

***PUBLIC HEARING WILL BE HELD IN THE  
MUNICIPAL COUNCIL CHAMBERS ON  
TUESDAY, OCTOBER 13, 2020 AT 7:00 P.M.***

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**A G E N D A**

- 1. Director of Development Services Report – Site-Specific Zoning Bylaw Text Amendment for the Property Legally Described as Lot B, District Lot 361, Range 5, Coast District, Plan 1995 (3309 Kalum Street)***

*A. Thompson  
Clerk*



**CITY OF TERRACE**  
**DEVELOPMENT SERVICES DEPARTMENT**  
**PUBLIC HEARING REPORT**

**MEMO:** Heather Avison, CAO for Committee of the Whole

**FROM:** David Block, Director of Development Services

**DATE:** October 13, 2020

**SUBJ:** Site-Specific Zoning Bylaw Text Amendment for the Property Legally Described as Lot B, District Lot 361, Range 5, Coast District Plan 1995 (3309 Kalum Street)

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**RECOMMENDATION:**

*It is recommended that following the holding of a Public Hearing, the bylaw to amend Zoning Bylaw No. 2069-2014 by changing the permitted uses and regulations in the C4 – Local Commercial Zone by adding “Micro Brewery/Craft Distillery” as a Site-Specific Primary Permitted use, for the property legally described as Lot B, District Lot 361, Range 5, Coast District Plan 1995 (3309 Kalum Street) be considered for third reading and adoption.*

**BACKGROUND:**

On June 17, 2020, the City received a Zoning Bylaw amendment application from Joseph Lavoie, the President of Coppersive Foods (1980) Ltd. to add Micro Brewery/Craft Distillery as a permitted use on the property at 3309 Kalum Street. The property is zoned C4 – Local Commercial and is designated as “Downtown” in the Official Community Plan. The subject lands are currently used as a convenience store and gas station. The applicant wishes to continue operating these uses in conjunction with the proposed Craft Distillery. Longer-term, the applicant has indicated that the uses of convenience store and gas station will be phased out.

Craft Distilleries were not a permitted use in Zoning Bylaw 2069-2014 when this application was initiated. Under a Zoning Bylaw amendment process, Micro Brewery/Craft Distillery was added as a primary permitted use in select commercial zones on August 24<sup>th</sup>, 2020.

However, Micro Brewery/Craft Distillery was not included as a primary permitted use in C4 – Local Commercial zoned properties as part of the recent Zoning Bylaw amendments. These properties are intended to have uses that attract clients from the

*Brewery/Craft Distillery uses demonstrated that neighbourhood commercial zones most often do not include this use.*

*In reviewing the appropriateness of this application, staff considered the following:*

- While the property is zoned C4 Neighbourhood Commercial, the site is designated as downtown in the OCP and therefore may be suitable for more active commercial uses.*
- Expanding commercial opportunities as the site transitions from being a gas station could help ensure the property does not become a vacant brownfield site like several historic gas station sites in downtown.*
- Preliminary calculations indicate that the Craft Distillery would likely have a relatively low maximum occupant load due to the small size of the proposed Craft Distillery. This could make the use more compatible adjacent to a residential area.*

*Neighbourhood impacts may depend on the type of endorsements received through the LCRB. A "Tasting Room Endorsement" has a consumption limit of 45ml per person/per day and restricts operating hours to 11pm. A "Lounge Endorsement" would allow a designated area for sale and service of liquor, remove the tasting room consumption limit, and extend the permitted operating hours.*

*Staff consulted with Fernie and Gibsons, two BC municipalities that have operational Craft Distilleries, near or in downtown core areas. These municipalities did not report negative community or neighbourhood impacts from these businesses. Overall, many of these distilleries have been seen as a positive addition to communities.*

*This application has implications related to the BC Building and Fire Code. If this zoning bylaw amendment is approved, Building Permits and Development Permits would both be required prior to construction of the proposed craft distillery. The applicant would also be required to obtain provincial licensing for the production and distribution of liquor products.*

*The City of Terrace's Building Inspection staff and Fire Officials were engaged to review the feasibility of the proposed use, considering the BC Building Code requirements for Craft Distilleries and the surrounding land uses. Staff suggests the requirements could be achieved on the subject lands in the existing building. However, the Distillery use would receive an F1 (High Hazard) classification due to the flammable and explosive potential of the products being manufactured and stored onsite. Therefore, additional safety measures in the building such as a sprinkler system and fire separation from other uses on the property would be required.*


*The applicant has provided an engineering study (see attached study) that supports that the proposed use to be classified as an F2 (Medium Hazard). Staff consulted with other municipalities in British Columbia that have active Craft Distilleries. In these*



communities, Craft Distilleries have been classified in some cases as F1 and others as F2, but regardless of classification they required extensive safety measures be implemented into the buildings in order to meet BC Building Code requirements.

This zoning bylaw amendment received 1<sup>st</sup> and 2<sup>nd</sup> readings at the September 14<sup>th</sup>, 2020, Council meeting. Public Notices appeared in the October 1<sup>st</sup>, 2020, and the October 8<sup>th</sup>, 2020 issues of the Terrace Standard and were also posted online. The notices indicated the place and time where the relevant bylaws and background documents could be viewed and included the time and location for the Public Hearing and the methods by which citizens could make presentations to Council. Notices were also mailed to the adjacent property owners and tenants.

At the time of writing this report staff has received nine written submissions of support for the application and one verbal submission outlining concerns. Concerns were brought forward from Cal Albright, Executive Director of Kermode Friendship Society, with offices located adjacent to the site of the proposal, at 3313 Kalum Street. Mr. Albright is concerned that proposed use would be adjacent to a social services agency that serves vulnerable individuals. All correspondence received in support of the application are included with this report. At the time of writing there were no written submissions received in opposition to the proposal.

  
Prepared by – Jack Cherniawsky,  
Planner I

  
Submitted by – Tara Irwin, City Planner

  
Reviewed by - David Block,  
Director of Development Services  
JC/dk

  
Approved for Submission to Council



**CITY OF TERRACE**

**BYLAW NO. - 2020**

**"A BYLAW OF THE CITY OF TERRACE TO AMEND ZONING BYLAW NO. 2069-2014, AND AMENDMENTS THERETO, BY AMENDING THE PERMITTED USES AND REGULATIONS IN THE C4 -NEIGHBOURHOOD COMMERCIAL ZONE."**

**WHEREAS** the Municipal Council of the City of Terrace has adopted Zoning Bylaw No. 2069-2014, and amendments thereto;

**AND WHEREAS** from time to time, zoning categories will require changes;

**NOW THEREFORE**, the Municipal Council of the City of Terrace, in open meeting assembled, hereby enacts as follows:

1.0 Amend Section 12.5.2 Site Specific Permitted Uses of the C4 – Neighbourhood Commercial Zone by adding the following:

.d Micro Brewery/Craft Distillery as a Primary Use on Lot B, District Lot 361, Range 5, Coast District, Plan 1995 (3309 Kalum Street)

2.0 This Bylaw may be cited, for all purposes, as **"Zoning Amendment (Uses Permitted in the C4 Zone) 3309 Kalum Street Bylaw No. - 2020"**.

**READ a first time** this 14<sup>th</sup> day of September, 2020.

**READ a second time** this 14<sup>th</sup> day of September, 2020.

**PUBLIC HEARING HELD** this                      day of                      , 2020.

**READ a third time** this                      day of                      , 2020.

**ADOPTED** this                      day of                      , 2020.

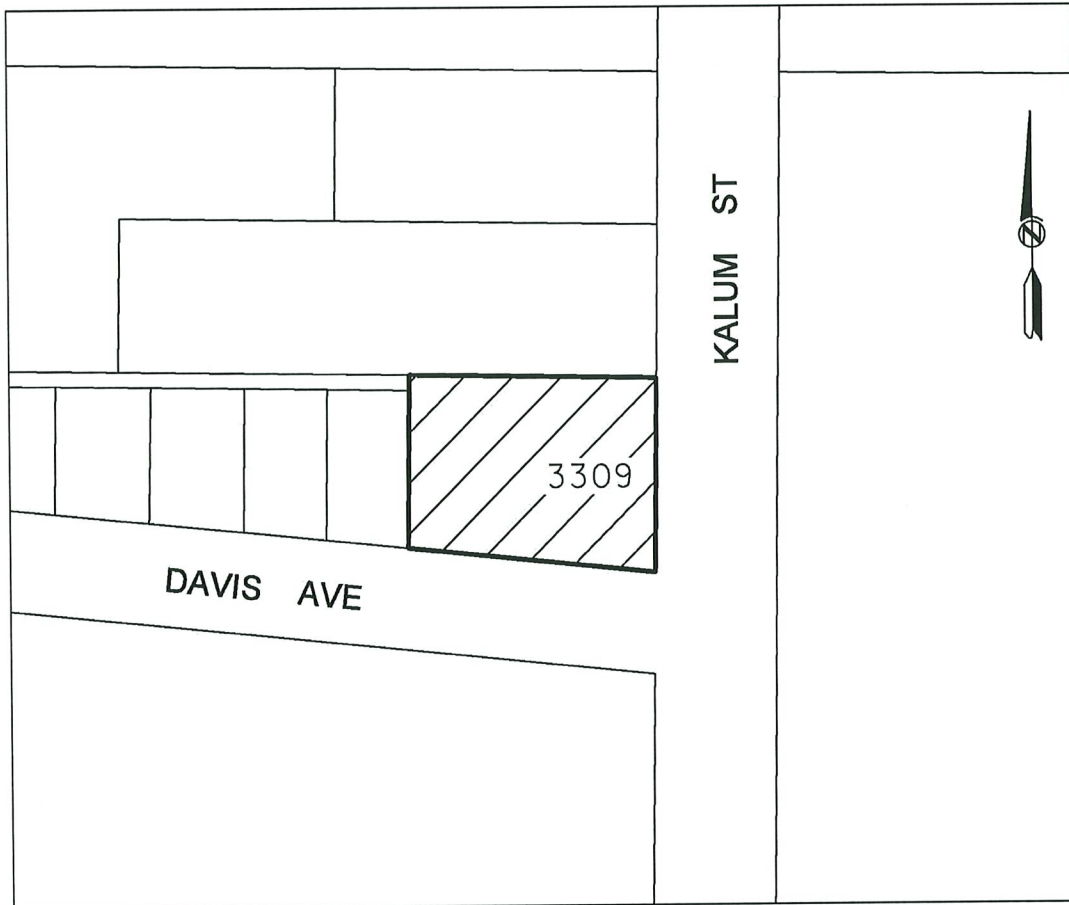
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**Mayor**

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**Clerk**

**APPENDIX "A"**





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Box 92, 3763 1st Avenue Smithers, British Columbia V0J 2N0

Our File: 19-141

December 18, 2019

Joseph Lavoie  
General Manager  
Copperside Foods Ltd.  
delivered via email to [joseph@coppersidefoods.com](mailto:joseph@coppersidefoods.com)

**Re: Feasibility study for proposed new distillery at 3309 Kalum Street, Terrace, BC**

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Bulkley Valley Engineering Services Ltd. (BVES) was engaged by Joseph Lavoie (proponent) to undertake a preliminary level feasibility study and design for the subject development. The Work of this project is presented in this letter report except for some preliminary sketches which will be provided later.

BVES understands the proponent wishes to develop a craft-distillery at the subject site which is currently an Esso gas bar with a large convenience store. The development as proposed would see the gas bar remain unaltered and the convenience store reduced in size to a footprint of approximately 46 square meters (500 square feet). The remainder of the existing building would then be converted to use as a craft distillery.

BVES undertook the work of this report by consulting directly with the City of Terrace (City) planning staff, and in coordination with subconsultant with task specific expertise. Alison Watson, MPLAN, MCIP, is a Registered Professional Planner and Julie Hoddinot, B,Arch., building designer both kindly agreed to weigh in with their opinions. Our Mr. Eerik Lilles visited the subject site on November 7<sup>th</sup> to review existing conditions. BVES also reviewed design drawings for the most recent major renovation of the site undertaken by Soutar & Associates, dated 1990. This work applies the 2018 British Columbia Building Code.

The below information provides an overview of the City of Terrace requirements for the conversion of a portion of the existing building located at 3309 Kalum Street into a craft distillery as understood by BVES as of the date of this report.

1. **Land Development Application (Zoning Amendment)** to rezone the property to accommodate all uses associated with the craft distillery. This includes submitting the application, fee, letter outlining reasons for the proposed amendment (letter of intent) and a drawing showing the location of the property. Applications are reviewed internally by staff and proceed directly to City Council prior to a public hearing being held. The City of Terrace does not have an Advisory Planning Commission that reviews applications.
2. **Liquor License Application (Local Government Resolution)** is required as part of the liquor licensing process. These applications include a public notice component, whereby notices are sent to neighbours, ads placed in the newspaper and a public hearing. Referrals are also sent to internal City departments and RCMP for comment.
3. **Development Permit** is required for any exterior changes to the building.
4. **Building Permit Application** is required for any change of use to the building. Note that the development of any required parking and loading (as per Zoning regulations) will be required as triggered by a change of use.



BVES recommended the proponents intent to be outlined as follows and provided to the City:

### Proposal

*The property is located at 3309 Kalum Street (existing ESSO / Copper Side Foods). The proposal is to convert most of the existing building to be used for a craft distillery. The long-term vision for the property is for a downtown craft distillery that showcases our area's unique qualities as reflected by the space and in the spirits made on-site. The distillery will be an upscale, artisan experience that benefits downtown Terrace and the community.*

### About Craft Distilling

*In 2013 Provincial regulations changed to establish two categories of distilleries in BC - commercial (large scale production with no ingredient specifications) and craft. Features of a craft distillery include:*

- *Produce no more than 50,000 litres of spirit per year.*
- *Use 100% BC agriculture products to produce alcohol from fermentation.*
- *All fermentation must be completed on-site at the distillery.*

*These provincial regulations set a craft distillery at the highest level of any jurisdiction in Northern America and forces distillers to be creative and innovative in sourcing local raw materials that helps to support local agriculture / food industry. The growing popularity of craft spirits is due to the focus on local and premium product philosophy.*

*The BC draft distilling industry has grown significantly following these regulatory changes, similar to the craft beer movement. Our business in Terrace would be Northwest BC's first locally owned craft distillery. Currently there are approximately 68 distilleries in BC, mostly in the lower mainland, with an additional 14 opening soon, including a distillery in Prince George.*

### Development Phasing

*The project requires a phased approach, consistent with our business plan to realize our long-term vision of a craft distillery at this location,*

- *In the short / medium term, there will be approximately 500 sq. ft in the existing building to be used for the existing gas station retail (convenience) space.*
- *In the longer term, ideally the distillery would be financially viable to support expansion into the gas station retail space with an area potentially converted for a full kitchen to offer local food pairings.*

*The existing gas station tanks underground have three to five years remaining in which given the high number of other gas stations in the community there is not a strong case to reinvest to replacement these tanks. By beginning the building conversation now, the distillery viability will help to transition the use of the building away from gas station use.*

### Proposed Craft Distillery Uses

*The craft distillery portion of the building incorporates three core uses, all of which require applicable licenses from the Liquor & Cannabis Regulation Branch (LCRB), to develop the business over the next few years. These are:*

1. *Craft manufacturing & wholesaling.*
2. *On-site retail store (required by LCRB to sell goods related to our product and in order to sell at Farmers' Markets).*
3. *Lounge to be able to hold small events and serve food.*

*As mentioned, craft distilling is the small-scale production / manufacturing of spirits using locally sourced ingredients. All aspects of the part of the manufacturing license, on-site retail and lounge are regulated by provincial legislation. The "Manufacturer Terms & Conditions" guidebook from the LCRB provides a detailed review of the provincial regulations. Terrace Council and public consultation is also required prior to use obtaining a manufacturing license and lounge endorsement.*

Regarding neighbourhood impact, we anticipate the following:

- As per provincial regulations, the Office of the Fire Commissioner (OFC) requires that a distillery owner/applicant construct and maintain their distillery in conformance with the BC Fire Code requirements for fire prevention/protection. A copy of the Approval in Principle letter associated with the manufacturer's license is required to be provided to OFC.
- Minimal addition traffic during the day due to the specialty nature of our retail sales and consumption limits.
- Slight increase in traffic (pedestrian and vehicular) during early evening hours between 5-9 pm. We see this as a benefit the surrounding area which currently experiences low level crime and nuisance activities.
- Current building configuration and proposed layout will minimize any noise to adjacent residential property owners.

Initially we plan on being open three or four days a week (Thursday to Sunday) from 1 to 9 pm with a hopeful expansion to being open 5-7 days a week. Ideally, the hours on the lounge license would be 12pm-12am seven days a week to keep options open for special events – however, these would not be regular hours. Extended hours would be for provide events only.

#### Proposed Zoning Change

The current zoning of the property is C4 – Neighbourhood Commercial. This zone accommodates the current use of our building but does not permit for craft distilling and the lounge. Of note is that neighbourhood pub is already a permitted use in this zone.

To move forward with our proposal and business phasing, we propose to change the zoning of our property by adding "craft distillery" as a site-specific permitted use in the existing C4 Zone. This would accommodate the existing site uses as well as allow for the new distillery use. This is consistent with format of Terrace's Zoning Bylaw and approaches the City has taken in the past to accommodate site specific uses without changing the zoning of a property.

There are examples of BC communities creating definitions for "craft distillery" as like craft breweries, are uses that contain a hybrid mix of uses that move beyond traditional use categories. Many communities are permitting these types of establishments in both light industrial and throughout a range of commercial zones as well as in agricultural areas.

A proposed definition of "craft distillery" ideally would include all uses associated with the distillery, including the retail and lounge component. Permitting a lounge and ancillary retail sales is in keeping with provincial regulations, to allow the purchase and consumption of liquor products manufactured on the site.

Some examples of definitions for "craft distillery" used on other communities include:

- Town of Osoyoos: "CRAFT DISTILLERY means an establishment licensed under the Liquor Control and Licensing Act that manufactures alcoholic beverages by distillation with a maximum annual production volume of 50,000 litres and may include the tasting and retail sales of alcoholic products produced on-site."
- City of Salmon Arm: "CRAFT DISTILLERY & BREWERY means the distilling or brewing of alcoholic beverages or alcoholic products with alcoholic content exceeding 1% by volume. This production must be licensed by the Provincial Liquor Control and Licensing Act Regulations. Product tasting and retail sales of all products produced on-site is permitted. All equipment and manufacturing processes must be contained indoors up to maximum floor area of 275 square meters and shall not create a nuisance. Limited outside storage of product for display and distilling purposes is permitted provided the storage area does not encroach into public land, parking areas, drive aisles or access to a building."
- City of Richmond: "Microbrewery, Winery and Distillery means a premises, licensed under the Liquor Control and Licensing Act, on which there is manufacturing of beer, ale, cider, wine or spirits for sale to business customers and shall include ancillary retail sale of these liquor products and related non-liquor products to the public within the manufacturer's store and lounge provided that their combined floor area and any outdoor lounge patio area do not exceed the manufacturing floor area.

- *Municipality of North Cowichan: "CRAFT OR ARTISAN DISTILLERY means an establishment, licensed by the Province of British Columbia, that produces alcoholic beverages by distillation, or by infusion through distillation, and may include a tasting room and retail sales of the product produced on site."*

Consistency with Terrace's Official Community Plan

*The property is currently designated "Downtown" in the City of Terrace's Official Community Plan. We believe that our proposal aligns with the OCP policies for downtown Terrace:*

- *The Downtown Commercial designation functions as the centre of the community for commercial, social and cultural life.*
- *A full range of commercial goods and services, administrative, public and corporate offices and services will meet the needs of the City and region as well as downtown residents.*
- *This area supports high-density multi-family housing in mixed-use commercial and residential developments that foster a vibrant, safe and attractive pedestrian-oriented district.*
- *Public amenities, plazas and heritage preservation opportunities will be encouraged here as they assist in making the downtown a significant destination for residents and visitors.*
- *10% of the total residential population is targeted to be living in the downtown by 2050.*

BVES recommends that the proponent submit a rezoning application along with this letter report and request rezoning. BVES also recommends an opinion as to BCBC building type and occupancy be provided in writing by the Building Authority as this is the outcome of this item will significantly impact the feasibility of the project moving forward.

It is then up to the proponent to assess likelihood of positive rezoning results and timeframe to decide on proceeding with the next steps including liquor license, development permit, and building permit, necessarily in this order.

BVES and this team of professionals, or any individual team member, would be pleased to discuss supporting this project further along the development pathway.

Attached, for your reference is a summary of review work by Julie Hoddinot including some supporting documentation and some recent photos taken of the subject site as well as a floor plan sketch provided by the proponent and standard Terrace application forms.

If you have any questions or require additional information, please feel free to contact the undersigned.

Best Regards.

**Bulkley Valley Engineering Services Ltd.**

Eerik Lilles, P.Eng.

Attachments.

Site Photos 7 Pages

Preliminary Code Analysis: Julie Hoddinot, 27 Pages

Site Plan Report, 1 Page

Terrace application forms, 5 Pages





## Field report 1 for project Copperside Craft Distillery - Terrace

### Copperside Craft Distillery - Terrace

Feasibility Study

3309 Kalum Street

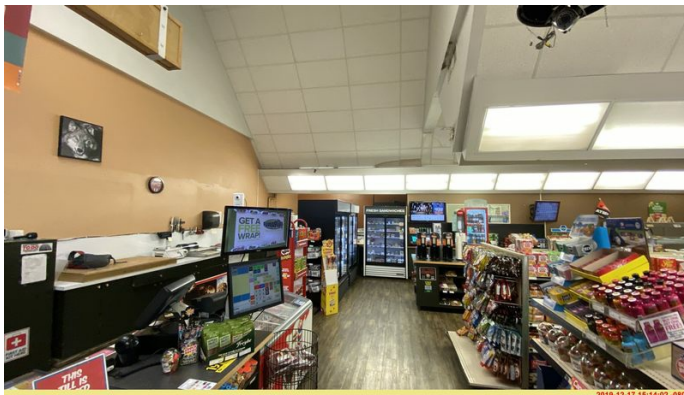
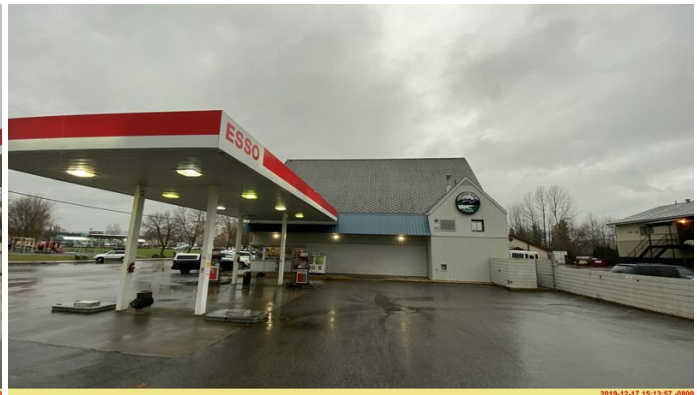
Terrace, BC (CA)

Report number: 198-170-1

Date: December 17, 2019 03:05 PM

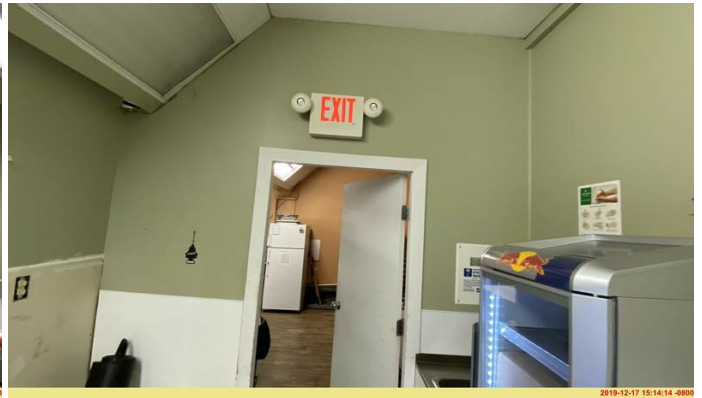
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### Feasibility Study - Field Visit





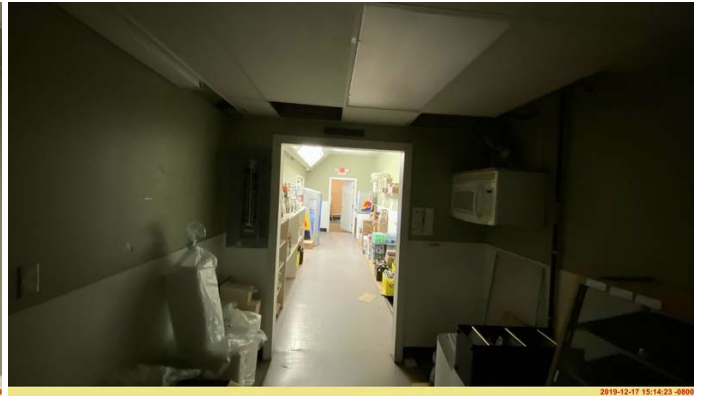
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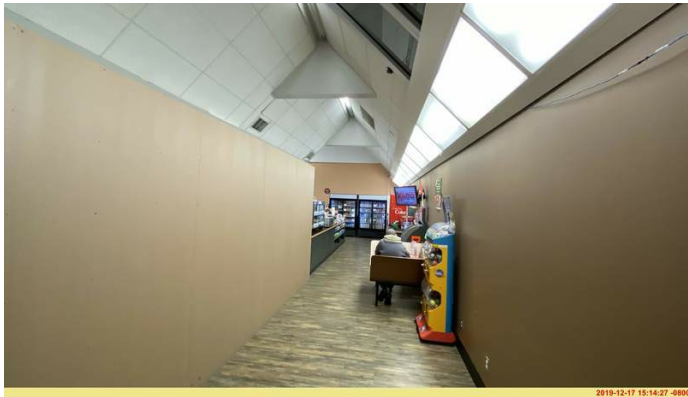
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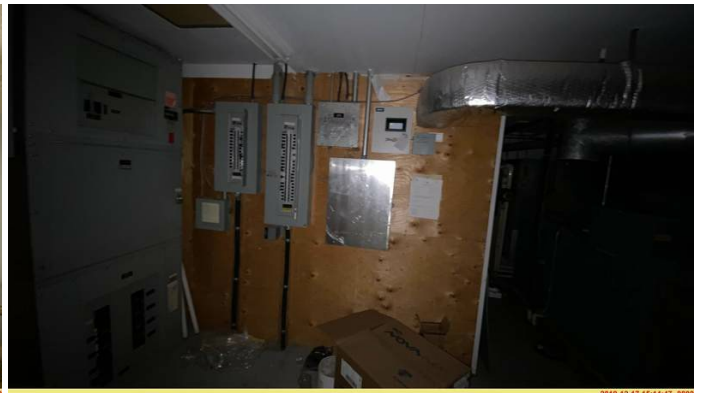
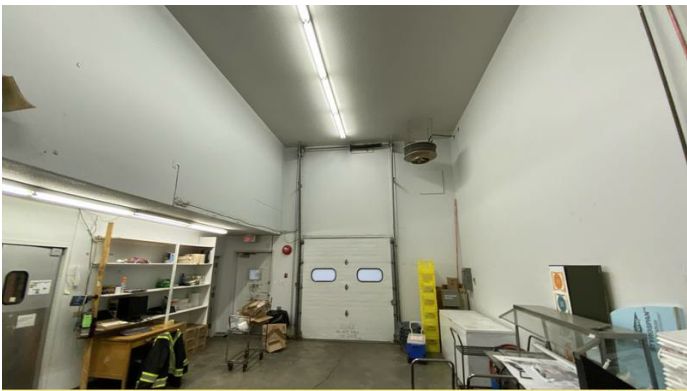


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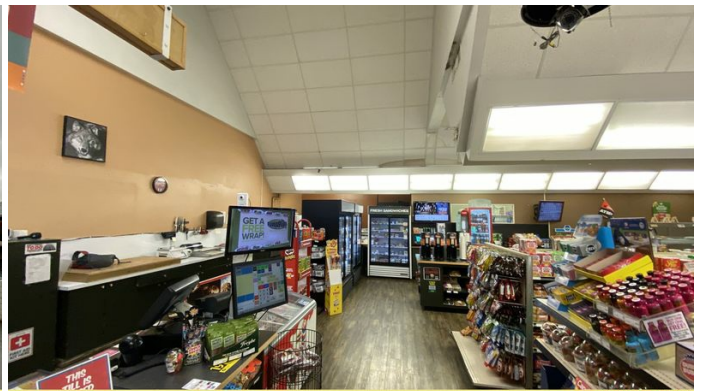
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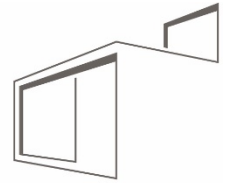




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## General conditions

This submittal is provided to assure that the works constructed substantially comply in material respect with the construction documents in accordance with EGBC Guidelines. Unless stated herein and fully documented this work is based on visual review of project work readily available at the time of the visit only. Field reviews, tests and inspections do not relieve the general contractor of his/her responsibilities and are not for the benefit of the general contractor



the DESIGNERY

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# PRELIMINARY CODE ANALYSIS

**Project:** Copperside Distillery

**Date:** December 16, 2019

**Client:** Eerik Lilles, BV Engineering Services

**Location:** 3309 Kalum Street, Terrace, BC

## PRELIMINARY CODE SUMMARY:

Upon our preliminary code analysis to change the current use of the building from mercantile to a distillery, it was found that if the local building inspector approves the classification of the building as F2 (Medium Hazard Industrial) then the building can fall within Part 9 of the BCBC. This allows the building to remain unsprinklered as well as allows no separation between the tasting room and distillery. We have listed the implications of having the building classified as F1 (High Hazard Industrial) at the end of this document.

We have also attached two Building Code Appeal documents to support our interpretation that:

- The tasting room should be considered as a subsidiary use to the F2 major occupancy (distillery) allowing an open concept between the two spaces should the client wish to do so.

We have also included the client's document in support of the classification of craft distilleries under F2 (Medium Hazard Industrial) instead of F1 (High Hazard Industrial) occupancy. We also found a very thorough study conducted by the same consulting company which was prepared to support a distillery project in Fernie, BC.

**Applicable Building Code:** British Columbia Building Code – 2018 Edition

**Authority Having Jurisdiction:** City of Terrace

**Major Occupancy Classification:** Definition from BCBC: *Major occupancy means the principal occupancy for which a building or part thereof is used or intended to be used, and shall be deemed to include the subsidiary occupancies that are an integral part of the principal occupancy. The major occupancy classifications used in this Code are as follows:*

Distillery – F2 (Medium Hazard Industrial)

Tasting Room – Subsidiary to F2 Occupancy

Copperside Store – E (Mercantile)

**Building Area (footprint):** 450 m<sup>2</sup> (4,844 SF)

**Approximate Floor Areas:**

Distillery = 334.7 m<sup>2</sup> (3,603 SF) (Manufacturing – 195.1 m<sup>2</sup>, Storage – 139.7 m<sup>2</sup>)

Tasting Room = 54.5 m<sup>2</sup> (587 SF)

Retail = 75.8 m<sup>2</sup> (816 SF)

Offices & Storage (upper floors) = 320.4 m<sup>2</sup>

Building Height: 3 Storeys

**Separation of Suites (9.10.9.13):** Should the Copperside store be considered a separate rental suite, it shall be separated from the remainder of the distillery by a 45 min. fire separation.

**Occupant Load (3.1.17):**

Distillery – 47

Tasting Room – 46

Copperside Store – 21

**Number of Water Closets (3.7.2.2):**

Distillery – 4 (2 for each sex)

Tasting Room – 2 (1 for each sex)

Copperside Store – 1 universal WC (for staff only)

It may be possible to justify that the washrooms of the distillery and tasting room could be shared. The number of washrooms required in the distillery could also be reduced by demonstrating how many occupants the space is designed for and a sign to be installed in the space as per the clause below.

*3.1.17.1 (2) If a floor area or part thereof has been designed for an occupant load other than that determined from Table 3.1.17.1., a permanent sign indicating that occupant load shall be posted in a conspicuous location.*

Please note that if the store is a separate rental suite, it shall have its own washroom or it shall access a public corridor to a shared washroom. This would create issues with the current layout sketch by the client as this public corridor would need to also be fire separated from the distillery occupancy.

## F1 – HIGH HAZARD INDUSTRIAL CLASSIFICATION

The building then automatically is required to satisfy the requirements of Part 3 of BCBC.

**Sprinkler System:** Required

**Major Occupancy Fire Separations:**

**Table 3.1.3.1.**  
**Major Occupancy Fire Separations<sup>(1)</sup>**  
Forming Part of Sentence 3.1.3.1.(1)

Major Occupancy	Minimum Fire-Resistance Rating of Fire Separation, h												
	Adjoining Major Occupancy												
	A-1	A-2	A-3	A-4	B-1	B-2	B-3	C	D	E	F-1	F-2	F-3
A-1	–	1	1	1	2	2	2	1	1	2	(2)	2	1
A-2	1	–	1	1	2	2	2	1 <sup>(3)</sup>	1 <sup>(4)</sup>	2	(2)	2	1
A-3	1	1	–	1	2	2	2	1	1	2	(2)	2	1
A-4	1	1	1	–	2	2	2	1	1	2	(2)	2	1
B-1	2	2	2	2	–	2	2	2	2	2	(2)	2	2
B-2	2	2	2	2	2	–	1	2	2	2	(2)	2	2
B-3	2	2	2	2	2	1	–	1	2	2	(2)	2	2
C	1	1 <sup>(3)</sup>	1	1	2	2	1	–	1	2 <sup>(5)</sup>	(2)	2 <sup>(6)</sup>	1
D	1	1 <sup>(4)</sup>	1	1	2	2	2	1	–	–	3	–	–
E	2	2	2	2	2	2	2	2 <sup>(5)</sup>	–	–	3	–	–
F-1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	3	3	–	2	2
F-2	2	2	2	2	2	2	2	2 <sup>(6)</sup>	–	–	2	–	–
F-3	1	1	1	1	2	2	2	1	–	–	2	–	–

*(2) No major occupancy of Group F, Division 1 shall be contained within a building with any occupancy classified as Group A, B or C.*

## **BCAB #1793 - Determination of Subsidiary or Major Occupancy**

February 16, 2017

**BCAB #1793**

**Re: Determination of Subsidiary or Major Occupancy**

### **Project Description**

The project is an existing brewery, located in a sprinklered multi-tenant industrial complex. The brewery is proposing to expand their operation to include additional storage space as well as a brewery lounge and sales area. The brewery lounge and sales area would be approximately 110 m<sup>2</sup> and would comprise approximately 25% of the total area of the brewery. The intended number of patrons in the brewery lounge is 40 persons.

The brewery lounge and sales area would primarily be used for product tasting/consumption and sales. The beer served and sold would be brewed on premise under the manufacturer's licence. Special Event Areas could allow the brewery lounge to be used for events such as "...music events, special meals/dinners or wedding receptions, however this is not the intent of the operator. The appellant has indicated they would apply for one special events license per annum to celebrate their opening date.

### **Applicable Code Requirements**

#### **1.4.1.2. (Division A) Defined Terms**

*Major occupancy* means the principal *occupancy* for which a *building* or part thereof is used or intended to be used, and shall be deemed to include the subsidiary *occupancies* that are an integral part of the principal *occupancy*.

### **Decision Being Appealed (Local Authority's Position)**

The local authority has decided the brewery lounge is classified as a Group A, Division 2 major occupancy and cannot be considered subsidiary to the Group F major occupancy (brewery).

The local authority has issued a building permit for only 30 persons in order to apply the permitted provisions of a low occupant load A2 occupancy.

The local authority considers the brewery lounge as being separate and distinct from the brewery. The term 'subsidiary', except for any meaning implicit in the use of the word 'integral', is not defined within the Code. The local authority does not consider the brewery lounge to be an integral part of the principle occupancy.

The local authority is also concerned about Liquor Control and Licensing Branch Policy Directive No: 13-02 which provides endorsements for Special Event Areas which would allow the brewery lounge to be used for events such as "...music events, special meals/dinners or wedding receptions." While special event endorsements are event driven, such events would constitute a major occupancy.



## **Appellant's Position**

The appellant considers the brewing lounge and sales area to be a subsidiary occupancy to brewery operation and should not be considered to be a separate major occupancy (A2). The appellant maintains that the brewery lounge and sales area would not exist if not for the major occupancy and are integral to [business viability of] the major occupancy. The brewery lounge and sales area are for the sole purpose of promoting and selling the product that is manufactured on site.

## **Appeal Board Decision #1793**

It is the determination of the Board that the brewery lounge and sales area in this circumstance is not a separate major occupancy.

## **Reason for Decision**

- The brewery lounge and sales area will be used primarily for buying and tasting of product that is manufactured on site.
- The brewery lounge is not intended to be used for uses that are not integral to the brewery such as space rental for meetings, weddings or receptions.
- The Board notes that where the occupant load is less than that required by Table 3.1.17.1., signage identifying the occupant load must be posted in accordance with Sentence 3.1.17.1.(2).

Lyle Kuhnert  
Chair, Building Code Appeal Board

## BCAB #1833

September 19, 2019

### Re: Determination of Subsidiary or Major Occupancy

#### Project Description

The project is a new building for the production of cider that has been classified as a Group F, Division 2 major occupancy. The one storey building has a building area of 268 m<sup>2</sup>, includes a mezzanine, and is not sprinklered. Information provided by the appellant indicates approximately 9% of the gross floor area is used for tasting and sales, which is approximately 12% of the first storey floor area. The production space and the tasting area are both within the same suite.

The tasting area, which is located on the first storey, has a calculated occupant load of 25.

The tasting area will be primarily used for product tasting and sales of the product manufactured on site. The appellant has indicated that the space is not intended for large gatherings or events.

#### Applicable Code Requirements

Definition of major occupancy in Sentence 1.4.1.2.(1) of Division A of the 2018 British Columbia Building Code.

**Major occupancy** means the principal *occupancy* for which a *building* or part thereof is used or intended to be used, and shall be deemed to include the subsidiary *occupancies* that are an integral part of the principal *occupancy*. The *major occupancy* classifications used in this Code are as follows: [Excerpt from BC Building Code definition]

#### Decision being Appealed (Local Authority's Position)

The local authority considers that the tasting area is a Group A, Division 2 major occupancy, but is permitted to be classified as a Group D major occupancy under Sentence 9.10.2.3.(1). As such, the local authority has determined that a fire separation is required between the production space and the tasting area.

#### Appellant's Position

The appellant maintains that the tasting area is considered subsidiary to the Group F, Division 2 major occupancy and does not require a fire separation between the production space and the tasting area.

#### Appeal Board Decision #1833

It is the determination of the Board that the tasting area in this circumstance is not a separate major occupancy and as such, no fire separation is required between the production space and the tasting area.

## **Reason for Decision**

The decision is based on the definition of major occupancy, which identifies subsidiary occupancies as part of a major occupancy.

The tasting area will be used primarily for buying and tasting the product manufactured on site. The tasting area is not intended to be used for large gatherings or events that are not directly related to the cidery.

The subject building falls within the jurisdiction of Part 9 of the BC Building Code.

Note: Sentence 9.10.2.3.(1) points to Article 3.1.2.6. which only applies to separate suites. In Table 3.1.3.1. there are requirements for major occupancy separations within the same suite. In Part 9 there is no equivalent requirement.

Lyle Kuhnert

Chair, Building Code Appeal Board

# BC BUILDING CODE 2012

## DISTILLERIES

## NEWSLETTER | Autumn 2013

by Frankie Victor, ASCT, BCQ and Jeff Mitchell, M Eng, P Eng, CP

Sentence 3.1.2.1.(1) outlines the Building Code's major occupancy classifications. The intent is to "classify buildings or portions of buildings based on use and occupancy to determine the appropriate requirements in the Building Code".

The Building Code broadly classifies a distillery as a Group F, Division 1 occupancy regardless of the size or relative hazard of the operation. A micro, or boutique, distillery produces beverage grade alcohol in small quantities. Similar to the profusion of microbreweries over the past 20 years, micro-distilleries are a growing trend. According to our research, prior to the 1920's the small family-operated distillery was a significant part of the North American liquor industry. Prohibition put all but the largest operations out of business and triggered an era of industrial type distilleries. Thus, the inclusion of distilleries in Appendix A of the Building Code as an example of a Group F, Division 1 occupancy reflects the large industrial operation that has been the norm for the past 90 years.

The objectives related to protection of Group F, Division 1 occupancies are to limit the effects of fire on occupants and on the building and to limit the potential for occupants being delayed in moving to a safe place. The only guidance provided with regard to distilleries is their inclusion in Appendix A as an example of a high hazard industrial occupancy.

Based on analysis of combustible contents, including the product, and potential explosion hazards we have determined at a number of small distilleries that the occupancy classification is within the range of a Group F, Division 3 (low) or Group F, Division 2 (medium) hazard industrial occupancy as defined by the Building Code.



### ABOUT THE AUTHORS

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### ABOUT GHL CONSULTANTS LTD

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## **BUILDING CODE ALTERNATIVE SOLUTION**

*for*

### **LOST BOYS DISTILLERY**

*at*

**1441 7<sup>TH</sup> AVENUE  
FERNIE, BC**

*Prepared for*

**Mr. Pat Coughlin**  
Lost Boys Distillery  
1441 7<sup>th</sup> Avenue  
Ferne, BC  
V0B 1M5

**March 8, 2018**

**GHL File 6549.00**



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## APPENDICES

Appendix A	Project Drawings
Appendix B	Combustible Content Calculation
Appendix C	<i>“Potential Explosion Hazards Due to Evaporating Ethanol in Whisky Distilleries”</i>



## 1.0 INTRODUCTION

We have been asked by Lost Boys Distillery to prepare the following approach to Building Code alternative solution for a distillery to be located at 1441 7<sup>th</sup> Avenue, Fernie, BC.

This report is not intended as a contract document for bidding or construction purposes. Formal direction, including design drawings and specifications, for implementation of all recommendations contained in this report must be obtained from the appropriate design professional. It is the responsibility of the appropriate design professional to incorporate, coordinate and detail the measures outlined in this report into the contract documents.

The scope of GHL's review is to provide analysis of the distillery process to confirm occupancy classification. We have relied on information provided by Lost Boys Distillery including drawings attached in *Appendix A*. We have not reviewed the building for purposes other than as specifically described in this report and we have not visited the site.

## 2.0 APPLICABLE BUILDING CODE

The applicable Codes are the BC Building and Fire Codes 2012 and all references indicated are to these editions.

## 3.0 BUILDING CODE CONCEPTS

### 3.1 Project Description

The project will include tenant improvements to an existing building. The building is one storey in height and approximately 386m<sup>2</sup> in area, of combustible construction, unsprinklered and not equipped with a fire alarm system. The project will create a craft, or distillery, in a portion of the building, a 190m<sup>2</sup> suite. This space will include a 137m<sup>2</sup> processing area for the production of distilled beverage alcohol and storage space for product and subsidiary retail and tasting areas.

### 3.2 Occupancy Classification

Appendix A of the Building Code includes *distillery* as an example of an occupancy that may be a Group F, Division 1 (high hazard industrial) occupancy. Per the Building Code definition of a high hazard industrial occupancy, analysis is required to determine whether an individual distillery contains sufficient quantities of flammable, combustible or explosive materials to create a special fire hazard. The Fire Code, in Sentence 4.10.2.1.(1), describes a building *in which distilled beverage alcohol is distilled, processed, or stored in bulk* as a Group F-1 occupancy. This building which will contain a distillery, will be classified as *medium hazard industrial*, or Group F Division 2 occupancy per the analysis included in the alternative solution.

The distillery will offer tours and tasting and retail sales of products; the visiting public will observe the operation, taste, and purchase the product as part of a single distillery experience. The tours, tasting and sales are entirely subsidiary to the distilling and considered part of the overall industrial occupancy.



#### 4.0 ALTERNATIVE SOLUTION TO BUILDING CODE COMPLIANCE

Part 3 of the Building Code consists of acceptable solutions. Division A, Clause 1.2.1.1.(1)(b) and Division C Section 2.3, permit development of alternative solutions to Building Code compliance. Alternative solutions are commonly developed to satisfy the minimum level of performance required under Part 3 fire protection and occupant safety requirements.

The following analysis establishes the areas of performance applicable to the acceptable solutions and the level of performance provided by the acceptable solution, explains the level of performance provided by the proposed alternative solution, and compares the two levels of performance in order to demonstrate that the alternative solution meets the criteria established in Clause 1.2.1.1.(1)(b).

4.1 Solution	Occupancy Classification of Distillery
<i>Code Reference</i>	Sentence 3.1.2.1.(1) and Fire Code Sentence 4.10.2.1.(1)
<i>Acceptable Solution</i>	<p>Sentence 3.1.2.1.(1) defines industrial occupancies as low, medium and high hazard. Appendix A includes <i>distillery</i> as an example of an occupancy that may be a Group F, Division 1 (high hazard) occupancy.</p> <p><i>High hazard occupancy</i> is defined in the Building Code as an industrial occupancy containing sufficient quantities of highly combustible and flammable or explosive materials which, because of their inherent characteristics, constitute a special fire hazard.</p> <p><i>Distillery</i> is defined as a <i>process plant</i> where <i>distilled beverage alcohol</i> is produced, concentrated or otherwise processed.</p> <p><i>Distilled beverage alcohol</i> is defined as a beverage produced by fermentation that contains more than 20% alcohol by volume.</p> <p>Sentence 4.10.2.1.(1) of the Fire Code describes a building in which distilled beverage alcohol is distilled, processed or stored in bulk as a <i>high hazard industrial</i> occupancy.</p>
<i>Intent</i>	The intent in both the Building Code and the Fire Code is that buildings be classified based on their occupancy to determine the applicable provisions in other parts of the Codes.
<i>Alternative Solution</i>	<p>The following features of the building are inherent or will be implemented to achieve at least the minimum level of performance required by Division B in the areas defined by the objectives and functional statements attributed to the applicable acceptable solution:</p> <ul style="list-style-type: none"><li>▪ The distillery has a limited risk of explosion; volumes of alcohol are low, the product is heated within purpose built enclosed vessels with pressure relieve valves.</li><li>▪ The distillery has a fuel load less than 50kg/m<sup>2</sup> or 1200 MJ/m<sup>2</sup>, consistent with the combustible content of a Group F, Division 3, or low hazard, industrial occupancy.</li></ul>





- Raw ingredients are not processed on site.
- Electric or steam equipment will be used within the distillery processing area; there will be no open flames or exposed heat sources, further minimizing the probability of ignition.

### Discussion

### Introduction

Sentence 3.1.2.1.(1) outlines the major occupancy classifications that are the basis for determining the acceptable solutions in the Building Code. The only guidance provided in the Building Code with regard to distilleries is their inclusion in Appendix A as an example of a high hazard industrial occupancy. The intent of the following alternative solution is to demonstrate that the proposed distillery is not a *high hazard industrial* occupancy.

The Building and Fire Codes define distilled beverage alcohol as “*a beverage that is produced by fermentation and contains more than 20% by volume of water-miscible alcohol*”. Appendix A of the Building Code includes distillery as an example of an occupancy that may be Group F, Division 1 occupancy but offers no guidance on size or the relative hazard of the operation. The proposed distillery will produce beverage grade alcohol in relatively small quantities. Similar to the profusion of breweries over past 20 years, distilleries are a rapidly growing trend. According to our research, prior to the 1920’s, the small family-operated distillery was a significant part of the North American liquor industry. Prohibition put all but the largest operations out of business and triggered an era of industrial type distilleries. Thus, the inclusion of distilleries in Appendix A of the Building Code as an example of a Group F, Division 1 occupancy reflects the large industrial operation that has been the norm for the past 90 years.

### Level of Performance of Acceptable Solution

There are no objectives or functional statements attributed directly to Sentence 3.1.2.1.(1). The intent is *to classify buildings or portions of buildings based on use and occupancy to determine the appropriate requirements in the Building Code*. Although there are no objectives and functional statements attributed to Sentence 3.1.2.1.(1), the overall objective related to occupancy classification may be derived from the objectives and functional statements of Subsections 3.1.2 and 3.1.3 as outlined in the table below.

Code Reference	Functional Statement	Objective	Function	Link	People Not Harmed Due To
Subsections 3.1.2 and 3.1.3	F02	OS1.2	To limit the severity and effects of fire or explosions	so that	a person in or adjacent to the building is not exposed to an unacceptable risk of injury due to fire or explosion impacting areas beyond its point of origin.
	F03		To retard the effects of fire on areas beyond its point of origin		
	F10	OS1.5	To facilitate the timely movement of persons to a safe place in an emergency		a person in or adjacent to the building is not exposed to an unacceptable risk of injury due to their being delayed or impeded in moving to a safe place during a fire emergency.



The overall objective related to occupancy classification is two-fold; to limit the effects of fire on occupants and the building, and to limit the potential for occupants being delayed in moving to a safe place. The intent of the following alternative solution is to demonstrate that the proposed distillery is not a high hazard industrial occupancy as defined by the Building and Fire Codes.

### **Level of Performance of Alternative Solution**

The Building Code establishes the difference between low and medium hazard industrial occupancies based on a quantitative difference in combustible content. However, the distinction between a high hazard occupancy and a medium hazard occupancy is not dependent on combustible content but rather based on the fire hazard presented by the materials contained therein. A high hazard occupancy is defined as “*an industrial occupancy containing sufficient quantities of highly combustible and flammable or explosive materials which, because of their inherent characteristics, constitute a special fire hazard*”. It is evident from the definition of a high hazard occupancy and the prescribed areas of performance that the explosion risk must be assessed to determine if a particular operation is a high hazard occupancy. This is similar to the way the combustible loads of buildings are routinely assessed to confirm that they fall within the low hazard classification (50kg/m<sup>2</sup> or 1200MJ/m<sup>2</sup> of floor area).

### **Distillation Process**

The distillation process at this site will be as follows:

1. The grain is purchased cracked, it is not processed on site. Grain is mixed with water to make the mash.
2. The mash is heated to 75C in a 1500L tank to convert the grain starches to fermentable sugars.
3. The liquid from the mash is transferred to a 1000L fermentation tank and fermented 3 to 7 days to produce a low alcohol ferment with 4-12% alcohol by volume (ABV). Spent grains are taken off site.
4. The ferment is transferred to the 800L still in and distilled up to 6 to 9 hours to get approximately 150L at 40% ABV (the stripping run). Temperature during the distillation process is 78C. This temperature is below the 100C vaporizing temperature for the water in the still and this, does not create pressure in the still under normal operating conditions. As a precaution against equipment failure, the still is equipped with a pressure relief valve.
5. The distilled product is transferred to an 800L steel tank.
6. The product is redistilled:
  - to get 120L at 70% to 90% ABV and stored in steel tanks or bottled (vodka) – 200L at 90%
  - to get 140L at 40% to 60% ABV and stored in barrels (whiskey) – 800L at 60%
  - with botanicals to get 100L at 40% ABV (gin) and bottled – 100L at 40%



### **Level of Risk of Subject Distillation Process**

The subject process is similar to a commercial kitchen where cooking operations such as deep frying can be high hazard, but are controlled with appropriate equipment and procedures. The distillation process is designed to control the hazard; purpose built enclosed equipment will be used. Although distilling does not occur under pressure, the still is equipped with pressure relief valves to limit the probability of pressure buildup in the event of equipment failure and the distilling process is supervised by the operator. The finished product will be bottled or stored in other closed containers to limit off-gassing.

The capacity of the still and stored product has been taken into consideration in the combustible load calculation and in the analysis for potential spills and leaks as further discussed below.

### **Fuel Load**

The distilled product varies in alcohol content from 12% to 90% ABV. Production is such that various processes in the distillery may occur simultaneously (i.e fermenting at the same time as distilling, etc.). In calculating the total combustible load for the processing room, we have conservatively assumed that all equipment, tanks and barrels are at capacity however, this is unlikely to occur.

For purposes of the combustible liquid, we have included only the ethanol. For example, one 1L bottle of distilled beverage at 40% ABV contains 0.4L or 0.316kg of ethanol ( $0.4\text{L} \times 0.79\text{kg/L} = 0.316\text{kg}$ ). We have excluded the ethanol in the low alcohol ferment stage as the ABV is approximately half the 20% limit that defines a flammable liquid; this is effectively beer. The following is a summary of the combustible content for the processing room; a more detailed calculation is included in *Appendix B*.

<b>Material</b>	<b>Heat of Combustion (MJ/kg)</b>	<b>Gross Weight of Materials (kg)</b>	<b>Combustibles (MJ/kg x kg) in MJ</b>
Ethanol	29.7	2121	63 010
Wood / Cardboard / Grain	19	2568	48 782
<b>Subtotal</b>		<b>4689</b>	<b>111 792</b>
Area	137m <sup>2</sup>		
<b>Combustible Content</b>		<b>34kg/m<sup>2</sup></b>	<b>816MJ/m<sup>2</sup></b>

*Notes to table:*

1. Alcohol conservatively includes full processing; the ethanol produced in the still and storage containers; bottles, tanks and barrels.
2. Wood/cardboard includes cardboard boxes, pallets, wood furniture and grain.
3. Heats of combustion are from the Handbook of Fire Protection Engineering.

The above calculation shows that the combustible content is less than the 50kg/m<sup>2</sup> or 1200 MJ/m<sup>2</sup> limit which defines the upper boundary of the Group F, Division 3 (low hazard) occupancy classification. Thus, in terms of combustible content the space falls within the scope of the Group F, Division 3 occupancy although we have conservatively classified it Group F, Division 2. However, combustible content alone is not an indication of whether the distillery operation meets the definition of a high hazard occupancy, and what constitutes “sufficient quantities of highly combustible and flammable or explosive materials” or “a special fire hazard” special is not defined. Thus, we have prepared the following analysis.



### **Explosion Risk from Vaporized Alcohol**

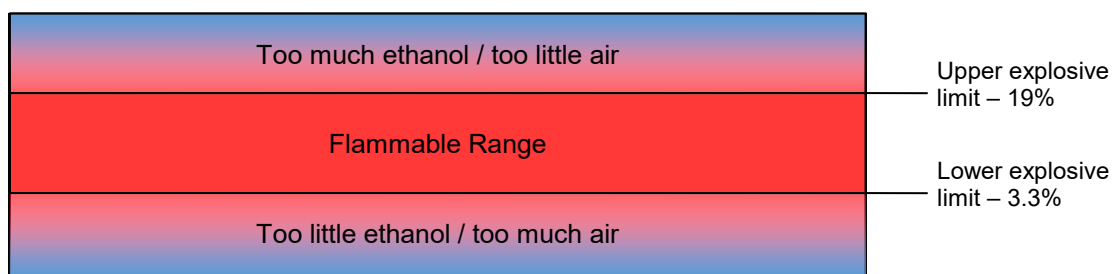
Based on the definition of Group F, Division 1 occupancy and its reference to explosion, the potential risk of explosion has been reviewed as follows:

The Society of Fire Protection Engineers Handbook of Fire Protection Engineering (SFPE Handbook) states the following regarding the nature of explosion:

*Combustible gases, vapors, and dusts/powders represent explosion hazards when and if they are mixed with air (or other oxidant) in proportions between the lower and upper flammable limits. The explosion hazard is associated with the premixing of fuel and oxidant in a confined environment prior to the introduction of an ignition source. On ignition, flame propagates through the fuel-oxidant mixture, and the confinement prevents the unrestrained expansion of the combustion products. The result is the development of a potentially damaging pressure increase.*

In this statement, the concepts of “lower explosive limit” and “upper explosive limit” are important. Flame can only propagate through a defined range of compositions of fuel and oxidant. This range is bounded by the lower flammable limit and the upper flammable limit. When the air/gas mixture is below the lower flammable limit, there is not enough fuel to support propagation of flame through the mixture. When the air/gas mixture is above the upper flammable limit, there is not enough oxidant to support combustion. The goal is to always maintain the atmosphere below the lower explosive limit.

For fire or explosion to occur two criteria must be met. Ethanol and oxygen must mix in specific proportions and there must be an ignition source; a spark or flame. The ethanol/oxygen mixture is only potentially explosive at between 3.3% ethanol and 19% ethanol. If there is too much or too little ethanol the mixture is not flammable or explosive. This is represented in the diagram below.



The ethanol stored in the distillery is normally in liquid form at room temperature and stored in closed containers or barrels or enclosed in the still. To vaporize, ethanol must be heated to 78.4C. If the liquid does not vaporize in sufficient quantity, there is a low probability that the air/ethanol mixture within the explosive range will form. The ethanol will be heated in an enclosed vessel (the still) and heating will take place entirely within the equipment. The still is designed to capture vapour; this is distilling by definition. The room in which the distilling equipment is located will be maintained at normal room temperature; thus, in the event of a spill, there is low probability that the ethanol will vaporize given the surrounding room temperature. Even in the event of equipment failure, the distillate which spills onto the cold floor, will rapidly cool. This is supported by the paper entitled, “*Potential Explosion Hazards due to Evaporating Ethanol in Whisky Distilleries*”, attached in *Appendix C*, which concludes that there is no explosion hazard in a distillery in which operations occur at room temperature.





The explosive range for ethanol is 3.3% (Lower Explosive Limit or LEL) to 19% (Upper Explosive Limit or UEL) vapour to air. The floor area has a volume of approximately 575m<sup>3</sup> (137m<sup>2</sup> floor area x 4.2m height). For an ethanol spill in the room to be flammable, at least 19m<sup>3</sup> of vapour is required.

To calculate how many litres of ethanol are required to produce the quantity of vapour at the LEL in this room the following formula is used:

$$1L \text{ of Liquid } A = 0.83 * (\text{specific gravity of Liquid } A / \text{Vapour density of Vapour } A) = m^3 \text{ of Vapour } A$$

The specific gravity of liquid ethanol = 0.79

Vapour density = molecular weight liquid/molecular weight of air = 46.1 / 29 = 1.58

1 L of liquid ethanol = 0.83 (0.79 / 1.58) = 0.415m<sup>3</sup> of vapour ethanol

1L (19m<sup>3</sup> / 0.415m<sup>3</sup>) = 48L

Therefore, 48L of ethanol is required to produce sufficient vapour for the room to be at the LEL and it would be necessary to maintain the 48L of liquid near its 78.4C temperature long enough that the entire volume evaporates.

While the ethanol is at an elevated temperature in the still, the processing room and its floor are at room temperature. As the still is a metal vessel, a break is unlikely; however, a leak is possible. Even if the still were to spill its entire contents and the liquid was at 78.4C, the ethanol would rapidly cool on the floor and little vapour would be created. The greatest concentration of heated ethanol is in the second distillation where 120L of ethanol at 90% ABV is distilled. A spill in the 137m<sup>2</sup> distilling area will form a pool with a depth of approximately 1mm (0.12m<sup>3</sup>/137m<sup>2</sup>). Given the spill of this thin depth of liquid is onto a cool floor at room temperature, the liquid would rapidly cool and there is little potential that sufficient vaporization will occur to reach the LEL, as the cooling ethanol will remain in its liquid state. Further, the product is water miscible and normal practice is to dilute a spill and direct it to floor drains. Therefore, the probability of explosion is remote.

### **Barrel Ageing**

Aging rooms can have a high combustible content as the contents include both the wood barrels themselves and the ethanol in the barrels. Again, there is no combustible load limit in the medium hazard industrial occupancy and the distinction between the medium and high is based on the risk of explosion or a special fire hazard. The concern is with industrial type ageing warehouses where a large number of barrels are left undisturbed. The following examines the potential explosion risk from vaporized ethanol due to the evaporation of ethanol from oak barrels in the aging process in the distilling area.

Barrels will be stored in the distilling area. The operator proposes five (5) 110L barrels and forty (40) 38L barrels containing distilled product at 60% alcohol by volume (ABV) which equates to 1242L of ethanol and this quantity has already been included in the combustible load calculation.

Wood barrels are not *closed containers* as defined in the Fire Code and once the barrels become saturated there is some evaporation of ethanol through the wood.



The paper entitled, “*Cost and Engineering Study – Control of Volatile Organic Emissions from Whiskey Warehousing*”, by US Environmental Protection Agency reports evaporative losses of between 2.09kg ethanol/water mixture per barrel per year and 3.90kg ethanol/water mixture per barrel per year during the storage of distilled beverage alcohol in barrels. Excerpts from this paper are attached in *Attachment 2* and the entire paper is available on request. This data is based on barrel soakage losses and evaporation from 55 proof gallons (55 liquid gallons at 50% alcohol at 60°F) barrels.

In order to provide a conservative estimate for this analysis, the maximum evaporation rate of 3.90kg ethanol/water mixture per barrel per year is used. Conservative because it is assumed that the entire 3.90kg evaporates into the room while, in reality, a portion of the 3.90kg is absorbed by the barrel. Further, although the product evaporating into the room contains some water, it conservatively assumed that the 3.90kg is pure ethanol.

A percentage of the ethanol is lost in the aging period as follows:

55 liquid gallons (US) of ethanol = 165kg

Percentage of product evaporated per year =  $(3.90\text{kg}/165\text{kg}) \times 100\% = 2.4\%$  per year

Volume of product in barrels	<b>1242L</b> (five 110L barrels and forty 38L barrels at 60% ABV)
Volume of liquid ethanol evaporated	<b>30L/year</b> ( $1242\text{L} \times 2.4\%/\text{year}$ )
	<b>0.03m<sup>3</sup>/year</b> ( $30\text{L}/\text{year} \div 1000\text{L}/\text{m}^3$ )

Based on the above calculation, approximately 0.03m<sup>3</sup> (30L) of liquid ethanol will be evaporated into the storage room per year or 0.00008m<sup>3</sup> per day.

Sentence 4.10.6.1.(1) of the BC Fire Code 2012 describes natural or mechanical ventilation to prevent the concentration of vapour from exceeding 25% of the Lower Explosive Limit (LEL) for ethanol (3.3%), measured 1.5m away from any equipment or from any opening subject to vapour release. 25% of the LEL will be reached when the ethanol concentration in the room is at 0.825%; for the 575m<sup>3</sup> distilling room, this equates to 4.7m<sup>3</sup> of ethanol vapour. Thus, provided this limit is maintained, the risk of fire or explosion will be limited and the intent of the Code will be achieved.

To calculate how many liters of liquid ethanol are required to produce the quantity of vapour at 25% of the LEL in this room the same formula is used:

$1L \text{ of Liquid } A = 0.83 * (\text{specific gravity of Liquid } A / \text{Vapour density of Vapour } A) = m^3 \text{ of Vapour } A.$

The specific gravity of liquid ethanol = 0.79.

Vapour density = molecular weight liquid/molecular weight of air =  $46.1 / 29 = 1.58$ .

1 L of liquid ethanol =  $0.83 (0.79 / 1.58) = 0.415\text{m}^3$  of vapour ethanol.

4.7m<sup>3</sup> of vapour ethanol =  $(4.7\text{m}^3 \times 1\text{L}) / 0.415\text{m}^3 = 11.3\text{L}$  of liquid ethanol.

11.3L (0.0113m<sup>3</sup>) of liquid ethanol is required to produce enough vapour to reach the 25% of the LEL prescribed by the Sentence 4.10.6.1.(1) of the BC Fire Code.

Without opening of doors, leakage, or ventilation; either natural or mechanical, of the distilling room, time to reach 25% of the LEL is  $0.0113\text{m}^3 / 0.00008\text{m}^3$  per day, or 141 days. Thus, to avoid reaching 25% of the LEL, one air change every 141 days is required in the distilling room.



Thus, there is no potential for off gassing from barrels to raise the air/ethanol mixture to within 25% of the lower flammable limit based on typical opening doors, heating and ventilating the space. A barrel leak or spill is a possibility; however, poses a much lesser hazard than the previously discussed spill from the still, as the ethanol content is lower and the liquid at room temperature.

The paper referenced in *Appendix C* establishes a common theme in incidents where an explosion occurred; a fire preceded the explosion. Radiation and convection enhanced the vaporization of alcohol, destroyed casks and/or structures creating further spillage and vaporization, culminating in the ignition of a flammable mixture. Five mechanisms were identified for the production of a flammable mixture.

The relevance to the subject distillery is summarized in the following table:

Scenario	Relevance to Subject Distillery
Evaporation of ethanol following a leak under normal temperature and pressure	Relevant, but probability of explosion is low given the volume of the room vs the volume of ethanol in the still and room temperature is far below the 78.4C boiling point of ethanol and rapid cooling on a concrete floor will halt vaporization.
Evaporation of ethanol from spillage into a hot ambient atmosphere, due to a fire  Evaporation of ethanol onto a hot surface, heated by radiation from a fire	Relevant, but the probability of a process related fire starting in the first place is low due to use of enclosed system and controls on the distillation process. Exposure to fire originating elsewhere in the building is unlikely due a fire separation between the suite and the remainder of the building.
Production of explosive mixture in a kettle, tank or cask	Not relevant, production is in a still specially fabricated for the distillation process, not in open kettles, tanks or casks. The stills are equipped with a pressure relief valves to prevent the development of explosive conditions. Mixing and storage tanks are maintained at room temperature with no appreciable pressure buildup.
Evaporation of ethanol into an oxygen deficient atmosphere with subsequent introduction of air	Not relevant, ambient conditions with sufficient oxygen availability will be maintained within the processing room.

### ***Fire Separation***

The building includes other suites or occupancies and a fire separation is prescribed by the Building Code based on separation of suites and potential hazard disparities between occupancies.

### ***Boiler Room***

There will be no open flame or other similar ignition sources within the distillery area during the distilling process. The equipment is steam operated and the boiler is located in a separate room. The door to the room will be weather stripped to protect against vapour and storage in the boiler room is not permitted.

### ***Egress***

The distillery is served by three exterior exit doors. Travel distance to an exit door will not exceed 16m (where the Building Code limit is 30m) which will facilitate timely egress. Additionally, occupant load will be low and the small tasting and retail area is served by two exterior doors and egress from the public area is not through the distilling area.



### Comparison of Performance of Alternative Solution to Acceptable Solution

The following table provides a comparison of the level of performance offered by the acceptable and alternative solutions in the areas of performance established by the objective and functional statements attributed to Sentences in Subsection 3.1.2 and 3.1.3 related to occupancy. Although there are no objectives and functional statements attributed to Sentence 3.1.2.1.(1), as noted above, the overall objective related to occupancy classification is two-fold; to limit the effects of fire on occupants and the building and to limit the potential for occupants being delayed in moving to a safe place.

Area of Performance	Acceptable Solution	Alternative Solution
To limit the severity and effects of fire or explosions <b>AND</b> to retard the effects of fire on areas beyond its point of origin <b>SO THAT</b> a person in or adjacent to the building is not exposed to an unacceptable risk of damage due to fire or explosion impacting areas beyond its point of origin and to facilitate the timely movement of persons to a safe place in an emergency <b>SO THAT</b> a person in or adjacent to the building is not exposed to an unacceptable risk of injury due to being delayed or impeded in moving to a safe place in a fire emergency.	Classification of distilleries as Group F, Division 1 occupancies which would dictate construction requirements combination of occupancies and limit travel distance to 25m.	<ul style="list-style-type: none"><li>▪ Fuel load of the distillery being consistent with a Group F, Division 3 occupancy (although we have classified it F2).</li><li>▪ The distillery does not constitute an explosion hazard, as distilling occurs in small batches within an enclosed vessel in an environment at room temperature.</li><li>▪ No open flame or other ignition sources will be present in the distilling room.</li><li>▪ No risk of explosion from suspended dust.</li><li>▪ Low occupant load, multiple exits and 9m travel distance facilitate egress.</li></ul>

### Fire Code

Section 4.10 of the Fire Code applies to distilleries. Sentence 4.10.1.1.(2) specifies that flammable liquids other than the distilled beverage alcohol are subject to the requirements for storage and handling in Part 4, *Flammable and Combustible Liquids*, of the Fire Code. Measures described in this section assume a high hazard industrial occupancy, which the subject distillery is not; however, the following is a summary of compliance:

- Sentence 4.10.2.1.(2) specifies that storage of distilled beverage alcohol in closed containers (bottles and tanks) falls within the Group F, Division 2 occupancy classification. To accommodate storage, the entire processing area has been classified as Group F, Division 2.
- Article 4.10.3.1 for design, fabrication and testing of tanks, vats, barrels, drums and containers. We understand from the operator that the equipment proposed has been designed and fabricated according to the conditions under which they are expected to be used.
- Article 4.10.3.2 for support, foundation and anchorage of storage tanks (tanks with capacity over 230L). The storage tank will not be elevated; it will sit on the floor. All storage tanks are required to be seismically restrained in conformance with the requirements of Part 4 of the Building Code.
- Article 4.10.3.3 for venting of storage tanks in conformance with good engineering practice. Distilled product will not be stored in pressure tanks and the still, while it does not operate under pressure in normal conditions it will be equipped with an emergency pressure relief valve.
- Sentence 4.10.4.1.(1) requires that the building be sprinklered where the volume of product stored in tanks and barrels exceeds 25,000L. Less than 5,000L of alcohol product will be stored in the facility at any given time (tanks, bottles and barrels). The volume is well below the point at which the Fire Code would prescribe sprinklers.





- Sentence 4.10.4.2.(1) confirms that storage of closed containers (tanks and bottles) of distilled beverage alcohol is regulated by Part 3 of the Fire Code for indoor storage rather than the more onerous Part 4 for flammable and combustible liquids. Individual storage spaces in unsprinklered buildings are limited in Table 3.2.3.2. to 250m<sup>2</sup>; while the proposed distilling area is 137m<sup>2</sup>. Typical storage requirements under Part 3 of the Fire Code apply; aisles, stacking heights, not smoking, and having a Fire Safety Plan.
- Sentence 4.10.7.1.(1) describes emergency drainage to direct any spilled or leaked distilled beverage alcohol to a safe place. The Fire Code reference to ‘safe’ means safe from ignition sources. The expected pool in the event of a spill from the storage tanks discussed previously is approximately 6mm in depth. In the event of a spill, the concentrate of ethanol in the air may be high at a very thin layer immediately above the pool for a short time however, as the vapour dissipates into the room the concentration will quickly be reduced.
- Article 4.10.5.1 describes the design, fabrication, assembly, and inspection of piping and pumping systems for distilled alcohol as having to be suitable for the anticipated use. Product may be transferred in small volumes in open containers for trial runs; however, the majority of transfers will be done by pumping liquid through a transfer system designed specifically for purposes of bottling distilled beverage alcohol.
- Section 4.10 is specific to distilleries and Sentence 4.10.1.1.(3) states that where there is a conflict between this section and the remainder of Part 4, that Section 4.10 governs. Thus, the specific requirements for ventilation in Sentence 4.10.6.1.(1) apply rather than the general requirements in Article 4.1.7.2.
- Sentence 4.10.6.1.(1) describes natural or mechanical ventilation to prevent the concentration of vapour from exceeding 25% of the LEL (3.3%), measured 1.5m away from any equipment or from any opening subject to vapour release. The processing equipment is designed to capture vapour; this is distilling by definition. The equipment is self-contained and does not release vapours under normal operating conditions. Based on the discussion on explosion risk of ethanol vapours, both during distillation and barrel ageing, ventilation through opening of doors and the building’s heating and ventilation system, this article is met.
- Article 4.10.8.1 describes portable fire extinguishers in ageing warehouses and on industrial lifts. As the subject building is not this type of industrial operation, the requirements for fire extinguishers per NFPA 10 for medium hazard industrial occupancies apply.
- Sentence 4.10.8.2.(1) describes standpipes in conformance with the Building Code. Standpipes are not required in this building per Sentence 3.2.5.8.(1) of the Building Code.

### *Conclusion*

Based on the discussion above, the distillery is not a Group F, Division 1 major occupancy by definition, primarily due to the limited quantities of product and the use of closed equipment. This alternative solution will provide at least the minimum level of performance described in the acceptable solutions in Sentence 3.1.2.1.(1) of the Building Code and Section 4.10 of the Fire Code in classifying buildings according to their occupancy for purposes of determining the acceptable solutions in the Building Code.

This alternative solution is based on the particular process and size of the building described in this report. If the process changes, or the operation expands, further review will be required.



## 5.0 SUMMARY

This report has described alternative solutions to Building Code compliance for the proposed project at 1441 7<sup>th</sup> Avenue, Fernie, BC.

Design consultants are required to incorporate criteria for the proposed alternative solution into the construction documents and to confirm installation. Prior to installation of the alternative solution features, appropriate design documentation will be reviewed by GHl for consistency with the alternative solution. GHl will review design documentation relating to the proposed alternative solution only. It is expected that review of general Building Code compliance will be the responsibility of others.

GHl will conduct discretionary field review(s) to observe conformance with the alternative solution and upon satisfactory installation, confirmation will be submitted to the Authority Having Jurisdiction.

Prepared by,  
**GHl CONSULTANTS LTD**

Frankie Victor, Eng L, BCQ

Reviewed by,

for Matt Turco, MAsc, EIT

Reviewed by,

Jeff Mitchell, M Eng, P Eng, CP



Enclosures

### \* Limitation of Liability \*

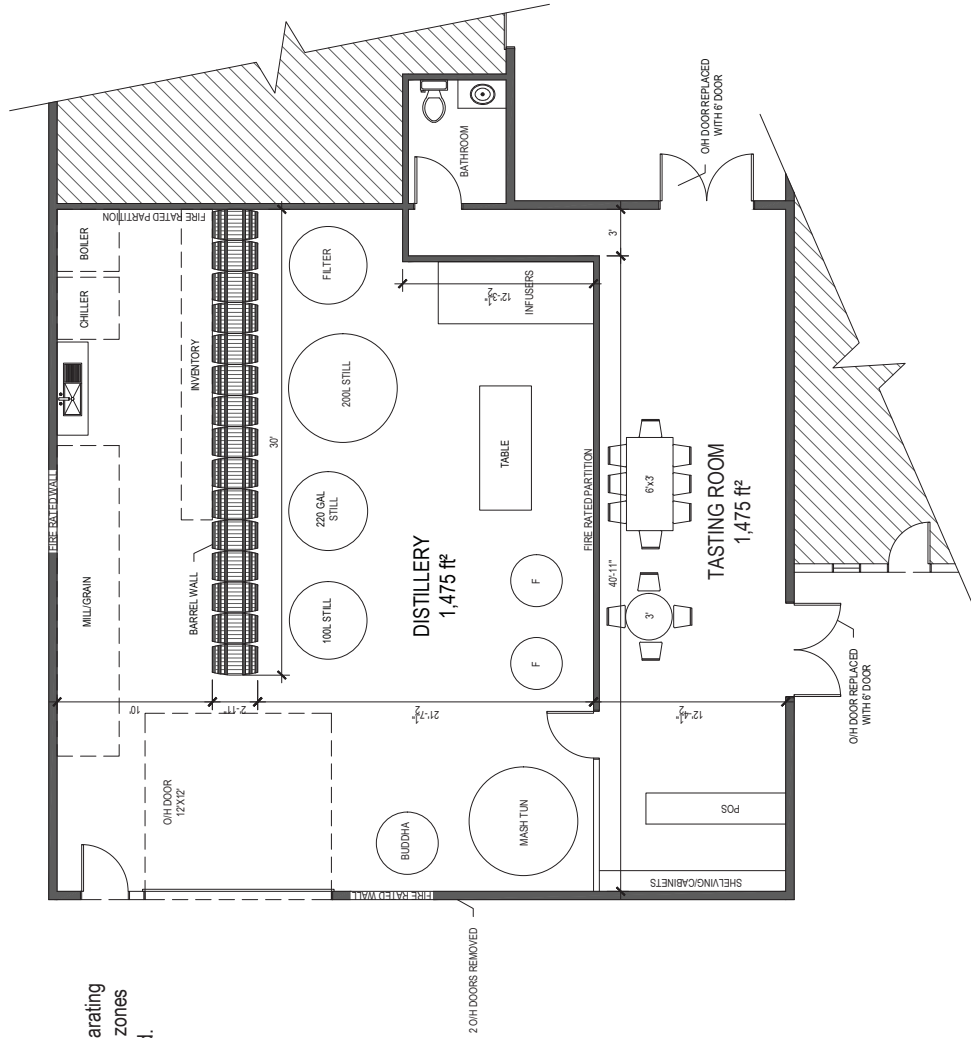
This technical report addresses only specific Building Code issues under the GHl/Client agreement for this project and shall in no way be construed as exhaustive or complete. This technical report is issued only to the Authority Having Jurisdiction, the Client, Prime Consultants and Fire Suppression Designer to this project and shall not be relied upon (without prior written authorization from GHl) by any other party.

FV/MT/kl

P:\PRJ\65\6549 - Lost Boys Distillery, Fernie\Report\2018-03-08 Report (GHl 6549.00).doc

# NOTES

All walls and ceiling separating the distillery from other zones are to be fire rated.



PROPOSED FLOORPLAN  
SCALE: 1/8"=1'-0"

1  
A3.1

PROJECT	FERNIE
ADDRESS:	14417 AVE
	FERNIE, BC
DRAWING TITLE	PROPOSED FLOORPLAN
DRAWN BY:	Sam McConnery
SCALE:	AS NOTED
DATE:	22/06/2017
SHEET NUMBER	A3.1

## Combustible Content Calculation

**Project:** Lost Boys Distillery  
**Address:** Fernie, BC  
**GHL File:** 6549.00

**Date:** 27-Feb-18  
**Revised:**  
**Prepared By:** FV/

### ETHANOL (40% ABV-70% ABV)

Production and Storage	Number	Quantity (L)	%ABV	Amount (kg)
Still (gin runs)	1	100	40.0	31.6
Still (vodka runs)	1	200	90.0	142.2
Still (stripping and whiskey runs)	1	800	40.0	252.8
Storage Tanks (metal)	1	600	90.0	426.6
Barrels (110L)	5	110	65.0	282.4
Barrels (38L)	40	38	65.0	780.5
Finished Bottles (750ml)	1600	0.75	40.0	379.2
Total				2121.5

### WOOD (CARDBOARD, PALLETS)

	Number	Weight per unit (kg)	Amount (kg)
Cardboard boxes	200	0.3	62.5
Barrels (110L)	5	27.0	135.0
Barrels (38L)	40	9.0	360.0
Wood furnishings	1	1000.0	1000.0
Grain	1000	1.0	1000.0
Pallets	1	10.0	10.0
Total			2567.5

### Combustible Content Calculation

Distilling Floor Area	137.0 m <sup>2</sup>
Ethanol	2121.5 kg
Wood	2567.5 kg
	4689.0
<b>Total Combustible Content</b>	<b>34.2 kg/m<sup>2</sup></b>

	Weight	Unit Energy Content (MJ/kg)	Total Energy(MJ)
Ethanol	2121.5	29.7	63009.9
Wood	2567.5	19.0	48782.5
			111792.4

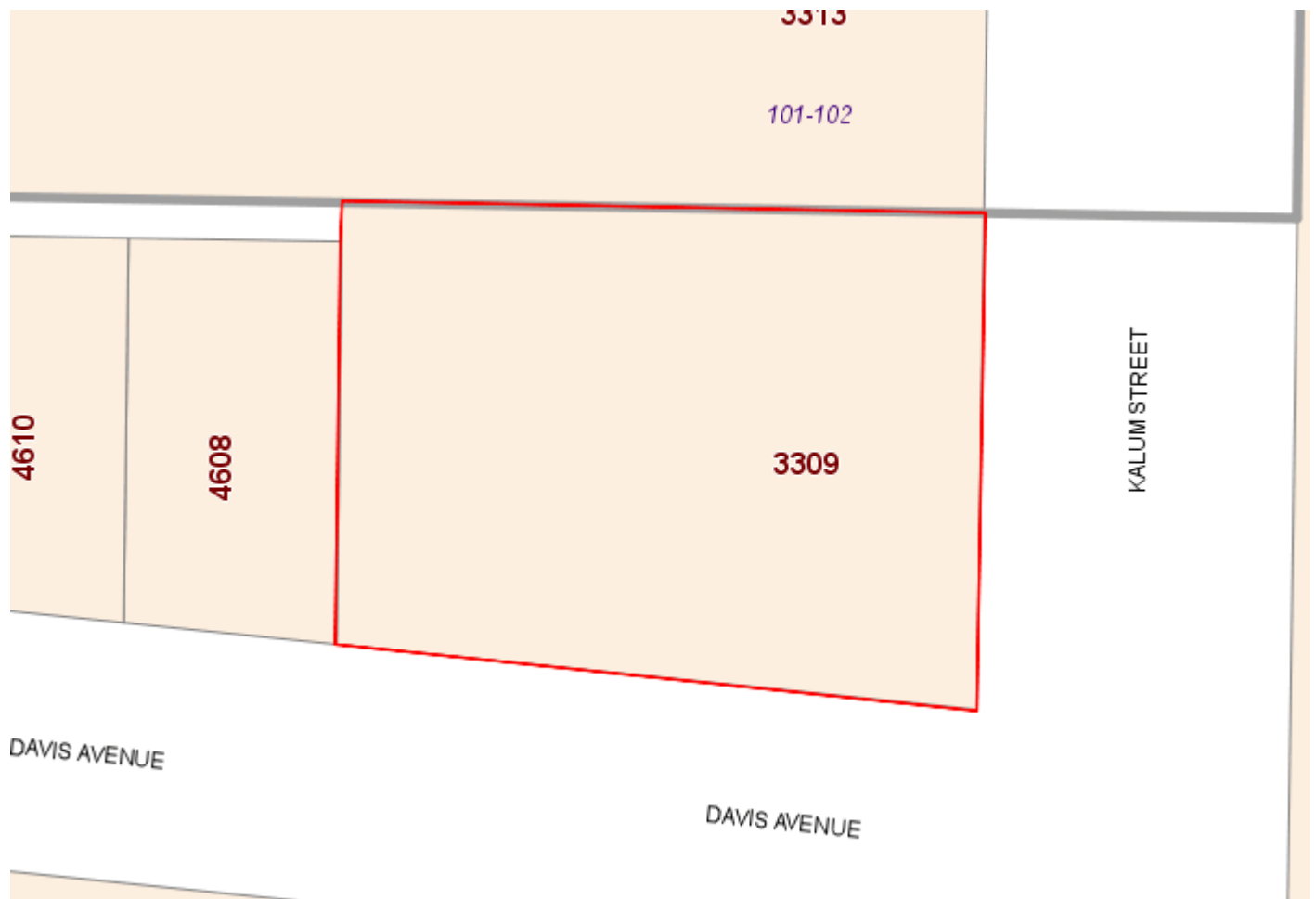
<b>Total Combustible Content</b>	<b>816.0 MJ/m<sup>2</sup></b>
----------------------------------	-------------------------------



# Parcels Internal Report

12/17/2019

Roll	:	01122.000
Unit	:	
House Number	:	3309
Address	:	3309 KALUM STREET
PID	:	010-502-351
DL	:	361
Lot	:	B
Area	:	1816.1
Zoning	:	C4



**CITY OF TERRACE**  
**Land Development Application**



**APPLICATION FOR:** (Mark appropriate box)

APPLICATION NO: \_\_\_\_\_  
Office Use Only

- |  |   |
|--|---|
| <input type="checkbox"/> <b>Official Community Plan &amp; Zoning Amendment</b> | <input type="checkbox"/> <b>Development Permit:</b> New <input type="checkbox"/> Amendment <input type="checkbox"/> |
| <input type="checkbox"/> <b>Official Community Plan Amendment</b>              | <input type="checkbox"/> <b>Development Variance Permit</b>   |
| <input type="checkbox"/> <b>Zoning Amendment</b>                               | <input type="checkbox"/> <b>Board of Variance Permit</b>  |
| <input type="checkbox"/> <b>Land Use Contract Amendment</b>                    | <input type="checkbox"/> <b>Subdivision</b>   |
| <input type="checkbox"/> <b>Phased / Bare Land Strata</b>                      | <input type="checkbox"/> <b>Temporary Use Permit:</b> New <input type="checkbox"/> Renewal <input type="checkbox"/> |
| <input type="checkbox"/> <b>Strata Title Conversion</b>                        |   |

**APPLICANT / AGENT**

Name(s) \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_ PC \_\_\_\_\_  
Phone \_\_\_\_\_ Cell \_\_\_\_\_  
Email \_\_\_\_\_

**OWNER(S)** (if other than applicant)

Name(s) \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_ PC \_\_\_\_\_  
Phone \_\_\_\_\_ Cell \_\_\_\_\_  
Email \_\_\_\_\_

**SUBJECT PROPERTY**

Legal Description \_\_\_\_\_  
\_\_\_\_\_  
Civic Address \_\_\_\_\_  
Present Use \_\_\_\_\_  
Current Zoning \_\_\_\_\_ Proposed Zoning \_\_\_\_\_  
Current OCP Designation \_\_\_\_\_ Proposed OCP Designation \_\_\_\_\_  
Description of Proposed Land Development (Attach extra sheet, if necessary) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SIGNATURE OF APPLICANT / AGENT**

**SIGNATURE OF OWNER(S)**

I/We have attached to this application the documents required as noted on the additional pages of this form and agree to submit further information deemed necessary for processing this application.

DATE \_\_\_\_\_ DATE \_\_\_\_\_

Personal information contained in this form is collected under the Freedom of Information and Protection of Privacy Act, and will be used only for the purpose for which it was collected. If you have any questions about the collection and use of this information, contact the City's Freedom of Information Co-ordinator at (250) 635-4721.



**THE APPLICANT MUST COMPLETE THE FOLLOWING REQUIREMENTS:**

- ☐ **Application fee(s)**  
*(See Planning Fees Bylaw No. 2058 – 2014)*
- ☐ **Letter of Authorization from the owner of property providing consent.**  
*(Applies only if the applicant/ agent is not the owner)*
- ☐ **Reasons for the proposed amendment.**
- ☐ **Drawing showing the location of application property.**

**Please Note:**

- Additional information may be required at the time of application.
- Electronic submissions of supporting documents in PDF are preferred. Please email the completed application to [developmentservices@terrace.ca](mailto:developmentservices@terrace.ca)

**If you require additional information or assistance please contact the City of Terrace Development Services Department at:**

**5003 Graham Avenue, Terrace, BC V8G-1B3**  
**EMAIL [developmentservices@terrace.ca](mailto:developmentservices@terrace.ca)**  
**PHONE (250) 615-4022**

Updated 22-Nov-18



**THE APPLICANT MUST COMPLETE THE FOLLOWING REQUIREMENTS:**

- ☐ **Application fee(s)**  
*(See Planning Fees Bylaw No. 2058 – 2014)*
- ☐ **Letter of Authorization from the owner of property providing consent.**  
*(Applies only if the applicant/ agent is not the owner)*
- ☐ **Reasons for the proposed development permit application.**
- ☐ **Drawing showing the location of application property.**
- ☐ **Site Plan, including the following:**
  - *Dimensioned site plan showing locations of proposed and existing buildings, ground levels, off-street parking, landscaping, access corridors, pedestrian routes, drainage, and exterior lighting.*
  - *Floor plan of proposed and existing buildings showing proposed use of the spaces.*
  - *Elevation of proposed and existing buildings and structures and details of exterior finish and signs.*
  - *Location of any major or limiting topographic features.*

**Please Note:**

- *Additional information may be required at the time of application.*
- *Electronic submissions of supporting documents in PDF are preferred. Please email the completed application to [developmentservices@terrace.ca](mailto:developmentservices@terrace.ca)*

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**PHONE (250) 615-4022**

*Updated 22-Nov-18*





## CITY OF TERRACE LIQUOR / CANNABIS LICENSE APPLICATION

**Application Type:**

- |                          |   |            |
|--------------------------|---|------------|
| <input type="checkbox"/> | Liquor Primary License, New   | \$ 500.00  |
| <input type="checkbox"/> | Liquor Primary License, Amendment to Existing<br><small>(Occupant load increase, winery endorsement, permanent hour extension)</small>            | \$ 300.00  |
| <input type="checkbox"/> | Food Primary License, Amendment to Existing<br><small>(Late night hour extensions beyond midnight and patron participation entertainment)</small> | \$ 300.00  |
| <input type="checkbox"/> | Liquor/Food Primary License, Temporary Amendment<br><small>(Special occasion hour extensions or temporary occupant load increase)</small>         | \$ 100.00  |
| <input type="checkbox"/> | Storefront Cannabis Retail Sales License, New   | \$1,500.00 |

Name of Applicant(s): \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number(s): \_\_\_\_\_ Cell: \_\_\_\_\_

Email: \_\_\_\_\_

License Number(s) Affected: \_\_\_\_\_

Name of Owner(s): \_\_\_\_\_  
(if different from applicant)

Address: \_\_\_\_\_

Telephone Number(s): \_\_\_\_\_ Fax: \_\_\_\_\_

Legal Description of Licensed Property: \_\_\_\_\_

Address of Licensed Property: \_\_\_\_\_

Present Zoning: \_\_\_\_\_ Present Use: \_\_\_\_\_

\_\_\_\_\_  
**SIGNATURE OF APPLICANT**

\_\_\_\_\_  
**DATE**

- ☐ Letter of Authorization Attached (if Applicant is not the Owner)

**TO COMPLETE THIS APPLICATION SUBMIT TO DEVELOPMENT SERVICES:**

1. *Appropriate Application fee.*
2. *Signed Letter of Authorization from the Owner \_\_\_\_\_  
(applies only if the applicant is not the owner)*
3. *LCRB APPLICATION*
  - (i) *Submit copy of completed Liquor and Cannabis Regulation Branch (LCRB) application form(s) and associated documents (i.e. letter of intent, occupant load, floor plans, etc.)*

**APPLICATION REVIEW & APPROVAL PROCEDURES**

1. *The application is processed and reviewed by City staff.*
2. *The Development Services Department will coordinate input from the various municipal departments, notify landowners/tenants within a prescribed distance from the land that is the subject of the application and will publish a notice in the local newspaper advising of a public hearing.*
3. *The Development Services Department will prepare a report for Council, including feedback from the Public Hearing.*
4. *After considering the application and the report, City Council may provide a response to the application in the form required by the Province, as outlined by the LCRB.*

*If you require additional information or assistance please contact the City of Terrace Planning Department at (250) 615-4022.*

*Personal information contained on this form is collected under the Freedom of Information and Protection of Privacy Act, and will be used only for the purpose for which it was collected. If you have any questions about the collection and use of this information, contact the City's Freedom of Information Co-ordinator at 250-638-4722.*

## Jack Cherniawsky

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**From:** Tara Irwin <tirwin@terrace.ca>  
**Sent:** October 8, 2020 9:43 AM  
**To:** Jack Cherniawsky  
**Subject:** FW: proposed craft distillery 3309 kalum st

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**From:** Alisa Thompson  
**Sent:** October 8, 2020 9:39 AM  
**To:** (sg)Mayor and Council; Heather Avison; Laurel Payjack-Mohler; Tara Irwin; David Block  
**Subject:** Fw: proposed craft distillery 3309 kalum st

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**From:** David Norman  
**Sent:** October 7, 2020 4:55 PM  
**To:** Alisa Thompson <[athompson@terrace.ca](mailto:athompson@terrace.ca)>  
**Subject:** proposed craft distillery 3309 kalum st

Dear Sir/Madam;

I am a resident of Terrace and would like to express my positive backing for the proposed "craft distillery", to be located at 3309 Kalum St.

The operation would create negligible noise or other "downsides".

There would be added employment opportunities, and given a successful operation, the overall result would be one of increased prosperity for the Town of Terrace.

Please list me as one who supports the "craft distillery" proposal.

Thank You

David Norman  
Old Remo Rd, Terrace.

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**From:**  
**Sent:** Thursday, October 8, 2020 8:48 AM  
**To:**  
**Subject:** Letter of support - Copper River Distillery

To whom it may concern,

I am writing this letter in support of the Copper River Distillery. As Terrace continues to grow as the new hub of Northwest it is important to allow the infrastructure to grow as well. Terrace has the opportunity to host the first craft distillery in all of Northern BC. With this comes the chance to educate the community on the artisanal spirit culture and the responsible drinking associated with it.

I believe rejecting the zoning for this project will have a negative impact on the Terrace economy. This council needs to seriously consider the message that they are sending to local small business. Be part of the solution, not part of the problem.

Thank you,

Brionne Lavoie

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**From:** Gina Friesen  
**Sent:** Wednesday, October 7, 2020 3:01 PM  
**To:**  
**Subject:** re concerning Copper River Distilling Company

To whom this may concern.

I support the Copper River Distilling Company be added to our community.

For the last 31 years I have been an employee of Copperside foods , and a resident of Terrace for 50 years.

I am supporting this new venture 100% as a resident of Terrace . To many small towns make room for "out of town business owners" that don't keep the money in their home towns. This company does keep it in our home town. I am proud of Copperside because they do use local contractors and businesses , as well as have employed thousands of Terrace residents over the last 40 years. I have no issue with the Distilling Company or it's location.

Thanks for your time

Gina Friesen



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**From:** Danielle Lavoie  
**Sent:** Wednesday, October 7, 2020 2:16 PM  
**To:**  
**Subject:** Letter of Support - Copper River Distilling

To Whom it May Concern,

I would like to express my support for approval of zoning for Copper River Distilling. I hope that your council members take the time to understand what a distillery is, and how it can positively contribute to tourism, culture and the local economy in Terrace.

Best Wishes,  
Danielle Lavoie

## Jack Cherniawsky

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**From:** Tara Irwin <tirwin@terrace.ca>  
**Sent:** October 5, 2020 9:25 AM  
**To:** Jack Cherniawsky  
**Subject:** FW:

FYI

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**From:** Alisa Thompson  
**Sent:** October 5, 2020 9:24 AM  
**To:** (sg)Mayor and Council; Heather Avison; David Block; Tara Irwin; Laurel Payjack-Mohler; Ashley Poole  
**Subject:** Fw:

---

**From:** Rettich, Clemens  
**Sent:** October 5, 2020 6:55 AM  
**To:** Alisa Thompson <athompson@terrace.ca>  
**Cc:** [info@copperriverdistillery.com](mailto:info@copperriverdistillery.com) <[info@copperriverdistillery.com](mailto:info@copperriverdistillery.com)>  
**Subject:**

To Whom It May Concern:

Please accept this message in support of Copper River Distilling's zoning application to the City, and as an ask for your support of the craft distilling movement generally.

I have known Joseph Lavoie personally, and his team, for many years. I know them to be a group of professional, ethical, and community-minded entrepreneurs. In seeking to establish this craft distillery, they would be contributing to the economy, skills base, quality of life, and local food community in a positive and substantial way.

The team at Copper River Distilling is committed to contributing actively to the economy and quality of life in Terrace.

I look forward to hearing of the approval of, and successful launch of Copper River Distilling in Terrace.

Clemens Rettich

*Note: this is a personal and professional endorsement of Copper River Distilling's zoning application, but does not represent the position, endorsement or opinion of my employer, Grant Thornton LLP.*

**Clemens Rettich | Organizational Performance**  
**Business Consulting and Technology – Vancouver Island**  
Grant Thornton LLP  
1675 Douglas Street, Suite 650 | Victoria | BC | V8W 2G5  
T +1 250 995 3397 | M +1 250 686 1347  
E [Clemens.Rettich@ca.gt.com](mailto:Clemens.Rettich@ca.gt.com) | W <http://www.grantthornton.ca/>



Please note we have closed our offices until further notice to ensure the well being and safety of our people and our clients. During this time, we remain committed to working with you remotely to ensure your needs are met, and will be

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**From:** Mary Lou  
**Sent:** Wednesday, October 7, 2020 1:13 PM  
**To:**  
**Subject:** Support for approval of zoning application for Copper River Distilling Company's Craft Distillery

Hello,

I would like to express my support and encourage approval of the above zoning application for the craft distillery project. The project has potential to showcase Terrace, its farms/producers and artisans through partnerships and working relationships. Go for it, Terrace!

Regards,

Mary Lou Von Niessen

## Jack Cherniawsky

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**From:** Tara Irwin <tirwin@terrace.ca>  
**Sent:** October 5, 2020 1:27 PM  
**To:** Jack Cherniawsky  
**Subject:** FW: Craft Distillery

Can you add to file please

---

**From:** Alisa Thompson  
**Sent:** October 5, 2020 11:44 AM  
**To:** (sg)Mayor and Council; Heather Avison; David Block; Tara Irwin; Laurel Payjack-Mohler; Ashley Poole  
**Subject:** Fw: Craft Distillery

---

**From:** Warren Wilson  
**Sent:** October 5, 2020 11:42 AM  
**To:** Alisa Thompson <[athompson@terrace.ca](mailto:athompson@terrace.ca)>  
**Subject:** Craft Distillery

I'd like to add my voice to those who think it would be a fine idea to have a craft distillery in Terrace. The proposed location seems appropriate to the use: on the edge of the downtown area and slightly away from the residential. It would help to add fresh life to the Copperside building on that site and add diversity to the local economy by introducing a new business.

I believe these kinds of innovative initiatives should receive any support the City of Terrace can provide.

Warren Wilson

## Jack Cherniawsky

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**From:** Tara Irwin <tirwin@terrace.ca>  
**Sent:** October 5, 2020 1:27 PM  
**To:** Jack Cherniawsky  
**Subject:** FW: Craft Distillery support

Can you add to file please

---

**From:** Alisa Thompson  
**Sent:** October 5, 2020 1:18 PM  
**To:** (sg)Mayor and Council; Heather Avison; David Block; Tara Irwin; Ashley Poole; Laurel Payjack-Mohler  
**Subject:** Fw: Craft Distillery support

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**From:** Dunfield, Craig  
**Sent:** October 5, 2020 1:14 PM  
**To:** Alisa Thompson <[athompson@terrace.ca](mailto:athompson@terrace.ca)>  
**Subject:** Craft Distillery support

Good day,

I am writing in support of the proposed craft distillery planned for 3309 Kalum Street. I have witnessed very strong support for our local brewery from community members, as well as travelers and would expect to see a similar level of support for the proposed distillery. The distillery will be beneficial to Terrace in terms of direct employment, ancillary businesses, as well as taxation. The hours of operation are important, based on the location being directly across from the park and playground, however I feel this can be mitigated by limiting the open hours to mostly in the evenings, when the park and playground are being used less. Allowing this business to open will also diversify the economy and provide for a more vibrant downtown. I'm looking forward to hearing more about this project moving forward.

Regards,

**Craig Dunfield** | Branch Manager, RBC Royal Bank | **Royal Bank of Canada** | 4640 Lakelse Ave, Terrace, B.C. V8G 1R2 | T. 250-635-8006 | F. 250-635-4625  
**Craig Dunfield** | Mutual Funds Representative, RBC Royal Bank | **Royal Mutual Funds Inc.** | T. 250-635-8006

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**From:** Denise Kluss  
**Sent:** Wednesday, October 7, 2020 2:23 PM  
**To:**  
**Subject:** Distillery

This email is to express my support in the possibility of a distillery opening up on Kalum in Terrace.  
Denise Kluss

Sent from my iPhone



October 8, 2020

To: Mayor and Council

Support for Copper River Distilling

The Terrace Downtown Improvement Area Society wishes to express our support for Copper River Distilling's plans for a craft distillery in our downtown.

We are pleased that this investment will be coming from long time Terrace business owners and residents who have a strong track record in our local business community and in supporting a variety of community groups over the years.

We look forward to this positive development.

Regards,

Dave Gordon, President  
Terrace Downtown Improvement Area Society

**Tara Irwin**

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**Subject:** FW: Support for Copper River Distillery

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**From:** Jeff Minhinnick  
**Sent:** October 7, 2020 8:51 AM  
**To:** Alisa Thompson <[athompson@terrace.ca](mailto:athompson@terrace.ca)>  
**Subject:** Support for Copper River Distillery

Hello,

I wanted to write in and show my support for Copper River Distillery. While I understand there is some concern about its location near a park, I don't believe that to be an issue. I've been to numerous distilleries and breweries that are near parks and have never witnessed any issues. Distilleries are not bars and people rarely stay for more than a taster flight and purchase product.

I feel that this business could add to our struggling and frankly lack lustre downtown core. I believe this would be an excellent addition to our growing town. They plan to support local farmers and other small businesses. I for one welcome this new addition to Terrace.

Sincerely,  
Jeffrey Minhinnick

Sent from my iPhone