Township of Langley

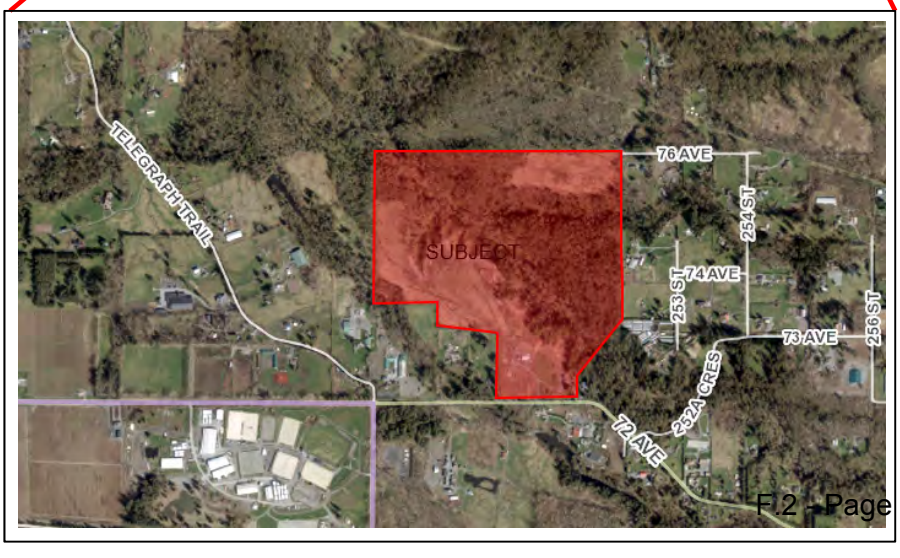
Est. 1873

REPORT TO MAYOR AND COUNCIL

PRESENTED:	MAY 7, 2018 – REGULAR AFTERNOON MEETING	**REPORT:**	18-58
FROM:	COMMUNITY DEVELOPMENT DIVISION	**FILE:**	11-23-0015
SUBJECT:	AGRICULTURAL LAND COMMISSION APPLICATION NO. 100304 (APLIN AND MARTIN CONSULTANTS LTD. / HOMESTAR BUILDING CORP. / MEYER / 25125 – 72 AVENUE)		

PROPOSAL:

Subdivision application under Section 21(2) of the Agricultural Land Commission Act to subdivide a 51.1 ha (126.4 ac) property located at 25125 – 72 Avenue into six (6) rural lots.



RECOMMENDATION SUMMARY:

That Council not authorize referral of the subdivision application by Aplin and Martin Consultants Ltd. for a 51.1 ha (126.4 ac) property located at 25125 – 72 Avenue to the Agricultural Land Commission, as it does not comply with the Township's Zoning Bylaw.

RATIONALE:

The proposed subdivision does not comply with the Township's Rural Zone RU-3 8.0 ha (19.8 ac) minimum lot size.

RECOMMENDATION:

That Council not authorize referral of the subdivision application submitted by Aplin and Martin Consultants Ltd. on behalf of Chris Meyer and Homestar Building Corporation for a 51.1 ha (126.4 ac) property located at 25125 – 72 Avenue within the Agricultural Land Reserve to the Agricultural Land Commission as it does not comply with the Township's Zoning Bylaw, Rural Plan, Official Community Plan and the Metro Vancouver Regional Growth Strategy.

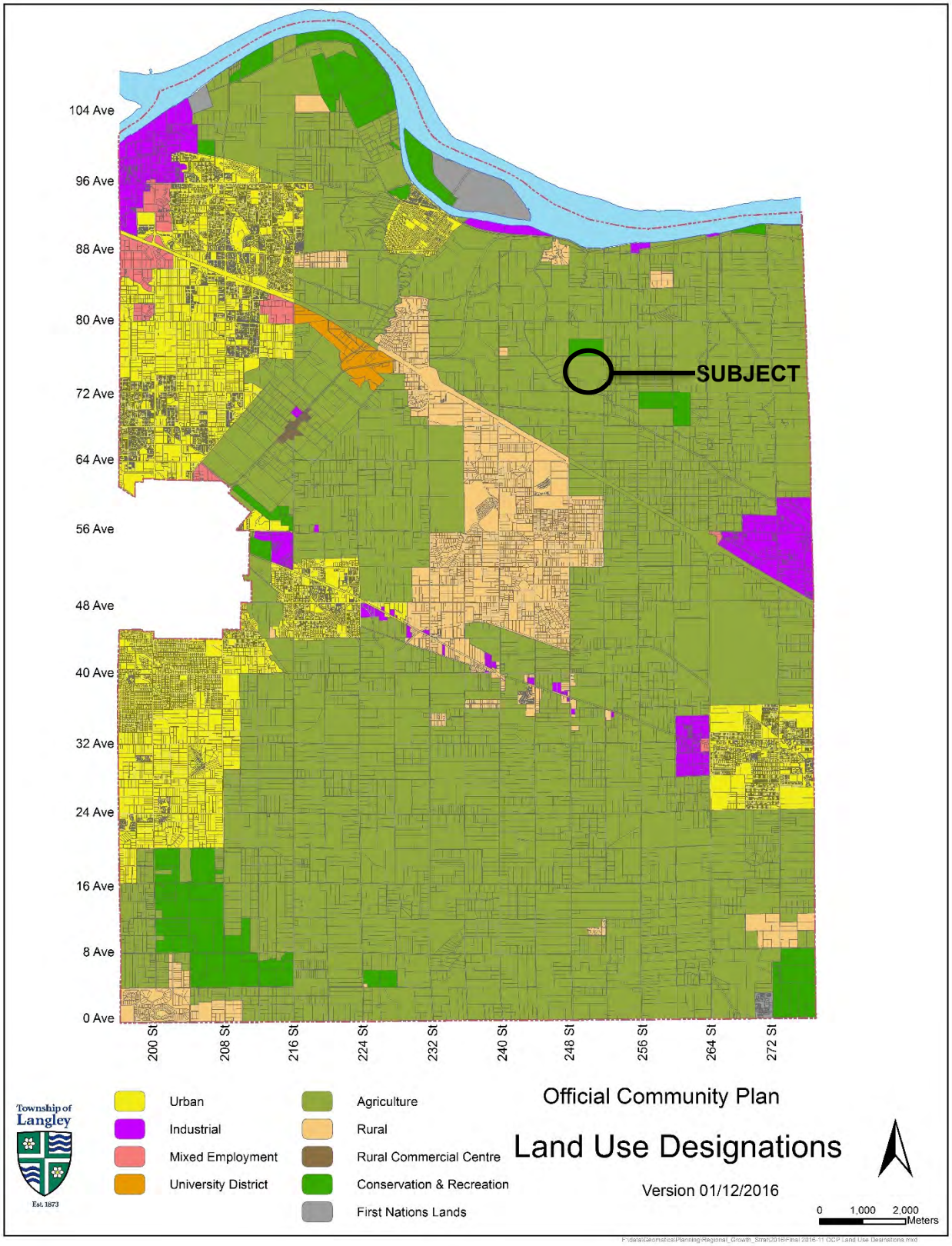
EXECUTIVE SUMMARY:

The applicant, pursuant to Section 21(2) of the Agricultural Land Commission Act, has applied to subdivide a 51.1 ha (126.4 ac) property located at 25125 – 72 Avenue into six (6) rural lots ranging in size from 2.0 ha (4.94 ac) to 26 ha (64.3 ac). The subject property is zoned Rural Zone RU-3 and designated Agricultural / Countryside in the Rural Plan.

Four (4) out of six (6) proposed lots do not meet the minimum lot size provisions of the Township of Langley Zoning Bylaw No. 2500 for the Rural RU-3 Zone. The proposal is also inconsistent with the provisions of the Rural Plan, Official Community Plan and the Metro Vancouver Regional Growth Strategy (RGS). Should the ALC view the application favorably, the applicant would require a Rural Plan amendment and rezoning application in order to accommodate the proposed subdivision. Staff recommend that Council not authorize the subdivision application to proceed to the ALC.

PURPOSE:

This report is to provide Council with information and a recommendation with respect to an ALR subdivision application submitted under Section 21(2) of the ALC Act by Aplin and Martin Consultants Ltd.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SUBJECT
Township of Langley
Est. 1873
Urban
Industrial
Mixed Employment
University District
Agriculture
Rural
Rural Commercial Centre
Conservation & Recreation
First Nations Lands
Official Community Plan
Land Use Designations
Version 01/12/2016
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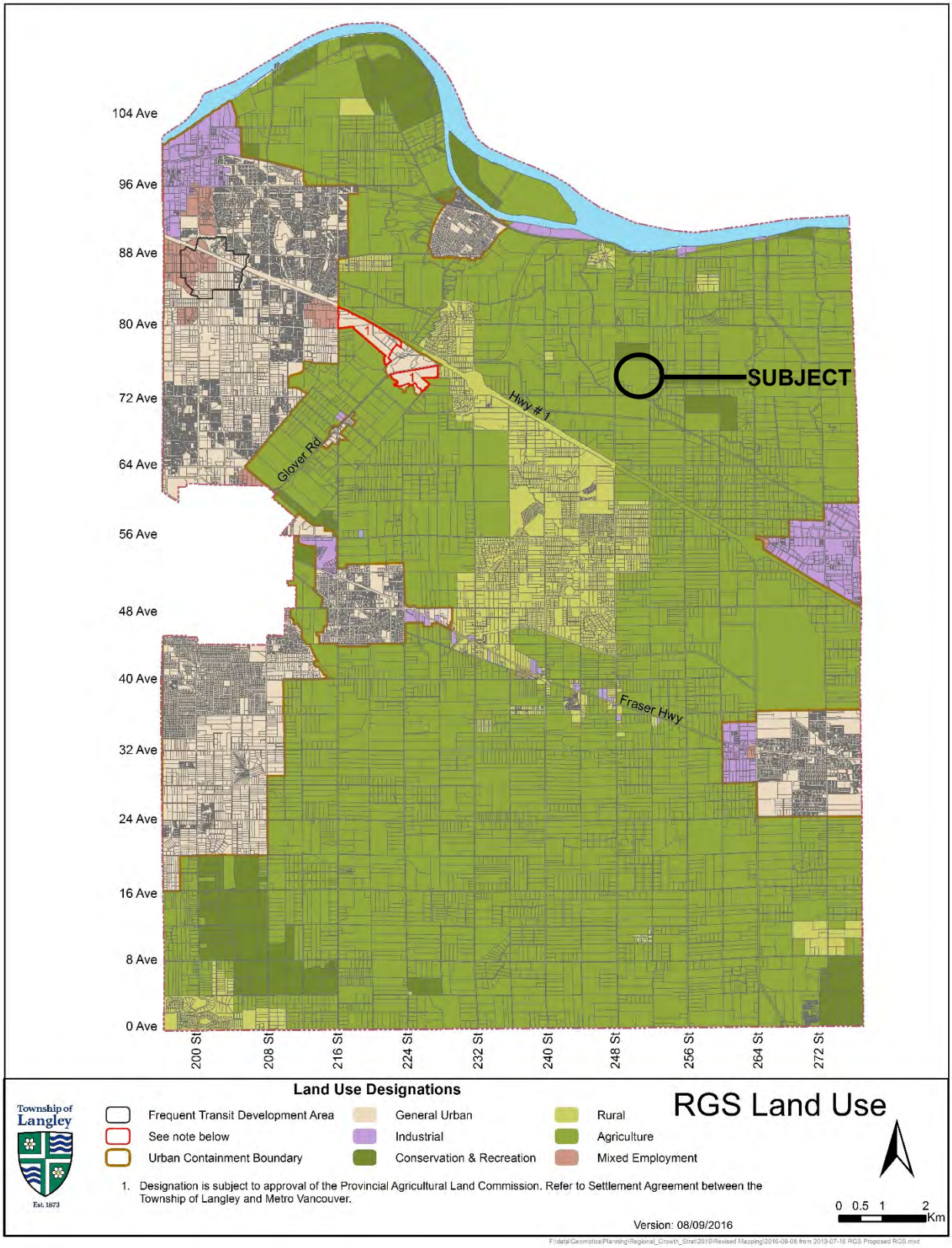
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SUBJECT
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1
Land Use Designations
Township of Langley
Est. 1873
Frequent Transit Development Area
See note below
Urban Containment Boundary
General Urban
Industrial
Conservation & Recreation
Rural
Agriculture
Mixed Employment
RGS Land Use
1. Designation is subject to approval of the Provincial Agricultural Land Commission. Refer to Settlement Agreement between the Township of Langley and Metro Vancouver.
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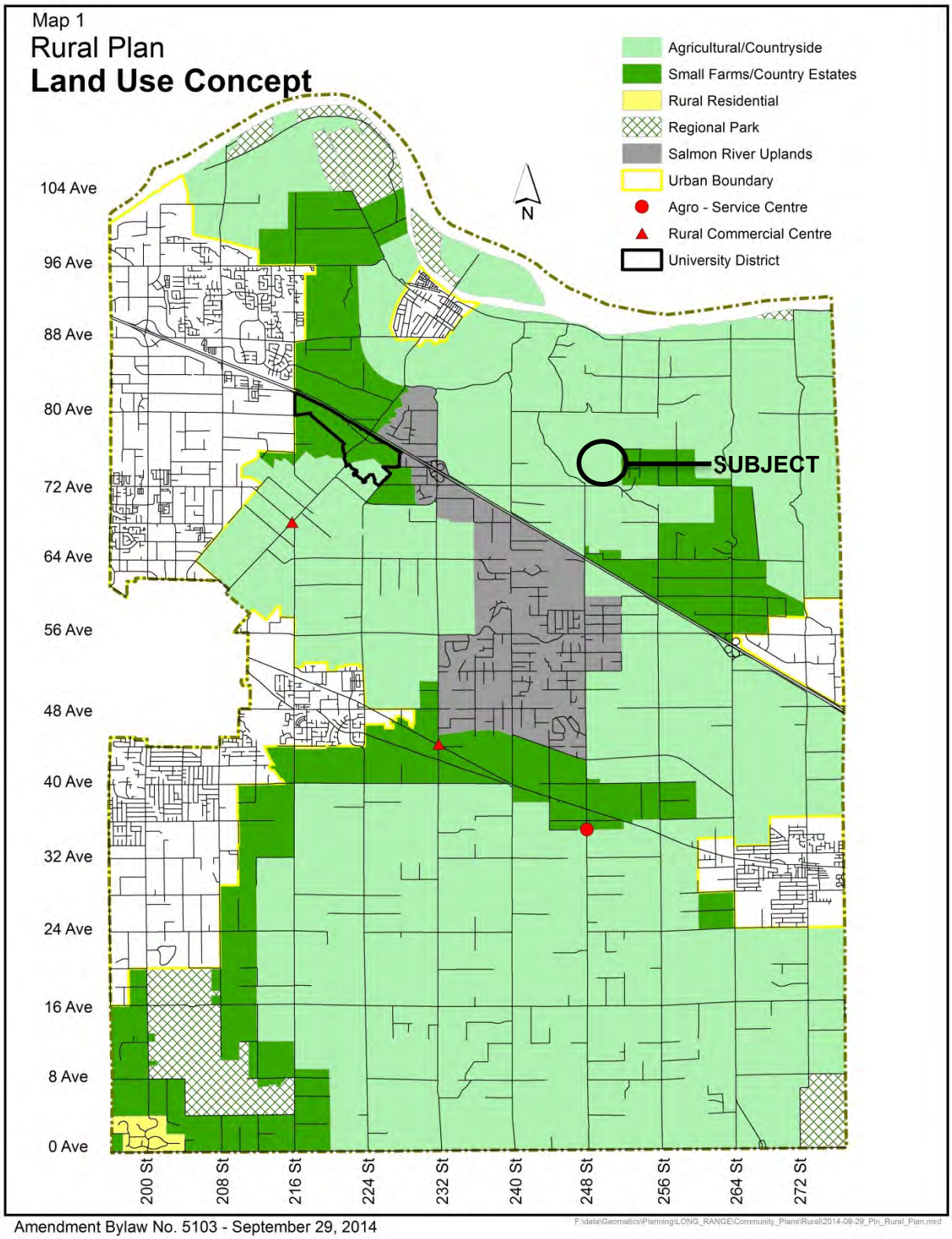
Map 1
Rural Plan
Land Use Concept
Agricultural/Countryside
Small Farms/Country Estates
Rural Residential
Regional Park
Salmon River Uplands
Urban Boundary
Agro - Service Centre
Rural Commercial Centre
University District
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SUBJECT
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Amendment Bylaw No. 5103 - September 29, 2014
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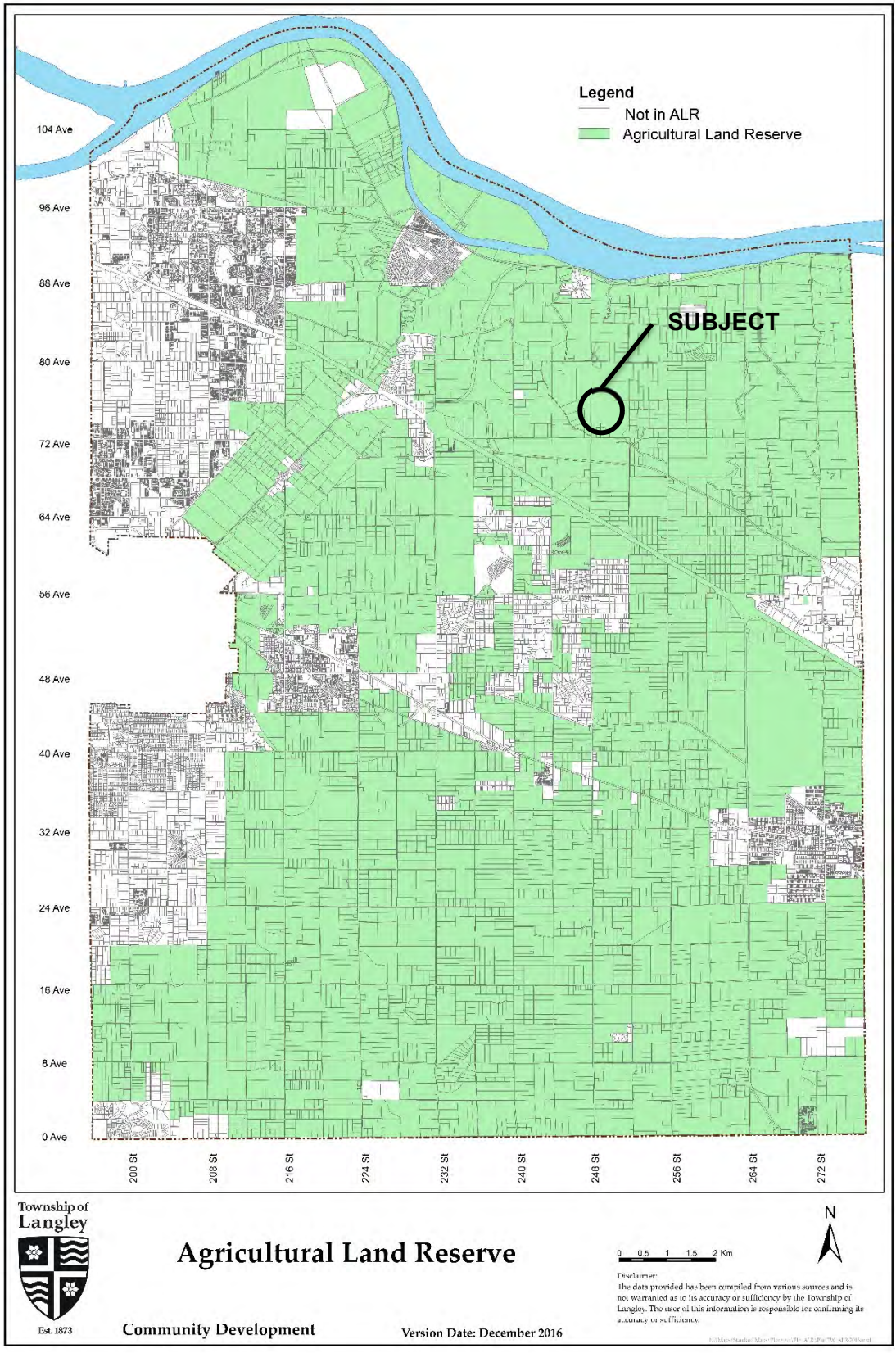
Legend
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Township of Langley
Est. 1873
Agricultural Land Reserve
Community Development
Version Date: December 2016
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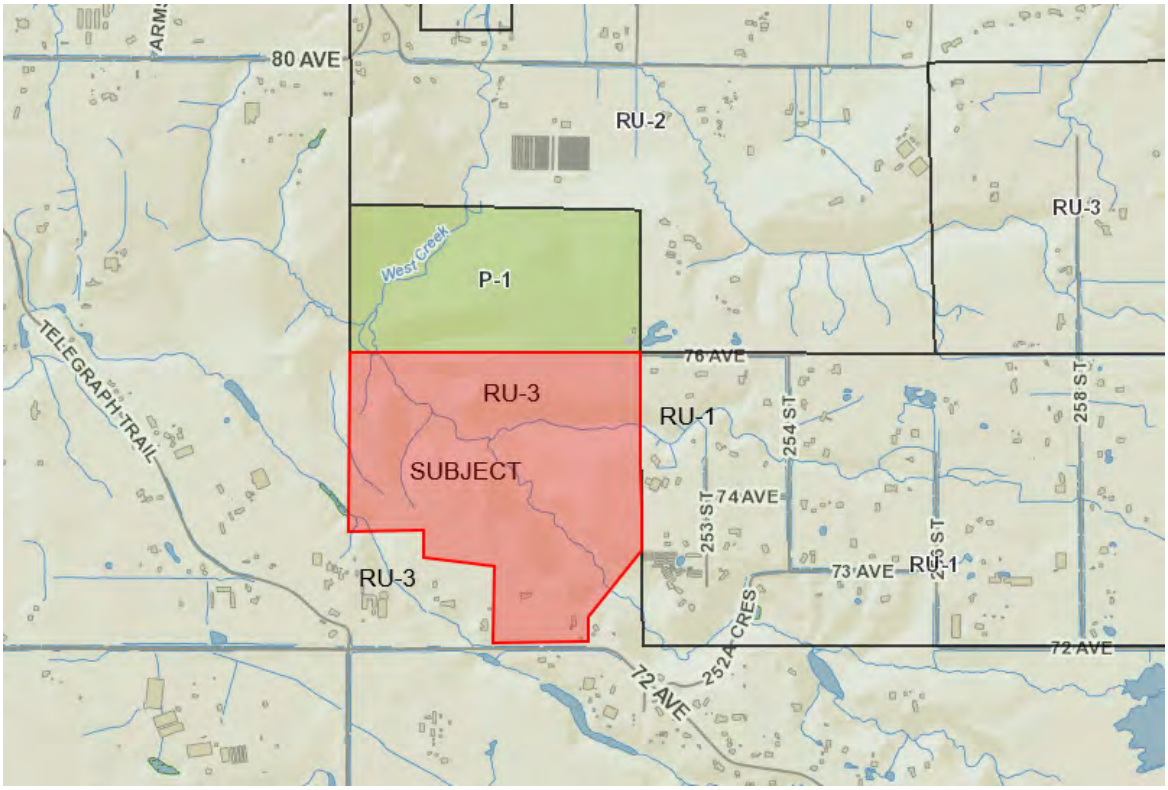
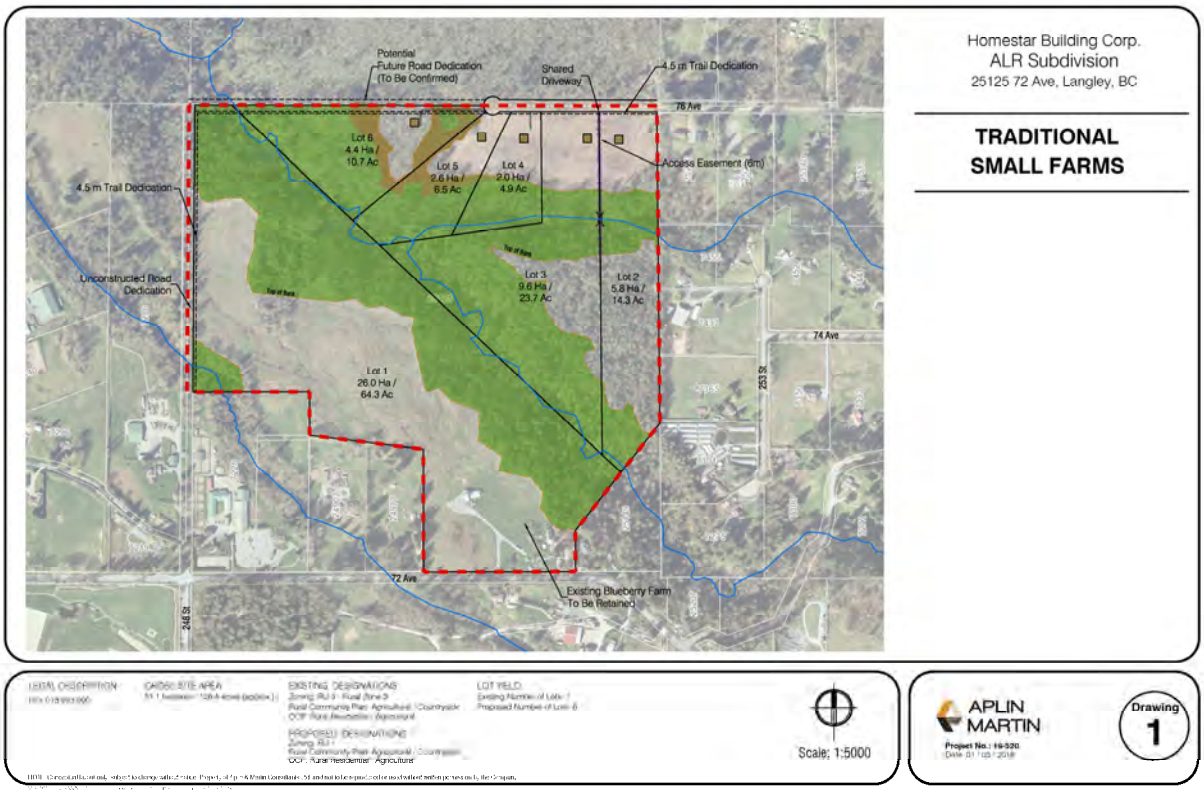
Disclaimer:
The data provided has been compiled from various sources and is not warranted as to its accuracy or sufficiency by the Township of Langley. The user of this information is responsible for confirming its accuracy or sufficiency.



ZONING BYLAW NO. 2500



SITE PLAN – SUBMITTED BY APPLICANT

REFERENCE:

Agent	Aplin and Martin Consultants Ltd. 1680–13450 – 102 Avenue Surrey, BC V3T 0J5
Owners :	Chris Meyer 25125 – 72 Avenue Langley, BC V4W 1J1
Legal Description:	Parcel "A" (Reference Plan 9530) Of Lot 2 Plan 8102 And Of The Southwest Quarter Section 23 Township 11 Except: Parcel "One" (Explanatory Plan 15187), New Westminster District
Location:	25125 – 72 Avenue
Area:	51.1 ha (126.4 ac)
Existing Zoning:	Rural Zone RU-3
Minimum Lot Sizes:	RU-3 – 8.0 ha (19.8 ac)
Rural Plan:	Agricultural / Countryside
Agricultural Land Reserve:	In the ALR

BACKGROUND/HISTORY:

The ALC Act allows Council the opportunity to provide recommendations on subdivision applications made to the ALC. Information available to Council to consider making recommendations are policies contained in the Rural Plan, Official Community Plan and Metro Vancouver Regional Growth Strategy.

The application consists of a 51.1 ha (126.4 ac) parcel located at 25125 – 72 Avenue. The lands are designated Agricultural / Countryside in the Rural Plan (adopted in 1993). The minimum lot size permitted for subdivision is 8.0 ha (19.8 ac) in the RU-3 Zone which is consistent with the site's Agricultural / Countryside designation in the Rural Plan.

A previous application for subdivision was made in 1993 and refused by the ALC for twenty five (25) 2.0 ha (4.94 ac) lots. An alternative proposal was approved by the ALC for two (2) lots approximately 30 ha (74 ac) and 20 ha (50 ac) in size. The proponent made application for the latter proposal on March 22, 2016 and elected to place that application on hold while pursuing the current application.

The current application consists of a subdivision layout proposing six (6) lots, five (5) of which are on the north side of the ravine accommodating West Creek (a red coded watercourse) ranging in size from 2.0 ha (4.94 ac) to 9.6 ha (23.7 ac). The area south of the ravine is proposed to remain as a 26 ha (64.3 ac) lot. The proposal does not comply with the minimum lot size provisions of the Township of Langley Zoning Bylaw No. 2500. Should the ALC view the application favourably, a

Rural Plan amendment and rezoning application would be required to accommodate the proposal. The applicant has provided rationale (Attachment A) and an Agrologist Report (Attachment B) in support of the proposal.

DISCUSSION/ANALYSIS:

An application has been submitted pursuant to Section 21(2) of the ALC Act to subdivide a 51.1 ha (124.6 ac) property into a six (6) rural lots. Proposed Lot 1 (26.0 ha / 64.3 ac) will consist of the lands south of a ravine accommodating West Creek, with frontage along 72 Avenue and 248 Street (unconstructed). Proposed Lots 2-6 are comprised of the northeastern half of the subject property, each ranging in size from 2.0 ha (4.9 ac) to 9.6 ha (23.7 ac) and accessed via 76 Avenue. Should the ALC approve the application, the applicant will be required to dedicate and construct to a half road standard, the south half of 76 Avenue along the northern portion of the property. In addition, the applicant will be required to dedicate the east half of 248 Street along the western property line. The applicant proposes a public access trail along the north and west property lines. Protection of the watercourse (West Creek) consistent with senior government streamside protection requirements will be required at the time of subdivision (should the application be approved by the ALC).

The proposed subdivision layout does not meet the minimum lot size provisions of the Township of Langley's Zoning Bylaw and Rural Plan designation, thus necessitating a future rezoning/plan amendment application should the ALC approve the application for subdivision. Staff note that the subject property abuts lands designated Small Farms / Country Estates to the east that were not supported by the ALC in their review of the Rural Plan. The applicant has provided information (see Attachments) indicating that smaller farm parcels are sought to support intensive agriculture by new entrants to farming that would otherwise be cost prohibitive.

Description of Property:

The subject property is 51.1 ha (126.4 ac) in size and contains two (2) single family dwellings and accessory buildings in the southeast portion of the site. The property is bisected northwest to southeast by the natural boundary of West Creek, a red coded watercourse.

Adjacent Uses and Property Sizes:

North:	Ponder Park (located in the ALR) accessed from 76 Avenue, 32.4 ha (80 ac) in size, zoned Civic Institutional Zone P-1, and designated Agricultural / Countryside in the Rural Plan;
East:	Rural residential properties (Spence Subdivision) located in the ALR approximately 2.0 ha (4.94 ac) in size, all zoned Rural Zone RU-1, and designated Small Farms / Country Estates in the Rural Plan;
South:	72 Avenue, beyond which is a rural property 38.5 ha (95 ac) in size (located in the ALR) zoned Rural Zone RU-3 and designated Agricultural / Countryside in the Rural Plan;
West:	248 Street road dedication (unconstructed), beyond which is a rural property (22 ac) in size (located in the ALR), zoned Rural Zone RU-3 and designated Agricultural / Countryside in the Rural Plan.

Official Community Plan:

The subject lands are designated Agriculture by the Official Community Plan (OCP), which contains the following policies:

> *2.2.1. Areas designated as Agriculture shall be used primarily for agricultural uses and supporting services to protect the agricultural land base and support food production. Food production and other forms of agriculture are encouraged within this area.*
>
> *2.2.3. Limit the subdivision of agricultural land, as set out in the Rural Plan, subject to the approval of the Agricultural Land Commission for land within the ALR. Commercial, industrial, and institutional uses are not encouraged in this designation, except in conformity with the Rural Plan and subject to the approval of the Agricultural Land Commission.*

The policy guidance in the OCP aims to preserve Agriculture designated areas for food production, conservation and other supportive uses.

Rural Plan:

The property is designated "Agricultural/Countryside" in the Township's Rural Plan. Section 5.5.1 of the Rural Plan states:

> *"In areas designated Agriculture/Countryside, agricultural uses and considerations shall have priority over non-agricultural uses, where such uses would have an adverse impact on agriculture. Non-agricultural uses that do not comply with provisions of this plan are not permitted."*

Section 5.3.2 of the Rural Plan states:

> *"Where applications under the Agricultural Land Commission Act do not conform to the policies of this plan, Township Council may refuse to authorize them. In these cases, land owners may not apply to the Commission."*

Regional Growth Strategy:

In addition to Township policies and plans, when considering an application for subdivision of land, consideration is provided to the provisions of applicable regional plans, such as Metro Vancouver's Regional Growth Strategy (RGS). The OCP references a Regional Context Statement that describes how the OCP is consistent with the policy objectives of the RGS. The RGS designates the subject property as Agriculture, a designation primarily intended for agricultural uses, facilities and services, and states:

Section 2.3.6(b) of the RGS states that the OCP policies shall support agricultural viability including:

> *ii) Discourage subdivision of agricultural land leading to farm fragmentation*

iv) Manage the agricultural-urban interface to protect the integrity and viability of agricultural operations (e.g. buffers between agricultural and urban areas or edge planning)

vi) Encourage the use of agricultural land, with an emphasis on food production

Agricultural Advisory and Economic Enhancement Committee:

In accordance with past practice, the application will be forwarded to the Agricultural Advisory and Economic Enhancement Committee (AAEEC) for information purposes.

Community Connections Trail:

The Community Connections Municipal Trail Network Plan endorsed by Council on September 26, 1994 anticipates community trails along West Creek. In consultation with the Parks Administration, Design and Development department, a trail connection along 76 Avenue and 248 Street is consistent with the Plan.

At the time of subdivision, the applicant will be required to protect all Streamside Protection and Enhancement Areas (SPEA) in accordance with the Provincial Riparian Areas Regulation (RAR). To accommodate the trail, a public access 4.5 m Statutory Right-of-Way (SRW) is proposed adjacent to both the constructed and the unconstructed road rights of way for 76 Avenue and 248 Street and is to be provided in compliance with relevant senior government streamside protection requirements. This SRW will allow for design and construction of a 3.0 m wide gravel surfaced public trail in accordance with the Township Subdivision and Development Servicing Bylaw 2011 No. 4861. Construction details of the trail will be determined at subdivision stage should the application be approved by the ALC.

Servicing:

As part of the subdivision application, the applicant will be required to dedicate and construct the south 10m of 76 Avenue along the property frontage with a 15m radius cul-de-sac bulb at the western terminus and dedicate the east 10m of 248 Street along the property frontage. Construction of 248 Street is not anticipated to be included within the scope of this application. Servicing requirements, in accordance with the Subdivision and Development Servicing Bylaw, are required to be addressed as part of any future development application.

Environmental Considerations:

The subject lands are traversed by a red coded watercourse. As the property is located in the ALR, the applicant would be responsible to meet senior government requirements for streamside protection.

POLICY CONSIDERATIONS:

The subject site is located within the ALR and designated Agriculture/Countryside in the Rural Plan. The application to subdivide the property into rural lots less than the designated minimum lot size is inconsistent with the provisions of the Zoning Bylaw, Rural Plan, Official Community Plan and the Metro Vancouver Regional Growth Strategy.

Section 30(4) of the Agricultural Land Reserve Act and Section 5.3.2 of the Rural Plan provide Council the option to not authorize the subdivision application to proceed to the ALC. Should approval be granted, details of the proposed subdivision will be addressed at the subdivision stage in accordance with the Township's Subdivision and Development Servicing Bylaw and any additional requirements imposed by the ALC.

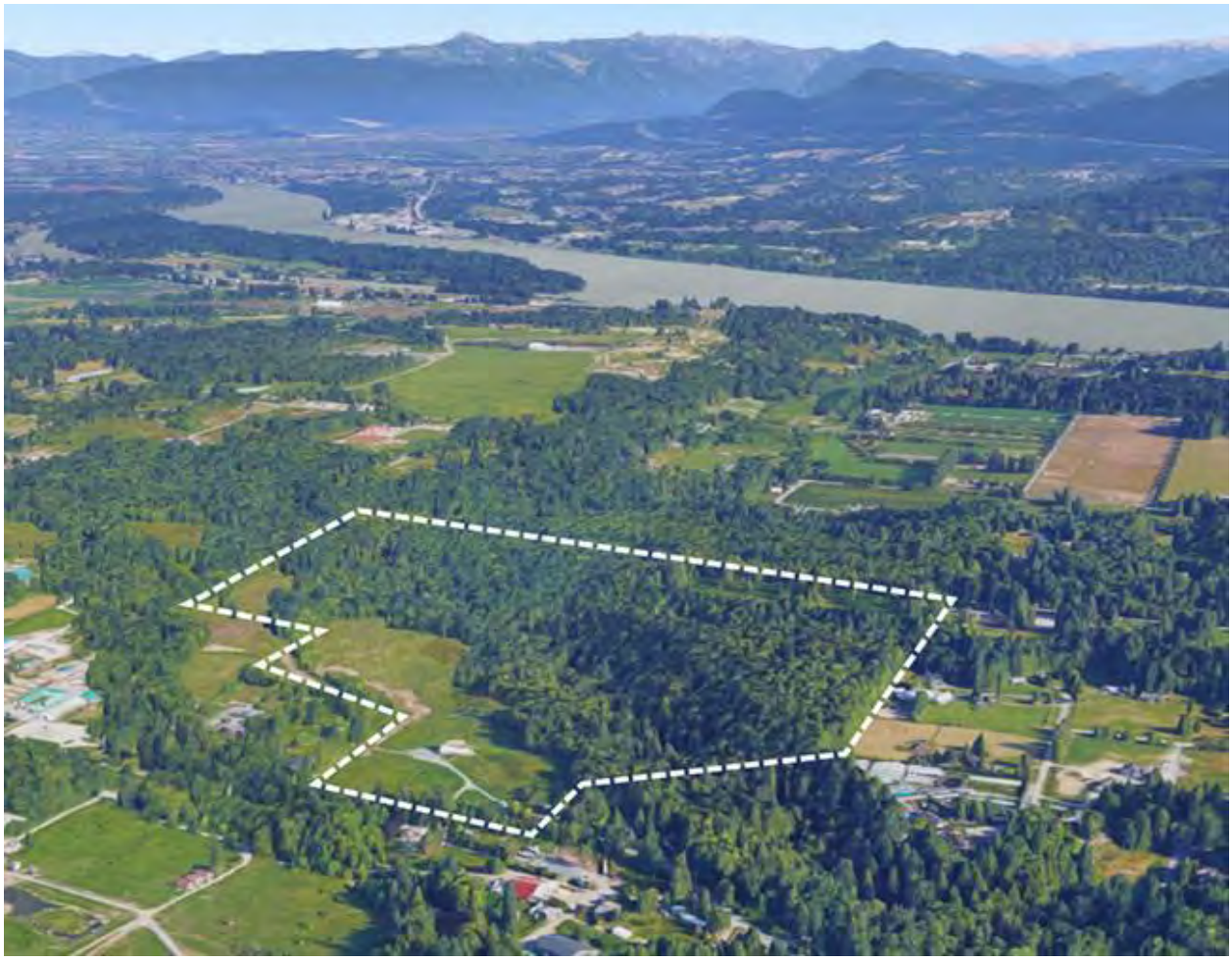
Respectfully submitted,

Daniel Graham
DEVELOPMENT PLANNER
for
COMMUNITY DEVELOPMENT DIVISION

ATTACHMENT A Applicant Rationale

ATTACHMENT B Agrologist Report

This report constitutes the "Local Government Report" as required under Section 12 or 29 of the Agricultural Land Reserve Use, Subdivision and Procedure Regulation.



ALR Subdivision Application Rationale
25125 72nd Avenue, Langley, BC

Project No. 16-520
February 2018
Aplin Martin

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1 EXECUTIVE SUMMARY

The subject site is a 51.1 hectare [126.4 acre] parcel located at 25125 72nd Avenue, Langley, BC. The land is located within the Agricultural Land Reserve (ALR) and is zoned RU-3 (Rural), which permits a wide range of agricultural uses. The Township of Langley designates the site as "Agricultural" in its Official Community Plan (OCP) and "Agricultural/Countryside" in its Rural Community Plan. Metro Vancouver similarly identifies the site as "Agriculture" in its Regional Growth Strategy (RGS).

Historically, the land has been partially utilized for agricultural purposes, such as hay production and livestock grazing. Presently, the subject site contains a 0.6 hectare [1.5 acre] blueberry farm and associated dwellings on the southern portion of the lot. The remainder of the site is a combination of vacant grasslands and dense forests. Two significant ravines cut across the property, meeting at a fork mid-site. These ravines divide the site into three distinct areas, which are identified in this report as "Southwest", "East" and "Northeast".

The steep topography of the ravines restricts the site's agricultural capability and poses accessibility challenges. Consequently, approximately 70% to 75% of the property has never been farmed and is unlikely to be brought into agricultural production under the current single parcel structure. Access to the "Northeast" portion is only viable via 76th Avenue to the north, which is adjacent to a rural residential community. The "East" portion is isolated between two ravines and abuts the rear portion of neighbouring properties. A potential solution to provide access to the "East" portion is to build a watercourse/ravine crossing from the "Northeast" portion of the site.

Dave Melnychuk, P.Ag has conducted an agrologist assessment of the property and found that the lack of recent agricultural activity has contributed to nutrient-deficient soils. Several years of agricultural management inputs, such as application of livestock manure, compost and commercial fertilizers, would be required to improve soil fertility. As a means of bringing additional portions of the subject site into agricultural production, the property owner is applying for an ALR subdivision application to subdivide the site into 6 agricultural parcels. The proposed lot lines would follow the site's topography and thus, limit the topographic constraints and accessibility issues currently faced.

The subdivision concept retains the "Southwest" portion intact within a single lot, and divides the remainder of the site into 5 traditional small-farm parcels, fronting 76th Avenue.

This ALR subdivision proposal considers the current site conditions and offers a solution that will not only improve the agricultural capability of the land, but will also open up additional land for agricultural production. It creates opportunities for new entrants into agricultural production and supports the local economy and commodity demands through intensive agricultural production on small-farm parcels.

2 SITE DETAILS

2.1 SITE PROFILE

Located at 25125 72nd Avenue in the Township of Langley, the subject property is a 51.1 hectare [126.4 acre] parcel within the ALR. The Township of Langley designates the site as "Agricultural" and "Agricultural/Countryside" in the OCP and Rural Community Plan respectively. The site is zoned RU-3 (Rural), which provides for a wide range of agricultural uses and limited residential uses.

A small-scale blueberry farm operation (0.6 hectares [1.5 acres]) and associated dwellings are located on the southern portion of the site adjacent to 72nd Avenue. The remainder of the site is a mixture of vacant grasslands, dense forests and ravines. These ravines feature slopes ranging from 30% to 70% and cut through the property to separate the site into three distinct portions: "Southwest", "East" and "Northeast".

Two watercourses transverse the property through the forested ravines: a Class "A" red-coded watercourse bisects the site from the southeast corner to the northwest corner of the site, and a Class "A (OD)" orange-coded watercourse runs east-west to meet the red-coded watercourse at a fork. The classifications of these watercourses indicate fish presence year-round (Class "A") or during over-wintering period when base flows are re-established (Class "A (OD)").

Surrounding land uses are:

- North: Ponder Park (municipal), a largely forested area in its natural state
- East: Established rural/small farm lots ranging from approximately 1.8 hectares (4.6 acres) to 2.5 hectares (6.2 acres) in size
- South: Rural/small farm lots ranging in size from 2.1 hectares (5.2 acres) to 4.1 hectares (10.1 acres). South of 72nd Avenue is a single large farm parcel of approximately 38.3 hectares (94.7 acres) in size.
- West: Mix of rural and small-farm land-use on lots ranging from around 3 hectares (7.4 acres) to 9 hectares (22.2 acres) in size

Many of these properties are negatively impacted by the same topographical challenges experienced on the subject site.

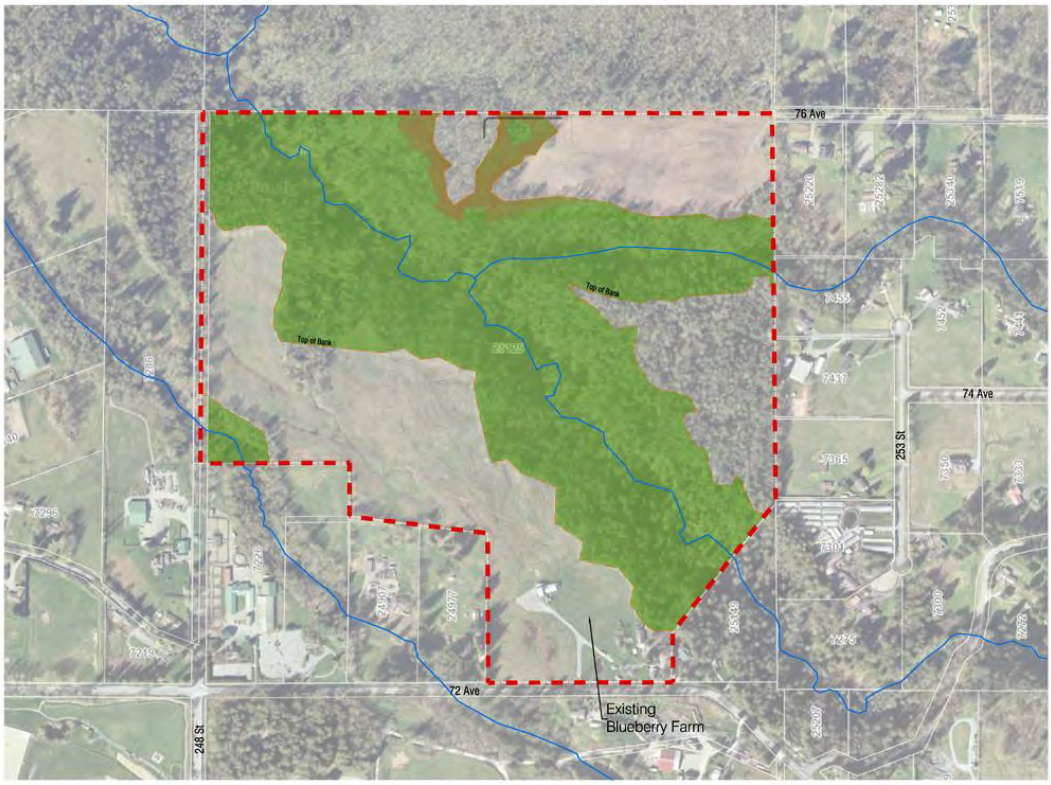

Figure 1A: Subject Site

Figure 1B: Subject Site (Google 3D View)

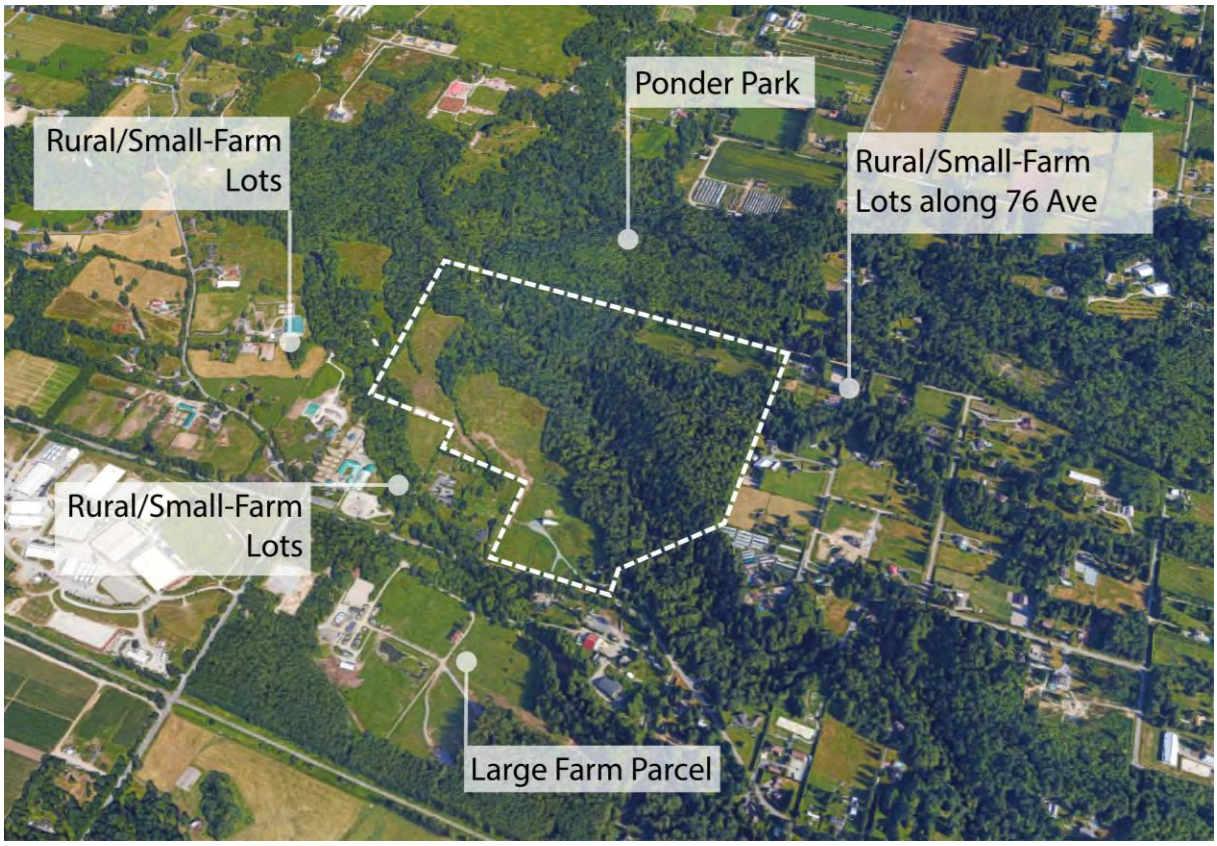

Figure 1C: Surrounding land use

2.2 LEGAL DESCRIPTION AND NOTATION

The following is the Legal Description of the subject property. A title document is also provided in Appendix I: Land Title Document.

	PARCEL 25125 72nd Avenue Langley, BC
PID	013-283-090
AREA	51.1 Ha / 126.4 Ac
LEGAL DESCRIPTION	PARCEL "A" (REFERENCE PLAN 9530) OF LOT 2 PLAN 8102 AND OF THE SOUTH WEST QUARTER SECTION 23 TOWNSHIP 11 EXCEPT: PARCEL "ONE" (EXPLANATORY PLAN 15187), NEW WESTMINSTER DISTRICT
LEGAL NOTATION	THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND COMMISSION ACT, SEE AGRICULTURAL LAND RESERVE PLAN NO. 28 DEPOSITED JULY 30, 1974

Table 1: Legal Description and Notation

2.3 REGULATORY DESIGNATIONS

PROVINCIAL

Agricultural Land Reserve (ALR): The subject site is within the ALR. Thus, Agricultural Land Commission (ALC) approval is required for the Township of Langley to grant permission for any modification to property, including but not limited to subdivision, road construction and ALR exclusion. The subject site is to remain within the ALR.

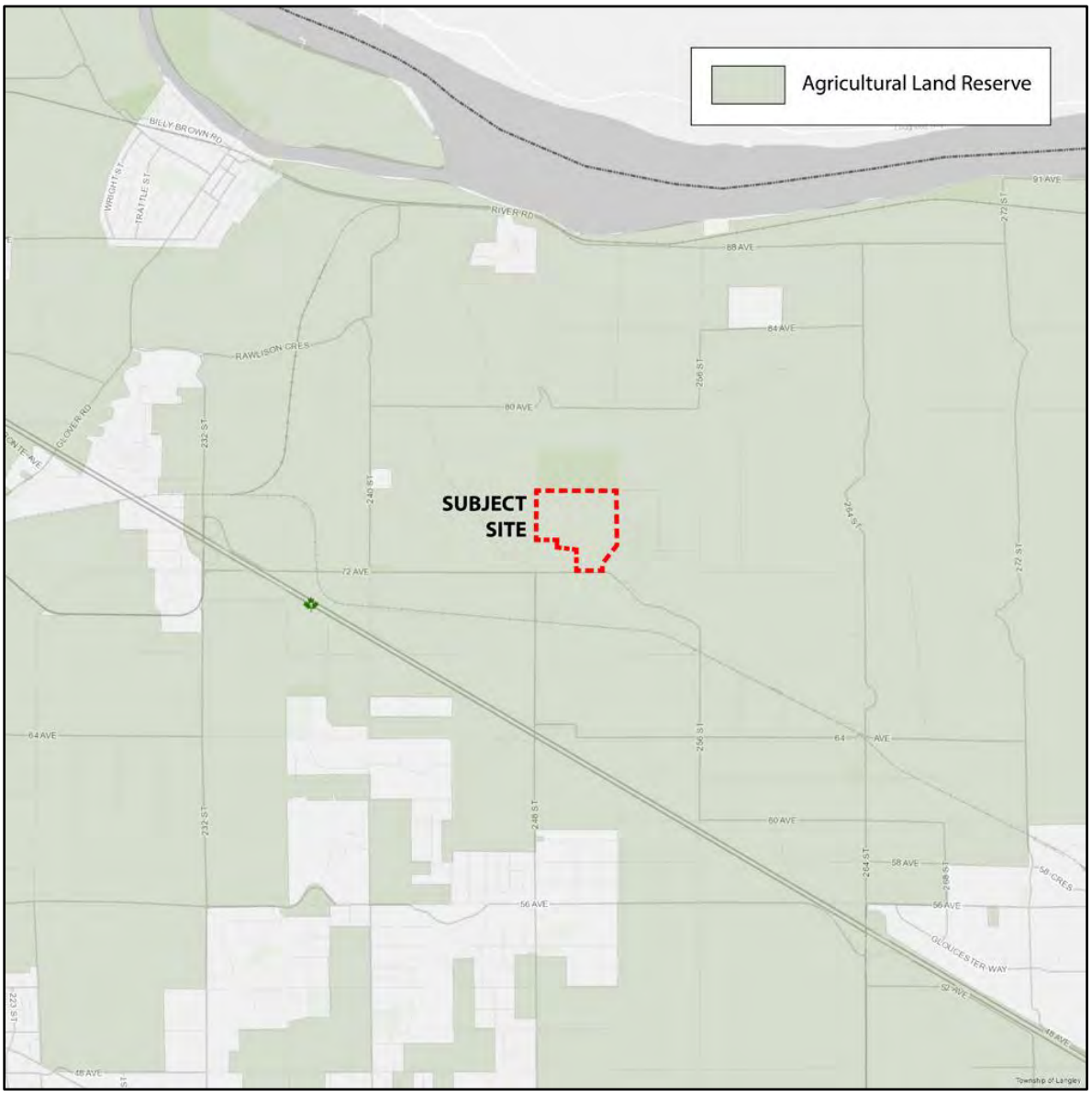

Figure 2: Agricultural Land Reserve (ALR)

REGIONAL

Metro Vancouver Regional District: Metro Vancouver Regional Growth Strategy (RGS) has designated the site as "Agricultural". Except for Ponder Park to the north, all adjacent lands carry the same "Agricultural" designation. Ponder Park is a municipal park and is designated "Conservation and Recreation". The subject site is to remain "Agricultural".

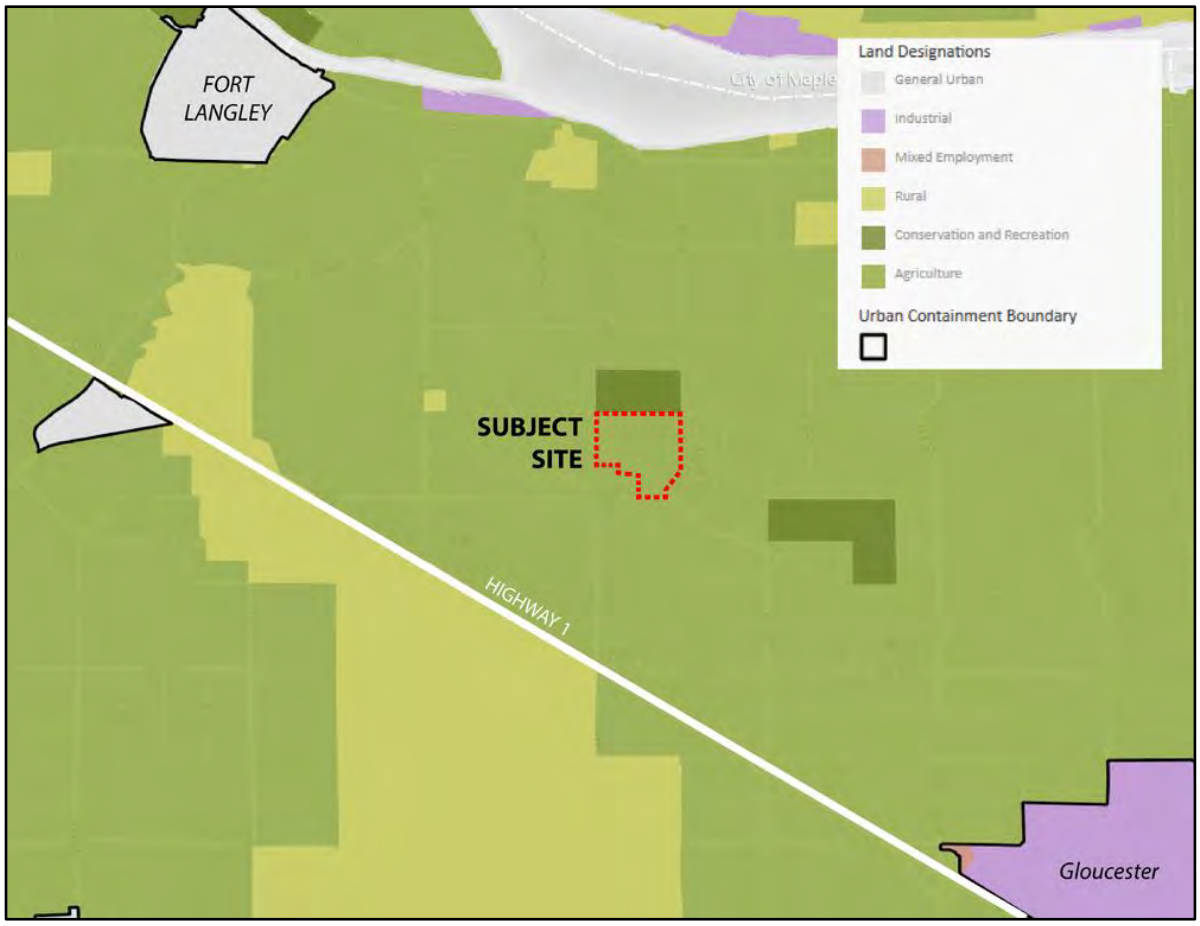

Figure 3: Metro Vancouver Regional Growth Strategy (RGS)

MUNICIPAL

Official Community Plan (OCP) – adopted in 2016: The property is identified as "Agriculture" in the Township of Langley OCP. Areas designated as "Agriculture" are intended for agricultural uses and auxiliary services to protect the agricultural land base and support food production.

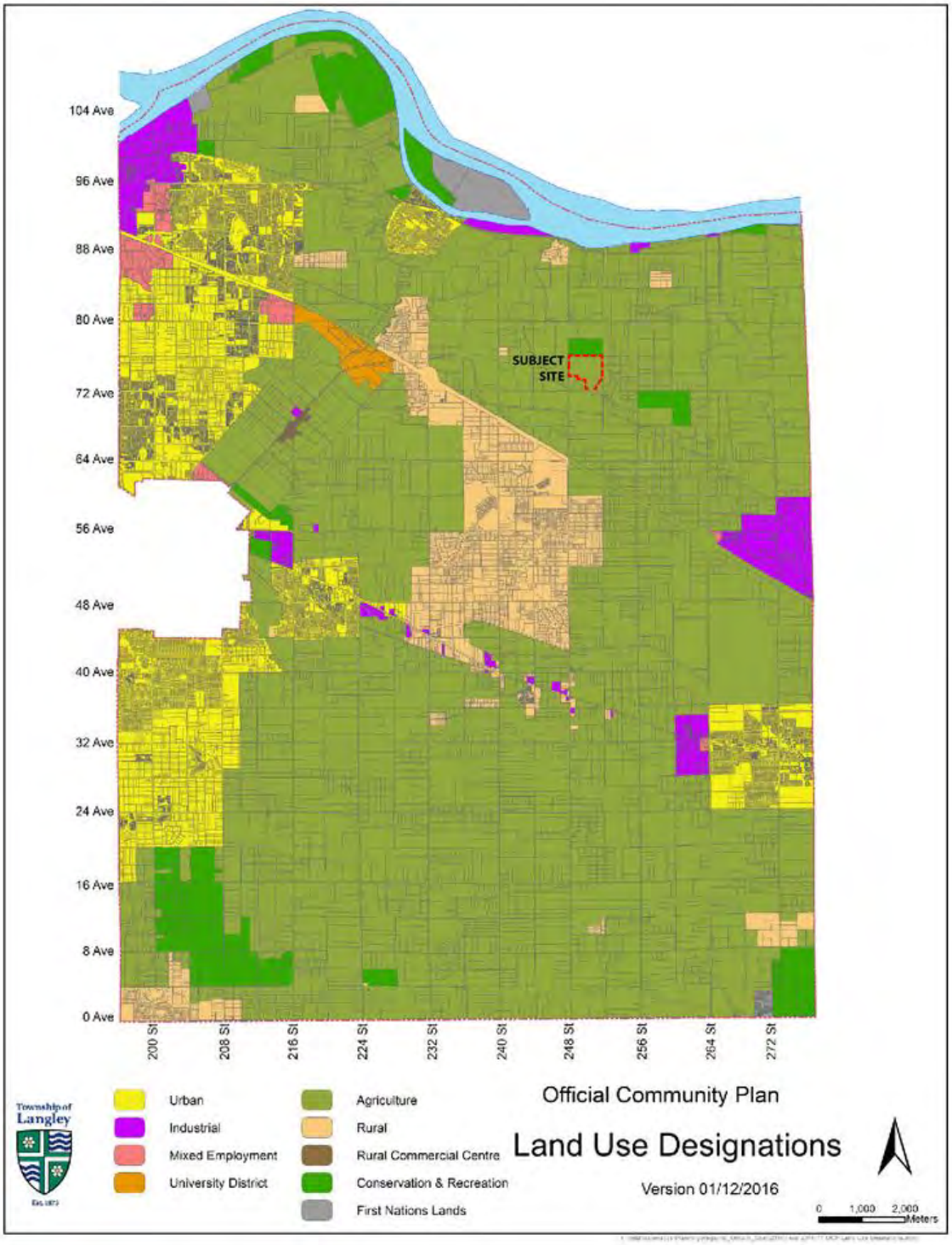

Figure 4: Township of Langley Official Community Plan (OCP)

Rural Community Plan – adopted in 1993: The site is designated "Agricultural/Countryside" in the Rural Community Plan, but is immediately adjacent to "Small Farms/Country Estates". The site is to remain as "Agricultural/Countryside".

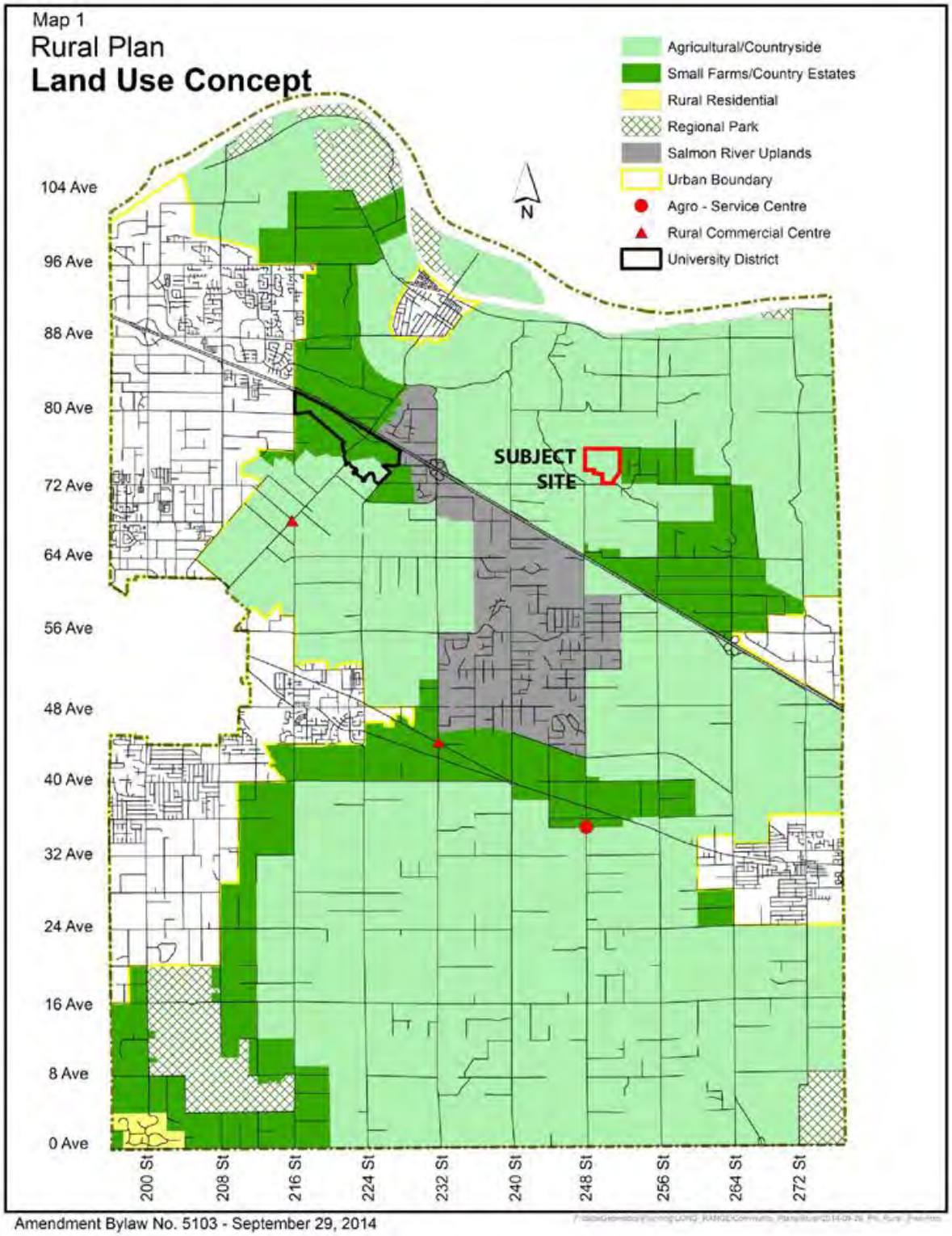

Figure 5: Township of Langley Rural Community Plan

Zoning: The subject site is zoned RU-3 (Rural), which allows for the following uses:

- Accessory buildings and uses
- Accessory home occupations
- Accessory parking of commercial vehicles
- Agricultural uses
- Commercial greenhouses
- Equestrian centres and riding stables
- Feedlots
- Intensive swine operations
- Mushroom farms
- Residential uses
- Veterinary clinics

(See Appendix II: Zoning Bylaw – RU-3 Zone)

The zoning bylaw prescribes a minimum lot size of 8.0 hectares [19.7 acres] in the RU-3 zone, which is equivalent to an overall density of 0.13 uph or 0.05 upa. Given that the subject has an area of 51.1 hectares [126.4 acres], the existing RU-3 zone will allow for a 6-lot subdivision of the site. The Township of Langley will consider lot sizes less than 8.0 hectares [19.7 acres] on condition that 1) the overall site density is consistent with the zone and 2) the applicant can demonstrate how the layout is beneficial for agriculture. As the proposed subdivision satisfies both of these requirements, the site will not be rezoned as part of the subject application.

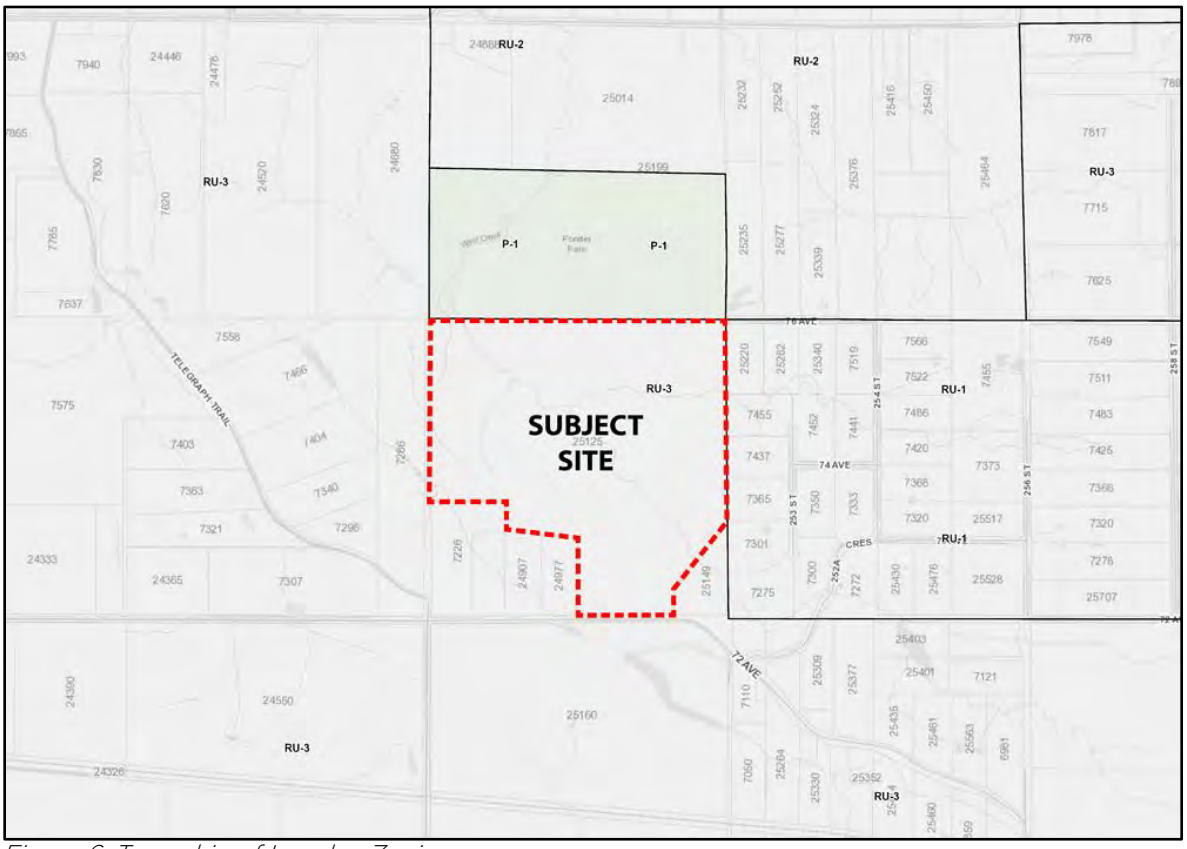

Figure 6: Township of Langley Zoning

2.4 SITE HISTORY

OWNERSHIP

The subject site has been the property of Chris Meyer since June 1, 2016. His family is the operator of the 0.6 hectare [1.5 acre] blueberry farm on the southern portion of the lot.

AGRICULTURAL PRODUCTION

In the past, the southern portions of the property have been used for a modest level of hay production and livestock grazing. At present, the only agricultural production occurring onsite is a small blueberry farm located along 72nd Avenue. The majority of the property is not suitable for intensive agricultural field crop production due to the site's rolling topography and steep, hazardous ravines, which cover 52% of the site. The proposed subdivision will help expand agricultural activity to the flat portions of the site that are otherwise inaccessible.

PREVIOUS ALC APPLICATIONS

In 1993, an ALR subdivision application was submitted to create twenty-five (25) 2.0 hectare [4.9 acre] lots on the subject site (ALC File #28493). This proposal was refused by the ALC, because the Commission was not supportive of subdividing the "Southwest" area into small-farm parcels. The Commission, however, did permit a 2-lot subdivision as delineated by the main ravine, which cuts through the property diagonally. This ALC decision was made without much discussion about the impacts of ravines and watercourses on the site's agricultural capability.

In 1996, an ALC application was submitted, requesting to upgrade an existing cottage on the property so that it could be used to house a caretaker. This application was approved in a letter dated January 28, 1997 (See Appendix III).

2.5 SITE CONDITIONS

TERRAIN

The site terrain is varied and greatly influenced by the two large ravines cutting across the property. The largest of the ravines runs diagonal from southeast to northwest. This ravine contains a Class "A" red-coded watercourse. The other ravine contains a Class "A (OD)" orange-coded watercourse that runs east-west to meet the red-coded watercourse at a fork. The ravines cover approximately 27 hectares [66 acres] or 52% of the site, are 150 to 250 metres wide and have slopes ranging between 30% to 70%. As a result of the site's topography, the site is naturally segregated into 3 separate areas with limited accessibility (See Figure 7 – Site Areas).

Southwest: The largest of these areas is located southwest of the red-coded watercourse, and is made up of a mixture of relatively flat and rolling topography. Within this area is the existing blueberry farm and associated buildings.

East: Located east of the red-coded watercourse and south of the orange-coded watercourse is a forested area made up of relatively flat topography. This area, although topographically isolated from other farmable portions of the site, has been identified as having agricultural capability due to favourable soils. However, farming of this area would require clearing of the existing forest.

Northeast: The remaining portion of the site is located to the northeast of the ravines adjacent to 76th Avenue. This area consists of relatively flat and rolling topography, with the exception of an area of steep slopes. In general, this "Northeast" area is largely cleared with some sporadic tree cover.

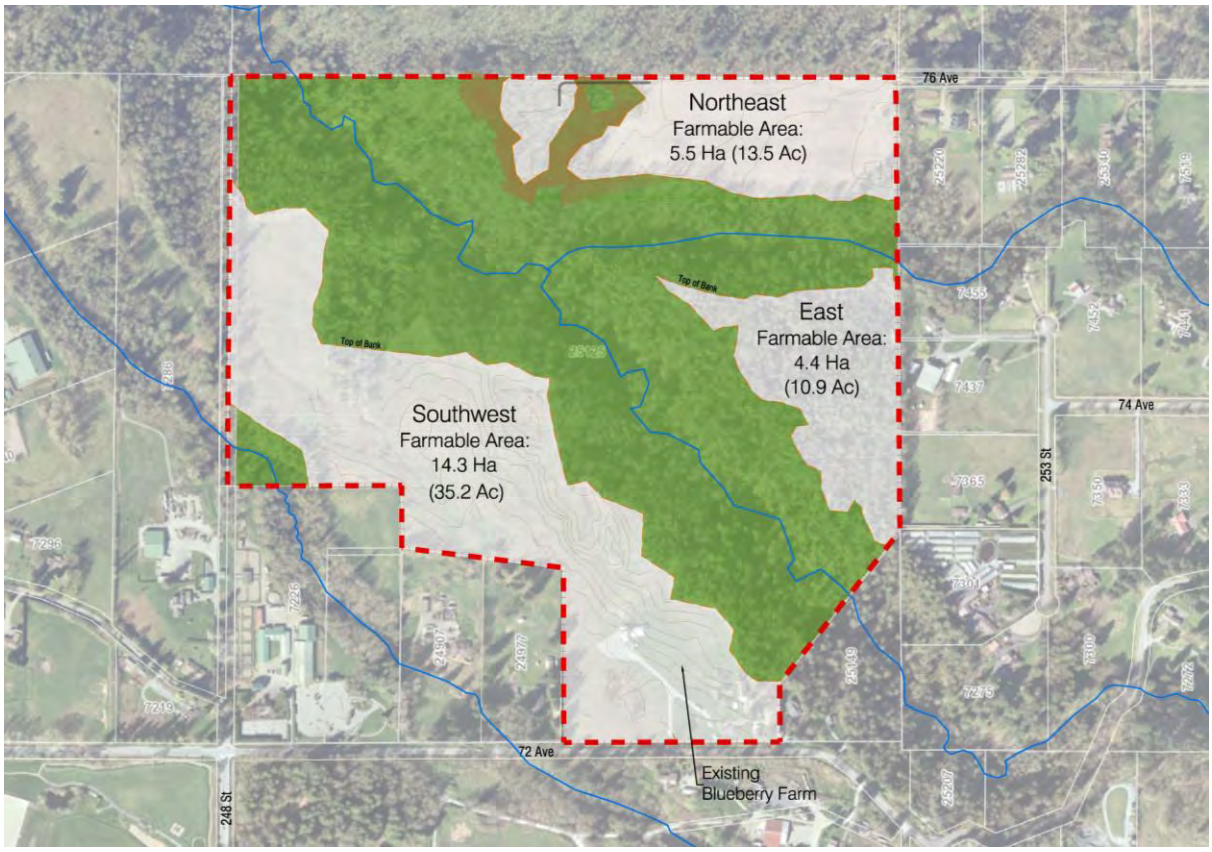

Figure 7: Site Areas

SOIL CLASSIFICATION

Existing soil maps show that the dominant soils in the "Southwest" area is the Whatcom-Nicholson-Scat complex. The dominant soil type on the remainder of the property ("Northeast" and "East" areas) is the Whatcom-Scat soil complex.

These soil types were developed from moderately fine-textured glaciomarine deposits, but differ in drainage properties. Whatcom and Nicholson soils are moderately well-drained, while Scat soil has poor drainage and suffers from a perched water table and compacted subsurface layer. Root zone and internal water movement are restricted where the compacted impervious layer is less than 50 cm from the surface. With appropriate land improvements in drainage and irrigation, along with good farm management practices, these soils will be capable of producing a wide range of crops.

Further to this mapping, Dave Melnychuk, P.Ag conducted a field survey of onsite soils in December 2016 (See Appendix IV). This survey found that soils throughout the site are deficient in most plant nutrients. The main reason for this low fertility is that most areas of the site have either not been actively farmed for several years, or have never been used for agricultural purposes. Despite low nutrient levels, this condition can be improved with the addition of plant nutrients by application of livestock manure, compost, and commercial fertilizers.

2.6 AGRICULTURAL CAPABILITY

CAPABILITY CLASSIFICATION

The agricultural capability of lands on the site outside the ravine areas is a mix of Class 2 and Class 3 (after improvements). In the "Southwest" portion, the land is rated as 5:3TA-3:3DT-2:5W and can be improved to 5:3TD-3:3DT-2:3DW rating, with the implementation of drainage and irrigation improvements. In the "Northeast" and "East" portions, the land is rated 5:2TA-3:3TA-2:5W and can be improved to 5:2TD-3:3TD-2:3DW rating, with the implementation of drainage and irrigation improvements.

The lands within the ravines are rated a mix of Class 6 and Class 7. They have no agricultural potential due to steepness of the ravine banks.

AGRICULTURAL IMPROVEMENTS AND MANAGEMENT INPUTS

Because of the inherent low fertility, compacted subsurface layer and poor soil drainage, Dave Melnychuk, P.Ag recommends implementing soil amendments and farm management practices in the first 2 to 3 years of farming to address these weaknesses. With completion of the primary land improvements and installation of subsurface drainage and irrigation systems, emphasis should be directed at improving soil structure, maintaining internal drainage capability and increasing organic matter and soil fertility levels. Production of perennial forage grasses and cereals in the first 2 to 3 years will improve the soil condition, tilth and fertility, enabling the land to support a wide range of crops such as vegetables, berries, cereals, nursery crops, hops and herbs.

Plant Nutrients: Having appropriate levels of phosphorus during the early production years is particularly important, as this essential plant nutrient is critical in root development, particularly lateral and fibrous rootlets. Plant nutrient levels should be monitored by means of spring soil testing and corrected through appropriate application rates of compost, livestock manure and fertilizer.

Drainage: Drainage systems remove excess surface water and lower the water table to improve crop production. Drainage systems should be designed to lower the water table to approximately 0.3 to 0.5 metres (1.0 to 1.6 feet) below the soil surface, within 24 hours after a rainfall event.

Irrigation: Irrigation is an important factor in achieving optimum crop production, particularly between late June to mid-September. A lack of supplemental water by irrigation during this time of the year may result in reduced crop yields and quality. However, over-irrigation will discourage deep rooting by grass plants and may also initiate soil erosion on sloped areas. The irrigation system should be managed to match plant requirements and soil conditions.

3 PROPOSAL

The subject site is naturally severed into three separate portions by deep ravines: "Southwest", "East", and "Northeast". These ravines cover approximately 27 hectares [66 acres], resulting in 52% of the entire land base unsuitable for agricultural production. Due to limited site accessibility, agricultural activity has been restricted to the "Southwest" area of the site. Approximately 70% to 75% of the property has never been farmed and are unlikely to be brought into agricultural production under the current single parcel structure. Access to the "Northeast" is only viable via 76th Avenue to the north, which is adjacent to a rural

residential community. The "East" is isolated between two ravines and abuts the rear portion of neighbouring properties. The agrologist report suggests selling the "East" portion to the adjacent property owner to the east. An alternative solution is to build a watercourse/ravine crossing from the "Northeast" portion of the site.

Given access limitations, the applicant is proposing to subdivide the subject site into smaller farm parcels in order to bring the isolated and unused portions of the site into agricultural production. This proposal entails a 6-lot subdivision with parcels ranging in size from 2.0 hectares (4.9 acres) to 26 hectares (64.3 acres). The large contiguous farmable area in the "Southwest" would remain intact with the existing farm fronting 72nd Avenue. The remaining "East" and "Northeast" lands would be divided up amongst the remaining 5 lots, and made accessible by an extension of 76th Avenue along the north boundary of the site.

To achieve compatibility with adjacent land uses, these 5 smaller farm parcels would continue the existing lot pattern established along 76th Avenue to the east. Preliminary consultation with property owners to the east along 76th Avenue has revealed their preference for a continuation of the established small-farm lot pattern along 76th Avenue. The neighbouring property owners are not in favor of a single large farm parcel on 76th Avenue.

The subdivision concept retains the "Southwest" portion intact within a single lot, and divides the remainder of the site into 5 traditional small-farm parcels, fronting 76th Avenue.

3.1 SUBDIVISION CONCEPT: TRADITIONAL SMALL FARMS

The farmable portion in the "East" between the ravines has been divided between Lots 2 and 3. Since this portion is topographically isolated by a ravine, a shared-access driveway is proposed along the property line between Lots 2 and 3 to limit the watercourse crossing to a single point. Under this option, Lots 2 and 3 would be the largest of the 5 lots along 76th Avenue at 5.8 hectares (14.3 acres) and 9.6 hectares (23.7 acres) respectively. The remaining 3 lots further west along 76th Avenue would not have access to the farmable portion in the "East" but would contain farmable portions on their respective lands north of the ravine. Subdivision Concept (Traditional Small Farms) is provided in Figure 8 below and Appendix V.

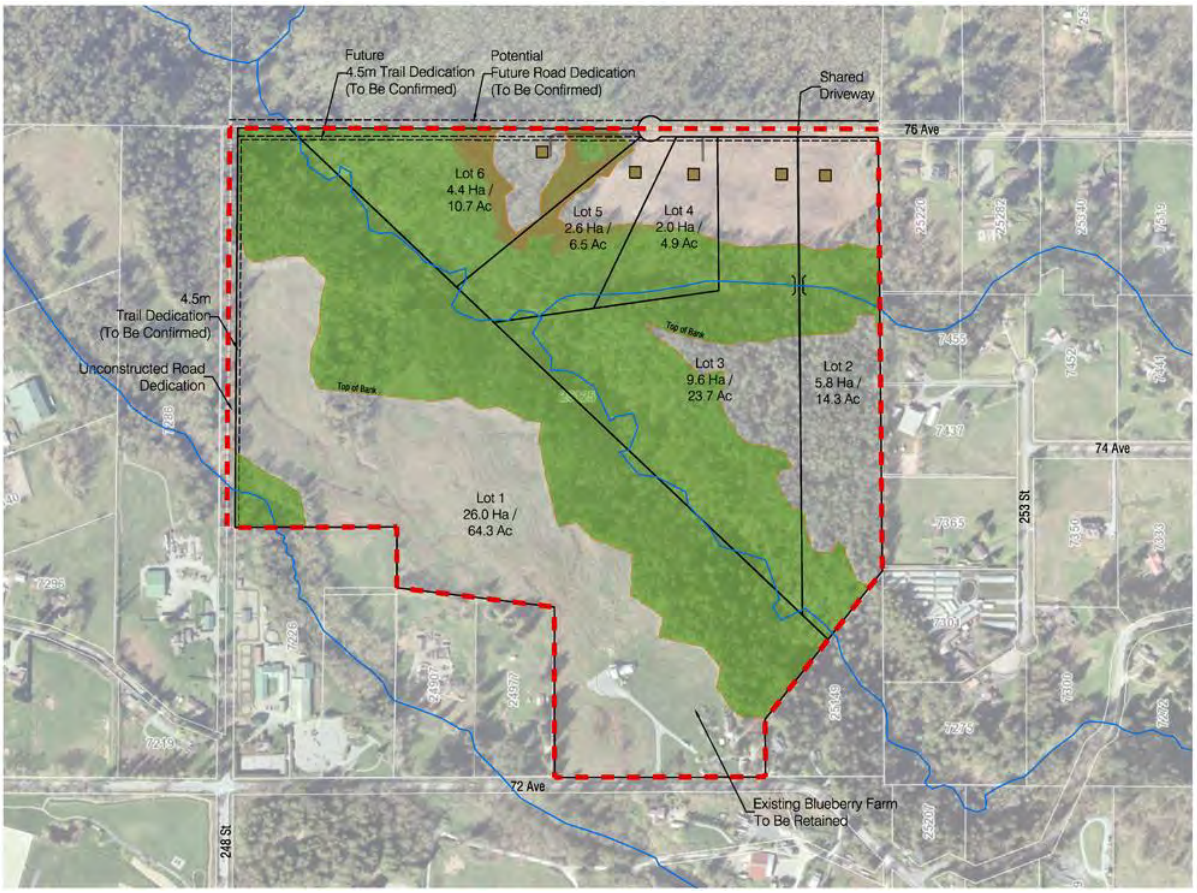

Figure 8: Subdivision Concept (Traditional Small Farms)

4 ALR SUBDIVISION CONSIDERATIONS

4.1 TOPOGRAPHIC CONSTRAINTS

A primary constraint limiting the agricultural potential of the subject site is its topography. As outlined in previous sections, two large ravines cut across the site, breaking it into three distinct sections, while covering approximately 27 hectares [66 acres] or 52% of the gross site area. These ravines not only limit the land available for agricultural production due to steep slopes, but also segregate farmable portions of the site, making them inaccessible from the "Southwest" portion of the site. Of the remaining lands not covered by ravine:

- Southwest: This portion is made up of a relatively flat terrain with some rolling topography. Largely cleared of trees, this portion contains an existing blueberry farm and associated buildings. This portion of the site is the most suitable for agricultural production (assuming land improvements are made), and will be retained as a single lot contiguous with the existing blueberry farm fronting 72nd Avenue.

- East: This isolated portion between the ravines is made up of relatively flat, forested lands. This portion is suitable for agriculture, subject to forest clearing and overcoming accessibility issues. This land can only be accessed by a watercourse/ravine crossing from the "Northeast" section of the site, and would need to be associated with "Northeast" lands in order to have legal frontage onto 76th Avenue.

- Northeast: The majority of the "Northeast" portion of the site is made up of a relatively flat and rolling topography, and suitable for agriculture production. The one exception is an area of steep slopes further to the west. The "Northeast" portion is largely cleared of trees with some sporadic tree cover.

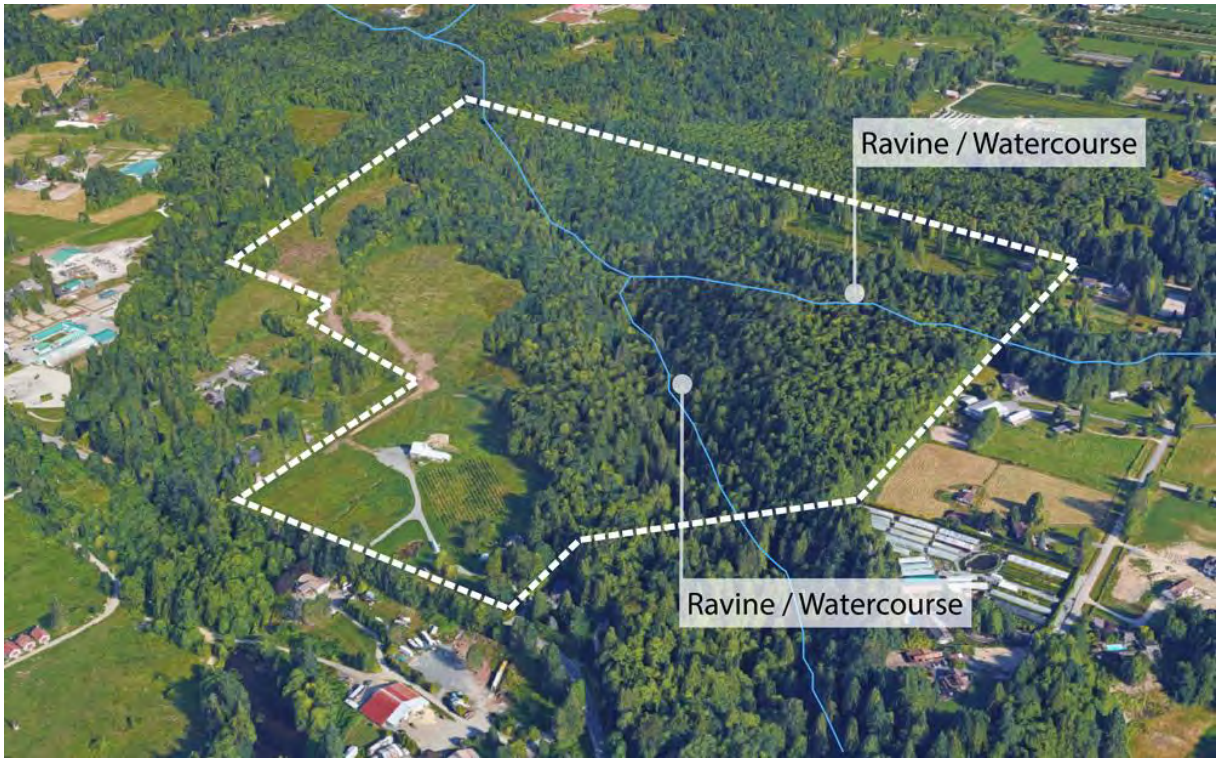

Figure 10: Site Topography

4.2 ACCESSIBILITY

The site's topography significantly impacts accessibility between farmable areas of the site. While the large "Southwest" portion can be accessed from 72nd Avenue, the farmable area to the "Northeast" is only accessible from 76th Avenue, and the isolated "East" portion between the ravines is only accessible by means of a watercourse crossing from the "Northeast" area. This segregation is highly constraining to bringing all farmable areas of the site into agricultural production as a single farm parcel. In practice, the various farmable areas are naturally positioned to function as separate parcels.

For example, in order for the operator of the farm on the "Southwest" portion of the site to access the "Northeast" portion, he or she would be required to travel on public roads through the rural neighbourhood to the east along 72nd Avenue, 252A Crescent, 254th Street, and 76th Avenue for an approximate distance of 1.9 km **(See Figure 11 – Site Accessibility).** This would not only be inhibitive for the farm operator, but also potentially disruptive to the surrounding neighbourhood when farm vehicles are involved.

Figure 11: Site Accessibility

4.3 BRINGING LAND INTO AGRICULTURAL PRODUCTION

By subdividing the site into smaller parcels, the "Northeast" and "East" portions of the site can be brought into agricultural production. Given the topographic and accessibility constraints of the site, agricultural production on these lands is unlikely to occur under the site's existing single parcel structure. The table below provides a breakdown of the amount of land to be brought into agricultural production through the proposed subdivision.

	Current land in agricultural production (Approx.)	Proposed land in agricultural production (Approx.)
Southwest	4.2 hectares (10.5 acres)	14 hectares (35 acres)
East	0 hectares (0 acres)	4.4 hectares (10.9 acres)
Northeast	0 hectares (0 acres)	5.5 hectares (13.5 acres)
Total	4.4 hectares (10.8 acres)	24.2 hectares (59.6 acres)

Table 2: Land in agricultural production by site area

The agricultural capability of lands outside the ravine areas is improvable to a mix of Class 2 and Class 3, with the implementation of drainage and irrigation improvements. After 2 to 3 years of perennial forage grass and cereal production, the nutrient levels in the soil should be able to support a wide range of crops, such as vegetables, berries, nursery crops, hobs and herbs.

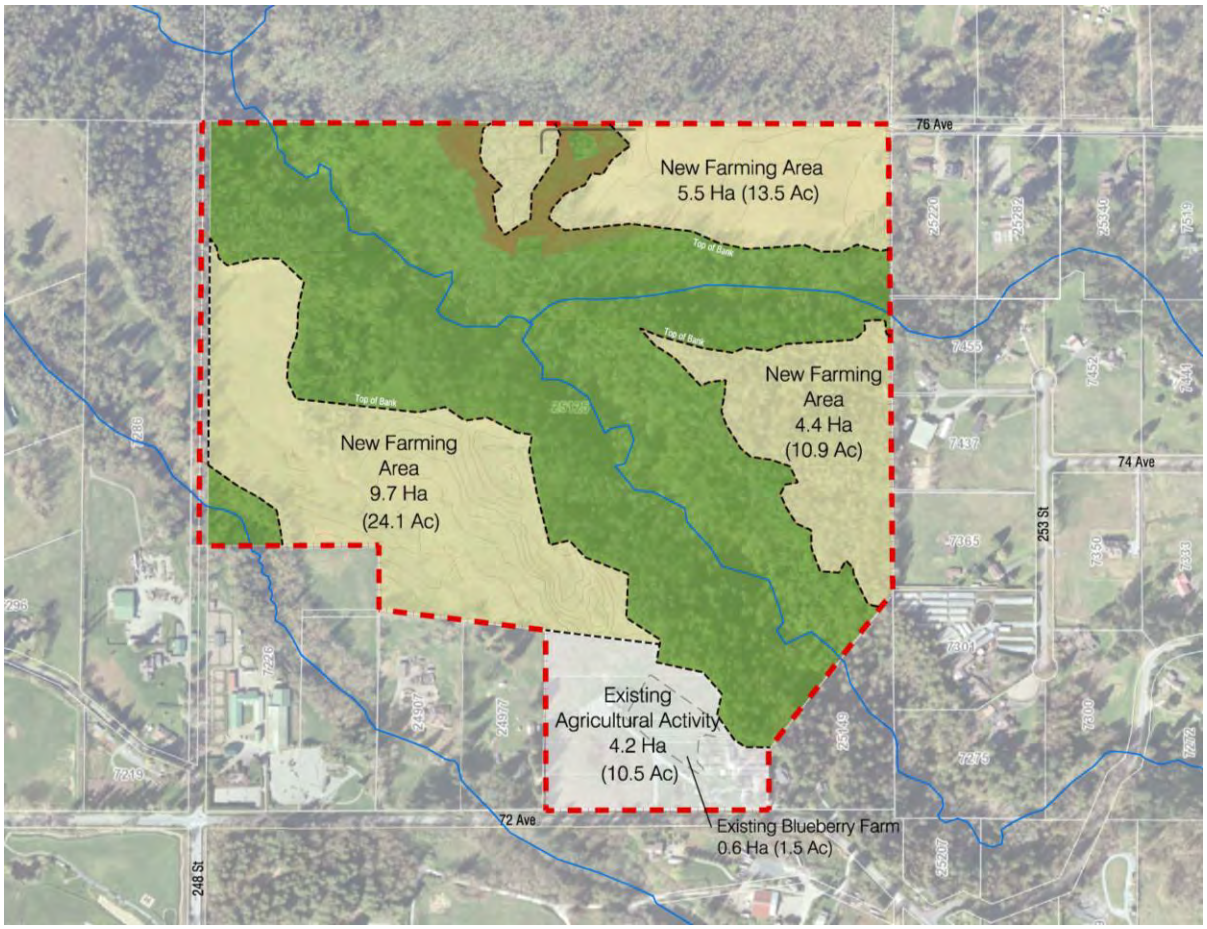

Figure 12: Existing and proposed farming areas

4.4 ADVANTAGES OF SMALLER FARM PARCELS

While there is a traditional view that larger parcels are more favorable to agricultural production than smaller parcels, recent trends in the Fraser Valley are beginning to challenge this assumption. As outlined in the Agrologist Study by Dave Melnychuk, P.Ag, one of the most dynamic and growing sectors of agriculture in the Fraser Valley is actually *small lot agriculture*. Driven by high cost of land and shifting demands within commodity markets, smaller farm parcels are becoming increasingly desirable.

Small farm operations within the Fraser Valley, which focus on intensive production in niche commodities for local markets, are outpacing the growth of large farms that are typically heavily focused on single field crops. Intensive non-soil based operations (e.g. poultry, greenhouse, and mushroom production) and specialty farming (e.g. organic vegetables, specialty nurseries, horse breeding, vineyards, and hop production) are often better served by smaller sized parcels. As a result, there is a strong demand for small parcels for farming purposes, especially from new entrants.

The applicant is aware that the ALC does not wish to encourage the creation of rural estates in the ALR. In recognition of this objective, innovative mechanisms can be put in place to discourage rural-estate-minded individuals from purchasing these small parcels for the sole purpose of building a large estate home in the country:

1. Placing a "farming only" covenant against the title.
2. Establishing maximum setbacks from the frontage road for all buildings and a maximum size of the home plate.
3. Implementing a lease to purchase agreement that includes stringent agricultural performance measures.

5 CONCLUSION

The subject property holds valuable, under-utilized agricultural land that is constrained by topographic and accessibility challenges. Through the proposed ALR subdivision, the applicant will be able address these challenges, open up new land for agriculture, and:

- Bring a total of 24.2 hectares (59.6 acres) of agricultural land into production.
- Create small-lot farming parcels that are in growing demand in the Fraser Valley.
- Improve soil capability through onsite improvements.
- Create an opportunity for new entrants into agricultural production.
- Support the local economy and commodity demands through intensive agricultural production on small-lot parcels.
- Enhance and protect existing riparian areas within the forested ravines on site.
- Conform to the Township of Langley Official Community Plan (OCP), Rural Community Plan, Zoning Plan, and Metro Vancouver Regional Growth Strategy (RGS).

The applicant intends to work with the ALC panel to review the Subdivision Concept to provide the greatest benefit to farming on this unique parcel of agricultural land. The intent of the application is to respond to shifting demand for smaller plot, intensive agricultural farming parcels in a market driven by the high cost of land.

APPENDIX IV

AGROLOGIST REPORT

Agrologist Report

25125 – 72 avenue
Langley

Prepared for:
Chris Meyer
25125 – 72 avenue
Langley

Prepared by:
Dave Melnychuk, P.Ag
19915-37A Avenue
Langley, BC, V3A 2S8

.....

Langley, BC
V3A 2S8
604 812-3276
August 31, 2017

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Executive Summary

Chris Meyer, the landowner, is requesting consideration by the Township of Langley and the Provincial Agriculture Land Commission for a subdivision proposal of property located at 25125 – 72 avenue, Langley. The objective of the proposal is to subdivide the existing 126 acre parcel into separate legal parcels, based upon topographical and location characteristics. The lots would be made available to prospective new entrants to farming for development of small lot agricultural enterprises.

An Agrologist report has been prepared to provide approval agencies with information relevant to this proposal. The report contains the following sections:

- Description of soils classification and agricultural capability, along with a summary of the field inspections and soil sampling procedures
- Description of the existing land uses and surface conditions.
- Potential boundary configurations based upon agronomic and topographical considerations
- Description of best land and soil management practices
- Proposed agricultural development and investments
- Benefits which would be generated upon approval of the sub division.

Agricultural benefits of the proposed subdivision would include the following:

- The proposed sub-division would contribute to the Provincial Agricultural Land Commission's mandate of supporting and encouraging agriculture growth and expansion
- The subdivision would provide opportunities for new entrants into agriculture, in response to a rapidly expanding small lot agriculture sector in the Lower mainland region of the province...
- The sub division would encourage increased capital investments in agricultural buildings, infrastructure and land improvements.
- The sub division would result in additional land, which presently sits idle in native tree cover, being brought into agricultural production.
- The sub division could demonstrate innovative methods for bringing small parcels into agricultural production without risking the establishment of rural estates

Agrologist Report – 25125-72 avenue, Langley

Introduction:

The Meyer property, located at 25125-72 avenue, Langley covers an area of approximately 126 acres. The land is located in the Agricultural Land Reserve and has been partially utilized for agricultural purpose as hay and pasture, along with a small planting of about 1.5 acres of blueberries. The majority of the land (approximately 56%) has never been farmed because of topographical features, native tree cover and isolation challenges. More detailed description of the topographical features will be provided later in this report.

The owner is requesting a subdivision of the 126 acres into separate legal parcels, based primarily on topographical and isolation factors. The owner is considering a couple of different sub-division options which would be consistent with the Township's zoning and minimum lots size in the RU3 zone.

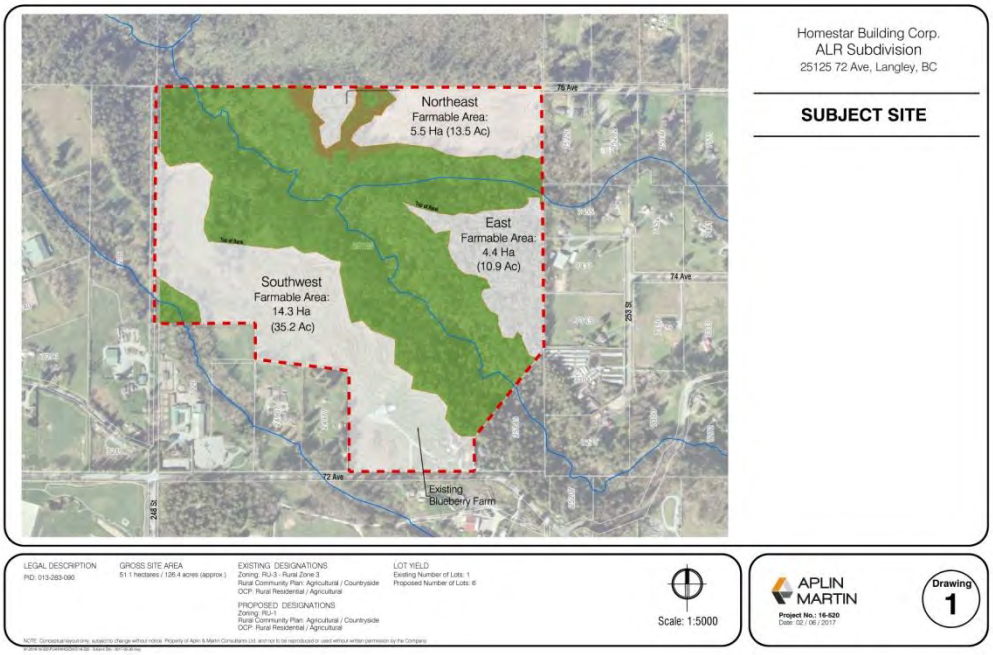
Zoning:

The property is located in the Agriculture Land Reserve, and zoned by the Township of Langley as RU-3. The Township zoning permits a wide range of agricultural uses. The minimum lot size under Langley's zoning bylaw is 20 acres.

Historic and Existing uses:

Historically a portion of this property was used for hay production, livestock grazing and a small planting (1.5 acres) of blueberries. The majority of the property is not suitable for agricultural production because of 2 steep and deep ravines which cut the property into 3 distinct portions, as is illustrated in the following map.

The non-farmable areas contain, in total, 66.4 acres or about 53% of the entire property.



Adjacent land uses:

The adjacent property to the north is a Township park (Ponder Park) which is basically a nature park with very little development. The properties to the east consist mostly of 5 acre parcels with some agriculture activity occurring. The properties to the south and west consist of a variety of horse based enterprises and small lot agricultural ventures. Many of the properties adjacent to the Meyer property are negatively impacted by the same topographical challenges (ravines and water courses) which exist on the Meyer property.

Soils classification

The field mapping of the soils in the Lower Fraser Valley was completed in the early 1970's and the results are compiled in the 1980 publication: *Soils of the Langley-Vancouver Map Area – RAB Bulletin 18.*

The dominant soil found on the west side of the ravine and West Creek is the **Whatcom-Nicholson-Scat (W-N-S)** soil complex.

These 3 soil types were developed from moderately fine textured glaciomarine deposits. The differences between these soils are the drainage characteristic. While the Whatcom and Nicholson soils are moderately well drained, the Scat soil has poor drainage and suffers from perched water table and a compacted subsurface layer. Root zone and internal water movement is restricted where the compacted impervious layer is less than 50 cm from the surface. With appropriate land improvements in drainage and irrigation along with good farm management practices these soils are capable of producing a wide range of field crops.

The dominant soil type found on the east side of the major ravine is the **Whatcom-Scat** soil complex, according to the original soil mapping.

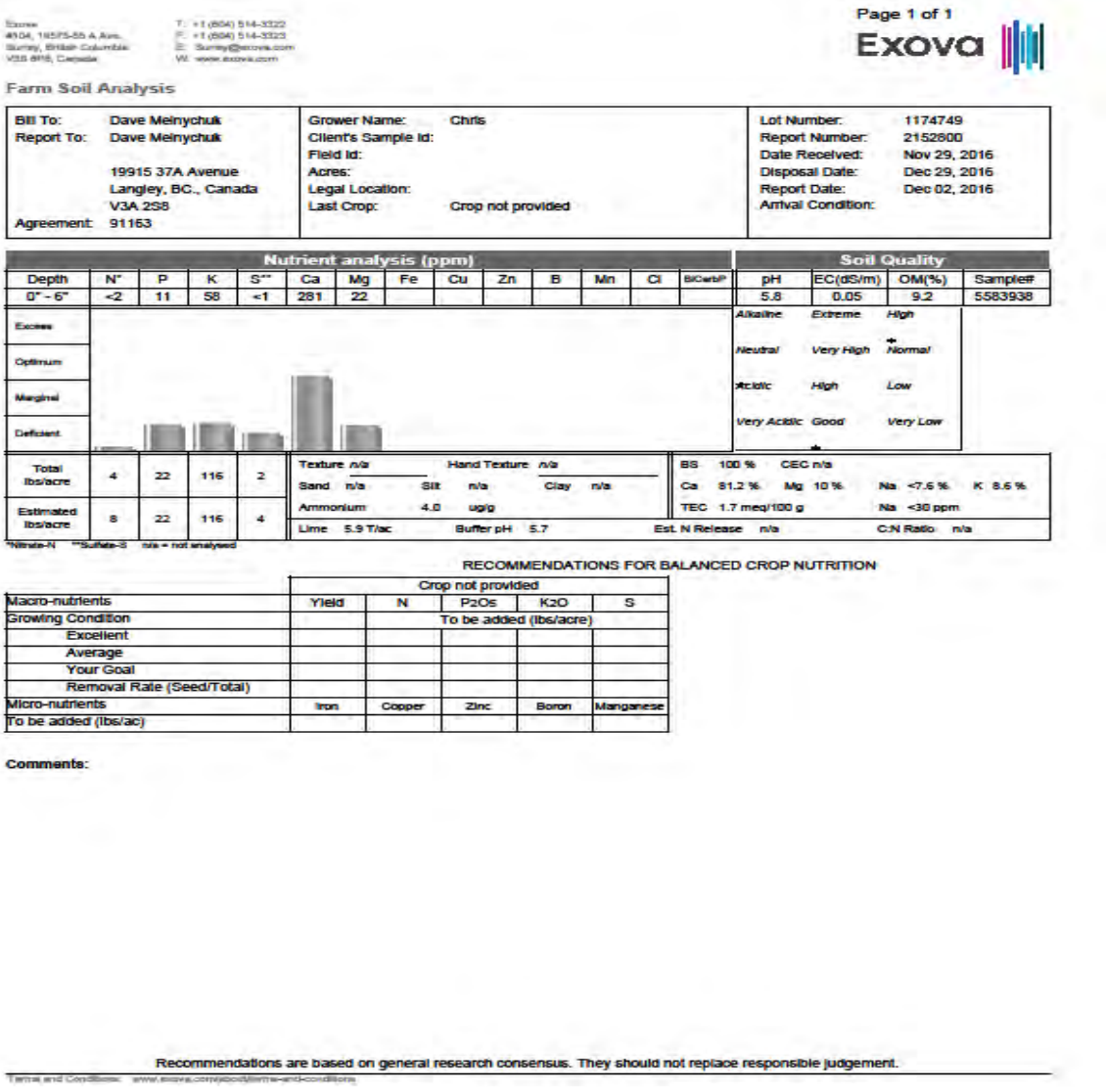
Soil field survey

In December, a field survey of the soils was completed. Several soil samples were collected and sent to Exova Labs in Surrey for analysis. The nutrient levels are consistently low and similar throughout all of the samples. The following is the summary of the laboratory results, along with a comparison of nutrient levels between the Meyer soils and level of nutrients in a typical farmed soil in the Fraser Valley.:

Comparison of Analysis between Meyer soil samples and typical nutrient levels

Nutrient factor	Typical Fraser Valley Mineral Soil	Meyer soil samples Samples 1 to 6	Relative comparison
Organic matter	less than 15%	6.2% to 13.1%	Good
ph	5.5 to 6.5	4.7 to 6.1	Mainly acidic
Electrical conductivity	0.05 to 2.0 ds/m	0.05 to 0.12 ds/m	good
Nitrate Nitrogen	35 to 80 ppm	2 to 9 ppm	deficient

Phosphorus	25 to 70 ppm	5 to 10 ppm	deficient
Potassium	100 to 200 ppm	47 to 77 ppm	deficient
Calcium	650 + ppm	90 to 382 ppm	deficient
Magnesium	110+ ppm	5 to 32 ppm	deficient
Sulfate - Sulfur	6+ ppm	Less than 1 ppm	deficient



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Exova

Farm Soil Analysis

Bill To:	Dave Meinychuk	Grower Name:	Chris	Lot Number:	1174749
Report To:	Dave Meinychuk	Client's Sample Id:		Report Number:	2152600
	19915 37A Avenue	Field Id:		Date Received:	Nov 29, 2016
	Langley, BC., Canada	Acres:		Disposal Date:	Dec 29, 2016
	V3A 2S8	Legal Location:		Report Date:	Dec 02, 2016
Agreement:	91163	Last Crop:	Crop not provided	Arrival Condition:	

Nutrient analysis (ppm)

Depth	N*	P	K	S**	Ca	Mg	Fe	Cu	Zn	B	Mn	Cl	BiCarbP
0" - 6"	<2	11	58	<1	281	22							
Total lbs/acre	4	22	116	2									
Estimated lbs/acre	8	22	116	4									

Soil Quality

pH	EC(dS/m)	OM(%)	Sample#
5.8	0.05	9.2	5583938

Alkaline / Extreme / High
Neutral / Very High / Normal
Acidic / High / Low
Very Acidic / Good / Very Low

Texture n/a Hand Texture n/a
Sand n/a Silt n/a Clay n/a
Ammonium 4.0 ug/g
Lime 5.9 T/ac Buffer pH 5.7

BS 100 % CEC n/a
Ca 81.2 % Mg 10 % Na <7.6 % K 8.6 %
TEC 1.7 meq/100 g Na <30 ppm
Est. N Release n/a C:N Ratio n/a

*Nitrate-N **Sulfate-S n/a = not analysed

RECOMMENDATIONS FOR BALANCED CROP NUTRITION

Crop not provided					
Macro-nutrients	Yield	N	P2O5	K2O	S
Growing Condition		To be added (lbs/acre)			
Excellent					
Average					
Your Goal					
Removal Rate (Seed/Total)					
Micro-nutrients	Iron	Copper	Zinc	Boron	Manganese
To be added (lbs/ac)					

Comments:

Recommendations are based on general research consensus. They should not replace responsible judgement.

As indicated by the results of the laboratory analysis, the soils on the Meyer property are deficient in most plant nutrients. The main reasons for the low fertility is that the former farmed areas have not been actively farmed for several years plus the fact that 2 of the soil samples were taken from areas which are still covered by native tree cover and have never been utilized for agricultural purposes.

Although the nutrient levels are very low, this condition can be rectified with addition of plant nutrients by application of livestock manures and compost as well as commercial fertilizer. Several years of inputs would be required to bring the nutrient levels up to the point where acceptable crop yields could be expected.

Agricultural capability:
The agricultural capability rating, as identified on the published Langley map sheet, is a complex of class 2 to class 3 lands (after improvements) for the land outside of the confines of the 2 large ravines. The land affected by the ravines would nil agricultural potential because of the steepness of the ravine banks and would be rated class 6T and 7T

- On the west side of West Creek, the land is rated as a class 5:3TA-3:3DT-2:5W and can be improved to a 5:3TD-3:3DT-2:3DW rating, with the implementation of drainage and irrigation improvements. This section of the property contains approximately 35.2 acres with this agricultural capability rating.
- On the east side of the major ravine, which runs from a south east to north west direction, the land is rated as a 5:2TA-3:3TA-2:5W class and can be improved to a 5:2TD-3:3TD-2:3DW rating, with the implementation of drainage and irrigation improvements. There are approximately 24.4 acres (in 2 separate areas separated by another ravine) with this agricultural capability rating.
- The ravines would have a class 6 and 7 rating and cover approximately 66.4 acres or about 53% of the entire property.

Agricultural capability rating criteria:

Land capability class for mineral soils in British Columbia is a systematic grouping of lands that have the same relative degree of limitation for agricultural use. The intensity of limitations become progressively greater from Class 1 to Class 7. Class1 to Class 3 is considered prime farmland.

Class I: This land has no or very slight limitations that restrict use for common agricultural crops
Class 2: This land has minor limitations that require good ongoing management practices and/or slightly restrict the range of crops
Class 3: This land has limitations that require moderately intensive management practices and/or moderately restrict the range of crops
Class 4: This land has limitations that require special management practices and/or restrict the range of crops
Class 5: Land that has limitations which restrict its capability to producing perennial forage crops and/or other specially adapted crops.
Class 6: Non-arable land which is capable of producing native and/or uncultivated perennial forage crops
Class 7: No capability for arable culture or sustained natural grazing.

Limitations may seriously affect one or more of the following practices: timing and ease of tillage; planting and harvesting; range of suitable crops and methods of soil conservation. Note: in areas which are climatically suitable for growing specialty crops (tree fruits, grapes, small fruits) the limitations of stoniness and/or topography on some class 4 lands may not be significant limitations to these crops.

Agriculture capability sub-class:

The next level of classification is the capability sub-class which identifies the type of limitation inherent to soils. The sub-classes for mineral soils which exist on the Meyer property include the following categories: A (soil moisture deficiency); D (undesirable soil structure and/or low perviousness); T (topography); W (excess water). Most of these limitations, can be addressed with appropriate land improvements and cultural practices, although it impractical to address severe topographical features

Topographical limitations of the Meyer property

The property is severed by 2 ravines, the first and mayor ravine cuts diagonally from the south east corner to the north west corner while the second ravine cuts the east portion of the property into 2 smaller parcels.

These ravines effectively establish 3 separate parcels, with no direct access between each other. The cost of establishing road access through these ravines would be prohibitive and challenging from an environmental perspective as West Creek is a red listed watercourse with fish presence.

The ravines cover approximately 66 acres or about 53% of the entire property.

Due to the severe topographical features and 2 major ravines, the property is effectively cut up into 3 separated portions, as outlined in the following table.

Isolated areas	Size	Farmable area	Ag. Capability	Ravine Area (6T&7T)
Western portion	64 acres	35.2 acres	5:3TA-3:3DT-2:5W	28.8 acres
Eastern portion	32 acres	10.9 acres	5:2TA-3:3TA-2:5W	21.1 acres
North portion	30 acres	13.5 acres	5:2TA-3:3TA-2:5W	16.5 acres

The following descriptions provide additional agricultural information about each of the 3 separated and isolated areas on the overall property.

1. **Portion of the property located west of West Creek:** This area covers approximately 64 acres, of which 35.2 acres would be suitable for agricultural production. The remaining 28.8 acres falls within the banks of the West Creek ravine and has nil agricultural potential. The 35.2 acres has been farmed for hay and pasture in the past but has lain idle for a few years (except for about 1.5 acres of blueberries), as is illustrated in the following photographs. Over the last year, the new owner has become the task of renovating the old grass fields. The soils in this area, based upon the soils classification and the soil survey, is limited by a rolling topography and a compacted sub soil, therefore forage grass production is probably the best crop use

for much of the area. More intensive cropping of higher valued crops is possible, although a comprehensive soil improvement project would be required, including installation of sub-surface drain tile and an irrigation system. The feasibility of developing an irrigation is largely based upon proving up an adequate supply of groundwater capable of producing 4 US gpm per acre.

Looking south over the idle forage field.

Looking south to the blueberry field and main residence

2. **<u>Land located in the isolated eastern section of the property</u>**.

This parcel could contain about 32 acres, of which about 10.9 acres would be suitable for agricultural production and the remainder is taken up by large ravines on 3 sides of the parcel. The 10.9 acres of farmable land is covered by native tree cover and would require significant cost in clearing, stump and root removal before conventional agriculture could commence. The remaining 21.1 acres is impacted by deep ravines and has nil agricultural potential. There is no road access to this proposed lot. The cost to build a road through the ravine would be prohibitive; therefore a potential option would be to sell this portion to an adjoining property owner to the east.

The following photograph illustrates the dense native tree cover of the east section of the property.

3. **Land located in the northern portion of the property**

This section of the property is located in the northern area of the property and is isolated from both the western and eastern portions of the property, by 2 deep ravines. This area covers about 30 acres, of which 13.5 acres would be suitable for agricultural production. The remaining 16.5 acres are impacted by deep ravines and have nil agricultural potential. The property is accessed by an improved Municipal road (76th avenue) at the north east corner of the property.

Of the approximate 13.5 acres of farmable land, approximately 8.5 acres has been farmed in the past but has lain idle for several years, as illustrated in the following photograph.

Recommended best farm and crop management practices :

Because of the inherent low fertility, compacted sub layer and poor drainage of the Whatcom/Scat soil type (the dominant soil type throughout the property), soil amendments and farm management practices should to be focused in the first 2 to 3 years of farming to address these weaknesses. With completion of the primary land improvements (clearing of the dense stand of native tree cover is required in the easterly portion) installation of sub-surface drainage and an irrigation systems for each of the 3 separate portions, emphasis should be directed at improving soil structure,

maintaining internal drainage capability and increasing organic matter levels and soil fertility levels.

In addition to introducing livestock manures as a soil amendment, consider should be given to compost as a soil improvement. Applications of compost at approximately 8 to 10 tons per acre would be a good start in rehabilitate soil structure and kick starting the microbial activity. Compost offers many advantages over raw manure and commercial fertilizers particularly when applied to nutrient poor soils. When added to fine textured clay soils, the beneficial effects of compost on soil physical properties is evidenced by increased water infiltration, improved water-holding capacity, improved aeration, permeability and soil aggregation as well as reduced soil crusting, and reduced runoff and water erosion.
Unlike most commercial fertilizers, compost functions as a slow release store of nutrients , providing nutrients during the entire growing season. From an environmental perspective, composted agricultural waste products are less likely to pollute watercourses compared to raw manure because there are less soluble nutrients in compost compared to raw manure. Depending upon the nutrient content of the compost applied and crops grown, the application rate should be adjusted appropriately.

Production of perennial forage grasses and cereals are one of the most effective techniques for improving the condition, tilth and fertility of a soil. The objective over the first 2 to 3 years should be to improve soil structure, build organic matter and increase soil fertility through an intensive forage production system. An agronomic regiment should be followed, including:

Plant nutrients: Spring soil testing for nutrient levels followed by appropriate application rates of compost, livestock manures and fertilizer with the goal of maximizing forage grass production. The appropriate level of phosphorus during these early years is particularly important as this essential plant nutrient is critical in root development, particularly lateral and fibrous rootlets.

Drainage: The following factors are an indication of poor drainage: surface ponding; water tolerant grass species; poor crop yields; high water table; flooding during storm events; colour and poor structure in the soil profile. If these condition exist, drainage systems are recommended. The objective of a drainage system is to remove excess surface water and to lower the water table to improve crop production. Drainage systems should be designed to lower the water table to approximately 0.3 to 0.5 meters (1 to 1.6 ft) below the soil surface, 24 hours after the cessation of a rainfall event. From a trafficability perspective, a water table of 0.5 meters is a minimum requirement. Under normal circumstances, drain tiles, are installed at a depth of 0.9 to 1.2 meters (3 to 4 ft) below the soil surface.

Irrigation: Irrigation is an important factor in achieving optimum crop production, particularly between the months of late June to Mid September when the accumulated evapo-transpiration (ET) exceeds the effective rainfall. Without supplemental water by irrigation during this time of the year, crop yields will be reduced and there may be negative impacts on crop quality. In designing an irrigation system, for peak flow rates and annual crop water requirements the following factors are important: crop type, soil type, rooting depth, irrigation system efficiency and ET rates. Based upon reference material by the Ministry of Agriculture, the estimated the peak irrigation flow rate in the Langley to Abbotsford area is 4.0 US gpm per acre and the annual crop water requirement varies from 6 to 9 inches.

From an irrigation equipment perspective, capital cost relative to expected crop revenue and relative efficiencies are important factors to consider by farmers. In regard to forage grass production, a travelling gun or wheelmove may be the most practical equipment while for row crops trickle irrigation systems may be the preferred equipment although trickle is more expensive to install. The efficiency of trickle irrigation is 85 to 95% compared to sprinkler application with a travelling gun which has an efficiency of about 55 to 70%.

To achieve a reasonable return from the capital investment in an irrigation system, it is important to be careful how the irrigation system is managed. Seasonal scheduling and application rates should be matched with plant requirements and soil conditions. Over irrigation should be avoided since too much water will discourage deep rooting by the grass plants. Excessive irrigation may also initiate soil erosion on the areas with the greater slope.

Agricultural potential

After implementation of the land improvements, as mentioned earlier in the this report, and after a couple years of production of forage grasses and cereals, the fertility and tilth of the soils should have increased to a point where the land should be ready to produce a wide range of crops (i.e., forage, vegetables, berries, cereals, field nursery crops, and specialty crops such as hops, grapes, herbs, etc).

The land west of West Creek would require additional deep tillage and sub soiling, as these soils have denser subsoil which contributes to slower internal percolation, leading to poorer production of deep rooted perennial crops such as raspberries.

The soils in the eastern and northern sections of the property contain superior internal drainage conditions, allowing for a wider range of deep rooted vegetable crops and berry crops. Raspberries is one of the berry crops which requires good internal drainage as the roots prefer to extend downward to a depth at least to 1 to 1.5 meters.

In addition to traditional and niche type of crops, the land in each of the 3 sections would be suitable for several non-soil based agricultural endeavours, including; green houses, poultry (traditional and specialty birds), container nursery, etc.

Relationship of parcel size to agricultural growth and diversification

For those producers who are considering an intensive operation which is non-soil based such as poultry, green house, mushroom or those producers who are focused on establishing a specialty type farm such as, organic vegetables, specialty nursery, horse breeding, vineyard, hops, etc they may be better served, (particularly when considering initial capital investment), with a smaller sized parcel rather than a large acreage parcel. In general, smaller parcels may limit the type of agricultural operations which can be supported by the small parcel, although this premise is more applicable to primarily the major commodities like grain, dairy, and other sectors which are heavily weighted in favour of large scale field crop production. This generalization does not apply to all situations and all commodities, particularly in many areas of the Central Fraser Valley. The traditional view of and approach to farming ***where bigger is better*** may not reflect some of the realities of Fraser Valley agriculture and the trends in one of the most dynamic and growing sector(s) of agriculture in the Fraser Valley – small lot agriculture.

Recent trends in small lot agriculture, demonstrates that small agricultural parcels in the Lower Mainland are becoming desirable by new farm entrants. This trend is clearly demonstrated by the high level of participation in agricultural seminars and workshops held in the Fraser valley.

Recent examples include the results of workshops sponsored by non-profit organizations such as the Langley Sustainable Agriculture Foundation (LSAF). In 2013, LSAF held a workshop on small lot agriculture where over 300 people attended. This was followed up by a workshop in 2014, where over 400 people attended a workshop featuring the renowned speaker Joel Salatin, to hear about the latest trends in agriculture.

These events demonstrate the strong interest in farming, focusing on small lots, organic production practices, and local food production.

In view of the recent trends and the high cost of land, large parcel sizes are not necessarily the best vehicle to meet the demands for increased agricultural production in the Lower Mainland.

There are many successful farms operating on smaller parcels of land in the Fraser Valley and the growth in these types of intensive operations is out striping the growth in the number of larger farms which are heavily focused on large scale field crops. The trend in agriculture in the Fraser Valley is moving towards more intensification on parcel sizes which suit the needs of the particular agricultural commodity or enterprise.

In regard to economics, significant revenue can be generated on small parcels of land by specialized niche commodities (i.e., Curtis Stone of ***Spin Farming*** fame has reported returns of $100,000 per acre on very small parcels growing high end fresh vegetables for the restaurant trade). Many other exciting examples testify to the claim that agriculture can be viable and profitable on small parcels of agricultural land

In view of the strong demand for small lot agriculture and strong public support for local food production, consideration of policy development regarding appropriate parcels sizes for agricultural production would be warranted.

Final Comments and Conclusion

- The Meyer property is unique from a topographical perspective and is severed into separate parcels by deep ravines, resulting in less than 50% of the entire land base suitable for agricultural production.
- The creation of separate legal parcels, will provide the opportunity of establishing separate small lot agricultural operations, which can range from niche market vegetables, nursery ,hops, green house, specialty poultry, greenhouse and others
- There is a strong demand for small parcels for farming purposes from new entrants who wish to enter the field of agriculture but are not able to purchase large parcels of land in the Fraser Valley which are well beyond the financial capability of most aspiring farmers.
- It is understandable that approving agencies do not wish to encourage the creation of rural estates in the ALR and in recognition of this objective, innovative mechanisms could be implemented which would discourage rural estate minded individuals from purchasing small parcels for the sole purpose of building a large estate home in the country. Some of these techniques could include:
    1. Placing a '***farming only"*** covenant against the title
    2. Establishing conditions which dictate the maximum setbacks from the frontage road for all buildings and establish a maximum size of the home plate. These are provisions which have been adopted by the Corporation of Delta and the City of Surrey, in an effort to prevent the building of mega homes in the ALR.
    3. In an effort to attract serious and committed new entrants into farming, a lease to purchase agreement, (along with inclusion of stringent agricultural performance measures), could be an excellent way to get more young people started in farming.

Prepared by;
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August 31, 2017
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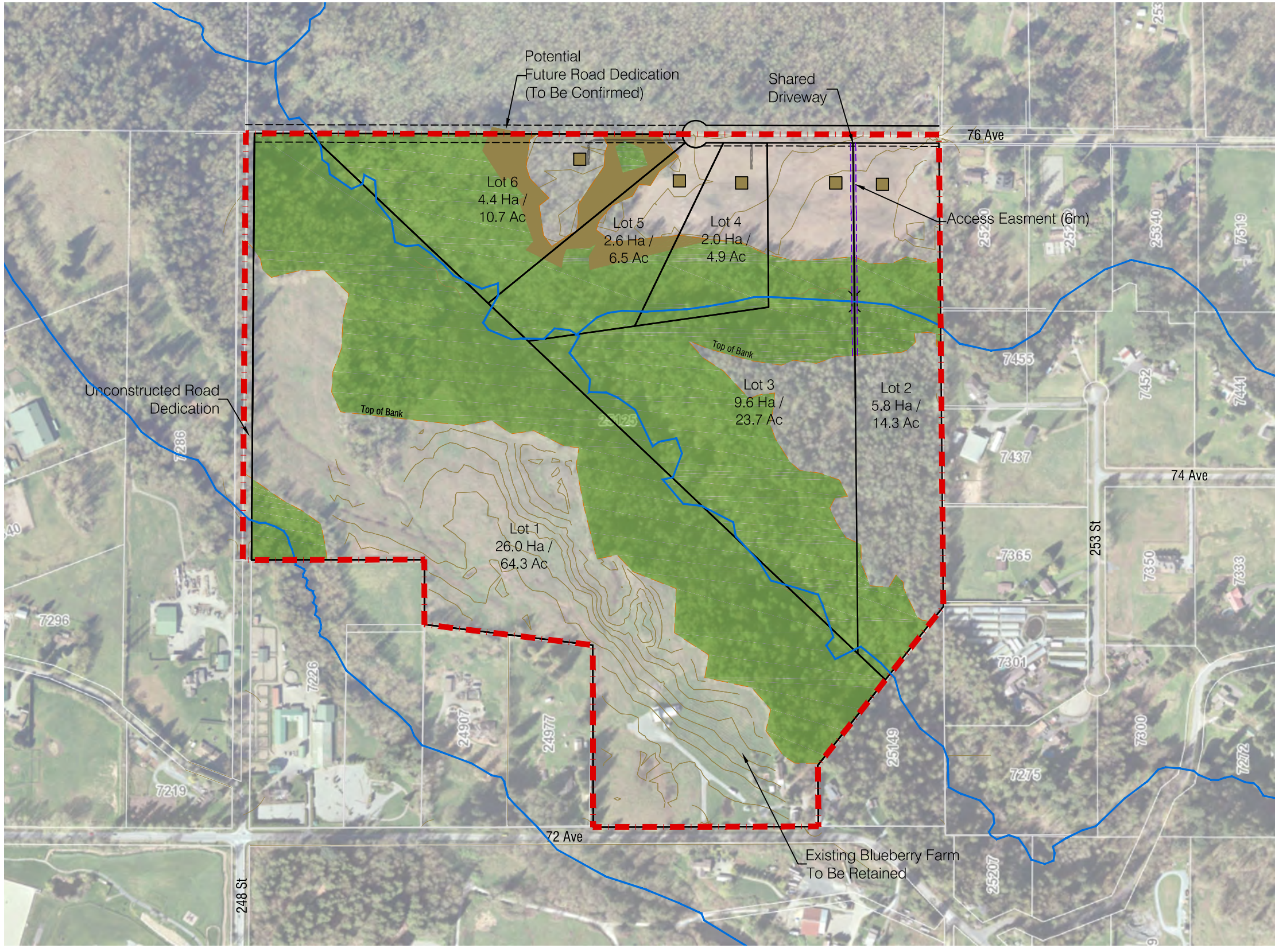
APPENDIX V

SUBDIVISION CONCEPT PLAN

Homestar Building Corp.
ALR Subdivision
25125 72 Ave, Langley, BC

TRADITIONAL SMALL FARMS



LEGAL DESCRIPTION
PID: 013-283-090

GROSS SITE AREA
51.1 hectares / 126.4 acres (approx.)

EXISTING DESIGNATIONS
Zoning: RU-3 - Rural Zone 3
Rural Community Plan: Agricultural / Countryside
OCP: Rural Residential / Agricultural

PROPOSED DESIGNATIONS
Zoning: RU-1
Rural Community Plan: Agricultural / Countryside
OCP: Rural Residential / Agricultural

LOT YIELD
Existing Number of Lots: 1
Proposed Number of Lots: 6

Scale: 1:5000

APLIN MARTIN

Project No.: 16-520
Date: 19 / 02 / 2018

Drawing F.2 1

M:\2016\16-520\PLANNING\DWG\16-520 - Subdivision Concept (Traditional Small Farm) - 2018-02-16.dwg

APPENDIX VI

KPU LETTER OF SUPPORT – HOPS FARM