



To: Mayor & Each Councillor

From: City Clerk's Office

Materials Relating to an Agenda Item

Meeting: COUNCIL

Item: #13

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October 13<sup>th</sup> 2020

**City of Richmond**  
**c/o Chair of Council**

Schedule 1 to the Minutes of the  
Regular meeting of Richmond  
City Council held on Tuesday,  
October 13, 2020.

**RE: Desktop assessment of suitable imported soil source locations for 8511 No 5 Road, Richmond**

The purpose of this desktop assessment of source soil assessment was to identify areas in Richmond and Delta which are likely to contain suitable topsoil for importation onto 8511 No. 4 Road, Richmond.

Criteria for suitable topsoil, as established through investigation and objective evaluation of agricultural capability end goals, includes:

- loam textured soil (ideally a silt loam to loam),
- minimal/absent coarse fragment content, and
- sourced from an area that is either undeveloped or zoned and used for residential due to a lower risk of contamination compared to a commercial or industrial areas.

Lands zoned and used for agricultural were considered to not be unsuitable source locations because of the regulatory and practical restrictions of removing soils from agricultural lands.

Provincial mapping as 1:20,000 scale provided by the [British Columbia Soil Information Finder Tool](#) (SIFT) indicates that the majority of Richmond contains soils classified as 'unclassified urban'; these soils are found west of No.4 Road and stretch towards coastal areas.

Central Richmond (between No.4 and No. 6 Roads) is characterized by the presence of poorly drained organic soils belonging to the Lumbum, Triggs, Lulu and Richmond soil associations – which are not ideal for relocation and re-use as topsoil without the original conditions which support formation of such a soil type.

Organic soils are still the dominant soil type toward east Richmond (east of No. 6 Road), however there are occasional, discontinuous areas of mineral soils.

Based on the search criteria, provincial mapping provided by SIFT, and description of soils in the publication [Soils of the Langley-Vancouver Map Area](#) (MOE Report No. 15 British Columbia Soil Survey), the following four soil associations were determined to be the most suitable and widespread for topsoil in Richmond:

If there are any questions, please direct them to the undersigned during the Council Meeting today.

A handwritten signature in blue ink that reads "Tom Elliot". The signature is fluid and cursive, with a long horizontal stroke extending to the left.

Thomas R Elliot PhD P.Geo P.Ag



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**Soils association: Annis**

Characteristics: Silt loam texture, 0% coarse fragment content (stone free), poorly drained  
Mapped distribution: Limited presence in Richmond and Delta.



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**Soils association: Blundell**

Characteristics: Silt loam texture, 0% coarse fragment content (stone free), poorly drained

Mapped distribution: Found mostly in agricultural areas in central and east Richmond, and industrial and commercial areas in north Delta proximal to the Fraser River. Limited distribution in residential area(s) shown as star below.



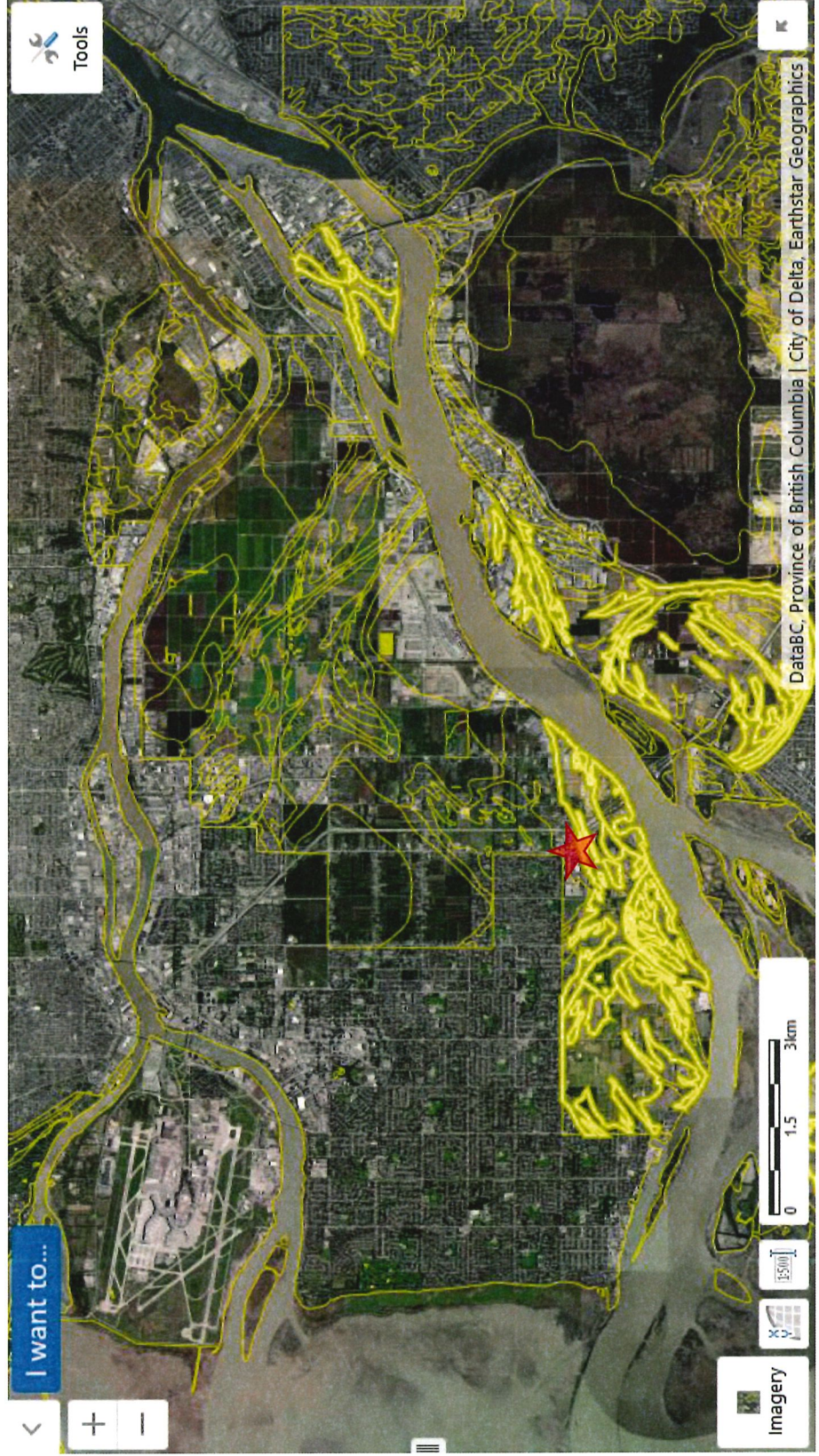
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**Soils association: Crescent**

Characteristics: Silt loam texture, 0% coarse fragment content (stone free), poorly drained

Mapped distribution: Found mostly in agricultural areas in south Richmond, and industrial and commercial areas in north Delta proximal to the Fraser River. Limited distribution in residential area(s) shown as star below.



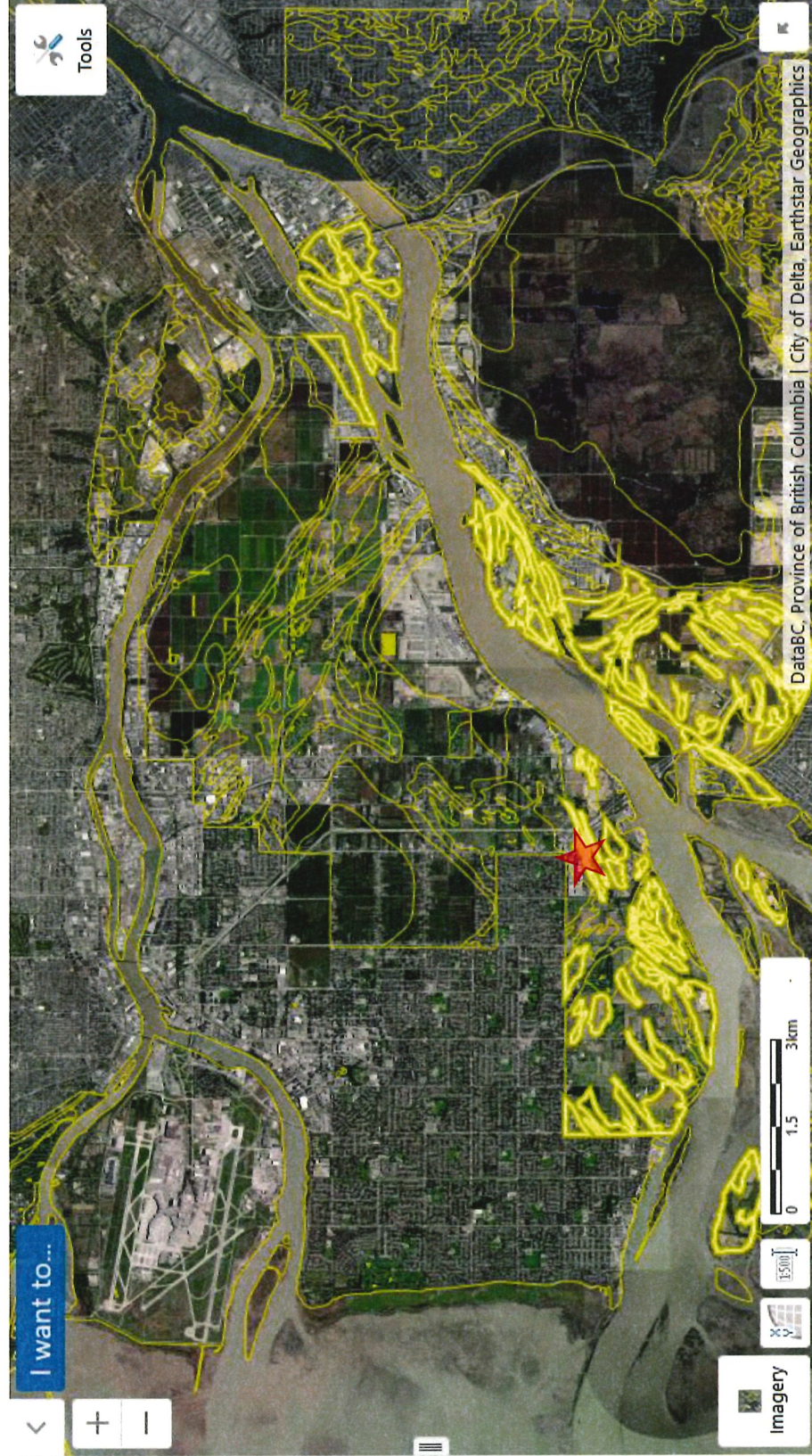


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**Soils association: Westham**

Characteristics: Silt loam texture, 0% coarse fragment content (stone free), poorly drained

Mapped distribution: Found mostly in agricultural areas in south Richmond, and industrial and commercial areas in north Delta proximal to the Fraser River. Limited distribution in residential area(s) shown as star below.



As for Delta, the most suitable topsoil would be soil from the Ladner association. Although Ladner soil covers a substantial area in Delta, most is located on existing agricultural lands and thus cannot be removed. The remaining areas in Delta are mapped as containing silt clay loam or classified as 'unclassified urban'.

#### Soils association: Ladner

Characteristics: Silt loam texture, 0% coarse fragment content (stone free), poorly drained

Mapped distribution: Found mostly in agricultural areas in Delta. Limited distribution in residential area(s) shown as star below.

