# City of Salmon Arm Development and Planning Services <br> Committee 

Tuesday, February 18, 2020
8:00 a.m.
Council Chambers, City Hall 500-2 Avenue NE

| Page \# | Item \# | Description |
| :---: | :---: | :---: |
|  | 1. | CALL TO ORDER |
|  | 2. | ACKNOWLEDGEMENT OF TRADITIONAL TERRITORY <br> We acknowledge that we are gathering here on the traditional territory of the Secwepemc people, with whom we share these lands and where we live and work together. |
|  | 3. | REVIEW OF AGENDA |
|  | 4. | DISCLOSURE OF INTEREST |
| 1-14 | 5. | REPORTS |
|  | 1. | Zoning Amendment Application No. ZON-1166 [Westside Farms Ltd.; 149010 Avenue SW; A-1 and R-1 to C-3] |
|  | 2. | Development Variance Permit Application No. VP-510 [Westside Farms Ltd.; 149010 Avenue SW; Service Requirements] (see Item 5.1 above) |
| 15-88 | 3. | Zoning Amendment Application No. ZON-1165 [628746 BC Ltd./Laird, B.; 52110 Street SW; C-7 to C-3] |
|  | 4. | Development Permit Application No. DP-423 [628746 BC Ltd./Laird, B.; 52110 Street SW; Highway Service/Tourist Commercial] (see Item 5.3 above) |
| 89-98 | 5. | Development Variance Permit Application No. VP-506 [Seventh-Day Adventist Church/Burman Construction/Burman, P.; 588135 Street NE; Setback Requirements] |
| 99-108 | 6. | Zoning Amendment Application No. ZON-1168 [Roodzant, J.; 2351 60 Street NW; A-2 to A-3] |
| 109-126 | 7. | Development Variance Permit Application No. VP-505 [Micku, B. \& V./Franklin Engineering Ltd./Sonmor, D.; 3410 Lakeshore Road NE; Service Requirements] |

6. PRESENTATIONS
7. FOR INFORMATION
8. IN CAMERA
9. LATE ITEM
10. ADJOURNMENT

## CITY OF

## SALMONARM

TO: $\quad$ His Worship Mayor Harrison and Members of Council
DATE: $\quad$ February 6, 2020
FROM: Director of Development Services
RE: $\quad$ Zoning Bylaw Amendment Application No. 1166
Development Variance Permit Application No. 510
Subject Property: Proposed Lot 1, Plan EPP99304
Civic Address: 1490-10 Avenue SW
Owner/Applicant: Westside Farms Ltd., Inc. No. BC 1075703

## MOTION FOR CONSIDERATION

THAT: Bylaw No. 4372 be considered, adoption of which would amend Zoning Bylaw No. 2303 by rezoning the northerly 2.77 hectares of that part of the NE $1 / 4$ of Section 10 included in plan attached to absolute fees parcel book volume 5 , folio 614; Township 20 Range 10 W6M, KDYD, shown on Schedule A, from A-1 (Agricultural Zone) and $\mathrm{R}-1$ (Single Family Residential Zone) to $\mathrm{C}-3$ (Service Commercial Zone);

AND THAT: Final reading Bylaw No. 4372 be withheld subject to the following:

1) Ministry of Transportation and Infrastructure approval;
2) Registration of a Section 219 Land Title Act Covenant addressing the City's Floodplain Regulations and the Provincial Riparian Areas Protection Regulation;

AND THAT: Development Variance Permit No. 510 be authorized for issuance for that part of the NE $1 / 4$ of Section 10 included in plan attached to absolute fees parcel book volume 5, folio 614; Township 20 Range 10 W6M, KDYD, which will vary Subdivision and Development Servicing Bylaw No. 4163 as follows:

Section 4.0 - waive all City of Salmon Arm works and services requirements;
AND THAT: Issuance of Development Variance Permit No. 510 be withheld subject to Registration of a Section 219 Land Title Act Covenant on titles stipulating the following:

1) No further subdivision or development of Proposed Lot 1, Plan EPP99304 or the Remainder until fully serviced to City of Salmon Arm Standards; and
2) No development on Proposed Lot 1, Plan EPP99304 until fencing is adequately installed along the ALR boundary, in a phased manner and to be approved by a future Development Permit.

## PROPOSAL

The rezoning application (ZON-1166) proposes Bylaw No. 4372 intended to rezone the northerly 2.77 ha portion of the subject property (Proposed Lot 1) from Agriculture (A-1) and Single Family Residential (R-1) to Service Commercial (C-3) in order to: 1) facilitate a single lot subdivision along the ALR boundary; and 2) allow for future service commercial land uses and development on Proposed Lot 1.

The second application, Development Variance Permit (DVP-510), is a request for Council to waive all servicing bylaw related requirements to the proposed subdivision; mainly to not upgrade the 10 Avenue SW frontage to the Urban Arterial Street Standard.

The owner/applicant is agreeable to the subject conditions outlined in the Motion for Consideration.
Schedule A and the sketch plan of subdivision "Proposed Lot 1, Plan EPP99304" are attached as APPENDIX 1 and various reference maps are attached as APPENDIX 2. The C-3 zone regulations are attached as APPENDIX 3.

## BACKGROUND

The owner/applicant intends to sell the proposed remainder in the ALR to a local, large scale farming operation. There are no immediate plans to further subdivide or develop Proposed Lot 1 and farming activity on the 2.77 ha portion is likely continue over the short-term. The remaining 9.19 ha southern portion in the ALR is to remain zoned A-1 (Agriculture).

Proposed Lot 1 cannot be subdivided under the current A-1 / R-1 zoning due to the minimum parcel size requirement of 8.0 ha for an A-1 zoned lot.

The subject property has a long history of farm use. Proposed Lot 1 and the lots to the east and west have been designated for "Highway Commercial" (HC) land use in the Official Community Plan (OCP) since at least the 1990s. Long standing farm operations have occurred on the lands to the south, southwest and southeast for generations.

## Site / Context

The subdivision plan for Proposed Lot 1 shows a 15 m wide panhandle access from 10 Ave. SW to the southern remainder along the present west parcel boundary. It also shows 2.4 m of road dedication along the 273 m length of the 10 Ave. SW frontage. The panhandle and lot depth is approx. 110 m . Within the panhandle is a proposed 6.5 m wide statutory right of way for a drainage ditch that is subject to the Provincial Riparian Areas Protection Regulation (RAPR) and needed by the City for its master drainage planning; mostly for Residential Development Area B to the southeast.

The subject property is relatively flat, a large portion of which lies below the 200-Year Floodplain Elevation ( < 352 m Geodetic Survey Coordinate). Tenth Ave. SW has acted somewhat as a dike throughout Salmon Arm's urbanized history as the north side of this road is not within the floodplain. Although excellent land for agriculture with Class 2 soils, it may also be well suited for commercial development with stabilized, raised and drained surface conditions.

Properties across 10 Ave. SW to the north and those to the east and west that are not in the ALR include a mix of service commercial, regional mall (zoned C-3, C-7) and low to medium density residential land uses and developments (zoned R-1 and R-4).

## OCP / Zoning

The Highway Commercial land use policies of the OCP applicable to Proposed Lot 1 support C-3 zoning. No development is proposed at this time. If rezoned to C-3, development on Proposed Lot 1 would be subject to a Development Permit application to address architectural form and character; the "Highway Commercial Development Permit Area" guidelines of the OCP and zoning regulations would be applicable.

Proposed Lot 1 was entirely zoned Rural Residential (RR-1) in the mid 1970s and it appears that the ALR boundary today is the original alignment from the early 1970s. The remaining 9 ha portion in the ALR proposed to be severed is to remain designated "Salmon Valley Agriculture" and zoned Agriculture (A-1).

The subject property is designated "Potential Hazardous Areas Development Permit Area - Floodplain". The registration of a Floodplain Covenant as detailed in the Motion for Consideration will satisfy the OCP's policies in this regard. The covenant will generally restrict new development to an elevation above the minimum flood construction level, require favourable geotechnical review prior to development, and save the City harmless from liability.

In terms of the RAPR, the subject property is designated "Environmentally Sensitive Riparian Areas Development Permit Area" in the OCP due to the drainage ditch traversing south to north and mos tly aligned with the eastern parcel boundary of the adjacent lot to the west. The default RAPR setback or "Streamside Protection and Enhancement Area" (SPEA) is 30 m . The associated Assessment Report (No. 6034 January 20, 2020) by Jeremy Ayotte, RP. Bio, Qualified Environmental Professional states:
"This Riparian Areas Regulation assessment report was triggered by a subdivision proposal that also requires dedication of a City of Salmon Arm Right of Way ( 6.5 m width), and road access to the remaining lot ( 4.5 m width). The City of Salmon Arm Right of Way will be within the 10 m SPEA on this stream. The road access to the remaining lot will be outside of the 10 m SPEA (see site plan). There is no requirement for any development within the SPEA (soil disturbance or vegetation removal) as a consequence of this proposed development. Establishing a 10 m SPEA on this stream will lead to improved streamside vegetation potential."

The registration of a Riparian Areas Covenant will satisfy the OCP policies in this regard. It will have the effect of prohibiting any development or disturbance of the SPEA on the subject property's proposed panhandle, but it will not apply to the adjacent property where the drainage ditch is primarily located.

A SPEA width less than 30 m needs to be approved by the Ministry of Environment and Climate Change (MOE). Staff understands from the owner/applicant's QEP that MOE will allow a 10 m wide SPEA as proposed; however, as of this date, official notification of approval from MOE has not been received.

The owner/applicant has been cooperating with staff for almost a year with plan to secure a City statutory right of way over the entire length of this critical drainage ditch that would cross over $1,000 \mathrm{~m}$ of farmland to the south. The right of way still requires ALC and possibly MOE approval through technical application processes which do not require City Council's approvals.

## Servicing Variances

The owner/applicant is requesting that Council waive all servicing requirements for the related subdivision, which would primarily involve road upgrades to the Urban Arterial Standard along the 10 Ave. SW frontage. The related 2016 cross-section from the Subdivision and Development Servicing (SDS) Bylaw shows a 25 m wide ( 12.5 m wide from centerline) road intended to accommodate on the south side: 7.5 m of asphalt, curb and gutter, street-lighting, 3 m wide multi-use path, fire hydrants and underground utility connections.

The present alignment of 10 Ave. SW is not constructed to the current standard along most of its north and south frontages; newer developments have been subject to an interim Urban Arterial standard of the SDS Bylaw. Recent road works costs for those developments along the north side of 10 Ave. SW have been a minimum of $\$ 1000 / \mathrm{m}$ of frontage, not including hydro and utilities.

The sketch plan of subdivision indicates 2.4 m width of road dedication to achieve a width of 10 m from centerline for a total dedicated area of $657 \mathrm{~m}^{2}$. Additional road width may need to be negotiated and secured by a statutory right of way in the future.

The existing water main and sanitary sewer mains within 10 Ave. SW are consistent with the SDS Bylaw standards and do not require upgrading at this time. The existing storm sewer main, however, is at capacity and an alternate storm water management solution is needed for this area which will need to be addressed prior to commercial development proceeding on the subject property.

Staff recommend approval of DVP-510 subject to the registration of a covenant stipulating:
No further subdivision or development of Proposed Lot 1, Plan EPP99304 or the Remainder until fully serviced to City of Salmon Arm Standards

The above covenant would defer all servicing requirements to the next subdivision or development, whichever is applied for first.

## Engineering Department

Comments pending.

## Ministry of Transportation and Infrastructure

Ministry approval of the Rezoning Bylaw is required as the subject property is within 800 m of the Trans Canada Highway.

## Agricultural Advisory Committee

The AAC's mandate includes reviewing planning / development applications for properties in the ALR and along its fringe. The AAC reviewed the rezoning application on February 5, 2020 and unanimously recommended approval.

## ALR Buffering

To be somewhat consistent with the OCP polices for agricultural land, the City's Approving Officers have consistently required the installation of fencing along ALR boundaries for past proposals under similar circumstances. At a minimum, fencing should be installed to separate agricultural uses from commercial, residential and other non-compatible activities. The C-3 zone allows for a broad range of commercial uses and accessory residential development on upper floors.

The fencing work is requested to be deferred to future Development Permit approvals and potentially in a phased manner depending on how Proposed Lot 1 is subdivided and developed. The fencing requirements are to be addressed in the same Covenant as the servicing requirements associated with the DVP. Staff support this request. The type and height of fencing can be reviewed in the future with reference to the Ministry of Agriculture's / ALC's Fencing and Buffering Guidelines and relative to the proposed C-3 uses.

## CONCLUSION

The proposed rezoning is consistent with the OCP and supported by City staff. The proposed variance will defer off-site servicing and fencing along the ALR boundary to a later date when future development or subdivision is applied for. The owner/applicant is agreeable to the subject conditions outlines in the Motion for Consideration.


Subdivision Plan of Port of
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## APPENDIX 1



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## Purpose

17.1 The C-3 Zone is intended to accommodate commercial uses which are oriented towards vehicular traffic and require large areas of land for storage and/or display purposes and/or to accommodate large buildings. New developments zoned C-3 may be required to obtain a Development Permit as per the requirements of the Official Community Plan.

## Regulations

17.2 On a parcel zoned C-3, no building or structure shall be constructed, located or altered and no plan of subdivision approved which contravenes the regulations set out in the $\mathrm{C}-3$ Zone or those regulations contained elsewhere in this Bylaw.

## Permitted Uses

17.3 The following uses and no others are permitted in the C-3 Zone:
. 1 auto parts and accessories (new) sales;
. 2 automotive repair shop, excluding fuel service stations;
. 3 automotive sales and rental lots and showroom (new and used);
. 4 boat and trailer sales and rental showrooms, including minor repairs;
. 5 building supply establishment;
. 6 cafe; \#2736
. 8 commercial daycare facility,
. 9 craft distillery and brewery
. 10 electrical appliance repair shop;
.11 farm equipment sales and rental;
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frozen food lockers, including retail sales;
funeral home including accessory crematorium;
greenhouses and nurseries, including retail sales;
high technology research and development; \#4368
home occupation; \#2782
laboratory, scientific and research;
laundromat;
locksmith shop;
licensee retail store; \#3223
mini warehousing;
mobile food vending; \#4240
mobile home sales; \#2736
moving and storage establishment;
neighbourhood pub; \#3223
offices;
outside vending; \#2837
personal service establishment; \#4049
print shop;
public use;
public utility,
radiator repair shop;
recreation facility-indoor,
rental and repair of tools, small equipment; \#2736
restaurant,
retail store; \#4049
tire sales and repair establishment;
recreation vehicle sales, repair, rental and assembly on parcels greater than 1.0 hectare with
maximum $25 \%$ of gross floor area to be used for part's assembly. \#2596

39 transportation use;
.40 truck sales and rental lots and showroom;
41 upholstery shop;
. 42 upper floor dwelling units;
43 veterinary hospital;
44 accessory use;

## Maximum Height of Principal Buildings

17.4 The maximum height of the principal buildings shall be 10.0 metres ( 32.8 feet).

## Maximum Height of Accessory Buildings

17.5 The maximum height of accessory buildings shall be 6.0 metres ( 19.68 feet).

## Minimum Parcel Size or Site Area

17.6 The minimum parcel size or site area shall be 465.0 square meters ( $5,005.4$ square feet).

## Minimum Parcel or Site Width

17.7 The minimum parcel or site width shall be 15.0 metres ( 49.2 feet).

## Minimum Setback of Principal Buildings

17.8 The minimum setback of the principal buildings from the:

1 Front parcel line shall be 6.0 metres (19.7 feet)
2 Rear parcel line

- adjacent to a residential zone shall be $\quad 3.0$ metres ( 9.8 feet)
- all other cases shall be 1.0 metre ( 3.3 feet)
. 3 Interior side parcel line
- adjacent to a residential
zone shall be $\quad 3.0$ metres ( 9.8 feet)
- all other cases shall be 1.0 metre ( 3.3 feet)
.4 Exterior side parcel line shall be 6.0 metres ( 19.7 feet)


## Minimum Setback of Accessory Buildings

17.9 The minimum setback of accessory buildings from the:

1 Front parcel line shall be 6.0 metres ( 19.7 feet)
. 2 Rear parcel line shall be 1.0 metre ( 3.3 feet)
. 3 Interior side parcel line shall be 1.0 metre ( 3.3 feet)
.4 Exterior side parcel line shall be 6.0 metres (19.7 feet)

## Outside Storage

17.10 Outside storage shall be screened as per Appendix III.

## Parking and Loading

17.11 Parking and loading shall be required as per Appendix I.

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To: His Worship Mayor Harrison and Members of Council
Date: February 11, 2020
Subject: Zoning Bylaw Amendment Application No. 1165
Development Permit Application No. 423 (Highway Service / Tourist Commercial)
Legal: Lot 5, Section 15, Township 20, Range 10, W6M, KDYD, Plan 12965 Except
Plans 21358, 24962, KAP73904 and EPP40251
Civic: $\quad 521$ - 10 Street SW
Owner \& Applicant: 628746 BC LTD. / Laird, B.

## MOTION FOR CONSIDERATION

THAT: Bylaw No. 4370 be considered, adoption of which would amend Zoning Bylaw No. 2303 by rezoning Lot 5, Section 15, Township 20, Range 10, W6M, KDYD, Plan 12965 Except Plans 21358, 24962, KAP73904 and EPP40251 (521-10 Street SW) from C.7 (Shopping Centre Commercial Zone) to C-3 (Service Commercial Zone);

AND THAT: Final reading of Byiaw No. 4370 be withheld subject to:

1. Approval by the Ministry of Transportation and Infrastructure, and
2. The modification of Covenant CA3712464 - CA3712465 to allow for subdivision and the construction of a furniture store in accordance with the elevations and site plan attached in Appendix 3;

AND THAT: Development Permit No. 423 be authorized for issuance for Lot 5, Section 15, Township 20, Range 10, W6M, KDYD, Plan 12965 Except Plans 21358, 24962, KAP73904 and EPP40251 (521 - 10 Street SW) in accordance with the elevations and site plan attached in Appendix 3;

AND FURTHER THAT: Issuance of Development Permit No. DP-423 be withheld subject to the receipt of an Irrevocable Letter of Credit in the amount of $125 \%$ of a landscaper's estimate for completion of landscaping.

## STAFF RECOMMENDATION

THAT: The motion for consideration be adopted.

## PROPOSAL

The proposal is to rezone and develop the parcel located at 521 - 10 Street SW (Appendix 1 and 2) for a new 19,000 square foot commercial furniture store building. Rezoning will allow for a planned subdivision (SUB-19.20) as shown in the attached site plans. The proposed building design is for a single storey commercial building on the northeast corner of the parcel, with a showroom, storage and office space.

$$
5.3 / 5.4
$$

Public parking will be located in the front of the building, with loading and staff parking located at the rear of the building.

Letters of Intent, elevations and site plan drawings are attached as Appendix 3.

## SITE CONTEXT

The site is designated Highway Service / Tourist Commercial in the City's Official Community Plan (OCP) and is zoned Shopping Centre Commercial (C-7) in the Zoning Bylaw (Appendix 4 and 5). The parcel is subject to the guidelines of the OCP's Highway Service / Tourist Commercial Development Permit Area as described further in this report.

The site is currently vacant of any buildings (site photos attached as Appendix 6). The property under consideration has a gross area of 3.6 acres and has approximately 43 m of frontage along 10 Street SW.

The adjacent land uses are described as follows:

| North: | C-3-Service Commercial |
| :--- | :--- |
| South: | C-7-Shopping Centre Commercial |
| East: | 10 Street SW with R-1 \& R-4 - residential beyond |
| West: | C-3-Service Commercial |

In support of their Development Permit application, the applicant has provided a detailed site plan (Appendix 3) to demonstrate their concept for the property, and elevations depicting the proposed building design.

## Traffic Impact Analysis

This site was before Council in 2013/2014 related to the subdivision and development of the neighbouring Kal Tire parcel. Due to the potential traffic increase related to the proposed development impacting the intersection of 10 Street and 5 Avenue, a Traffic Impact Analysis (TIA - Appendix 7) was required and a subsequent covenant restricting future development was placed on the remaining undeveloped property (Appendix 8). The TIA considered the highest practical use of the site, assuming an ultimate build out of over 105,000 square feet of gross floor area under $\mathrm{C}-3$ (Kal Tire, 11,300 square feet) and $\mathrm{C}-7$ zoning ( 94,500 square feet), and a peak trip generation of 352 per hour.

Some of the TIA recommended improvements have been completed, however concerns remain regarding the adjacent intersection and roadways which are expected to see increased traffic volumes related to future development. The applicant has requested an amendment to the covenant (Appendix 9) which would allow for the building of the proposed furniture store and single lot subdivision without an update to the TIA, while the requirement would remain on title to be triggered by future development.

## COMMENTS

## Fire Department

No concerns.

## Building Department

No concerns.

## Engineering Department

Comments pending.

## Ministry of Transportation and Infrastructure

The subject property is located within 800 m of the Trans Canada Highway therefore the zoning bylaw amendment requires approval by MOTI pursuant to the Transportation Act. The application was referred to MOTI for comment on January 9, 2020. Approval from MOTI will be required prior to final adoption of the zoning bylaw.

The MOTI covenant is attached as Appendix 11. Comments are pending.

## Design Review Panel

A Design Review Panel (DRP) meeting was held on January 23, 2020 to discuss the form and character of the proposed development (meeting minutes attached - Appendix 12). The DRP was supportive of the proposal as presented. Noting their support of the proposal as presented and the design features proposed, the panel did mention an opportunity to potentially enhance the design of the north and south elevations.

Staff noted that from initial pre-application discussions with the applicant, that the design has been enhanced with the vertical features brought in to break up the north and south elevations.

## Planning Department

OCP Commercial Policy - Zoning
The OCP's Highway Service / Tourist Commercial designation supports the proposed C-3 zone. The current C-7 - Shopping Centre zone has a minimum parcel size of 1.0 hectares. Rezoning to C-3, which has a minimum parcel size of 465 square metres, is required to support the proposed subdivision.

Staff are supportive of allowing the City's "no build / no subdivision" covenant to be amended to allow a Building Permit for the furniture store and the related single lot subdivision. Without amending the covenant, a Building Permit can not be issued. The amendment would allow for a furniture store only, and compared to the full build out of a shopping mall, the development of a 19,000 square foot furniture store should generally produce limited impact in terms of traffic generation.

The City's covenant would remain on title, meaning that an updated TIA would be required for any further development proposal.

## Form and Character Development Permit

The proposed development is subject to the "Highway Service/Tourist Commercial Development Permit Area" design guidelines of the OCP, suggesting characteristics under the topics of siting and building, landscape and screening, as well as access, circulation and parking area guidelines.

## Siting and Building

The one storey, rectangular shaped building will be approximately 7.0 m in height ( 10 m maximum is permitted), presenting architectural interest with an enhanced facade divided into three elements by an elevated central entrance feature. The building is oriented to the street frontage as main entry way and multiple windows face 10 Avenue SW, complimented with awnings and facia signage.

## Landscape and Screening

The proposed site plan (Appendix 3) shows two general sites for landscaping: an island located adjacent the proposed building and a boulevard strip including two parking area islands adjacent 10 Street SW helping to define the edge of the site. The refuse containers are located at the rear of the site.

## Access, Circulation and Parking Area

Vehicle access is via a let down shared with Kal Tire from 10 Street SW with an access route along the north parcel line to the rear parking area. Future access routes may be created in the future over the adjacent property to the south. There are a total of 28 parking stalls proposed: 22 parking stalls proposed in the front area with 6 stalls at the rear of the site. The front parking area is broken by landscaping.

There are two loading areas: one at the rear of the building and one at the entrance way. Furthermore, the proposal shows an asphalt parking surface.

The subject property is proposed for commercial use including retail, office and storage/warehouse space. A strict interpretation of the Zoning Bylaw would require 81 parking spaces for a retail uses, while 28 parking spaces are proposed. The Zoning Bylaw requires a range of parking spaces for different retail uses, however "furniture store" is not amongst the uses contemplated. In the opinion of staff, the most appropriate category for the proposed use would be "Equipment, Machinery, Tool and Appliance Sales, Rental and Repair."

The applicant has included a letter from the prospective tenant (and potential owner) indicating that the 28 proposed parking spaces would exceed their needs (Appendix 3). Staff have reviewed local furniture stores as well as recent applications in adjacent communities, and concur that the parking proposed appears sufficient for the use intended. Related to parking requirements, the "Equipment, Machinery, Tool and Appliance Sales, Rental and Repair" category appears to largely align with existing furniture stores of similar format.

## Servicing and Future Road Widening / Building Setbacks

10 Street SW is designated as an Urban Collector Road in the OCP, and is currently constructed with a 20 m dedicated width. The proposed building is setback over 25 m from the front parcel line, far exceeding the required setback. The proposed location is in conformance with zoning regulations and any relocation would need to meet appropriate setback and regulatory requirements.

## CONCLUSION

The proposed C-3 zone is consistent with the OCP Highway Service / Tourist Commercial designation, and is therefore supported by staff.

The proposal involves the development of the subject property with a commercial retail building. The application substantially aligns with the "Highway Service/Tourist Commercial Development Permit Area" guidelines of the OCP. The form and character proposed is consistent with these guidelines. The applicant has been forthcoming and co-operative, working with staff to ensure alignment with OCP guidelines. Overall, staff is satisfied with the design proposed.

Zoning Bylaw Amendment Application No. 1165 and Development Permit No. 423 are recommended for approval by staff.


Prepared by: Chris Larson, MCP
Planning and Development Officer


Page 4 of 4



# 628746 B.C. Ltd. <br> Box 1022 <br> Salmon arm BC. <br> VIE 4P2 

Dec. 27, 2019
Mayor and Council
Re: development of $52110^{\text {th }}$ ST SW
The undersigned will be representing the owner during construction of a proposed $20,000 \mathrm{sq}$. ft . building to accommodate a new Ashley Furniture store. It is the intent of the developer to subdivide and rezone this property from $\mathrm{C}-7$ to $\mathrm{C}-3$ as current zoning restricts lot size. Access to the new lot will be via the existing service road from 10 th street, shared with Kal Tire. The owner has provided a letter requesting a parking variance based on their experience at 2 other stores.

Ashley corporate will not own the building but has influence re design and finishes. Attached are proposed elevations which include considerable glazing, stone, durable fiber cement and metal siding elements which are compatible with and exceed the character of neighbouring buildings. Landscaping will include bricks between the sidewalk and $10^{\text {th }}$, matching the existing Kal Tire and Piccadilly sites.

We believe this proposed building will add substantially to the existing street scape and retail opportunities in Salmon Arm.


WH゙ Laird.

3202-28th Street, vernon, b.c VIT $4 z 8$
PHOONE, 250-545-0535 GST R100836121

September 9, 2019

This letter is to advise pertinent departments and/or other stakeholders that based on previous parking requirements in both our Penticton and Vernon stores that we will require a peak parking need for $\mathbf{1 7}$ customer stalls and $\mathbf{6}$ staff parking stalls for the location in Salmon Arm.

We have more staff in both Penticton and Vernon but we are expecting customer numbers to be slightly lower but basically in the realm of these two stores.

If you require anything further with regard to this, please feel free to contact me at the above phone number, or via emall cturcotte@ashleyok.ca.

Regards,


Cheryl Turcotte, CPA, CGA
Controller
Case Furniture Ltd./Ashiley Homestores
/ct


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## FOR INFORMATION ONLY



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| Nov. 20, 2019 | ESS-90-2127 |

NORTH ELEVATION
sale 126-~1:6

## FOR INFORMATION ONLY








View of subject parcel looking southwest along 10 Street SW.


View of subject parcel looking northwest along 10 Street SW.


# D.C. Dean Associates Inc. 

32-1900 Irongate Place, Kamloops BV2E 2K1 Phone: 250-372-9166 Fax: 250-372-8603 Cell: 250-371-4822 email: dcdean@shaw.ca

2014 January 29
W.H. Laird Holdings Ltd.

Box 1022
Salmon Arm, BC
V1E 4P2

Attention: Bill Laird

Dear Sir,

## Re: Traffic Impact Assessment, Lot 5 Plan 12965 Salmon Arm

As requested an analysis has been completed on the traffic impacts of the proposed development on Lot 5, Plan 12965 in Salmon Arm, including the implications of increased traffic on the existing highway and city road network and the necessary measures required to mitigate the growth in traffic. The impact review has been undertaken in accordance with the terms of reference approved by the City and the Ministry of Transportation and Infrastructure on November 25, 2013.

The work undertaken, the analysis results, and conclusions as well as recommendations are all summarized in this report.

I trust this provides the required information as your development proceeds through the approval process. Please do not hesitate to call if you have any questions or need clarification.

Yours truly,
D.C. DEAN ASSOCIATES INC.


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W. H. Laird Holdings Ltd.

# Salmon Arm Lot 5 Plan 12965 Traffic Impact Assessment 

DRAFT

January 29, 2013

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## 1. Introduction

The property of Lot 5, Plan 12965 in Salmon Arm is being considered for rezoning and development by W.H. Laird Holdings Ltd. The lands are located on $10^{\text {th }}$ Street S.W. in the southwest sector of the City as shown in Figure 1. The developer has retained D.C. Dean Associates to undertake a traffic impact assessment of the proposed development to identify the impact increased traffic has on the existing highway and City road system. As the property is located within 800 metres of the Trans-Canada Highway the traffic impact study has been prepared for approval by both the City of Salmon Arm and the Ministry of Transportation and Infrastructure (MOTI).

Figure 1
Site Location


The purpose of the report is to identify the increased traffic growth the development will generate and the capacity and safety considerations that may arise with the development. The report will address the requirements outlined in the proposed Terms of Reference dated November 24, 2013 and approved by MOTI and the City on November 25, 2013.

The study area includes intersections around the development site that include both MOTI and City controlled intersections. These include the intersections shown in Figure 2.

Figure 2
Study Area

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## 2. Proposed Development

Figure 3
Site Plan
It is proposed that Lot 5, Plan 12965 will be rezoned to accommodate C3 (Service Commercial) zoning for the northern portion of the lot, and C7 (Shopping Centre Commercial) zoning for the southern portion. Active planning for the C3 portion of the site to accommodate an 11,300 square foot tire service and retail store, while no definitive plans currently exist for the C3 zone. Figure 3 shows the proposed tire service centre site plan and the remaining C3 site. It also shows the access required for the tire centres truck circulation, and the proposed access for the remainder.

Although the plans are moving forward for the tire centre, the trip generations for this study will be
 based on the highest practical use of the site. This includes an 11,300 square foot building supply store on the C3 site, and a 94,500 square foot shopping centre on the C7 site (based on $42 \%$ site coverage).

For the purpose of the traffic study it is assumed that the C3 site will initially be developed with opening day occurring in 2014. Development of the shopping centre site will not occur for at least 5 years, with an assumed full build-out in 10 years. In reality, the development timing will be subject to market conditions and given the size of development full build-out could take longer.

The agreed upon study horizons include the following:

Opening Day 2014 - includes bull build-out of the C3 Zone;
5-year 2019 -includes full build-out of the C3 Zone; and
10-vear 2024 - includes full build-out of both the C 3 and C 7 Zones.

## 3. Existing Area Conditions

### 3.1. Study Area Land Use

The existing land use in the vicinity of the proposed development consists of a mixture of residential, agricultural, commercial and service oriented developments. On the west side of $10^{\text {th }}$ Street just south of the development is the Piccadilly Mall, and north of the development is a veterinarian clinic and automobile servicing establishments. Residential developments are situated on the east side of $10^{\text {th }}$ Street across from the proposed development, as well as south of Piccadilly Mall. The mixture of residential and commercial generates pedestrian activity that needs to be accommodated along and across the roadways.

The Wal Mart in the Smart Centre has recently opened creating a noticeable increase of traffic along the Trans-Canada Highway corridor. In addition, the recent relocation of Canada Tire to the Piccadilly Mall has increased the traffic on $10^{\text {th }}$ Street. Planning work has been undertaken on a proposed Gaming Centre at the southeast corner of $10^{\text {th }}$ Street SW and the Trans-Canada Highway, but no start-up date has been announced.

### 3.2. Road Network

The City of Salmon Arm's Official Community Plan provides a road classification system for the roads within the City. The designation of the roads in the vicinity of the proposed development is shown in Figure 4.

Figure 4
Road Classification


Trans-Canada Highway (TCH) - this provincially designated highway has had some recent road widenings west of the $10^{\text {th }}$ Avenue intersection due to the Smart Development impacts. From the protected tee at the $10^{\text {th }}$ Avenue intersection the highway is two lanes east to the connection with $4^{\text {th }}$ Avenue where it widens to a four lane cross-section. The intersections of the TCH with $10^{\text {th }}$ Street and with $5^{\text {th }}$ Street are signalized and have left turn bays on the TCH. The TCH is posted at $60 \mathrm{~km} / \mathrm{h}$ between $10^{\text {th }}$ Avenue and approximately $4^{\text {th }}$ Avenue where it reduces to $50 \mathrm{~km} / \mathrm{h}$ eastward through the City Centre.
$10^{\text {th }}$ Street SW - this roadway is classified as an urban collector road between the TCH and Foothill Road. The 14 metre wide roadway is marked as a two lane roadway with parking on both sides where appropriate. It is built to an urban standard with sidewalks on both sides. The majority of the traffic on the roadway is generated by the Piccadilly Mall. North of the TCH the roadway connects with Lakeshore Drive.
$10^{\text {th }}$ Avenue SW - this is an urban arterial road that provides an east-west alternative to the TCH. It is a two-lane roadway with a mixture of rural and urban treatment (curb, gutter and sidewalk) and is posted at $50 \mathrm{~km} / \mathrm{h}$. The intersection of $10^{\text {th }}$ Avenue SW and $10^{\text {th }}$ Street SW is controlled with a four-way stop.
$5^{\text {th }}$ Avenue SW - this two lane urban collector road also provides an east-west connection between $10^{\text {th }}$ Street SW and $5^{\text {th }}$ Street SE. Within the study area it has curb, gutter and sidewalk on both sides of the roadway, with provision for parking.
$5^{\text {th }}$ Street SW - This also is a two lane urban collector road having parking on both sides and built to an urban standard with curb, gutter and sidewalks.

### 3.3. Transit Service

The development site is well served by the local transit system with two routes utilizing $10^{\text {th }}$ Street SW. Route 1 (West Loop) provides daytime hourly service as does Route 6 (Shoppers Shuttle) with the buses arriving approximately $1 / 2$ hour apart. Figure 5 shows the routes.

Figure 5 - Bus Routes


### 3.4. Pedestrians and Cyclists

Due to the proximity of commercial and residential developments, the existing pedestrian activity in the study area is relatively high and will continue to grow as the proposed shopping centre develops on the C7 site. The surrounding roadways have at least one sidewalk, with many of the roadways having sidewalks on both sides. Crosswalks are in place at the intersections, including one crossing of $10^{\text {th }}$ Street SW at the intersection of the Piccadilly Mall driveway entrance. Concerns have been made regarding this crossing; it is a popular crosswalk with the seniors' residential community across the street, and a busy mall access with a high number of eastbound left turning motorists leaving the parking lot and turning over the crosswalk. The City is undertaking a safety review of this crossing in 2014 to determine whether enhancements are required.

### 3.5. Existing Traffic Volumes

Traffic counts were downloaded from the traffic controllers for the week of Nov 14 to 21, 2013 at the 10th Street SW and the 5th Street SW intersections with the TCH. These provided the lane counts through the intersection which were then converted to turning movement counts by supplementing peak hour spot counts. Peak hour traffic counts were conducted on the non-signalized intersections on Saturday Jan 11, 2014 and Tuesday Jan 14, 2014.

The MOTI periodically collects traffic count data from a site located on the TCH 200 metres east of Salmon River Road (TM Site ID 22-007EW). This site has classified the TCH as Seasonal and therefore summer peak volumes will be different than those counted in November and January. MOTI has provided a Summer Annual Daily Traffic (SADT) factor table to convert traffic volumes to summer volumes which is presented in Appendix A. In discussion with the City, it was decided to also adjust the City intersection counts to summer peak hour counts using the MOTl's SADT factor table. It was agreed that this would provide conservative summer traffic volumes (i.e. overestimate) - although the City traffic will increase in the summer, it may not increase to the same degree as the TCH .

The factor for the November counts is 1.631 and for January it is 1.973 . The original traffic counts and the adjusted summer peak volumes are shown in Appendix B.

## 4. Projected Traffic

Within the study area future traffic volumes will increase due to growth of the background traffic (both highway and City generated) and the addition of traffic from the proposed development.

### 4.1. Background Traffic

Traffic is anticipated to grow each year on the TCH and within the community of Salmon Arm. The MOTI's traffic counting site on the TCH east of $5^{\text {th }}$ Avenue (TM Site ID 22-020EW) identifies an average annual growth of $0.7 \%$ from 2005 to 2010. In recognition that this may
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represent a low growth period, a typical highway growth rate of $2 \%$ annually has been applied in this analysis. The same $2 \%$ growth rate has been used on the City traffic.

The terms of reference indicated that the projected traffic from the Smart Centre development will be added to the road network. However, the prime tenant and traffic generator Wal Mart had opened and was in full operation when the traffic count information was collected for this study. Traffic generated from the ancillary buildings will be covered by the background growth rate.

The background traffic volumes for each study intersection at the 5-year horizon (2019) and 10-year horizon (2024) projected using these growth rates are shown in Appendix B.

### 4.2. Site Traffic

This section calculates the expected traffic that will be generated by each of the developments and distributes it upon the local road network.

### 4.2.1. Trip Generation

The trip generation rates have been established using the Institute of Transportation Engineers Trip Generation Manual ( $8^{\text {th }}$ Edition) for the peak hours at the required horizon years.

The allowable land uses for each zone are identified in the City of Salmon Arm's Zoning Bylaw No. 2303. Different land uses have varying trip generation rates, but they also have a reasonable maximum size of development. Therefore to choose the land use to base the maximum number of trips generated from, it is necessary to consider both its trip generation rate and its reasonable maximum size. The maximum size for the C3 lot will be the proposed $11,300 \mathrm{sq}$. ft. Kal Tire proposal, whereas the maximum size for the shopping centre will be $42 \%$ lot coverage which is similar to the adjacent Piccadilly Mall. Key permitted uses in this evaluation are shown in the following table.

Figure 6 - Traffic Generation of Permitted Uses

| Zone | Land Use | PM Peak Hr <br> Trip <br> Code | Reasonable <br> Trip <br> (trip / / 1000 <br> sq.ft) | Building <br> Size <br> (sq.ft.) | PM Peak Hr <br> Trips <br> Generated |
| :---: | :--- | :---: | :---: | :---: | :---: |
|  | Auto parts and accessories | 843 | 5.98 | 7,500 | 45 |
|  | Building supply store | 812 | 4.49 | 11,300 | 63 |
|  | Café / Restaurant | 932 | 11.15 | 5,000 | 56 |
|  | Neighbourhood pub | 925 | 11.34 | 5,000 | 57 |
|  | Tire store | 848 | 4.15 | 11,300 | 47 |
| C7 | Shopping centre | 820 | 3.73 | 94,500 | 352 |

Based on the trips generated, the land uses to be used for the analysis includes Building Supply Store in the C3 zone and Shopping Centre in the C7 zone.
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The applicable trip generation rates for these land uses are shown in Figure 7 below:

Figure 7 - Trip Generation Rates

| Zone | ITE <br> Code | Land Use | Units | Weekday Peak Hour of <br> Adjacent Street Traffic <br> Between 4 and 6 pm | Saturday Peak Hour |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C3 | 812 | Building <br> Supply Store | 1000 <br> sq.ft. | 4.49 <br> $(47 \%$ in $/ 53 \%$ out $)$ | $(51 \%$ in $/ 49 \%$ out $)$ |
| C7 | 820 | Shopping <br> Centre | 1000 <br> sq.ft. | 3.73 <br> $(49 \%$ in $/ 51 \%$ out $)$ | (53\% in / 47\% out) |

For the purpose of the study it will be assumed that all trips generated by the development will be made by automobile, although it is recognized that some trips to the shopping centre in particular may be accommodated by transit or by walking from nearby residences. The number of trips generated by the development is therefore shown in Figure 8:

Figure 8-Trip Generation

|  | PM Peak Hour |  | Saturday Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: |
| Zone | C3 | C7 | C3 | C7 |
| Land Use | Building Supply Store | Shopping Centre | Building Supply Store | Shopping Centre |
| Size | 11,300 sq.ft. | 94,500 sq.ft. | 11,300 sq.ft. | 94,500 sq.ft. |
| Generation Rate | 4.49 trips / 1000 sq.ft. | $\begin{aligned} & 3.73 \text { trips / } 1000 \\ & \text { sq.ft } \end{aligned}$ | $\begin{gathered} 9.58 \text { trips / } 1000 \\ \text { sq.ft. } \end{gathered}$ | $\begin{gathered} 4.89 \text { trips / } 1000 \\ \text { sq.ft } \end{gathered}$ |
| Inbound / Outbound | 47\% / 53\% | 49\% / 51\% | 51\% / 49\% | 53\% / 47\% |
| Inbound Trips | 24 | 173 | 55 | 245 |
|  | 197 |  | 300 |  |
| Outbound Trips | 27 | 179 | 53 | 217 |
|  | 206 |  | 270 |  |
| Total Trips | 51 | 352 | 108 | 462 |
|  | 403 |  | 570 |  |

It is also assumed that an estimated $10 \%$ of trips coming to the development sites that will be pass-by trips. These are trips by motorists already in the study area (e.g. going to Piccadilly Mall) and therefore should not be added to the surrounding intersection counts.

### 4.2.2. Trip Distribution and Assignment

The proposed development will attract trips from throughout the region. Manual trip distribution and assignment has been based on $70 \%$ of the generated traffic using $10^{\text {th }}$ Street SW to/from the north, $20 \%$ to/from the south, and $10 \%$ to/from the east on $5^{\text {th }}$ Avenue SW. The resulting traffic assignment on the study intersections is shown in Figures 9 and 10.

Figure 9
C3 Zone Development Traffic Assignment

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Figure 10
C7 Zone Shopping Centre Development Traffic Assignment


### 4.3. Total Traffic

The development traffic has been added to the background traffic to determine the total traffic for each of the peak periods in each of the planning horizons. This includes adding the C3 Zone development traffic to the 2014 and 2019 planning horizons, and both the C3 and C7 Zone development traffic to the 2024 horizon. The resulting traffic volumes are shown in Appendix B.

## 5. Transportation Analysis

This section of the report summarizes the capacity analyses for each of the horizon years that have been undertaken on the existing road network with the background traffic growth as well as the future road network with the addition of the proposed development traffic. The purpose of the analyses is to determine whether traffic growth (with and without development) can be accommodated by the road network and if not, what mitigation measures are required to provide acceptable levels of service.

### 5.1. Capacity and Level of Service

The performance of the intersections within the study area was reviewed using the methodology prescribed in the Highway Capacity Manual, through the use of Synchro and SimTraffic software. Key outputs of the analysis include the volume to capacity ratio (v/c), the level of service (LOS), and the queue lengths. For the volume to capacity ratio, the volume is the number of vehicles making a certain movement, and the capacity is the maximum number of vehicles that can be accommodated. The level of service is defined in terms of delay. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The relationship between level of service and delays for unsignalized intersections is shown in the following Figure 11. Motorists in a community the size of Salmon Arm would typically find an overall level of service C as being satisfactory, as long as each individual movement was a level of service $D$ or better. The third output to consider is the queue length relative to the storage capacity of the turn bays or link lengths between intersections.

Figure 11
Level of Service Criteria for Intersections

| Level of <br> Service <br> Designation | Signalized Intersection Criteria <br> Average Total Delay <br> (Seconds per Vehicle) | Unsignalized Intersection Criteria <br> Average Total Delay <br> (Seconds per Vehicle) |
| :---: | :---: | :---: |
| A | $\leq 10.0$ | $\leq 10.0$ |
| B | 10.1 to 20.0 | 10.1 to 15.0 |
| C | 20.1 to 35.0 | 15.1 to 25.0 |
| D | 35.1 to 55.0 | 25.1 to 35.0 |
| E | 55.1 to 80 | 35.1 to 50.0 |
| F | $>80$ | $>50$ |

Source: Highway Capacity Manual, Transportation Research Board; Washington, DC; 2000

### 5.1.1. Weekday PM Peak Hour Analysis

This section summarizes the results of the Synchro / SimTraffic analysis of the Weekday PM Peak Hour levels of service for the various planning horizons. For each study year, results for both the background (base) traffic and the combined traffic (base plus development traffic) are shown. No intersection improvements are considered at this time. The traffic movements that
experience a level of service LOS D or worse or queue length exceeding the existing queue storage are noted. Full results of the Synchro / SimTraffic analyses are shown in Appendix C.

2014 PM Peak Hour

| Scenario | Intersection | Overall LOS | Movement | V/C <br> Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.84 | 33.3 | C | 47 | 40 |
|  | $\begin{aligned} & 10^{\text {th }} \text { St \& } \\ & 5^{\text {th }} \text { Ave } \end{aligned}$ | A | WBL | 1.07 | 29.7 | D | 63 | 345 |
| Combined | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.85 | 47.4 | D | 48 | 40 |
|  | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \text { Ave } \end{aligned}$ | A | WBL | 1.13 | 33.3 | D | 74 | 345 |
|  |  |  | EBT | 0.08 | 28.5 | D | 6 | 25 |
|  |  |  | WBR | 1.54 | 37.0 | D | 29 | 345 |

The study intersections operate at an acceptable level of service during the 2014 PM peak hour both with and without the additional development traffic. Each scenario has some traffic movements at a couple of intersections operating at a LOS D but overall delays are acceptable.

2019 PM Peak Hour

| Scenario | Intersection | Overall LOS | Movement | V/C Ratio | Delay (sec) | LOS | Queue (m) | Queue <br> Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & \text { TCH } \end{aligned}$ | C | EBL | 0.56 | 45.5 | D | 49 | 40 |
|  |  |  | WBL | 0.96 | 77.7 | E | 95 | 75 |
|  | $\begin{gathered} 5^{\text {th }} \text { St \& } \\ \text { TCH } \end{gathered}$ | B | WBL | 1.02 | 51.0 | D | 54 | 40 |
|  | $\begin{aligned} & 10^{\text {th }} \text { St \& } \\ & 5^{\text {th }} \text { Ave } \end{aligned}$ | C | WBL | 1.45 | 94.8 | F | 210 | 345 |
|  |  |  | WBR | 1.45 | 66.3 | E | 29 | 345 |
| Combined | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | C | EBL | 0.94 | 42.9 | D | 45 | 40 |
|  |  |  | WBL | 0.91 | 48.9 | D | 85 | 75 |
|  |  |  | NBT / NBL | 0.90 | 48.4 | D | 99 | 113 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.92 | 35.5 | D | 49 | 40 |
|  |  |  | NBL | 0.49 | 46.6 | D | 62 | 180 |
|  | $\begin{gathered} 10^{\text {th }} \text { St \& } \\ 5^{\text {th }} \text { Ave } \end{gathered}$ | B | WBL | 1.54 | 62.4 | E | 117 | 345 |
|  |  |  | WBR | 1.54 | 37.0 | D | 29 | 345 |

As traffic increases over the next five years the background growth causes more delays at the study intersections. Unacceptable LOS E and F are experienced for some movements and a number of left turn bay storage lengths are exceeded. Similar signal timings were used with
the additional development traffic, but resulted in fewer LOS E and F - the model runs are similar to real situations in that a short burst of traffic can set the service level off for a long period. Although the Combined level of service has only one LOS E, a number of queues exceeded the storage.

2024 PM Peak Hour

| Scenario | Intersection | Overall LOS | Movement | VIC <br> Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | D | EBL | 0.60 | 69.5 | E | 55 | 40 |
|  |  |  | EBT/EBR | 0.98 | 44.2 | D | 121 | 133 |
|  |  |  | WBL | 1.00 | 73.9 | E | 96 | 75 |
|  |  |  | NBT/NBL | 0.98 | 57.7 | E | 104 | 113 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 1.15 | 77.7 | E | 56 | 40 |
|  |  |  | NBL | 0.59 | 54.5 | D | 73 | 180 |
|  | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \mathrm{Ave} \end{aligned}$ | F | WBL / WBT | 1.93 | 257.2 | F | 406 | 345 |
|  |  |  | WBR | 1.93 | 233.9 | F | 26 | 345 |
|  | $\begin{aligned} & 5^{\mathrm{th}} \mathrm{St} \& \\ & 5^{\mathrm{h}} \text { Ave } \end{aligned}$ | E | NBL/NBT | 0.34 | 95.9 | F | 77 | 410 |
|  |  |  | SBL/SBT | 0.79 | 136.8 | F | 214 | 180 |
|  | $\begin{aligned} & 10^{1 \text { th } \mathrm{St} \&} \\ & 4^{\text {th }} \text { Ave } \end{aligned}$ | A | EBL | 0.33 | 31.5 | D | 28 | 80 |
|  | $10^{1 \mathrm{~h}}$ Ave \& TCH | A | NBL | 1.07 | 52.1 | F | 77 | 220 |
|  |  |  | NBR | 1.07 | 39.3 | E | 20 | 220 |
| Combined | $10^{\text {th }} \mathrm{St} \&$ <br> TCH. | D | EBL | 0.65 | 91.6 | F | 59 | 40 |
|  |  |  | EBT/EBR | 1.06 | 76.5 | E | 137 | 133 |
|  |  |  | WBL | 1.16 | 94.1 | F | 83 | 75 |
|  |  |  | NBT/NBL | 1.12 | 62.3 | E | 117 | 113 |
|  |  |  | SBT/SBL | 0.36 | 50.4 | D | 97 | 30 |
|  | $\begin{aligned} & 5^{\text {th }} \mathrm{St} \& \\ & \mathrm{TCH} \end{aligned}$ | F | EBT/EBR | 0.57 | 450.8 | F | 321 | 425 |
|  |  |  | WBL | 1.27 | 959 | F | 49 | 40 |
|  |  |  | WBT | 0.50 | 290 | F | 352 | 200 |
|  |  |  | NBL | 0.59 | 52.6 | D | 75 | 180 |
|  | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ 5^{\text {th }} \text { Ave } \end{gathered}$ | F | EBL/EBT | 0.27 | 37.9 | E | 7 | 25 |
|  |  |  | WBLNBT/ WBR | 2.98 | 496 | F | 330 | 345 |
|  | $\begin{aligned} & 5^{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \text { Ave } \end{aligned}$ | F | $\underset{\text { BR }}{\substack{\text { NBL/NBT/N }}}$ | 0.37 | 963 | F | 231 | 410 |
|  |  |  | $\begin{gathered} \text { SBL/SBT/S } \\ \text { BR } \end{gathered}$ | 0.83 | 1424 | F | 399 | 130 |
|  | $\begin{aligned} & 10^{\text {th }} \text { St \& } \\ & 4^{\text {th Ave }} \text { Ave } \end{aligned}$ | A | EBL | 0.48 | 31.5 | D | 33 | 80 |
|  | $10^{\text {th }}$ Ave \& TCH | A | NBL | 1.10 | 41.9 | E | 69 | 220 |
|  |  |  | NBR | 1.10 | 82.2 | F | 20 | 220 |

Numerous study intersections show failure in both the base and combined scenarios in the study year 2024 without any network improvements. This is not surprising given a $2 \%$ growth
rate over 10 years and the full build-out of development traffic. As with any road network, the failure of adjacent intersections can have a detrimental effect on the adjacent intersections.

### 5.1.2. Saturday Peak Hour Analysis

Similar to the previous section, this section summarizes the results of the Synchro / SimTraffic analysis of the Saturday Peak Hour levels of service for the various planning horizons.

2014 Saturday Peak Hour

| Scenario | Intersection | $\begin{aligned} & \text { Overall } \\ & \text { Los } \end{aligned}$ | Movement | VIC <br> Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ 5^{\text {th }} \text { Ave } \end{gathered}$ | A | WBL | 0.77 | 44.7 | D | 86 | 345 |
| Combined | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | C | WBL | 0.95 | 38.4 | D | 76 | 75 |
|  |  |  | NBL/NBT | 0.84 | 39.4 | D | 86 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.77 | 33.7 | C | 41 | 40 |
|  | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ 5^{\text {th }} \text { Ave } \end{gathered}$ | B | WBLNMBT | 1.62 | 42.3 | D | 76 | 345 |

As was seen in the PM Peak Hour, the levels of service for the study intersections during the Saturday Peak hour are acceptable with some individual traffic movements at LOS D but overall LOS remaining at C or better.

2019 Saturday Peak Hour

| Scenario | Intersection | Overall LOS | Movement | V/C Ratio | Delay (sec) | LOS | Queue (m) | Queue <br> Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | D | EBL | 0.48 | 60.4 | E | 59 | 40 |
|  |  |  | EBT/EBR | 1.07 | 56.9 | E | 129 | 113 |
|  |  |  | WBL | 0.93 | 76.6 | E | 56 | 75 |
|  |  |  | NBT/NBL | 0.85 | 43.9 | D | 89 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.95 | 43.3 | D | 49 | 40 |
|  | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \text { Ave } \end{aligned}$ | D | WBL/NBT | 1.94 | 216 | F | 335 | 345 |
|  |  |  | WBR | 1.94 | 174 | F | 30 | 345 |
| Combined | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | D | EBL | 0.45 | 42.3 | D | 53 | 40 |
|  |  |  | WBL | 1.05 | 142 | F | 100 | 75 |
|  |  |  | NBT / NBL | 0.91 | 46.4 | D | 97 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \text { TCH } \end{gathered}$ | B | WBL | 0.95 | 53.6 | D | 50 | 40 |
|  | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \mathrm{Ave} \end{aligned}$ | F | WBL/NBT | 2.18 | 417 | F | 386 | 345 |
|  |  |  | WBR | 2.18 | 393 | F | 30 | 345 |

Five years of background growth have caused traffic movements at two intersections to fail for both the base and combined scenarios.

2024 Saturday Peak Hour

| Scenario | Intersection | Overall LOS | Movement | VIC <br> Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | E | EBL | 0.51 | 81.7 | F | 61 | 40 |
|  |  |  | EBT/EBR | 1.05 | 78.2 | E | 142 | 113 |
|  |  |  | WBL | 1.13 | 275 | F | 98 | 75 |
|  |  |  | NBT/NBL | 0.97 | 66.0 | E | 107 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | C | WBL | 1.04 | 91.6 | F | 56 | 40 |
|  |  |  | NBL | 0.59 | 79 | E | 108 | 180 |
|  | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \mathrm{Ave} \end{aligned}$ | F | WBL/ WBT | 2.65 | 553 | F | 411 | 345 |
|  |  |  | WBR | 2.65 | 521 | F | 32 | 345 |
|  | $\begin{aligned} & 5_{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \mathrm{Ave} \end{aligned}$ | F | SBL/SBT | 0.59 | 565 | F | 336 | 130 |
|  | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & 4^{\text {th }} \mathrm{Ave} \\ & \hline \end{aligned}$ | B | EBL | 0.34 | 53.9 | F | 39 | 80 |
|  |  |  | EBR | 0.34 | 38.8 | E | 39 | 80 |
|  | $\begin{gathered} 10^{\mathrm{th}} \text { Ave \&: } \\ \text { TCH } \end{gathered}$ | D | NBL | 1.05 | 99.7 | F | 101 | 220 |
|  |  |  | NBR | 1.05 | 68.6 | E | 30 | 220 |
| Combined | $10^{\text {th }} \mathrm{St} \&$ <br> TCH. | F | EBL | 0.66 | 80.2 | F | 62 | 40 |
|  |  |  | EBT/EBR | 1.09 | 79.4 | E | 147 | 113 |
|  |  |  | WBL | 1.67 | 654 | F | 109 | 75 |
|  |  |  | NBT/NBL | 1.23 | 44.6 | D | 99 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \text { St \& } \\ \text { TCH } \end{gathered}$ | F | EBT/EBR | 0.85 | 109 | F | 275 | 400 |
|  |  |  | WBL | 1.52 | 702 | F | 59 | 40 |
|  |  |  | WBT | 0.76 | 260 | F | 279 | 270 |
|  | $\begin{gathered} 10^{\text {th }} \text { St \& } \\ 5^{\text {th }} \text { Ave } \end{gathered}$ | F | EBL/EBT | 1.00 | 66.9 | F | 9 | 25 |
|  |  |  | WBLNBT/ WBR | 4.98 | 614 | F | 330 | 345 |
|  | $\begin{aligned} & 5^{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \text { Ave } \end{aligned}$ | F | $\begin{gathered} \text { NBL/NBT/N } \\ \text { BR } \end{gathered}$ | 0.20 | 396 | F | 17 | 410 |
|  |  |  | $\begin{gathered} \text { SBL/SBT/S } \\ \text { BR } \end{gathered}$ | 0.65 | 1007 | F | 359 | 130 |
|  | $\begin{gathered} 10^{\text {th }} \text { Ave \& } \\ \text { TCH } \end{gathered}$ |  | NBL | 1.10 | 167.7 | F | 85 | 220 |
|  |  |  | NBR | 1.10 | 42.9 | E | 25 | 220 |
|  | Shopping Centre Access | C | EBL/EBR | 4.06 | 169 | F | 51 | 25 |

Similar to the PM Peak Hour, numerous study intersections show failure in both the base and combined scenarios in the study year 2024 without any network improvements. An additional intersection at the proposed shopping centre is now active, and shows with full build-out the exiting movement fails (this has assumed all shopping centre traffic exiting at the one access as opposed to splitting volumes with the shared access - if this is done the access exiting movement still operates at LOS F).
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### 5.2. Capacity Improvements

A number of intersection control, signal timing and phasing, and road widenings are required to accommodate the expected future growth of traffic within the study area if an acceptable level of service is to be maintained. This section of the report identifies what those capacity improvements should be at each planning year, and the resulting levels of service that would result in the weekday PM and Saturday peak hours if they were to be implemented.

### 5.2.1. 2014 (Opening Day) Horizon

No mitigation is required to maintain an adequate level of service at the opening day horizon. The levels of service remain what was previously reported with some traffic movements operating at a LOS D while the overall level of service remains LOS C or better for each study intersection.

2014 PM Peak Hour

| Scenario | Intersection | Overall LOS | Movement | VIC Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 5^{\text {th }} \mathrm{St} \mathrm{\&} \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.84 | 33.3 | C | 47 | 40 |
|  | $\begin{gathered} 10^{\text {th } \mathrm{St}} \& \\ 5^{\text {th }} \mathrm{Ave} \end{gathered}$ | A | WBL | 1.07 | 29.7 | D | 63 | 345 |
| Combined | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.85 | 47.4 | D | 48 | 40 |
|  | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & 5^{t^{h}} \text { Ave } \end{aligned}$ | A | WBL | 1.13 | 33.3 | D | 74 | 345 |
|  |  |  | EBT | 0.08 | 28.5 | D | 6 | 25 |
|  |  |  | WBR | 1.54 | 37.0 | D | 29 | 345 |

## 2014 Saturday Peak Hour

| Scenario | Intersection | Overall LOS | Movement | V/C Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 10^{\text {th } \mathrm{St} \&} \\ 5^{\text {th }} \text { Ave } \\ \hline \end{gathered}$ | A | WBL | 0.77 | 44.7 | D | 86 | 345 |
| Combined | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & \mathrm{TCH} \end{aligned}$ | C | WBL | 0.95 | 38.4 | D | 76 | 75 |
|  |  |  | NBL/NBT | 0.84 | 39.4 | D | 86 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.77 | 33.7 | C | 41 | 40 |
|  | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ 5^{\text {th }} \mathrm{Ave} \end{gathered}$ | B | WBLNBT | 1.62 | 42.3 | D | 76 | 345 |

### 5.2.2. 2019 Horizon

The following mitigation measures are required to maintain an acceptable level of service within the study area at the 2019 planning horizon.

Figure 12
Mitigation Measures Required Prior to 2019

| Without Development Traffic | With Development Traffic |
| :---: | :---: |
| - Install new traffic signal at the intersection <br> of 10 Street SW and $5^{\text {th }}$ Avenue SW | - Install new traffic signal at the intersection <br> of 10 Street SW and $5^{\text {th }}$ Avenue SW |
| - Install westbound advance left turn signal <br> phase at $5^{\text {th }}$ Street SW and the TCH | - Install westbound advance left turn signal <br> phase at $5^{\text {th }}$ Street SW and the TCH |

After applying these mitigation measures the level of service analysis identifies the following traffic movements having a L.OS E or worse and/or queue lengths exceeding storage bays.

## 2019 PM Peak Hour (with mitigation)

| Scenario | Intersection | Overall LOS | Movement | VIC <br> Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | C | EBL | 0.53 | 33.9 | C | 45 | 40 |
|  |  |  | NBL/NBT | 0.92 | 52.8 | D | 101 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \text { St \& } \\ \text { TCH } \end{gathered}$ | B | WBL | 0.72 | 26.2 | C | 48 | 40 |
| Combined | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | C | EBL | 0.53 | 33.1 | C | 46 | 40 |
|  |  |  | WBL | 0.85 | 39.1 | D | 80 | 75 |
|  |  |  | NBT / NBL | 0.94 | 52.7 | D | 99 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.72 | 26.5 | C | 46 | 40 |

2019 Saturday Peak Hour (with mitigation)

| Scenario | Intersection | Overall LOS | Movement | V/C Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & \text { TCH } \end{aligned}$ | C | EBL | 0.42 | 36.2 | D | 52 | 40 |
|  |  |  | WBL | 0.95 | 40.7 | D | 80 | 75 |
|  |  |  | NBL/NBT | 0.90 | 49.0 | D | 95 | 110 |
| Combined | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \text { TCH } \end{gathered}$ | C | EBL | 0.44 | 51.0 | D | 52 | 40 |
|  |  |  | EBT/EBR | 0.99 | 42.5 | D | 106 | 113 |
|  |  |  | WBL | 0.95 | 53.1 | D | 90 | 75 |
|  |  |  | NBT / NBL | 0.94 | 52.6 | D | 100 | 110 |

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### 5.2.3. 2024 Horizon

The following mitigation measures are required to maintain an acceptable level of service within the study area at the 2024 planning horizon.

Figure 12
Mitigation Measures Required Prior to 2024

| Without Development Traffic | With Development Traffic |
| :---: | :---: |
| - Install new traffic signal at the intersection of 10 Street SW and $5^{\text {th }}$ Avenue SW | - Install new traffic signal at the intersection of $10^{\text {th }}$ Street SW and $5^{\text {th }}$ Avenue SW |
| - Install westbound advance left turn signal phase at $5^{\text {th }}$ Street SW and the TCH | - Install westbound advance left turn signal phase at $5^{\text {th }}$ Street SW and the TCH |
| - Install four-way stop control at the intersection of $5^{\text {th }}$ Street SW and $5^{\text {th }}$ Avenue SW | - Install four-way stop control at the intersection of $5^{\text {th }}$ Street SW and $5^{\text {th }}$ Avenue SW |
| - Realign the $10^{\text {th }}$ Avenue and TCH intersection to a signalized $20^{\text {th }}$ Street intersection in accordance with City plans. | - Realign the $10^{\text {th }}$ Avenue and TCH intersection to a signalized $20^{\text {th }}$ Street intersection in accordance with City plans. |
| - Widen the $10^{\text {th }}$ Street SW northbound and southbound approaches to the TCH to include 1 shared left/thru, 1 thru, and 1 right turn lane | - Widen the $10^{\text {th }}$ Street SW northbound and southbound approaches to the TCH to include 1 shared left/thru, 1 thru, and 1 right turn lane |
| - Widen the TCH westbound approach to $10^{\text {th }}$ Street SW and install dual left turn lanes (required for Saturday Peak Hour) | - Widen the TCH westbound approach to $10^{\text {th }}$ Street SW and install dual left turn lanes (required for Saturday Peak Hour) |
|  | - Widen the TCH eastbound approach to $10^{\text {th }}$ Street SW and add a $3^{\text {rd }}$ eastbound through lane (required for Saturday Peak Hour) |
|  | - Install new traffic signal on $10^{\text {th }}$ Street SW at the south access to the proposed shopping centre |

After applying these mitigation measures the level of service analysis identifies the following traffic movements having a LOS E or worse and/or queue lengths exceeding storage bays.

2024 PM Peak Hour (with mitigation*)

| Scenario | Intersection | Overall LOS | Movement | VIC <br> Ratio | Delay <br> (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | C | EBL | 0.54 | 39.4 | D | 37 | 40 |
|  |  |  | WBL | 0.85 | 35.3 | D | 70 | 75 |
|  |  |  | NBL | 0.66 | 44.7 | D | 71 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.78 | 31.2 | C | 50 | 40 |
|  | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \text { Ave } \end{aligned}$ | B | SBL | 0.39 | 43.6 | D | 39 | 37 |
|  | $\begin{gathered} 10^{\text {th }} \text { Ave \& } \\ \text { TCH } \end{gathered}$ | B | WBL | 0.60 | 36.3 | D | 11.7 | 40? |
| Combined | $10^{\text {th }} \mathrm{St}$ \& TCH. | C | EBL | 0.53 | 44.2 | D | 41 | 40 |
|  |  |  | NBL | 0.73 | 44.1 | D | 78 | 110 |
|  |  |  | SBL | 0.25 | 37.1 | D | 36 | 30 |
|  | $\begin{aligned} & 5^{\text {th }} \text { St \& } \\ & \text { TCH } \end{aligned}$ | C | WBL | 0.85 | 37.9 | D | 55 | 40 |

*except those measures identified as required for Saturday Peak Hour
2024 Saturday Peak Hour (with mitigation)

| Scenario | Intersection | Overall LOS | Movement | V/C <br> Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | C | NBL | 0.51 | 36.8 | D | 67 | 110 |
| Combined | $10^{\text {th }} \mathrm{St} \&$ <br> TCH. | C | EBL | 0.58 | 40.0 | D | 39 | 40 |
|  |  |  | EBR/EBT | 0.83 | 49.3 | D | 66 | 113 |
|  |  |  | WBL | 0.80 | 40.5 | D | 61 | 75 |
|  |  |  | NBL | 0.66 | 47.6 | D | 81 | 110 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | B | WBL | 0.79 | 28.3 | C | 49 | 45 |
|  | $\begin{aligned} & 10^{\text {th } \mathrm{St} \&} \\ & 5^{\text {th }} \mathrm{Ave} \end{aligned}$ | B | SBL | 0.61 | 40.9 | D | 42 | 37 |
|  | Shopping Centre Access | B | NBT | 0.73 | 39.9 | D | 67 | 100 |

## 5.3. $10^{\text {th }}$ Street SW Treatment

The width of $10^{\text {th }}$ Street SW is approximately 14 metres between the TCH and $10^{\text {th }}$ Avenue SW. For the portion between $5^{\text {th }}$ and $10^{\text {th }}$ Avenues the roadway has one travel lane and one parking lane in each direction. Sidewalks exist on both sides of $10^{\text {th }}$ Street SW and crosswalks are located at $5^{\text {th }}$ Avenue, the entrance to Piccadilly Mall and $10^{\text {th }}$ Avenue. With the projected increase in background traffic and the proposed new development, traffic volumes will increase on $10^{\text {th }}$ Street SW and modification to the cross-section will be required. A plan for access to the development site is required to adequately and safely provide access.

### 5.3.1. Access

Access to the two developments is proposed as shown in Figure 13. Both the C 3 and C 7 sites will have a full turns access, and also share a full turns access at their boundary. The north access is directly across from $5^{\text {th }}$ Avenue SW and should be constructed with curb returns to visually reinforce the $4^{\text {th }}$ leg of the intersection. This is particularly important when the intersection is signalized.

As the C7 zoned shopping centre develops the south access will need to be provided. By full build-out, the traffic exiting the south access will be operating at a LOS F. Although the level of service could be improved through the application of a protected $T$ the future need of 4laning $10^{\text {th }}$ Street makes a traffic signal a more logical measure.

### 5.3.2. Truck Access

The likely use of the C3 zone will be for a tire service and retail shop, and therefore access for semi-trailers is required. On-site movements and circulation is important, and this is what has identified the need for the mid access that will be shared by the C3 and C7 zone. Figure 14 shows the turning movements of the design vehicle (WB-67 US) used by Kal-Tire in their site designs. The turn into the development site requires a 15 metre wide access throat. To minimize the crossing distance for pedestrians, it is suggested that this could be designed with a truck turning apron and having a standard crossing width access.

Also shown in Figure 15 is the turning radius of the design vehicle for the eastbound right turn from the TCH onto $10^{\text {th }}$ Street SW. Due to the tight turning radius the truck cannot make the turn without utilizing additional lane space. The drawing is reflective of what currently exists when the semi-trucks servicing the Piccadilly Mall make this movement. A less disruptive movement that would be known by the local truck drivers using the Kal Tire service bays would be to turn right off of the TCH at the $4^{\text {th }}$ Avenue connection, and make the turn onto $10^{\text {th }}$ Street SW from $4^{\text {th }}$ Avenue.

Figure 14
Truck Access and Circulation


Figure 15 TCH Eastbound Right Turn onto $10^{\text {th }}$ St SW


### 5.3.3. Pedestrian Movements

The development of the C3 zone lands will likely not add to the pedestrian activity within the area. However, as the shopping centre is developed in the C7 zone lands, it will attract pedestrian traffic from the neighbouring residential developments. For the residential complexes across the street from the proposed shopping centre, it is unlikely that pedestrians will walk north or south to the existing crosswalks. Similarly, a bus stop exists opposite the proposed shopping centre (see Figure 16) creating a pedestrian desire line across $10^{\text {th }}$ Street at this location. Therefore a future warranted crosswalk at the south entrance to the shopping centre should be anticipated in the access design, and pedestrian routing from the access to the shopping centre buildings should be considered.

Figure 16
Bus Stop Locations


### 5.3.4. $10^{\text {th }}$ Street SW Cross-Section

The background and development traffic projections indicate close to 2000 vehicles during the peak hours on $10^{\text {th }}$ Street SW south of $5^{\text {th }}$ Avenue within the next 10 years. With parked vehicles and turning movements into the existing residences and future developments, the existing 2 travel lane roadway could experience delays and safety issues due to congestion.

Consideration should be given to removing the turning vehicles from the through lanes, thereby increasing the corridor's capacity, by removing the parking and installing a centre two-way left turn lane. This extends the ability for the corridor to remain as a two-lane roadway and retain the benefits of slower traffic and shorter pedestrian crossings. The added benefit for vulnerable road users is that room would exist for bicycle lanes or wider shared lanes and medians could be installed at crosswalks to provide a midcrossing refuge as shown in Figure 17. As traffic volumes increase throughout the corridor, the cross-section will need to change to a 4 lane roadway.

## 6. Improvement Summary

This section summarizes the recommended improvements required to maintain capacity and address safety issues of road network experiencing high traffic growth. It also discusses possible impediments for carrying through with the recommendations and the

Figure 17
Two-way Left Turn Lane Example
 consequences if that were to happen.

### 6.1. Recommended Improvements

A list of road network improvements have been identified for the study area based on the projection of background traffic increases and the addition of the proposed development traffic. These improvements have been identified for the three planning horizon years opening day (2014), 2019, and 2024.

Although tied to specific years, the improvements will be required based on the actual trafic growth. It is noted that the projected traffic growth in this study could be overestimated for the following reasons:

- The highway and City traffic growth factor of $2 \%$ is higher than recent historical growth (highway growth from 2005 to 2010 was $0.7 \%$ );
- The highway SADT factors (1.973 for January counts and 1.631 for November co unts) were used on the City intersections;
- Assumed use of development land was based on highest trip generator whereas the C3 site is being developed for a tire service and retail store, and the C7 site development plans are unknown at this time.

It is therefore suggested that the planning time frames be used as a guide and the timing of the recommended mitigation measures be based on actual traffic growth.

The following mitigation measures are required with and without development traffic:

For opening day (2014): - No mitigation measures are required

- Consider removing parking on $10^{\text {th }}$ Street SW between $5^{\text {th }}$ Avenue SW and $10^{\text {th }}$ Avenue SW and installing a centre two-way left turn lane

Prior to 2019: e Install new traffic signal at the intersection of 10 Street SW and $5^{\text {th }}$ Avenue SW

- Install westbound advance left turn signal phase at $5^{\text {th }}$ Street SW and the TCH

Prior to 2024: - Install four-way stop control at the intersection of $5^{\text {th }}$ Street SW and $5^{\text {th }}$ Avenue SW

- Realign the $10^{\text {th }}$ Avenue and TCH intersection to a signalized $20^{\text {th }}$ Street intersection in accordance with City plans.
- Widen the $10^{\text {th }}$ Street SW northbound and southbound approaches to the TCH to include 1 shared left/thru, 1 thru, and 1 right turn lane
- Widen the TCH westbound approach to $10^{\text {th }}$ Street SW and install dual left turn lanes (required for Saturday Peak Hour)

In addition to the above mitigation measures, the addition of development traffic requires the following further mitigation:

Prior to 2024: - Widen the TCH eastbound approach to $10^{\text {th }}$ Street SW and add a $3^{\text {rd }}$ eastbound through lane (required for Saturday Peak Hour)

- Install new traffic signal on $10^{\text {th }}$ Street SW at the south access to the proposed shopping centre


### 6.2. Impediment for Improvement

### 6.2.1. Land Acquisition Required

The proposed improvements at the intersection of $10^{\text {th }}$ Street SW and the TCH require road widenings and land acquisition on both $10^{\text {th }}$ Street SW and the TCH. The adjacent properties are First Nations lands which may extend the timing of acquisition or impact its feasibility. It is likely that improvements would only be achieved during a full corridor upgrade where property issues are better addressed. The result may be that with or without the development, the level of service of the $10^{\text {th }}$ Street intersection with the TCH will fall below acceptable levels.

### 6.2.2. Traffic Redistribution

As the levels of service decrease and the congestion and delays increase, it is likely that those motorists that have a choice of routing in their travels change their travel patterns. In this situation, the $5^{\text {th }}$ Avenue corridor parallels the highway and is currently under-utilized. Access to the $10^{\text {th }}$ Street destinations could rely on the $5^{\text {th }}$ Avenue corridor connecting with either $5^{\text {th }}$ Street or Shuswap as shown in Figure 18. Similarly, northbound vehicles on $10^{\text {th }}$ Street turning left at TCH could choose to go southbound on $10^{\text {th }}$ Street to turn right on $10^{\text {th }}$ Avenue to connect to the highway.

A simulation of the redistribution of traffic onto these alternate routes was undertaken to determine whether the alternate routes could accommodate more traffic. The 2024 Saturday Peak Hour scenario

Figure 18
Route Alternatives
 was run with no improvements to the intersection of $10^{\text {th }}$ Street and TCH, but with the following movements reduced by $50 \%$ and redistributed onto the network:

- Northbound left turn
- Northbound right turn
- Westbound left turn

The level of service implications are shown in the following table.

2024 Saturday Peak Hour (No improvements at $10^{\text {th }}$ Street and TCH) Traffic Redistributed

| Scenario | Intersection | Overall LOS | Movement | V/C <br> Ratio | Delay (sec) | LOS | Queue (m) | Queue Storage (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combined | $\begin{gathered} 10^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} . \end{gathered}$ | 28.2 | $\begin{gathered} \text { EBL/EBT/ } \\ \text { EBR } \end{gathered}$ | 0.97 | 41.2 | D | 110 | 113 |
|  |  |  | WBL | 0.82 | 63.1 | E | 105 | 75 |
|  |  |  | NBT/NBL | 0.83 | 50.2 | D | 91 | 110 |
|  |  |  | SBL | 0.40 | 37.9 | D | 87 | 30 |
|  | $\begin{gathered} 5^{\text {th }} \mathrm{St} \& \\ \mathrm{TCH} \end{gathered}$ | 24.2 | WBL | 0.86 | 45.3 | D | 56 | 40 |
|  |  |  | NBL | 0.39 | 41.2 | D | 98 | 180 |
|  | $\begin{aligned} & 10^{\text {th }} \mathrm{St} \& \\ & 5^{\text {th }} \text { Ave } \end{aligned}$ | 16.3 | SBL | 0.68 | 57.7 | E | 41 | 37 |
|  | $\begin{gathered} 10^{\text {th }} \text { Ave \& } \\ \text { TCH } \end{gathered}$ | 20.1 | WBL | 0.32 | 70.3 | E | 21 | 75 |
|  |  |  | NBL | 0.81 | 37.3 | D | 93 | 220 |
|  | Shopping Centre Access | 14.3 | NBL | 0.73 | 50.6 | D | 73 | 110 |

The resulting levels of service for some movements are below acceptable limits at some intersections but are reflective of the delays that would be required to encourage alternative routing. The overall levels of service for the intersections are all at LOS C or better.

This would indicate that if the preferred improvement strategy needed to accommodate background growth (with or without development) cannot be undertaken at the optimum time, alternate routing exists that can reasonably accommodate the growth in traffic.

### 6.2.3. Future Uncertainties

There are a number of uncertainties within this analysis where assumptions had to be made in order to assess the road network impacts. Some of these uncertainties related to the development of the C7 zone land, namely:

- The assumption that the land would be built out within 10 years;
- The assumption that 94,500 sq.ft. of retail space would be built.

However, the biggest uncertainty is the growth of the background traffic and the ability to accommodate this growth by making improvements to the $10^{\text {th }}$ Street and TCH intersection.

Based on the consequences that these uncertainties have on the road network it is suggested that this TIA provide the information required to approve the rezoning subject to a 219 covenant (no build clause) on the C7 zone land. When the timing and nature of the $\mathbf{C 7}$ zone
development is known, updated traffic impact analysis could be done to identify the measures required to remove the covenant.

## 7. Conclusions and Recommendations

The following is a summary of findings and recommendations for this analysis of the proposed development of Lot 5 Plan 12965 in Salmon Arm.

- A development is proposed on Lot 5 Plan 12965 consisting of an 11,300 square foot tire service and retail store on the northern C3 zone land and a shopping centre on the southern C7 zone land. The tire service and retail store is anticipated to be built in 2014, where as the shopping centre will be developed between 2019 and 2024.
- Based on a higher trip generating land use, the C3 zone land could generate 51 and 108 trips in the weekday PM peak hour and Saturday peak hour respectively.
- The C7 zone land could generate 352 and 462 trips in the weekday PM peak hour and Saturday peak hour respectively.
- Each development will have one full-turns access and will share a second full-turns access, all from $10^{\text {th }}$ Street SW.
- Capacity analyses were undertaken for Ministry of Transportation and Infrastructure (MOTI) and City intersections within the vicinity of the new developments, both with and without the traffic added by the developments. Horizon years of 2014, 2019 and 2024 were considered.
- At opening day of the tire and retail store in 2014 all intersections within the study area operate at a level of service (LOS) C or better, with individual movements not worse than a LOS D.
- At the 2019 planning horizon, all intersections operate at a LOS C or better, but some individual movements at the intersections of $10^{\text {th }}$ Street SW \& TCH and $10^{\text {th }}$ Street SW \& $5^{\text {th }}$ Street SW operate at LOS E and F, with and without the development traffic.
- At the 2024 planning horizon, a number of intersections within the study area fail with an overall LOS $F$, with and without the development traffic.
- In order to mitigate the poor levels of service of the growth in background traffic, the following improvement strategy is recommended:

| For opening day (2014): | - No mitigation measures are required <br> - Consider removing parking on $10^{\text {th }}$ Street SW between $5^{\text {th }}$ Avenue SW and $10^{\text {th }}$ Avenue SW and installing a centre twoway left turn lane |
| :---: | :---: |
| Prior to 2019: | - Install new traffic signal at the intersection of 10 Street SW and $5^{\text {th }}$ Avenue SW <br> - Install westbound advance left turn signal phase at $5^{\text {th }}$ Street SW and the TCH |


| Prior to 2024: | - Install four-way stop control at the intersection of $5^{\text {th }}$ Street SW and $5^{\text {th }}$ Avenue SW <br> - Realign the $10^{\text {th }}$ Avenue and TCH intersection to a signalized $20^{\text {th }}$ Street intersection in accordance with City plans. <br> - Widen the $10^{\text {th }}$ Street SW northbound and southbound approaches to the TCH to include 1 shared leff/thru, 1 thru, and 1 right turn lane <br> - Widen the TCH westbound approach to $10^{\text {th }}$ Street SW and install dual left turn lanes (required for Saturday Peak Hour) |
| :---: | :---: |

- When the development traffic is added to the road network, further mitigation measures are required to attain acceptable levels of service:

| Prior to 2024: | - Widen the TCH eastbound approach to $10^{\text {th }}$ Street SW and add <br> a $3^{\text {rd }}$ eastbound through lane (required for Saturday Peak Hour) <br> - Install new traffic signal on $10^{\text {th }}$ Street SW at the south access <br> to the proposed shopping centre |
| :--- | :--- |

- The recommended improvements at the intersection of $10^{\text {th }}$ Street SW and TCH may be difficult to achieve due to difficulties in achieving the road right-of-way. If that occurs, the background growth of highway and city traffic over the next 10 years will result in intersection failure and excessive delays and will encourage motorists that have routing alternatives to avoid the intersection.
- A review of major redistribution of traffic ( $50 \%$ of traffic having $10^{\text {th }}$ Street SW as origin/destination) indicates that adjacent corridors have excess capacity and can accommodate the redistributed traffic. The levels of service of the study area intersections all had LOS C or better, with 3 intersections having one movement with a LOSE.
- This indicates that until such time as highway widening can occur through this area, congestion will influence the routing choices within the study area. Highway improvement at the $10^{\text {th }}$ Street intersection will likely occur only with a corridor wide improvement program, as opposed to intersection specific.
- All results of this study are based on traffic volume projections that are deemed to be quite conservative (i.e. overestimated). The timing of specific improvements with and without development traffic is shown for comparison purposes; actual timing of improvements should be based on the traffic conditions of the day.
- Due to the uncertainties with respect to the C7 zone land development's timing and size, and the uncertainty of background growth rate and the ability to accommodate the growth with improvements at the $10^{\text {th }}$ Street and TCH intersection, consideration should be given to zoning approval subject to a 219 Covenant restricting development of the C7 zone lands. It is recommended that once the timing and nature of the C 7 zone development is known updated traffic impact analysis be done to identify the measures required to remove the covenant.


## Appendix A

## Summer Annual Daily Traffic Factors

| $\text { ooss } \forall \text { ueeg `৩"ด }$ | 2007 | DT Factors |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\sim}{0}$ | Group | Type | Day of Week | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 8 | 1 | Consistent |  | 1.226 | 1.138 | 1.105 | 1.08 | 1.059 | 1.092 | 1.003 | 0.998 | 1.04 | 1.088 | 1.128 | 1.191 |
| = | 2 | Seasonal |  | 1.973 | 1.777 | 1.605 | 1.482 | 1.296 | 1.23 | 1.032 | 0.971 | 1.186 | 1.393 | 1.631 | 1.838 |
| ก | 3 | Highly Seasonal |  | 3.028 | 2.714 | 2.224 | 1.929 | 1.831 | 1.451 | 1.03 | 0.978 | 1.412 | 1.916 | 2.512 | 2.754 |
|  | 1 | Daily | Sun | 1.242 | 1.283 | 1.224 | 1.219 | 1.236 | 1.207 | 1.207 | 1.194 | 1.217 | 1.254 | 1.237 | 1.344 |
|  | 1 | Daily | Mon | 1.031 | 1.001 | 1.003 | 1.005 | 1.039 | 1.009 | 1.023 | 1.031 | 1.047 | 1.025 | 1.063 | 1.014 |
|  | 1 | Daily | Tue | 0.968 | 0.972 | 0.968 | 0.969 | 0.974 | 0.979 | 0.969 | 0.979 | 0.973 | 0.969 | 0.975 | 1.026 |
|  | 1 | Daily | Wed | 0.965 | 0.959 | 0.953 | 0.954 | 0.959 | 0.961 | 0.962 | 0.948 | 0.953 | 0.966 | 0.955 | 0.933 |
|  | 1 | Daily | Thu | 0.963 | 0.938 | 0.946 | 0.916 | 0.928 | 0.943 | 0.939 | 0.933 | 0.942 | 0.942 | 0.926 | 0.894 |
|  | 1 | Daily | Fii | 0.877 | 0.878 | 0.898 | 0.947 | 0.885 | 0.892 | 0.9 | 0.904 | 0.891 | 0.872 | 0.871 | 0.856 |
|  | 1 | Daily | Sat | 1.087 | 1.124 | 1.133 | 1.104 | 1.1 | 1.117 | 1.101 | 1.112 | 1.087 | 1.1 | 1.102 | 1.113 |
|  | 2 | Daily | Sun | 1.24 | 1.251 | 1.139 | 1.119 | 1.128 | 1.079 | 1.042 | 1.027 | 1.037 | 1.226 | 1.174 | 1.225 |
|  | 2 | Daily | Mon | 1.02 | 0.99 | 1.019 | 1.013 | 0.984 | 1.024 | 0.99 | 1 | 0.982 | 0.983 | 1.033 | 1.093 |
|  | 2 | Daily | Tue | 0.97 | 1.008 | 1.008 | 1.023 | 1.05 | 1.048 | 1.039 | 1.079 | 1.047 | 1.012 | 0.995 | 1.176 |
|  | 2 | Daily | Wed | 0.923 | 0.98 | 0.974 | 0.996 | 1.033 | 1.013 | 1.035 | 1.037 | 1.025 | 1.017 | 0.978 | 0.958 |
|  | 2 | Daily | Thu | 0.949 | 0.949 | 0.957 | 0.91 | 0.957 | 0.964 | 0.985 | 0.992 | 1.012 | 0.952 | 0.952 | 0.87 |
|  | 2 | Daily | Fri | 0.886 | 0.847 | 0.886 | 0.894 | 0.828 | 0.852 | 0.888 | 0.881 | 0.896 | 0.83 | 0.856 | 0.843 |
|  | 2 | Daily | Sat | 1.165 | 1.157 | 1.145 | 1.139 | 1.129 | 1.102 | 1.071 | 1.039 | 1.058 | 1.13 | 1.116 | 1.042 |
|  | 3 | Daily | Sun | 1.091 | 1.044 | 1.002 | 1.004 | 1.02 | 1.008 | 0.994 | 0.975 | 0.976 | 1.103 | 1.07 | 1.056 |
|  | 3 | Daily | Mon | 1.019 | 1.032 | 1.023 | 1 | 0.925 | 1.08 | 0.98 | 0.984 | 0.939 | 0.954 | 1.019 | 1.188 |
|  | 3 | Daily | Tue | 1.029 | 1.046 | 1.078 | 1.117 | 1.12 | 1.129 | 1.093 | 1.113 | 1.085 | 1.077 | 1.055 | 1.291 |
|  | 3 | Daily | Wed | 0.977 | 1.016 | 1.063 | 1.071 | 1.115 | 1.091 | 1.083 | 1.089 | 1.084 | 1.094 | 1.048 | 0.974 |
|  | 3 | Daily | Thu | 0.974 | 1 | 0.994 | 0.948 | 0.991 | 0.962 | 1.024 | 1.014 | 1.055 | 0.987 | 0.987 | 0.893 |
|  | 3 | Daily | Fri | 0.911 | 0.876 | 0.899 | 0.875 | 0.853 | 0.841 | 0.893 | 0.888 | 0.928 | 0.841 | 0.868 | 0.844 |
|  | 3 | Daily | Sat | 1.114 | 1.093 | 1.063 | 1.091 | 1.102 | 1.013 | 1.018 | 1.015 | 1 | 1.063 | 1.069 | 0.962 |

NOTE:
Group 1 Consistent
Group 2 Seasonal
Group 3 Highly Seasonal

## Appendix B

## Study Traffic Volumes

| Scenario | Peak | Eastbound |  |  | Westbound |  |  | Northbound |  |  | Southbound |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LT | Thru | RT | LT | Thru | RT | LT | Thru | RT | LT | Thru | RT |  |
| Base Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Existing | Weekday PM |  | 400 | 88 | 8 | 524 |  | 92 |  | 4 |  |  |  | 1116 |
|  | Saturday Peak |  | 428 | 148 | 12 | 472 |  | 72 |  | 16 |  |  |  | 1148 |
| Seasonal Adjustment | Weekday PM |  | 789 | 174 | 16 | 1034 |  | 182 |  | 8 |  |  |  | 2202 |
|  | Saturday Peak |  | 844 | 292 | 24 | 931 |  | 142 |  | 32 |  |  |  | 2265 |
| 2019 | Weekday PM |  | 871 | 192 | 17 | 1141 |  | 200 |  | 9 |  |  |  | 2431 |
|  | Saturday Peak |  | 932 | 322 | 25 | 1028 |  | 157 |  | 35 |  |  |  | 2501 |
| 2024 | Weekday PM |  | 982 | 212 | 19 | 1280 |  | 221 |  | 10 |  |  |  | 2684 |
|  | Saturday Peak |  | 1029 | 356 | 29 | 1135 |  | 173 |  | 38 |  |  |  | 2761 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Development Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kal Tire | Weekday PM |  | 2 |  |  |  |  |  |  |  |  |  |  |  |
|  | Saturday Peak |  | 7 |  |  |  |  |  |  |  |  |  |  | 7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shopping Centre | Weekday PM |  | 18 |  |  |  |  |  |  |  |  |  |  | 16 |
|  | Saturday Peak |  | 22 |  |  |  |  |  |  |  |  |  |  | 22 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Combined Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Opening Day } \\ & 2014 \end{aligned}$ | Weekday PM |  | 791 | 174 | 16 | 1034 |  | 182 |  | 8 |  |  |  | 2204 |
|  | Saturday Peak |  | 851 | 292 | 24. | 931 |  | 142 |  | 32 |  |  |  | 2272 |
| 2019 | Weekday PM |  | 873 | 192 | 17 | 1141 |  | 200 |  | 9 |  |  |  | 2433 |
|  | Saturday Peak |  | 939 | 322 | 28 | 1028 |  | 157 |  | 35 |  |  |  | 2508 |
| 2024 | Weekday PM |  | 980 | 212 | 19 | 1260 |  | 221 |  | 10 |  |  |  | 2702 |
|  | Saturday Peak |  | 1058 | 356 | 29 | 1195 |  | 173 |  | 38 |  |  |  | 2790 |



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| Scenario | Peak | Eastbound |  |  | Westbound |  |  | Northbound |  |  | Southbound |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LT | Thru | RT | LT | Thru | RT | LT | Thru | RT | LT | Thru | RT |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Base Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Existing | Weekday PM | 11 |  | 26. |  |  |  | 10 | 307 |  |  | 208 | 14 | 575 |
|  | Saturday Peak | 10 |  | 24. |  |  |  | 10 | 335 |  |  | 234 | 12 | 624 |
| Seasonal Adjustment | Weekday PM | 22 |  | 51 |  |  |  | 19 | 605 |  |  | 410 | 27 | 1134 |
|  | Saturday Peak | 19 |  | 47 |  |  |  | 20 | 661 |  |  | 461 | 23 | 1231 |
| 2019 | Weekday PM | 24 |  | 56 |  |  |  | 21 | 668 |  |  | 453 | 30 | 1252 |
|  | Saturday Peak | 21 |  | 52. |  |  |  | 22 | 730 |  |  | 509 | 25 | 1359 |
| 2024 | Weekday PM | 27 |  | 62 |  |  |  | 23 | 737 |  |  | 500 | 33 | 1382 |
|  | Saturday Peak | 23 |  | 57. |  |  |  | 24 | 806 |  |  | 562 | 28 | 1501 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Development Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kal Tire | Weekday PM |  |  | 2. |  |  |  |  | 17. |  |  | 14 |  | 33 |
|  | Saturday Peak |  |  | 5. |  |  |  |  | 33 |  |  | 29 |  | 67 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shopping Centre | Weekday PM |  |  | 11. |  |  |  |  | 113 |  |  | 98 |  | 222 |
|  | Saturday Peak |  |  | 15 |  |  |  |  | 137 |  |  | 139 |  | 291 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Combined Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opening Day 2014 | Weekday PM | 22 |  | 53 |  |  |  | 19 | 822 |  |  | 424 | 27 | 1167 |
|  | Saturday Peak | 19 |  | 52 |  |  |  | 20 | 694 |  |  | 490 | 23 | 1298 |
| 2019 | Weekday PM | 24. |  | 58 |  |  |  | 21 | 685 |  |  | 467 | 30 | 1285 |
|  | Saturday Peak | 21 |  | 57 |  |  |  | 22 | 763 |  |  | 538 | 25 | 1426 |
| 2024 | Weekday PM | 27 |  | 75 |  |  |  | 23 | 867 |  |  | 612 | 33 | 1637 |
|  | Saturday Peak | 23 |  | 77. |  |  |  | 24 | 976 |  |  | 730 | 28 | 1859 |

January 29, 2013 Appendix 7: Traffic Impact Analysis


## SADT Factor: 1.973 <br>  Intersection: $\quad 5^{\text {th }}$ Avenue SW and $10^{\text {th }}$ Street SW

| Scenario | Peak | Eastbound |  |  | Westbound |  |  | Northbound |  |  | Southbound |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LT | Thru | RT | LT | Thru | RT | LT | Thru | RT | LT | Thru | RT |  |
| Base Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Existing | Weekday PM | 74 | 94 | 28 | 20 | 70 | 42 | 8 | 22 | 12 | 26 | 50 | 38 | 484 |
|  | Saturday Peak | 91 | 97 | 20 | 12 | 78 | 24 | 12 | 41 | 5 | 16 | 33 | 65 | 493 |
| Seasonal Adjustment | Weekday PM | 146 | 185 | 55 | 39 | 138 | 83 | 16 | 43 | 24 | 51 | 99 | 75 | 955 |
|  | Saturday Peak | 179 | 192 | 39 | 24 | 150 | 47 | 24 | 82 | 11 | 32 | 66 | 129 | 973 |
| 2019 | Weekday PM | 161 | 205 | 61 | 44 | 152 | 91 | 17 | 48 | 26 | 57 | 109 | 83 | 1054 |
|  | Saturday Peak | 198 | 212 | 44 | 28 | 166 | 52 | 26 | 90 | 12 | 35 | 73 | 142 | 1075 |
| 2024 | Weekday PM | 178 | 226 | 67 | 48 | 188 | 101 | 19 | 53 | 29 | 63 | 120 | 91 | 1164 |
|  | Saturday Peak | 218 | 234 | 48 | 29 | 183 | 58 | 29 | 99 | 13 | 38 | 80 | 157 | 1187 |
| Development Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kal Tire | Weekday PM | 2 |  |  |  |  | 1 |  |  | 1 | 1 | 2 | 2 | 9 |
|  | Saturday Peak | 5 |  |  |  |  | 3 |  |  | 2 | 2 | 4 | 3 | 19 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shopping Centre | Weekday PM | 18 |  |  |  |  | 10 |  |  | 5 | 7 | 14 | 11 | 63 |
|  | Saturday Peak | 22 |  |  |  |  | 15 |  |  | 7 | 9 | 17 | 13 | 83 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Combined Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opening Day 2014 | Weekday PM | 148 | 185 | 55 | 39 | 138 | 84 | 16 | 43 | 25 | 52 | 101 | 77 | 964 |
|  | Saturday Peak | 184 | 192 | 39 | 24. | 150 | 50 | 24 | 82 | 13 | 34 | 70 | 132 | 992 |
| 2019 | Weekday PM | 163 | 205 | 61. | 44 | 152 | 92 | 17. | 48 | 27 | 58 | 111 | 85 | 1063 |
|  | Saturday Peak | 203 | 212 | 44 | 26 | 166 | 55 | 26 | 90 | 14 | 37 | 77 | 145 | 1094 |
| 2024 | Weekday PM | 196 | 226 | 67. | 48 | 168 | 112 | 19 | 53 | 35 | 71 | 136 | 104 | 1236 |
|  | Saturday Peak | 245 | 234 | 48 | 29 | 183 | 76 | 29 | 99 | 22 | 49 | 101 | 173 | 1289 |


| Scenario | Peak | Eastbound |  |  | Westbound |  |  | Northbound |  |  | Southbound |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LT | Thru | RT | LT | Thru | RT | LT | Thru | RT | LT | Thru | RT |  |
| Base Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Existing | Weekday PM | 20 | 100 | 4 | 20. | 144 | 28. | 8 | 12 | 16 | 24 | 36 | 24 | 436 |
|  | Saturday Peak | 40 | 120 | 0 | 40 | 128 | 16 | 0 | 8 | 20 | 20 | 8 | 20 | 420 |
| Seasonal Adjustment | Weekday PM | 39 | 197 | 8 | 39 | 284 | 55 | 16 | 24 | 32 | 47 | 71 | 47 | 860 |
|  | Saturday Peak | 79 | 237 | 0 | 79 | 253 | 32 | 0 | 16 | 39 | 39 | 16 | 39 | 829 |
| 2019 | Weekday PM | 44 | 218 | 9 | 44 | 314 | 61 | 17 | 26 | 35 | 52 | 78 | 52 | 950 |
|  | Saturday Peak | 87 | 261 | 0 | 87 | 279 | 35 | 0 | 17 | 44 | 44 | 17 | 44 | 915 |
| 2024 | Weekday PM | 48 | 241 | 10 | 48 | 346 | 67 | 19 | 29 | 38 | 58 | 87 | 58 | 1049 |
|  | Saturday Peak | 98 | 289 | 0 | 96 | 308 | 38 | 0 | 19 | 48 | 48 | 19 | 48 | 1010 |
| Development Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kal Tire | Weekday PM |  | 2 |  |  | 2 |  |  |  |  |  |  |  | 4 |
|  | Saturday Peak |  | 5 |  |  | 5 |  |  |  |  |  |  |  | 10 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shopping Centre | Weekday PM |  | 16 |  |  | 18 |  |  |  |  |  |  |  | 32 |
|  | Saturday Peak |  | 20. |  |  | 20 |  |  |  |  |  |  |  | 40 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Combined Traffic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opening Day 2014 | Weekday PM | 39 | 199 | 8 | 39 | 288 | 55 | 16 | 24 | 32 | 47 | 71 | 47 | 864 |
|  | Saturday Peak | 79 | 24.2 | 0 | 79. | 258 | 32 | 0 | 16 | 39 | 39 | 16 | 39 | 839 |
| 2019 | Weekday PM | 44. | 220 | 9 | 44 | 316 | 61 | 17 | 26 | 35 | 52 | 78 | 52 | 954 |
|  | Saturday Peak | 87. | 266 | 0 | 87 | 284 | 35 | 0 | 17 | 44 | 44 | 17 | 44 | 925 |
| 2024 | Weekday PM | 48 | 259 | 10 | 48 | 384 | 87. | 19 | 29 | 38 | 58 | 87 | 58 | 1085 |
|  | Saturday Peak | 96 | 314 | 0 | 96 | 333 | 38 | 0 | 19 | 48 | 48 | 19 | 48 | 1060 |

## Appendix C

## Synchro / SimTraffic Results

(To be supplied on CD)

Your electronic signature is a representation that you are a subscriber as defined by the Land Title Act, RSBC 1996 c.250, and that you have applied your electronic signature in accordance with Section 168.3, and a true copy, or a copy of that true copy, is in your possession.

1. APPLICATION: (Name, address, phone number of applicant, applicant's solicitor or agent) Elizabeth Sadorsky, Brooke, Jackson, Downs LLP
Barristers and Solicitors
PO Box 67, 51-3rd Street NE
Salmon Arm BC V1E 4N2
Document Fees: $\$ 147.00$
2. PARCEL IDENTIFIER AND LEGAL DESCRIPTION OF LAND:
[FID]
[LEGAL DESCRIPTION]
009-333-461
LOT 5 SECTION 15 TOWNSHIP 20 RANGE 10 W6M KDYD PLAN 12965 EXCEPT PLANS 21358, 24962, KAP73904 AND EPP40251

STE? YES $\square$
3. NATURE OF INTEREST

CHARGE NO.
ADDITIONAL, INFORMATION

## Covenant

Priority Agreement
4. TERMS: Part 2 of this instrument consists of (select one only)
(a) $\square$ Filed Standard Charge Terms D.F. No.
(b) $\sqrt{ }$ Express Charge Terms Annexed as Part 2
A selection of (a) includes any additional or modified terms referred to in Item 7 or in a schedule annexed to this instrument.
5. TRANSFEROR (S):

SEE SCHEDULE
6. TRANSFEREE(S): (including postal addresses) and postal codes))

CITY OF SALMON ARM

BOX 40
SALMON ARM
BRITISH COLUMBIA
VIE 4N2
CANADA
7. $\triangle D D I T I O N A L ~ O R ~ M O D I F I E D ~ T E R M S: ~$

Nil
8. EXECUTION (S): This instrument creates, assigns, modifies, enlarges, discharges or governs the priority of the interests) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledges) receipt of a true copy of the filed standard charge terms, if any.

Officer Signature (s)

Elizabeth Sadorsky
Barrister \& Solicitor
51-3 Street NE, PO Box 67 Salmon Arm, BC VIE 4N2


> Transferor (s) Signature (s)

628746 B.C. Ltd, by its authorized signatory:

William Herbert Laird

OFFICER CERTIFICATION:
Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1996, c. 124 , to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

| Officer Signature(s) |
| :--- |
| Janet Rose Palmer |
| Commissioner for Taking Affidavis |
| Commissioner No. 2013-1177 |
| Until October 31, 2016 |
| Box 868 |
| Salmon Arm, British Columbia |
| V1E 4N9 |

as to both signatures

## Elizabeth Sadorsky

Barrister \& Solicitor
51-3 Street NE, PO Box 67
Salmon Arm, BC
V1E 4N2
as to signature of Carl Bannister
Transferor / Borrower / Party Signature(s)
Salmon Arm Savings and Credit Union by its authorized signatories:
Michael Wagner

## Dan Morin

This is the instrument creating the conditions or covenants entered into under Section 219 of the Land Title Act by the Transferor herein described:
Nancy Cooper, Mayor
Carl Bannister, Chief Administrative Officer
$\qquad$

OFFICER CERTIFICATION:
Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1996, c. 124 to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Tifle Act as they pertain to the execution of this instrument.

ENTER THE REQUIRED INFORMATION IN THE SAME ORDER AS THE INHORMATION MUST APPEAR ON TIIE FREEIHOLD 'LRANSRER FORM, MORTGAGE FORM, OR GENERAL INSTRUMIENT FORM.

## 5. TRANSFEROR(S):

628746 B.C. LTD. (Inc. No. BC628746)
Box 1022
Salmon Arm, BC
V1E 4P2

- and -

SALMON ARM SAVINGS AND CREDIT UNION, joining this instrument to grant priority over Mortgage CA2389617 and Assignment of Rents CA2389618

## GENERAL INSTRUMENT - PART 2

## SECTION 219 COVENANT

## WHEREAS:

A. The Transferor is the registered owner in fee simple of that certain parcel or tract of land situate in the City of Salmon Arm, Province of British Columbia, more particularly described in Section 2 of Part 1 of this Form C General Instrument (hereinafter called the "Transferor's Land").
B. It was a condition of the approval by the Transferee of the subdivision which created the Transferor's Land that the Transferor would enter into the covenants herein set out, pursuant to Section 219 of the Land Title Act.

NOW THEREFORE in consideration of payment by the Transferee of the sum of ONE DOLLAR ( $\$ 1.00$ ) of lawful money of Canada and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by the Transferor) and pursuant to Section 219 of the Land Title Act, the Transferor hereby covenants and agrees with the Transferee as follows:

1. Hereafter, and so long as the covenants herein contain shall remain in full force and effect, no buildings, improvements or other structures shall be built, constructed or located on the Transferor's Land and the Transferor's Land shall not be subdivided until such time as:
a) the Transferor's Land is fully serviced to the standards of the Transferee; and
b) the Transferor has completed all traffic improvements to 10 Street SW required by the Transferee in connection with the proposed development of the Transferor's Land to the satisfaction of the Transferee, which may include a traffic impact analysis.
2. The Transferor covenants and agrees to indemnify and save harmless the Transferee, its servants and agents, from and against all suits, demands, claims, losses, damages, costs, and expenses arising out of any breach, violation or nonperformance by the Transferor of any of the covenants set out herein.

## Page 5 of 5 Pages

3. The Transferor and the Transferee further agree with one another as follows:
(a) that whenever the expressions "Transferor" or "Transferee" are used herein, the same shall be construed as meaning the singular, plural, or body corporate or politic where the context so requires;
(b) that the covenants herein contained are and shall be deemed to be covenants with title to the Transferor's Land to the benefit of the Transferee and shall be binding upon the Transferor and the successors in title to the Transferor, in perpetuity, or until such time as the same shall be released by the Transferee or shall be ordered discharged by a Court of competent jurisdiction; and
(c) that this Section 219 Covenant shall only be modified or discharged in accordance with the requirements of Section 219 of the Land Title Act.

## CONSENT TO SECTION 219 COVENANT

KNOW ALL PERSONS BY THESE PRESENTS that SALMON ARM SAVINGS AND CREDIT UNION, the registered holder of Mortgage CA2389617 and Assignment of Rents CA2389618 (collectively the "Prior Charges"), for an in consideration of the sum of ONE DOLLAR ( $\$ 1.00$ ) of lawful money of Canada, paid to it by the Transferee (the receipt and sufficiency of which is hereby acknowledged) does hereby grant and convey to the Transferee, its successors and assigns, priority to the within Section 219 Covenant over the Prior Charges as if the said Section 219 Covenant had been dated and registered prior to the Prior Charges.

## 628746 B.C. Ltd. <br> Box 1022 <br> Salmon arm BC. <br> V1E 4P2

Feb. 07, 2020

Mayor and Council

Re: 521-10 St SW. Subdivision, Down zoning and 219 Covenants.

This property is approx. 3.5 acres. We have applied to down zone the site from C-7 to C-3, and subdivide approx. one acre to construct an Ashley furniture store. Currently the City of Salmon Arm and MoTl each have covenants restricting future development subject to the size and type of project proposed.

The owner proposes that the City covenant will remain on the title of the new 1 acre Ashley lot, but modified to restrict development to a furniture store only, and any future use may require the owner to provide an updated traffic impact analysis and a greater number of on-site parking stalls.

It is our understanding that MoTi will discharge their covenant on the new 1 acre lot.

We expect the terms and conditions of the existing covenants restricting future development will continue to be registered on the remaining 2.5 acre lot.

MOTAppendiyNWMGUEQveflant
CA3712462 CA3712463
PAGE 1 OF 5 PAGES

| lizabeth Ann | Digitally sianed by Elizabelh Ann Sadorsky 2P2.181 |
| :---: | :---: |
| Sadorsky | $\mathrm{DN}: c=C A, \quad \mathrm{cn}=$ Elizabeth Ann Sadorsky 2 P2J8T, $0=$ Lawye |
| 2P2J8T |  |

1. APPLICATION: (Namc, address, phone number of applicant, applicant's solicitor or agent)

Elizabeth Sadorsky, Brooke, Jackson, Downs LLP
Barristers and Solicitors
PO Box 67, 51-3rd Street NE
Salmon Arm
BC V1E 4N2
Document Fees: $\$ 147.00$
2. PARCEL IDENTIFIER AND LEGAL DESCRIPTION OF LAND:
[PID]
[LRGAL DESCRIPTION]
009-333-461 LOT 5 SECTION 15 TOWNSHIP 20 RANGE 10 W6M KDYD PLAN 12965 EXCEPT PLANS 21358, 24962, KAP73904 AND EPP40251

STC? YES
3. NATURE OF INTEREST

CHARGE NO.
ADDITIONAL INFORMATION

## Covenant

Priority Agreement
4. TERMS: Part 2 of this instrument consists of (select one only)
(a) $\square$ Filed Standard Charge Terms D,F, No.
(b) $\sqrt{ }$ Express Charge Terms Annexed as Part 2
A selection of (a) includes any additional or modified ferms referred 10 in Item 7 or in a schodule annexed to this instrument.
5. TRANSFEROR(S):

SEE SCHEDULE
6. TRANSFEREE(S): (including postal address(es) and postal code(s))

SEE SCHEDULE


## OFFICER CERTIFICATION:

Your signature constitutes a representation that you arc a solicitor, notary public or other person authorized by the Evidence Acl, R.S.B.C. 1996, c. 124, to take affidavits for use in British Columbia and certifies the matters set oul in Part 5 of the Land Title Acl as they pertain to the exccution of this instrument.

EXECUTIONS CONTINUED
PAGE 2 of 5 pages

Officer Signature(s)

## Daniel Arthur Morin

Commissioner for Taking Affidavits in BC
Commissioner No. 2013-0639
Until May 31, 2016
Box 868
Salmon Arm, British Columbia V1E 4N9
as to both signatures
$\qquad$
$\qquad$


Transferor / Borrower / Party Signature(s)
Salmon Arm Savings and Credit Union by its authorized signatories:

## Michael Wagner

Ken Hawrys

This is the instrument creating the conditions or covenants entered into under Section 219 of the Land Title Act by the Transferor herein described:

William G. Sparkes, Approving Officer for the Ministry of Transportation and Infrastructure

Enter the required information in the same order as the information must appear on tie frefhoid Transfer form, Mortgage form, Or General INSTRUMENS FORM.

## 5. TRANSFEROR(S):

628746 B.C. LTD. (Inc. No. BC628746)
Box 1022
Salmon Arm, BC
V1E 4P2

- and -

SALMON ARM SAVINGS AND CREDIT UNION, joining this instrument to grant priority over Mortgage CA2389617 and Assignment of Rents CA2389618

## 6. TRANSFEREE(S):

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA as represented by the Minister of Transportation and Infrastructure Parliament Buildings
Victoria, BC
V8X 1V4

# GENERAL INSTRUMIENT PART 2 

Page 4 of 5 pages

## SECTION 219 COVENANT

## WHEREAS:

A. The Transferor is the registered owner in fee simple of that certain parcel or tract of land situate in the City of Salmon Arm, Province of British Columbia, more particularly described in Section 2 of this Form C General Instrument (the "Transferor's Land").
B. The Transferor applied to the Transferee for approval of its application to the Clty of Salmon Arm to re-zone the parent property of the Transferor's Land from A-1 (Agriculture) to $\mathrm{C}-3$ (Service Commercial) and C-7 (Shopping Centre Commercial).
C. It is a condition of the approval by the Transferee of the re-zoning application recited herein that the Transferor agree to certain restrictions with respect to the development of the Transferor's Land and the Transferor has agreed to grant the covenants hereinafter set out, pursuant to Section 219 of the Land Title Act, to evidence those restrictions.

NOW THEREFORE in consideration of payment by the Transferee of the sum of ONE DOLLAR (\$1.00) of lawful money of Canada and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by the Transferor) and pursuant to Section 219 of the Land Title Act, the Transferor hereby covenants and agrees with the Transferee as follows:

1. Hereafter, and so long as the covenants herein contained shall remain in full force and effect, no buildings, improvements or other structures shall be built, constructed or located on the Transferor's Land, and the Transferor's Land shall be used only as bare land, until such time as the Transferor has submitted a site plan with current traffic impact analysis based on the proposed use to the Transferee, has completed any offsite works as recommended by the Transferee's traffic engineer, and has obtained the Transferee's approval.
2. The Transferor covenants and agrees to indemnify and save harmless the Transferee, its servants and agents, from and against all suits, demands, claims losses, damages, costs or expenses arising out of any breach, violation or nonperformance by the Transferor of any of the covenants set out herein.
3. The Transferor and the Transferee further agree with one another, as follows:
(a) that whenever the expressions "Transferor" or "Transferee" are used herein, the same shall be construed as meaning the singular, plural, or body corporate or politic where the context so requires;
(b) that the covenants herein contained are and shall be deemed to be covenants with title to the Transferor's Land to the benefit of the Trans feree and shall be binding upon the Transferor and the successors in title to the Transferor, in perpetuity, or until such time as the same shall be released by the Transferee or shall be ordered discharged by a Court of competent jurisdiction;
(c) that this Covenant shall only be modified or discharged in accordance with the requirements of the Land Title Act.

## CONSENT TO SECTION 219 COVENANT

KNOW ALL PERSONS BY THESE PRESENTS that SALMON ARM SAVINGS AND CREDIT UNION, the registered holder of Mortgage CA2389617 and Assignment of Rents CA2389618 (collectively the "Prior Charges"), for and in consideration of the sum of ONE DOLLAR ( $\$ 1.00$ ) of lawful money of Canada, paid to it by the Transferee (the receipt and sufficiency of which is hereby acknowledged) does hereby grant and convey to the Transferee, its successors and assigns, priority to the within Section 219 Covenant over the Prior Charges as if the said Section 219 Covenant had been dated and registered prior to the Prior Charges.

| Present: | Trent Sismey (Panel Member - Acting Chair) <br> Paul Burrows (Panel Member) <br> Marc Lamerton (Panel Member) <br> Dennis Lowe (Panel Member) |
| :--- | :--- |
|  | Bill Laird (Applicant DP-423) |
|  | Chris Larson (Planning and Development Officer) <br> Scott Beeching (Senior Planner) |
| Absent: | Sharon Bennett (Panel Member) |
| Application: | Proposed Commercial Development at 521 - 10 Street SW <br> Development Permit Application No. DP-423 |

The meeting was called to order at 2:34 p.m.
Development Permit Application No. DP-423
The Applicant summarized the proposal, referring to the site plans and building elevations, including future development plans and the requested parking variance. The intent is to build and sell the parcel.

Panel members sought clarification on the design including landscaping, and parking. It was noted that there will be street parking and potential options for parking along the north and south building elevations.

The applicant left the meeting at $2: 49$.
Panel members discussed the proposal, noting that the elevations were generally pleasing with vertical elements to break up the larger less featured walls.

The applicant returned to the meeting at 3:02.

## Panel Recommendation

THAT the application drawings under review for application DP-423 be supported as presented, noting no concerns with the requested parking variance. While not a requirement and recognizing the vertical design elements, the DRP noted a potential opportunity to enhance the north and south elevations through some form of design feature, such as windows for natural lighting or artistic branding.

The meeting adjourned at 3:07 p.m.

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## To: His Worship Mayor Harrison and Members of Council

Date: February 11, 2020
Subject: Development Variance Permit Application No. VP-506
Legal: Lot 1, Section 31, Township 20, Range 9, W6M, KDYD, Plan 4569, Except Plans 17099 \& 26295
Civic: 5881 - 35 Street NE
Owner: Seventh-Day Adventist Church
Applicant / Agent: Burman Construction / Peter Burman

## MOTION FOR CONSIDERATION

THAT: Development Variance Permit No. VP-506 be authorized for issuance for Lot 1, Section 31, Township 20, Range 9, W6M, KDYD, Plan 4569, Except Plans 17099 \& 26295, which will vary the provisions of Zoning Bylaw No. 2303 as follows:

1) Section 35.11 .3 - reduce the minimum setback of a building from the interior south parcel line from 3.0 metres to 0.76 metres.
2) Section 4.3.10 - reduce projection of roof eaves to the south parcel line from the minimum of 0.6 metres to 0.0 metres.

## STAFF RECOMMENDATION

THAT: The motion for consideration be adopted.

## PROPOSAL

The subject property is located at $5881-35$ Street NE (Appendix $1 \& 2$ ). The variance request is to reduce the minimum setback of the southern interior parcel line from 3.0 metres to 0.76 metres; and, to reduce the minimum distance of roof eaves projection to the southern parcel line from 0.6 metres to 0.0 m . to accommodate a renovation of a garage. The applicant intends to raise the garage and attach it to the house. A letter of rationale and site photos have been submitted and are attached as Appendix 3.

## BACKGROUND

The subject property is designated Acreage Reserve in the City's Official Community Plan and zoned A-2, Rural Holding Zone (Appendix 4 \& 5). The property is also in the Agricultural Land Reserve (ALR). The subject property and adjacent property to the west is owned by the Seventh-Day Adventist Church. The subject property currently contains a single family dwelling and accessory buildings. A portion of the parking lot for the church is on the subject property also. The Seventh-Day Adventist Church operates a church and a school on the neighbouring property to the west as the P-3 Institutional Zone permits. However, most of the surrounding properties are zoned A-2, Rural Holding Zone and in the ALR, with exception to properties to the northeast, which transition from smaller agriculture properties zoned A-3 (Small Holding Zone) to R-1 (Single Family Residential Zone).

The subject property is approximately 152 metres $\times 102$ metres in size with the area of 1.54 hectares. The existing house and detached garage on the property is situated close to the south and east property lines, as shown on the site plan (Appendix 6). The construction project includes raising the level of the detached garage to align the roof of the garage to the roof of the house, so there will be one continuous roof line. It
is not known at the time if a new garage will be constructed or if the existing structure will be attached. The existing garage currently does not meet the required 3.0 metre setback and should this variance application be approved, the site plan (Appendix 6) indicates the south corner of the garage will be 0.76 metres from the southern, interior property line.

The second variance is to reduce the minimum projection for roof eaves. No projection is permitted closer than 0.6 metres to a parcel line. This construction project would put the roof eaves on the southern corner of the garage at 0.0 metres from the southern parcel line.

## COMMENTS

## Engineering Department

No Engineering Department concerns.

## Fire Department

No Fire Department concerns.

## Building Department

No concerns with the variance. B.C. Building Code requirements will be addressed at the time of building permit application.

## Planning Department

The existing garage is currently non-conforming as it does not meet the required 3.0 metre setback; and, due to the siting of the existing house and garage on the property, there is very little room along the southern parcel line. If approved, the variance will make the garage in its current location conform to the Zoning Bylaw and once the garage is raised, the degree of non-conformity will not be increased.

Setbacks help ensure adequate separation between properties for privacy, aesthetics and fire safety. In this situation, the property bordering the southern property line is zoned A-2, approximately 3 acres in size and there is a buffer of trees \& shrubs between the houses; thus, this variance would pose little, if any, impact to the neighbouring property. In addition, the siting of the existing garage will change very little and is already non-conforming; therefore, should this variance be approved the current siting of the existing garage will align with zoning bylaw regulations. For these reasons, this is a reasonable variance request.


Prepared by: Denise Ackerman
Planner, Development Services




February 13, 2020

## To: Salmon Arm City Council

Re: 5881-35 ${ }^{\text {th }}$ St NE, Salmon Arm BC
Please give consideration to my request to make necessary alterations to the existing non -conforming garage on the SW corner of the garage at property line.

I am requesting to raise the garage roof to the same level as the existing house roof because the existing garage roofing membrane is leaking badly and needs replacing.

I would like to gain more space in the garage and join it to the south utility room wall, eliminating the post at the corner of the house, which holds up the house roof presently. By joining the garage to the house it would improve the looks substantially giving the appearance of a single family dwelling. The residents would no longer have to go outside to access their garage.

The garage is not structurally sound and by replacing the roof to join with the house roof I will provide engineered roof trusses as well as looking for direct egress from utility room window/door to the garage.

I would appreciate the Salmon Arm City Council to grant permission as shown on plan.

Best Regards

Peter Burman
Burman Construction
250-727-1636


Subject Property


View Looking Northwest
Subject Property is Behind Stand of Trees


Rear of Garage \& House




To: $\quad$ His Worship Mayor Harrison and Members of Council<br>Date: February 18, 2020<br>Subject: $\quad$ Zoning Bylaw Amendment Application No. 1168<br>Legal: Lot 1, Section 20, Township 20, Range 10, W6M, KDYD, Plan KAP84550<br>Civic: 235160 Street NW<br>Applicant: Jeremy Roodzant

## MOTION FOR CONSIDERATION

THAT: Bylaw No. 4374 be considered by Council, adoption of which would amend Zoning Bylaw No. 2303 by rezoning Lot 1, Section 20, Township 20, Range 10, W6M, KDYD, Plan KAP84550 from A-2 (Rural Holding) to A-3 (Smail Holding).

## STAFF RECOMMENDATION

THAT: The motion for consideration be adopted.

## BACKGROUND

The subject parcel is located at 235160 Street NW in the Gleneden area as shown on Appendix 1 and 2. The proposal is to rezone the subject parcel to Small Holding A-3 Zone to facilitate a 2 ha (5 ac) subdivision.

The existing parcel is approximately 8.08 ha in size, is designated Acreage Reserve in the Official Community Plan (OCP) as shown on Appendix 3, and is currently zoned Rural Holding A-2 as shown on Appendix 4.

The proposal meets the required minimum parcel size requirements of the Small Holding A-3 zone. Small Holding A-3 Zoning regulations are attached as Appendix 5. A sketch plan showing the subdivision and proposed building, which is subject to change, has been provided as Appendix 6 .

The surrounding properties are designated Acreage Reserve by the OCP and the area is generally comprised of a mixture of A-2 and A-3 zoned parcels, with a mix of agriculture and larger lot residential uses. The improved soil capability ranges from class 4-6. The property is vacant. Onsite water and sewer service will be required. The A-3 Zone would allow for agriculture, one single family dwelling and an accessory secondary suite. Any new construction would require a building permit and will be subject to meeting Zoning Bylaw and BC Building Code requirements.

The property is affected by three covenants. The first covenant is notification that the developer is responsible for the provision of both the required quantity and quality of water. The second covenant requires setbacks and minimum building elevations to protect buildings from flood hazard and to protect the watercourse (Palmer Creek as shown on Site Plan) in accordance with the Riparian Areas Regulation. The third covenant requires a geotechnical review prior to construction due to the steep sloping western portion of the lot. The property is designated Potentially Hazardous Development Permit Area - Steep Slopes and Environmentally Sensitive Development Permit Area - Riparian Areas in the OCP.

## OCP POLICY

The subject parcel is designated Acreage Reserve in the OCP. The proposed A-3 zone is consistent with the Acreage Reserve land use designation. The proposed subdivision is consistent with OCP Policy 7.3.29, which supports subdivision within the Acreage Reserve:
" 7.3.29 Subdivision to accommodate further rural small agricultural holdings may be supported within the Acreage Reserve area situated west of both the Salmon River and the Trans Canada Highway subject to compliance with the following criteria:
a. the site is well drained and free from flooding, unstable soils or other hazardous conditions;
b. soil conditions permit permanent on-site sewage disposal for each parcel as determined by the appropriate agency;
c. availability of adequate potable water supply on each parcel, approved by the appropriate agency;
d. minimum two (2) hectare parcel size, other than subdivisions or boundary adjustments contemplated under policy 7.3.6 and subject to appropriate zoning; and
e. the lands have an improved agricultural soils capability rating of class four (4), class five (5), class six (6) or class seven (7) as determined by the ALC, based on the Canada Land Inventory Agricultural Capability Classification System. The principle of protecting better quality agricultural soils from subdivision into small lots will guide decisions on mixed category applications and the ALC will continue to consider each subdivision application on its own merits to ascertain the potential impact of subdivision on existing and potential agricultural development."

## COMMENTS

## Engineering Department

No engineering concerns with rezoning. Subdivision is subject to the Rural Standard of the Subdivision and Development Servicing Bylaw No. 4163 upgrading the west half of 60 Street NW will be required.

## Building Department

No building department concerns. Will be required to meet BC Building Code.

## Fire Department

No Fire Department concerns.

## Planning Department

The development as proposed is consistent with the Acreage Reserve OCP designation. The proposed A-3 zoning is aligned with the existing mix of A-2 and A-3 properties in that area. The proposed 2 ha subdivision meets the A-3 minimum parcel area requirements.

## CONCLUSION

The proposed A-3 zoning is consistent with the OCP and is supported by staff. Directing subdivision to this area limits the impact on land with higher agricultural potential.


Prepared by: Scott Beeching, MCIP, RPP
Senior Planner


HNんEIIUIX I: LOCADION


Appendix 2: Orthophoto ${ }^{102}$


Appendix 3: OCP


Appendix 4: Zoning ${ }^{104}$


## Purpose

36.1 The A-3 Zone is intended to provide for the creation of two hectare parcels in areas specified in the Official Community Plan where further urbanization is not anticipated and where the Agricultural Land Commission (ALC has either excluded the area from the Agricultural Land Reserve or where the ALC has agreed to the A-3 Zoning).

## Regulations

36.2 On a parcel zoned A-3, no building or structure shall be constructed, located or altered and no plan of subdivision approved which contravenes the regulations set out in the A-3 Zone or those regulations contained elsewhere in this Bylaw.

## Permitted Uses

36.3 The following uses and no others are permitted in the A-3 Zone
. 1 agriculture;
. 2 bed and breakfast, limited to three let rooms;
. 3 boarders, limited to two;
.4 detached suite (development of a detached suite in the Agricultural Land Reserve is subject to the Agricultural Land Commission Act and Regulations);
.5 family childcare facility;
. 6 group childcare;
. 7 home occupation;
. 8 public use;
. 9 public utility;
. 10 secondary suite;
. 11 silviculture;
. 12 single family dwelling;
.13 accessory use, including the retail sale of agricultural products produced on the parcel.

## Maximum Number of Single Family Dwellings

36.4 The maximum number of single family dwellings shall be one (1) per parcel.
.1 A second dwelling may be permitted under Section 4.13 of the bylaw.
Maximum Number of Secondary Suites
36.5 One (1) secondary suite or one (1) detached suite is permitted per parcel.

Maximum Residential Building Area
36.6 The maximum combined building area for all dwelling units (single family dwelling, detached suite and farm help) shall be no greater than $500 \mathrm{~m}^{2}\left(5,382 \mathrm{ft}^{2}\right)$.

## SECTION 36 - A-3 - SMALL HOLDING ZONE - CONTINUED

## Maximum Height of Single Family Dwellings

36.7 The maximum height of the single family dwelling shall be 10.0 metres ( 32.8 feet).

## Maximum Height of Accessory Buildings

36.8 The maximum height of accessory buildings shall be 12.0 metres ( 39.4 feet).

## Minimum Parcel Size

36.9 The minimum parcel size shall be 2.0 hectares (4.9 acres).

## Minimum Parcel Width

36.10 The minimum parcel width shall be 50.0 metres ( 164.0 feet).

## Minimum Setback of Principal and Accessory Buildings Intended to Accommodate Non-Agricultural Uses

36.11 . 1 The minimum setback of principal and accessory buildings intended to accommodate non-agricultural uses from all parcel lines shall be 6.0 metres ( 19.7 feet).
.2 Refer to Section 4.9 for "Special Building Setbacks" which may apply.

## Minimum Setback of Buildings or Structures Intended to Accommodate Agricultural Uses

36.12 The minimum setback of buildings and structures intended to accommodate agricultural uses from the:
. $1 \quad$ Front parcel line shall be
30.0 metres ( 98.4 feet)
. 2 Rear parcel line shall be
15.0 metres ( 49.2 feet)
. 3 Interior side parcel line shall be
15.0 metres ( 49.2 feet)
. 4 Exterior side parcel line shall be
30.0 metres ( 98.4 feet)
.5 Any single family dwelling shall be
15.0 metres ( 49.2 feet)
. 6 Any watercourse or body of water shall be
30.0 metres ( 98.4 feet)
. 7 Refer to "Pound and Animal Control Bylaw" for special setbacks which may apply.

## Sale of Agricultural Products

36.13 The retail sale of agricultural products produced on the parcel is permitted provided the maximum floor area of the retail sale stand is 40.0 square metres ( 430.5 square feet).

## Parking

36.14 Parking shall be required as per Appendix I.
$\frac{\stackrel{5}{\sigma}}{0}$

CIVIC ADDRESS:
LEGAL DESCRIPTION:

CURRENT ZONING: CURRENT OCP:

PROPOSED ZONING:
PROPOSED OCP:
TOTAL AREA:

2351 60th St NW, Salmon Arm, BC, V1E 3B2
Parcel ID: 027-166-678 LOT 1 SECTION 20 TOWNSHIP 20 RANGE 10 WGM KDYD PLAN KAPB4550

A2 - RURAL HOLDING ACREAGE RESERVE

A3-SMALL HOLDING ACREAGE RESERVE
19.95 Acres ( $80,760 \mathrm{sq} \mathrm{m}$ )

## PROPOSED SUBDIVISION:

CREATE 5 ACRE PARCEL
$75 \mathrm{~m} \times 270 \mathrm{~m}$ WITH EXISTING WELL
PLAN TO SELL, NO BUILDINGS PROPOSED BY OWNER
EXISTING PROPERTY AFIER SUBDIVISION
14.95 ACRES

25m ROAD FRONTAGE
PROPOSED DRIVEWAY AND BUILDING AS SHOWN



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## CITY OF

SALMONARM

TO: His Worship Mayor Harrison and Members of Council<br>DATE: February 11, 2020<br>SUBJECT: Development Variance Permit Application No. VP-505 (Servicing)<br>Legal: Lot A, Section 25, Township 20, Range 10, W6M, KDYD, Plan 24783<br>Civic Address: 3410 Lakeshore Road NE<br>Owner: Brendan and Vanessa Micku<br>Applicant: David Sonmor, Franklin Engineering Ltd.

## MOTION FOR CONSIDERATION

THAT: Development Variance Permit No. VP-505 be issued to vary the City of Salmon Arm Subdivision and Development Servicing Bylaw No. 4163 as follows:

1. Section 4.4 Road Classification - waive the requirements to upgrade the east and west halves of Lakeshore Road NE from the Urban Collector Road (RD-3) fuli standard, providing sidewalk, curb and gutter, boulevard, fire hydrants, and light standards, to providing a 2 m of gravel surfaced pedestrian walkway along the east half, and a BC Hydro davit light;
2. Section 5.0 Water Systems - walve the requirement for extending the existing water main along Lakeshore Road from 62 m to 28 m ;
3. Section 6.0 Sanitary Sewer System - waive the requirement for extending the sanitary sewer line along Lakeshore Road from 174 m to 141 m ; and,
4. Section 7.0 Storm Water Management - waive the requirement for extending the storm sewer line along Lakeshore Road from 172 m of new pipe to overland drainage ditching.

## STAFF RECOMMENDATION

In reference to the Motion for Consideration:
Item 1 - recommend waiving the requirement to upgrade the west half of Lakeshore Road;
Item 2 - is not recommended for approval;
Item 3 - is not recommended for approval; and
Item 4 - is not recommended for approval.

## PROPOSAL

The subject property is located at 3410 Lakeshore Rd NE, as shown on Appendix 1 and 2, and is subject to preliminary subdivision approval to create one new parcel. The applicant is requesting variances to the Subdivision and Development Servicing (SDS) Bylaw No. 4163 as itemized in the Motion for Consideration. The site plan is attached as Appendix 3 and a letter of rationale and cost estimates from David Sonmor, P. Eng., dated January $21^{\text {st }}, 2020$, is attached as Appendix 4.

## BACKGROUND

The subject property is located along a 1.1 km stretch of Lakeshore Road where there is a gap of sanitary and storm sewers and fully serviced road frontages. This has made development of these lands to be a challenge since Raven subdivision was created in the 1970s / 80s. The site is closer to the southern end of this gap and nearest sanitary and storm mains utilities are located approximately 170 m away.

The property is designated Low Density in the City's Official Community Plan (OCP) and zoned R -1 Single Family Residential in the Zoning Bylaw. The property is legally hooked across Lakeshore Road with a combined area of $4,492 \mathrm{~m}^{2}(1.11 \mathrm{ac})$ total area and $67 \mathrm{~m}(220 \mathrm{ft}) \mathrm{m}$ of road frontage. The proposed subdivision would create a new parcel of $3,368 \mathrm{~m}^{2}(0.832 \mathrm{ac})$ leaving a remainder of $1,124 \mathrm{~m}^{2}(0.277 \mathrm{ac})$ and the existing single family dwelling.

Section 4.0 of the SDS Bylaw No. 4163 requires that all subdivisions provide works and services in accordance with the standards and specifications set out in Schedule B. In this case, that includes road upgrades, utility upgrades and utility extensions to the urban standard. Two drawings are attached, one showing the extent of the existing water, sanitary and storm sewer mains and what is required by the PLR (Appendix 7), and the other showing the servicing that is proposed by the variance (Appendix 8).

Section 5.4.3 of the Subdivision and Development Servicing Bylaw No. 4163 allows for an exemption from full works and services of the bylaw when the total parcel area divided by the minimum parcel size $=3$ or fewer parcels. The total parcel area, $4,492 \mathrm{~m}^{2}$, divided by minimum parcel size for subdivision in the R-1 zone, $450 \mathrm{~m}^{2}$, is 9.98 potential parcels. The gross area of the subject property and even the area of eastern portion only ( $3,772 \mathrm{~m}^{2}$ ) are far from qualifying for an infill exemption.

The Subdivision Preliminary Layout Review (PLR) requires upgrading to the Urban Collector Road Standard (RD-3) including sidewalk, curb and gutter, boulevard, fire hydrants, and light standards. The present level of service in this area, and fronting the subject property, are below this standard with no sidewalks or bicycle lanes.

The applicant is offering to provide a 2 m of gravel surfaced pedestrian walkway instead of concrete sidewalk. Street lighting, and underground hydro / telecommunication infrastructure is also a requirement of the standard. In the letter from the applicant it is noted that the provision of street lighting would be costly. The applicant has requested waiving the requirement to provide City specification street lighting and instead add a davit light to an existing BC Hydro poll.

The water main terminates 5 m south of the northern property line, the PLR requires extension of the water main 62 m across the subject property frontage to serve adjacent parcels. The applicant is requesting that Council waive the requirement for the full extension of the water main to the opposite property boundary (northern most extent) and instead terminate after 28 m at the middle of the subject property to serve both the existing and proposed parcels.

The sanitary sewer main terminates 105 m south of the southern property line, the PLR requires extension of the sanitary main 174 m across the subject property frontage to serve adjacent parcels. The applicant is requesting that Council waive the requirement for the full extension of the sanitary main to the opposite property boundary (northern most extent) and instead terminate after 141 m at the middle of the subject property to serve both the existing and proposed parcels.

The storm sewer main terminates 105 m south of the south property boundary, the PLR requires extending the storm sewer main 174 m to the north property boundary. The applicant is requesting to instead use onsite storm disposal and ditching to save the cost associated with the extension and existing ground conditions. The PLR allows for discharge to the municipal storm water system or onsite disposal, subject to an Integrated Stormwater Management Plan (ISMP). This however does not relieve the requirement to extend the storm sewer main to address road drainage.

## COMMENTS

## Engineering Department

The Engineering Department recommends that the requested variances be denied. However the Engineering Department would support the variance if amended to only waive road upgrades along on the west side of Lakeshore Road NE.

Engineering comments are attached as Appendix 9.

## CONCLUSION

The proposed subdivision does not meet the infill exemption criteria.
Lakeshore Road sees a lot of traffic, both motor vehicle and active transportation, and pedestrian safety is a concern. If just this section of the road was reconfigured to meet the Urban Collector Road standard it would be inconsistent with the rest of the road, as the subject property is within a 1.1 km gap where there is no sidewalk; however, incremental upgrades are required to improve pedestrian safety. Residential development has resulted in sidewalks being installed on Lakeshore Road and 20 Street NE which have improved pedestrian movement despite the inconsistency.

If the provision of water, sewer and storm sewer services is varied and the neighbouring properties are similarly developed for higher density residential the infrastructure burden would be pushed onto future developers and the City.

The estimated cost of servicing required by the PLR to be provided by the developer is $\$ 247,800$; this could be reduced to an estimated $\$ 85,720$ if all of the variance requests are approved.

Should Council approve any of the variances, in particular for storm sewer works, the undersigned defers to the City Engineer's comments and recommendations (Appendix 9) for direction/suggestions.


Prepared by: Scott Beeching, MCIP, RPP
Senior Planner


Director of Development Services

Appenaix 1: Location

$\sqrt[5]{5}$ Subject Parcel


Subject Parcel
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# Kevin Pearson, Approving Officer 

City of Salmon Arm
PO Box 40, $5002^{\text {nd }}$ Ave NE
Salmon Arm, BC V1E 4N2

January $21^{\text {st }}, 2020$

RE: Subdivision Variance Permit Application for 3410 Lakeshore Road N.E. - File: 19.14

Dear Mr. Pearson,
This letter supports a request for variances to the Subdivision and Development Servicing Bylaw No 4163 for the proposed subdivision at Lot A, Section 25, township 20, Range 10, W6M, KFYD Plan 24783, as submitted by David Sonmor, P.Eng. Thank you for your review of this letter, which describes the variances that the client has requested and reasons for this application.

The proposed subdivision lies on both the East and West sides of Lakeshore Road roughly 650 meters north of the intersection of Lakeshore road and $26^{\text {th }}$ Avenue NE. The site is at a local high point with drainage running both North and South away from the property along Lakeshore Road. The property owner wishes to subdivide his lot into 2 parcels. Current lot area is roughly $4,527.0 \mathrm{~m}^{2}$, subdivision would produce one $1,582.6 \mathrm{~m}^{2}$ parcel with an existing house on it, and one $2,944.4 \mathrm{~m}^{2}$ parcel (see attached drawing C-01).

These variances are intended to lift constraints on development that would provide unnecessary services and infrastructure and make the subdivision of the lot economically infeasible. It is in our opinion that these requested variances are reasonable and sensible given the location and existing condition of the site.

1. Subdivision Application Review Page 3 of 6, "Sanitary Sewer", (a)

Eliminate the requirement to extend an existing 200 mm Sanitary Sewer line along Lakeshore Road to the northern boundary of the property. Due to the fact that the subject property is located on a local high point (see attached drawing C-02), a city sanitary service line running along Lakeshore Road from the south would only have the capacity to service the subject property and potentially the northern neighboring property (property 3470). The property owner to the north of the subject property (property 3470) has raised objection to having city sanitary services installed
infront of his property. As an alternative, the existing sanitary line could be exten ded to approximately 33 meters north of the subject property's southern boundary, at the approximate proposed subdivided parcel line (see attached drawing C-01). This would allow both subdivided parcels to tie into the City sanitary main along Lakeshore Road while the northern neighboring property (property 3470 ) would still have access to city sanitary services to the east of the property along $20^{\text {th }}$ Street NE.
2. Subdivision Application Review Page 3 of 6 , "Drainage", (b)

Eliminate the requirement for extending the storm sewer along lakeshore road to the northern property boundary. The property in question sits on a local high point of Lakeshore road indicating that the only end user for the storm connection proposed by the City would be the current property owner. The existing house already has an onsite Storm system and the Client will provide an alternate Storm Water Management Plan making use of rock pits and overland drainage for the City to consider. This will likely include overland drainage improvements running along the East side of Lakeshore road extending South of the subject property (see attached drawings C-01 \& C-02). It should be noted that the high likelihood of encountering shallow bedrock on this project is a risk that is of particular concern given the small scale of the proposed subdivision and large difference in construction cost. The additional costs incurred from having to trench through bedrock are substantial enough to make a project financially infeasible. This is a risk that could be eliminated by way of properly channelized overland flow.
3. Subdivision Application Review Page 3 of 6, "Water System", (a)

Eliminate the requirement for extending the Existing water main along Lakeshore Road to the southern property boundary. The Lot to the south of the subject property currently ties into an existing water main running along $20^{\text {th }}$ street. For this reason, extending the existing water main along Lakeshore road to the southern property boundary is unnecessary. The client would like to extend the existing water main to the proposed new parcel line (see attached drawing C-01). This would provide adequate pipe length to install a new hydrant just north of the proposed new parcel line, as well as allowing for the proposed southern parcel to be serviced by the main running along Lakeshore Road.
4. Subdivision Application Review Page 2 of 6, "Roads/Access", (b)

Eliminate the requirement for upgrades to street lights, road cross section, sidewalk, and curb \& gutter along Lakeshore Road (see drawing C-03). The subject property is
located on a roughly 1.1 km rural section of Lakeshore Road. Existing sidewalk and curb \& gutter terminates roughly 300 m south of the subject property and roughly 800 m north of the subject Property (see attached figure C-04). Outside of the downtown core, Lakeshore Road is currently illuminated exclusively by BC Hydro pole mounted lights (see attached figure C-04). The proposed lot subdivision meets all requirements for a city infill exemption with the exception of parcel size, however, it is in Franklin Engineering's opinion that it meets the intent of the infill exemption due to the fact that it is a small 2 lot subdivision surrounded by comparably large rural lots and includes undevelopable portions of land West of Lakeshore. Due to the non contiguous nature of these potential upgrades (see drawing C-03), the relatively small scale of the proposed subdivision, and the uniform lighting and road cross sections both north and south of the subject property, the client would like to request that the above requirements for subdivision development be eliminated. It is Franklin Engineering's understanding that one of the city's primary concerns in the area is pedestrian safety. In order to address this concern, it is proposed that a 2 meter wide gravel surfaced pedestrian walkway be installed east of Lakeshores eastern ditch line. In order to provide additional lighting, it is proposed that an additional BC Hydro pole mounted street light be installed west of Lakeshore on an existing pole near the clients southern property line. Together, these proposed alternatives will provide both safe lighting, and safe separation from traffic for pedestrian use while giving consideration to the financial burden large-scale infrastructure upgrades can have on small scale subdivisions.

The reduction of new infrastructure requirements from those listed in the PLA, to those proposed in the DVP, will allow subdivision of the subject property to become economically feasible while both maintaining the rural nature of the surrounding properties, and providing appropriate access to city services for all properties affected.

We welcome your review of these proposed variance requests and look forward to addressing any questions or concerns you may have regarding them. We trust that we have presented a case that these are reasonable, sound variances to the applicable bylaws, which allow for an efficient use of this site.

Sincerely,


David Sonmor, P.Eng.
Franklin Engineering

## PLA \& DVP ESTIMATES <br> 3410 Lakeshore Road NE

PLA minus DVP
PREPARED BY:
FRANKLIN ENGINEERING LTD.

| PREPARED BY: |  |
| :---: | :---: |
| franklin engineering Ltd. |  |
| CALCULATED BY: | David Sonmor |
| REVIEWED BY: | Jayme Franklin |
| Date: Jan 06, 2019 |  |

Date: Jan 06, 2019

OCP Designatuion





TO: Kevin Pearson, Director of Development Services<br>DATE: 5 February 2020<br>PREPARED BY: Matt Gienger<br>OWNER: Micku, B., Lakeshore Road NE, Salmon Arm, BC V1E 3N4<br>APPLICANT: Franklin Engineering - D. Sonmor, PO Box 2590, 416A Street NE Salmon Arm, BC V1E 4R5<br>SUBJECT: VARIANCE PERMIT APPLICATION NO. VP- 505<br>LEGAL: Lot A, Section 25, Township 20, Range 10, W6M KDYD, Plan 24783<br>CIVIC: $\quad 3410$ Lakeshore Road NE

Further to the request for variance dated November 18, 2019 and subsequent revisions dated January 21 2020; the Engineering Department has reviewed the site and offers the following comments and recommendations relative to the requested variances:

The applicant is requesting a variance to Subdivision \& Servicing Bylaw 4163, Section 4.0 as follows:

1. Waive the requirement to extend sanitary sewer to northern boundary of property;
2. Waive the requirement to extend storm sewer to northern boundary of property;
3. Waive the requirement to extend water main to the southern boundary of property;
4. Waive the requirement to upgrade the frontages of the subject property.
5. Waive the requirement to extend sanitary sewer to northern boundary of property,

The Subdivision and Development 'Servicing Bylaw 4163 (SDSB) requires that developers upgrade their frontage to a specific service level and provide adequate servicing to the parcels and the to furthest extent of their parcels to allow for future upstream development.

A 200 mm diameter sanitary sewer on Lakeshore Road terminates approximately 105 m south of the southern boundary of the subject property. The applicant is proposing to extend the sanitary main to the southern boundary of the new northern parcel, which would provide servicing to the existing and proposed parcels, but not the upstream property.

The adjacent parcel to the north, 3470 Lakeshore Road NE, is not connected to City sanitary. A sanitary main exists on 20 Street NE to the parcel's eastern boundary, approximately 15 to 20 m higher than the parcel's frontage on Lakeshore Road NE. Staff's opinion is that the main on 20 Street NE will not adequately service 3470 Lakeshore Road NE.

The sanitary main should be required to be extended across the full frontage of the property to support future connection and/or development of adjacent property to the north. If this connection is not required now, a future developer would be required to pay for extended services without the possibility of a latecomer's agreement.

The applicant would have the option of applying a latecomer's agreement to 3341 Lakeshore Road, which benefits from the installation of sanitary sewer system within their frontage.

DEVELOPMENT VARIANGE PERMIT APPLICATION NO. VP-505
Page 2

## Recommendation:

The Engineering Department recommends that the requested variance to waive the requirement to extend the sanitary main be denied.
2. Waive the requirement to extend storm sewer to the northern boundary of the property.

A 375 mm diameter storm sewer on Lakeshore Road terminates approximately 105 m south of south property line. Extending this storm sewer across the frontage along Lakeshore Road to the northern boundary of the subject property is required by the SDSB to provide stormwater conveyance for the properties and road drainage.

The applicant has applied to waive the need for any storm sewer installation along Lakeshore Road. The applicant has indicated the existing and created parcels would utilize on site storm water disposal. Given the proximity of steep slopes on the west boundary of the property, the Engineering Department does not support on site storm water disposal in the absence of adequate geotechnical documents supporting ground disposal. Surface disposal to adequate ditching could be considered in the interim; however, catchbasins and curbing are required along frontage.

In the area between the subject parcel and the existing storm sewer to the south, ditching would prove adequate in the interim. Therefore, in an effort to reduce the developer's costs, the Engineering Department would be in favour of waiving the need for storm sewer main between the parcel's southern boundary and the existing storm sewer approximately 105 m south of the south property line.

If this variance is denied by council and a storm sewer main is required to be extended across the subject property's frontage, the applicant would have the option of applying a latecomer's agreement to the benefiting property, 3341 Lakeshore Road.

## Recommendation:

The Engineering Department recommends that the requested variance to waive the requirement to extend the storm sewer to the northern boundary of the property be denied. However, the Engineering Department would support the variance if amended to include new storm sewer main along the frontage of the subject parcel with appropriate ditching to the south of the southern boundary of the subject parcel.
3. Waive the requirement to extend water main to the southern boundary of the property.

An existing 150 mm diameter Zone 2 watermain on Lakeshore Road terminates approximately 5 m south of the north property line. Extending this watermain across the frontage of subject property is required by the Subdivision and Development Servicing Bylaw.

The property directly to the south of the subject property is currently serviced by the water main within 20 Street NE. Although extending the water main would not immediately benefit this property it would be beneficial for future development.

## DEVELOPMENT VARIANCE PERMIT APPLICATION NO. VP-505

Page 3
A major consideration for extending the water main in this location is to promote future water main looping. Looping helps reduce areas of stagnant water, reduces maintenance costs, reduces water velocity and increases reliability of service by feeding services from two locations rather than one.

## Recommendation:

The Engineering Department recommends that the requested variance to waive the requirement to extend the storm sewer to the southern boundary of the property be denied.

## 4. Waive the requirement to upgrade frontages of the subject property.

The Subdivision and Development Servicing Bylaw 4163 (SDSB) requires that developers upgrade their frontage onto all City roads to meet the current bylaw standards. This helps the City to move towards a uniform road standard and reduces the burden on the City to fund upgrades across the frontage of development properties.

Lakeshore Road is currently constructed to an Interim Rural Road standard. Upgrading to an Urban Collector Road standard is required on east and west sides of road, in accordance with Specification Drawing No. RD-3. Upgrading may include, but is not limited to, road widening and construction, bike lane, curb \& gutter, sidewalk, boulevard construction, street lighting, fire hydrants, street drainage and hydro and telecommunications.

Given the small undevelopable area of the subject parcel on the west side of Lakeshore Road NE, the Engineering Department finds it reasonable to waive the requirement of frontage upgrades on the west side of Lakeshore Road NE.

This area of Lakeshore Road sees a high level of vehicular, cyclist and pedestrian traffic, exacerbated by the lack of transit service and limited school bus service to the Raven area. Pedestrian safety has been raised as a concern regularly in this area. This proposed development would be the first within this area to upgrade to the standards specified in the SDSB; however, it is important that the requirements of frontage upgrades be enforced to increase pedestrian and cyclist safety, even for a short stretch of road.

## Recommendation:

The Engineering Department recommends that the requested variance to waive the requirement to upgrade frontages of the subject property be denied. However, the Engineering Department would support the variance if amended to waive improvements on the west side of Lakeshore Road NE only.


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