

# Temporary Use Permit TUP21-0001



This permit relates to land in the City of Kelowna municipally known as

**2125 Baron Road**

and legally known as

**Lot A District Lot 126 ODYD Plan EPP110834**

and permits the land to be used for the following development:

**C4 – Urban Centre Commercial**

The present owner and any subsequent owner of the above described land must comply with any attached terms and conditions.

Date of Council Decision                      June 22, 2021

Decision By:                                      Council

Development Permit Area:                      N/A

Existing Zone:                                      C4 – Urban Centre Commercial

Future Land Use Designation:                      MXR – Mixed Use (Residential / Commercial)

## **This is NOT a Building Permit.**

In addition to your Temporary Use Permit, a Building Permit may be required prior to any work commencing. For further information, contact the City of Kelowna, Development Services Branch.

## **NOTICE**

This permit does not relieve the owner or the owner's authorized agent from full compliance with the requirements of any federal, provincial or other municipal legislation, or the terms and conditions of any easement, covenant, building scheme or agreement affecting the building or land.

Owner:                      Victor Properties Ltd., Inc. No. BC1050457

Applicant:                      WSP Canada Group Limited.

Planner:                      Andrew Ferguson

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Terry Barton  
Development Planning Department Manager  
Development Planning

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Date

### 1. SCOPE OF APPROVAL

This Temporary Use Permit applies to and only to those lands within the Municipality as described above, and any and all buildings, structures and other development thereon.

This Temporary Use Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this permit, noted in the Terms and Conditions below.

The issuance of a permit limits the permit holder to be in strict compliance with regulations of the Zoning Bylaw and all other Bylaws unless specific variances have been authorized by the Development Permit. No implied variances from bylaw provisions shall be granted by virtue of drawing notations that are inconsistent with bylaw provisions and that may not have been identified as required Variances by the applicant or Municipal staff.

### 2. CONDITIONS OF APPROVAL

- a) The duration of the Temporary Use Permit Application TUP21-0001 shall be for a total of three (3) months.
- b) The siting and location of the mobile rock crusher to be in accordance with Schedule "A".

This Temporary Use Permit is valid for three (3) months **from the date of Council** approval.

### 3. PERFORMANCE SECURITY

None required.

### 4. INDEMNIFICATION

Upon commencement of the works authorized by this Permit the Developer covenants and agrees to save harmless and effectually indemnify the Municipality against:

- a) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and by whomsoever brought, by reason of the Municipality said Permit.

All costs, expenses, claims that may be incurred by the Municipality where the construction, engineering or other types of works as called for by the Permit results in damages to any property owned in whole or in part by the Municipality or which the Municipality by duty or custom is obliged, directly or indirectly in any way or to any degree, to construct, repair, or maintain.

**The PERMIT HOLDER is the CURRENT LAND OWNER.  
Security shall ONLY be returned to the signatory of the  
Landscape Agreement or their designates.**

**SCHEDULE A**  
This forms part of application # TUP21-0001

Planner Initials **AF**

City of Kelowna  
COMMUNITY PLANNING

**LEGEND:**

- NILEX SILT FENCE CONSTRUCTION
- INFILTRATION DITCH

0 5 1:500 25m

REVISION:

REV	DATE	DESCRIPTION	BY
3A	2021-02-01	ISSUED FOR OWNERS REVIEW	SDS
2A	2021-02-01	ISSUED FOR BUILDING PERMIT	SDS
1A	2021-01-15	ISSUED FOR 90% DESIGN REVIEW	SDS

SEAL:

DISCLAIMER: THIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR REVISED WITHOUT WRITTEN PERMISSION BY WSP. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND UTILITY LOCATIONS AND REPORT ALL ERRORS AND OMISSIONS PRIOR TO COMMENCING WORK.

DATE: 2020-11-20

DESIGNED BY: S. Cadieux, P.Eng.

APPROVED BY: S. Springstead, GradTech

DRAWN BY: S. Springstead, GradTech

MODIFIED BY: K. Unger, GradTech

APPROVED BY: S. Cadieux, P.Eng.

DISCIPLINE: INFRASTRUCTURE

**wsp**

WSP Canada Inc.  
700-1631 Dickson Ave, Kelowna, BC V1Y 0B5  
T 250-860-5500 | www.wsp.com

PROJECT NUMBER: 17M-02290-01-05

CLIENT: **COSTCO WHOLESALE**

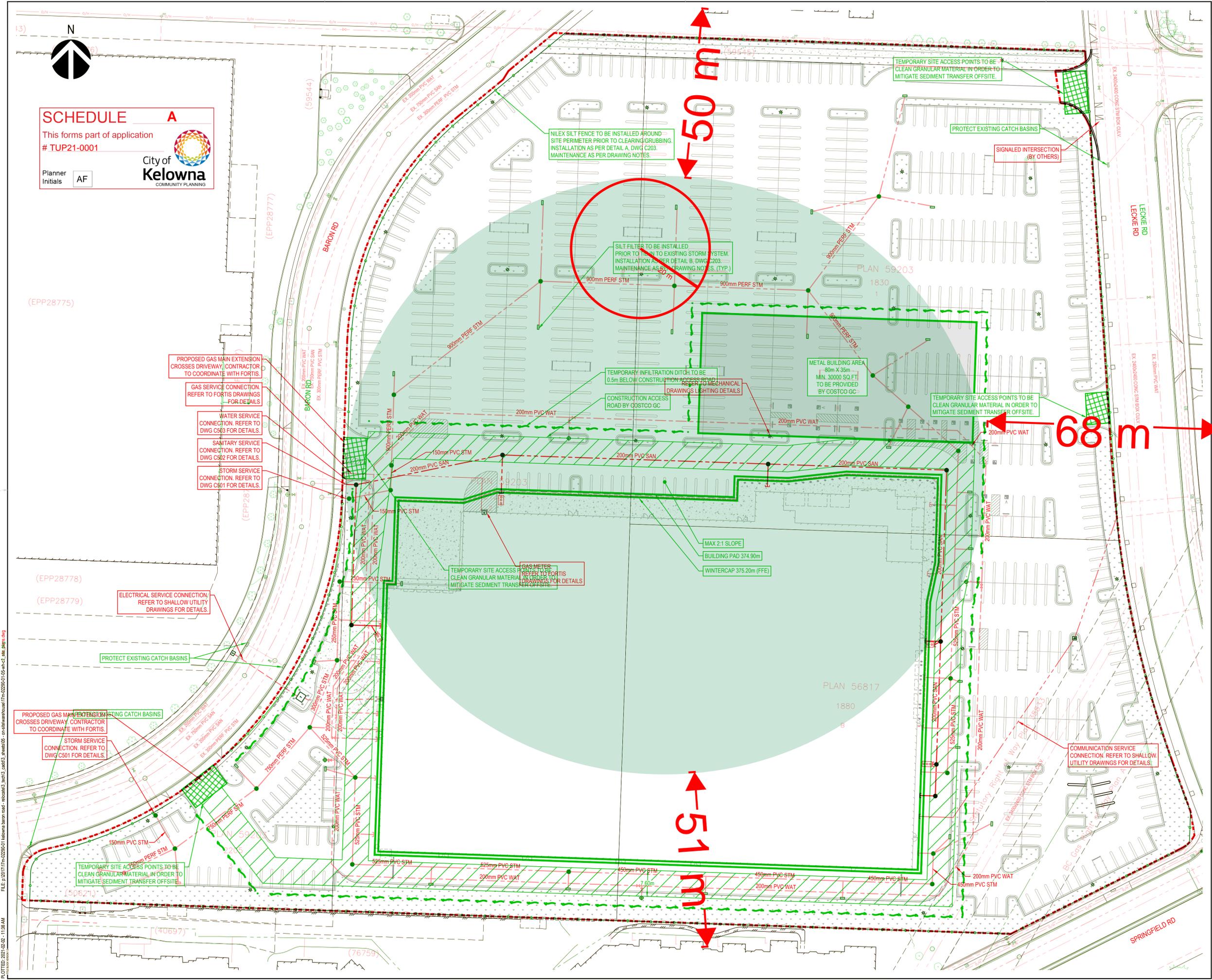
CLIENT REF. #:

PROJECT: **COSTCO KELOWNA WAREHOUSE**

TITLE: **EROSION & SEDIMENT CONTROL CONSTRUCTION STAGE**

DRAWING NUMBER: **C203**

REV: **3A**



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 C:\p\2021\17M-02290-01\kelowna\warehouse\17m-02290-01-05-eroc-3a.dwg



## MEMO

**TO:** City of Kelowna, Jason Issler  
**FROM:** WSP Canada Inc, Andrew Bruce  
**SUBJECT:** Temporary Use Permit for Operation of a Crusher  
**DATE:** January 27, 2021

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## INTRODUCTION

Please find the accompanying application forms, fees and title information for a Temporary Use Permit for 2205 and 2125 Baron Road and 1880 Leckie Road. This is the site for the proposed new Costco Warehouse. 1901 Baron Road is also part of the overall development site but the Temporary Use Permit does not need to apply to this address.

The request for the temporary use permit is to permit the use of a mobile rock crusher on site for a limited portion of the construction stage and within limited operating hours per day. The City of Kelowna’s current position is that crushing plants are not permitted to operate outside of I5 – Extraction zoned properties. The material that would be processed would consist of “oversized” rock or cobble. This native material is too large to be used for any part of the site grading or underground works. If it can be processed or crushed on site, it can be made into a range of material from appropriate base material, granular fills and structural fill. If it cannot be processed on site, it needs to be hauled off-site to a gravel pit.

Our proposal includes specific siting criteria to provide adequate distance separation from adjacent residential, a specific number of days of operation (duration), and mitigation efforts for dust. Finally, we provide some data on noise that compares the operation of the mobile crushing plant to source of noise emission that are considered as acceptable normal construction activities. We will also speak to the reasons why allowing the mobile crushing operation on site has broader benefits to the community.

## PROPOSED LOCATION

The attached Schedule A shows the proposed location parameters for the mobile crushing plant. The larger green circle is the proposed minimum distance away from residential uses where the crushing plant could be placed to operate. While these crusher are “mobile” they typically aren’t moved more than once a day. It is more likely that they would be moved to a location and operate for several days in one place. They are really only moved to get them out of the way of other site work.

The 20 m smaller circle is the actual extent of the operation zone around the crushing plant.

## OPERATION PARAMETERS

WSP is providing Civil Engineering services to the Costco group, has reviewed the Geotechnical Engineering reports and coordinated with civil contractor to estimate the amount of material that could be processed for re-use on the site. There is not material that will be process and exported from the overall Costco development site (Warehouse and Gas Bar sites). The estimated amount of material is approximately 4,500 cubic metres. This would equate to approximately 320 tandem dump truck loads if the material could not be processed on site.

These quantity estimates have been used to calculate the amount of time required to process the oversized material into usable granular material for site construction. It is proposed that crushing operation be permitted to operate the same as any other equipment on site which is subject to the City of Kelowna Noise Bylaw. In order to minimise crushing duration, material will be stockpiled at or near the crushing plant to be processed in batches. This means that the crushing may run for a few days consecutively and then stop until the next batch of material is ready to process. The contractor estimates that based on 8 hours of crushing per day, there will need to be a total of 21 days of crushing activity, not necessarily in one consecutive period of time. In order to account for possible mechanical maintenance or other contingency, the requested number of days of operation is 28 days.

## DUST MITIGATION

Most of the newer mobile crushing plants have built in “wash bars” that introduce water into the material during crushing. This dampens the dust at the source and reduces wind borne dust migrating from the crushing plant. In the case that the crusher plant available to the site does not have this built in dust suppression system, the contractor has committed to apply water manually to the material prior to crushing and after it has been produced. It should be noted that this is a large site that will be regraded in its entirety. Dust suppression throughout construction will follow standard procedures but elimination of dust is not possible. The contributory dust from the crushing operation is not anticipated to make the overall level of dust on the site any worse than normal construction practices would dictate.

## NOISE IMPACTS

WSP has collected some limited data on rock crushers and has reviewed published data on other construction equipment such as large bulldozers and excavators that would be commonly used on a construction site such as Costco’s. Noise data differs between brands for the same type of equipment and the mechanical condition of the machines can also provide variable noise emissions. The contractor for Costco has also provided recent data from a quarry in Vernon that supports the publicly available data but suggests that the noise levels are generally lower than the published data.

Our general finding is that a typical bulldozer or excavator emits between 80 and 90 decibels during normal operations. These pieces of equipment are mobile and will move around the site during operations. As such, the distance from the equipment to the adjacent residential will be constantly changing.

The rock crusher will be placed in one location and may move once or twice during the entire duration of the crushing operation. Therefore, we can assure that the placement of the machine can

be done in a way to maximise separation from the residential use. The data we have on rock crushers show that, immediately adjacent to the machine, noise emissions are between 90 and 99 decibels. However, we also have data of the noise level at a 20 m separation which ranges from 74 to 85 decibels. Given that the crushing plant will not be located closer than 50 m from residential, the noise levels will be significantly less than at the 20 m data measurements. In terms of comparative noise emission experienced by adjacent residential users, the crushing plant will not produce any greater impact than other machinery being used and accepted as common construction activity.

The more recent data collected from the Quarry in Vernon suggested that the noise levels at 20 m distance from the machine were in the range of 70-75 decibels and at 50 m, they were as low as 62 decibels.

As a final note, all mobile equipment is required to use movement awareness beepers as a safety precaution. These beepers are, by design, louder than the operating equipment and produce noise emissions in the range of 90-110 decibels.

## ENVIRONMENTAL AND EFFICIENCY CONSIDERATIONS

As previously noted, the estimated volume of oversized material that would be processed on site is approximately 4,500 cubic metres which is the equivalent of approximately 320 tandem dump truck loads. If the material cannot be processed on-site, it has to be removed from the site. The two closest gravel pits to export this material to are either in West Kelowna (12 kms) or Lake Country (17 km). Considering round trips to haul to the pit and return to site, this equates to between 7,680 to 10,880 kms of truck trips that could be eliminated by the on-site processing.

In terms of efficiency, not only does the on-site processing eliminate the truck trips to export the material, but it facilitates a waste material being converted into a useable and necessary product for the construction. Aggregates of all kinds are a valuable and non-renewable resource and every effort should be made to use them as efficiently as possible.

## CONCLUSION

This application for a Temporary Use Permit is being submitted to allow for a rock crushing plant to be used on the new Costco Warehouse site intermittently for a total duration of 28 days during the construction in 2021. The hours of operation are proposed to be the same as for the rest of the equipment on site and regulated by the City of Kelowna Noise Bylaw. Mitigation measures will be applied to reduce dust and we propose that the noise impacts will be no greater than other machinery used under accepted construction practises. Furthermore, the operation of the crusher on site will provide efficiency and reduce environmental impacts by eliminating between 7,680 and 10,880 kilometers of truck travel on local roads.

Andrew Bruce  
Practice Lead, Private Development