



City of Richmond

Report to Committee

To: Community Safety Committee
From: Phyllis L. Carlyle
General Manager, Law & Community Safety
Date: April 20, 2011
File: 12-8080-12-01/Vol 01
Re: Non-Farm Use Fill Applications by 0826239 BC Ltd for Properties Located at 20100 Westminster Highway and 6980 No 9 Road.

Staff Recommendation

That Council endorse the non-farm use applications submitted by 0826239 BC Ltd to fill the properties located at 20100 Westminster Highway and 6980 No 9 Road to an agricultural standard suitable for the purpose of wasabi farming; and

That the endorsed applications be forwarded to the Agricultural Land Commission (ALC) for consideration with the recommendation that the ALC incorporate as a condition of permit:

1. The requirement for a performance bond, in a form and amount deemed acceptable to the ALC as a mitigation measure until the satisfactory completion of the proposed project and;
2. The requirement for quarterly inspections and monitoring by a professional agrologist as well as the submission of quarterly activity reports to the ALC with a copy to the City.

Phyllis L. Carlyle
General Manager, Law & Community Safety
(604-276-4104)

Att.

FOR ORIGINATING DEPARTMENT USE ONLY					
ROUTED TO:	CONCURRENCE		CONCURRENCE OF GENERAL MANAGER		
Engineering	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
Sewerage & Drainage	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
Policy Planning	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
Transportation	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
REVIEWED BY TAG	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	REVIEWED BY CAO	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

Staff Report

Origin

The City of Richmond is in receipt of non-farm use applications by 0826239 BC Ltd, to fill the properties located at 20100 Westminster Highway and 6980 No 9 Road to an agricultural standard suitable for the purpose of wasabi farming (**Attachment 1.1**).

The subject properties are situated in the Agricultural Land Reserve (ALR) and are thus subject to provisions of the Agricultural Land Commission (ALC) Act and associated regulations. The proponent is making an application to place fill on agricultural land and is therefore subject to sections 20 (1) and (2) of the ALC Act which states:

- 20 (1) A person must not use agricultural land for a non-farm use unless permitted by this Act, the regulations or an order of the commission.
- (2) For the purposes of subsection (1), except as provided in the regulations, the removal of soil and the placement of fill are non-farm uses.

Non-farm use applications must be submitted to the City of Richmond first for the appropriate staff review. When the review of the non-farm use application is complete, it is forwarded to Richmond City Council for consideration. Pursuant to section 25 (3) of the ALC Act, a resolution from Council is required in order to authorize the subject non-farm use application to proceed to the Agricultural Land Commission (ALC) for a final decision.

Analysis

The properties located at 20100 Westminster Highway and 6980 No 9 Road are zoned AG1 (Agriculture), which permits a wide range of farming and compatible uses consistent with the provisions of the ALR.

The applicant has been involved in the farming industry in BC since 1978; background data on the owners is attached for information (**Attachment 1.2**). The data confirms that the applicant's farming contribution includes over 500 acres in Richmond, over 200 acres in Coquitlam, over 220 acres in Deroche and agricultural processing plants in Langley. In addition the applicant owns and operates over 2000 acres of active fruit orchards in California.

Uses on Adjacent Lots

To the North: Cranberry plantation north of Westminster Highway.

To the East: Cranberry Bog (recently cleared and farm related works implemented)

To the South: Vacant land with trees, shrubs and high voltage electrical power line.

To the West: Active blueberry farm.

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To the West: Active blueberry farm.

The following table outlines key information related to the current use of lands under application:

Item	Existing	Proposed
Owner	0826239 BC Ltd	No Change
Applicant	0826239 BC Ltd	No Change
Authorized Agent	Yad Kallu	No Change
Site Size	14.04 Hectares	No change
Land Uses at 20100 Westminster Highway	<ul style="list-style-type: none"> • Vacant Land • 4 acres remnant of historic blueberry farm 	<ul style="list-style-type: none"> • Soil-based wasabi farming
Land Uses at 6980 No 9 Road	<ul style="list-style-type: none"> • Vacant Land 	<ul style="list-style-type: none"> • Soil-based wasabi farming
OCP Designation	Agriculture	<ul style="list-style-type: none"> • No OCP amendment required.
ALR Designation	Subject site is contained in the ALR	<ul style="list-style-type: none"> • Subject site to remain in the ALR. • Non-farm use proposal for property within the ALR.
Zoning	AG1	No change
Riparian Management Area	15 m RMA	No change

Project Overview

The total project parcel area of the subject properties located at 20100 Westminster Highway and 6980 No 9 Road is approximately 14.04 hectares. The applicant maintains that the properties are currently about 1 meter geodetic elevation, which is too low for the proposed farming of soil-based wasabi. The proposal involves filling the properties to an agricultural standard suitable for the growth of wasabi, specifically the varieties Mazuma, Daruma and Green Thumb. The proposed fill would generally consist of sandy coarse grain and structural fill from approved local excavation sites and the proposed depth is 1.5m above existing grade of fill with an 8" organic soil top dress. Proposed plan for drainage improvements include standard 4" pipe cutting across the field at 40' intervals, the irrigation supply source is already located on the property at 6980 No. 9 Road.

The applicant has advised that the proposed duration of the project, which includes the filling of the site, and topsoil preparation will be two years. The wasabi production will be phased in with fill activities in approximately 5-acre sections.

The applicant has submitted a comprehensive agrologist report prepared by Keystone Environmental Ltd in support of their application (**Attachment 2**). The agrologist report states that the climate of Richmond is very suitable for the growth of wasabi and that in general the soil requirements for this type of crop are: "good drainage, high organic matter content and a soil structure that is open and friable."

Consultation

The Ministry of Agriculture and Lands has confirmed that the current Strengthening Farming Factsheet that provides guidelines for farm practices involving fill in British Columbia (BC), does not include wasabi production. The Ministry is not aware of any other soil-based wasabi producers in BC. Therefore there is currently no BC production information or guidelines pertaining to farm fill practices involving soil-based wasabi production.

The Richmond Agricultural Advisory Committee (AAC) reviewed the project on Dec 02, 2010. The AAC supported the use of the land to explore a potentially new type of agricultural crop in the City of Richmond providing that sufficient fill management and monitoring mechanisms were put in place. A motion was passed requesting additional information; an excerpt of the AAC meeting minutes is attached for your perusal (**Attachment 3, pages 5-7**).

The applicant provided responses to the following requests by the AAC:

1. *Submission of additional information from appropriate professional that addresses the impact of the fill activities on neighbouring properties, land uses and infrastructure and make recommendations to mitigate any such impacts.*
 - The applicant submitted a geotechnical report from Thurber Engineering Ltd addressing the concern regarding the impact of fill to neighboring properties as well as issues related to drainage. Thurber Engineering has completed several projects in the City of Richmond; these projects are named in the attached report (**Attachment 4**). The report states that the retention of the existing east west ditch crossing and installation of new ditches along the perimeter of the property will mitigate "...surface runoff impacts to surrounding properties" page 2. The report further states that: "As the fill will be placed in lifts and the maximum total fill thickness will be 1.5m, the risk of fill instability is minimal. Accordingly, the risk of ground heave on adjacent properties is also minimal" page 3.
2. *Submission of an acceptable management plan to monitor and inspect all fill activities (plan and inspection to be undertaken by a professional agrologist) and that inspections are to occur on a regular scheduled quarterly basis.*
 - With regard to the request for a quarterly monitoring plan, the applicant provided written confirmation that Thurber Engineering will be retained to advise and monitor fill activities and implement good management practices the applicant states that:

... quarterly monitoring for the wasabi project will be carried out by Keystone Environmental, as they are the agrologists for this project. The procedure for this will be that once the fill is received and contoured, an agrologist will inspect the site. This inspection will continue on a quarterly basis until all in filling is completed. Since the fill will be previously vetted and the fill depth is 1.5m one sample for every 250 square meters will be collected for analytical testing. This would include particle size analysis and basic fertility (NPK) analysis. Since the fill will be to help drainage from wasabi growth and there will be a top dressing of previously stripped topsoil and other organic rich soils, the fertility analysis would not be extensive. Additional random test pits or boring will be performed to visually confirm the material has been placed.

3. *Submission of an acceptable security/bond amount to ensure that fill activities are undertaken as identified in the submitted agrologist report and monitoring strategy.*
 - The applicant has agreed to post an acceptable security/bond with the ALC

Staff Comments

Staff support the proposed agricultural production of wasabi as it offers diversity in agriculture for Richmond where the dominant crops have historically been cranberries and blueberries.

Staff does not support the use of Westminster Highway as an access point (driveway) when removing and/or bringing in fill to the sites. The applicant has submitted a traffic control plan showing access point for dump trucks through No. 9 Road.

The watercourse adjacent to 20100 Westminster Highway has a 15 meter wide Riparian Management Area (RMA). As the proposed fill activity is for a farm use, it is exempt from the City's Riparian Area Regulations. The proponent has submitted documentation from the Department of Fisheries and Oceans Canada confirming that they will consider a reduction in the 15 meter wide RMA requirement for the ditch/watercourse on or adjacent to 20100 Westminster Highway to no less than 5 meters.

Pending approval by the ALC, the applicant has agreed in writing to comply with all of the requirements as set out under the following City bylaws:

Boulevard and Roadway Protection Regulation Bylaw 6366, including providing security to the City in the amount of \$5,000 pursuant to section 8 (d) to ensure that roadways and drainage systems are kept clear of materials, debris, dirt or mud during or resulting from the fill activity.

Soil Removal and Fill Deposit Regulation Bylaw 8094, including depositing a security bond in the amount of \$10,000 to the City pursuant to section 4.2 to ensure the full and proper compliance with the provisions of this bylaw and all terms and conditions of the permit.

Staff are recommending that as a condition of permit, the applicant be required to post a performance bond in a form and amount deemed acceptable by the ALC. This performance bond

shall be sufficient to guarantee that all required mitigation and monitoring measures are completed as prescribed, as well as ensure the rehabilitation of the land in the event the project is not completed. The performance bond will be held by the ALC, to assist the ALC in determining an acceptable bond, the applicant has provided an estimate cost per acre for implementing a wasabi field. The approximate cost provided is \$30,000 to \$35,000 per acre; this includes about 20,000 plants, shade cloth, misting lines, soil and labour.

Financial Impact

An application fee of \$1200 has been paid to the City for the two properties; \$600 of this amount will be forwarded to the Agricultural Land Commission with the applications.

Options

- Option 1 - Deny the fill proposal involving the subject sites total 14 hectares.
- Option 2 – (**Recommended**) Endorse the non-farm use applications and forward to the ALC with the provision that the ALC incorporate the requirement for a performance bond in its written approval as a mitigation measure until the satisfactory completion of the proposed project.

Conclusion

The General and Specific Land Use Maps contained in the City of Richmond's Official Community Plan (OCP) identify both sites for agriculture, which means those areas of the City where the principal use is agriculture. The OCP also states objectives and supporting policies to protect farmlands in the ALR and enhance agricultural viability and productivity in Richmond.

The proposed non-farm use fill applications for the purpose of improving the agricultural land use of the subject sites for wasabi farming, complies with City land use designations and policies for land contained in the ALR. As such, Staff recommends that Council endorse the applications and forward the non-farm use fill applications submitted by 0826239 BC Ltd to the Agricultural Land Commission for consideration.



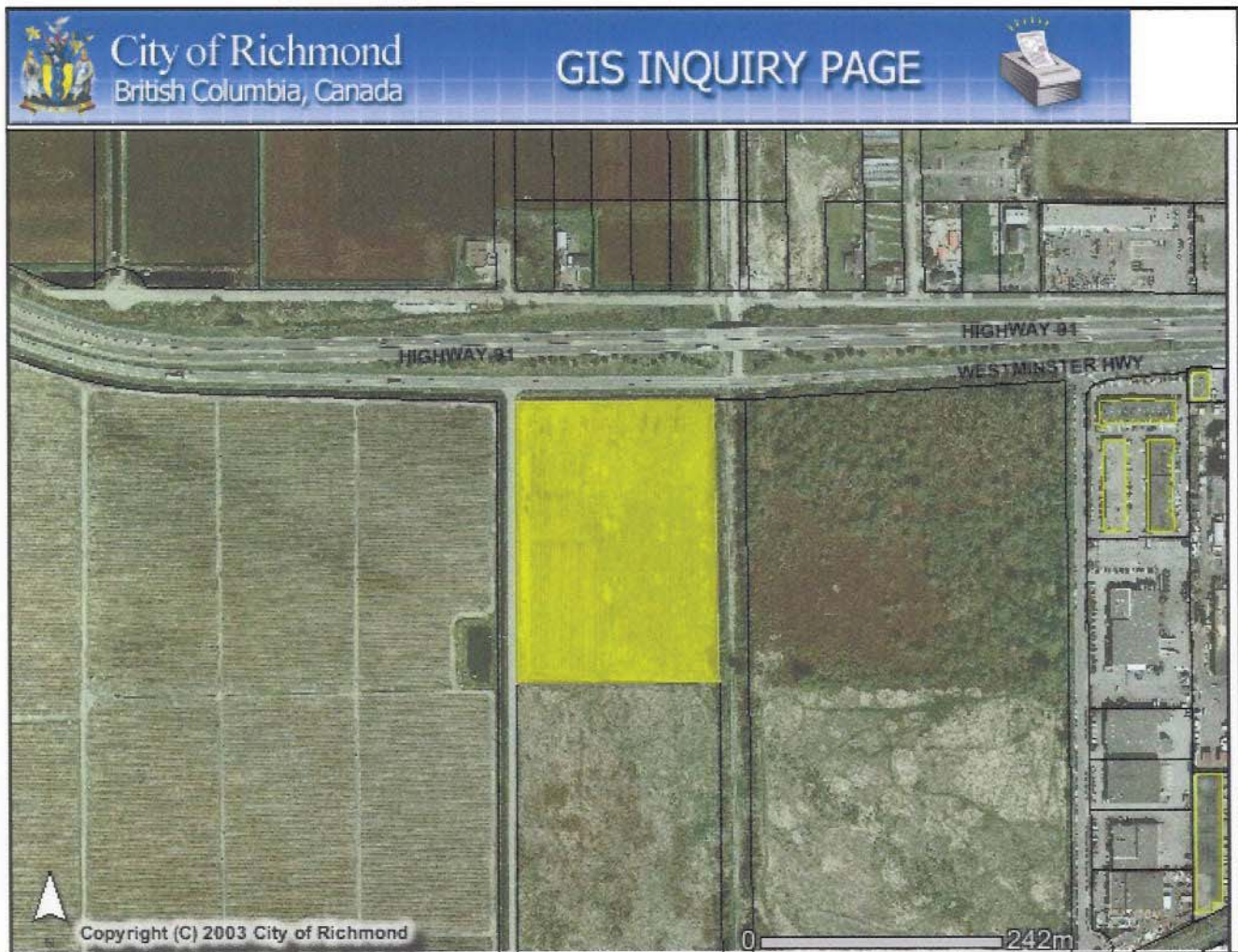
Magda Laljee
Supervisor, Community Bylaws
(604-247-4642)



Wayne G. Mercer
Manager, Community Bylaws
(604-247-4601)

ML:ml

- Att.
- 1.1 Copy of non-farm use applications by 0826239 BC Ltd.
 - 1.2 Copy of applicant's background data
 2. Copy of Agrologist report prepared by Keystone Environmental Ltd.
 3. Copy of Agricultural Advisory Committee meeting minutes -- December 2, 2010.
 4. Copy of geotechnical report from Thurber Engineering Ltd.



City of Richmond Property Information

Address: 20100 Westminster Hwy

Richmond Key: 88312

Lot: A

Zoning: AG1

FCL: 3.5m Gsc

DPA: No **ALR:** Yes **Heritage:** No **HAP Required:** No **ESA DP required:** No

RAR: 15m **MOT Sub Appr:** Yes **MOT RZ Appr:** No **NEF:** No

BCAA Legal: A SEC 9 BLK4N RG4W PL LMP53136

Roll: 004689093

SEC: 9-4-4

OCP SCH:

Rights of Way:

PID: 025-389-807

PL: LMP53136

Sewer Area: EAST

Recycling Pick up Day: THURSDAY

Assessments

Gross Taxes: \$918.57

Gross Land: \$62,330.00

Net Land: \$62,330.00

Parcel Area: 55964 sq.m.

Gross Improvement: \$0.00

Net Improvement: \$0.00

Gross Total: \$62,330.00

Net Total: \$62,330.00

Owners

0826239 Bc Ltd
5820 Sagebrush Rd
LA JOLLA CA 92037
USA

Disclaimer

GIS information is provided as a public resource for general information purposes only. The information shown on this map is compiled from various sources and the City makes no warranties, expressed or implied, as to the accuracy or completeness of the information.

Users are reminded that lot size and legal description must be confirmed at the Land Title office in New Westminster.

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City of Richmond Property Information

Address: 6980 No 9 Rd

Richmond Key: 88313

Lot: B

Zoning: AG1

FCL: 3.5m Gsc

DPA: No ALR: Yes Heritage: No HAP Required: No ESA DP required: No

RAR: 15m MOT Sub Appr: No MOT RZ Appr: No NEF: No

BCAA Legal: B SEC 9 BLK4N RG4W PL LMP53136

Roll: 004689094

SEC: 9-4-4

OCP SCH:

Rights of Way:

PID: 025-389-815

PL: LMP53136

Sewer Area: EAST

Recycling Pick up Day: THURSDAY

Assessments

Gross Taxes: \$1,417.81

Gross Land: \$96,207.00

Net Land: \$96,207.00

Parcel Area: 85822 sq.m.

Gross Improvement: \$0.00

Net Improvement: \$0.00

Gross Total: \$96,207.00

Net Total: \$96,207.00

Owners

0826239 Bc Ltd
5820 Sagebrush Rd
LA JOLLA CA 92037
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VIA FEDERAL EXPRESS

June 13, 2010
City of Richmond
6911 No. 3 Road
Richmond, BC
V6Y 2C1, Canada
Phone: (604) 276-4000

RE: Application to Fill Deposit (Schedule to Bylaw No. 8094)

Dear City of Richmond:

Please accept this application to fill the subject property that consists of Lots A & B, Section 9, Block 4 West, New Westminster District, Plan LMP 53136, City of Richmond B.C which is approximately 14.04 hectares of land in the Agricultural Land Reserve. The process will be filling the property to an agricultural standard for Wasabi farming and establishing access roads in accordance with the recommendations provided by the enclosed agrology report.

1. The properties are presently at about 1 meter geodetic elevation and too low for farming soil grown Wasabi. Wasabi or Japanese horseradish (*Wasabia japonica* [Miquel] Matsu.) is a perennial plant of Japan used as a traditional condiment of Japanese food. Wasabi is as a potential new crop for B.C. for two main reasons. First, there is consistently more demand than available supply for this crop. Second reason, wholesale prices can be as high as \$200/kg and it is well suited to Lower Mainland land costs. A perennial plant of Japan, it was traditionally a prized culinary condiment used only in Japan, but is now in vogue and in demand by elite restaurants and sushi bars throughout the world, and increasingly served as a value-added ingredient to processed foods.

In British-Columbia, wasabi has been grown with some success using hydroponic culture in greenhouses but this cultivation method required a costly investment in building and equipment. However, wasabi is easier to grow in soil than in running water and nowadays 70% of wasabi produced in Japan is grown in soil. According to leading producers in China, it can only take one year to grow a crop and the rhizome can get to a good marketable product up to 16 to 20cm. A micro-propagation laboratory operating in B.C. is selling wasabi tissue cultured plantlets directly to growers. This planting material is disease free and 3 varieties are available for testing. We want to take advantage of this opportunity and grow wasabi in soil in commercial quantities.

Our goal is to produce high quality wasabi in soil in an environmentally responsible manner to sell to North American and international markets. Wasabi also offers an opportunity for developing or supplying new food and nutraceutical products from or in British Columbia and will benefit not only growers, but the province as well.

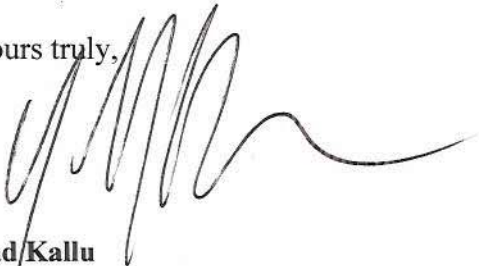
Wasabi products represent a value-added growth opportunity for the BC agri-food industry, with high potential for export to Asian markets. Our innovation will generate significant business activities in farming and manufacturing industries and could potentially create many direct and indirect jobs in BC.

2. In order to fill the properties a number of consents and or permits will be required. The property is within the Agricultural Land Reserve (ALR) and permission will be required from the Agricultural Land Commission to fill the property.
3. In order to obtain all the permits, we have consulted the services of the following consultant:
 - Agrologist, Keystone Environmental Ltd. (Full Report Enclosed)
4. The estimated time frame to accomplish all of the requirements including filling the site and topsoil preparation for wasabi farming will be two years.

We have reviewed and agree to comply with City of Richmond Bylaws 6989 (Public Health), 6366 (Roadway Protection), 8057 (Tree Protection). We also indemnify the City of Richmond pursuant to section 4.1.1 (c) (xvi) of the Form 8094 and we acknowledge a \$10,000.00 security deposit will be required pursuant to section 4.2.1 prior to the issue of the fill permit by the City of Richmond.

Thank you for considering this application. If you have any questions or require further information on the application, please do not hesitate to call at (604) 861-4644.

Yours truly,



Yad Kallu
President
WCH Ltd.

Direct Line: (604) 861-4644

E-Mail: yad@wchltd.com

Enclosure

Table of Contents – Application for Fill Deposit
Schedule C to Bylaw No. 8094

Tab 1 – Application for Fill Deposit (Schedule C to Bylaw No. 8094) and Application Fee (\$600)

Tab 2 – Exhibit 1 – Agent Authorization

Tab 3 – Exhibit 2 – Certificate of Title and Title Search Print

Tab 4 – Exhibit 3 – Current Use of Land Under Application

Tab 5 – Exhibit 4 – Use on Adjacent Land – East, West, North and South

Tab 6 – Exhibit 5 – Map of Routing and Schedule for Vehicular Traffic

Tab 7 – Exhibit 6 – Agrologist Report – Keystone Environmental

Tab 8 – Exhibit 7 – Copy of full submission to Agricultural Land Commission (*Dated June 10, 2010*)

Tab 9 – Additional Information

TAB 1

Application to Fill Deposit (Schedule C to Bylaw No. 8094)
and
Application Fee (\$600)



CITY OF RICHMOND

SOIL REMOVAL AND FILL DEPOSIT REGULATION

BYLAW NO. 8094

EFFECTIVE DATE – NOVEMBER 13, 2007

CITY OF RICHMOND
SOIL REMOVAL AND FILL DEPOSIT REGULATION
BYLAW NO. 8094

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Soil Removal and Fill Deposit Regulation Bylaw No. 8094

The Council of the City of Richmond enacts as follows:

PART ONE – APPLICATION

1. Application

- 1.1 This bylaw applies only to lands located within an **agricultural land reserve**, as defined in this bylaw.
- 1.2 Nothing in this bylaw precludes or relieves a person from complying with the provisions of the *Agricultural Land Commission Act* and regulations or any other applicable local, provincial or federal enactment or regulation.

PART TWO – INTERPRETATION

2. Interpretation

- 2.1 In this bylaw:

**AGRICULTURAL LAND
RESERVE**

means the area of land within the City of Richmond designated as protected agricultural land under the *Agricultural Land Commission Act*, as amended, and shown in the hatched areas outlined in bold in Schedule “A”, which is attached and forms part of this bylaw.

BC LAND SURVEYOR

means a person who is listed as a practicing member under Section 34(1) of the *Land Surveyors Act*, as amended.

CITY

means the City of Richmond.

COMMISSION

means the Provincial Agricultural Land Commission established under the *Agricultural Land Commission Act*, as amended.

COUNCIL

means the municipal council of the City of Richmond.

DEPOSIT

means to place, store, pile, spill or release, directly or indirectly, **fill** on a parcel or contiguous **parcels** of land where that **fill** did not exist or stand previously and includes a **stockpile**.

EXISTING FARM

means a **parcel** that has been previously operated as a **farm** in compliance with the *Agricultural Land Commission Act* and a **parcel** designated as a **farm** operation through property assessment and property tax designation.

FARM

means a **parcel** for farming purposes, such as farming of plants and animals, and includes a **farm** business or **farm** operation as specified in the *Farm Practices Protection (Right to Farm) Act*.

FILL

means a deposit comprised of **soil** or **permitted material** or combination thereof.

GUIDELINES FOR FARM PRACTICES INVOLVING FILL

means the document published by the *Ministry of Agriculture and Lands*, which outlines standard practices of agricultural **fill**, as amended.

HIGHWAY

includes a street, road, lane, bridge, viaduct and any other way open to public use, other than a private right-of-way on private property or any other public right-of-way as defined in Part 1 of the *Transportation Act*.

MANAGER

means Manager, Community Bylaws and any person designated by the Manager to act in Manager's place.

PARCEL

means any lot, block or other area in which land is held or into which land is subdivided but does not include a **highway**.

PERMIT

means an authorization to remove **soil** or deposit **fill** issued under this bylaw.

PERMITTED MATERIAL

includes:

- (a) any material that is listed in the *Guidelines for Farm Practices Involving Fill*, or that is used as specified in the *Guidelines for Farm Practices Involving Fill*;

- (b) any material not specified in (a) that is certified in writing, as a standard farm practice, by a **Professional Agrologist** in a form acceptable to the **Manager**; and
- (c) any material that is authorized for **deposit** as **fill** at a specified location by the Commission pursuant to Section 20 (3) of the *Agricultural Land Commission Act*, as amended.

**PROFESSIONAL
AGROLOGIST**

means a person who is a member in good standing under Section 15 of the *Agrologist Act*, as amended.

PROFESSIONAL ENGINEER

means a person who is a certified member under Section 20 of the *Engineers and Geoscientists Act*, as amended.

PROVINCIAL ENACTMENT

means an enactment of the Province of British Columbia.

REMOVAL

means to remove **soil** from a **parcel** or contiguous parcels of land on which it exists or has been deposited.

SOIL

means topsoil, sand, gravel, rock, silt, clay, peat or any other substance of which land is composed, or any combination thereof;

STOCKPILE

means a man-made accumulation of **soil** held in reserve for future use, **deposit** or **removal**.

WOODWASTE

means a wood by-product as defined under the *Code of Agricultural Practice for Waste Management* and includes hog fuel, mill ends, wood chips, bark and sawdust but does not include demolition waste, construction waste, tree stumps, branches, logs or log ends.

PART THREE – RESTRICTIONS AND EXEMPTIONS

3.1 Restrictions

- 3.1.1 Subject to a **Provincial enactment** and any procedure, authorization or permission thereunder, no person shall **deposit soil**, or cause, suffer or permit the **deposit** of **soil** on any land within the **agricultural land reserve** except in accordance with this bylaw.

- 3.1.2 Except as otherwise provided in this bylaw, but subject to any procedure, authorization, or permission respecting activity regulated under an applicable **Provincial enactment**, no person shall carry out, cause, suffer or permit the **removal** of soil from, or the **deposit** of fill on, any land located within the **agricultural land reserve** without first making application for and obtaining a **permit** from the City, and every such deposit or removal shall conform in all respects to the requirements and regulations of this bylaw and the terms and conditions of the **permit**.

3.2 Exemptions

- 3.2.1 Despite Section 3.1.2, a **permit** is not required where the **deposit** or **removal**:

- (a)
 - (i) is related to, or carried out in connection with, an existing “**farm** use” or “non-farm use” supported by a “Notice of Intent”, as defined in the *Agricultural Land Commission Act* and submitted and acknowledged pursuant to that Act;
 - (ii) is for an approved **farm** practice as defined in the *Guidelines for Farm Practices Involving Fill* on an **existing farm** operation; and
 - (iii) is outlined in a “Soil Removal or Fill Deposit Notice”, identified in Schedule “B”, which is attached and forms part of this bylaw, and is submitted to the **City** for an **existing farm** operation, as indicated by their property assessment and property tax designation, a minimum of five (5) business days prior to scheduled **soil removal** or **fill deposit**;
- (b) will not:
 - (i) exceed One Hundred (100) cubic metres in volume on or from a single **parcel** over one calendar year; and
 - (ii) exceed one (1) metre in depth at any point; and
 - (iii) be carried out for more than One (1) month in duration;
- (c) is by a floriculturalist or horticulturist on lands owned by that person or business and in connection with such trade or business;
- (d) is required for the erection of a building or structure under a valid building permit or development permit issued by the **City**, where the **deposit** or **removal** is in accordance with the approved drawings submitted as part of the application for the building permit;
- (e) is related to the construction of works and services for a subdivision where the **deposit** or **removal** is in accordance with the approved drawings submitted as part of the application for subdivision;

- (f) is required to create, maintain or repair a private road, driveway, paved parking area, dyke or any **highway** or statutory right-of-way necessary to accommodate a permitted use on the property;
- (g) is required for the construction, maintenance or repair of utility works within a **highway** or municipal works, by or on behalf of the **City**;
- (h) involves the movement of existing **soil** within the boundaries of a single **parcel** or contiguous parcels of land;
- (i) is required for the construction or maintenance of a private sewage disposal system or septic field for which a permit has been granted; or
- (j) involves the open storage or stockpiling of **soil** or **woodwaste** intended to be processed and removed in connection with a lawful use of the land on which they are stored.

PART FOUR – PERMIT APPLICATION PROCESS

4.1 Application Requirements

4.1.1 Every application for a **permit** shall be made in writing to the **Manager** using the “Application for Soil Removal / Fill Deposit” provided for that purpose by the **City**, identified in Schedule “C”, which is attached and forms part of this bylaw and shall include:

- (a) a non-refundable application fee of Six Hundred Dollars (\$600.00);
- (b) a security deposit in accordance with the requirements of Section 4.2.1;
- (c) the following documents, plans and information relating to the proposed **removal** or **deposit** operation:
 - (i) evidence, satisfactory to the **Manager**, that an applicable application for **soil removal** or **fill deposit** has been made under the *Agricultural Land Commission Act*, as amended, and approved by the **Commission**;
 - (ii) a description of the composition and volume of the **soil** to be removed or **fill** to be deposited as prepared by a **Professional Agrologist**;
 - (iii) the street location, legal description and a copy of the title search of the **parcel**;
 - (iv) the consent in writing of the registered owner or owners of the **parcel**;
 - (v) a plan in reasonable detail indicating clearly the location of the proposed **deposit** or **removal** and all pertinent topographic features, including existing buildings, structures, water courses and tree cover;

- (vi) the depths and proposed slopes which will be maintained upon completion of a **removal** or **deposit**;
- (vii) the methods proposed to control the erosion of the banks of a **removal** or **deposit**;
- (viii) the proposed methods of drainage control for the site during and after a **removal** or **deposit**;
- (ix) the proposed methods of access to the **removal** or **deposit** site during the operation including a scale map of the proposed routing and scheduling of truck and vehicular traffic;
- (x) evidence, satisfactory to the **Manager**, that all requirements have been met under the City's *Boulevard and Roadway Protection and Regulation Bylaw No. 6366*, as amended;
- (xi) evidence, satisfactory to the **Manager**, that all requirements have been met under the City's *Tree Protection Bylaw No. 8057* as amended;
- (xii) the location and size of any buffer zones necessary to provide a visual and sound barrier between the **permit** area and adjacent lands, parks, roads, **highways** and other uses;
- (xiii) the proposed methods of noise and dust control during the **removal** or **deposit** operation, in compliance with the City's *Public Health Protection Bylaw No. 6989*, as amended;
- (xiv) the proposed completion dates for all **removal** or **deposit** operations;
- (xv) where requested by the **Manager**, site plans prepared by a **BC Land Surveyor** or **Professional Engineer** which plans may be required to show or include, without limitation, a statement of the volume of **soil** to be removed or **fill** to be deposited along with the calculations, cross-sections and other data and information used in calculating estimated total volume, site contours, particulars as to the present use and occupancy of the **parcel**, proposed slopes, pertinent topographic features, buildings, highways, watercourses and all other structures, utilities and facilities;
- (xvi) an indemnity in favour of the **City**, in the form prescribed, indemnifying and saving harmless the **City**, its agents, employees, officers and servants, from and against all claims, demands, losses, costs, damages, actions, suits or proceedings whatsoever by whomsoever brought by reason of, or arising from, the issue by the **City** of a **permit** under this bylaw to conduct the proposed **deposit** or **removal** operation; and

- (xvii) such further and other information as the **Manager** determines is necessary to adequately describe the nature and extent of the **removal** or **deposit** operation.

4.2 Security

- 4.2.1 Prior to the issuance of a **permit**, every applicant must deposit with the **City**, security in the form of cash or an unconditional, irrevocable letter of credit drawn on a Canadian financial institution, in a form acceptable to the **Manager**, in an amount equal to Twenty Dollars (\$20.00) per cubic metre of **soil** to be removed or **fill** to be deposited, based on the volume as outlined in the applicable reports submitted under Section 4.1.1 (c)(ii) and Section 4.1.1(c)(xv), to a maximum of Ten Thousand Dollars (\$10,000.00), to ensure full and proper compliance with the provisions of this bylaw and all terms and conditions of the **permit**.
- 4.2.2 That portion of the security deposit not required for the foregoing purposes or to repair damage to **City** property caused by the **removal** or **deposit** operations shall be returned to the applicant upon receipt of a final report, in a form acceptable to the **Manager**, from the **Professional Agrologist** and the **Professional Engineer** providing applicable documentation under Section 4.1.1(c)(ii) and Section 4.1.1(c)(xv) respectively and confirming that all aspects of the original **removal** or **deposit** operation have been fulfilled. Any assessment of damage to **City** property or the costs of necessary repairs will be provided by the General Manager, Engineering & Public Works or designate.

4.3 Permit Issuance

- 4.3.1 Subject to Section 4.3.2, where:

- (a) an application for a **permit** complies with the requirements of this bylaw;
- (b) the proposed **removal** or **deposit** complies with this bylaw and all other applicable **City** bylaws;
- (c) the proposed **removal** or **deposit** has been approved by the **Commission**; and
- (d) the **Manager**, having regard to the documents, plans and information submitted with the application for a **permit**, is of the opinion that the **deposit** or **removal** operation can be carried out safely, without undue nuisance or interference to adjacent parcels or the public, or damage or injury to persons or property;

the **Manager** may issue a **permit**.

- 4.3.2 The **Manager** must not issue a **permit** where the proposed **removal** or **deposit** could reasonably be expected to:

- (a) reduce, damage or otherwise adversely affect the long-term agricultural viability of the **parcel** which is the subject of the **permit** or any adjacent or nearby **parcel**;

- (b) endanger, damage or otherwise adversely affect any adjacent **parcel**, structure, **highway**, easement, utility works and services or right-of-way;
- (c) foul, obstruct, impede or otherwise adversely affect any stream, creek, waterway, watercourse, groundwater aquifer, waterworks, ditch, drain, sewer or other established drainage facility; or
- (d) endanger or otherwise adversely affect an environmentally sensitive area.

For the purposes of making a determination under this section, the **Manager** may require an applicant to obtain a report by a **professional engineer**, scientist, technician or other person qualified under a **Provincial enactment** to make an assessment or recommendation on the matter and the **Manager** may refuse, limit, or impose conditions on a **permit** based on information or advice provided in such a report or reports.

4.4 Expiry

- 4.4.1 Every **permit** shall expire twelve (12) months from the date of issue or upon such earlier date as may be specified in the **permit**.

4.5 Renewal, Extension or Modification

- 4.5.1 If the **removal** or **deposit** operations authorized by a **permit** are not completed before the **permit** expires, or it becomes necessary to alter or deviate from the particulars of the **permit** application or drawings submitted for a **permit**, the **Manager** may renew, extend or modify the permit upon written request of the **permit** holder, subject to the following:

- (a) a **permit** holder has no vested right to receive an extension, renewal or modification and the **Manager** may require that a new **permit** application be submitted;
- (b) the permit holder shall pay a non-refundable fee of One Hundred Dollars (\$100.00)
- (c) the application for a renewal, extension or modification is received no later than thirty (30) days before the expiry date of the existing **permit**;
- (d) the **Manager** may renew or extend a **permit** for an additional period of not more than one (1) year, except where the extraction or processing of aggregate or minerals is being carried out pursuant to a valid permit issued under the *Mines Act* or other **Provincial enactment**, in which circumstance a **permit** may be renewed as required, but continues to be subject to all other terms and conditions of this bylaw and other applicable enactments;
- (e) the **Manager** may require that the **permit** holder provide additional information authorized by this bylaw as a pre-condition to considering an application for a **permit** renewal, extension or modification; and

- (f) all terms and conditions set out in the original **permit** shall apply to each renewal, extension or modification of the **permit** except as amended or modified by the renewal, extension or modification.

PART FIVE – REGULATIONS

5.1 Regulations

- 5.1.1 Every **removal** of **soil** or **deposit** of **fill** shall comply with, and every **permit** issued under this bylaw is subject to the observance or fulfilment of, the following requirements, restrictions and regulations, to the satisfaction and approval of the **Manager**:
 - (a) no **soil removal** or **fill deposit** activities may be carried out between the hours of 8:00 p.m. and 7:00 a.m. the following morning;
 - (b) no **soil removal** or **fill deposit** activities may be carried out on a Sunday or any statutory holiday;
 - (c) every vehicle used for hauling **soil** or **fill** shall be properly licensed and insured and in compliance with all applicable laws and regulations governing the use and operation of the vehicle on a **highway**;
 - (d) every load of **soil** or **fill** shall be fully and properly covered so as to prevent **soil**, **fill** or dust from blowing or falling from the vehicle;
 - (e) all damage to drainage facilities, natural watercourses, **highways** or other public or private property shall be promptly and properly repaired to the satisfaction of the **Manager** at the expense of the **permit** holder;
 - (f) all streams, creeks, waterways, natural watercourses, groundwater aquifers, waterworks, ditches, drains, sewers or other established drainage facilities shall be kept free of all **soil** or **fill** arising from or caused by the **removal** or **deposit** operations;
 - (g) no **removal** or **deposit** greater than One-half (0.5) metres in depth shall be undertaken within Two and One-half (2.5) metres of any utility pole, pipeline, structure or **highway** or below overhead wires without giving prior notice to and receiving written approval from the **City** or other authority having jurisdiction;
 - (h) no **removal** or **deposit** shall be undertaken on a **highway**, statutory right-of-way or easement without first obtaining the permission in writing of the **City** or other authority having jurisdiction over such **highway** or statutory right-of-way;
 - (i) all structures or excavations erected or made in connection with a **removal** or **deposit** operation shall be temporary in nature and shall be removed forthwith upon completion of the operation;

- (j) all hazards or potential hazards arising from the **removal** or **deposit** operation shall be adequately fenced or otherwise protected for the safety of the public;
- (k) during and upon completion of every **removal** or **deposit** operation, the boundaries of all adjacent **parcels**, **highways**, rights-of-way and easements shall be protected from erosion or collapse and from run-off of water or mud;
- (l) all **stockpiles** of **soil** or **fill** shall be confined to the locations prescribed in the **permit** and shall be maintained so that they do not adversely affect or damage adjacent **parcels** or cause a nuisance to any person;
- (m) all **removal** or **deposit** operations must not encroach upon, undermine, damage or endanger any adjacent **parcels** or any setback area prescribed in the **permit** or a bylaw; and
- (n) all **removal** or **deposit** operations shall be limited only to the area specified in the **permit** which shall be clearly marked at the site and such markings maintained for the duration of the **permit**.

5.1.2 The **Manager** may issue a **permit** subject to the observance or fulfilment of additional conditions specified in the **permit** which in the opinion of the **Manager** are necessary to achieve the purposes of this bylaw.

PART VI – ADMINISTRATION

6.1 Right of Entry for Inspection

6.1.1 Subject to any requirements of a **Provincial enactment**, the **Manager** is hereby authorized at all reasonable times to enter upon and inspect any **parcels** to determine whether the requirements, restrictions, regulations, terms, conditions and directions of this bylaw or a **permit** are being observed. For certainty, any entry by the **Manager** to a site that is a “mine” for the purposes of the *Mines Act* must be conducted in compliance with the entry provisions of the Health, Safety and Reclamation Code for Mines in British Columbia under the *Mines Act*.

6.1.2 No person shall prevent or obstruct or attempt to prevent or obstruct the **Manager** from entering upon **parcels** as authorized by Section 6.1.1.

6.2 Notice of Non-compliance

6.2.1 The **Manager** may give notice to any person of a breach of, or non-compliance with, any of the provisions of this bylaw or a **permit** issued thereto and such person shall immediately cease all **soil removal** or **fill deposit** activities until such breach or non-compliance is remedied to the satisfaction of the **Manager**, and every owner of a **parcel** shall refuse to permit the further **removal** of **soil** or **deposit** of **fill** from or upon the **parcel** until such time as the breach or non-compliance is remedied to the satisfaction of the **Manager**.

6.3 Failure to Remedy Non-Compliance

- 6.3.1 In the event that any person having received notice of breach fails within the time specified therein to remedy such breach, the City or its appointed agents may enter upon the **parcel** or any part thereof and carry out the works required to remedy the breach, and the expense of doing so shall be paid by the person in breach and, if not paid within 90 days, the expense, with interest at the prescribed rate and costs, shall be recovered in the same manner as municipal taxes.

6.4 Suspension or Cancellation of Permit

6.4.1 If:

- (a) there is a contravention of any term, condition, requirement or restriction of this bylaw or a **permit** issued under this bylaw; or
- (b) a **permit** was issued under this bylaw on the basis of statements made in the permit application or a report, declaration or record required under this bylaw, that were false or misleading with respect to a material fact or that omitted to state a material fact, the omission of which made the statement false or misleading;

the **Manager** may:

- (i) suspend in whole or in part the rights of the **permit** holder under the **permit**;
- (ii) cancel the **permit**; or
- (iii) amend or attach new conditions to a **permit** with the written consent of the **permit** holder.

6.5 Right of Reconsideration

- 6.5.1 Where an applicant or owner of a **parcel** is subject to a requirement or a decision made by the **Manager** under this bylaw and is dissatisfied with the requirement or decision, the applicant or owner may apply to the General Manager, Engineering and Public Works for reconsideration of the matter within 30 days of the requirement or decision being communicated to them.
- 6.5.2 An application for reconsideration must be delivered in writing to the City Clerk and must set out the grounds upon which the applicant considers the requirement or decision of the **Manager** inappropriate and what, if any, requirement or decision the applicant or owner considers the General Manager, Engineering and Public Works ought to substitute.
- 6.5.3 The General Manager, Engineering and Public Works may hear from the applicant and any other person interested in the matter under reconsideration who wishes to be heard and may either confirm the requirement or decision of the **Manager** or substitute its own requirement or decision.

PART SEVEN – OFFENCES AND PENALTIES

7.1 Offences and Penalties

- 7.1.1 Any person who contravenes or violates any provision of this bylaw or any **permit** issued under this bylaw or who suffers or allows any act or thing to be done in contravention or violation of this bylaw or any **permit** issued under this bylaw, or who fails or neglects to do anything required to be done under this bylaw or any **permit** issued under this bylaw, commits an offence and upon conviction shall be liable to a fine of not more than Ten Thousand Dollars (\$10,000.00) and where the offence is a continuing one, each day that the offence is continued shall constitute a separate offence.

PART EIGHT – SEVERABILITY AND CITATION

8.1 Severability

- 8.1.1 If any section, subsection, sentence, clause or phrase of this bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this bylaw.

8.2 Citation

- 8.2.1 This Bylaw is cited as “**Soil Removal And Fill Deposit Regulation Bylaw No. 8094**”.

FIRST READING

SECOND READING

THIRD READING

ADOPTED

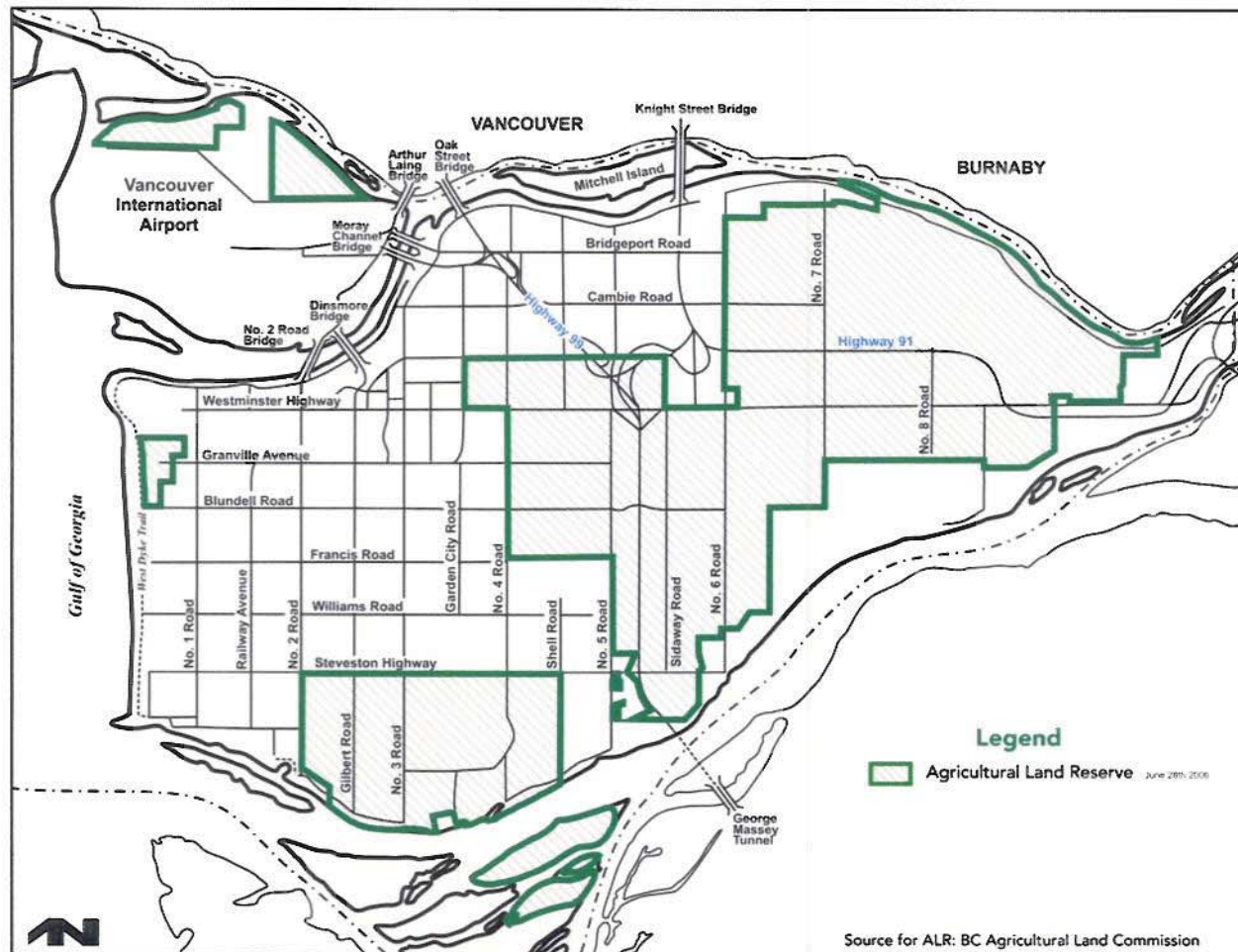
CITY OF RICHMOND
APPROVED for content by originating dept.
APPROVED for legality by Solicitor

MAYOR

CORPORATE OFFICER

SCHEDULE A to BYLAW NO. 8094

Agricultural Land Reserve City of Richmond



SCHEDULE C to BYLAW NO. 8094

Page 1 of 2

Application for Soil Removal / Fill Deposit
Proposed Farm or Non-Farm Operations - Agricultural Land Reserve

☐ Application to remove soil☒ Application to deposit fill

Owner: <u>0826239 BC Ltd.</u>	Agent: <u>Yad Kallu</u>
Address: <u>c/o Avtar Dhillon</u> <u>927-470 Granville Street,</u> <u>Vancouver, BC, V6C 7V5</u>	Address: <u>PO Box 96019 3080-11166</u> <u>Steveston Hwy, Richmond BC, V7A 5JR</u>
Telephone: (B) <u>(858) 361-4499</u>	Telephone: (B) <u>(604) 861-4644</u>
(C) <u>same</u>	(C) _____
(F) <u>(858) 777-5481</u>	(F) <u>(858) 777-5481</u>
Email: <u>ad@idhillon.com</u>	Email: <u>yad@wchltd.com</u>

6980 No. 9 Road - Lot A, Section 9, Block 4 North, Range 4 West,
 New Westminster District Plan LMP53136 (APN: 025-389-815)

Address of Property or Legal Description [REDACTED] est,

Size of Property / Parcel: 14.04 hectares

Current Use of Property: Approx 4 acres of Blueberries; remaining is vacant land. No
buildings on property
- See attached - Exhibit 3

Adjacent Uses: North: Westminster Hwy and Cranberry Plantation
 East: Recently excavated land for cranberry farming
 South: Vacant land with trees, shrub and
high voltage electrical powerline
 West: Blueberry Farm
 (See attached Exhibit 4 for more detail)

Total Project Area: 14.04 hectares
 Volume of Soil or Fill: 210,584 cubic metres
 Depth of Soil or Fill: 1.25 metres
 Duration of Project: 24 weeks / (months)

Type of Soil / Fill Material (reference *Guidelines for Farm Practices Involving Fill (BC Ministry of Agriculture and Lands)*)

Random granular excavated material

Purpose of Project (reference *Guidelines for Farm Practices Involving Fill (BC Ministry of Agriculture and Lands)*)

See Exhibit 3 and Cover Letter

Proposed Reclamation Measures (for soil removal projects)

N/A


SCHEDULE C to BYLAW NO. 8094

Page 1 of 2

Application for Soil Removal / Fill Deposit
Proposed Farm or Non-Farm Operations - Agricultural Land Reserve

☐ Application to remove soil☐ Application to deposit fill

Owner: _____ Address: _____ _____ Telephone: (B) _____ (C) _____ (F) _____ Email: _____	Agent: _____ Address: _____ _____ Telephone: (B) _____ (C) _____ (F) _____ Email: _____
---	---

Address of Property or Legal Description _____ AS _____ Size of Property / Parcel: <u>5.4 MG</u> hectares Current Use of Property: _____  _____
--

Adjacent Uses: North: _____ East: _____ South: _____ West: _____	Total Project Area: _____ hectares Volume of Soil or Fill: _____ cubic metres Depth of Soil or Fill: _____ metres Duration of Project: _____ weeks / months
---	--

 Type of Soil / Fill Material (reference *Guidelines for Farm Practices Involving Fill (BC Ministry of Agriculture and Lands)*)

 Purpose of Project (reference *Guidelines for Farm Practices Involving Fill (BC Ministry of Agriculture and Lands)*)

 Proposed Reclamation Measures (for soil removal projects)

SCHEDULE B to BYLAW NO. 8094

Notice of Soil Removal or Fill Deposit
Existing Farm Operations - Agricultural Land Reserve

☐ Notice to remove soil

☐ Notice to deposit fill

Owner: _____

Address: _____

Telephone: (B) _____ (C) _____

Fax: _____ Email: _____

Address of Property, or Legal Description _____

Current Use of Property: _____

Adjacent Uses: North: _____ East: _____

South: _____ West: _____

Purpose of Project (reference *Guidelines for Farm Practices Involving Fill (BC Ministry of Agriculture and Lands)*)

Volume: _____ cubic metres Depth _____ metres

Declaration: I/We declare that:

- the information provided in this document is true and correct, to the best of my/our knowledge, and
- that any fictitious or misleading information that I/we provide may be a violation of the City of Richmond Soil Removal and Fill Deposit Regulation Bylaw No 8094 and punishable by a fine of up to \$10,000.

Date _____

Signature of Owner _____

Print name _____

SCHEDULE C to BYLAW NO. 8094

Page 1 of 2

Application for Soil Removal / Fill Deposit
Proposed Farm or Non-Farm Operations - Agricultural Land Reserve

☐ Application to remove soil☒ Application to deposit fill

Owner: <u>0826239 BC Ltd.</u>	Agent: <u>Yad Kallu</u>
Address: <u>c/o Avtar Dhillon</u> <u>927-470 Granville Street,</u> <u>Vancouver, BC, V6C 7V5</u>	Address: <u>PO Box 96019 3080-11166</u> <u>Steveston Hwy, Richmond BC, V7A 5JR</u>
Telephone: (B) <u>(858) 361-4499</u>	Telephone: (B) <u>(604) 861-4644</u>
(C) <u>same</u>	(C) _____
(F) <u>(858) 777-5481</u>	(F) <u>(858) 777-5481</u>
Email: <u>ad@idhillon.com</u>	Email: <u>yad@wchltd.com</u>

Address of Property or Legal Description	<u>9980 No. 9 Road - Lot A, Section 9, Block 4 North, Range 4 West,</u> <u>New Westminster District Plan LMP53136 (APN: 025-389-815)</u> <u>20100 Westminster Highway - Lot B, Section 9, Block 4 North Range 4 West,</u> <u>New Westminster District Plan LMP53136 (APN: 025-389-807)</u>
Size of Property / Parcel:	<u>14.04</u> hectares
Current Use of Property:	<u>Approx 4 acres of Blueberries; remaining is vacant land. No</u> <u>buildings on property</u> <u>- See attached - Exhibit 3</u>

Adjacent Uses: North: Westminster Hwy and Cranberry Plantation
 East: Recently excavated land for cranberry farming
 South: Vacant land with trees, shrub and
high voltage electrical powerline
 West: Blueberry Farm
 (See attached Exhibit 4 for more detail)

Total Project Area: 14.04 hectares
 Volume of Soil or Fill: 210,584 cubic metres
 Depth of Soil or Fill: 1.25 metres
 Duration of Project: 24 weeks / (months)

Type of Soil / Fill Material (reference *Guidelines for Farm Practices Involving Fill (BC Ministry of Agriculture and Lands)*)Random granular excavated materialPurpose of Project (reference *Guidelines for Farm Practices Involving Fill (BC Ministry of Agriculture and Lands)*)See Exhibit 3 and Cover Letter

Proposed Reclamation Measures (for soil removal projects)

N/A

SCHEDULE C to BYLAW NO. 8094

Page 2 of 2

Application for Soil Removal / Fill Deposit
Proposed Farm or Non-Farm Operations - Agricultural Land Reserve

Has a Professional Agrologist reviewed the project and provided a written report? ☒ Yes ☐ No

(If yes, please attach a copy of the report)

(If no, please explain why) See attached Exhibit 6 - Agrologist Report

Has a Professional Engineer reviewed the project and provided a written report? ☐ Yes ☒ No

(If yes, please attach a copy of the report)

(If no, please explain why)

The site plans, volume of soil to be deposited, site contours, proposed slopes

pertinent topographic features and watercourses, etc. have been covered in the agrologist report.

Are you hereby undertaking to provide a security deposit as outlined in Section 4.2.1 of the City's Soil Removal and Fill Deposit Regulation Bylaw No 8094 (deposit is required to be in place before any permit is issued) ☒ Yes ☐ No

Have all requirements been met under the following City Bylaws:

Boulevard and Roadway Protection and Regulation Bylaw No. 6366 ☒ Yes ☐ No

Tree Protection Bylaw No. 8057 ☒ Yes ☐ No

Public Health Protection Bylaw No. 6989 ☒ Yes ☐ No

(If yes for any, please attach confirmation)

(If no for any, please explain why)

Tree Protection Bylaw 8057 does not apply. There are three large veteran trees along Lot B access area and the historical farm home site. These will not be impacted by the proposed fill activities. Several deciduous trees line the west perimeter of the Site and will not be impacted.

Please attach the following documents:

☒ Copy of Submission to Agricultural Land Commission

☒ Certificate of Title or Title Search Print

☒ Map or sketch of parcel showing the proposed project

☒ Map of Routing and Schedule for Vehicular Traffic

☒ Any photographs

☒ Other Documents as Required under Section 4.1

Declaration: I/We declare that:

- the information provided in this document is true and correct, to the best of my/our knowledge, and
- that any fictitious or misleading information that I/we provide may be a violation of the City of Richmond Soil Removal and Fill Deposit Regulation Bylaw No 8094 and punishable by a fine of up to \$10,000.

July 16 2010

Date



Signature of Owner

Avtar Dhillon

Print name

TAB 2

Exhibit 1 – Agent Authorization

0826239 BC Ltd.

Exhibit 1

VIA FEDERAL EXPRESS

June 10, 2010
Provincial Agricultural Land Commission
Room 133, 4940 Canada Way
Burnaby, BC
V5G 4K6

RE: Agent Authorization

To Whom it May Concern:

I hereby authorize Mr. Yad Kallu, WCH Ltd. permission to act as our agent to deal with the management of development, construction management, and the property approvals of the following property located in Richmond, BC identified as:

025-389-815; 6980 No. 9 Road; Lot A, Section 9, Block 4 North, Range 4 West, New Westminster District Plan, LMP53136

[REDACTED]

Sincerely,



Avtar Dhillon, MD

Property Owner

Direct Line: (858) 361-4499

E-Mail: ad@idhillon.com

Enclosure

0826239 BC Ltd.

VIA FEDERAL EXPRESS

June 10, 2010
Provincial Agricultural Land Commission
Room 133, 4940 Canada Way
Burnaby, BC
V5G 4K6

RE: Agent Authorization

To Whom it May Concern:

I hereby authorize Mr. Yad Kallu, WCH Ltd. permission to act as our agent to deal with the management of development, construction management, and the property approvals of the following property located in Richmond, BC identified as:

025-389-815; 6980 No. 9 Road; Lot A, Section 9, Block 4 North, Range 4 West, New Westminister District Plan, LMP53136

025-389-807; 20100 Westminister Highway; Lot B, Section 9, Block 4 North, Range 4 West, New Westminister District Plan, LMP53136

Sincerely,



Avtar Dhillon, MD

Property Owner

Direct Line: (858) 361-4499

E-Mail: ad@idhillon.com

Enclosure

TAB 3

Exhibit 2 – Certificate of Title and Title Search Print

CERTIFICATE NO: STBC1401183

TITLE NO: BB978006

THIS IS TO CERTIFY THAT AT 05:58 ON 21 OCTOBER, 2008,
THE STATE OF THE TITLE TO THE LAND DESCRIBED HEREIN IS AS STATED
AND IS SUBJECT TO THE NOTATIONS APPEARING BELOW. THIS CERTIFICATE
IS TO BE READ SUBJECT TO THE PROVISIONS OF SECTION 23(2) OF
THE LAND TITLE ACT (R.S.B.C. 1996 CHAPTER 250) AND MAY BE AFFECTED BY
SECTIONS 50 AND 55-58 OF THE LAND ACT (R.S.B.C. 1996 CHAPTER 245).


REGISTRAR

APPLICATION FOR REGISTRATION RECEIVED ON: 07 JULY, 2008

ENTERED: 15 JULY, 2008

REGISTERED OWNER IN FEE SIMPLE:

0826239 B.C. LTD., INC. NO. BC0826239
5820 SAGEBRUSH ROAD
LA JOLLA, CALIFORNIA
USA
92037



TAXATION AUTHORITY:

CITY OF RICHMOND

DESCRIPTION OF LAND:

PARCEL IDENTIFIER: 025-389-807

20100 WESTMINSTER HWY

LOT A SECTION 9 BLOCK 4 NORTH RANGE 4 WEST NEW WESTMINSTER DISTRICT
PLAN LMP53136

LEGAL NOTATIONS:

THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND
COMMISSION ACT; SEE AGRICULTURAL LAND RESERVE PLAN NO. 1
DEPOSITED JULY 30TH, 1974.

ZONING REGULATION AND PLAN UNDER THE AERONAUTICS ACT (CANADA)
FILED 10/02/1981 UNDER NO. T17084 PLAN NO. 61216

CHARGES, LIENS AND INTERESTS:

NATURE OF CHARGE

CHARGE NUMBER	DATE	TIME
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STATUTORY RIGHT OF WAY

238710C	1958-06-06	15:53
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REGISTERED OWNER OF CHARGE

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

238710C

REMARKS: PLAN 17927

INTER ALIA

MORTGAGE

BB685130	2008-07-08	09:55
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REGISTERED OWNER OF CHARGE

FARM CREDIT CANADA

BB685130

CERTIFICATE NO: STBC1401186

TITLE NO: BB978007

THIS IS TO CERTIFY THAT AT 05:58 ON 21 OCTOBER, 2008,
THE STATE OF THE TITLE TO THE LAND DESCRIBED HEREIN IS AS STATED
AND IS SUBJECT TO THE NOTATIONS APPEARING BELOW. THIS CERTIFICATE
IS TO BE READ SUBJECT TO THE PROVISIONS OF SECTION 23(2) OF
THE LAND TITLE ACT (R.S.B.C. 1996 CHAPTER 250) AND MAY BE AFFECTED BY
SECTIONS 50 AND 55-58 OF THE LAND ACT (R.S.B.C. 1996 CHAPTER 245).


REGISTRAR

APPLICATION FOR REGISTRATION RECEIVED ON: 07 JULY, 2008
ENTERED: 15 JULY, 2008

REGISTERED OWNER IN FEE SIMPLE:

0826239 B.C. LTD., INC. NO. BC0826239
5820 SAGEBRUSH ROAD
LA JOLLA, CALIFORNIA
USA
92037

TAXATION AUTHORITY:
CITY OF RICHMOND

DESCRIPTION OF LAND:

PARCEL IDENTIFIER: 025-389-815
LOT B SECTION 9 BLOCK 4 NORTH RANGE 4 WEST NEW WESTMINSTER DISTRICT
PLAN LMP53136

LEGAL NOTATIONS:

THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND
COMMISSION ACT; SEE AGRICULTURAL LAND RESERVE PLAN NO. 1
DEPOSITED JULY 30TH, 1974.

ZONING REGULATION AND PLAN UNDER THE AERONAUTICS ACT (CANADA)
FILED 10/02/1981 UNDER NO. T17084 PLAN NO. 61216

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NATURE OF CHARGE

CHARGE NUMBER	DATE	TIME
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STATUTORY RIGHT OF WAY

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REGISTERED OWNER OF CHARGE

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY
238710C

REMARKS: PLAN 17927
INTER ALIA

MORTGAGE

BB685130	2008-07-08	09:55
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REGISTERED OWNER OF CHARGE

FARM CREDIT CANADA
BB685130



LAND TITLE DISTRICT: NEW WESTMINSTER, BRITISH COLUMBIA

CERTIFICATE NO: STBC1401186

TITLE NO: BB978007

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REGISTRAR

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ENTERED: 15 JULY, 2008

REGISTERED OWNER IN FEE SIMPLE:

0826239 B.C. LTD., INC. NO. BC0826239
5820 SAGEBRUSH ROAD
LA JOLLA, CALIFORNIA
USA
92037



TAXATION AUTHORITY:
CITY OF RICHMOND

DESCRIPTION OF LAND:

PARCEL IDENTIFIER: 025-389-815 *6980 No 9 RD*
LOT B SECTION 9 BLOCK 4 NORTH RANGE 4 WEST NEW WESTMINSTER DISTRICT
PLAN LMP53136

LEGAL NOTATIONS:

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COMMISSION ACT; SEE AGRICULTURAL LAND RESERVE PLAN NO. 1
DEPOSITED JULY 30TH, 1974.

ZONING REGULATION AND PLAN UNDER THE AERONAUTICS ACT (CANADA)
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CHARGES, LIENS AND INTERESTS:

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CHARGE NUMBER	DATE	TIME
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STATUTORY RIGHT OF WAY

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REGISTERED OWNER OF CHARGE

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY
238710C

REMARKS: PLAN 17927
INTER ALIA

MORTGAGE

BB685130	2008-07-08	09:55
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REGISTERED OWNER OF CHARGE

FARM CREDIT CANADA
BB685130

CS - 52

LAND TITLE DISTRICT: NEW WESTMINSTER, BRITISH COLUMBIA

CERTIFICATE NO: STBC1401183

TITLE NO: BB978006

THIS IS TO CERTIFY THAT AT 05:58 ON 21 OCTOBER, 2008,
THE STATE OF THE TITLE TO THE LAND DESCRIBED HEREIN IS AS STATED
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REGISTRAR

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ENTERED: 15 JULY, 2008

REGISTERED OWNER IN FEE SIMPLE:

0826239 B.C. LTD., INC. NO. BC0826239
5820 SAGEBRUSH ROAD
LA JOLLA, CALIFORNIA
USA
92037



TAXATION AUTHORITY:
CITY OF RICHMOND

DESCRIPTION OF LAND:

PARCEL IDENTIFIER: 025-389-807
LOT A SECTION 9 BLOCK 4 NORTH RANGE 4 WEST NEW WESTMINSTER DISTRICT
PLAN LMP53136

LEGAL NOTATIONS:

THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND
COMMISSION ACT; SEE AGRICULTURAL LAND RESERVE PLAN NO. 1
DEPOSITED JULY 30TH, 1974.

ZONING REGULATION AND PLAN UNDER THE AERONAUTICS ACT (CANADA)
FILED 10/02/1981 UNDER NO. T17084 PLAN NO. 61216

CHARGES, LIENS AND INTERESTS:

NATURE OF CHARGE

CHARGE NUMBER	DATE	TIME
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STATUTORY RIGHT OF WAY

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REGISTERED OWNER OF CHARGE

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

238710C

REMARKS: PLAN 17927

INTER ALIA

MORTGAGE

BB685130	2008-07-08	09:55
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REGISTERED OWNER OF CHARGE

FARM CREDIT CANADA

BB685130

CS - 53

CONTINUED ON PAGE 2

TAB 4

Exhibit 3 – Current Use of Land Under Application

Current Use of Land Under Application

**Purpose of project:**

The purpose of the project is to enhance the drainage by filling the land with soil with good drainage to permit soil grown wasabi farming on a parcels of the property located on No. 9 road near Westminister Highway in the City of Richmond.

Explain how the proposal will benefit the agricultural use of the property:

The properties are presently at an elevation that has been too wet for farming. Previous attempts to grow strawberries and blueberries were not successful. Raising the elevation to the same level as the adjacent roads will enhance the agricultural capability of the land or permit growth of soil grown wasabi plants.

TAB 5

Exhibit 4 –Use on Adjacent Land – East, West, North and South

Exhibit 4 – Uses on Adjacent Lots



Cranberry Farm Blueberry Farm Vacant Land Subject Property
Blueberry Farm & Vacant Land Excavated land for cranberry farm



North



Cranberry Plantation north of Westminster Highway



Westminster Hwy adjacent to North side of property

South



No road (located South of Subject Property)



East



52 acre recently cleared property for cranberry farming



Subject property separated from Cranberry property on East side by railway tracks

West



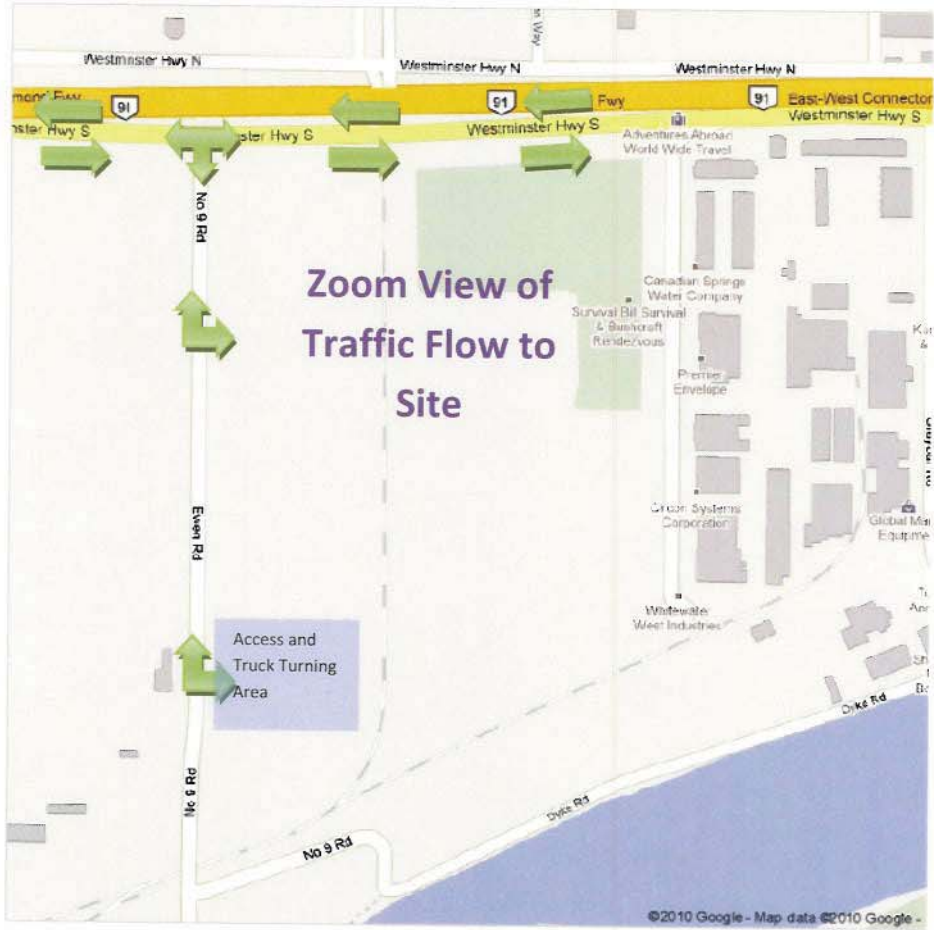
6511 No. 9 Road (located West of Subject Property)



TAB 6

Exhibit 5 – Map of Routing and Schedule for Vehicular Traffic

Exhibit 5 – Map of Routing and Schedule for Vehicular Traffic



TAB 7

Exhibit 6 – Agrologist Report – Keystone Environmental

(ENCLOSED UNDER SEPARATE COVER)

TAB 8

Exhibit 7 – Copy of full submission to Agricultural Land Commission (*Dated June 10, 2010*)

YAD KALLU

VIA FEDERAL EXPRESS

June 11, 2010
Provincial Agricultural Land Commission
Room 133, 4940 Canada Way
Burnaby, BC
V5G 4K6

RE: Application to Fill

Dear Agricultural Land Commission:

Please accept this application to fill the subject property that consists of Lots A & B, Section 9, Block 4 West, New Westminster District, Plan LMP 53136, City of Richmond B.C. which is approximately 14.04 hectares of land in the Agricultural Land Reserve. The process will be filling the property to an agricultural standard for Wasabi farming and establishing access roads in accordance with the recommendations provided by the enclosed agrology report.

The properties are presently at about 1 meter geodetic elevation and too low for farming soil grown Wasabi. Wasabi or Japanese horseradish (*Wasabia japonica* [Miquel] Matsu.) is a perennial plant of Japan used as a traditional condiment of Japanese food. Wasabi is as a potential new crop for B.C. for two main reasons. First, there is consistently more demand than available supply for this crop. Second reason, wholesale prices can be as high as \$200/kg and it is well suited to Lower Mainland land costs. A perennial plant of Japan, it was traditionally a prized culinary condiment used only in Japan, but is now in vogue and in demand by elite restaurants and sushi bars throughout the world, and increasingly served as a value-added ingredient to processed foods.

In British-Columbia, wasabi has been grown with some success using hydroponic culture in greenhouses and but this cultivation method required a costly investment in building and equipment. However, wasabi is easier to grow in soil than in running water and nowadays 70% of wasabi produced in Japan are grown in soil. According to leading producers in China, it can only take one year to grow a crop and the rhizome can get to a good marketable product up to 16 to 20cm. A micro-propagation laboratory operating in B.C. is selling wasabi tissue cultured plantlets directly to growers. This planting material is disease free and 3 varieties are available for testing. We want to take advantage of this opportunity and grow wasabi in soil in commercial quantities.

Our goal is to produce high quality wasabi in soil in an environmentally responsible manner to sell to North American and international markets. Wasabi also offers an opportunity for developing or supplying new food and nutraceutical products from or in British Columbia and will benefit not only growers, but the province as well.

Wasabi products represent a value-added growth opportunity for the BC agri-food industry, with high potential for export to Asian markets. Our innovation will generate significant business activities in farming and manufacturing industries and could potentially create many direct and indirect jobs in BC.

In order to fill the properties a number of consents and or permits will be required. The property is within the Agricultural Land Reserve (ALR) and permission will be required from the Agricultural Land Commission to fill the property.

In order to obtain all the permits, we have consulted the services of the following consultant:

- Agrologist, Keystone Environmental Ltd. (Full Report Enclosed)

The estimated time frame to accomplish all of the requirements including filling the site and topsoil preparation for wasabi farming will be two years.

Thank you for considering this application. If you have any questions or require further information on the application, please do not hesitate to call at (604) 861-4644.

Yours truly,

Yad Kallu
President
WCH Ltd.

Direct Line: (604) 861-4644

E-Mail: yad@wchltd.com

Enclosure

Table of Contents – Application to Place Fill
Agricultural Land Commission

Tab 1 – ALC Application to Fill or Remove Soil and Application Fee (\$600)

Tab 2 – Exhibit 1 – Agent Authorization

Tab 3 – Exhibit 2 – Certificate of Title and Title Search Print

Tab 4 – Exhibit 3 – Current Use of Land Under Application

Tab 5 – Exhibit 4 – Use on Adjacent Land – East, West, North and South

Tab 6 – Exhibit 5 – Agrologist Report – Keystone Environmental

TAB 1

ALC Application to Fill or Remove Soil and Application Fee (\$600)



APPLICATION

For a Non-farm Use To Place Fill or Remove Soil under the Agricultural Land Commission Act

This form must be completed for non-farm use proposals involving the placement of fill or removal of soil that do not qualify for exemption under Part 3 of the Agricultural Land Reserve Use, Subdivision and Procedure Regulation.

To avoid delays in processing your application, please ensure that all parts of the form are completed and that the required documents and fees are enclosed.

The information required by this form and the documents you provide with it are collected to process an application under the *Agricultural Land Commission Act* and regulation. This information will be available for review by any member of the public. If you have any questions about the collection or use of this information, contact the Commission and ask for the staff member handling the application.

Provincial Agricultural Land Commission
Room 133, 4940 Canada Way, Burnaby, BC V5G 4K6
Telephone: (604) 660-7000 Fax: (604) 660-7033
www.alc.gov.bc.ca

INSTRUCTIONS FOR COMPLETING THE APPLICATION FORM

This application must be submitted for proposals involving placement of fill or soil removal that do not qualify for exemption under Part 3 of the Agricultural Land Reserve Use, Subdivision and Procedure Regulation.

The application fee is \$600 and is payable to the local government.

APPLICANT

This is the registered owner of the land or an agent acting on behalf of the owner. If there is more than one registered owner, all owners' names must be shown. An agent must supply written authorization of all owners.

LOCAL GOVERNMENT

Specify the municipality or regional district in which the property is located.

LAND UNDER APPLICATION

Refer to your registered title to complete this part. The size of parcel refers to the entire parcel, not just the area under application. If you do not know the size of your property, your local government office may be able to assist with this information. Copies of the Certificate of Title or Title Search Print must accompany your application.

CURRENT USE OF LAND and ADJACENT USES

Describe the current use of the whole parcel and the types of activities on adjacent lots. Include any historical use of the property, particularly its use for farming activities. Show this information on a plan or sketch.

PROPOSAL

Be clear and precise in describing the proposal and purpose of the application. Explain how your proposal will enhance the agricultural potential of the property. Explain any measures you propose to take to reduce potential impact on surrounding farm operations such as landscape screening, dust control measures, noise abatement, etc. Include a plan or sketch if appropriate.

SIGNATURE(S)

All registered owners of the land must sign the application or provide written confirmation that they consent to the application. If an agent signs the application form, he/she must provide written authorization to act on behalf of the owner(s).

SEND COMPLETED APPLICATION and ACCOMPANYING DOCUMENTS TO:

- the Municipality in which the land is located;
- if not within a Municipality, the Regional District or Islands Trust in which the land is located.

The following **must** be enclosed:

- | | |
|---|--|
| ▪ Application fee (\$600) payable to the Local Government | ▪ Map or sketch showing proposal & adjacent uses |
| ▪ Certificate of Title or Title Search Print | ▪ Photographs (referenced to a map or sketch) |
| ▪ Agent authorization (if using agent) | ▪ East/West and North/South cross-sectional profiles of fill and/or removal area |

INCOMPLETE OR MISSING INFORMATION WILL DELAY YOUR APPLICATION

If you have any questions about the application process, contact the Municipal or Regional District or Islands Trust office in which the property is located. You may also contact the Commission's office.



**APPLICATION TO PLACE FILL OR REMOVE SOIL
UNDER SECTION 20(3) OF THE AGRICULTURAL LAND COMMISSION ACT**

NOTE: The information required by this form and the documents you provide with it are collected to process your application under the Agricultural Land Commission Act and regulation. This information will be available for review by any member of the public. If you have any questions about the collection or use of this information, contact the Agricultural Land Commission and ask for the staff member who will be handling your application.

APPLICANT

Registered Owner: 0826239 BC Ltd.		Agent: Yad Kallu	
Address: c/o Avtar Dhillon		Address: PO Box 96019 3080-11166	
927-470 Granville Street		Steveston Hwy, Richmond BC	
Vancouver, BC	Postal Code V6C 7V5	Canada	Postal Code V7A 5JR
Tel. (home) 858-361-4499 (work) same		Tel. 604-861-4644	
Fax 858-777-5481		Fax 858-777-5481	
E-mail ad@idhillon.com		E-mail yad@wchltd.com	

LOCAL GOVERNMENT JURISDICTION (Indicate Regional District or Municipality)

City of Richmond

LAND UNDER APPLICATION (Show land on plan or sketch)

Title Number	Size of Parcel (Ha.)
025-389-815 (6980 No. 9 Road, Richmond, BC)	8.51
025-389-807 (20100 Westminster Highway, Richmond, BC)	5.51

CURRENT USE OF LAND UNDER APPLICATION (Show information on plan or sketch)

List all existing uses on the parcel(s) and describe all buildings
4 acres of Blue Berries; remaining is vacant land. No buildings on property
- See attached - Exhibit 3

PROPOSAL (Show on plan or sketch)

☒ To Place Fill ☐ To Remove Soil ☐ To Remove Soil and Place Fill

Type of Material: Random Excavated Material

Volume: 210,584* cubic metres

Depth: 1.25 metres

Total Project Area: 14.04 hectares

Duration of Project: 2 years

Type of Equipment to be Used: (i.e. screening plants, washers, portable asphalt and concrete plants)

Excavator with bucket

D6 bulldozer

Compactor

Off Road Truck

Dump Truck

Proposed Reclamation Measures: N/A

Reclamation plan prepared by Professional Agrologist

☐

Yes (If yes, attach plan)

☒

No

Purpose of Project:

See Exhibit 3 and Cover Letter

Explain how the proposal will benefit the agricultural use of the property:

See Exhibit 3 and Cover Letter

USES ON ADJACENT LOTS (Show information on plan or sketch)

North Cranberry plantation north of Westminster Hwy

East Recently excavated land for cranberry farming

South Vacant land with trees, shrub and high voltage electrical powerline

West Blueberry farm

(See attached Exhibit 4 for more detail)

Are there any farm activities such as livestock operations, greenhouses or horticultural activities in proximity to the proposal?

☐

Yes (If yes, please specify farm activity and location)

☒

No

DECLARATION

I/we consent to the use of the information provided in the application and all supporting documents to process the application in accordance with the *Agricultural Land Commission Act* and regulation. Furthermore, I/we declare that the information provided in the application and all the supporting documents are, to the best of my/our knowledge, true and correct. I/we understand that the Agricultural Land Commission will take the steps necessary to confirm the accuracy of the information and documents provided.

July 16/2010
Date

Signature of Owner or Agent

YAD KALLU
Print Name

Date

Signature of Owner or Agent

Print Name

Date

Signature of Owner or Agent

Print Name

YAD KALLU

TAB 2

Exhibit 1 – Agent Authorization

0826239 BC Ltd.

VIA FEDERAL EXPRESS

June 10, 2010
Provincial Agricultural Land Commission
Room 133, 4940 Canada Way
Burnaby, BC
V5G 4K6

RE: Agent Authorization

To Whom it May Concern:

I hereby authorize Mr. Yad Kallu, WCH Ltd. permission to act as our agent to deal with the management of development, construction management, and the property approvals of the following property located in Richmond, BC identified as:

025-389-815; 6980 No. 9 Road; Lot A, Section 9, Block 4 North, Range 4 West, New Westminster District Plan, LMP53136

025-389-807; 20100 Westminster Highway; Lot B, Section 9, Block 4 North, Range 4 West, New Westminster District Plan, LMP53136

Sincerely,



Avtar Dhillon, MD
Property Owner
Direct Line: (858) 361-4499
E-Mail: ad@idhillon.com

Enclosure

YAD KALLU

TAB 3

Exhibit 2 – Certificate of Title and Title Search Print

CERTIFICATE NO: STBC1401183

TITLE NO: BB978006

THIS IS TO CERTIFY THAT AT 05:58 ON 21 OCTOBER, 2008,
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SECTIONS 50 AND 55-58 OF THE LAND ACT (R.S.B.C. 1996 CHAPTER 245).


REGISTRAR

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ENTERED: 15 JULY, 2008

REGISTERED OWNER IN FEE SIMPLE:

0826239 B.C. LTD., INC. NO. BC0826239
5820 SAGEBRUSH ROAD
LA JOLLA, CALIFORNIA
USA
92037



TAXATION AUTHORITY:
CITY OF RICHMOND

DESCRIPTION OF LAND:

PARCEL IDENTIFIER: 025-389-807
LOT A SECTION 9 BLOCK 4 NORTH RANGE 4 WEST NEW WESTMINSTER DISTRICT
PLAN LMP53136

LEGAL NOTATIONS:

THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND
COMMISSION ACT; SEE AGRICULTURAL LAND RESERVE PLAN NO. 1
DEPOSITED JULY 30TH, 1974.

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FILED 10/02/1981 UNDER NO. T17084 PLAN NO. 61216

CHARGES, LIENS AND INTERESTS:

NATURE OF CHARGE

CHARGE NUMBER	DATE	TIME
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STATUTORY RIGHT OF WAY

238710C	1958-06-06	15:53
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REGISTERED OWNER OF CHARGE

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY
238710C

REMARKS: PLAN 17927
INTER ALIA

MORTGAGE

BB685130	2008-07-08	09:55
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REGISTERED OWNER OF CHARGE

FARM CREDIT CANADA
BB685130

CERTIFICATE NO: STBC1401186

TITLE NO: BB978007

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USA
92037



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DESCRIPTION OF LAND:

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LOT B SECTION 9 BLOCK 4 NORTH RANGE 4 WEST NEW WESTMINSTER DISTRICT
PLAN LMP53136

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BRITISH COLUMBIA HYDRO AND POWER AUTHORITY
238710C

REMARKS: PLAN 17927
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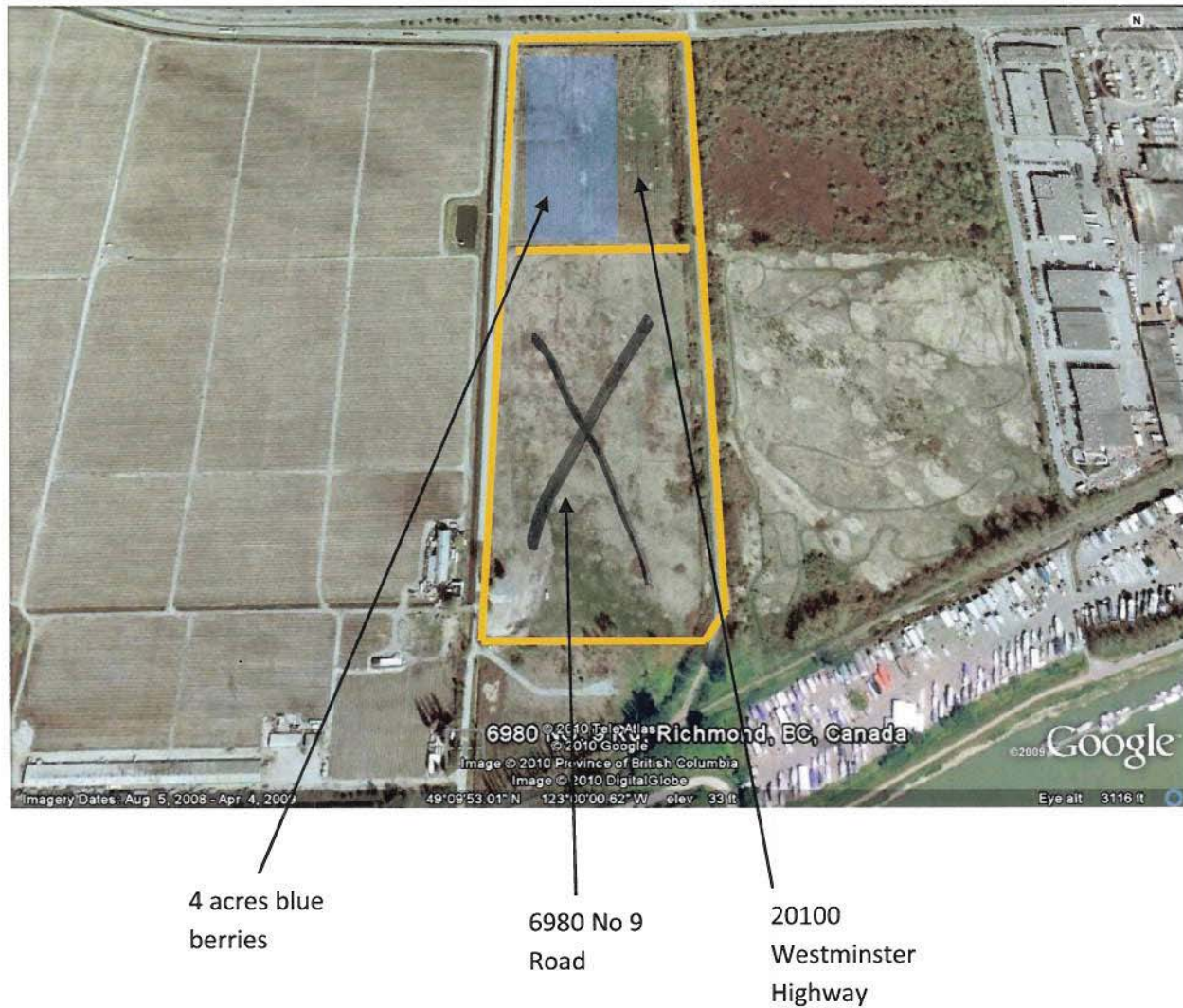
REGISTERED OWNER OF CHARGE

FARM CREDIT CANADA
BB685130

TAB 4

Exhibit 3 – Current Use of Land Under Application

Current Use of Land Under Application

**Purpose of project:**

The purpose of the project is to enhance the drainage by filling the land with soil with good drainage to permit soil grown wasabi farming on a parcels of the property located on No. 9 road near Westminster Highway in the City of Richmond.

Explain how the proposal will benefit the agricultural use of the property:

The properties are presently at an elevation that has been too wet for farming. Previous attempts to grow strawberries and blueberries were not successful. Raising the elevation to the same level as the adjacent roads will enhance the agricultural capability of the land or permit growth of soil grown wasabi plants.

TAB 5

Exhibit 4 – Use on Adjacent Land – East, West, North and South

Exhibit 4 – Uses on Adjacent Lots



Cranberry Farm
Blueberry Farm
Vacant Land
Subject Property
Blueberry Farm & Vacant Land
Excavated land for cranberry farm



North



Cranberry Plantation north of Westminster Highway



Westminster Hwy adjacent to North side of property

South



No road (located South of Subject Property)



TAB 6

Exhibit 5 – Agrologist Report – Keystone Environmental

(ENCLOSED UNDER SEPARATE COVER)

East



52 acre recently cleared property for cranberry farming



Subject property separated from Cranberry property on East side by railway tracks

West



6511 No. 9 Road (located West of Subject Property)



Ownership of One World Farms Bio

To: City of Richmond
From: WCH Ltd
RE: App # 10-538968 and 10-539008
Date: April 04 2011

Avtar Dhillon and Diljit Bains (owners of One World Farms Inc.) purchased the property from Mr. and Mrs. Bains, the parents of Diljit Bains. Both the Dhillon and the Bains families have farming operations and have played an important role in the farming industry in B.C. and California. Ms. Bains and Dr. Dhillon's families come from generations of farmers.

Ms. Bains' Great Grandfather left his farming operation in India and came to U.S.A. in the 1920's and worked as a farm laborer and earned enough money to purchase his first 30 acre peach orchard. Her Grandfather came in 1948 and continued farming the operation started by his father.

Ms. Bains' father came to the US in 1958 and today is a prominent figure in farming. He has been farming in the US ever since 1958 and later expanded his operations into B.C. in 1978. He has developed and operated hundreds of acres of farmland in B.C. In recent years he has scaled down his operations in B.C. and California by selling some of his farms and ranches to his two sons and one daughter. Each of the children has their own farming operations as well as joint operations with each other and their parents. The 33 acre agricultural land in Richmond was purchased by the Bains family to develop it as a blueberry farm, unfortunately the poor soil, and its low ground level have limited its farming capability, having a negative impact on the planted acreage (only 4 acres remain in production of the 33). The undertaking to improve the raw land into agricultural land has proven to be challenging for the Bains family, but the recent efforts by Ms Bains and Dr. Dhillon to make improvements to the land in order to establish a wasabi operation can revitalize this parcel of land and perhaps aid in sparking a new crop for the lower mainland.

Dr. Dhillon has grown up in Vancouver and in addition to farming with his father and uncles, he had a family medical practice until 2001. Currently he and his wife have several hundred acres of farming operations in California and BC. These include blueberry farms in Richmond and walnut, prune, almond and peach orchards as well as fruit processing in California. Dr Dhillon is the former CEO and current Chairman of Inovio Bio Medical Corp. www.inovio.com, which is a publicly traded company on the NYSE. Dr Dhillon feels that with his key contacts in the Neutraceutical / Pharmaceutical industry as well as his wife's ties to the agriculture industry they are in an extremely unique position of creating "New To Market" health products that can prove to be quite lucrative.

Today, Ms Bains, her husband, her brothers and both of there parents have been involved in farming and have expanded the family business. A short synopsis of the properties they have developed and or farmed over the years is provided below.

Noteworthy operations in B.C. have included ownership and operation of a 350 acre cranberry farm in Richmond for over 20yrs, as well as 160 acres of vacant land in Richmond, developed into a productive blueberry farm and operated for 10 years and later sold to the Purewalls. In Coquitlum an additional 200 acres of raw land was purchased from the government and developed into a productive blueberry farm and later sold after several years of operations. A farm in Deroche consisting of 220 acres was developed for growth of blackcurrant, raspberry, strawberry and blueberry. In addition to all of these properties which are actively being farmed, they owned a processing plant in Langley for raspberries, cranberries and other crops. The farms and the processing plants all currently remain operational and productive.

Currently in California Bains family farming operations consist of over 2000 acres of prune, peach, walnut and almond orchards as well as rice and wheat fields, including several hundred acres of orchards owned and operated by Dr. Dhillon and Ms. Bains.



Keystone Environmental

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Attachment #2

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**AGROLOGIST REPORT
FILL PLACEMENT APPLICATION
FOR**

**Lots A and B, Section 9, Block 4 North,
Range 4 West, New Westminster District, Plan LMP53136
20100 Westminster Highway and 6980 No. 9 Road,
Richmond, BC**

Prepared for:

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Project No. 10561

July 2010

EXECUTIVE SUMMARY

This KEYSTONE ENVIRONMENTAL™ Agrologist Report was prepared for a property located at Section 9, Block 4 North, Range 4 West, New Westminster District, Plan LMP 53136, City of Richmond, BC, and consists of both Lot A and Lot B (the "Site"). The Site assessment was conducted to review the need for fill material to improve the agricultural utility of the property to grow wasabi plants. It is understood that this report will be used to support the application to place fill under section 20(3) of the *Agricultural Land Commission Act*.

The Site is located at 20100 Westminster Highway and 6980 No. 9 Road in Richmond, BC. The property is bounded by Highway 91 along the north, No. 9 Road along the west, railroad tracks along the east and property PID 003-987-558 along the south.

The Site is zoned AG1 by the City of Richmond for traditional agricultural use. The northern portion of the Site (Lot A) contains a blueberry plantation with raised beds running north-south parallel with No. 9 Road on almost half of that lot, the other portion was mounded and historically cultivated but is presently overgrown with shrubs, grasses and herbaceous non-cultivar species. The southern portion of the Site (Lot B) was vacant and also historically cultivated but not overgrown to the extent that the northern unplanted Lot A was. Agriculture ditches follow the entire length of the north perimeter and the middle of the Site between Lot A and Lot B, and intermittently along the west perimeter of Lot A. The entire Site is 141,786 m² and, in general, was relatively level.

The land use surrounding the Site is zoned AG1 (agriculture), IL (light industrial) and I (industrial). There are blueberry plantations west of the Site across No. 9 Road and north of the Site across Highway 91. Railroad tracks are immediately east of the Site, the Fraser River is 220 m south of the Site, and a Lafarge cement plant is 200 m southwest of the Site.

The soils on the Site were classified according to the "*Soils of the Langley-Vancouver Map Area, Volume 3*" (Province of British Columbia, Ministry of Environment, 1981). Keystone Environmental Ltd. (Keystone Environmental) assessed the Site to verify soil classifications and found four different soil units:

1. Lumbum;
2. Blundell-Annis;



3. Delta; and
4. Kitter-Delta.

The proposed use for the Site is to grow wasabi on the land in conjunction with a National Research Council Grant to study open field wasabi. To optimize the best growth opportunities for wasabi, infilling of the Site is required.

The proposed fill plan for the Site is as follows:

- Strip all good quality, arable soils from the field to be stock piled until such time enough fill is placed to achieve the required elevation;
- Place a locally-sourced coarse-grained soil with some fines to fill the Site;
- Elevate the existing grade by a minimum of 1 m at the south end to a maximum of 1.5 m above the existing grade at the north end;
- Place fill such that fill embankments meet 2H:1V slope;
- In the area of the watercourse, middle of the Site, fill should be sloped at 3H:1V to prevent any potential erosion to the watercourse;
- Place fill to elevate the contours of the Site to meet the City of Richmond Soil and Fill Deposit Regulation Bylaw 8094, to allow the potential placement of farm support structures, if any should need to be constructed;
- Follow setbacks of 5 m from all watercourses adjacent to the Site and on-Site for start of fill placement; and
- Top dress the filled area using the previously stripped lands mixed with peat, sand, and other organic matter to achieve a proper growth medium for wasabi.

The following measures should be implemented to minimize the possible impacts of the fill placement to the Site and associated watercourses:

- Apply the fill material during the dry season (late July, August, September), when the groundwater table is at its lowest point;
- Use erosion and sediment control Best Management Practices (BMPs), such as silt fence installation during fill placement;

- Provide construction monitoring during fill placement;
- Take extra care when sloping of the zone between the farm area and watercourses, such that there is a gradual transition between the two in order to minimize accelerated overland water flow to the riparian areas; and
- Plant grasses or other ground cover to minimize soil erosion from disturbed and new filled areas.

The following agricultural improvements are anticipated for the Site following the placement of fill material:

- Increased water holding capacity, due to the larger volume of soil that will be present on the Site that will reduce flooding of lower lying areas;
- Improved soil structure, which will allow for an increase in the number of days that farm machinery can traverse the soils on the Site;
- Increased soil structure that will allow for a wider variety of agricultural crops to be grown; and
- Compliance with the City of Richmond bylaws for the base of buildings in a flood plain which will then allow for the construction of agricultural support buildings if so required in the future.

Overall, the potential impact of fill placement on the aesthetic issue of view is minimal. Other operational aesthetic impacts, from increasing active operation of the land for agricultural purposes, such as odour and dust, can be readily mitigated and managed through BMPs.

The potential impact to the Site from the placement of the fill will be an improvement to the agricultural utility due to increased soil drainage and ability to grow a wider variety of crops.

With the preservation of the standard setbacks for on-Site and adjacent watercourses, there should be no impact on sensitive natural communities associated with these areas. There is expected to be a potential displacement of birds and mammals that currently inhabit the Site but the adjacent similar habitat types can accommodate this displacement.



The overall use of a granular, well-drained material for fill over the majority of the Site, away from the perimeter agriculture and transecting ditches will reduce the current flooding of the area. The soil will allow for more infiltration of water during storm events and the increased volume of soil will increase soil water holding capacity. This increase in water holding capacity should, in turn, moderate/regulate water discharge to the receiving watercourses, allowing for more stable water habitat. With use of mitigation measures and BMPs during fill placement, the potential impacts on water quality from erosion and sedimentation should be minimized.

It is concluded that the Site at Lot A and Lot B, Section 9, Block 4 North, Range 4 West, New Westminster District, Plan LMP 53136, in the City of Richmond, BC, is a suitable location to receive the fill material required to improve agricultural land use. With the appropriate use of measures to prevent soil erosion, and later operational measures such as best management practices, the application of fill material is anticipated to improve soil structure and drainage, mitigate current flooding issues and increase the utility of the land for agricultural use, specifically for the growth of wasabi.

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1. INTRODUCTION

This report presents the findings of a KEYSTONE ENVIRONMENTAL™ Agrologist Report, prepared for Mr. Yad Kallu of WCH Ltd. for Lots A and B, Section 9, Block 4 North, Range 4 West, New Westminster District, Plan LMP 53136, City of Richmond, BC (the "Site"). Keystone Environmental Ltd. (Keystone Environmental) understands that Mr. Yad Kallu would like to infill and develop the Site for use as a wasabi farm.

The assessment of the Site was conducted to evaluate whether the placement of fill material would improve the agricultural ability of the property. It is understood that this report will be used to support the application to place fill under Section 20(3) of the *Agricultural Land Commission Act*, respecting regulated Department of Fisheries and Oceans (DFO) recommended watercourse setbacks and to assist in compliance with the City of Richmond Bylaw No. 8094, Section 4.1 requirements.

1.1 Scope of Work

The scope of work for this study was in general accordance with the suggested guidelines of the Provincial Agricultural Land Commission, and included the following tasks:

- Review of available historic records, including aerial photographs and current title searches;
- Review of available documents relating to the agricultural land use of the Site and the site agricultural land capability;
- Site reconnaissance to observe Site conditions; and
- Soil sampling to verify Site soil classification types.

1.2 Study Limitations

Findings presented in this report are based upon (i) a review of accessible areas on-Site and on surrounding grounds, (ii) a review of available site and historic archive records, and (iii) the results of field investigations. Site conditions (soil, geologic, hydrogeologic, and chemical characterization) may vary from that extrapolated from the data collected during this investigation. Site characteristics and soil sampling results reflect conditions encountered at specific test locations. Consequently, while findings and conclusions documented in this report



have been prepared in a manner consistent with the level of care and skill normally exercised by other members of the agricultural profession practising under similar circumstances in the area at the time of the performance of the work, this report is not intended nor is it able to provide a totally comprehensive review of past or present site conditions.

This report has been prepared solely for the internal use of Mr. Yad Kallu and for review purposes by the Agricultural Land Commission, the City of Richmond and the Department of Fisheries and Oceans, pursuant to the agreement between Keystone Environmental Ltd. and Mr. Yad Kallu. A copy of the general terms and conditions associated with this agreement is attached in Appendix C. By using the report, Mr. Yad Kallu, the Agricultural Land Commission, the City of Richmond and the Department of Fisheries and Oceans agree that they will review and use the report in its entirety. Any use which other parties make of this report, or any reliance on or decisions made based on it, are the responsibility of such parties. Keystone Environmental Ltd. accepts no responsibility for damages, if any, suffered by other parties as a result of decisions made or actions based on this report.

2. SITE DESCRIPTION

2.1 Site Identification

The Site is identified as follows:

Legal Addresses:	Lots A & B, Section 9, Block 4 North, Range 4 West, New Westminster District, Plan LMP53136
General Civic Address:	20100 Westminster Highway (Lot A) & 6980 No. 9 Road (Lot B)
Parcel Identifier:	025-389-807 (Lot A) & 025-389-815 (Lot B)
Current Zoning:	AG1 (traditional sites zoned for agriculture purposes)
Site Latitude:	49° 9.917' N
Site Longitude:	123° 0.005' W

Figure 1 Site Location within the Lower Mainland of BC (image from Google Earth)



Figure 2 Site Lot Locations and Immediate Surrounding Area (Image from Google Earth)



2.2 General Site Description

The Site was located in the eastern part of the City of Richmond, BC, southwest of Highway 91 and along the east side of No. 9 Road (see Appended Figures 1 and 2). The Site was approximately 141,786 m², was divided into two lots (Lot A & Lot B), and zoned AG1 (agricultural use) by the City of Richmond. The land use surrounding the Site was zoned AG1 (agriculture) north across New Westminster Highway, west across No. 9 Road, and adjacent to the east. The land adjacent to the south of Lot B was zoned both AG1 and IL (light industrial). Industrial land use was located to the southwest near the intersection of Dyke Road and No. 9 Road.

Cranberries were planted west of the Site across No. 9 Road and north of the Site across Highway 91. Railroad tracks ran parallel to the eastern property line and separated the Site from a former City of Richmond ecologically sensitive area (to the east) which has been cleared.

The Fraser River was 220 m south of the southern property boundary, and a Lafarge cement plant was located 200 m southwest of the Site.

Lot A of the Site was distinctly divided north to south with a blueberry shrub (*Vaccinium sp.*) plantation in raised vertical rows (Photograph 1) on the western 65 m. The eastern portion of the Site consisted of an area that was historically cultivated but presently is unmanaged for agricultural use. It was overgrown with invasive species, such as Himalayan blackberry (*Rubus discolor*), deciduous shrubs and wild herbaceous species, such as western buttercup (*Ranunculus repens*) and fireweed (*Epilobium angustifolium*) (Photograph 2). Soil was mounded in the northeast corner.

Photograph 1 Blueberry plantation in the western portion of Lot A



The Site was bisected by a watercourse, east to west along the Site, between Lot A and Lot B. This watercourse discharged apparently off-Site, seasonally, along the western perimeter (Photograph 3).



Photograph 2 Uncultivated area of Lot A with grasses, buttercup and shrubs



Photograph 3 Central watercourse that bisects Lots A and B



Lot B is located south of the watercourse. It was historically cultivated but is currently devoid of farming activities and any recent evidence of cultivation. It is still relatively open but is becoming overgrown with grasses and herbaceous species (Photograph 4).

Photograph 4 Lot B uncultivated grasses, invasive weeds and herbaceous plants



Access to Lot B is from the southwest corner. A farm residence was historically located in that corner. It is currently being used as an area for vehicular storage and material stockpiling (Photograph 5). Along the southern boundary of Lot B (and the Site) is a dense thicket of blackberry and a group of black cottonwood trees (*Populus trichocarpa*). There is an opening to an adjacent off-Site road near the middle of the lot.



Photograph 5 Parking and stockpile area, southwest corner of Lot B



2.3 Topography

All areas of the Site were relatively level with elevation varying from three to nine metres above sea level. Most of the Site was at eight to nine metres above sea level. The lowest part of land was along the north boundary adjacent Highway 91. Ditches have been constructed along the north side of Lot A in association with Highway 91 along the west property line and through the middle of the Site separating the legal boundary of Lot A and Lot B. There was also evidence of drainage close to the middle of Lot A in the blueberry plantation that ran from the top of Lot A almost to the middle ditch that bisected the Lots. In general, Site and regional topography was fairly flat.

2.4 Surficial Geology and Hydrogeology

Surficial geology was assessed using the City of Richmond Surficial Map (Scale 1:25,000) and the Geological Survey of Canada Surficial Geology map (Surficial Geology, New Westminster, Scale 1:50,000, Map number: 1486A (1979)). The maps were reviewed to provide a description

of soil material at the Site. Current soil stratigraphy may or may not be as described by the Surficial Geology map due to human intervention.

The City of Richmond Surficial Geology Map listed the Site as having silt to silt loam soils, less than 2 m thick overlaying deltaic deposits. The Site, and the general vicinity around it, was classified by the Geological Survey of Canada Surficial Geology map as Fraser River Sediments which consisted of deltaic and distributary channel fill sediments overlying and cutting estuarine sediments and overlain in much of the area by overbank sediments. Specifically the northern third and southern thirds of the Site were classified as having over bank sandy to silt loam, normally less than two metres overlying the deltaic deposits. The middle third of the Site was classified as having overbank silty to silt clay, normally less than two metres overlying the deltaic deposits.

Site groundwater was expected to follow regional topography. Local groundwater flow direction may vary as a result of local conditions, such as topography, geology and the presence of drainage channels and buried utilities, and is subject to confirmation with field measurements. Because Site is relatively flat, local groundwater flow was indeterminate. It is likely that the groundwater flow direction and gradient is tidally influenced due to the Site's proximity to the Fraser River. Drainage is provided by infiltration which partly feeds the ditches along the Site boundaries and the central watercourse. Groundwater on and around the Site is a part of the Fraser River groundwater basin.

2.5 Soil

The soils on the Site were classified according to the "*Soils of the Langley-Vancouver Map Area, Volume 3*" soil survey (1981).

Site Assessment and Soil Observations

A Site assessment was conducted on May 19, 2010, to determine conditions and verify soil type classifications. Keystone Environmental identified four soil units throughout. They were defined by soil classification, Site location, topography and drainage moisture regime (Figure 3).



Figure 3 The four different soil units identified within the Site



Soil Unit #1 – Lumbum Soils

Soil unit #1, Lumbum soils, were only located in the northeastern corner of the Site, within Lot A.

General Soil Description

Lumbum soils have thick organic deposits and the soil classification is *Typic Mesisol*. They are typically found in the lowlands of Richmond at low elevations.

A silty-clay deposit horizon was identified near the surface where mounding and cultivation had occurred and below that a deep peat layer was present (at 30+ cm below the surface; Photographs 6 and 7). Low to no coarse fragments were located in the Lumbum soil pits and rooting depth was restricted to the upper 30 cm. The Lumbum soils were planted with cranberries in the northwestern corner and showed heavy mounding in the northeastern corner of Lot A.

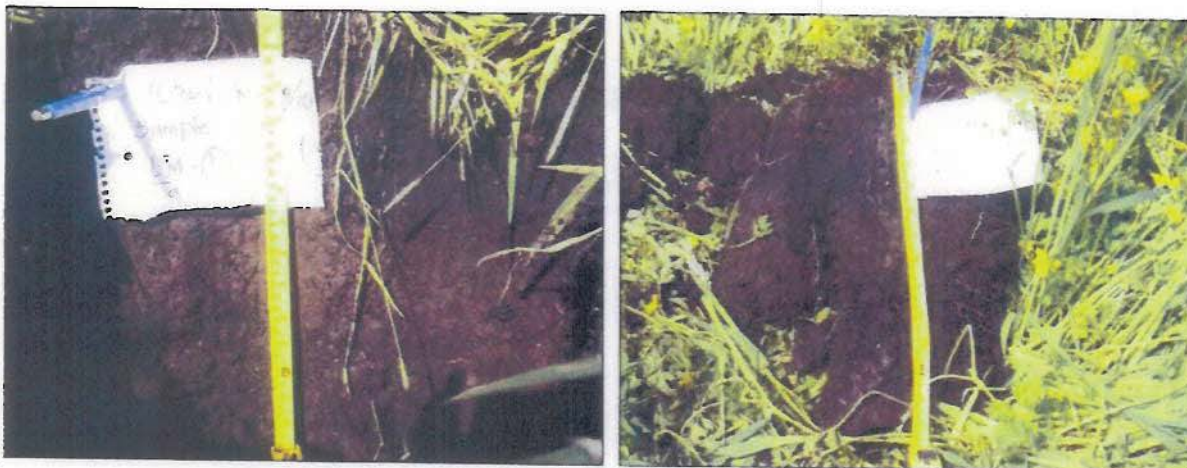
Drainage and Soil Moisture

Lumbum soils are poorly drained and thus have high watertables, and at times exemplify extreme acidity. They have slow surface run-off due to high water retention capacity, often exhibiting ponded surface water during the wetter months of the year.

Soil Textures

Surface textures were observed to be composed of mostly silty clay loam and subsoils were dominantly silty clay. These fine textures act as a confining layer which limits the downward movement of groundwater.

Photographs 6 and 7 Lumbum Soil profile and extracted section in Lot A May 19, 2010



Soil Unit #2 – Blundell-Annis Soils

Soil unit #2 was identified as a narrow strip of Blundell-Annis soil that transects Lot A, within the northern portion of the Site, just south of the Lumbum soils. Blundell-Annis soils are typically found in Richmond at low elevations.

General Soil Description

The Blundell-Annis soils were stratified with a thin organic, decomposed layer from just below the surface to 5 cm, followed by smooth silty clay layers and a buried layer of wet decomposing peat.



Drainage and Soil Moisture

Blundell-Annis soils are poorly drained. These soils have a high water holding capacity and the watertable is near the surface. Water often accumulates during significant rainfall events and it was observed that water had infilled the soil sampling pits to approximately 40 cm (Photographs 8 and 9).

Soil Textures

Below the surface organic layer, the top horizon layer was observed to be composed of clay loam and silt loam and also consisting of a lower horizon of silty-clay peat. The peat layer of the Blundell-Annis soils was found to be deeper than what was observed in the Lumbum soil sampling pits. These soils have developed from Fraser River deltaic deposits and are generally stone free (no coarse fragments were found in the samples collected on-Site).

Photographs 8 and 9 The Blundell-Annis soil pits observed May 19, 2010, infilling with water



Soil Unit #3 – Delta Soils

Soil unit #3 consisted of two separate narrow strips that ran in a northwest-southeast direction completely across the south portion of both Lot A and Lot B. This soil unit is entirely Delta soils. They are common within central Richmond often found in association with Blundell-Annis soils. They were observed on this Site with the neighbouring soil unit #2. Delta soils were present in the blueberry plantation and the uncultivated eastern portion of Lot A where the highest concentrations of blackberries were found.

General Soil Description

These soils are organically rich but poorly drained. This soil had a shallow layer (up to 5 cm) of organic litter on the surface. Much of the upper organic decomposed layer was absent. Two dominant horizons existed: silty clay loam (up to 22 cm) and clay loam (22 cm to 50+ cm). No coarse fragments were observed.

Drainage and Soil Moisture

These soils are moderately pervious, have slow surface run-off and high water holding capacity. (Photographs 10 and 11)

Soil Textures

These soils lacked coarse fragments and the upper soil horizon layer was absent likely due to the blueberry mounding adjacent to the sample locations. The lower horizons were very dark grey silty clay loam. They had a lighter clay loam layer beneath.

Photographs 10 and 11 Soil profiles of the two Delta soil pits sampled on May 19, 2010



Soil Unit #4 – Kitter-Delta Soils

Soil unit #4 encompassed nearly half of Lot B, largely in the northwest corner and for a minor amount in the very southeast corner of both Lots A and B. The entire unit was not planted and was fairly open with modest herbaceous growth observed on the surface.



General Soil Description

The soil was missing the organic layer in Lot A due to previous cultivation activities (likely the raised blueberry rows), but was present in Lot B. These soils are mainly found in the Delta and Richmond municipalities and are often on the highest elevations of the relative landscape, as was observed for this Site. The two soil types (Kitter and Delta) are commonly associated soil complexes.

Drainage and Soil Moisture

This soil unit is moderately poor to poorly drained and has high water retention capacity but is slightly better drained than the previously identified soil units.

Photographs 12 and 13 Kitter-Delta soil profile and extracted section in Lot A



Soil Textures

The soil had no coarse fragments and was found to be silty loam within the first horizon and clay loam in the lower dominant horizon.

2.6 Drainage

No areas of standing water were observed during the Site visit. All Site drainage appeared to accumulate in constructed drainage ditches:

- A drainage ditch located along the north side of Lot A, associated with the Westminster Highway and running parallel to the Site;
- A one-metre deep central drainage ditch/watercourse running east-west at the legal property line between Lots A and B (water flowed off-Site to the railroad tracks on the east side of the property [running north-south]) (see Photograph 3);
- An intermittent perimeter ditch located along the western property line in the northwest corner of the Site extending approximately halfway down Lot A only, which connected to a constructed farm access road dyke parallel to No. 9 Road (see Photographs 14 and 15); and
- An unconnected central drainage ditch running north-south in the blueberry plantation on Lot A, and running the length of the planted blueberry area (see Photograph 16), and No. 9 Road ditch on the west side of the road paralleling the Site (see Photograph 17).

Photograph 14 Western perimeter ditch extended half-way along Lot A (to south)



Photograph 15 Western perimeter farm access road paralleled the hydro poles along No. 9 Road



Photograph 16 Drainage channel in eastern portion of the blueberry plantation in Lot A



Photograph 17 No. 9 Road and site drainage ditch is indicated by arrow (looking south)



3. HISTORIC LAND USE

Aerial photographs were reviewed for information concerning past uses of and activities at the Site.

3.1 Aerial Photographs

Aerial photographs dated 1938, 1949, 1954, 1963, 1974, 1979, 1984, September 1991, September 1997 and April 2004 were reviewed for information concerning historical physical features of land use on-Site and on properties in the vicinity of the Site. The following discussion is a summary of observations made during the aerial photograph review. Copies of the aerial photographs are presented in Appendix B.

1938 and 1949 Aerial Photographs

On-Site

- The 1938 and 1949 aerial photographs showed that the Site was partially developed: Vegetation was cleared within Lot B; there were no shrubs or trees. Lot A was partially cleared within the southwest corner. Trees and bushes were present on the north corner of the Site.
- There was evidence of an un-named drainage pathway dissecting the top northeast corner of Lot B. The man-made agriculture ditch which currently separated Lot A and B was not yet constructed.
- A residence was present on the Site at the very southwest corner of Lot B in 1938.

Off-Site

- Photographs showed that the entire surrounding area of the Site was a mix of agricultural use.
- Directly north of the Site Westminster Highway was a simple two-lane road. The railway line was in place and adjacent the east side of the Site by 1938.

1954 Aerial Photograph

On-Site

- Vegetation appeared to have been removed from the northeastern portion of Lot A.
- The residence in the bottom southwestern corner of the Site was reconstructed by 1954 in a location slightly north. A large barn was present where the house had been removed, and a road or dyke was constructed that ran directly south the new house, east-west across the property.
- The central drainage ditch appeared more distinct by 1954.
- The rest of the Site remained substantially unchanged from the 1949 aerial photograph.

1963 Aerial Photograph

On-Site

- By 1963, the Site was cultivated uniformly throughout Lot A. By 1963, Lot B showed evidence of increased agricultural use in the form of tilling lines and separated production into two small sections along the southern boundary, adjacent to the residence.
- Drainage systems around and through the Site are similar to the 1954 aerial photograph.

Off-Site

- The 1963 aerial photograph showed the first evidence of the Lafarge cement plant, located along the Fraser River and southwest of the Site. A new building (unknown use) was constructed north of the Lafarge cement plant and south of the Site.
- Surrounding agricultural properties were the same as was observed in the 1954 photograph, except they appeared to be more cultivated and at a mature stage in crop production.

1974 and 1979 Aerial Photographs

On-Site

- The Site remained relatively unchanged as depicted in the 1974 to 1979 aerial photographs with the exception of a number of trees appearing near the southeast residence.



A watercourse transected the middle of the Site. It appeared more defined in the 1979 picture.

Off-Site

- The Lafarge cement plant increased in footprint between 1963 and 1974. By 1979, there were more cleared areas and buildings at the plant.

1984 and 1991 Aerial Photographs

On-Site

- The 1991 aerial photograph showed evidence of cultivation on both Lots A and B. North-south tilling rows were evident. The remainder was very similar to the 1984 aerial photograph.
- The diagonally transecting drainage was not as prominent in 1984 or 1991.

Off-Site

- The 1991 aerial photograph showed increased agriculture cultivation on Lot C, which is directly adjacent to the southern boundary of the Site. This area was previously cleared in earlier aerial photographs, but now showed distinct crop line patterns.

1997 Aerial Photograph

On-Site

- The 1997 aerial photograph showed distinct crop separation on the Site between Lots A and B.
- By 1997, the diagonally transecting drainage was not present and a new smaller drainage pathway appeared to have been constructed through the middle and across Lot A.

Off-Site

- The surrounding landscape was similar from 1991 to 1997.

2004 Aerial Photograph

On-Site

- The 2004 aerial photograph showed a decrease in crop production. There was evidence of cultivation along the western half of Lot A only, although the remainder of the Site appeared be clear of large shrubs when compared to the state of the Site at the present time, which had extensive shrub growth on the eastern half of Lot A and scattered throughout Lot B.
- The middle drainage was evident in 2004.

Off-Site

- Land surrounding the Site had an increase in residential infrastructure but immediately adjacent to the Site it was relatively unchanged from 1997 to 2004. Agriculture use and industrial development, west of the Site along the Fraser River, were evident.

3.2 Current Title Search

A title search was reviewed via the BC Online website. No title transfers, covenants or easements related to Site contamination issues were listed. A copy of the current land title search result is provided in Appendix A.



4. FILL PLACEMENT

Keystone Environmental personnel visited the Site to:

- Observe current conditions, as well as neighbouring properties;
- Determine the need and appropriateness for fill placement on Site; and
- Prepare photographic documentation of Site history.

4.1 Proposed Agricultural Crop

The Site owner proposes to use the Site to grow wasabi¹, specifically the varieties Mazuma, Daruma and Green Thumb. The climate of the Richmond area is very suitable for the growth of wasabi. The conversion of this plot of land for growing wasabi is being done in conjunction with a National Research Council study for the growth of wasabi in open fields in the Richmond area. Independent of the variety of wasabi chosen for production, the general soil requirements for field growth of this crop are: good drainage, high organic matter content and a soil structure that is open and friable.²

4.2 Fill Placement Plan

The proposed plan for the Site is as follows:

- Strip all good quality, arable soils from the field to be stock piled until such time enough fill is placed to achieve the required elevation;
- Place a locally-sourced coarse-grained soil with some fines to fill the Site;
- Elevate the existing grade by a minimum of 1 m at the south end to a maximum of 1.5 m above the existing grade at the north end;
- Place fill such that fill embankments meet 2H:1V slope;
- In the area of the watercourse, middle of the Site, fill should be sloped at 3H:1V to prevent any potential erosion to the watercourse;

¹ Originally *Wasabia japonica*, *Cochlearia wasabi*, or *Eutrema japonica* (<http://en.wikipedia.org/wiki/Wasabi>)

² Miles, Carol and Catherine Chadwick 2008 "Growing Wasabi in the Pacific Northwest" A Pacific Northwest Extension Publication Washington State University • Oregon State University • University of Idaho PNW0605 <http://cru.cahe.wsu.edu/CEPublications/pnw0605/pnw0605.pdf> 12 pp.

- Place fill to elevate the contours of the Site to meet the City of Richmond Soil and Fill Deposit Regulation Bylaw 8094, to allow the potential placement of farm support structures, if any should need to be constructed;
- Follow setbacks of 5 m from all watercourses adjacent to the Site and on-Site for start of fill placement; and
- Top dress the filled area using the previously stripped lands mixed with peat, sand, and other organic matter to achieve a proper growth medium for wasabi.

The following measures should be implemented to minimize the possible impacts of the fill placement to the Site and associated watercourses:

- Apply the fill material during the dry season (late July, August, September), when the groundwater table is at its lowest point;
- Use erosion and sediment control Best Management Practices (BMPs), such as silt fence installation during fill placement;
- Provide construction monitoring during fill placement;
- Take extra care when sloping of the zone between the farm area and watercourses, such that there is a gradual transition between the two in order to minimize accelerated overland water flow to the riparian areas; and
- Plant grasses or other ground cover to minimize soil erosion from disturbed and new filled areas should be performed.

4.3 Anticipated Agricultural Improvements to the Site

A review of relevant historical information and aerial photographs indicated that the Site was historically utilized for agricultural cultivation and farming practices. By reviewing the aerial photographs and conducting a visit to the Site, most of the Site had been abandoned for cultivation use. Historically, it had been used for agricultural purposes and therefore can be revived into productive cultivation through the use of improved drainage.

Native soils in the northern and central portion of the Site had high clay content with a subsurface layer that did not allow for good drainage. Similarly, the soils in the southern portion



of the Site also had poor drainage. Currently, these poor drainage characteristics are not conducive to production of the proposed wasabi crop.

The application of traditional agricultural drainage techniques is anticipated to limit the proposed practice as the Site is currently level, or below that of adjoining properties, and the high moisture retaining ability along with silt and clay loam soils would reduce the effectiveness of tile drains in their current state.

The following agricultural improvements are anticipated for the Site following the placement of appropriate fill material:

- Increased water holding capacity, due to the larger volume of soil that will be present on the Site that will reduce flooding of lower lying areas;
- Improved soil structure, which will allow for an increase in the number of days that farm machinery can traverse the soils on the Site;
- Increased soil structure that will allow for a wider variety of agricultural crops to be grown; and
- Compliance with the City of Richmond bylaws for the base of buildings in a flood plain which will then allow for the construction of agricultural support buildings if so required in the future.

5. SUMMARY AND CONCLUSIONS

It is concluded that the Site consisting of Lots A and B, Section 9, Block 4 North, Range 4 West, New Westminster District, Plan LMP 53136, City of Richmond, BC, is a suitable location to receive the fill material required to improve the agricultural land use of the Site. With the appropriate use of measures to prevent soil erosion, and later operational measures such as best management practices, the application of fill material is anticipated to improve soil structure and drainage, mitigate current flooding issues and increase the utility of the land for agricultural use, specifically for the growth of wasabi.



6. PROFESSIONAL STATEMENT


This report has been prepared and reviewed by Keystone Environmental Ltd.³ approved personnel who have the credentials and knowledge of the applicable public laws, regulations and/or policies which apply to this report.

This report was prepared by Ms. Tobi Anaka and reviewed by Ms. Shawna Reed, Ph.D., R.P. Bio., and Ms. Lori C. Larsen, P.Ag. It is subject to the General Terms and Conditions appended at the end of the report.

July 14, 2010

Date

Tobi Anaka
Project Biologist


Shawna E. Reed, Ph.D., R.P. Bio.
Director of Biological Assessment Services


Lori C. Larsen, P.Ag.
Senior Project Manager

³ Keystone Environmental Ltd.'s corporate address is:
Suite 320 – 4400 Dominion Street, Burnaby, BC V5G 4G3
Telephone: 604-430-0671 / Facsimile: 604-430-0672 / Internet: www.keystoneenviro.com

7. REFERENCES

Aerial photographs dated 1938, 1949, 1954, 1963, 1974, 1979, 1984, September 1991, September 1997, and April 2004.

City of Richmond Geographic and Land Information GIS Interactive Map Inquiry Tool: <http://map.city.richmond.bc.ca/website/gis/viewer.htm>.

Current Title Search obtained from BC Online.

Geological Survey of Canada Surficial Geology Map, 1486A dated 1981

Luttmerding, H.A., *Soils of the Langley-Vancouver Map Area Report No. 15 British Columbia Soil Survey Volume 1 Soil Map Mosaics and Legend Lower Fraser Valley (Scale 1:25000)*, 1980.

Sciberras, Frank, *City of Richmond Surficial Geology Map (Scale 1:25000)*, January 1996.



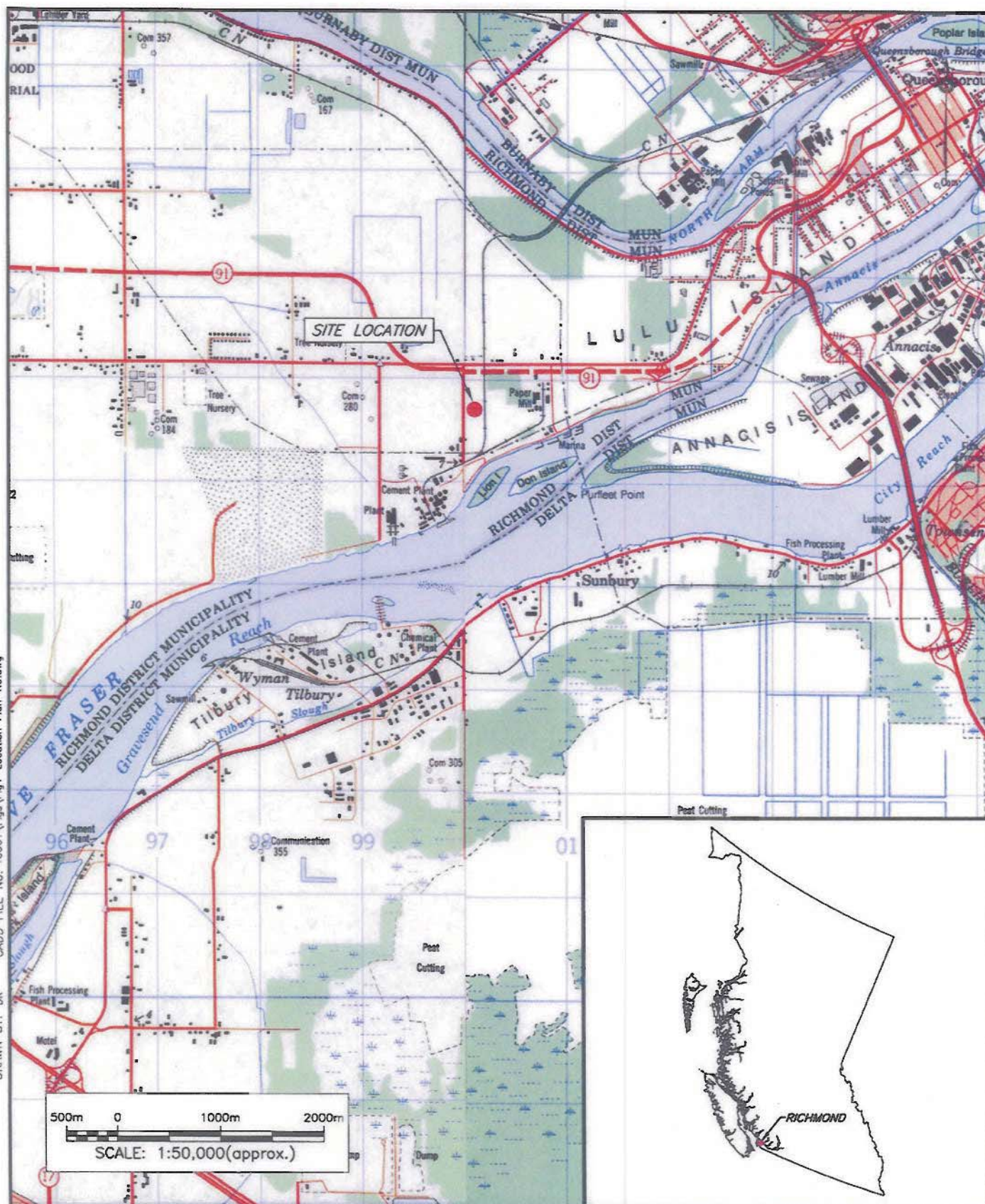
FIGURES



CADD FILE No. 10561\Figs\Fig1-Location Plan-R0.dwg

DRAWN BY: DK

PLOT SCALE: 1:1



**Keystone
Environmental**

20100 Westminster Hwy. &
6980 No. 9 Rd., Richmond, B C
WCH Ltd.

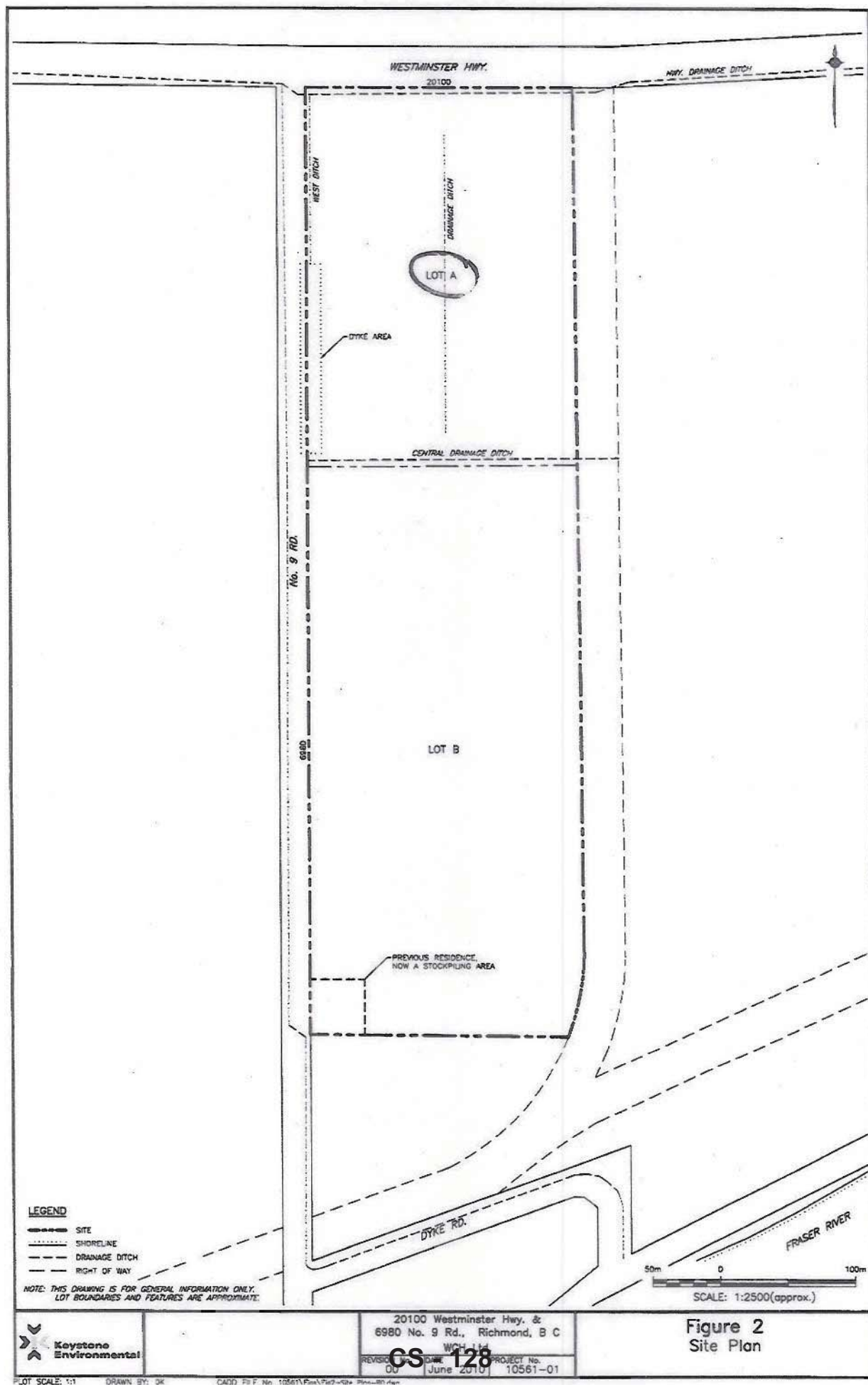
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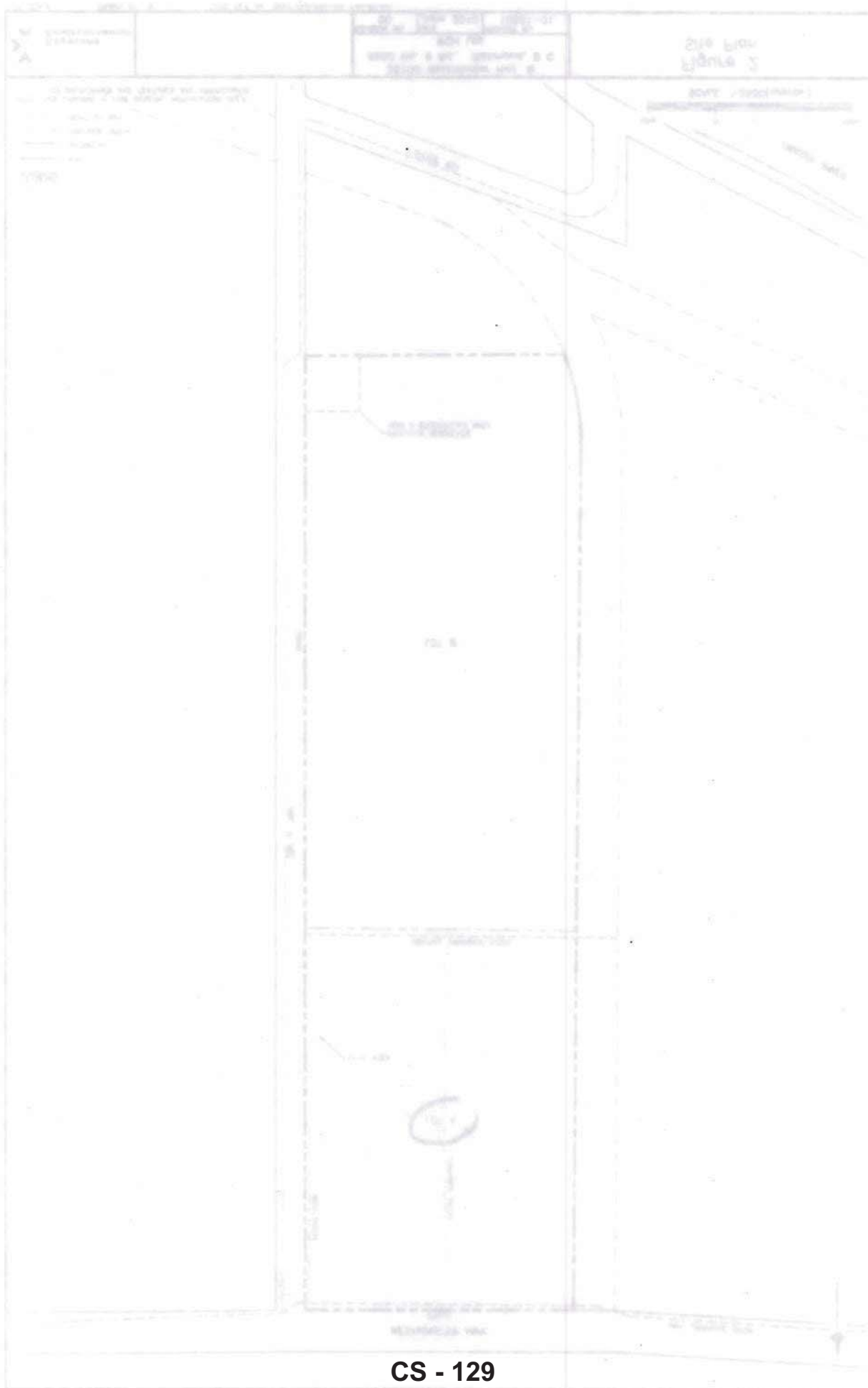
DATE
June 2010

PROJECT No.
10561-01

Figure 1
Location Plan







APPENDIX A

CURRENT TITLE SEARCHES



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Requestor: (PV43481)
Folio: 10561
TITLE SEARCH PRINT
KEYSTONE ENVIRONMENTAL LTD.
TITLE - BB978006

Time: 14:15:58
Page 001 of 002

NEW WESTMINSTER LAND TITLE OFFICE
TITLE NO: BB978006
FROM TITLE NO: BT79447

APPLICATION FOR REGISTRATION RECEIVED ON: 07 JULY, 2008
ENTERED: 15 JULY, 2008

REGISTERED OWNER IN FEE SIMPLE:
0826239 B.C. LTD., INC.NO. BC0826239
5820 SAGEBRUSH ROAD
LA JOLLA, CALIFORNIA
92037
USA

TAXATION AUTHORITY:
CITY OF RICHMOND

DESCRIPTION OF LAND:
PARCEL IDENTIFIER: 025-389-807
LOT A SECTION 9 BLOCK 4 NORTH RANGE 4 WEST NEW WESTMINSTER DISTRICT
PLAN LMP53136

LEGAL NOTATIONS:

THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND
COMMISSION ACT; SEE AGRICULTURAL LAND RESERVE PLAN NO. 1
DEPOSITED JULY 30TH, 1974.

ZONING REGULATION AND PLAN UNDER THE AERONAUTICS ACT (CANADA)
FILED 10/02/1981 UNDER NO. T17084 PLAN NO. 61216

CHARGES, LIENS AND INTERESTS:

NATURE OF CHARGE
CHARGE NUMBER DATE TIME

STATUTORY RIGHT OF WAY
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REGISTERED OWNER OF CHARGE:
BRITISH COLUMBIA HYDRO AND POWER AUTHORITY
238710C
REMARKS: PLAN 17927
INTER ALIA

MORTGAGE
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REGISTERED OWNER OF CHARGE:
FARM CREDIT CANADA
BB685130
REMARKS: INTER ALIA

PROPERTY TRANSFER TAX ACT CHARGE
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REGISTERED OWNER OF CHARGE:
THE CROWN IN RIGHT OF BRITISH COLUMBIA
BB1207498
REMARKS: INTER ALIA

Date: 09-Jul-2010
Requestor: (PV43481)
Folio: 10561
TITLE SEARCH PRINT
KEYSTONE ENVIRONMENTAL LTD.
TITLE - BB978006

Time: 14:15:58
Page 002 of 002

title-BB978006.txt

SECTION 28

PROPERTY TRANSFER TAX ACT CHARGE

BB1211999 2009-09-18 08:49

REGISTERED OWNER OF CHARGE:

THE CROWN IN RIGHT OF BRITISH COLUMBIA

BB1211999

REMARKS: INTER ALIA

SECTION 28

"CAUTION - CHARGES MAY NOT APPEAR IN ORDER OF PRIORITY. SEE SECTION 28, L.T.A."

DUPLICATE INDEFEASIBLE TITLE: NONE OUTSTANDING

TRANSFERS: NONE

PENDING APPLICATIONS: NONE

*** CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN ***

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Folio: 10561 TITLE - BB978007

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Page 001 of 003

NEW WESTMINSTER LAND TITLE OFFICE TITLE NO: BB978007
FROM TITLE NO: BT79448

APPLICATION FOR REGISTRATION RECEIVED ON: 07 JULY, 2008
ENTERED: 15 JULY, 2008

REGISTERED OWNER IN FEE SIMPLE:
0826239 B.C. LTD., INC.NO. BC0826239
5820 SAGEBRUSH ROAD
LA JOLLA, CALIFORNIA
92037
USA

TAXATION AUTHORITY:
CITY OF RICHMOND

DESCRIPTION OF LAND:
PARCEL IDENTIFIER: 025-389-815
LOT 8 SECTION 9 BLOCK 4 NORTH RANGE 4 WEST NEW WESTMINSTER DISTRICT
PLAN LMP53136

LEGAL NOTATIONS:

THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND
COMMISSION ACT; SEE AGRICULTURAL LAND RESERVE PLAN NO. 1
DEPOSITED JULY 30TH, 1974.

ZONING REGULATION AND PLAN UNDER THE AERONAUTICS ACT (CANADA)
FILED 10/02/1981 UNDER NO. T17084 PLAN NO. 61216

CHARGES, LIENS AND INTERESTS:

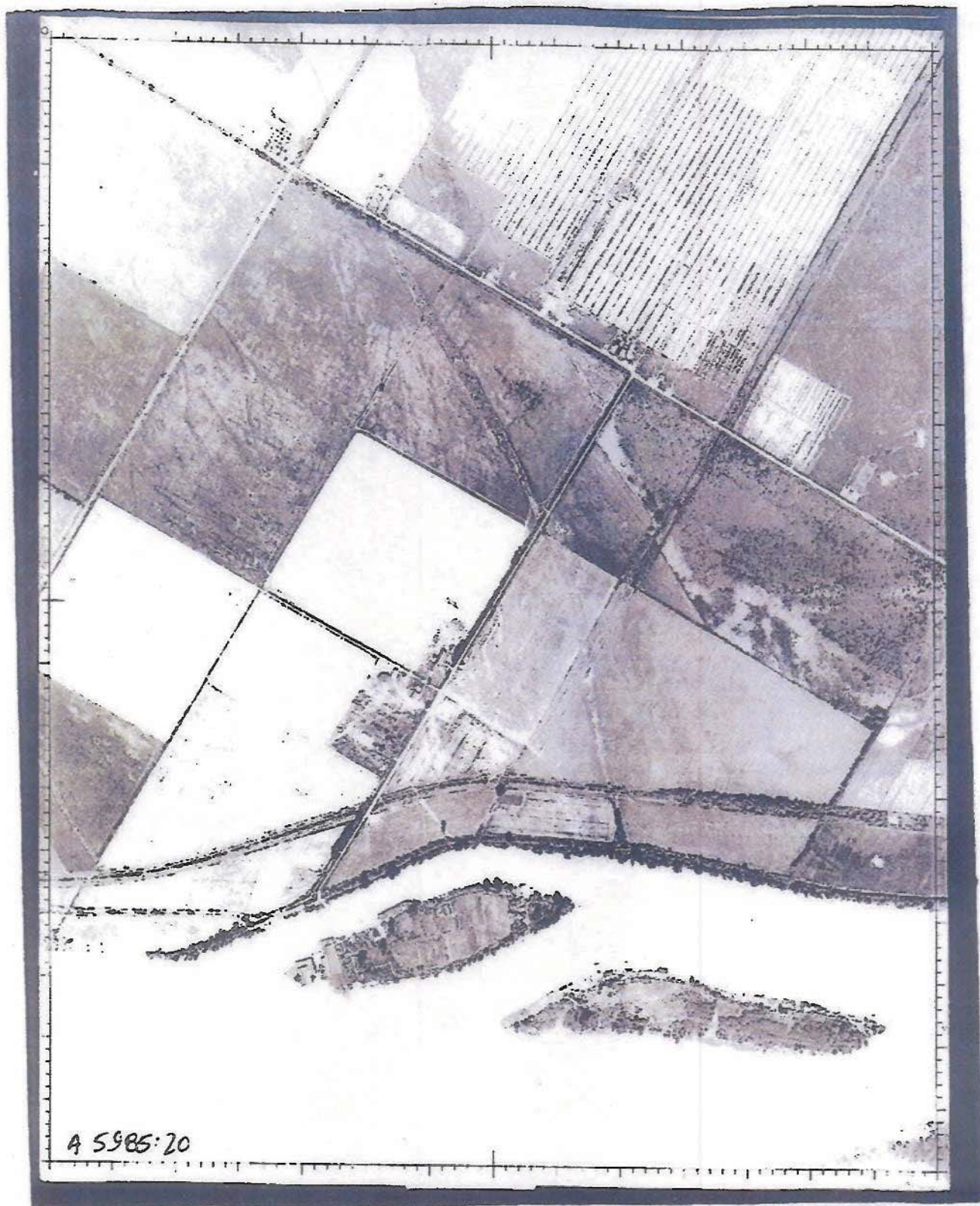
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238710C
REMARKS: PLAN 17927
INTER ALIA

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REGISTERED OWNER OF CHARGE:
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INCORPORATION NO. 74269
AS TO AN UNDIVIDED 1/2 INTEREST
BW340925
BENCHMARK MORTGAGE CORP.
INCORPORATION NO. 267180
AS TO AN UNDIVIDED 1/2 INTEREST
BW340925 TRANSFERRED TO BX211917
ENVISION CREDIT UNION
"IN TRUST - SEE BT304615"

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Folio: 10561 TITLE - BB978007

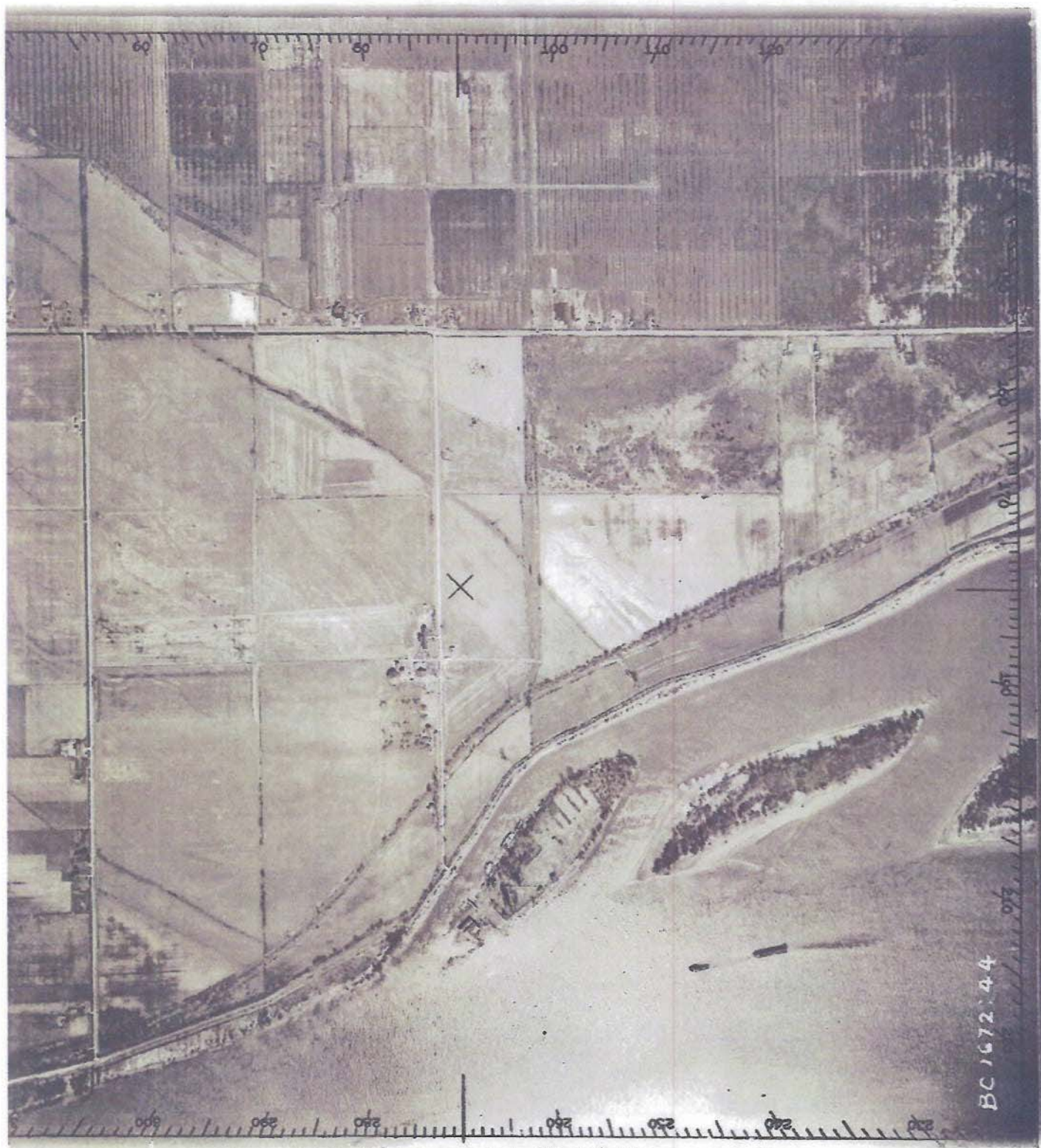
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Page 002 of 003



1938 aerial
photograph











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Province of British Columbia

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87-4039





FF 9131 #.81

VANCOUVER

18 SEP 91

SCALE 1: 24, 000

FOTO FLIGHT
250 AVIATION BL. N.E. CALGARY ALBERTA T2C 1G1
Telephone (403) 275-9314 Fax (403) 275-0960

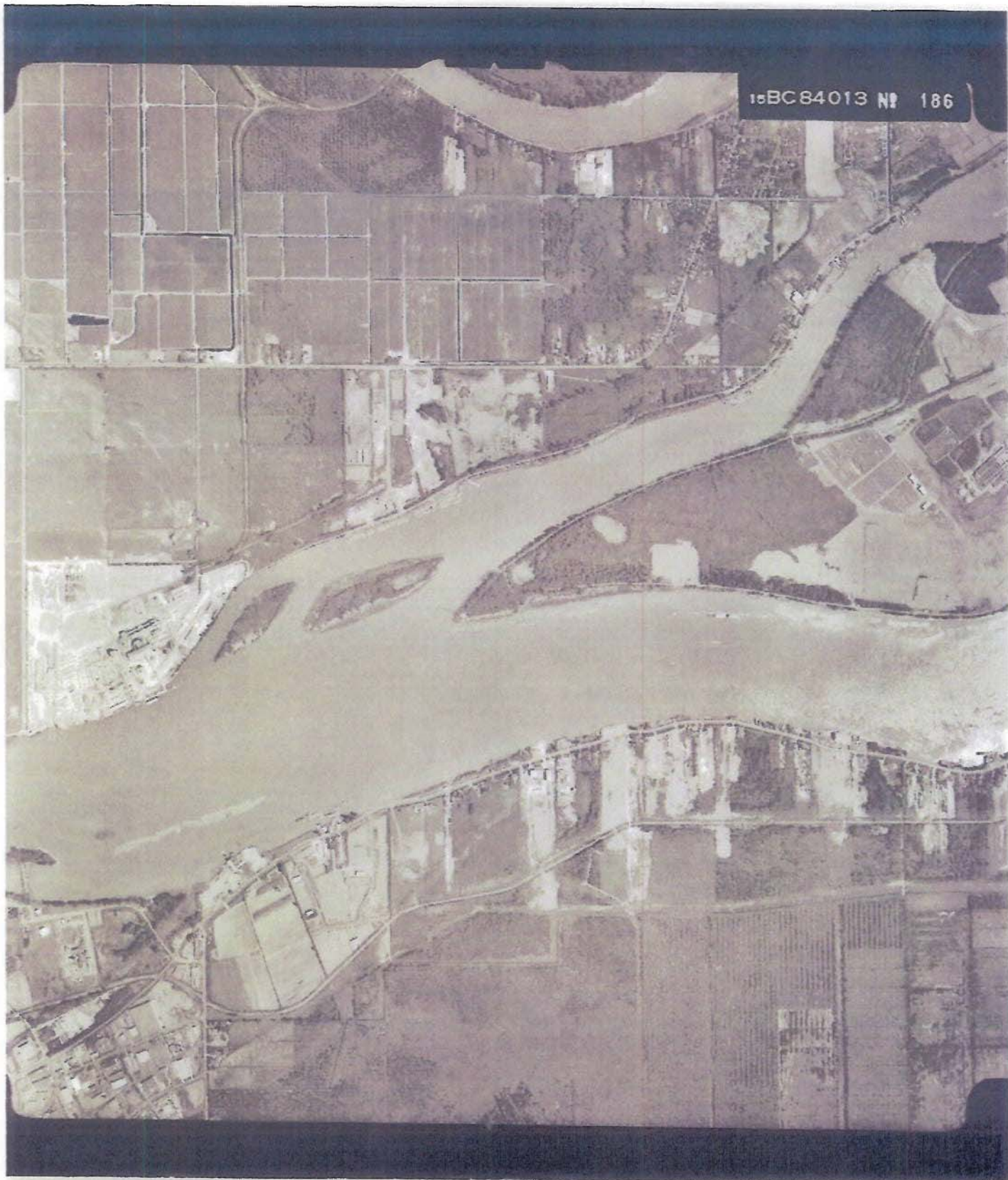


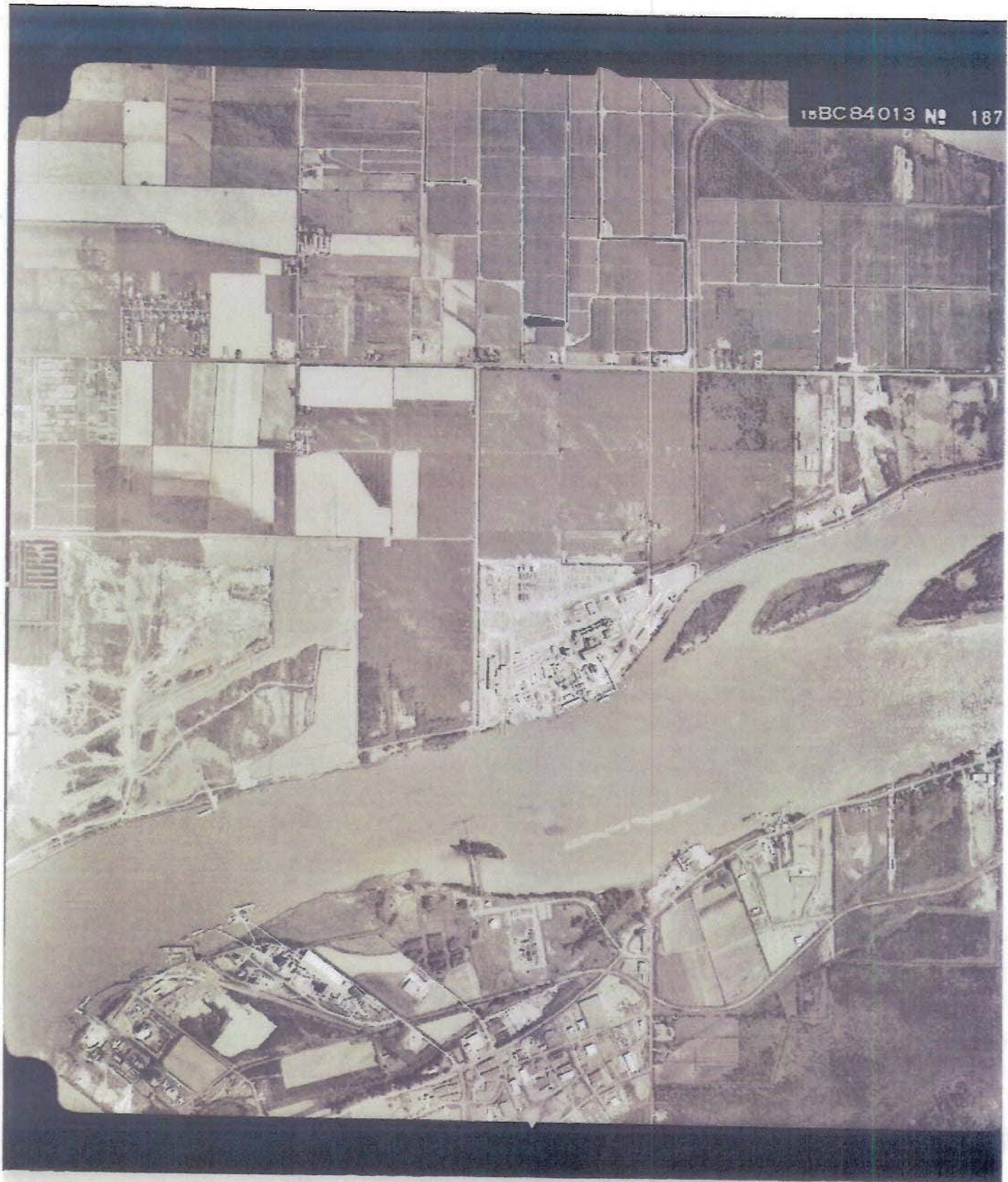
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VANCOUVER

18 SEP 91

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BC 79 009 M 122

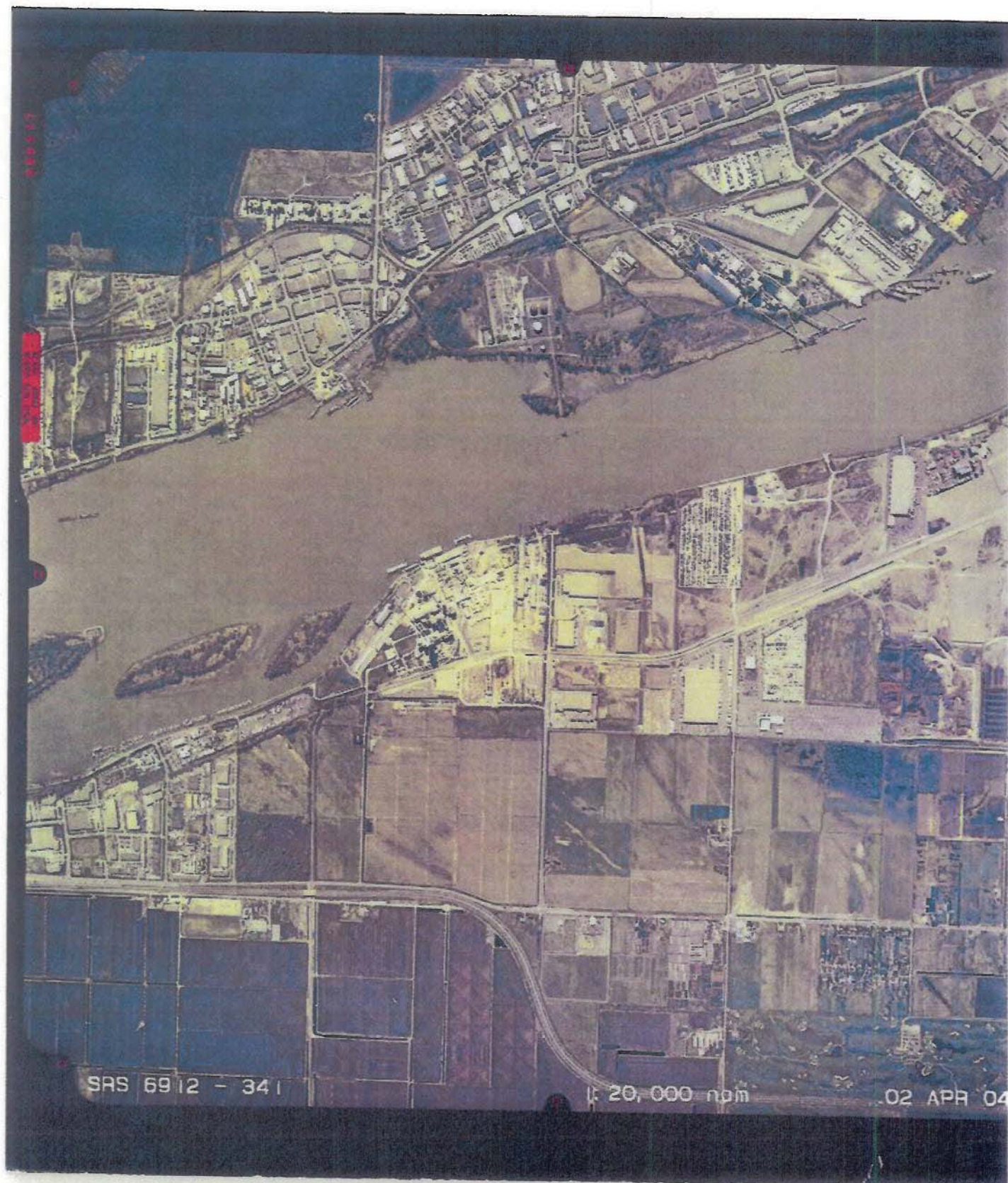


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APPENDIX C

GENERAL TERMS AND CONDITIONS FOR SERVICES



KEYSTONE ENVIRONMENTAL LTD.
GENERAL TERMS AND CONDITIONS FOR SERVICES

The terms and conditions set forth below govern all work or services requested by CLIENT as described and set forth in the Proposal of Keystone Environmental Ltd. ("Keystone") attached hereto, any Purchase Order issued by CLIENT or Agreement between Keystone and CLIENT. The provisions of said Proposal or Agreement govern the scope of services to be performed, including the time schedule, compensation, and any other special terms. The terms and conditions contained herein shall otherwise apply expressly stated to the contract or inconsistent with said Proposal or Agreement.

1. COMPENSATION

Unless otherwise stated in Keystone's Proposal, CLIENT agrees to compensate Keystone in accordance with Keystone's published rate schedules in effect on the date when the services are performed. Copies of the schedules currently in effect are attached hereto. Keystone's rate schedules are revised periodically; and Keystone will notify CLIENT of any such revisions and the effective date thereof which shall not be less than thirty (30) days after receipt of such notice. As to those services for which no schedule exists, Keystone shall be compensated on a time and materials basis as set forth in any change order executed pursuant to this Agreement.

2. PAYMENT

Unless otherwise agreed to in writing, invoices will be submitted monthly. Payment of invoices is due within thirty (30) days of receipt of the invoice. Invoices not paid within (30) days after date of receipt shall be deemed delinquent.

3. INDEPENDENT CONTRACTOR

Keystone shall be an independent contractor and shall be fully independent in performing the services of work and shall not act or hold themselves out as an agent, servant or employee of CLIENT.

4. KEYSTONE'S LIMITED WARRANTY

The sole and exclusive warranty which Keystone makes with respect to the services to be provided in the performance of the work is that they shall be performed in accordance with generally accepted professional practices and CLIENT's standards and specifications to the extent accepted by Keystone and shall be performed in a skillful manner.

In the event Keystone's performance of work, or any portion thereof, fails to conform with the above stated limited warranty, Keystone shall, at its discretion and its expense, proceed expeditiously to reperform the nonconforming, or upon the mutual agreement of the parties, refund the amount of compensation paid to Keystone for such nonconforming work. In no event shall Keystone be required to bear the cost of gaining access in order to perform its warranty obligations.

5. CLIENT WARRANTY

CLIENT warrants that: it will provide to Keystone all available information regarding the site, structures, facilities, buildings, and land involved with the work and that such information shall be true and correct: it will provide all licences and permits required for the work; that all work which it performs shall be in accordance with generally accepted professional practices; and it has title to or will provide right of entry or access to all property necessary to perform the work.

6. INDEMNITY

a. Subject to the limitations of Section 7 below, Keystone agrees to indemnify, defend and hold harmless CLIENT (including its officers, directors, employees and agents) from and against any and all losses, damages, liabilities, claims, suits, and the costs and expenses incident thereto (including legal fees and reasonable costs of investigation) which any or all of them may hereafter incur, become responsible for or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, private or public, contamination or adverse effects on the environment or any violation or alleged violation of governmental laws, regulations, or orders, to the extent caused by or arising out of: (i) Keystone's errors or omissions or (ii) negligence on the part of Keystone in performing services hereunder.

b. CLIENT agrees to indemnify and hold harmless Keystone (including its officers, directors, employees and agents) from and against any and all losses, damages, liabilities, claims, suits and the costs and expenses incident thereto (including legal fees and reasonable costs of investigation) which any or all of them may hereafter incur, become responsible for or pay out as a result of death or bodily injuries



to any person, destruction or damage to any property, private or public, contamination or adverse effects on the environment or any violation or alleged violation of governmental laws, regulations, or orders, caused by, or arising out of in whole or in part: (i) any negligence or willful misconduct of CLIENT, (ii) any breach of CLIENT of any warranties or other provisions hereunder, (iii) any condition including, but not limited to, contamination existing at the site, or (iv) contamination of other property arising or alleged to arise from or be related to the site provided, however, that such indemnification shall not apply to the extent any losses, damages, liabilities or expenses result from or arise out of: (i) any negligence or willful misconduct of Keystone; or (ii) any breach of Keystone of any warranties hereunder.

7. **LIMITATION OF LIABILITY**

Keystone's total liability, whether arising from or based upon breach of warranty, breach of contract, tort, including Keystone's negligence, strict liability, indemnity or any other cause of basis whatsoever, is expressly limited to the limits of Keystone's insurance coverage. This provision limiting Keystone's liability shall survive the termination, cancellation or expiration of any contract resulting from this Proposal and the completion of services thereunder. After three (3) years of completion of Keystone's services, any legal costs arising to defend third party claims made against Keystone in connection with the project defined in the Proposal or Agreement will be paid in full by the CLIENT.

8. **INSURANCE**

Keystone, during performance of this Agreement, will at its own expense carry Worker's Compensation Insurance within limits required by law; Comprehensive General Liability Insurance for bodily injury and for property damage; Professional Liability Insurance for errors omissions and negligence; and Comprehensive Automobile Liability Insurance for bodily injury and property damage. At CLIENT'S request, Keystone shall provide a Certificate of Insurance demonstrating Keystone's compliance with this section. Such Certificate of Insurance shall provide that said insurance shall not be cancelled or materially altered until at least ten (10) days after written notice to CLIENT.

9. **CONFIDENTIALITY**

Each party shall retain as confidential all information and data furnished to it by the other party which relate to the other party's technologies, formulae, procedures, processes, methods, trade secrets, ideas, improvements, inventions and/or computer programs, which are designated in writing by such other party as confidential at the time of transmission and are obtained or acquired by the receiving party in connection with work or services performed subject to this Proposal or Agreement, and shall not disclose such information to any third party.

However, nothing herein is meant to prevent nor shall it be interrupted as preventing either Keystone or CLIENT from disclosing and/or using said information or data; (i) when the information or data is actually known to the receiving party before being obtained or derived from the transmitting party; or (ii) when the information or data is generally available to the public without the receiving party's fault; or (iii) where the information or data is obtained or acquired in good faith at any time by the receiving party from a third party who has the right to disclose such information or data; or (iv) where a written release is obtained by the receiving party from the transmitting party; or (v) as required by law.

10. **PROTECTION OF INFORMATION**

Keystone specifically disclaims any warranties expressed or implied and does not make any representations regarding whether any information associated with conducting the work, including the report, can be protected from disclosure in responses to a request by a federal, provincial or local government agency, or in response to discovery or other legal process during the course of any litigation involving Keystone or CLIENT. Should Keystone receive such request from a third party, it will immediately advise CLIENT.

11. **FORCE MAJEURE**

Neither party shall be responsible or liable to the other for default or delay in the performance of any of its obligations hereunder (other than the payment of money for services already rendered) caused in whole or in part by strikes or other labour difficulties or disputes; governmental orders or regulations; war, riot, fire, explosion; acts of God; acts of omissions of the other party; any other like causes; or any other unlike causes which are beyond the reasonable control of the respective party.

In the event of delay in performance due to any such cause, the time for completion will be extended by a period of time reasonably necessary to overcome the effect of the delay. The party so prevented from complying shall within a reasonable time of its knowledge of the disability advise the other party of the

effective cause, the performance suspended or affected and the anticipated length of time during which performance will be prevented or delayed and shall make all reasonable efforts to remove such disability as soon as possible, except for labour disputes, which shall be solely within said party's discretion. The party prevented from complying shall advise the other party when the cause of the delay or default has ended, the number of days which will be reasonably required to compensate for the period of suspension and the date when performance will be resumed. Any additional costs or expense accruing or arising from the delaying event shall be solely for the account of the CLIENT.

12. **NOTICE**

Any notice, communication, or statement required or permitted to be given hereunder shall be in writing and deemed to have been sufficiently given when delivered in person or sent by facsimile, wire, or certified mail, return receipt requested, postage prepaid, to the address of the party set forth below, or to such address for either party as the party may be written notice designate.

13. **ASSIGNMENT/SUBCONTRACT**

Neither party hereto shall assign this Agreement or any part thereof or any interest therein without the prior written approval of the other party hereto except as herein otherwise provided. Keystone shall not subcontract the performance of any work hereunder without the written approval of CLIENT. Subject to the foregoing limitation, the Agreement shall inure to the benefit of and be binding upon the successors and permitted assigns of the parties hereto.

14. **ESTIMATES**

To the extent the work requires Keystone to prepare opinions of probable cost, for example, opinions of probable cost for the cost of construction, such opinions shall be prepared in accordance with generally accepted engineering practice and procedure. However, Keystone has no control over construction costs, competitive bidding and market conditions, costs of financing, acquisition of land or rights-of-way and Keystone does not guarantee the accuracy of such opinion of probable cost as compared to actual costs or contractor's bid.

15. **DELAYED AGREEMENTS AND OBLIGATIONS**

The performance by Keystone of its obligations under this Agreement depends upon the CLIENT performing its obligations in a timely manner and cooperating with Keystone to the extent reasonably required for completion of the Work. Delays by CLIENT in providing information or approvals or performing its obligations set forth in this Agreement may result in an appropriate adjustment of contract price and schedule.

16. **CONSTRUCTION PHASE**

To the extent the work is related to or shall be followed by construction work not performed by Keystone, Keystone shall not be responsible during the construction phase for the construction means, methods, techniques, sequences or procedures of construction contractors, or the safety precautions and programs incident thereto, and shall not be responsible for the construction contractor's failure to perform the work in accordance with the contract documents. Keystone will not direct, supervise or control the work of the CLIENT'S contractors or the CLIENT'S subcontractors.

17. **DOCUMENTATION, RECORDS, AUDIT**

Keystone when requested by CLIENT, shall provide CLIENT with copies of all documents relating to the service(s) of work performed. Keystone shall retain true and correct records in connection with each service and/or work performed and all transactions related thereto and shall retain all such records for twelve (12) months after the end of the calendar year in which the last service pursuant to this Agreement was performed. CLIENT, at its expense and upon reasonable notice, may from time to time during the term of this Agreement, and at any time after the date the service(s) were performed up to twelve (12) months after the end of the calendar year in which the last service(s) were performed, audit all records of Keystone in connection with all costs and expenses which it was invoiced.

18. **REPORTS, DOCUMENTS AND INFORMATION**

All field data, field notes, laboratory test data, calculations, estimates and other documents prepared by Keystone in performance of the work shall remain the property of Keystone. If required as part of the work, Keystone shall prepare a written report addressing the items in the work plan including the test results. Such report shall be the property of CLIENT, Keystone shall be entitled to retain three (3) copies of such report for its internal use and reference.



All drawings and documents produced under the terms of this Agreement are the property of Keystone, and cannot be used for any reason other than to bid and construct the project as described in the Proposal or Agreement.

19. **LIMITED USE OF REPORT**

Any report prepared as part of the work will be prepared solely for the internal use of CLIENT. Unless otherwise agreed by Keystone and CLIENT, parties agree that third parties are not to rely upon the report.

20. **SAMPLE MANAGEMENT**

Ownership of all samples obtained by Keystone from the project site is maintained by the CLIENT. Keystone will store such samples in a professional manner in a secure area for the period of time necessary to complete the project. Upon completion of the project, Keystone will return any unused samples or portions thereof to the CLIENT or at Keystone's option dispose of the samples in a lawful manner and bill the CLIENT for all costs related thereto. Keystone will normally store samples for thirty (30) days. Written notice will be given to the CLIENT before finally disposing of samples.

21. **RECOGNITION OF RISK**

CLIENT recognized and accepts the work to be undertaken by Keystone may involve unknown conditions and hazards. CLIENT further recognizes that environmental, geologic, hydrological, and geotechnical conditions can and may vary from those encountered by Keystone at the times and locations where it obtained data and information, and that limitations on available data results in some uncertainty with respect to the interpretation of these conditions, despite the use of due professional care by Keystone. CLIENT recognizes that the performance of services hereunder or the implementation of recommendations made by Keystone may unavoidably alter the existing site conditions and affect the environment in the area being studied.

22. **DISPOSAL OF CONTAMINATED MATERIAL**

It is understood and agreed that Keystone is not, and has no responsibility as, a generator, operator or storer of pre-existing hazardous substances or wastes found or identified at work sites. Keystone shall not directly or indirectly assume title to such hazardous or toxic substances and shall not be liable to third parties.

CLIENT will indemnify and hold harmless Keystone from and against all incurred losses, damages, costs and expenses, including but not limited to attorneys' fees, arising or resulting from actions brought by third parties alleging or identifying Keystone as a generator, operator, storer or owner of pre-existing hazardous substances or wastes found or identified at work sites.

23. **SUSPENSION OR TERMINATION**

In the event the work is terminated or suspended by CLIENT prior to the completion of the services contemplated hereunder, Keystone shall be paid for: (i) the services rendered to the date of termination or suspension, (ii) the demobilization costs, and (iii) the costs incurred with respect to noncancelable commitments.

24. **GOVERNING LAW**

This Agreement shall be governed by and interpreted pursuant to the laws of the Province of British Columbia.

25. **HEADINGS AND SEVERABILITY**

Any heading preceding the text of sections hereof is inserted solely for convenience or reference and shall not constitute a part of the Agreement and shall not effect the meanings, context, effect or construction of the Agreement. Every part, term or provision of this Agreement is severable from others. Notwithstanding any possible future finding by duly constituted authority that a particular part, term or provision is invalid, void or unenforceable, this Agreement has been made with the clear intention that the validity and enforceability of the remaining parts, terms and provision shall not be affected thereby.

26. **ENTIRE AGREEMENT**

The terms and conditions set forth herein constitute the entire Agreement and understanding or the parties relating to the provision of work or services by Keystone to CLIENT, and merges and supersedes all prior agreements, commitments, representation, writings, and discussions between them and shall be incorporated in all work orders, purchase orders and authorization unless otherwise so stated therein. The terms and conditions may be amended only by written instrument signed by both parties.



AGRICULTURAL ADVISORY COMMITTEE (AAC)

Held Thursday, December 2, 2010 (1-3pm)

M.1.003

Richmond City Hall

In Attendance:

Todd May (Chair); Bill Zylmans; Bruce May; Bill Jones; Dave Sandhu; Dave Johnston; Arzeena Hamir; Danny Chen; Ken May; Councillor Harold Steves; Kathleen Zimmerman (Ministry of Agriculture and Lands); Kevin Eng (Policy Planning); Terry Crowe (Policy Planning)

Regrets:

Tony Pellett (Agricultural Land Commission)

Guests:

Lilian Arishenkoff (Townline); Rick Ilich (Townline); Ann Rowan (Metro Vancouver); Ross Coates (Nelson Road Project Team); Anthony Foo (Engineering Planning); Milton Chan (Engineering Planning); Romeo Bicego (Engineering and Public Works); Yad Kallu; Jamie Esko (Parks)

1. Adoption of Agenda

The agenda for December 2, 2010 was adopted. One item was added at the beginning of the Agenda to discuss Environmentally Sensitive Areas (ESA) and agricultural land use implications.

2. ESA's on ALR Land

Terry Crowe provided updates to the Committee on recent reports to Council on the process of reviewing ESA's across the City and the progress on this initiative to date. Reference was made to the legal interpretation identified in the report to Council, which staff noted would ultimately lead to City Council determining if agricultural land uses could take precedence over ESA designations.

Staff also noted that the some members of the public have formerly approached the Parks, Recreation and Cultural Services Committee who are advocating for the purchase of a parcel owned by Ecowaste on No. 6 Road that is currently subject to a proposal to place fill on site.

Committee members commented that the Provincial legislation on this matter has not changed and that this is a different legal interpretation offered on the issue. Committee members emphasized that agricultural property owner rights are being impacted if an ESA designation is placed on agricultural land and that to date, no provisions for compensation have been offered to farmers to protect ESA areas. Comments were also made about the importance of defining what was considered to be the “alteration of land” in ESA areas and what types of “alterations” would trigger development approvals.

Staff advised that a Planning Committee meeting would be targeted for either February/March 2011 for a status report to Council. AAC members identified the importance of having the opportunity to review the report prior to it being forwarded to Planning Committee and as a result, forwarded the following motion:

That the subsequent ESA review and update status report slated for February/March of 2011 be brought forward to the AAC for review and comment prior to consideration by Planning Committee and Council.

Carried Unanimously

3. Nelson Road Interchange Project – Status Update

Ross Coates updated Committee members on the status of the project since preload and construction activities commenced earlier in 2010. The following updates were provided:

- Preload activities are underway. In certain areas, a special preload approach to deal with the high level of organics and existing sensitive infrastructure (in-ground force mains) has been undertaken.
- The flyover piers and abutments are being constructed. Steelwork will begin shortly on the piers and abutments to prepare them for the pre-fabricated concrete pieces that will form the flyover.
- The project is on target to be completed by the March 31, 2011 deadline. The project team is hoping that poor weather over the Winter months will not overly impact the construction activity and timetable.

A committee member asked about the re-stripping that would occur at the south side of Westminster Highway as a result of the interchange construction. The consultant noted that Richmond would be responsible for re-stripping the intersection accordingly and that this would occur after construction activity on the interchange has generally concluded.

The consultant indicated that updates will be provided to the Committee in the New Year.

4. Engineering and Public Works: Presentation of Upcoming Irrigation and Drainage Works

Engineering Planning staff provided a summary of works already completed, projects slated for 2011 and future works left to be done based on the East Richmond Agricultural Water Supply Study. For 2010, drainage and irrigation improvements were conducted along the Francis Road corridor between Sidaway Road and No. 6 Road.

2011 planned capital works (to be submitted to Council for consideration) involves the Granville Avenue corridor between Sidaway and No. 6 Road. Works are also being explored to install a lift/pump station around No. 8 Road and Westminster Highway due to the limited elevation of the canal that can be achieved due to the existing Terasen Gas pipe installation. Staff also indicated that cost savings from previous years drainage and irrigation works may result in additional projects submitted for the 2011 Capital Plan and they will write the appropriate Federal and Provincial agencies to request additional funding for works.

A committee member asked where water from canal improvements along No. 8 and No. 7 Road and Granville Avenue corridor would drain to. Staff indicated that water would drain to the Fraserport storm sewer system that had sufficient capacity to deal with loads. A question was also asked about the previous works done in the Sidaway/Francis Road area as it was noted that culverts had been blocked in the past. Engineering Planning staff confirmed that the culverts were cleared and water was flowing swiftly when inspected.

Romeo Bicego (Manager of Sewerage and Drainage) introduced himself to AAC members and identified some canal and drainage related works being conducted in agricultural areas. Staff and AAC members commented on recent works to clear shrubbery from drainage canals (Sidaway) and that use of the herder bucket to facilitate these works was a valuable resource. Staff also referenced that in the Gilmore area along No. 3 Road and Gilbert Road, canal re-profiling and re-grading would be occurring in 2011.

AAC members commented that the City should look to alternatives to simply hauling materials from canal cleaning/re-profiling away. Members suggested that the City look to arrange to place materials from ditches on neighbouring farmer fields.

5. Metro Vancouver Draft Regional Food Systems Strategy

Ann Rowan (Metro Vancouver) introduced herself and advised that over the past month, public consultation has been occurring throughout the region on the draft Regional Food System Strategy. Ann provided background information on the initiatives leading up to the development of the strategy (since 2008) and provided an overview of the Vision, 5 main goals of the strategy and proposed implementation/action plan if the strategy is adopted.

Members made the following comments:

- What have other AAC's throughout the region said about the strategy and how have they forwarded their comments. Metro Vancouver staff identified they have received positive feedback on the strategy and that they have received feedback on the strategy through local municipalities.

- Members asked about regional parks identified in the ALR and agricultural areas contained in the green zone and how this would be reflected in the proposed new regional growth strategy land use maps. Metro Vancouver staff noted that agricultural lands (ALR) in the green zone would be differentiated in the proposed regional growth strategy maps.
- Members asked whether there was any overlap between the action/implementation plan contained in the draft Regional Food Systems Strategy and the recommendations contained in Richmond's Agricultural Viability Strategy (AVS). City staff referenced the existing initiative to examine and prioritize the AVS' recommendations and that this document can be compared to Metro Vancouver's strategy. Any overlapping or comparable action item can be added to the AAC's annual work program to facilitate implementation of the strategy at the local and regional level.
- Members referenced many other awareness initiatives that currently operate (agriculture in the classroom) that can assist with the goals and vision of the strategy.

6. Development Proposal – Community Use Facility at 10620/10640 No. 5 Road and Agricultural Park Plan

City staff summarized the rezoning application involving the proposed community use facility (potentially child care) that involved use of the two subject properties fronting No. 5 Road for the building (new building addition and castle to be relocated from Fantasy Gardens site) and supporting uses (parking and outdoor play area). In the interim, the building addition would be temporarily used as the residential sales centre for the Gardens development immediately to the south outside of the ALR. A summary of the land uses associated with the proposed agricultural park plan was provided that involved development of the eastern portion of the site for agricultural uses (community and small research farm plots) and various enhancements to the existing botanical gardens on the west portion of the site.

The proponents (Townline) provided background on the extensive consultation that was undertaken in 2008/09 in regards to the Gardens development and what the public wanted to see happen with the botanical garden site contained in the ALR. Through this process, it was clear that the public wanted to bring farming back to the site and that it represented an opportunity to bring farming and community development together on a site that was a major gateway to Richmond.

It was highlighted that the existing botanical garden area had already been approved by the ALC previously and that the Agricultural Park Plan represented an opportunity to reintegrate agricultural uses on the site.

Comments were made about the irrigation water source for the agricultural areas, possibility of adding more trespass inhibiting shrubs along the north and south edges of the agricultural park and importance of securing a drainage canal along the north east portion of the site to enable the farm parcel (10320 No. 5 Road) to secure farm drainage to the Highway 99 drainage canal. Irrigation water would come from the storm water detention ponds, which would be supplemented with regular water supply in drier months. City Parks noted

comments about the landscape buffer treatments and drainage canal along the northern edge of the Agricultural Park.

Committee members had the following comments and questions of the proposed project and Agricultural Park plan:

- A question was asked about whether the land will remain in the ALR. Staff indicated all land will in the ALR and that the boundary is unchanged with this proposal. City staff are also consulting with ALC staff to determine if they have any comments on the community use facility or Agricultural Park Plan proposal.
- Questions were asked about the phasing of the Agricultural Park Plan and where the funding would be coming from. Parks staff noted that development of the Agricultural Park would be undertaken in phases and through the Capital Works program approved by Council.
- A comment was made about Ministry of Environment regulations pertaining to minimum burning radius established for day-care and other similar facilities.

AAC members forwarded the following motion:

That the proposal to develop 10620 and 10640 No. 5 Road and the Gardens Park Plan on portions of 10800 No. 5 Road contained in the Agricultural Land Reserve be supported.

Carried Unanimously

7. Development Proposal – Soil fill at 20100 Westminster Highway and 6980 No. 9 Road

City staff provided the surrounding land use context for the subject sites and summarized the soil fill proposal on the two subject parcels. The proponents project involves bringing in locally sourced fill materials to raise the elevation of the subject properties approximately 1 to 1.5 m. A summary of the proposal is contained in the agrologist report submitted by the proponents in support of their application. Specific questions and issues raised by staff on the proposal are as follows:

- Where will locally sourced fill be coming from?
- What monitoring mechanisms will be in place while fill activities are underway?
- What will be the final elevation of the subject site after fill activities are complete?
- What are the anticipated impacts on surrounding land uses, drainage infrastructure, roads as well as on-site existing drainage canals?
- Are any drainage or irrigation improvements planned?
- How will wasabi production be phased with fill activities?

AAC members had the following questions and comments on the proposal:

- What was the rationale for raising the elevation of the site for wasabi production and what would be the composition of the fill materials? The applicant indicated that based on the field test plots conducted and accompanying the agrologist report, fill was needed to elevate the site to deal with drainage on the subject site. The proponent noted that the wasabi crop was particularly sensitive to standing water and flooding, which was why it was necessary to raise the elevation of the site. Fill materials would generally consist of sandy coarse grain fill and structural fill from local excavation sites throughout the Lower Mainland. A member asked whether there was an option to pump water off the site rather than place fill on the site. The applicant advised that this was not an option, as it did not provide adequate protection from standing and high water tables.
- Members asked if the existing soil fill composition is suited for wasabi production? The proponent indicated that the existing soils (clay loam) were not suited to wasabi production and that the existing soils would be mixed with fill materials and peat to obtain the appropriate soil composition.
- Members requested what monitoring mechanisms would be in place during fill operations. The proponent responded they were looking at developing a strategy to monitor and oversee fill operations over the site.
- A question was asked about how the site would be irrigated and how humidity would be controlled. The proponent indicated they would implement an irrigation system that would tie into the existing City water line and that humidity would be controlled through shade cover cloth that would be placed over the entire wasabi crop.
- In response to questions about how the site will be drained, the proponent noted that the site has existing on-site drainage that will be utilized and feed into the surrounding City ditches. The applicant also noted that drain tiles will be placed at approximately 1 ft height elevation with 2 ft of fill on top.
- In response to questions on experience with the wasabi crop, the proponent noted that they have grown the crop in greenhouses (soil based) and now want to undertake field/soil-based trials.

Committee members identified that there was support for the use of the land to explore a potentially new type of agricultural crop (wasabi) that could be grown in Richmond; however, there had to be sufficient mechanisms in place to ensure that fill monitoring mechanisms are in place to ensure that materials are of suitable agricultural grade to prevent further degradation of farm land. As a result, the AAC forwarded the following motion:

That AAC members support the production of wasabi on the subject properties subject to the following provisions being secured by the City and ALC through the processing of the non-farm use (soil fill) application process:

- *Submission of additional information from an appropriate professional that addresses the impact of the fill activities on neighbouring properties, land uses and infrastructure and make recommendations to mitigate any such impacts.*
- *Submission of an acceptable management plan to monitor and inspect all fill activities (plan and inspection to be undertaken by a professional agrologist) and that inspections are to occur on a regularly scheduled quarterly basis.*
- *Submission of an acceptable security/bond amount to ensure that fill activities are undertaken as identified in the submitted agrologist report and monitoring strategy.*

Carried Unanimously

8. Meeting Minutes – October 13, 2010

The meeting minutes of October 13, 2010 were adopted.

9. Updates

a) Policy Planning (Kevin Eng)

Staff indicated they would follow-up with a previous AAC request to communicate to the Ministry of Agriculture and Lands about their concerns about the ability for the ALC to fulfill their mandate given existing budgetary constraints on the organization.

b) Ministry of Agriculture and Lands (Kathleen Zimmerman)

None.

c) Agricultural Land Commission (Tony Pellett)

Regrets.

10. New Business

None

11. Next Meeting

The next AAC meeting is scheduled for January 2011 (TBD).

12. Adjournment

The meeting was adjourned at 3:15 p.m.

Bill Zylmans/Todd May
Chairperson

KE:ke



MEMORANDUM

To: Yad Kallu
WCH Ltd.

Date: January 7, 2011

From: Brian Nakai / Dave Smith

File: 19-5895-0

6980 NO. 9 ROAD, RICHMOND

We understand that your client, One World Farms (OWF), is planning to place fill at the above property to raise grades for agricultural use. The planned fill thickness is 1.5 m. OWF prefers that the fill be of "structural" quality.

This memo provides our geotechnical input for fill placement at this site and provides information requested by the City of Richmond Agricultural Committee. Use of this report is subject to the attached Statement of General Conditions.

1. Geotechnical Conditions

Thurber Engineering Ltd. (TEL) has test hole information from previous investigations at this site and in adjacent roadways. The attached plan (Dwg. 19-5895-0-1) shows the test hole locations. The attached test hole logs provide complete detailed descriptions of the soils encountered and should be used in preference to the generalized summary provided below.

The native soil profile below the south portion of the property comprises about 2 to 4 m of silt, underlain by sand to the depth of our investigation. The strength of the silt is generally stiff near surface and decreases with depth. The DCPT blow counts indicate that the sand is generally loose to compact.

Compressible organic deposits (peat and organic silt) were encountered at THs 07-10 and 07-11 in the northern portion of the site. Peat is present at ground surface at the north end of the property (TH 04-1) and buried beneath a surficial silt layer in the 2007 test holes. The interpreted approximate southern limit of the organic deposits is shown on plan. The organic deposits typically extend to 6 to 8 m depth and are underlain by similar sand to that encountered in the south portion of the site.

The depth to groundwater in the open test holes ranged from 0.9 to 2.5 m below ground surface. Groundwater levels are likely subject to seasonal fluctuation.



2. Fill Placement

Thurber Engineering Ltd. (TEL) has extensive experience on similar fill placement projects, including the following projects in Richmond:

- Kingswood Industrial Park on Nelson Road
- English Bay Business Park at the west end of Mitchell Island
- Terra Nova residential development west of No. 1 Road
- Cambie-Jacombs residential development

We propose to utilize similar fill quality control procedures as were followed for the above projects, as described below.

TEL will review geotechnical and environmental reports for proposed fill sources and provide written approval for suitable sources. Where required, we will visit the source sites to observe current conditions. We will review the contractor's control procedures for ensuring that soil from approved sources only is delivered to the property and will conduct intermittent site visits during periods of fill placement to confirm that the control procedures are being followed. During our visits, our inspector will visually assess the soil delivered to the site to identify any loads with poor geotechnical quality and/or indicators of potential contamination (debris, stains or odours). Finally, our inspector will conduct proof rolling of each completed lift using the contractor's equipment to confirm that the lift has been adequately compacted prior to coverage with additional fill.

The fill should be spread in maximum 300 mm thick lifts and compacted using a smooth drum vibratory compactor. The nominal target compaction is 95% Standard Proctor maximum dry density (SPMDD). The initial lift may need to be thicker to support the placement equipment. We envision a nominally 450 mm maximum initial lift may be required for the majority of the site. At the north end of the property where peat is present at ground surface, an initial lift thickness of 900 mm may be required. Regardless, the thickness of all subsequent lifts should conform to the 300 mm maximum. Compaction of each lift must be approved by our inspector prior to coverage with additional fill.

3. Offsite Impacts

We understand that the existing east-west ditch crossing the property will be retained and new ditches will be provided along the perimeter of the property. These measures should be sufficient to avoid any surface runoff impacts to surrounding properties.



THURBER ENGINEERING LTD.

As the fill will be placed in lifts and the maximum total fill thickness will be 1.5 m, the risk of fill instability is minimal. Accordingly, the risk of ground heave on adjacent properties is also minimal.

We trust that this information will be sufficient for your present needs. Should any questions arise, please do not hesitate to call us.



Client: WCH Ltd.
File No. 19-5895-0
E file: a_bn_mem_report

Date: January 7, 2011

Page 3 of 3



STATEMENT OF GENERAL CONDITIONS

1. STANDARD OF CARE

This study and Report have been prepared in accordance with generally accepted engineering or environmental consulting practices in this area. No other warranty, expressed or implied, is made.

2. COMPLETE REPORT

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment are a part of the Report which is of a summary nature and is not intended to stand alone without reference to the instructions given to us by the Client, communications between us and the Client, and to any other reports, writings, proposals or documents prepared by us for the Client relative to the specific site described herein, all of which constitute the Report.

IN ORDER TO PROPERLY UNDERSTAND THE SUGGESTIONS, RECOMMENDATIONS AND OPINIONS EXPRESSED HEREIN, REFERENCE MUST BE MADE TO THE WHOLE OF THE REPORT. WE CANNOT BE RESPONSIBLE FOR USE BY ANY PARTY OF PORTIONS OF THE REPORT WITHOUT REFERENCE TO THE WHOLE REPORT.

3. BASIS OF REPORT

The Report has been prepared for the specific site, development, design objectives and purposes that were described to us by the Client. The applicability and reliability of any of the findings, recommendations, suggestions, or opinions expressed in the document, subject to the limitations provided herein, are only valid to the extent that this Report expressly addresses proposed development, design objectives and purposes, and then only to the extent there has been no material alteration to or variation from any of the said descriptions provided to us unless we are specifically requested by the Client to review and revise the Report in light of such alteration or variation or to consider such representations, information and instructions.

4. USE OF THE REPORT

The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of the Client. NO OTHER PARTY MAY USE OR RELY UPON THE REPORT OR ANY PORTION THEREOF WITHOUT OUR WRITTEN CONSENT AND SUCH USE SHALL BE ON SUCH TERMS AND CONDITIONS AS WE MAY EXPRESSLY APPROVE. The contents of the Report remain our copyright property. The Client may not give, lend or, sell the Report, or otherwise make the Report, or any portion thereof, available to any person without our prior written permission. Any use which a third party makes of the Report, are the sole responsibility of such third parties. Unless expressly permitted by us, no person other than the Client is entitled to rely on this Report. We accept no responsibility whatsoever for damages suffered by any third party resulting from use of the Report without our express written permission.

5. INTERPRETATION OF THE REPORT

- a) Nature and Exactness of Soil and Contaminant Description: Classification and identification of soils, rocks, geological units, contaminant materials and quantities have been based on investigations performed in accordance with the standards set out in Paragraph 1. Classification and identification of these factors are judgmental in nature. Comprehensive sampling and testing programs implemented with the appropriate equipment by experienced personnel, may fail to locate some conditions. All investigations utilizing the standards of Paragraph 1 will involve an inherent risk that some conditions will not be detected and all documents or records summarizing such investigations will be based on assumptions of what exists between the actual points sampled. Actual conditions may vary significantly between the points investigated and the Client and all other persons making use of such documents or records with our express written consent should be aware of this risk and this report is delivered on the express condition that such risk is accepted by the Client and such other persons. Some conditions are subject to change over time and those making use of the Report should be aware of this possibility and understand that the Report only presents the conditions at the sampled points at the time of sampling. Where special concerns exist, or the Client has special considerations or requirements, the Client should disclose them so that additional or special investigations may be undertaken which would not otherwise be within the scope of investigations made for the purposes of the Report.
- b) Reliance on Provided Information: The evaluation and conclusions contained in the Report have been prepared on the basis of conditions in evidence at the time of site inspections and on the basis of information provided to us. We have relied in good faith upon representations, information and instructions provided by the Client and others concerning the site. Accordingly, we cannot accept responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of misstatements, omissions, misrepresentations, or fraudulent acts of the Client or other persons providing information relied on by us. We are entitled to rely on such representations, information and instructions and are not required to carry out investigations to determine the truth or accuracy of such representations, information and instructions.



INTERPRETATION OF THE REPORT *(continued)*

- c) **Design Services:** The Report may form part of the design and construction documents for information purposes even though it may have been issued prior to the final design being completed. We should be retained to review the final design, project plans and documents prior to construction to confirm that they are consistent with the intent of the Report. Any differences that may exist between the report recommendations and the final design detailed in the contract documents should be reported to us immediately so that we can address potential conflicts.
- d) **Construction Services:** During construction we must be retained to provide field reviews. Field reviews consist of performing sufficient and timely observations of encountered conditions to confirm and document that the site conditions do not materially differ from those interpreted conditions considered in the preparation of the report. Adequate field reviews are necessary for Thurber to provide letters of assurance, in accordance with the requirements of many regulatory authorities.

6. RISK LIMITATION

Geotechnical engineering and environmental consulting projects often have the potential to encounter pollutants or hazardous substances and the potential to cause an accidental release of those substances. In consideration of the provision of the services by us, which are for the Client's benefit, the Client agrees to hold harmless and to indemnify and defend us and our directors, officers, servants, agents, employees, workmen and contractors (hereinafter referred to as the "Company") from and against any and all claims, losses, damages, demands, disputes, liability and legal investigative costs of defence, whether for personal injury including death, or any other loss whatsoever, regardless of any action or omission on the part of the Company, that result from an accidental release of pollutants or hazardous substances occurring as a result of carrying out this Project. This indemnification shall extend to all Claims brought or threatened against the Company under any federal or provincial statute as a result of conducting work on this Project. In addition to the above indemnification, the Client further agrees not to bring any claims against the Company in connection with any of the aforementioned causes.

7. SERVICES OF SUBCONSULTANTS AND CONTRACTORS

The conduct of engineering and environmental studies frequently requires hiring the services of individuals and companies with special expertise and/or services which we do not provide. We may arrange the hiring of these services as a convenience to our Clients. As these services are for the Client's benefit, the Client agrees to hold the Company harmless and to indemnify and defend us from and against all claims arising through such hirings to the extent that the Client would incur had he hired those services directly. This includes responsibility for payment for services rendered and pursuit of damages for errors, omissions or negligence by those parties in carrying out their work. In particular, these conditions apply to the use of drilling, excavation and laboratory testing services.

8. CONTROL OF WORK AND JOBSITE SAFETY

We are responsible only for the activities of our employees on the jobsite. The presence of our personnel on the site shall not be construed in any way to relieve the Client or any contractors on site from their responsibilities for site safety. The Client acknowledges that he, his representatives, contractors or others retain control of the site and that we never occupy a position of control of the site. The Client undertakes to inform us of all hazardous conditions, or other relevant conditions of which the Client is aware. The Client also recognizes that our activities may uncover previously unknown hazardous conditions or materials and that such a discovery may result in the necessity to undertake emergency procedures to protect our employees as well as the public at large and the environment in general. These procedures may well involve additional costs outside of any budgets previously agreed to. The Client agrees to pay us for any expenses incurred as the result of such discoveries and to compensate us through payment of additional fees and expenses for time spent by us to deal with the consequences of such discoveries. The Client also acknowledges that in some cases the discovery of hazardous conditions and materials will require that certain regulatory bodies be informed and the Client agrees that notification to such bodies by us will not be a cause of action or dispute.

9. INDEPENDENT JUDGEMENTS OF CLIENT

The information, interpretations and conclusions in the Report are based on our interpretation of conditions revealed through limited investigation conducted within a defined scope of services. We cannot accept responsibility for independent conclusions, interpretations, interpolations and/or decisions of the Client, or others who may come into possession of the Report, or any part thereof, which may be based on information contained in the Report. This restriction of liability includes but is not limited to decisions made to develop, purchase or sell land.



LEGEND:



TEST HOLE

NOTES: TEST HOLE LOCATIONS ARE APPROXIMATE.

ONE WORLD FARMS

TEST HOLE LOCATIONS

6980 NO. 9 ROAD

RICHMOND, BC



THURBER ENGINEERING LTD.

GEOTECHNICAL • ENVIRONMENTAL • MATERIALS

ENGINEER:

BN

DRAWN:

JL

FILE NO.

19-5895-0

DATE:

JANUARY 6, 2011

SCALE:

1:5000

FIGURE No.

1

CS-169

LOG OF TEST HOLE

TEST HOLE NO.
07-10

LOCATION: See Dwg. 19-1019-29-1

CLIENT: Bontebok Properties
PROJECT: 6511 Nelson Road

TOP OF HOLE ELEV:

METHOD: Solid Stem Auger

DATE: May 9, 2007

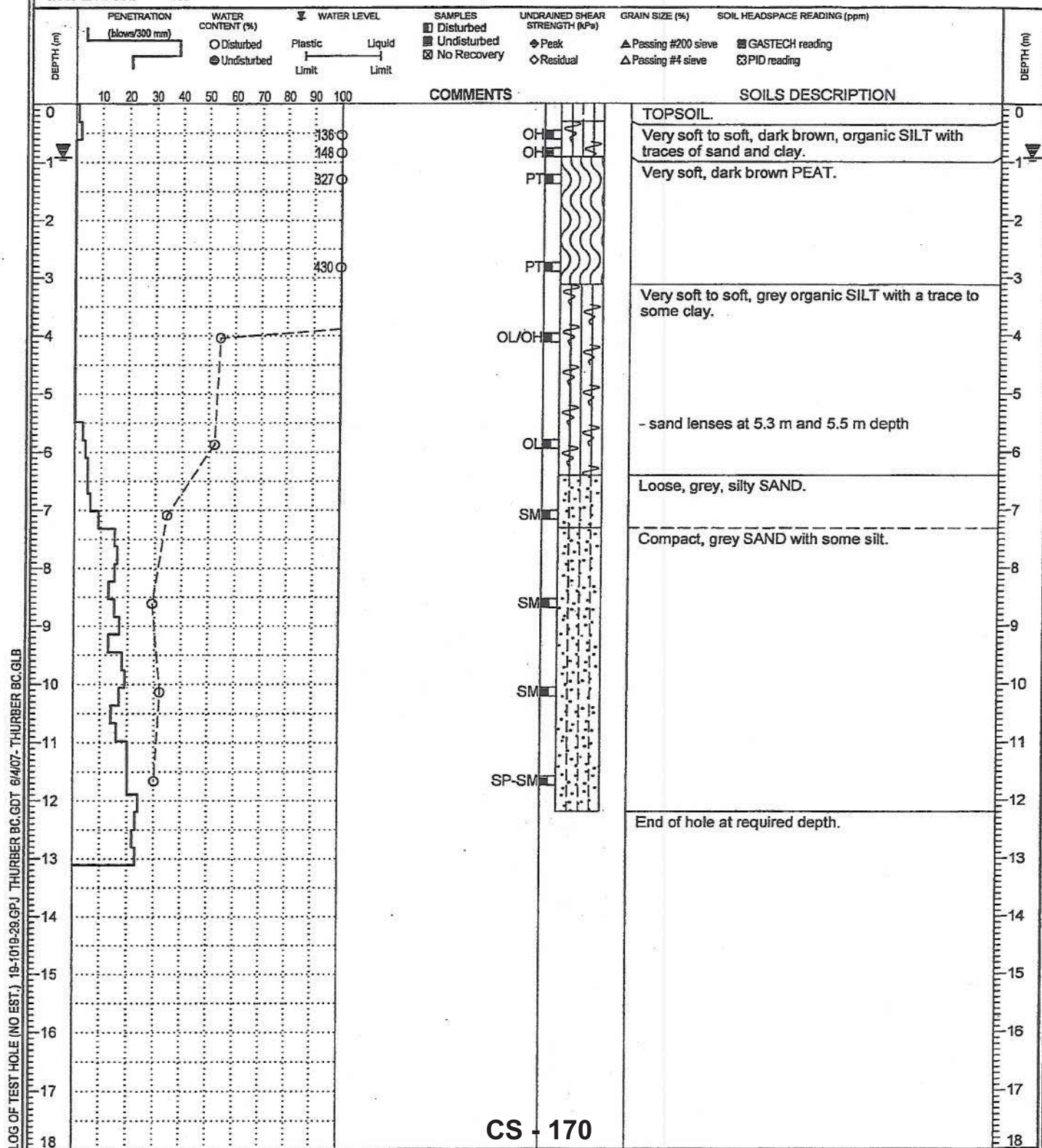
DRILLING CO.: On-Track Drilling Inc.

FILE NO.: 19-1019-29

INSPECTOR: KS



THURBER



LOG OF TEST HOLE

TEST HOLE NO.
07-11

LOCATION: See Dwg. 19-1019-29-1

CLIENT: Bontebok Properties
PROJECT: 6511 Nelson Road

TOP OF HOLE ELEV:

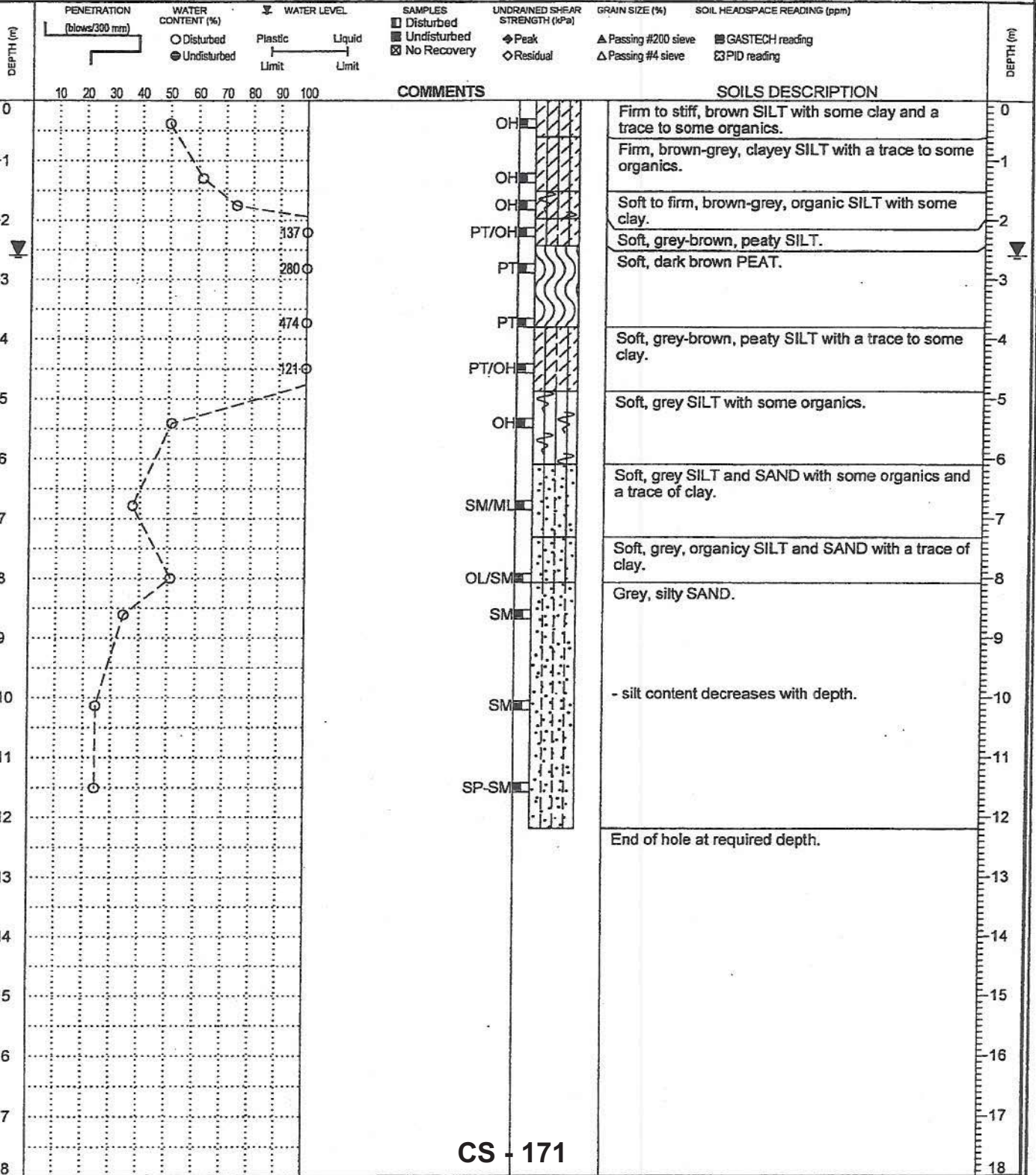
METHOD: Solid Stem Auger

DRILLING CO.: On-Track Drilling Inc.

INSPECTOR: KS

DATE: May 9, 2007

FILE NO.: 19-1019-29



LOG OF TEST HOLE

TEST HOLE NO.
07-12

LOCATION: See Dwg. 19-1019-29-1

CLIENT: Bontebok Properties
PROJECT: 6511 Nelson Road

TOP OF HOLE ELEV:

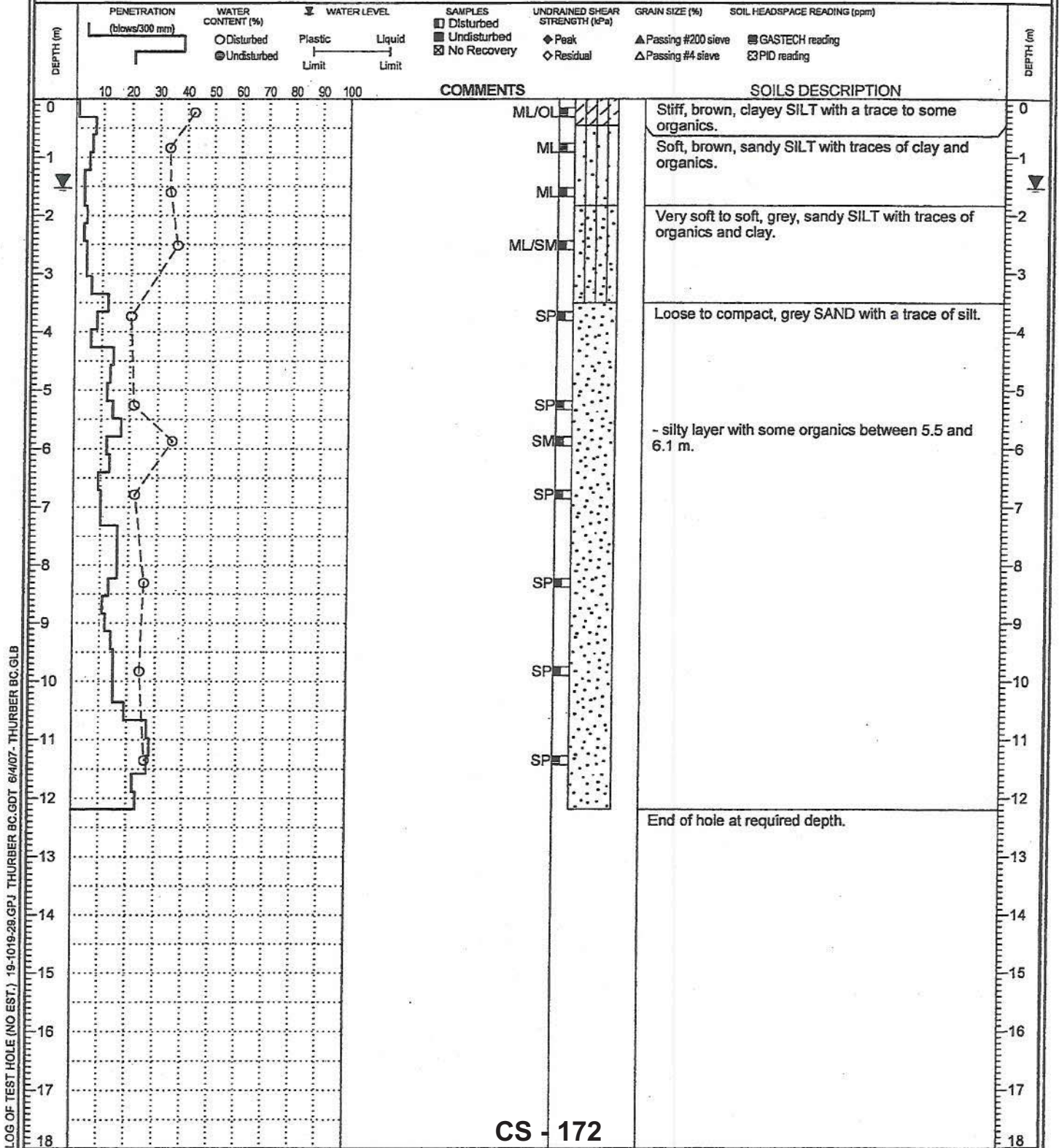
METHOD: Solid Stem Auger

DATE: May 9, 2007

DRILLING CO.: On-Track Drilling Inc.

FILE NO.: 19-1019-29

INSPECTOR: KS



LOG OF TEST HOLE

TEST HOLE NO.

04-1

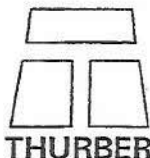
LOCATION: See Dwg. 17-610-86-1

TOP OF HOLE ELEV:

METHOD: Solid Stem Auger

DRILLING CO.: On Track Drilling Inc.

INSPECTOR: KG



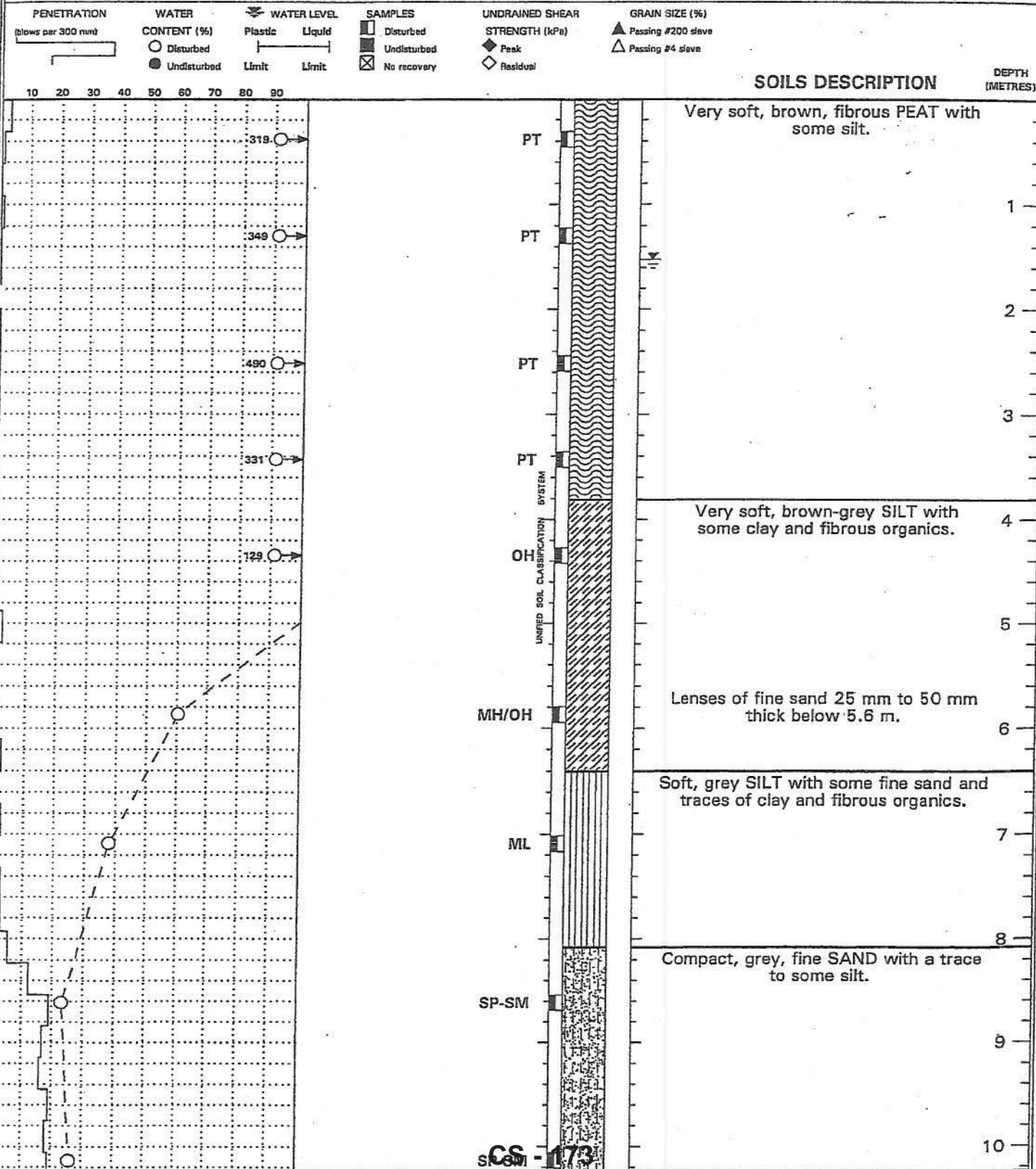
CLIENT: Urban Systems Ltd.

PROJECT: Westminster Highway Widening

DATE: August 20, 2004

FILE NO.: 17-610-86

SCALE: 1:50



Sheet 2 of 2

LOG OF TEST HOLE

TEST HOLE NO.

04-1

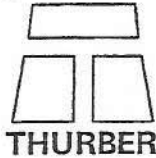
LOCATION: See Dwg. 17-610-86-1

TOP OF HOLE ELEV:

METHOD: Solid Stem Auger

DRILLING CO.: On Track Drilling Inc.

INSPECTOR: KG



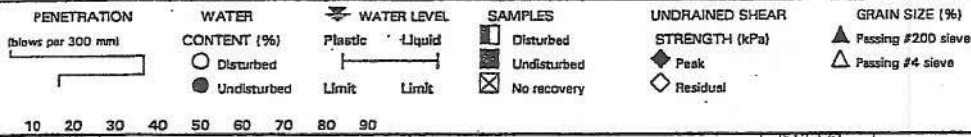
CLIENT: Urban Systems Ltd.

PROJECT: Westminster Highway Widening

DATE: August 20, 2004

FILE NO.: 17-610-86

SCALE: 1:50



SOILS DESCRIPTION

DEPTH (METRES)

(See Sheet 1)

SP-SM

End of hole at required depth.

UNRED SOIL CLASSIFICATION SYSTEM

CS - 174

LOG OF TEST HOLE

TEST HOLE NO.
04-12

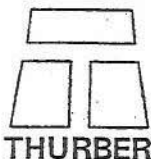
LOCATION: See Dwg. 17-610-86-1

TOP OF HOLE ELEV:

METHOD: Solid Stem Auger

DRILLING CO.: On Track Drilling Inc.

INSPECTOR: MWD



CLIENT: Urban Systems Ltd.

PROJECT: Westminster Highway Widening

DATE: November 5, 2004

FILE NO.: 17-610-86

SCALE: 1:50

PENETRATION
(blows per 300 mm)

WATER
CONTENT (%)

WATER LEVEL
Plastic Liquid

SAMPLES
Disturbed
Undisturbed
No recovery

UNDRAINED SHEAR
STRENGTH (kPa)
Peak
Residual

GRAIN SIZE (%)
▲ Passing #200 sieve
△ Passing #4 sieve

SOILS DESCRIPTION

DEPTH
(METRES)

10 20 30 40 50 60 70 80 90

SP-SM

SP

OH

OH

Pt

Pt

OL/OH

Topsoil and organics.
Compact, brown, fine SAND with traces
of silt and gravel.

Soft, brown-grey, fibrous peaty, clayey
SILT.
- some woody organics below 3.0 m

Soft, brown, fine grained and fibrous
PEAT.

Very soft, grey, clayey SILT with some
fibrous organics to peaty.

Loose, grey SAND with a trace of silt.
Trace recovery.

End of hole at required depth.

CS 175

Sheet 1 of 1

LOG OF TEST HOLE

TEST HOLE NO.

95-5

LOCATION: See Dwg. 17-610-42-1

CLIENT: Urban Systems Ltd

PROJECT: Fraser Richmond Forcemain

TOP OF HOLE ELEV:

METHOD: Solid-stem Auger

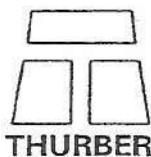
DRILLING CO.: SDS Drilling Ltd

INSPECTOR: KM

DATE: August 08, 1995

FILE NO.: 17-610-42

SCALE: 1:50



THURBER

PENETRATION

(blows per 300 mm)

WATER

CONTENT (%)

○ Disturbed

● Undisturbed

WATER LEVEL

Plastic Liquid

Limit Limit

SAMPLES

Disturbed

Undisturbed

No recovery

UNDRAINED SHEAR

STRENGTH (kPa)

Peak

Residual

GRAIN SIZE (%)

▲ Passing #200 sieve

△ Passing #4 sieve

SOILS DESCRIPTION

DEPTH
(METRES)

Loose, grey-brown SAND and GRAVEL (Fill).

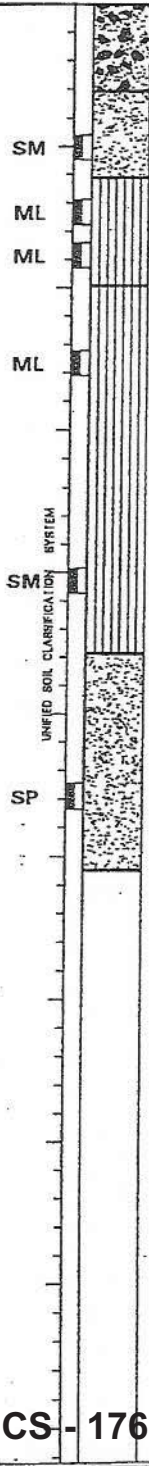
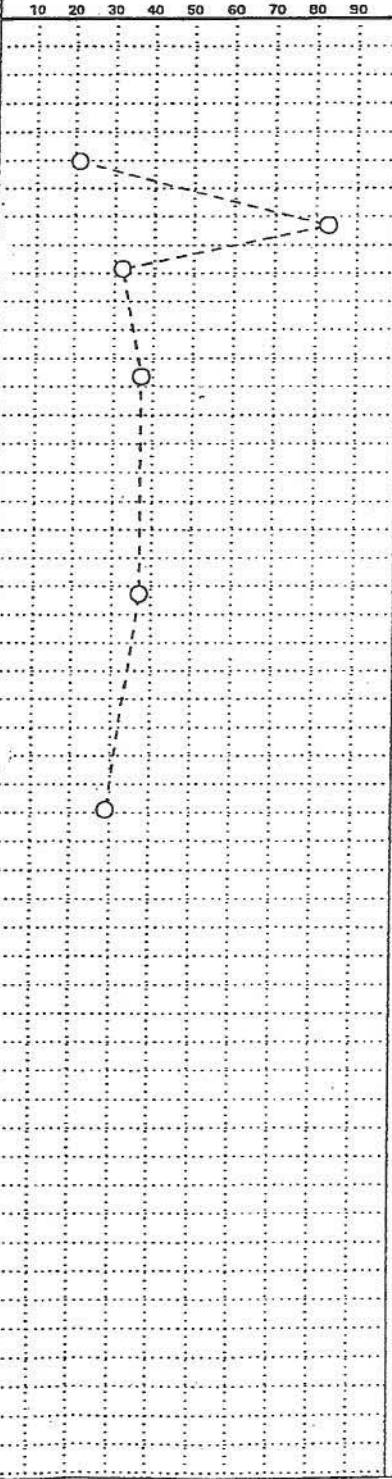
Loose, brown, silty SAND with traces of clay and organics (probable Fill).

Soft, brown, clayey SILT with a trace of organics. Some clay below 1.4 m.

Soft to firm, grey SILT with some sand and a traces of clay.
- hole sloughed to 2.7 m
- some wood from 3 to 4.5 m

Loose to compact, grey SAND with a trace of silt.

End of hole at required depth.



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Sheet 1 of 1

LOG OF TEST HOLE

TEST HOLE NO.

95-6

LOCATION: See Dwg. 17-610-42-1

TOP OF HOLE ELEV:

METHOD: Solid-stem Auger

DRILLING CO.: SDS Drilling Ltd

INSPECTOR: KM

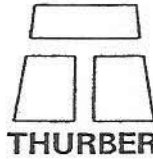
CLIENT: Urban Systems Ltd

PROJECT: Fraser Richmond Forcemain

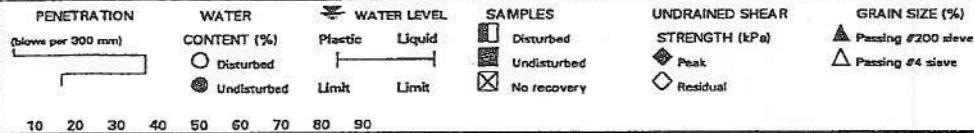
DATE: August 08, 1995

FILE NO.: 17-610-42

SCALE: 1:50

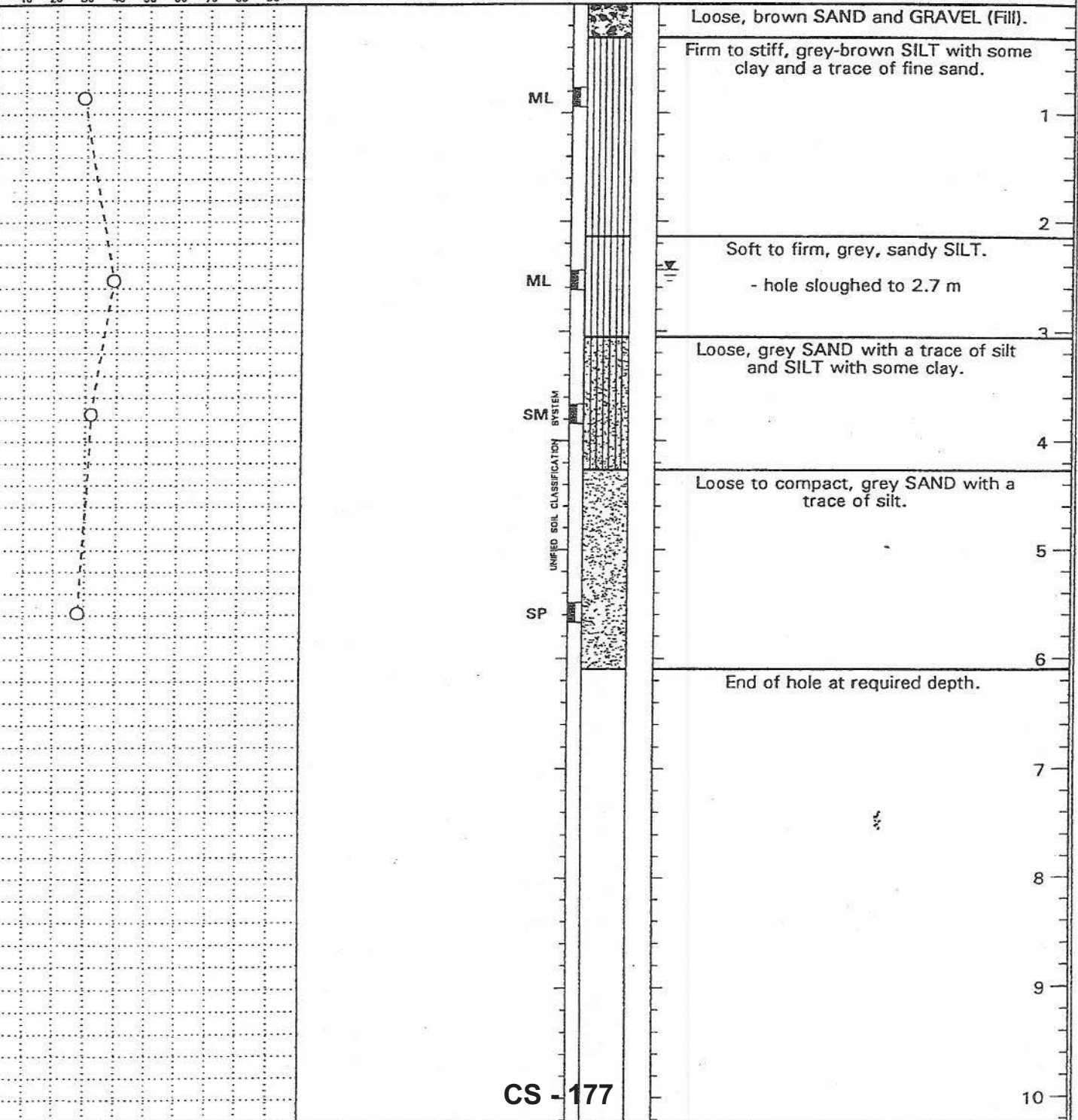


THURBER



SOILS DESCRIPTION

DEPTH (METRES)



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Sheet 1 of 1

LOG OF TEST HOLE

TEST HOLE NO.
95-7

LOCATION: See Dwg. 17-610-42-1

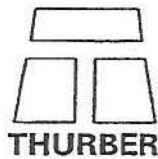
CLIENT: Urban Systems Ltd
PROJECT: Fraser Richmond Forcemain

TOP OF HOLE ELEV:

METHOD: Solid-stem Auger

DRILLING CO.: SDS Drilling Ltd

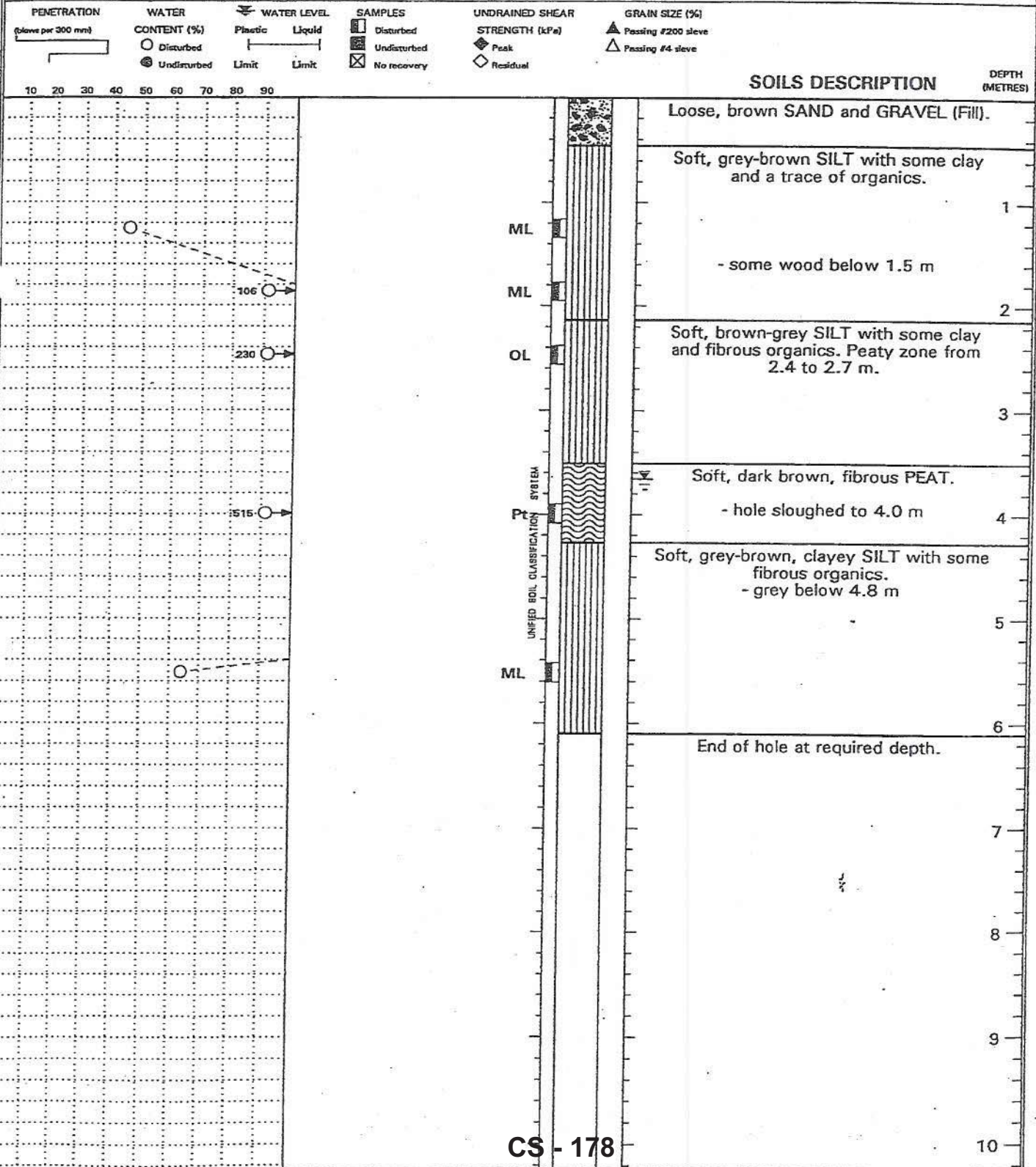
INSPECTOR: KM



DATE: August 08, 1995

FILE NO.: 17-610-42

SCALE: 1:50



Sheet 1 of 1

LOG OF TEST HOLE

TEST HOLE NO.

95-8

LOCATION: See Dwg. 17-610-42-1

CLIENT: Urban Systems Ltd.

PROJECT: Fraser Richmond Forcemain

TOP OF HOLE ELEV:

METHOD: Solid-stem Auger

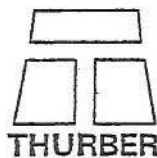
DATE: August 08, 1995

DRILLING CO.: SDS Drilling Ltd

FILE NO.: 17-610-42

SCALE: 1:50

INSPECTOR: KM



PENETRATION

blows per 300 mm

WATER

CONTENT (%)

○ Disturbed
● Undisturbed

WATER LEVEL

Plastic Liquid

Limit Limit

SAMPLES

□ Disturbed
■ Undisturbed
⊗ No recovery

UNDRAINED SHEAR

STRENGTH (kPa)

◆ Peak
◇ Residual

GRAIN SIZE (%)

▲ Passing #200 sieve
△ Passing #4 sieve

SOILS DESCRIPTION

DEPTH (METRES)

10 20 30 40 50 60 70 80 90

