



#### **Provincial Agricultural Land Commission - Applicant Submission**

**Application ID:** 

101256

**Application Type:** 

Placement of Fill within the ALR

Status:

Submitted to L/FNG

Applicant:

Bacon et al.

Local/First Nation Government:

City of Kelowna

#### 1. Parcel(s) Under Application

#### Parcel #1

**Parcel Type** 

Fee Simple

**Legal Description** 

LOT 1 SECTION 18 TOWNSHIP 27 OSOYOOS DIVISION YALE DISTRICT PLAN 32945

Approx. Map Area

17.13 ha

PID

003-270-386

**Purchase Date** 

Jul 21, 2021

**Farm Classification** 

No

**Civic Address** 

1850 Brentwood Road, Kelowna B.C. V1P 1H2

**Certificate Of Title** 

dehodsot.pdf

Land Owner(s)	Organization	Phone	Email	Corporate Summary
Allan Dehod	Not Applicable	2509797610	2sbacon@telus.n et	Not Applicable
Sadilyn Bacon	Not Applicable	2509797610	2sbacon@telus.n et	Not Applicable

#### 2. Other Owned Parcels

Do any of the land owners added No previously own or lease other parcels that might inform this application process?

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#### 3. Primary Contact

Type Third-Party Agent

First Name Carl

Last Name Withler

Organization (If Applicable) No Data

Phone 2508702137

Email cwithler@gmail.com

#### 4. Government

Local or First Nation Government: City of Kelowna

#### 5. Land Use

#### Land Use of Parcel(s) under Application

Describe all agriculture that currently takes place on the parcel(s).

years. The project proponent wishes to improve drainage, spread topsoil, plant cherries and grow them for the domestic and export markets.

Describe all agricultural improvements made to the parcel(s).

Approximately 13000 cubic meters of topsoil have been brought to site. Approximately 20000m more are needed to produce a rooting zone for

No agriculture currently takes place on this parcel. It has been vacant for

cherries.

Describe all other uses that currently take place on the parcel(s).

Weeds grow on this property currently.

#### Land Use of Adjacent Parcels

Main Land Use Type Specific Activity

North Commercial / Retail gravel movement

East Agricultural / Farm forage production

South Residential SFD

West Commercial / Retail trucking

#### 6. Proposal

Has the ALC previously received an No application or Notice of Intent for this proposal?

What is the purpose of the The propose

proposal?

The proposal is to bring approximately 35000 cubic meters of topsoil to site to spread and level and then to plant high value cherries on to provide to the domestic and export market.

Placement of Fill Project Duration

1 month

Fill to be Placed

Volume 35000 m<sup>3</sup>

Area 20000 m<sup>2</sup>

Maximum Depth 1.5 m

Average Depth 1 m



#### Fill already Placed

13000 m<sup>3</sup> Volume

200 m<sup>2</sup> Area

**Maximum Depth** 2 m

**Average Depth** 1 m

Describe the type of soil proposed

to be removed.

Drain rock to support the drainage plan as there is subsurface water on this

property and topsoil to level and plant into.

What alternative measures have

you considered or attempted before proposing to place fill? Leaving the field vacant, fallow and full of weeds.

impacts to surrounding

agricultural land?

What steps will be taken to reduce Fill will be placed in non growing season and roads will be washed after fill

placement.

Proposal Map / Site Plan 10-1850 Brentwood Irrigation With Drain Tile & Drain Pipes.pdf

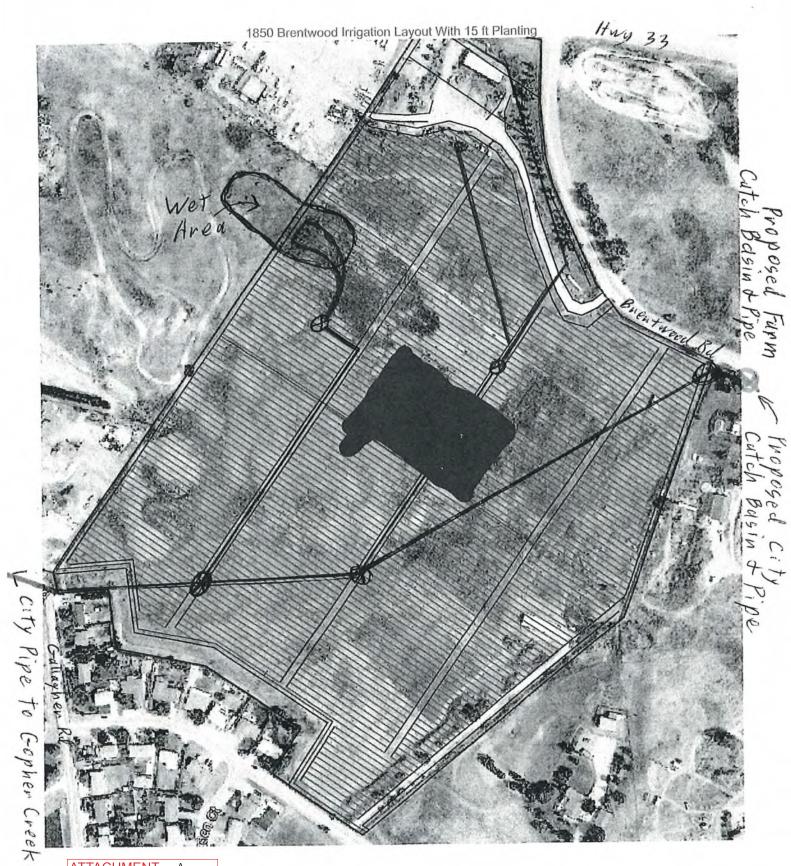
**Cross Sections** 10-1850 Brentwood Irrigation With Drain Tile & Drain Pipes.pdf

**Reclamation Plan** Reclamation plan for 1850 Brentwood Road.docx

#### 7. Optional Documents

Туре	Description	File Name
Other files that are related	red box on property shows approximate location of preplaced fill and proposed irrigaiton layout for cherry production.	10-1850 Brentwood Irrigation With Drain Tile & Drain Pipes.pdf
Photo of the Application Site	vacant property in 2018 wiating for fill	1-20180325-Gallagher Flats 1850 Brentwood.jpg





ATTACHMENT A
This forms part of application
# A24-0010
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DEVELOPMENT PLANNING

### Agricultural Capability Assessment 1850 Brentwood Road, Kelowna

Prepared by:

C A Scott Smith, MSc., P.Ag. Eterrna Consulting



Prepared for Collin McMeeken

October 23, 2024





Cover photograph: View looking west across the property showing the area of reclaimed gravel pit with mounds of fill lying on the soil surface.

#### **Summary of Conclusions**

Based on the field inspection and soil analytical properties, the agricultural capability assessment came to the following conclusions;

- 1. The soils beneath the area of fill (the study area) are rated as class 3AP and are considered suitable for tree fruits.
- 2. Spreading the imported fill would not change the agricultural capability class of the affected soil, it would remain as class 3AP based on the criteria within the Ministry of Environment (MOE) 1983 assessment framework.
- 3. The imported fill material, if stone picked and spread to a depth of 40 cm, would increase the thickness of the organic matter-rich topsoil in the affected area, and in so doing, enhance the water and nutrient holding capacity of the soil.
- 4. It is unlikely that spreading the imported fill would, in any way, be detrimental to the future productivity of the site.



#### Introduction

On September 26, 2024, I visited the property of Collin McMeeken at 1850 Brentwood Road (*PID 003-270-386*) in the Back Mountain area of Kelowna. The objective of the field visit was to complete an agricultural capability assessment of the central portion of the property that some 20 years previously been the site of a gravel pit. In an effort to improve the productivity of this reclaimed gravel pit, the client had imported a large volume of fill without the proper authorization from the Agricultural Land Commission. The agricultural land capability assessment was requested by the City of Kelowna.

The focus of this assessment was to 1) assess the condition of the soil in the reclaimed area that is now covered by imported fill (i.e. the study area) and 2) to evaluate the suitability of this imported fill as topsoil to potentially improve the agricultural capability of this land. According to the client, this fill came from a nearby housing development where the topsoil was removed in advance of infrastructure placements and home construction. The cultivated area of the property is approximately 15 ha (37 ac). The area covered by the fill is 2.4 ha (approximately 6 ac) (Figure 1).



Figure 1. The yellow line outlines the boundaries of the agricultural property at 1850 Brentwood Road. The dark area located in the centre of the lot marks the extent of fill placement.



#### **Assessment Methods**

#### Previously published information

The soils of the agricultural regions of the Okanagan Valley were mapped by the Ministry of Environment at a scale of 1:20,000 (Figure 2). This mapping provides relatively detailed information about the soils of the region (Wittneben 1986). The soil mappers then rated each map unit (polygon) with respect to its agricultural capability. The fill area is covered by three polygons. The soil series and the unimproved and improved capability ratings for each polygon are presented in Table 1. The dominant soil is the Rutland soil series which is formed on coarse-textured glaciofluvial parent material that has often been utilized as a gravel source.

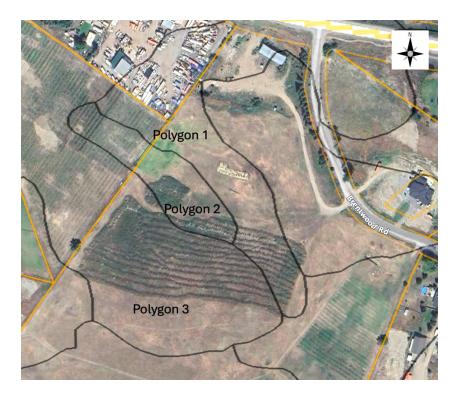


Figure 2. The boundaries of soil mapping polygons over the area of imported fill. Polygon numbers are listed in Table 3. The map information was gained from the provincial online Soil Information Finder Tool (SIFT 2018).

Class ratings are for tree fruits and grapes. The principal unimproved limitation of the soils for agricultural use relates to aridity. Irrigation can largely overcome aridity leaving stoniness as a moderate limitation (i.e. class 3AP) under improved conditions. The small area of Gartrell series with a limitation of wetness and poor fertility was not observed and was likely altered during gravel excavation and remediation.



Table 1. Soil series and agricultural capability as reported in regional mapping for the Okanagan Valley. The soil mapping was conducted some 40 years ago, long before the gravel was excavated from the site.

Soil Polygon	Area		Soil series	Capability Rating		
	(ha)	Name	Attributes	Unimproved	Improved	
1	0.38	Rutland	Rapidly drained gravelly glaciofluvial	5A	3AP/3AT	
2	0.16	Gartrell	Poorly drained loam over gravelly glaciofluvial	6W	4WF	
3	1.82	Rutland	Rapidly drained gravelly glaciofluvial	5A	ЗАР	

The regional soil mapping and derived capability ratings give useful baseline but do not describe the current soil conditions in the study area, which have more recently undergone disruption and some degree of remediation.

#### Field Methods

The BC Agricultural Land Commission utilizes the *Land capability for agriculture in British Columbia* (Ministry of Environment 1983) for all its assessments of agricultural capability. To meet the requirements of ALC Policy 10, three soil pits were excavated to a depth of between 120 and 150 cm to allow for detailed profile descriptions. The soils were classified using the Canadian System of Soil Classification (SCWG1998) and for disturbed soils followed the framework of Naeth et al. (2023). The agricultural capability rating class of each profile was according to Ministry of Environment (1983).

The fill has been placed in rows over the area impacted by gravel extraction some 20 years ago (Figure 3). Two of the pits (pits 1 and 2) were located between the rows of fill. Pit 3 was in a small area where the fill material had been surface distributed. Pit 3 allowed the examination of how a potential profile might look if the fill material were to be spread to a depth of approximately one foot (30 to 40 cm).



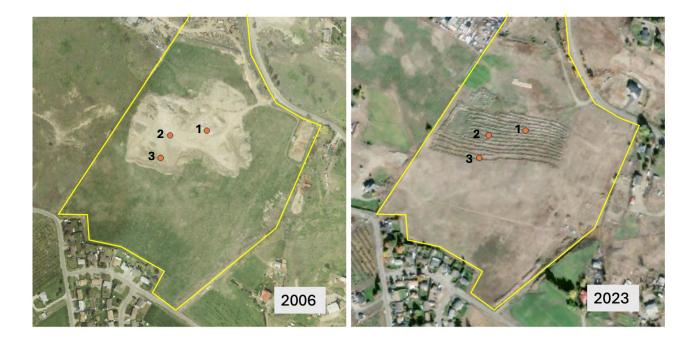


Figure 3. Aerial photographs showing the extent of the gravel excavations (2006) and current location of fill placement (2023). Soil pits examined and described in this report are shown as numbered points.

#### Results

Profile descriptions for the three pits examined are given in the appendix of the report. Each soil pit showed evidence of gravel pit remediation efforts as seen in a brownish surface horizon that represents the 'topsoil' that was presumably stockpiled then spread over the excavation site (Figure 4). The subsurface horizons are composed of sandy and gravelly glaciofluvial parent materials. The depth of disturbance within the profiles is variable but confined to less than 100 cm of the profile. Disturbed horizons were labeled according to the system of Naeth et al. (2023). The organic matter-rich surface layer is designated as a Dp horizon, subsurface disturbed layers as simply D horizons. Horizons below the level of disturbance are designated using conventional nomenclature. All three of the observed profiles in the study area are considered Anthroposols (human impacted soils). The topsoil layer beneath the imported fill is assumed to have been derived from the spreading of the original A horizon of the Rutland soil series which is classified as a Dark Brown Chernozem (Wittneben 1986). The imported fill is likely derived from the A horizon of the Kelowna soil series which is a Dark Brown Chernozem formed on till.

Within the underlying undisturbed portions of soil pits 2 and 3, thin layers of calcium carbonate accumulation were observed and designated as Cca horizons although, in general, the gravelly glaciofluvial parent materials are only very slightly to non-calcareous.





Figure 4. Soil and surface condition observed in soil pits 1 and 2. Some effects of groundwater saturation were observed below 140 cm depth in the Cgj horizon of pit 2.

The soil observed in pit 3 had a different surface condition composed of two distinct layers of disturbed topsoil placed over undisturbed glaciofluvial gravel (Figure 5). The two disturbed horizons in pit 3 (Dp1 and Dp2) extend to a depth of 80 cm and are both gravelly sandy loam texture. However, the Dp1 horizon composed of the imported fill is darker in colour and contains greater organic matter than the underlying Dp2 horizon. The undisturbed lower profile is composed of a BC, Cca and C horizon. These horizons represent the lower profile of the original Rutland soil.





Figure 5. Soil profile observed in pit 3.
There are two distinctive surface horizons labelled as Dp 1 and 2, composed of stockpiled topsoil materials that have been spread over the soil surface. The Dp1 horizon is composed of the relatively dark fill material recently imported to the site. The lighter-coloured Dp2 horizon is reclaimed topsoil derived from remediation efforts some 15 years ago.

#### The Classification of Anthroposols

Anthroposols (human disturbed soils) are not included in the existing Canadian System of Soil Classification but are proposed for inclusion in the next version of the System. All the profiles observed in this study are classified as Spolic Anthroposols. These are soils with surface deposits (Dp horizons) of imported soil fill or constructed mixtures of soil and organic material ≥30 cm thick and with <15% non-soil artefacts (plastics, concrete, metal) in any horizon. They are further classified into subgroups of Albo meaning the Dp horizon contains less than 2% carbon and Terro because undisturbed natural soil horizons exist within 100 cm of the soil surface. The classification of the three soils observed is Terro Albo Spolic Anthroposol. Full details of the classification system are presented in Naeth et al. (2023).



#### **Agricultural Capability**

#### Class and Subclass ratings

The BC Agricultural Land Commission utilizes the provincial seven class rating system for all its assessments of agricultural capability. Class 1 soils have no limitations to cultivated agriculture, class 7 soils are considered unsuited for agriculture. Soil classes 1 through 4 are considered suited for cultivated agriculture but with increasing limitations between class 2 and 4.

There are two factors which limit capability of the soils in the study area. Aridity (subclass A) is generated by the semi-arid climate and low available water holding capacity (AWHC) of the soils. Stoniness (subclass P) relates to the presence of stones >7.5 cm in diameter in the upper 25 cm of soil that can imped cultivation.

Table 4 outlines the capability classes and subclasses as they apply to the soils observed in the study area. The improved ratings assume irrigation (which overcomes the aridity limitation) and stone picking (which overcomes the stoniness limitation). The improved ratings are for tree fruits. Irrigation improves the ratings by two classes and stone picking can improve the stoniness limitation by one class where there is a sizable number of large stones present.

The reclaimed soil condition observed in the soil pits closely resembles the original character of the Rutland soils mapped on the property prior to the gravel extraction. These are rated as class 3AP for tree fruits and grapes. While these soils provide limitations to production, they are used widely in the Okanagan Valley for this purpose.

Table 4. Soil attributes and agricultural capability ratings for the soils observed in three soil pits beneath area of fill. Details of the rating system and class determinations are given in MOE (1983).

Soil Pit Estimated AWHC		Estimated Stoniness (upper 25 cm)		Agriculture Capability				
#	(upper 50 cm) mm	total cf >2.5 cm % vol	Cobbles and stones % vol	Aridity Unimproved Improved		Stoniness Unimproved Improved		Overall improved rating
1	40	30	5	5A	3A	3P	3P	ЗАР
2	34	25	10	5A	3A	3P	2P	ЗАР
3	42	30	15	5A	3A	3P	2P	ЗАР



#### Impact of imported fill on agricultural capability and future productivity

Soil pit 3 provides insight into what impact spreading the imported fill would have on the agricultural capability of the property. While the imported fill spread to a depth of 40 cm would not impact the capability rating (overall rating of 3AP, same as pits 1 and 2), its chemical nature would potentially enhance overall future productivity due to the appreciable carbon content of this material (Table 5). Greater carbon content relates to increased organic matter, in this case well decomposed humus (as indicated by C:N ration of 10), which in turn enhances both water and nutrient holding capacity of the soil. The property owner plans to pick the cobbles and large stones from the fill before spreading. This should ensure that the fill material provides maximum benefit to the productive capacity of the property for sweet cherries, the intended crop.

Table 5. Analytical properties of topsoil and fill materials. Total carbon is a measure of soil organic matter. The C:N ratio is a measure of the degree of decomposition of the organic matter. Both materials have mildly alkaline reaction and belong to the sandy loam texture class.

# of samples in composite	Material	Attributes	Total C %	Total N %	C:N ratio	pH (CaCl2)	Texture Class
2	Reclaimed topsoil	This material was stockpiled then spread over the gravel extraction site some 15 years ago and today composes the surface soil horizon beneath the fill area.	1.28	0.15	8.533	7.4	Sandy Ioam
3	Imported fill	Topsoil stripped from nearby grassland soil as a result of housing development	1.73	0.16	10.81	7.7	Sandy loam

#### Conclusions

- 1. The soils beneath the area of fill (the study area) are rated as class 3AP and are considered suitable for tree fruits.
- 2. Spreading the imported fill would not change the agricultural capability class of the affected soil, it would remain as class 3AP based on the criteria within the Ministry of Environment (MOE) 1983 assessment framework.

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- 3. The imported fill material, if stone picked and spread to a depth of 40 cm, would increase the thickness of the organic matter-rich topsoil in the affected area, and in so doing, enhance the water and nutrient holding capacity of the soil.
- 4. It is unlikely that spreading the imported fill would, in any way, be detrimental to the future productivity of the site.

#### References

**BC** Agricultural Land Commission (BC ALC). 2017. Policy P-10, Criteria for Agricultural Capability Assessments. Amended in February 2024.

https://www.alc.gov.bc.ca/assets/alc/assets/legislation-and-regulation/policies/alc\_-\_policy\_p-10\_-criteria\_for\_agricultural\_capability\_assessments.pdf (accessed September 2024).

Ministry of Environment (MOE) 1983. Land capability for agriculture in British Columbia. MOE Manual 1. Kelowna, BC. 61 pp.

**Naeth, M.A. et al. 2023.** Revised proposed classification for human modified soils in Canada: Anthroposolic order. Canadian Journal of Soil Science 103: 81–102. http://dx.doi.org/10.1139/CJSS-2022-0033

**Soil Classification Working Group (SCWG) 1998**. The Canadian Soil Classification System 3<sup>rd</sup> edition. Agric. And Agri-Food Can. Publ. 1646 (Revised) 187 pp.

BC Soils Information Finder Tool (SIFT) 2018. Provincial Soils Working Group, BC Ministry of Environment and Climate Change Strategy and Ministry of Agriculture. https://governmentofbc.maps.arcgis.com/apps/MapSeries/index.html?appid=cc25e43525c5471ca7b13d639bbcd7aa, (accessed September 2024).



#### Appendix – Soil profile descriptions

Table A1. Soil profile description from pit 1. The soil is moderately well drained with gleying observed at 140 cm depth. The depth to undisturbed materials is 85 cm and the soil is classified as Terro Albo Spolic Anthroposol.

Horizon	Depth cm	Description
Dh	0 - 45	Brown (7.5YR 4/2 d); Dark Brown (7.5YR 3/2 m); Gravelly sandy loam; structureless; plentiful fine roots; 35% coarse fragments (5% cobbles and stones); slightly sticky, slightly plastic consistence: abrupt wavy boundary; 37 to 48 cm thick.
D1	45 - 85	Brown (7.5 YR 5/2m); loamy fine sand; single grain structure; few very fine to fine roots; 5% coarse fragments; non sticky, non plastic consistence; abrupt irregular boundary; 13 to 42 cm thick.
С	85 - 140	Light brown (7.5YR 6/3 m); very gravelly sand; single grain structure; very few fine roots; 65% coarse fragments; non sticky, non plastic consistence; abrupt wavy boundary; 50 to 60 cm thick.
Cgj	140+	Light brown (7.5YR 6/3 m); sand; single grain structure; 5 cm bands of Fe and Mn stains in upper portion of horizon, common faint mottles throughout; non sticky, non plastic consistence: 10% coarse fragments.

Table A-2. Soil profile description from pit 2. The soil is well drained. The depth to undisturbed material is 30 cm and the soil is classified as Terro Albo Spolic Anthroposol.

Horizon	Depth cm	Description
Dh	0 - 30	Brown (10YR 4/3 d); Dark Brown (7.5YR 3/2 m); Sandy loam; coarse platy pseudostructure; plentiful fine roots; 25% coarse fragments (10% cobbles and stones); slightly sticky, slightly plastic consistence: abrupt smooth boundary; 25 to 35 cm thick.
C1	30 -75	Dark grayish brown (10 YR 4/2m); Very gravelly loamy sand; single grain structure; very few fine roots; 65% coarse fragments; non sticky, non plastic consistence; gradual wavy boundary; 40 to 60 cm thick.
Cca	75 -80	Grayish brown (2.5Y 5/2 m); very gravelly loamy sand; single grain structure; very few fine roots; 65% coarse fragments; strongly effervecent; thin streaks of CaCO3 along lower boundary of horizon; non sticky, non plastic consistence; clear wavy boundary; 5 to 10 cm thick.
C2	80 - 120+	Brown (7.5YR 4/3 m); loam to sand loam; massive structure; no roots; slightly sticky, slightly plastic consistence; 20% coarse fragments.



Table A-3. Soil profile description from pit 3. The soil is well drained. The depth to undisturbed material is 80 cm and the soil is classified as Terro Albo Spolic Anthroposol.

Horizon	Depth cm	Description
Dh1	0-45	Very dark brown (7.5YR 2.5/2 d); very dark brown (7.5YR 2/2 m); Gravelly sandy loam; weak fine granular structure; no roots; 30% coarse fragments (15% cobbles and stones); slightly sticky, slightly plastic consistence; abrupt wavy boundary; 35 to 45 cm thick.
Dh2	45 -80	Dark brown (7.5 YR 3/2 m); gravelly sandy loam; weak, fine subangular blocky structure; plentiful fine and few medium roots; 30% coarse fragments; slightly sticky, slightly plastic consistence; clear wavy boundary; 30 to 48 cm thick.
ВС	80 - 130	Brown (10YR 4/3 m); gravelly loamy fine sand; single grain structure; no roots; non sticky non plastic consistence; 45% coarse fragments; clear smooth boundary; 35 to 50 cm thick.
Cca	130 - 140	Light olive brown (2.5 Y 5/3 m); loam; massive structure; no roots; strongly effervecent; slightly sticky, slightly plastic consistence; thin coarbonate streaks along interface with C2 horizon; 10% coarse fragments; clear wavy boundary; 5 to 12 cm thick.
С	140 - 160+	Grayish brown (2.5Y 5/2 m); loam; massive structure; no roots; slightly sticky, slightly plastic consistence; 15% coarse fragments.



## Agrologist's Report Supporting Land the Placement of Topsoil 1850 Brentwood Road, Kelowna B.C. McMeeken Family

#### August 6, 2024



1850 Brentwood Road, Kelowna B.C.

Report Prepared by: Carl Withler P.Ag. DBA Greenspark Consulting.

A Context and Scope: this report is prepared at the request of City of Kelowna staff to provide relevant information to support the placement of topsoil and fill over the existing gravel pit at 1850 Brentwood Road. The importation of fill and topsoil is being proposed by an existing cherry growing family in the area (the McMeekens) to expand their cherry production land and rehabilitate a property that has been mined and ultimately neglected for over 15 years.

To assist City staff and ALC in adjudication of this application the following confirmation of commitment to agriculture and land management by the McMeeken family is provided.

#### **Outline of the Report**

- A. Context and Scope.
- B. History and context.
- C. Site review and mapping.
- D. General Commentary
- E. Conclusions and Recommendations.
- **B. History and context:** the project proponents for this project reside, and farm cherries, on Gallagher's Road directly across the street from the property in question. The McMeeken family have a long history of farming in the Kelowna area starting with picking cherries as a teenager to ultimately owning and running the family orchard. This has been a project overtaken over the last 60 years with succession planning in place for the McMeeken sons to inherit and continue to farm the home property as well as the property at 1850 Brentwood Road.

Currently the McMeeken family farm a total of 12.5 acres of high value cherries, transitioning from sour cherries to sweet, export quality cherries in 2015. They pack their fruit at Northern cherries in Glenmore and market with Global Fruit based in Creston and servicing the world. It is a good arrangement for the family, and they wish to continue on this path with production from 1850 Brentwood Road.



C. Site mapping and review; a site review was carried out on August 2, 2024, to confirm soil type and texture of the approximately 13,000 m of material that has been brought to site during the winter of 2023. The material in question was brought from Tower Ranch housing development and placed on the upper portion of the property to be spread downward after drainage infrastructure had been placed by the McMeeken's. The McMeeken's are currently working with a local engineering firm and the City of Kelowna to drain water from the lower portions of the property making it entirely arable and able to support cherry production.



Photo #1: December 2023 aerial image of soil and fill placed and ready to be spread from North (left) to South (right).

To confirm soil and fill texture and quality the Soil Information Finder Tool (SIFT) was used and assuming this soil came from the most recent excavations is likely a Ratnip or Kelowna soil. Either of which are sandy/loamy soils well drained and suitable for treefruit production as proposed by the McMeeken family. Once spread, they will reduce undulation, fill in remnant holes and swales from past gravel extraction and provide the medium for treefruit production.





Image #1: aerial image of 1850 Brentwood Road showing gravel extraction in 2006.





Photo #2: average soil placed at 1850 Brentwood. Well drained with 30% stoniness.

Also, on site currently, the McMeeken's have started testing cherry variety success at this location with a 2-acre planting in the northeast corner of the property which does not require fill/soil placement. This planting is Rainier and BF-9 (Red Dragon Eye) which should be late enough onto the market to produce a price premium. At current planting, irrigation development and fencing costs this "test" planting on the property is an approximately \$70,000.00 investment in agricultural production. The wish is to fully plant out the property once drainage and soil placement have been approved and developed.





Photo #3: test planting of Ranier and BF-9 cherries.

- **D.** General Commentary: I have known, or known of, the McMeeken family for 20 years and followed their progress from sour cherry growers and chocolatier's (Black Knight Chocolate) to successful sweet cherry growers committed to the local fruit producing, packing and sales industry. They are family oriented and wish to pass on a farming legacy to their children and grand children. The placement of fill at 1850 Brentwood Road helps them achieve this by doubling their production, bringing a remnant gravel pit into agricultural production and helping manage drainage water that often challenges local residents and City of Kelowna staff as it exits the property unmanaged. The ultimate development of this orchard will be good for this land within the ALR.
- **E. Conclusions and Recommendations:** in order to assist the McMeeken family and City of Kelowna staff in supporting this fill application the following recommendations are made:
  - Drainage planning should be shared with City staff and approved prior to further land development and placement of fill.
  - Annual reporting of land management activities should be submitted to City staff annually by the McMeeken to ensure farm development remains on track.

The authour of this report remain committed to assisting the McMeeken's, City of Kelowna and ALC staff in coming to reasonable resolution of this current soil placement non-compliance.

ATTACHMENT C

Respectfully submitted,

Carl Withler P.Ag.(#695)





#### Appendix 1: Statement of Qualifications as required by the Professional Governance Act.

Statement of Qualifications: Carl Withler has worked for the Province of British Columbia since 1984 working for the Ministries of Forests, Environment and Agriculture in various roles. From 2003-2020, Mr. Withler was employed by the Ministry of Agriculture located in Kelowna. He started as the Regional Agrologist for the Central and South Okanagan Valley as well as Kettle and Similkameen drainages. Starting in 2014, Mr. Withler became the Tree Fruit and Grape Industry specialist making him the first point of contact for the Ministry for all grape and tree fruit production related information and programming.

Mr. Withler is also a Professional Agrologist, registered and in good standing, with the B.C. Institute of Agrologists (BCIA) and has been so for over 35 years. He is bound by a Code of Ethics and professional practice standards that guide his work and life. Mr. Withler has acted as Knowledgeable Person on several farm practices complaints related to livestock, orchard and vineyard production. He has also been deemed an expert witness in court proceedings related to livestock production.

Added to this, Mr. Withler has worked in the grape and tree fruit industries since 1992, having converted orchard properties to grape production and assisted in, or managed everything from vineyard design to harvest and grape sale contract negotiations. Mr. Withler also spent a brief period of time in the New Zealand wine industry assisting in harvest and vineyard layout.



#### **References:**

Soil Information Finder Tool (SIFT) reviews: 1850 Brentwood Road, Kelowna

Agriculture Capability Mapping: 1850 Brentwood Road, Kelowna

RDOS mapping site: 1850 Brentwood Road, Kelowna

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