

TO: Director of Development Services
 DATE: 4 December 2024
 PREPARED BY: Mustafa Zakreet, Engineering Assistant
 SUBJECT: VARIANCE PERMIT APPLICATION FILE NO. VP- 609
 OWNER: City of Salmon Arm c/o Salmon Arm Folk Music Society
 APPLICANT: Bernd Hermanski
 LEGAL: Lot 1, Section 14, Township 20, Range 10, W6M, KDYD, Plan35473
 CIVIC: 541 – 3 Street SW

Further to the request for variance dated 16 October 2024 the Engineering Department has reviewed the site and offers the following comments and recommendations relative to the requested variance:

The applicant is requesting that Council waive the following requirements of the Subdivision and Development Servicing Bylaw No. 4293 (SDSB).

1. Install Street Lighting

Background:

The SDSB dictates the level of lighting that is required for all categories of road. However, the segment of 5 Avenue SW currently lacks streetlights, falling short of the mandated illumination standard (see Figure 1).

Given its proximity to high-density residential areas and Blackburn Park, a popular route for children, adequate lighting on 5 Avenue SW is essential for ensuring safety.

In contrast, 3 Street SW already meets the lighting requirements, necessitating no further action.

A cost estimate of \$33,031 has been provided for the installation of two davit street lights on 5 Avenue SW, as outlined in the variance application (Appendix A). Please note that this estimate is subject to approval by engineering staff, as it lacks a professional seal.



Figure 1- Existing Street Lights on 3rd Street SW

Recommendation:

In the interest of both traffic and pedestrian safety, the Engineering Department recommends that request to waive the requirement to Install Street Lighting be:

- Denied for 5 Avenue SW
- Supported for 3rd Street SW.

2. Install an offset Multi-Use Path (MUP) on 5 Avenue SW.

Background:

5 Avenue Street NE is an Urban Collector Road, requiring an offset MUP on one side and an offsite sidewalk on the other side to comply with current SDSB standards. One of the key objectives of the MUP is to get cyclists off motorized roads and to separate cyclists and pedestrians from motorists.

The Engineering Department has determined that the optimal location for the multi-use path is along the south side of 5 Avenue SW. This alignment offers numerous benefits, including existing property lines, road dedication, proximity to high-density residential areas, and the availability of city-owned land, all of which provide flexibility and simplicity for construction.

The existing sidewalk along the subject property frontage, although currently in good condition, does not comply with the city's current standards and road cross-section requirements, necessitating an upgrade.



A cost estimate of \$49,112 (Appendix B) has been prepared to cover the necessary works, including:

- Decommissioning of the existing sidewalk
- Earthwork modifications
- Construction of the new Multi-Use Path (MUP)

Recommendation:

The Engineering Department recommends that request to waive the requirement to install an offset Multi-Use Path be denied.

Mustafa Zakreet, EIT
Engineering Assistant

Jenn Wilson P.Eng.,
City Engineer

Appendix A

1.0	Div. 26	Electrical						
	26 56 01	Roadway Lighting						
1.01	1.9.1	Street Light Conduit RPVC 32ø, c/w trench excavation, bedding, warning tape, backfill, wiring, connections & permits	Lineal Metre	80	\$ 75.00	\$ 6,000.00	x 0.5 = 3000	
1.02	1.9.1	Street Light Conduit PVC DBII 75ø, c/w trench excavation, bedding, warning tape, backfill, wiring, connections & permits	Lineal Metre	10	\$ 95.00	\$ 950.00	x 0.5 = 425	
1.03	1.9.1	Poles & Fixtures - 9m Davit Street Light	Each	2	\$ 9,500.00	\$ 19,000.00	19000	
1.04	1.9.1	Poles & Fixtures - 5m Post Top Street Light	Each	1	\$ 6,500.00	\$ 6,500.00		
1.05	1.9.1	Poles & Fixtures - 5m Post Top Street Light c/w power base	Each	1	\$ 8,000.00	\$ 8,000.00		
1.06	1.9.1	Davit Concrete Pedestal	Each	2	\$ 2,000.00	\$ 4,000.00	4000	
1.07	1.9.1	Post Top Concrete Pedestal	Each	2	\$ 1,500.00	\$ 3,000.00		
Subtotal: Division 26 - Electrical						\$ 47,450.00	SUM = 26425 X 125% = \$33,031	

Appendix B

Summary of Cost Estimate			
1.0	Div. 26	Electrical	\$ 47,450.00
2.0	Div. 31	Earthwork	\$ 12,150.00
3.0	Div. 32	Roads and Site Improvements	\$ 22,140.00
4.0	Div. 33	Utilities	\$ 5,000.00
		Subtotal: Construction	\$ 86,740.00
5.0	Class C	Contingency (25%)	\$ 21,685.00
		Subtotal: Construction w/ Contingency	\$ 108,425.00

12150 +
 22140 +
 5000 =
 \$39,290 x
 125% =
\$49,112

Appendix C – Full Upgrade Cost Estimate

541 3rd Street SW Frontage Upgrades

June 2024

Class C Cost Estimate

Item No.	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount	
1.0	Div. 26	Electrical					
	26 56 01	Roadway Lighting					
1.01	1.9.1	Street Light Conduit RPVC 32ø, c/w trench excavation, bedding, warning tape, backfill, wiring, connections & permits	Lineal Metre	80	\$ 75.00	\$ 6,000.00	
1.02	1.9.1	Street Light Conduit PVC DBII 75ø, c/w trench excavation, bedding, warning tape, backfill, wiring, connections & permits	Lineal Metre	10	\$ 95.00	\$ 950.00	
1.03	1.9.1	Poles & Fixtures - 9m Davit Street Light	Each	2	\$ 9,500.00	\$ 19,000.00	
1.04	1.9.1	Poles & Fixtures - 5m Post Top Street Light	Each	1	\$ 6,500.00	\$ 6,500.00	
1.05	1.9.1	Poles & Fixtures - 5m Post Top Street Light c/w power base	Each	1	\$ 8,000.00	\$ 8,000.00	
1.06	1.9.1	Davit Concrete Pedestal	Each	2	\$ 2,000.00	\$ 4,000.00	
1.07	1.9.1	Post Top Concrete Pedestal	Each	2	\$ 1,500.00	\$ 3,000.00	
Subtotal: Division 26 - Electrical						\$ 47,450.00	
2.0	Div. 31	Earthwork					
	31 24 13	Roadway Excavation, Embankment and Compaction					
2.01	1.8.4	Remove Ex. Asphalt or Concrete Pavement, Sidewalks, Utility Strips, Driveways all thicknesses, c/w off-site disposal	Square Metre	90	\$ 12.50	\$ 1,125.00	
2.02	1.8.5	Common Excavation on-site re-use	Cubic Metre	45	\$ 20.00	\$ 900.00	
2.03	1.8.7S	Import Embankment Fill 150mm pit run gravel	Cubic Metre	135	\$ 75.00	\$ 10,125.00	
Subtotal: Division 31 - Earthwork						\$ 12,150.00	
3.0	Div. 32	Roads and Site Improvements					
	32 11 16.1	Granular Sub-Base					
3.01	1.4.2S	Granular Sub-Base variable thickness for roads, sidewalks, and driveways	Cubic Metre	60	\$ 95.00	\$ 5,700.00	
	32 11 23	Granular Base					
3.02	1.4.1S	Granular Base variable thickness for roads, sidewalks, and driveways	Cubic Metre	25	\$ 125.00	\$ 3,125.00	

541 3rd Street SW Frontage Upgrades

June 2024

Class C Cost Estimate

Item No.	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount
	32 12 16	Hot-Mix Asphalt Concrete Paving				
3.03	1.5.1S, 1.5.2	Asphalt Pavement - Upper Course # 2 (CoSA) 50mm thickness	Square Metre	145	\$ 40.00	\$ 5,800.00
	32 31 13	Chain Link Fences and Gates				
3.04	1.5.3	Remove & Reinststate Chain Link Fence	Lineal Metre	45	\$ 85.00	\$ 3,825.00
	32 91 21	Topsoil and Finish Grading				
3.05	1.4.1S	Imported Topsoil 150mm thickness	Square Metre	205	\$ 15.00	\$ 3,075.00
	32 92 19	Hydraulic Seeding				
3.06	1.8.1	Hydraulic Seeding	Square Metre	205	\$ 3.00	\$ 615.00
Subtotal: Division 32 - Roads and Site Improvements						\$ 22,140.00
4.0	Div. 33	Utilities				
		Other				
4.01		Relocate Existing Hydrant	Each	1	\$ 5,000.00	\$ 5,000.00
Subtotal: Division 33 - Utilities						\$ 5,000.00

541 3rd Street SW Frontage Upgrades

June 2024

Class C Cost Estimate

Item No.	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount
Summary of Cost Estimate						
1.0	Div. 26	Electrical				\$ 47,450.00
2.0	Div. 31	Earthwork				\$ 12,150.00
3.0	Div. 32	Roads and Site Improvements				\$ 22,140.00
4.0	Div. 33	Utilities				\$ 5,000.00
Subtotal: Construction						\$ 86,740.00
5.0	Class C	Contingency (25%)				\$ 21,685.00
Subtotal: Construction w/ Contingency						\$ 108,425.00
6.0		Engineering				
		Design (5%)				\$ 5,421.25
		Field Services (6%)				\$ 6,505.50
		Records (2%)				\$ 2,168.50
		Materials Testing (QA) (3%)				\$ 3,252.75
Subtotal: Engineering						\$ 17,348.00
Subtotal						\$ 125,773.00
GST (5%)						\$ 6,288.65
Total						\$ 132,061.65

Cost Estimate Notes:

- 1) Quantities may vary depending on field revisions and/or conditions encountered at the time of construction, thereby affecting the final cost.
- 2) Unit Prices are influenced by supply & demand for both contractors and materials at the time of construction, thereby affecting the final cost.
- 3) Unless noted otherwise, prices do not include BC Hydro, Telecommunications, FortisBC, Legal Survey (BCLS) and property/right-of-way acquisitions.
- 4) Unless noted otherwise, prices do not include Geotechnical, Environmental and Archaeological studies, reviews, and approvals.
- 5) Unit Prices are estimated in 2024 Canadian Dollars for similar works and exclude taxes.