Stantec

PERFORMANCE VERIFICATION PLAN

380 Harvey Avenue, Kelowna, BC

June 9, 2022

Prepared for:
The City of Kelowna

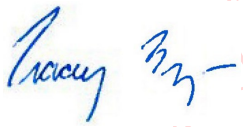
Prepared by:
Stantec Consulting Ltd.

Project Number:
123221547

Limitations and Sign-off

This document entitled Performance Verification Plan 380 Harvey Avenue, Kelowna, BC was prepared by Stantec Consulting Ltd. (“Stantec”) for the account of The City of Kelowna (the “Client”) to support the regulatory review process for its application (the “Application”) for a certificate of compliance (CofC) for the Site at the 380 Harvey Avenue, Kelowna, BC (the “Project”). In connection therewith, this document may be reviewed and used by the BC Ministry of Environment and Climate Change Strategy (BC ENV) participating in the review process in the normal course of its duties. Except as set forth in the previous sentence, any reliance on this document by any other party or use of it for any other purpose is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The information and conclusions in the document are based on the conditions existing at the time the document was published and does not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by the Client or others, unless expressly stated otherwise in the document. Any use which another party makes of this document is the responsibility and risk of such party. Such party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other party as a result of decisions made or actions taken based on this document.

Prepared by:



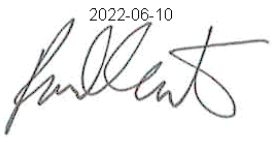
Digitally signed by L'Espérance, Tracey
Date: 2022.06.10 08:30:11 -07'00'

Signature

Tracey L’Espérance, R.P.Bio

Printed Name

Reviewed by:



Signature

Paul Embregts, P.Eng, CSAP

Printed Name

Stantec Permit #1002862

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1 Background

Stantec Consulting Ltd. (Stantec) was retained by The City of Kelowna (the City) to support an application for a risk-based Certificate of Compliance for 380 Harvey Avenue, Kelowna, BC. Stantec completed a Detailed Risk Assessment of residual impacts, post-remediation, at the Site which showed that risks were acceptable as contamination at the Site is risk managed.

Stantec has prepared this Performance Verification Plan (PVP) that presents the principal risk control that must remain in place and be managed appropriately at the Site so that risk from exposure continues to be mitigated. The PVP was prepared in accordance with BC Ministry of Environment and Climate Change Strategy (BC ENV) guidance (BC ENV 2022) and lists and describes the basis for risk control necessary to confirm the Site poses an acceptable risk to human health and the environment, in accordance with the BC Contaminated Sites Regulation (CSR) Protocol 1 (BC ENV 2021) and the exposure pathways evaluation and risk characterization sections of the Site's Detailed Risk Assessment (DRA, Stantec 2022). This PVP also outlines the actions needed to support implementation and maintenance of the risk control at the Site.

2 Required Risk Control

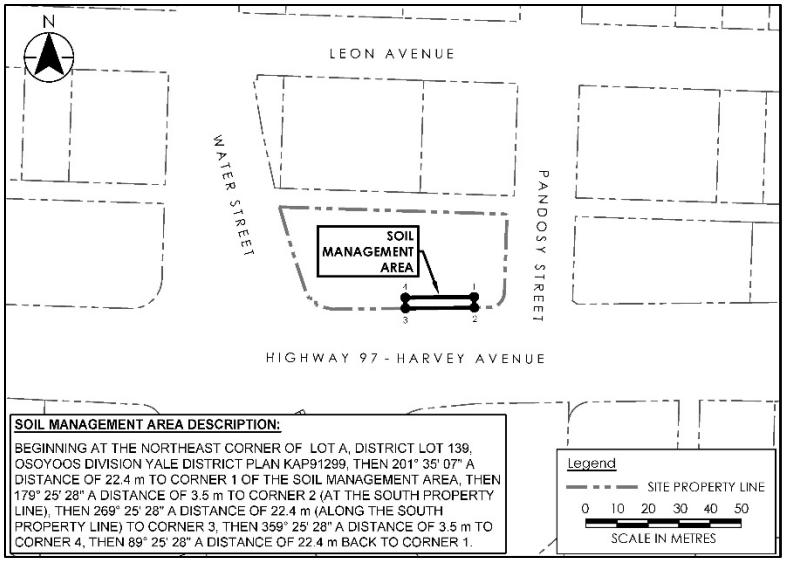
The principal risk control that must be maintained at the Site and is the focus of this PVP is as follows:

- Soil contamination in the Soil Management Area must remain at depth and covered by the existing 1 metre (m) of surface soil, or by a future concrete building foundation, 1 m soil cover, or other suitable cap

The Soil Management Area, shown in Figure 2.1, is defined by the following metes and bounds:

> BEGINNING AT THE NORTHEAST CORNER OF LOT A, DISTRICT LOT 139, OSOYOOS DIVISION YALE DISTRICT PLAN KAP91299, THEN 201° 35' 07" A DISTANCE OF 22.4 m TO CORNER 1 OF THE SOIL MANAGEMENT AREA, THEN 179° 25' 28" A DISTANCE OF 3.5 m TO CORNER 2 (AT THE SOUTH PROPERTY LINE), THEN 269° 25' 28" A DISTANCE OF 22.4 m (ALONG THE SOUTH PROPERTY LINE) TO CORNER 3, THEN 359° 25' 28" A DISTANCE OF 3.5 m TO CORNER 4, THEN 89° 25' 28" A DISTANCE OF 22.4 m BACK TO CORNER 1.

Figure 2.1 Soil Management Area



This risk control is mitigating human health and ecological exposure to contamination greater than BC ENV Schedule 3.1 Numerical Soil Standards underlying the Site and was the basis of the DRA report's conclusion of an incomplete exposure pathway and acceptable risks in Problem Formulation, as depicted on the figure in Appendix A.

The City of Kelowna is the current owner of the Site and is presently the responsible party for maintaining compliance with this PVP; the current contact is Graham Hood, Strategic Land Development Manager, Real Estate. It is understood that the City will transfer the responsibility for maintaining the risk controls to a new Site owner as part of their divestment of the property.

3 Required Actions to Implement the Required Risk Control

The following actions are required to implement the required risk control:

- Site owner and/or operator must ensure that at least 1.0 m of clean soil cover, building foundation, concrete, or some other suitable cap remain in place, overlying material that exceeds Schedule 3.1 Numerical Soil Standards.
- A qualified environmental professional should be retained to monitor for soil contamination exposed or removed during future excavation activities on the Site and to advise on appropriate soil management.

The risk control should be legally implemented through the addition to Schedule B Requirements and Conditions (Clause 2.) of the Site's Certificate of Compliance (CofC), and the applicant's (City of Kelowna) signature of the Site's Summary of Site Condition, which includes the risk control (Section 5.2).

If the City transfers ownership of this Site, a copy of this PVP should be provided to the new owner and followed.

4 Other Considerations and Contingency Planning

Soil contamination exceeding numeric standards are present in soils at depths greater than 1.0 metre below ground surface (mbgs) but are currently capped by at least 1 m of surface soil. This surface soil is expected to remain in the future; should redevelopment occur, areas of the Site are expected to be covered by building foundation, or concrete. These barriers are currently and/or will continue to prevent exposure to on-site receptors. Therefore, an immediate risk of exposure to the soil contamination by receptors is not present if the risk control does not become compromised. Furthermore, retaining a qualified environmental professional to advise on appropriate soil management during future excavation activities on the Site would mitigate future exposure and potential unacceptable risk. Consequently, a contingency action plan is not proposed in this PVP.

5 Record Keeping

The City should retain a written record of notification of the risk control to the new owner prior to transferring ownership of the Site.

Performance verification actions identified above are required during development of the Site. Records of the performance verification should be retained on file. No scheduled reporting to the Society of Contaminated Sites Approved Professionals of BC (CSAP) Review Services Committee or BC ENV with respect to the risk control is recommended.

Should performance verification actions indicate that there is a failure of the risk control, notification must be made to the Director at BC ENV.

6 Closure

We trust that the information provided in this letter report meets your present requirements. If you have questions concerning this report, please contact us.

7 References

BC ENV. (2021) BC Ministry of Environment and Climate Change Strategy. Protocol 1 for Contaminated Sites *Detailed Risk Assessment* Version 3.0 dated May 13, 2021.

BC ENV. (2022). BC Ministry of Environment and Climate Change Strategy. Performance Verification Plans. Retrieved June 2, 2022, from https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/remediation-planning/remediation-plan-aip/performance-verification-plans

Stantec. 2022. Detailed Risk Assessment, 380 Harvey Avenue, Kelowna, BC. Prepared for the City of Kelowna by Stantec Consulting Ltd. June 9, 2022.

8 Limitations

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential liabilities associated with the identified property.

This report provides an evaluation of selected environmental conditions associated with the identified portion of the property that was assessed at the time the work was conducted and is based on information obtained by and/or provided to Stantec at that time. There are no assurances regarding the accuracy and completeness of this information. All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

The opinions in this report can only be relied upon as they relate to the condition of the portion of the identified property that was assessed at the time the work was conducted. Activities at the property subsequent to Stantec's sampling may have significantly altered the property's condition. Stantec cannot comment on other areas of the property that were not assessed.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the data available and the results of the work. They are not a certification of the property's environmental condition. This report should not be construed as legal advice.

This report has been prepared for the exclusive use of The City of Kelowna and any use by any third party is prohibited with the exception of the BC Ministry of Environment and Climate Change Strategy (ENV) for the purposes of issuing an instrument. Stantec assumes no responsibility for losses, damages, liabilities or claims, howsoever arising, from third party use of this report. As the purpose of this report is to identify site conditions which may pose an environmental risk; the identification of non-environmental risks to structures or people on the site is beyond the scope of this assessment.

The conclusions are based on the site conditions encountered by Stantec at the time the work was performed at the specific testing and/or sampling locations, and conditions may vary among sampling locations. Should additional information become available which differs significantly from our understanding of conditions presented in this report, Stantec specifically disclaims any responsibility to update the conclusions in this report.

Appendix A Figures

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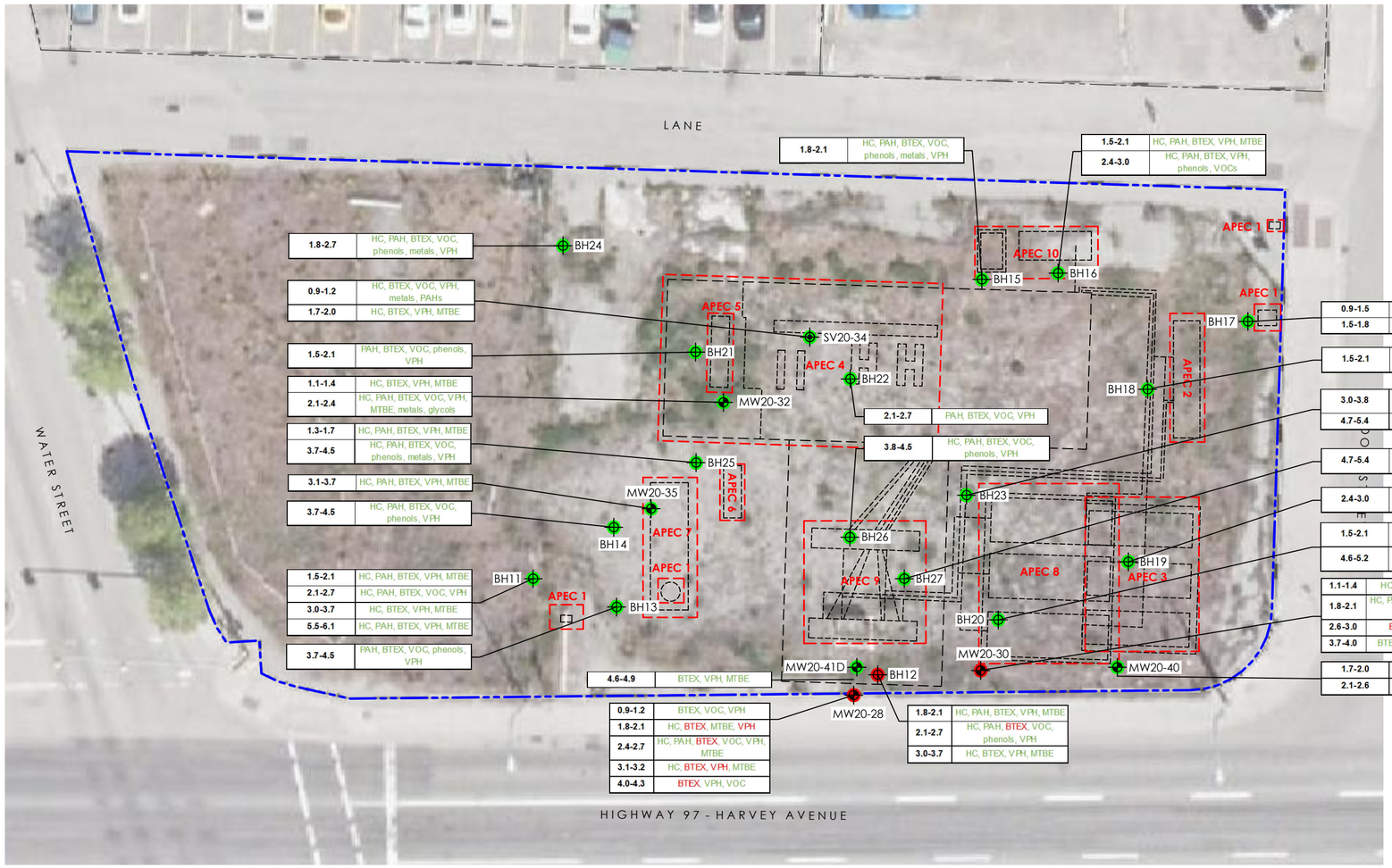

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Legend

- SITE BOUNDARY
- LOT LINE
- FORMER SITE STRUCTURE
- MONITORING WELL (SLR, 2019)
- MONITORING WELL (STANTEC, 2020)
- SOIL VAPOUR PROBE (STANTEC, 2020)
- SOIL ANALYTICAL RESULTS LESS THAN CSR CL STANDARDS OR SITE SPECIFIC STANDARD
- SOIL ANALYTICAL RESULTS EXCEEDS CSR CL STANDARDS OR SITE SPECIFIC STANDARD
- HC — HYDROCARBONS (EXTRACTABLE PETROLEUM HYDROCARBONS)
- BTEX — BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
- VPH — VOLATILE PETROLEUM HYDROCARBONS
- PAH — POLYCYCLIC AROMATIC HYDROCARBON
- MTBE — METHYL TERT-BUTYL ETHER
- TCLP — TOXICITY CHARACTERISTIC LEACHING POTENTIAL

SAMPLE DEPTH (m) | SAMPLE ANALYTE
#.## - #.## | HC, BTEX, VPH, MTBE

SCALE IN METRES
0 2.5 5 7.5 10
1:250

Client/Project
CITY OF KELOWNA

STAGE 1 PRELIMINARY SITE INVESTIGATION UPDATE AND DETAILED SITE INVESTIGATION
380 HARVEY AVENUE, KELOWNA, BC

Title
SOIL ANALYTICAL RESULTS POST-REMEDIATION

Project No.	Scale	Date
123221547	1:250	2020.12.18
Drawn By. G. HUYNH	Checked By. P. EMBREGTS	Designed by. K. BAKER
Drawing No. **5c**	Sheet 1 of 1	Revision 0