

October 26, 2021

[REDACTED]

RE: Summary for RAPR Assessment at 5356 8th Ave. Okanagan Falls BC

Sage Environmental Consulting Ltd (Sage) has been retained by Liam First (Client) to conduct a Riparian Areas Protection Regulation¹ (RAPR) assessment at 5356 8th Avenue in Okanagan Falls BC (Site). It is understood that Client intends to redevelop the Site into multifamily housing. The Site is located on the south shore of Skaha Lake near the outlet of the Okanagan River. Park properties are adjacent to the east and the west of the property. The Site has been used for decades as a seasonal recreational vehicle camping location for long term tenants. The Site is nearly entirely disturbed and developed.

Riparian Areas Protection Regulation

Preliminary review of the property for RAPR setbacks reveals that the site will have a 30m streamside protection and enhancement area (SPEA) as determined by the RAPR assessment methods². The recommended high-water mark (HWM) used for the Stream Boundary determination under RAPR on Skaha Lake is 338.5m geodetic elevation. Due to a flat site at a low elevation, the recommended HWM elevation sits well back of the shoreline on the lot, see drawing 3908-00-V-TOPO attached. A successful accretion application was made at this Site establishing the current Present Natural Boundary (PNB) and legal northern boundary for the property (Plan EPP54703). The PNB aligns closely with the elevation contour of 338.25m which is 0.25m lower than the recommended HWM elevation indicated above. We intend to submit a RAPR assessment that uses the PNB as the Stream Boundary from which the SPEA setback will be set. This would protect 30m of riparian habitat above the shoreline of Skaha Lake and allow a financially feasible development to proceed on the upland portion of the Site. This assessment will be reviewed by the RAPR office prior to approval. Feasibility of procedure to establish an alternate Stream Boundary elevation has been discussed with Ministry staff members at the RAPR office (N. Schwetz) and the Ministry of Forests Lands Natural Resource Operations and Rural Development (FLNRORD), Lands Branch (P. Tobin).

Community Connections, Habitat Restoration, and Species at Risk

The SPEA for this location has been developed and maintained by raking and tilling for decades. Aside from some remnant pruned trees in the SPEA, no appreciable habitat has been conserved or created at this location. There is a habitat restoration opportunity for the SPEA at this location that would allow development of riparian habitat value. It is understood that the community would like to connect the neighboring parks with a public access walkway east-west across the Site inside the SPEA. Construction of the pathway and restoration of the SPEA can be conducted in such a way that a net habitat benefit from current condition is realized at this location. Pathway construction by a municipal government within the SPEA does not require a provincial review by the RAPR office, however, QEP involvement is recommended to ensure application of best management practices, construction

¹ Riparian Areas Protection Regulation, BC Reg 178/2019, <<https://canlii.ca/t/5539/>> retrieved on 2021-10-26

² Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Fish and Aquatic Habitat Branch. Riparian Areas Protection Regulation. Technical Assessment MANUAL. November 2019. V. 1.1

monitoring, and performance monitoring is carried out. Should the pathway be positioned near to the PNB it may be 'in and about a stream' and require Provincial review under Section 11 of the Water Sustainability Act³.

It is known that the park east of, and adjacent to the Site features the short-rayed aster (*Symphyotrichum frondosum*). This is a provincially and federally protected species at risk known to occur in eight locations within the Okanagan. This species is also known to co-occur with other SEAR (species and ecosystems at risk). During the site visit on October 13, 2021, significant populations of short-rayed aster were noted in the park adjacent to and east of the Site. Continual maintenance of the riparian area and shoreline of the project Site has likely precluded significant establishment of this species on the subject project Site. Two individual plants were noted on the Site near the eastern fence line but as these are an annual species that reproduce entirely by seed it is unknown if they will persist in this historically disturbed area.

Future work within the 30m riparian area or shoreline of Skaha Lake will need to be considerate of the nearby presence of short-rayed aster. The proposed enhancements may be an opportunity to improve habitat conditions through restoration to support riparian and shoreline species including SEAR species. The recovery strategy for the short-rayed aster specifies stewardship as the primary objective to ensure protection and recovery of the species⁴. Ongoing monitoring and maintenance of restored shoreline and riparian areas may be necessary should restoration efforts be conducted, and a viable population established.

As the primary population for Short-Rayed Aster is present in the neighbouring park, it is recommended that the Regional District of Okanagan Similkameen (RDOS) undertake or facilitate a botanical survey to map and quantify the extent of SEAR within the park and determine whether the current species mapping adequately covers the SEAR range.

I trust this letter meets your needs. Questions may be directed to the undersigned.

Respectfully submitted,



Matthew Davidson, P.Ag.,
Sage Environmental Consulting Ltd

³ Water Sustainability Act, SBC 2014, c 15, <<https://canlii.ca/t/54qx7>> retrieved on 2021-10-26

⁴ Environment Canada. 2013. Recovery Strategy for the Short-rayed Alkali Aster (*Symphyotrichum frondosum*) in Canada. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. XIX pp. + Appendix.



STRATA PLAN
KAS1845

A
PLAN 36275

NORTHING..... 5469125.158
EASTING..... 312778.960
ELEVATION..... 340.53

NORTHING..... 5469240.753
EASTING..... 312786.157
ELEVATION..... 338.22

LEGEND

EXISTING

- EDGE OF PAVEMENT
 - - - FENCE LINE
 - OVERHEAD TELE/EC
 - ⊙ MANHOLE - STORM
 - ⊙ MANHOLE - SANITARY
 - ⊙ VALVE - WATER
 - ⊙ FIRE HYDRANT
 - ⊙ METER - GAS
 - ⊙ POLE - HYDRO
 - ⊙ POLE WITH TRANSFORMER
 - GUY WIRE
 - 4 SIGN POST
 - CATCH BASIN
 - IRON PIN - FOUND
- DATE OF FIELD SURVEY: AUGUST 27, 2021.

COMPILED (AS-BUILT DRAWINGS)

- SANITARY SEWER
- SANITARY SERVICE
- GAS MAIN

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DATUM

NAD 83 (CSRS) 4 0 0 BC 1.
GRID BEARINGS AND UTM COORDINATES DERIVED FROM GNSS OBSERVATIONS TO PENTICTON ACTIVE CONTROL STATION (PNTC), CAN-NET REAL TIME NETWORK, AND ARE REFERRED TO THE CENTRAL MERIDIAN OF UTM ZONE 11.
THIS PLAN SHOWS GROUND MEASURED DISTANCES. THE LINEWORK CONTAINED WITHIN THE DIGITAL CAD VERSION OF THIS DRAWING IS AT GRID. TO COMPUTE GRID LEVEL DISTANCES, MULTIPLY GROUND DISTANCES BY THE COMBINED SCALED FACTOR OF 0.99997972.
ELEVATIONS ARE IN METRES, REFERRED TO GEODETIC DATUM CGVD2013 (GEOID MODEL HTv2.0), AND DERIVED FROM PENTICTON ACTIVE CONTROL STATION (PNTC), CAN-NET REAL TIME NETWORK.
CONTOUR INTERVAL IS 0.25m.

A
PLAN KAP60058

8th AVENUE

RAILWAY LANE

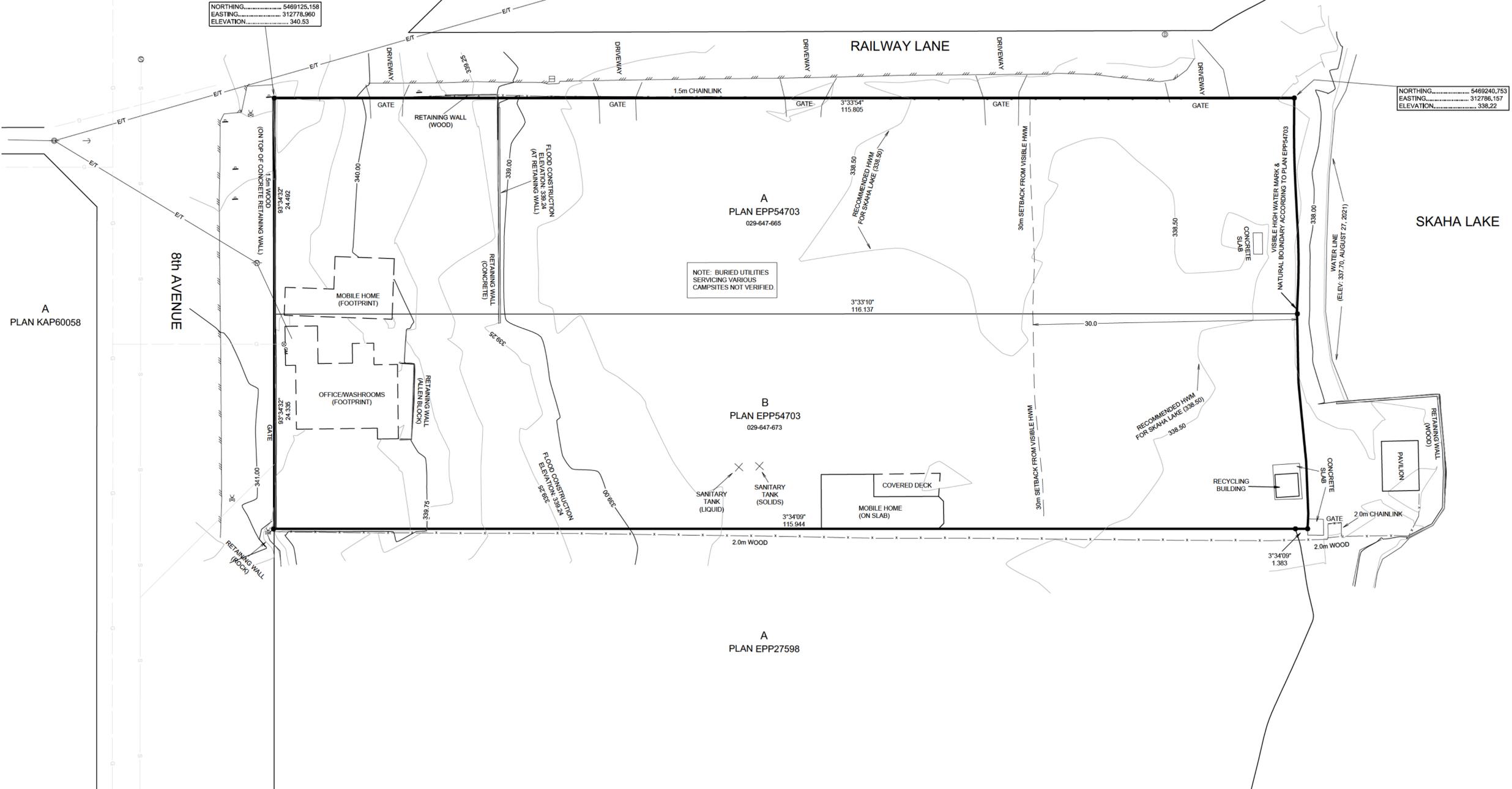
SKAHA LAKE

A
PLAN EPP54703
029-647-665

B
PLAN EPP54703
029-647-673

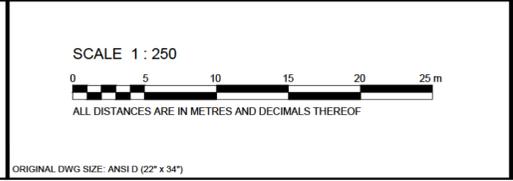
A
PLAN EPP27598

NOTE: BURIED UTILITIES
SERVICING VARIOUS
CAMPSITES NOT VERIFIED.



0	2021-09-02	DRAWING ISSUED	TB	DS
Rev	Date	Description	Drawn	Design

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LIAM CONSTRUCTION
5356 8TH AVENUE, OKANAGAN FALLS, BC

TOPOGRAPHIC SURVEY PLAN OF
LOT A AND LOT B DISTRICT LOT 2883S
SIMILKAMEEN DIVISION YALE DISTRICT PLAN EPP54703

Drawing No.	3908-00-V-TOPO
Project Number	2422-03908-00
Rev.	-