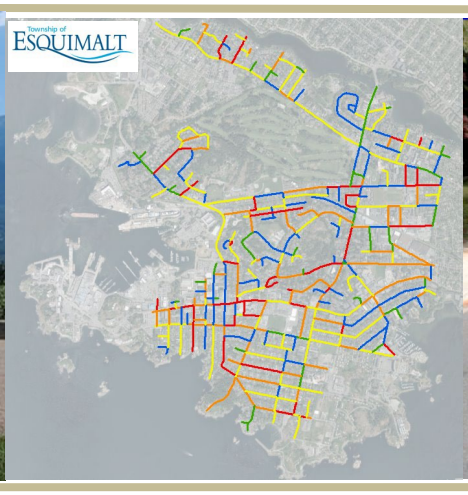
TETRA TECH

Pavement Condition Assessment and Pavement Management Plan Development



PRESENTED TO

Township of Esquimalt

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LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Township of Esquimalt and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Township of Esquimalt, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on the Use of this Document attached in Appendix A or Contractual Terms and Conditions executed by both parties.

1.0 INTRODUCTION

1.1 General

Tetra Tech Canada Inc. (Tetra Tech) was retained by the Township of Esquimalt (the Township) to conduct a comprehensive automated pavement condition assessment across the entire road network and to develop a Pavement Management Plan (PMP). The PMP is intended to guide the Township's annual roadworks program through lifecycle cost analysis, supported by a reliable pavement performance model.

This report outlines the methodology used for data collection and analysis, presents the current condition of the pavement network, and identifies the funding needed to maintain or enhance existing service levels.

All data and findings have been compiled into an ESRI-based Geographic Information System (GIS) project and are being delivered to the Township via a portable storage device for integration into its GIS platform.

1.2 Document Review

Tetra Tech conducted a review of the data/documents supplied by the Township, as described below:

- Township's GIS geodatabase (Curbshape) of road centerline network, including:
  - Street name and Classification.
  - Unique Section ID for each polygon of road segment.
  - Maintenance condition.
- Traffic Data – Including:
  - GIS geodatabase (TOE - 2024 Traffic count) and a weblink of Traffic count map, containing:
    - Location ID of the traffic count location.
    - Total traffic volume for each location.
  - Supplementary files: PDFs, AutoCAD maps, and Excel spreadsheets detailing 2024 traffic count locations.
- Historical Paving Projects – Covering the period from 2016 to 2024, as provided via email.
- Updated treatment unit costs and Township budget Information.

1.3 Project Definition

The Township maintains a roadway network comprising approximately 52.4 centreline-kilometers of paved roads. A detailed breakdown of the network by roadway classification is provided in Table 1. A short segment (0.3 kilometers) of GIS road lines was excluded from the lengths listed in Table 1, as it represents a DND (Department of National Defence) or private roads that falls outside the scope of this project.

Table 1: Road Network lengths based on Road Classification

Road Classification		GIS Centerline (km)	% Network
Major	MAJ	8.8	16.7%
Collector	COL	9.4	17.8%
Residential	RES	33.2	63%
Undefined	LAN	1.0	1.9%
Road Network		**52.4**	**100%**

2.0 PAVEMENT DATA COLLECTION

2.1 Network Definition and Plan for Data Collection

Tetra Tech considers accurately referenced data as one of the most crucial aspects of pavement data management. Location referencing is the method used to associate pavement distress, historical data, and road attribute data with the fundamental road inventory. Tetra Tech utilizes linear referencing for this project, employing a standardized methodology based on a measure attribute assigned to a polyline known as PolylineM. This methodology is applied to the pavement segments within a GIS. These polylines, referred to as "Routes," enable the accurate linkage of data defined by a linear distance from the origin of the line to specific locations along the polyline (refer to Figure 1).

Tetra Tech also created a comprehensive "Master List" containing all route details, including essential location descriptions, starting points, and lengths. The Master List was then used in field quality control as the base layer for the “TT Surveyor” application. TT Surveyor graphically displays the status and logs the completion of each segment during collection along with any relevant field notes during the data collection program.

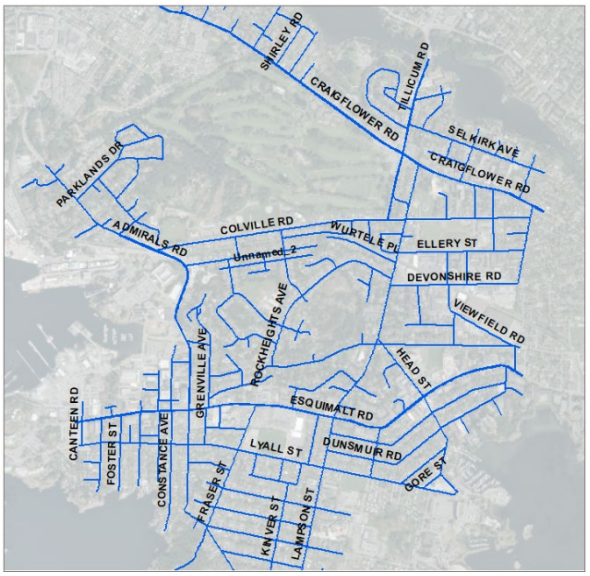


Figure 1: Example of Routes in GIS

2.2 Pavement Surface Condition Assessment

The Pavement condition assessment was conducted with the one of Tetra Tech's Pavement Surface Profiler (PSP-8000) vehicles. the PSP was employed to automatically capture data on pavement surface distress, the International Roughness Index (IRI), and digital images of the roadways, as well as three-dimensional Light Detection and Ranging (LiDAR) data.

Tetra Tech collected data on pavement condition for a total of 59.6 lane-km within the Township's paved road network at the end of June 2025, as outlined in Table 2. The survey was generally conducted in the outside lane of the northbound or eastbound lanes of each road segment. The pavement data collection covered the entire network with no missing routes. The survey included at least one lane in one direction on all roads. For divided and multi-lane roads primarily Major roads data was collected in both directions, with one lane assessed per direction.

Table 2: Extent of Pavement Data Collection by PSP

Road Class	GIS Centerline (km)	Survey Lane-km
Major	8.8	15.8
Collector	9.4	9.5
Residential	33.2	33.2
Laneway	1.0	1.0
Network	**52.4**	**59.6**

2.2.1 Pavement Surface Distress

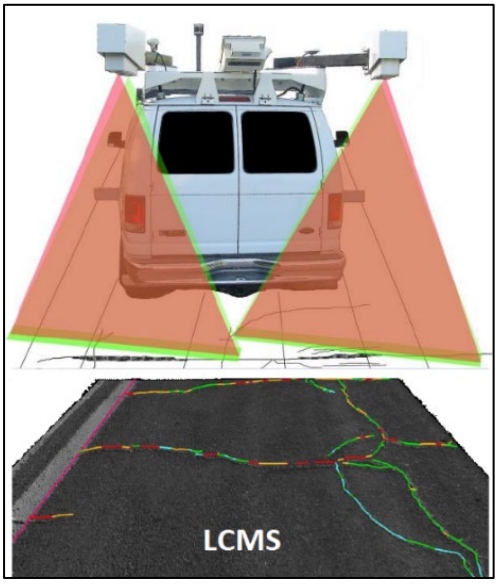
Tetra Tech utilized a 3D Laser Crack Measurement System (LCMS) for automated surface condition assessments. This LCMS generates detailed 3D elevation maps of the pavement surface, facilitating the automatic detection and classification of surface distresses. The system identifies and categorizes cracks based on variations in pavement surface elevation and differences in surface color. The elevation data is automatically processed to generate measurements of severity and extent for cracks and various other forms of roadway distress.

Distress data was collected on all paved roads following the ASTM D6433 methodology. This method involves rating individual distresses according to their severity and extent. Surface distresses were reported across the width of the surveyed lane, with data provided at intervals of up to 30 meters.

The recorded distresses for this project encompassed:

- Alligator Cracking (including longitudinal fatigue cracking).
- Longitudinal Cracking (excluding fatigue cracking).
- Transverse Cracking.
- Weathering.
- Raveling.
- Potholes.
- Rutting area.

While the LCMS doesn't directly detect or report patches, it does capture and report associated elements such as joints, cracks, and other distresses around or within patches.



Representation of the LCMS

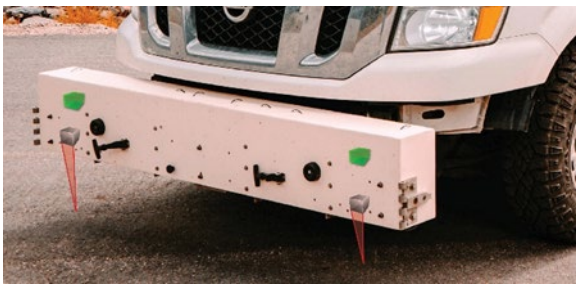
2.2.2 Front-Facing Right-of-Way (ROW) Imagery

Digital images were collected for all PSP surveys using an integrated Digital Imaging System. This system provides a forward looking, right-of-way (ROW) full roadway view. The imaging system provides a fully referenced record of the roadway corridor at the time of survey for the identification, inventory, and referencing of all infrastructure and appurtenances located within the driven ROW. Images are organized in folders for each roadway and delivered at a nominal spacing of 5 m. The direct linking of the ROW images into the project GIS was used as a data quality assurance tool. It provides users the ability to “virtually drive down the street” while sitting at their desk and was used in the validation of the condition data and analysis results (Figure 2).

Figure 2: Example of PSP 8000 Digital Image Log

2.2.3 Pavement Roughness (IRI) and Rut Depth

The PSP-8000 vehicle’s roughness measurement capabilities are provided by an inertial profiling system, which is an FHWA Class II profiler and is ASTM E950, AASHTO M328-10 and AASHTO PP70-10 compliant. The heart of this system is Tetra Tech’s Road Profiler with a high precision laser sensor array and two wheelpath accelerometers.



Roughness data was collected and processed to provide IRI using a high precision laser sensor array and two wheelpath accelerometers. Data collection and processing for this project was conducted in conformance with the “Best Practice Guidelines”, as described in the Transportation Association of Canada document “Standardization of IRI Data Collection and Reporting in Canada.”

The IRI data was provided for all segments where the data collection platform was able to record valid roughness data. The system requires survey speeds greater than 25 km/h for valid IRI measurements.

Transverse profile rut measurements were collected using the LCMS. Rut depths are calculated for the left and right wheelpath using, depending on lane width, 3,000 to 4,000 relative height measurements across the survey lane.

Both IRI and rut depth data were provided at intervals of up to 30 meters.

3.0 INCORPORATION OF ROAD INVENTORY AND TOWNSHIP 'S DATA

3.1 Roadway Inventory Data

One of the required inventory data elements is the size of the pavement segment (area or width), which is a parameter used to calculate the cost of pavement rehabilitation. Tetra Tech used the Township's GIS Curbshape polygons to calculate the average width for each polygon or road segment (an example is shown in Figure 3). It is worth noting that for laneways where polygons were not available, the average widths were estimated using orthophotos and collected road imagery.

Figure 3: Example of Inventory Polygons

A summary of pavement areas for each road classification is presented in Table 3. Based on this data, the Township manages approximately 468,000 m^2 of paved roads in total. Out of this, 59% of the road network area comprises minor roads (Residential/Laneway), while 41% consists of Major and Collector roads.

Table 3: Pavement Area of the Township Road Network

Road Classification	Average Width (m)	Calculated Area (m^2)
Major	11.8	103,000
Collector	9.3	88,000
Residential	8.1	273,000
Laneway	3.7	4,000
Road Network	**8.9**	**468,000**

Furthermore, Tetra Tech examined ROW images (from field assessments) and Orthophotos to establish the presence of curbs within each segment. The presence of curbs and gutters has an impact on the nature of improvements that can be implemented on a roadway.

Detailed road inventory data, including curb presence for each road segment, is provided in Appendix B. The majority of laneways and a small portion of residential roads do not have curbs, while the rest of the network is curbed.

3.2 Traffic Data

Traffic count data provided by the Township in web and GIS geodatabase formats was used to calculate approximate AADT. The data was collected at selected locations in 2024, with three days of counts per location. In total, data was gathered for 33 locations across the network. Tetra Tech extrapolated traffic volumes from these counts to adjacent road segments, as illustrated in Figure 4.

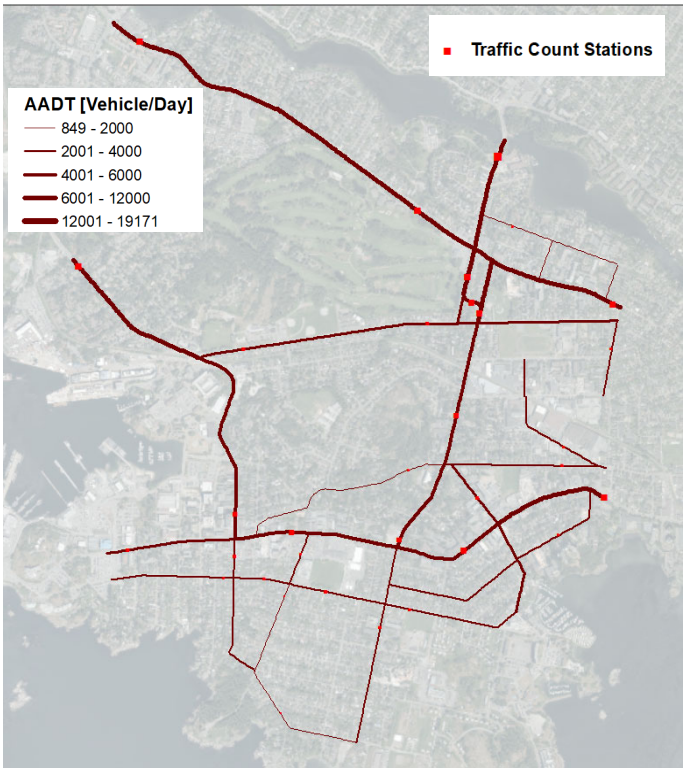


Figure 4: AADT for Township's Roads Based on Traffic Counts (2024)

In summary, all Major and Collector roads, along with a few Residential roads, were assigned an AADT value. For Residential roads and laneways where traffic data was unavailable, default values of 999 vehicles/day and 99 vehicles/day, respectively, were assumed for this study. A summary of AADT ranges by road classification is presented in Table 4, and detailed traffic data is provided in Appendix B.

Table 4: AADT Averages for Different Road Classifications

Road Classification	AADT (minimum)	AADT (Maximum)	AADT (Average)
Major	4,338	19,171	15,283
Collector	849	4,979	3,039
Residential (3 km)	1528	2,339	1,960

3.3 Historical Paving Overview

The Township supplied a list of paving projects completed between 2016 and 2024. After mapping these projects in GIS, those with very short lengths or partial paving (e.g., work limited to one lane or a small patching within a segment) were excluded from the analysis. The remaining projects, shown in Figure 5, were retained for consideration in the pavement management analysis.

Figure 5: Completed paving projects throughout the network (2016–2024)

4.0 PAVEMENT CONDITION INDICES

A pavement condition index is a value which expresses the overall condition of a pavement by considering various factors such as surface distresses, structural defects, and ride quality. The selection of an appropriate pavement condition index depends on the objectives of whatever system is used to manage a particular pavement network. The following indices were used for this project:

- Pavement Condition Index (PCI) according to ASTM D6433-20 to report the overall pavement condition at the network level.
- Pavement damaged surface area indices to be used for performance modelling, and treatment selection.
- Pavement surface ruts depth (RUT); excessive rutting can pose a safety concern in wet weather on higher traffic speed roadways.
- Pavement Roughness (IRI) to quantify riding comfort and used to report current pavement condition and historical condition comparison.

4.1 Pavement Condition Index (PCI)

The PCI is determined using the methodology outlined in the American Society for Testing and Materials standard ASTM D6433-20. This index, commonly used in North America, is useful for comparing the overall condition of one agency's network to that of others. It reflects the condition of the pavement surface based on the severity and extent of visible surface distresses. The PCI is a numerical rating that ranges from 100 to 0, with 100 representing the best possible condition and 0 representing the worst. Pavement conditions are categorized into five groups, from "Good" to "Very Poor," as detailed in Table 5.

Table 5: PCI Ranges for Condition Description

Condition Rating	PCI	Description
Good	86-100	New or excellent pavement with minimal cracking
Satisfactory	71-85	Generally good condition with frequent minor cracks
Fair	56-70	Moderate condition with occasional slight to moderate alligator cracking or rutting
Poor	41-55	Poor condition with frequent moderate alligator cracking and rutting
Very Poor	0-40	Very poor condition with extensive severe alligator cracking and rutting

4.2 Pavement Damaged Surface Area Indices

The individual pavement surface distresses are an important element of pavement management. They are of particular use in the treatment selection process. Tetra Tech uses the individual pavement surface distress indices as defined by the World Bank's Highway Development and Management Road Deterioration and Works Effects (HDM - RDWE) models.

The pavement cracking is classified into two categories: structural cracking and non-structural cracking. Each of these two categories of cracking are divided into a low and a high severity. The structural and age-related cracks are included in the fatigue crack index which is defined as the percent of the pavement surface area with load and age-related fatigue cracks including: alligator cracking and wheelpath longitudinal cracking. It is modelled as:

- AFCL (%): Narrow Fatigue Cracking Area;
- AFCW (%): Wide Fatigue Cracking Area; and
- AFCA (%): All Fatigue Cracking Area (AFCL+ AFCW).

The non-structural cracks are included in a thermal crack index which is defined as the percent of pavement surface area with cracks that are induced by low temperature as well as other non-structural cracking. The index includes transverse cracking and non-wheelpath longitudinal cracking such as joint cracking. It is defined as:

- TCL (%): Narrow Thermal and Other Cracking Area;
- TCW (%): Wide Thermal and Other Cracking Area; and
- TCA (%): All Thermal and Other Cracking Area (TCL + TCW).

The ACA Index is defined as total area of cracking including all fatigue cracks and thermal cracks:

- ACA (%) = AFCA + TCA.

4.3 Pavement Rutting

The pavement surface ruts can pose safety concerns where they are deep enough to affect the handling characteristics of a vehicle at higher speeds and can affect the ability of an agency to effectively clear snow and ice in the winter. The rut depth is measured in millimetres and the average of the inner and outer wheelpath rut depths have been used for the condition report and pavement performance modelling.

4.4 Pavement Roughness

Pavement roughness measures surface irregularities that impact ride quality and vehicle dynamics, expressed as the International Roughness Index (IRI). Calculated from a longitudinal profile, IRI is reported in millimeters per meter (mm/m) or equivalently meters per kilometer (m/km). Introduced in 1986, IRI is widely used to evaluate and manage road systems. It correlates with vehicle operating costs such as fuel consumption and tire wear. Even on lower-speed municipal networks, IRI provides a consistent measure of overall pavement health and helps compare conditions over time.

Drivers' perception of road roughness can vary based on their travel speed, with smoother roads (lower IRI values) preferred for higher speeds. Therefore, for this study, Tetra Tech assumed average travel speeds of 40 km/h for Major roads and 30 km/h for Collector and Residential roads. In this project, the only Collector road with the same speed limit as Major roads was Colville Road; however, for simplicity, it was considered to have a 30 km/h speed limit in the analysis. Table 6 illustrates the IRI ranges used to describe pavement conditions for different road classifications within the Township.

Table 6: IRI Ranges for Condition Description

Rating	IRI (mm/m)[1]		Colour Code
	Major	Collector/Residential	
Good	< 2.86	< 3.8	
Satisfactory	2.86 – 4.49	3.80 – 5.99	
Fair	4.49 – 5.69	6.00 -7.59	
Poor	5.69 – 8.08	7.60 – 10.80	
Very Poor	> 8.08	> 10.80	

[1]. The IRI condition range is based on (Yu, Chou, & Yau, 2006), normal travel speed of 40 km/h for Major and 30 km/h for Other Road

5.0 POPULATE DATABASE AND PAVEMENT CURRENT CONDITION

Pavement analysis segments are typically defined as roadway sections extending from one intersection to the next. These segments are used to evaluate current pavement conditions and support rehabilitation planning. Tetra Tech initially identified each block between intersections as a separate analysis segment, based on GIS route linework. Segments shorter than 30 meters were consolidated to achieve a more practical and consistent segment length.

Each segment was assigned a unique identifier (Analysis_ID). Where applicable, the Township polygon ID (Section_ID) was also incorporated as an attribute of the analysis segment.

Pavement condition data indices from 30-meter unit samples, roadside inventory records, and historical sources were compiled and summarized within these segments using dynamic data transfer methods.

5.1 2025 Paved Road Condition

As outlined in Section 4.0, the pavement condition status is reported using percentage of cracking, RUT, PCI, and IRI. The current status is based on the average values within each pavement management segment and weighted by centreline length. Table 7 provides a breakdown of the average pavement condition in 2025 for each roadway classification. Detailed tabular data of 2025 pavement condition indices are presented in Appendix B.

Table 7: Average 2025 Pavement Condition for Road Classifications

Road Class	Length (km)	Total Cracking (ACA %)	RUT (mm)	PCI	IRI (mm/m)
Major	8.8	14	4.5	63	3.79
Collector	9.3	21	3.8	56	5.51
Residential	33.2	19	3.7	63	5.73
Laneway	1.0	13	7.6	55	N/A*
Network	**52.4**	**18**	**3.9**	**61**	**5.33**
* Speed limit < 25 km/hr, IRI is not applicable					

As shown in Table 5, the average PCI for the entire road network in 2025 was 61. The average PCI values across different road classes ranged from 55 to 63, with Laneways and Collector roads at the lower end and Major roads and Residential roads at the higher end. However, the majority of roads falling within the *Fair* category.

In terms of surface smoothness, expressed as IRI, Major roads recorded the lowest IRI value at 3.79 mm/m, indicating smoother surfaces compared to other road classes. It should be noted, however, that speed limits for each road class should be considered when evaluating ride quality, rather than relying solely on IRI values.

Despite smoother surfaces, Major roads exhibited a higher average rut depth of 4.5 mm compared to Collector and Residential streets likely due to heavier traffic loading, excluding Laneways. Rutting is a significant factor contributing to the lower PCI observed on Major roads. Figure 6 presents an example segment along Craigflower Road where low-severity rutting is evident.

Figure 6: Segment on Craigflower Road Showing Low-Severity Rutting

Figure 7 illustrates the distribution of PCI values across the entire network and within each roadway classification. Road segments falling into the 'poor to very poor' condition category are termed 'backlog roads'. The graph highlights that the Township currently has 34% of its pavements classified as backlog with a PCI less than 55. A map displaying the 2025 PCI is presented in Appendix C.

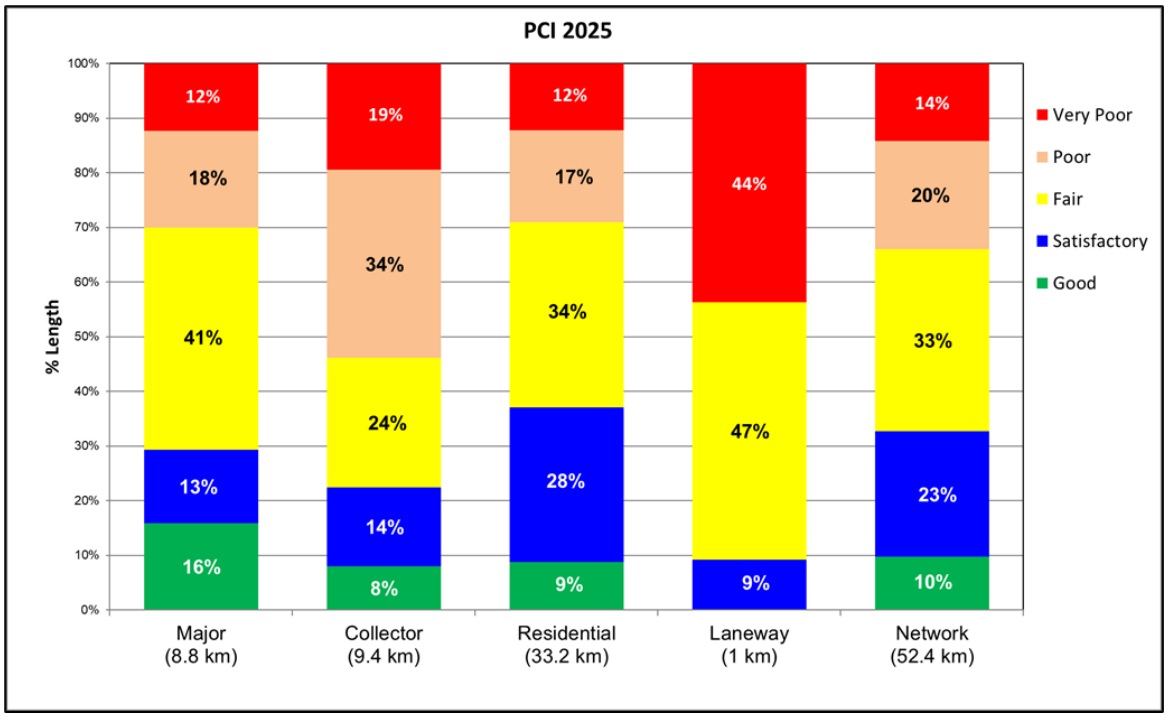


Figure 7: 2025 Pavement Condition Distribution in Terms of PCI

Figure 8 illustrates the distribution of IRI values across the entire road network and within each roadway classification. The figure shows that approximately 13% of the overall network was classified as being in Poor or Very Poor condition based on IRI in 2025.

It is important to note that the Township has implemented low travel speed limits—40 km/h for Major roads and 30 km/h for Collector and Residential roads. These lower speed limits influence the perception of ride quality, making higher IRI values more acceptable under such conditions.

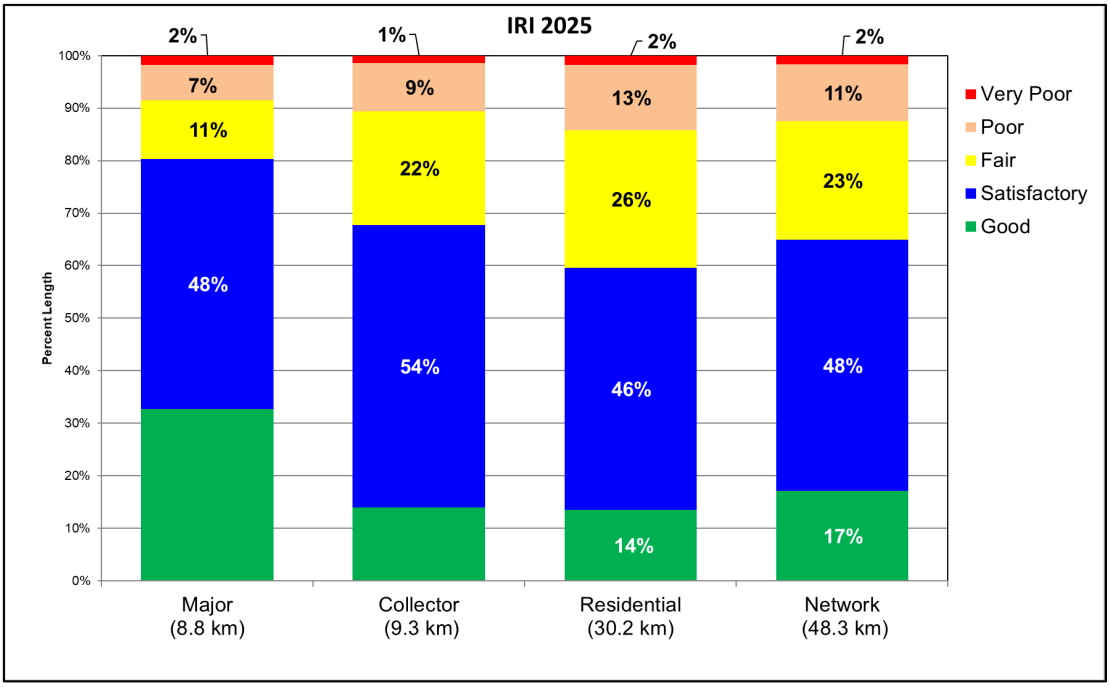


Figure 8: 2025 Pavement Condition Distribution in Terms of IRI

A map displaying the 2025 IRI is included in Appendix C.

6.0 ANALYSIS METHODOLOGY

6.1 Pavement Performance Modelling

Tetra Tech has applied the Highway Development and Management (HDM) modeling framework, developed by the World Bank, to forecast the progression of pavement distresses such as cracking, rutting, and surface roughness. Figure 9 outlines the modeling process, from input parameters to predicted pavement conditions. This model has been refined over more than two decades by a global team of experts.

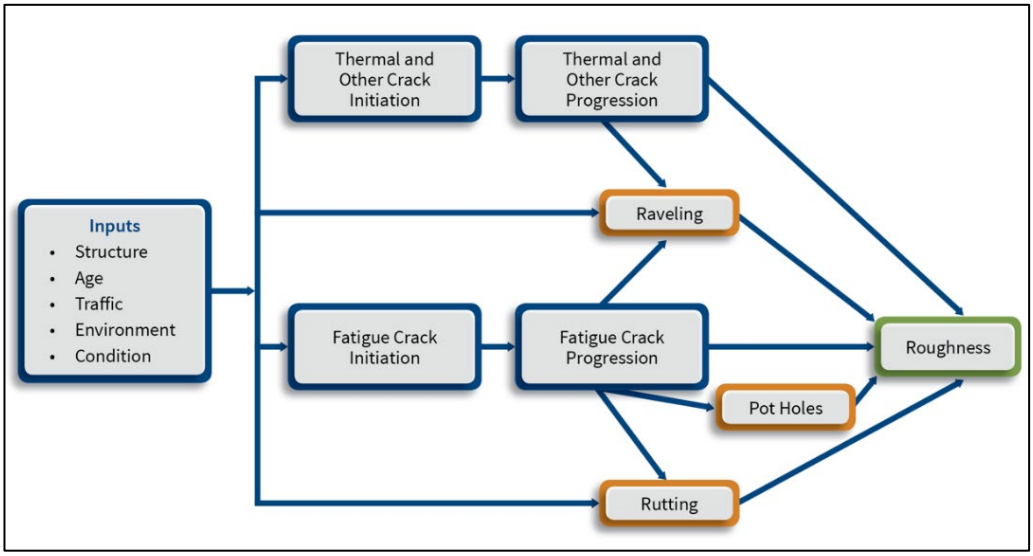


Figure 9: Predicting Pavement Performance

In addition, Tetra Tech analyzed three Pavement Condition Index (PCI) deterioration models for Major, Collector, and Residential roads. These models are based on Tetra Tech's experience with municipalities across the South Coast of British Columbia, and a review of local construction practices. The models estimate that Major roads will reach a PCI of 55 the rehabilitation threshold in approximately 20 years, while Collector and Residential roads are projected to reach the same threshold in 27 and 31 years, respectively.

6.2 Rehabilitation and Maintenance Treatments

Maintenance and rehabilitation treatments used were established based on the Township inputs. The treatments and their unit costs are shown in Table 8. Typically, crack sealing and patching are considered maintenance treatments, and the other treatments are considered resurfacing/major rehabilitation treatments.

Table 8: Treatments and Unit Costs used in the Analysis

Treatment	Treatment	Class	Unit Cost		
			Minimum	Maximum	Average
Maintenance	Crack Sealing	-	$4.17/L-m	$4.17/L-m	$4.17/L-m
	Shallow Patching	-	$30/m²	$30/m²	$30/m²
Resurfacing	50mm Overlay	Residential	$77	$79	$78
		Laneway	$78	$81	$79
	Mill and pave (50mm)	Major	$110	$122	$115
		Collector	$93	$106	$100
		Residential	$83	$105	$89
Major Rehabilitation	Full Mill and pave (80mm)	Major	$140	$140	$140
		Collector	$120	$120	$120
	Reconstruction	N/A			

A brief description for each treatment is provided in below:

- **Crack Sealing:** This involves applying a hot sealant to a crack to reduce water infiltration. It is a cost-effective pavement preservation treatment that can slow deterioration and extend pavement life by a few years.
- **Shallow Patching:** This includes repairing potholes or milling the localized cracked area. Patching is a crucial part of any pavement maintenance program. Pricing includes supply, placement, and compaction.
- **Overlay (nominal 50 mm):** This treatment involves applying a new layer of asphalt to a deteriorating surface to add strength and support heavier loads. It is used where no curb is present. This treatment is typically used in areas without curbs, such as laneways and select Residential road segments in this study. Costs vary depending on the extent of existing wide cracking that may require additional deep patching.
- **Mill and Overlay (nominal 50 mm)**: This process involves removing approximately 50 mm of the pavement surface with a large milling machine, followed by overlaying with 50 mm of hot mix asphalt. This is the most common pavement treatment. Costs vary based on road classification (as per Township input) and the extent of wide cracking requiring ancillary patching.
- **Full Depth Mill and Pave:** When a roadway is in very poor condition, a major rehabilitation such as Full Depth Mill and Pave is necessary. For this study, cost estimates are based on milling and overlaying 80 mm of asphalt, with adjustments made according to road classification as provided by the Township.
- **Full Reconstruction:** This comprehensive treatment involves curb-to-curb reconstruction, typically coordinated with underground utility upgrades or sidewalk renewals. It includes rebuilding the base and repaving. In this study, full reconstruction was not considered due to unavailable timing for utility replacements and other related factors.

6.2.1 Treatment Triggers

The feasibility of applying a treatment on a given analysis segment is usually limited by physical or other constraints. For example, overlays cannot be directly applied to segments with curb and gutter. Similarly, a treatment should never be applied in the absence of any surface distress, and an overlay should not be considered if the pavement is too severely distressed. A set of “triggers” were developed so that only feasible strategies are explored. The triggers (shown in Table 9) limit the number of strategies to those that can feasibly be applied.

Table 9: Maintenance and Rehabilitation Triggers

Treatment	Trigger Criteria
Crack Sealing	PCI< 85 And Low Severity Crack > 3%
Patching	PCI< 85 And Wide Cracking > 3%
Overlay (50 mm)	PCI < 55 And (PCI > 25 Major/Collector; PCI > 0 Residential/Laneway)
Mill and Fill (50 mm)	And IRI > 4.5 mm/m OR AFCW >8% And (Overlay (50 mm): If No Curb Exist; Mill and Fill (50 mm) If Curb Exist)
Full-Depth Mill & Inlay	Only Major/Collector Roads And PCI ≤ 25 OR AFCW> 15
Reconstruction	Coordinated with Utility Upgrade Timing

6.2.2 Treatment Resets

With the selection and application of any given rehabilitation treatment, the condition of a road will improve. For example, with the treatment of a 50 mm overlay, ruts would be filled, cracking would be overlaid, roughness would decrease, and strength would increase. Therefore, to predict performance over time and account for and compare possible interventions, the performance models must adjust the measured and forecasted distress data to reflect the application of the treatment. These changes to the value of the analysis variables as a result of the application of a treatment are called resets. Some heavy rehabilitation treatments, such as reconstruction, might reset virtually all the analysis variables.

6.3 Generate Feasible Rehabilitation Strategies and Optimization

The objective of pavement management is to provide and preserve the network of pavements as economically as possible (lowest life-cycle cost). Tetra Tech used Deighton's Total Infrastructure Management System (dTIMS), which is programmed by Tetra Tech engineers to perform Life-Cycle Cost Analyses (LCCA).

The dTIMS software uses the decision trees to create multiple feasible alternative strategies for each pavement segment. A strategy is defined as a collection of successive treatments applied consecutively over a defined life-cycle (usually 20 years). The process results in a database of up to hundreds of feasible strategies for each pavement segment in the network. Each strategy has one predicted performance for each of the present status reporting condition indices. Each strategy also has a predicted remaining service life in each year of the analysis period, its own set of life-cycle costs (by treatment application year), and its own set of measured benefits as defined by the agency (Figure 10).

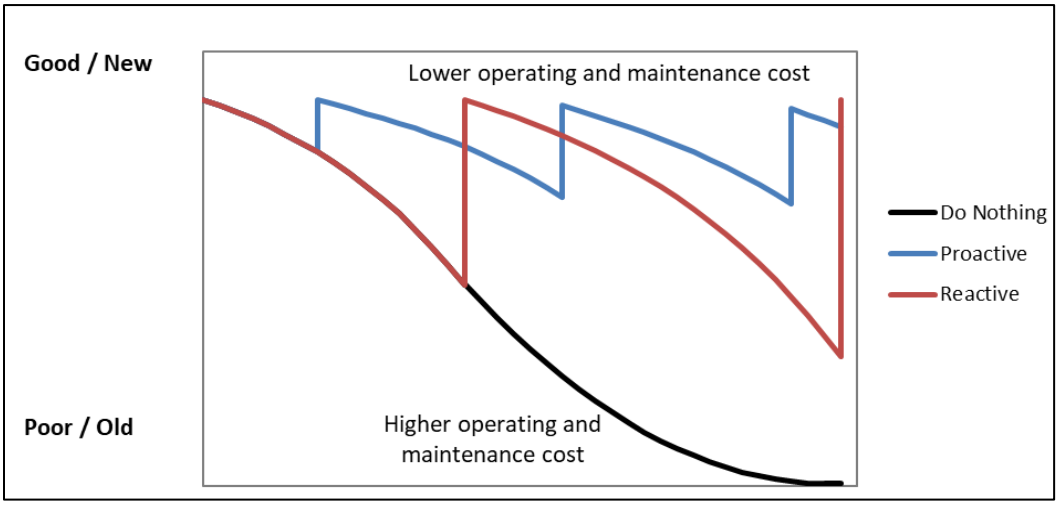


Figure 10: Example of Feasible Strategies for Each Pavement Segment

Applying an agency defined real discount rate (4%) provides a present value cost for each strategy and a present value measure of the total value of the benefits of each strategy.

Using this array of feasible strategies and given a trial budget for each roadway class or the whole network, Tetra Tech's optimization routine can select strategies from the database that meet the client specified optimization criteria (typically maximize cost-benefit).

6.3.1 Method to Measure Benefit of Each Strategy

One method to derive the benefit is to multiply the area under the pavement performance curve and the length of the pavement segment. The area under the curve was calculated by summing the present value of the difference between the condition index (such as PCI) resulting from a strategy and the condition index for the do-nothing strategy (base case strategy) for each year in the analysis period. A strategy is a collection of treatments over time that addresses the deficiency of the road segment. Figure 11 shows an example of calculating the benefit for a strategy with one overlay, early in the 20-year analysis period.

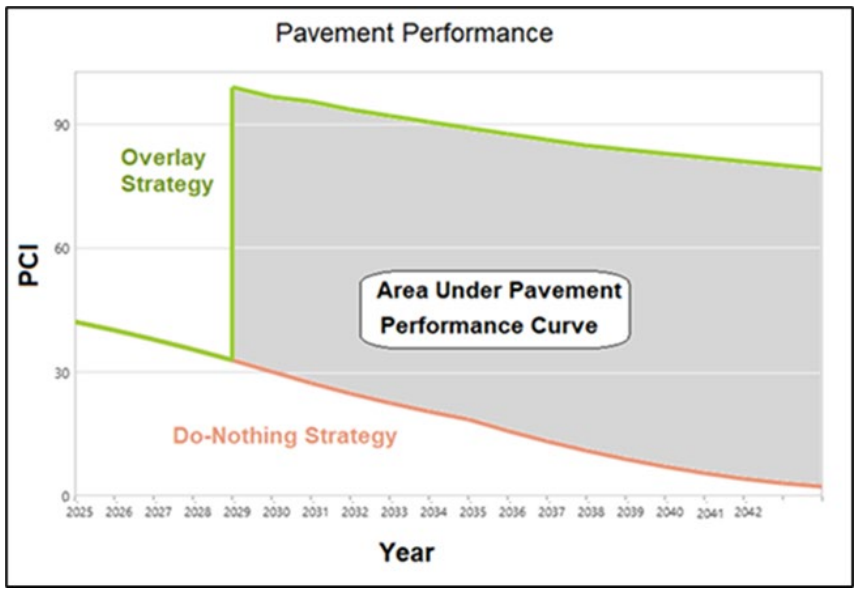


Figure 11: Example of calculating the benefit for an Overlay Strategy

At this stage, all road segments with similar distress levels are treated equally, regardless of classification. For instance, a major road and a residential road with the same condition would rank similarly. However, major roads typically carry more traffic and should be prioritized, especially when funding is limited. To account for this, a traffic factor based on recent AADT (Annual Average Daily Traffic) is incorporated. n summary, the benefit of a strategy is defined as:

$$\boldsymbol{Benefit} = \textbf{Present Value of Area under Pavement Performace Curve} \times \boldsymbol{Traffic\ Factor}$$

Table 10 presents the estimated traffic factors for various road classifications based on AADT ranges.

Table 10: Estimated Traffic Factor for Each Road Classification

Road Class	AADT Range	AADT (Average)	Average Traffic Factor
Major	4,338 – 19,171	15,283	3.3
Collector	849 – 4,979	3,039	1.7
Residential (3 km)- with Traffic data	1,528 – 2,339	1,960	1.4
Residential –no Traffic data	999 (Default)		1
Laneway	99 (Default)		0.3

6.4 Budget Scenarios

To support the Township's decision-making for pavement rehabilitation, several budget scenarios have been modeled over a 20-year horizon. These scenarios are summarized in Table 11. The Township's current capital budget for paving and large patching is understood to be $200,000/year.

Table 11: Budget Scenarios used in the 2025 Analysis

Budget Scenario	Annual Capital Budget for Pavement Rehabilitation
1 (current funding)	$200,000
2	$650,000
3	$1,500,000
4	$1,700,000
5	Unconstrained Budget

All budget scenarios are stated in real (base-year) dollars, meaning no inflation factor has been applied. By projecting future costs and benefits in constant dollars and then discounting them with a real discount rate, we obtain present-value figures directly in today's money. This approach removes the uncertainty of forecasting long-term inflation and the need to inflate—and subsequently strip out—anticipated price changes when comparing alternatives.

It is noted that routine maintenance (crack seal and patching) costs are part of a separate operations budget and therefore do not use the available capital budgets.

7.0 ANALYSIS RESULTS

7.1 Unconstrained Budget Analysis

An unconstrained budget, also known as a needs-based budget, represents the funding needed in a theoretical scenario where each road segment receives rehabilitation in the first year it meets the trigger for treatment. While not intended as a practical scenario, it helps estimate the maximum potential workload.

Figure 12 summarizes the rehabilitation costs based on the unconstrained budget scenario. Under this theoretical scenario, the Township would require around $11.9 million in the first year for rehabilitation of the paved road network, including $6.6 million for Major/Collector roads and $5.3 million for Residential/Laneway roads.

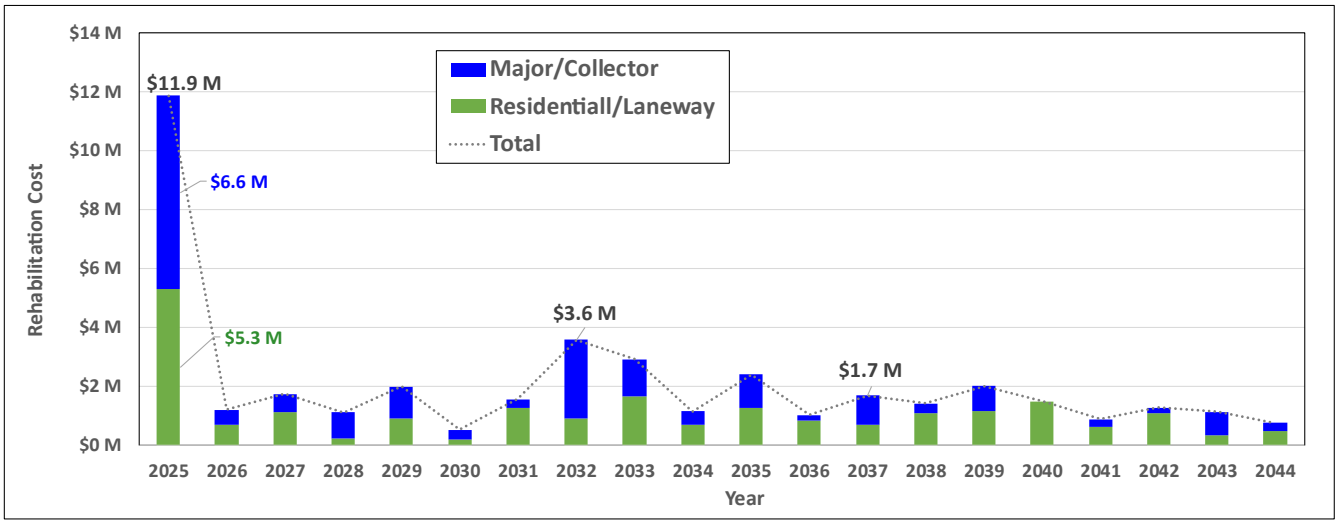


Figure 12: Rehabilitation Needs based on Unconstrained Budget Scenario

In total, the Township would require $41.9 million (or $2.1 million per year) for pavement rehabilitation over a 20-year period to address all the triggered needs at the earliest possible time. In other words, the following capital budgets on average are required for each road classification to remove all segments in the backlog in the next 20 years:

- Major/Collector: $1.1 million/year
- Residential/Laneway: $1.0 million/year

7.2 Constrained Budget Analysis

A road is said to be in backlog when there is not enough money to construct the most cost-effective rehabilitation. In other words, the road segments in poor to very poor condition are defined as “backlog roads”. In order to evaluate the consequence of various budget scenarios, the backlog cost is used. The backlog cost would need to be applied in a single year to eliminate the backlog. If the backlog cost is growing over time, the network is getting worse (i.e., more expensive to repair).

Figure 13 demonstrates how various annual budget scenarios influence the backlog cost. Maintaining the current backlog level of $11.9 million over the long term would require an annual pavement rehabilitation budget of $1.7 million. In contrast, continuing with the current budget of $200,000 per year could result in the backlog cost escalating to $43 million by 2044.

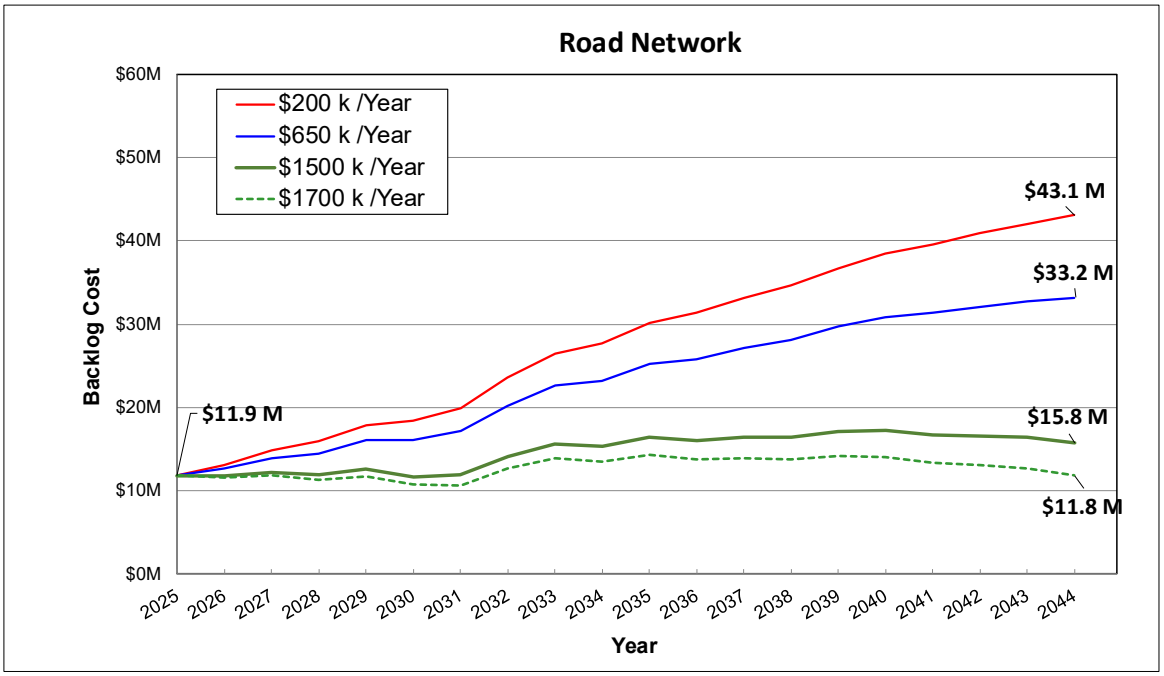


Figure 13: Future Backlog Projection based on Various Rehabilitation Budget Scenarios

Additionally, Figure 14 shows the predicted average PCI (Pavement Condition Index) of the road network over a 10-year period under each budget scenario. With the current funding level, the average PCI is expected to decline steadily. However, increasing the budget to $1.5 million per year would stabilize the network condition, while a budget of $1.7 million per year would lead to gradual improvement over time.

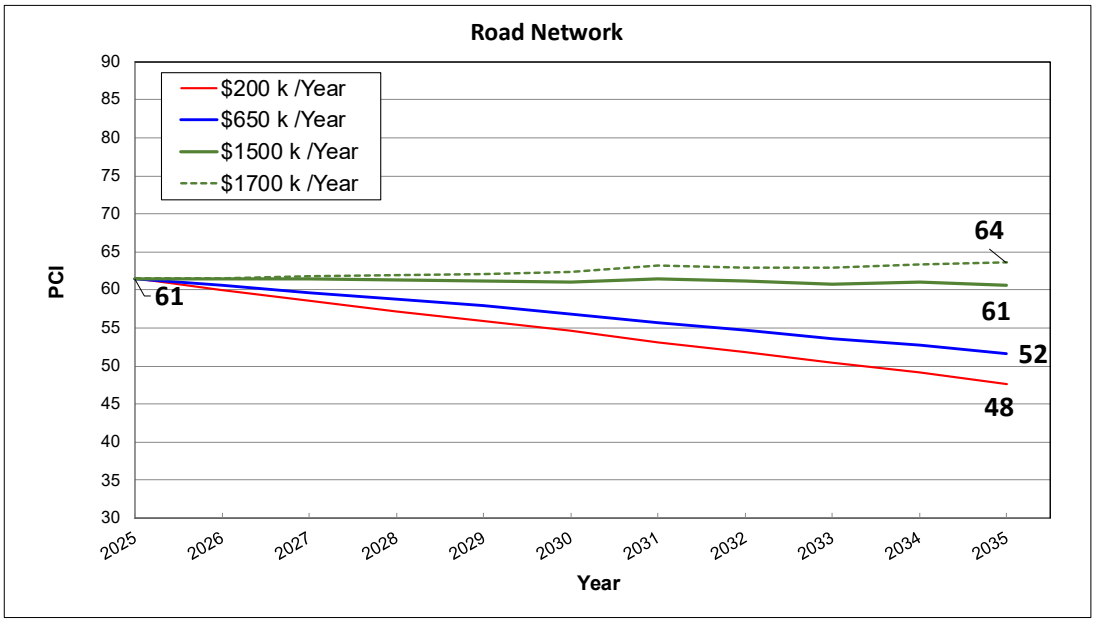


Figure 14: Predicted PCI for Different Budget Scenarios

7.3 Multi-Year Rehabilitation Program

Following discussions with the Township, a budget scenario of $650,000 per year was selected to guide the development of a long-term pavement rehabilitation plan. A detailed map and spreadsheet outlining the proposed 10-year paving program is provided in Appendix C.

This program includes only the rehabilitation treatments identified through the analysis and does not account for routine maintenance activities such as crack sealing or patching, which are funded separately through the operations budget.

8.0 CONCLUSIONS AND RECOMMENDATIONS

A life-cycle cost analysis was performed for each paved road segment to forecast the overall condition of the network under various budget scenarios. The objective was to determine the long-term funding required to maintain the pavement network and address existing backlog costs, ultimately guiding the development of a rehabilitation program.

Under the needs-based scenario (i.e., an unconstrained budget), an annual investment of $2.1 million would be required over a 20-year period to eliminate the backlog. This includes approximately $1.1 million/year for Major and Collector roads, and $1.0 million/year for Residential and Laneway roads.

Several constrained budget scenarios were also evaluated, including annual capital allocations of $200,000 (the Township's current budget), $650,000, $1.5 million, and $1.7 million. The analysis indicates that a minimum annual funding of $1.5 million is needed to maintain current pavement conditions over the next 10 years, while $1.7 million/year would be required to address backlog costs over a 20-year horizon. It is important to note that these figures are presented in current dollars and do not account for annual inflation.

The pavement rehabilitation plan has been formulated at the network-level. During implementation, it is recommended to finalize project-level assessments and designs. The Township should also contemplate revisiting the plan with fresh condition data every three to four years for Major/Collector roads and five to six years for Residential roads. This approach offers the opportunity to recalibrate deterioration models and incorporate new or rehabilitated pavements into the plan. This timeframe aligns with practices followed by other municipalities in western Canada.

9.0 CLOSURE

We trust this report meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

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PERMIT TO PRACTICE
TETRA TECH CANADA INC.
PERMIT NUMBER: 1001972

REFERENCE

Paterson, W. (1987). *Road Deterioration and Maintenance Effects.* Washington, D.C, USA: World Bank Publications.

Yu, J., Chou, E., & Yau, J.-T. (2006). Development of Speed-Related Ride Quality Thresholds Using International Roughness Index. *Transportation Research Record, No. 1974*, 47-53.

APPENDIX A

TETRA TECH'S LIMITATIONS ON THE USE OF THIS DOCUMENT

LIMITATIONS ON USE OF THIS DOCUMENT

DESIGN REPORT

1.1 USE OF DOCUMENT AND OWNERSHIP

This document pertains to a specific site, a specific development, and a specific scope of work. The document may include plans, drawings, profiles and other supporting documents that collectively constitute the document (the "Professional Document").

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Where TETRA TECH submits electronic file and/or hard copy versions of the Professional Document or any drawings or other project-related documents and deliverables (collectively termed TETRA TECH's "Instruments of Professional Service"), only the signed and/or sealed versions shall be considered final. The original signed and/or sealed electronic file and/or hard copy version archived by TETRA TECH shall be deemed to be the original. TETRA TECH will archive a protected digital copy of the original signed and/or sealed version for a period of 10 years.

Both electronic file and/or hard copy versions of TETRA TECH's Instruments of Professional Service shall not, under any circumstances, be altered by any party except TETRA TECH. TETRA TECH's Instruments of Professional Service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

1.3 STANDARD OF CARE

Services performed by TETRA TECH for the Professional Document have been conducted in accordance with the Contract, in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Professional judgment has been applied in developing the conclusions and/or recommendations provided in this Professional Document. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of the Professional Document.

If any error or omission is detected by the Client or an Authorized Party, the error or omission must be immediately brought to the attention of TETRA TECH.

1.4 DISCLOSURE OF INFORMATION BY CLIENT

The Client acknowledges that it has fully cooperated with TETRA TECH with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client further acknowledges that in order for TETRA TECH to properly provide the services contracted for in the Contract, TETRA TECH has relied upon the Client with respect to both the full disclosure and accuracy of any such information.

1.5 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of this Professional Document, TETRA TECH may have relied on information provided by third parties other than the Client.

While TETRA TECH endeavours to verify the accuracy of such information, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information even where inaccurate or unreliable information impacts any recommendations, design or other deliverables and causes the Client or an Authorized Party loss or damage.

1.6 GENERAL LIMITATIONS OF DOCUMENT

This Professional Document is based solely on the conditions presented and the data available to TETRA TECH at the time the data were collected in the field or gathered from available databases.

The Client, and any Authorized Party, acknowledges that the Professional Document is based on limited data and that the conclusions, opinions, and recommendations contained in the Professional Document are the result of the application of professional judgment to such limited data.

The Professional Document is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site conditions present, or variation in assumed conditions which might form the basis of design or recommendations as outlined in this report, at or on the development proposed as of the date of the Professional Document requires a supplementary exploration, investigation, and assessment.

TETRA TECH is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the Client.

1.7 ENVIRONMENTAL AND REGULATORY ISSUES

Unless so stipulated in the Design Report, TETRA TECH was not retained to explore, address or consider, and has not explored, addressed or considered any environmental or regulatory issues associated with the project specific design.

1.8 CALCULATIONS AND DESIGNS

TETRA TECH may have undertaken design calculations and prepared project specific designs in accordance with terms of reference that were previously set out in consultation with, and agreement of, TETRA TECH's client. These designs have been prepared to a standard that is consistent with current industry practice. Notwithstanding, if any error or omission is detected by TETRA TECH's Client or any party that is authorized to use the Design Report, the error or omission should be immediately drawn to the attention of TETRA TECH.

1.9 GEOTECHNICAL CONDITIONS

A Geotechnical Report is commonly the basis upon which the specific project design has been completed. It is incumbent upon TETRA TECH's Client, and any other authorized party, to be knowledgeable of the level of risk that has been incorporated into the project design, in consideration of the level of the geotechnical information that was reasonably acquired to facilitate completion of the design.

If a Geotechnical Report was prepared for the project by TETRA TECH, it may be included in the Design Report as appropriate. The Geotechnical Report contains Limitations that should be read in conjunction with these Limitations for the Design Report.

1.10 APPLICABLE CODES, STANDARDS, GUIDELINES & BEST PRACTICE

This report has been prepared based on the applicable codes, standards, guidelines or best practice as identified in the report. Some mandated codes, standards and guidelines (such as ASTM, AASHTO Bridge Design/Construction Codes, Canadian Highway Bridge Design Code, National/Provincial Building Codes) are routinely updated and corrections made. TETRA TECH cannot predict nor be held liable for any such future changes, amendments, errors or omissions in these documents that may have a bearing on the assessment, design or analyses included in this report.

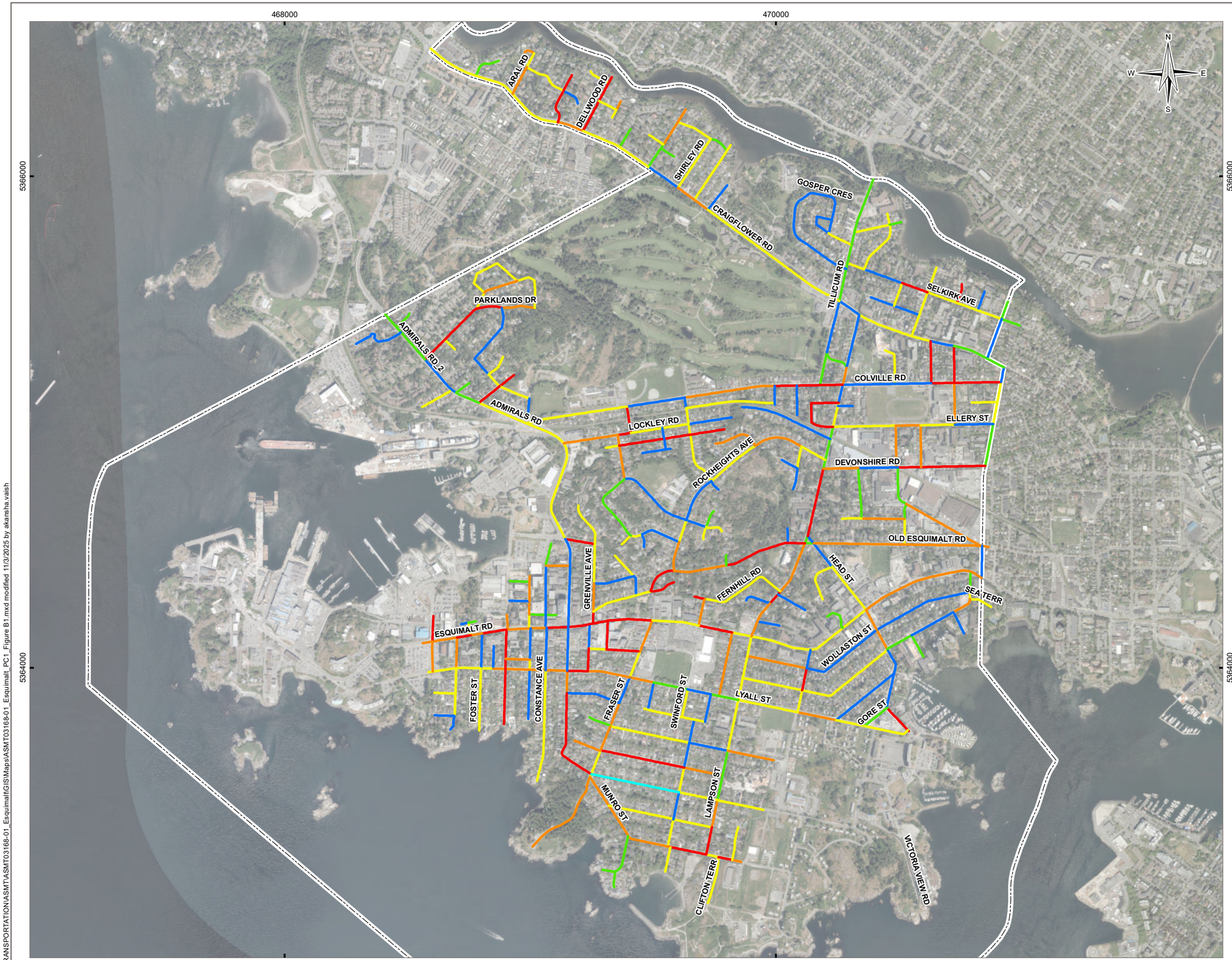
APPENDIX B

2025 PAVEMENT CONDITION

Figure B1 – 2025 Pavement Condition Index (PCI)

Figure B2 – 2025 Pavement Roughness (IRI)

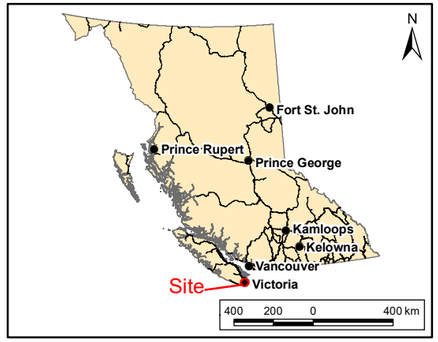
2025 Pavement Condition Indices Spreadsheet



LEGEND

PCI

- Very Poor (<40)
- Poor (41 - 55)
- Fair (56 - 70)
- Satisfactory (71 - 85)
- Good (86 - 100)
- Linear Route
- Township of Esquimalt Boundary



NOTES
Base data source:
Township of Esquimalt road centreline data retrieved from Open Data Portal.
Imagery provided by ESRI Basemaps via Maxar, 2022.

STATUS
ISSUED FOR USE

TOWNSHIP OF ESQUIMALT PAVEMENT CONDITION ASSESSMENT

2025 Pavement Condition Index (PCI)

PROJECTION UTM Zone 10 CSRS		**DATUM** NAD83		**CLIENT** Township of Esquimalt
Scale: 1:15,000 0.25 0.125 0 0.25 Kilometres				TETRA TECH
FILE NO. ASMT03168-01_Esquimalt_PC1_Figure B1.mxd				
OFFICE Tt-VANC	**DWN** AV	**CKD** NN	**APVD** KR	**REV** 0
DATE December 11, 2025	**PROJECT NO.** TRN.ASMT03168-01			**Figure B1**

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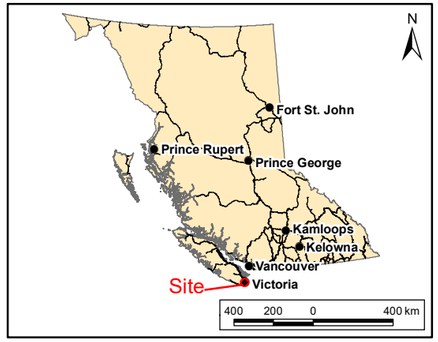
LEGEND

IRI (mm/m) - Major Roads

- Good (<2.86)
- Satisfactory (2.86 - 4.49)
- Fair (4.49 - 5.69)
- Poor (5.69 - 8.08)
- Very Poor (>8.08)

IRI (mm/m) - Collector & Residential Roads

- Good (<3.80)
- Satisfactory (3.80 - 5.99)
- Fair (5.99 - 7.59)
- Poor (7.59 - 10.80)
- Very Poor (>10.80)
- Linear Route
- Township of Esquimalt Boundary



NOTES

Base data source:
Township of Esquimalt road centreline data retrieved from Open Data Portal.
Imagery provided by ESRI Basemaps via Maxar, 2022.

STATUS
ISSUED FOR USE

TOWNSHIP OF ESQUIMALT PAVEMENT CONDITION ASSESSMENT

2025 International Roughness Index (IRI)

PROJECTION UTM Zone 10 CSRS		**DATUM** NAD83			**CLIENT** Township of Esquimalt
Scale: 1:15,000 0.25 0.125 0 0.25 Kilometres					TETRA TECH
FILE NO. ASMT03168-01_Esquimalt_IRI_Figure B2.mxd					
OFFICE Tt-VANC	**DWN** AV	**CKD** NN	**APVD** KR	**REV** 0	**Figure B2**
DATE December 11, 2025	**PROJECT NO.** TRN.ASMT03168-01				

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Analysis_ID	Township_SectionID	RoadName	From	To	From_Description	To_Description	Length (m)	Width (m)	Class	Curb	AADT (veh/day)	AFCA (%)	ACA (%)	PCI	RUT (mm)	IRI (m/mm)
Ana-001-0010	ADMR0004	ADMIRALS RD	0	250	ADMIRALS RD_1 / ESQUIMALT RD	ASTLE ST	250	9.8	MAJOR	B	8589	1.7	9.1	81	3.3	3.91
Ana-001-0020	ADMR0005	ADMIRALS RD	250	363	ASTLE ST	WOODWAY RD	113	13	MAJOR	B	8589	2.9	12.3	70	3.6	3.87
Ana-001-0030	ADMR0006	ADMIRALS RD	363	780	WOODWAY RD	LOCKLEY RD	417	14	MAJOR	B	8589	3.3	11.7	64	4.4	2.56
Ana-001-0040	ADMR0007	ADMIRALS RD	780	953	LOCKLEY RD	COLVILLE RD	173	14.2	MAJOR	B	8589	1.2	4.7	67	6.5	4.45
Ana-001-0050	ADMR0008	ADMIRALS RD	953	1164	COLVILLE RD	ADMIRALS RD_2 / COLES ST	211	13.5	MAJOR	B	13885	1.6	6.9	67	5.4	3.23
Ana-002-0010	ADMR0001	ADMIRALS RD_1	0	250	BEWDLEY AVE	JUNO ST	250	8.5	COLLECTOR	B	3903	2.9	27	37	4.1	6.23
Ana-002-0020	ADMR0002	ADMIRALS RD_1	250	342	JUNO ST	LYALL ST	92	7.7	COLLECTOR	B	3903	0.8	15.7	54	3.4	5.21
Ana-002-0030	ADMR0003	ADMIRALS RD_1	342	519	LYALL ST	ADMIRALS RD / ESQUIMALT RD	177	10.6	COLLECTOR	B	3903	2.4	12.7	70	2.7	3.04
Ana-003-0010	ADMR0014	ADMIRALS RD_2	0	95	Northwest End	LUSCOMBE PL	95	12	MAJOR	B	13885	0	1.5	96	3.1	3.87
Ana-003-0020	ADMR0012	ADMIRALS RD_2	95	243	LUSCOMBE PL	PARKLANDS DR	148	12.1	MAJOR	B	13885	0	0	92	3.9	3.17
Ana-003-0030	ADMR0011	ADMIRALS RD_2	243	430	PARKLANDS DR	ISBISTER ST	187	12	MAJOR	B	13885	1.4	3.8	82	3.9	2.71
Ana-003-0040	ADMR0009	ADMIRALS RD_2	430	531	ISBISTER ST	ADMIRALS RD / COLES ST	101	12.1	MAJOR	B	13885	0.3	1.3	95	3.6	2.6
Ana-004-0010	AGNS0001	AGNES ST	0	97	INSKIP RD	SELKIRK AVE	97	7.3	RESIDENTIAL	B	999	3.5	27.2	55	3.3	6.22
Ana-005-0010	ALDS0001	ALDEBURY RD	0	104	OLD ESQUIMALT RD	SHEARWATER ST	104	7.5	RESIDENTIAL	B	999	5.9	20.6	64	2.7	3.26
Ana-005-0020	ALDS0002	ALDEBURY RD	104	166	SHEARWATER ST	FAIRVIEW RD / VIEWFIELD RD	62	7.5	RESIDENTIAL	B	999	0.3	5.8	89	2.3	3.75
Ana-006-0010	ALER0001	ALEXANDER RD	0	299	KINGSMILL RD	KINGSMILL RD	299	7.1	RESIDENTIAL	B	999	5.9	23.1	69	2.8	4.16
Ana-007-0010	ANDA0001	ANDERSON AVE	0	104	West End	DOMINION RD	104	8.5	RESIDENTIAL	B	999	3	17.7	59	4.2	
Ana-008-0010	ARAR0001	ARAL RD	0	123	CRAIGFLOWER RD	TREEBANK RD W	123	8.1	RESIDENTIAL	B	999	9.7	48.2	47	3.6	5.84
Ana-008-0020	ARAR0002	ARAL RD	123	187	TREEBANK RD W	PHILION PL	64	9.4	RESIDENTIAL	B	999	7.2	37.4	55	3.6	7.2
Ana-009-0010	ARCS0001	ARCADIA ST	0	92	CRAIGFLOWER RD	INSKIP RD	92	7.1	RESIDENTIAL	B	1528	0.9	17.5	67	2.9	5.77
Ana-009-0020	ARCS0002	ARCADIA ST	92	190	INSKIP RD	SELKIRK AVE	98	7.1	RESIDENTIAL	B	1528	2.6	21	58	2.9	4.86
Ana-009-0030	ARCS0003	ARCADIA ST	190	296	SELKIRK AVE	North End	106	8.6	RESIDENTIAL	B	999	1.4	9.9	70	2.7	4.5
Ana-010-0010	ARMS0001	ARM ST	0	172	CRAIGFLOWER RD	SELKIRK AVE	172	8.5	RESIDENTIAL	B	1528	0.6	6.2	73	2.7	3.95
Ana-010-0020	ARMS0002	ARM ST	172	247	SELKIRK AVE	North End	75	8.4	RESIDENTIAL	B	999	0	4	92	2.2	2.5
Ana-011-0010	ASTS0001	ASTLE ST	0	98	CONSTANCE AVE	ADMIRALS RD	98	7.7	RESIDENTIAL	B	999	3.1	18.5	47	5.3	
Ana-012-0010	BEAS0001	BEATTY ST	0	80	West End	GRAFTON ST	80	7.4	RESIDENTIAL	B	999	0.3	6	77	2.7	5.77
Ana-013-0010	BEWA0001	BEWDLEY AVE	0	83	ADMIRALS RD_1	SAXE PL	83	8.5	COLLECTOR	B	3903	4.3	45.4	18	6.8	11.17
Ana-013-0020	BEWA0001	BEWDLEY AVE	83	146	SAXE PL	FRASER ST	63	8.5	COLLECTOR	B	3903	7.2	47	23	5.5	10.15
Ana-013-0030	BEWA0002	BEWDLEY AVE	146	511	FRASER ST	KINVER ST	365	8.4	RESIDENTIAL	B	999	3.9	29.2	41	4.5	8.88
Ana-013-0040	BEWA0003	BEWDLEY AVE	511	671	KINVER ST	LAMPSON ST	160	7.5	RESIDENTIAL	B	999	3.8	23.3	59	3.5	6.26
Ana-013-0050	BEWA0004	BEWDLEY AVE	671	862	LAMPSON ST	East End	191	8.3	RESIDENTIAL	B	999	2.5	22.6	62	2.8	4.78
Ana-014-0010	BRYC0001	BRYDEN CRT	0	178	South End	HEAD ST	178	8.8	RESIDENTIAL	B	999	0.6	7.2	62	5.2	
Ana-015-0010	CAIR0001	CAIRN RD	0	60	OLD ESQUIMALT RD	North End	60	7.5	RESIDENTIAL	B	999	1	8.2	79	3.3	
Ana-016-0010	CANR0001	CANTEEN RD	0	122	LYALL ST	ESQUIMALT RD	122	8.7	RESIDENTIAL	B	999	6.7	31.7	41	4.3	3.43
Ana-016-0020	CANR0002	CANTEEN RD	122	226	ESQUIMALT RD	North End	104	13.2	RESIDENTIAL	B	999	7.1	38.6	17	11.4	11.03
Ana-017-0010	CARA0001	CARLISLE AVE	0	73	COMERFORD ST	PARK PL	73	7.5	RESIDENTIAL	B	999	1.7	16.1	57	3.6	9.82
Ana-017-0020	CARA0002	CARLISLE AVE	73	209	PARK PL	FRASER ST	136	8	RESIDENTIAL	B	999	2.8	40.7	28	5.2	12.56
Ana-018-0010	CART0001	CARLTON TERR	0	110	Northwest End	ESQUIMALT RD	110	9.7	RESIDENTIAL	B	999	0.6	3.6	88	3.2	
Ana-019-0010	CARR0001	CAROLINE RD	0	77	ADMIRALS RD_2	Northeast End	77	7.8	RESIDENTIAL	B	999	0	1.4	98	2.4	3.19
Ana-020-0010	CARS0001	CARRIE ST	0	170	ELLERY ST	COLVILLE RD	170	7.7	RESIDENTIAL	B	999	2	28.4	43	4	6.29
Ana-020-0020	CARS0002	CARRIE ST	170	320	COLVILLE RD	CRAIGFLOWER RD	150	7.7	RESIDENTIAL	B	999	0.9	28.2	38	6.4	
Ana-021-0010	CAVS0001	CAVE ST	0	170	DEVONSHIRE RD	ELLERY ST	170	7.9	RESIDENTIAL	B	999	4.4	30.2	41	4.2	9.11
Ana-022-0010	CLIT0001	CLIFTON TERR	0	193	South End	MUNRO ST	193	5.3	RESIDENTIAL	N	999	0.4	5	68	4.7	8.47
Ana-023-0010	COLS0001	COLES ST	0	108	ADMIRALS RD / ADMIRALS RD_2	KINDERSLEY ST	108	8	RESIDENTIAL	B	999	7	37.5	35	6.4	6.16
Ana-023-0020	COLS0002	COLES ST	108	182	KINDERSLEY ST	Northeast End	74	7.4	RESIDENTIAL	B	999	6.7	37.7	28	7.4	7.68
Ana-024-0010	COLR0001	COLVILLE RD	0	414	ADMIRALS RD	INTERVALE AVE	414	10.6	COLLECTOR	B	4258	0.7	12.7	67	3.1	4.21
Ana-024-0020	COLR0002	COLVILLE RD	414	652	INTERVALE AVE	HUTCHINSON AVE	238	10.7	COLLECTOR	B	4258	0.5	10	72	3.3	4.41

Analysis_ID	Township_SectionID	RoadName	From	To	From_Description	To_Description	Length (m)	Width (m)	Class	Curb	AADT (veh/day)	AFCA (%)	ACA (%)	PCI	RUT (mm)	IRI (m/mm)
Ana-024-0030	COLR0003	COLVILLE RD	652	1021	HUTCHINSON AVE	MACLEOD AVE	369	10.7	COLLECTOR	B	4258	5	21.1	53	4.2	4.92
Ana-024-0040	COLR0004	COLVILLE RD	1021	1112	MACLEOD AVE	CONDOR AVE	91	10.7	COLLECTOR	B	4979	7.5	38.6	31	6.1	7.38
Ana-024-0050	COLR0005	COLVILLE RD	1112	1206	CONDOR AVE	TILLICUM RD	94	10.7	COLLECTOR	B	4979	8.4	41.5	22	6.2	6.18
Ana-024-0060	COLR0006	COLVILLE RD	1206	1299	TILLICUM RD	LAMPSON ST	93	8.6	COLLECTOR	B	4979	3.2	27.1	39	6.3	7.58
Ana-024-0070	COLR0007	COLVILLE RD	1299	1512	LAMPSON ST	FLEMING ST	213	11	COLLECTOR	B	4979	2.5	14.3	75	2.6	5.68
Ana-024-0080	COLR0008	COLVILLE RD	1512	1659	FLEMING ST	PHOENIX ST	147	10.9	COLLECTOR	B	4979	1.8	11.3	78	2.3	3.58
Ana-024-0090	COLR0009	COLVILLE RD	1659	1753	PHOENIX ST	CARRIE ST	94	8.4	COLLECTOR	B	4979	4.7	41.3	26	6.6	6.48
Ana-024-0100	COLR0010	COLVILLE RD	1753	1943	CARRIE ST	DOMINION RD	190	8.1	COLLECTOR	B	4979	4	37.8	27	4.6	6.39
Ana-025-0010	COMS0001	COMERFORD ST	0	92	LYALL ST	CARLISLE AVE	92	7.7	RESIDENTIAL	B	999	2.8	37.8	31	7.4	10.15
Ana-025-0020	COMS0002	COMERFORD ST	92	191	CARLISLE AVE	ESQUIMALT RD	99	9.4	RESIDENTIAL	B	999	1.1	10.8	78	2.9	6.67
Ana-026-0010	CONA0001	CONDOR AVE	0	120	South End	COLVILLE RD	120	8.5	RESIDENTIAL	B	999	1	7.4	76	3.8	4.35
Ana-027-0010	CONSA0001	CONSTANCE AVE	0	453	South End	LYALL ST	453	8.5	RESIDENTIAL	B	999	1.9	14.2	67	3.8	8.47
Ana-027-0020	CONSA0002	CONSTANCE AVE	453	625	LYALL ST	ESQUIMALT RD	172	7.6	RESIDENTIAL	B	999	0.9	6	84	1.9	2.66
Ana-027-0030	CONSA0003	CONSTANCE AVE	626	678	ESQUIMALT RD	MILES ST	52	7.8	RESIDENTIAL	B	999	0.9	5	72	2.8	7.36
Ana-027-0040	CONSA0004	CONSTANCE AVE	678	879	MILES ST	ASTLE ST	201	8.6	RESIDENTIAL	B	999	1.8	10.6	78	2.9	5.17
Ana-027-0050	CONSA0005	CONSTANCE AVE	879	972	ASTLE ST	North End	93	8	RESIDENTIAL	B	999	0.5	3.2	92	2.9	6.96
Ana-028-0010	CRAS0001	CRADDOCK ST	0	86	West End	GRAFTON ST	86	8.8	RESIDENTIAL	B	999	1.9	13.9	69	2.5	
Ana-029-0010	CRAR0001	CRAIGFLOWER RD	0	217	Northwest End	YARROW PL	217	13	MAJOR	B	13678	3	13	59	3.7	2.59
Ana-029-0020	CRAR0002	CRAIGFLOWER RD	217	387	YARROW PL	ARAL RD	170	9.1	MAJOR	B	13678	2.4	8.6	70	3.7	3.34
Ana-029-0030	CRAR0003	CRAIGFLOWER RD	387	613	ARAL RD	RANKIN RD	226	9.6	MAJOR	B	13678	3.3	14.6	64	3.6	2.93
Ana-029-0040	CRAR0004	CRAIGFLOWER RD	613	722	RANKIN RD	DELLWOOD RD	109	12.9	MAJOR	B	13678	6.1	20.8	50	4.2	2.26
Ana-029-0050	CRAR0005	CRAIGFLOWER RD	722	885	DELLWOOD RD	GLEN VALE RD	163	9.2	MAJOR	B	13678	7	21.2	58	3.9	3.32
Ana-029-0060	CRAR0006	CRAIGFLOWER RD	885	1027	GLEN VALE RD	GARTHLAND RD	142	11.7	MAJOR	B	13678	2.5	9.7	63	3.8	2.27
Ana-029-0070	CRAR0007	CRAIGFLOWER RD	1027	1175	GARTHLAND RD	SHIRLEY RD	148	10	MAJOR	B	13678	0.6	1.6	71	6.2	2.68
Ana-029-0080	CRAR0008	CRAIGFLOWER RD	1175	1257	SHIRLEY RD	FORSHAW RD	82	10.3	MAJOR	B	13678	2.8	10	49	7.2	3.18
Ana-029-0090	CRAR0009	CRAIGFLOWER RD	1257	1326	FORSHAW RD	SIOUX PL	69	9.7	MAJOR	B	13678	3.2	10.7	49	7.7	3.08
Ana-029-0100	CRAR0010	CRAIGFLOWER RD	1326	1978	SIOUX PL	TILLICUM RD	652	10.1	MAJOR	B	13608	3.2	11.2	63	5.4	3.48
Ana-029-0110	CRAR0011	CRAIGFLOWER RD	1978	2077	TILLICUM RD	LAMPSON ST	99	13	MAJOR	B	13015	1.7	9.3	76	3.8	3.48
Ana-029-0120	CRAR0012	CRAIGFLOWER RD	2077	2308	LAMPSON ST	ARCADIA ST	231	11.8	MAJOR	B	13015	2	9.3	70	3.3	3.64
Ana-029-0130	CRAR0013	CRAIGFLOWER RD	2308	2388	ARCADIA ST	PHOENIX ST	80	9.5	MAJOR	B	13015	1.2	6	69	4.2	3.83
Ana-029-0140	CRAR0014	CRAIGFLOWER RD	2388	2485	PHOENIX ST	CARRIE ST	97	12.7	MAJOR	B	13015	3.5	11.1	71	4	3.3
Ana-029-0150	CRAR0015	CRAIGFLOWER RD	2485	2630	CARRIE ST	ARM ST	145	12.1	MAJOR	B	13015	0.7	4.5	89	3.6	2.79
Ana-029-0160	CRAR0016	CRAIGFLOWER RD	2630	2707	ARM ST	DOMINION RD	77	11	MAJOR	B	13015	0.4	2.3	94	4.1	3.49
Ana-030-0010	CUNR0001	CUNNINGHAM RD	0	251	KINDERSLEY ST / Unnamed_3	PARKLANDS DR	251	7.3	RESIDENTIAL	B	999	3.2	18	72	3.1	5.37
Ana-031-0010	DECP0001	DECOSTA PL	0	80	SELKIRK AVE	North End	80	8.6	RESIDENTIAL	B	999	16.6	69.1	39	3.6	4.41
Ana-032-0010	DELR0001	DELLWOOD RD	0	138	CRAIGFLOWER RD	MESHER PL	138	8	RESIDENTIAL	B	999	7.6	56.8	24	4.5	6.21
Ana-032-0020	DELR0002	DELLWOOD RD	138	249	MESHER PL	Northeast End	111	8.6	RESIDENTIAL	B	999	8.3	54.3	30	4.4	9.55
Ana-033-0010	DEVR0001	DEVONSHIRE RD	0	142	LAMPSON ST	PORTER RD	142	10.1	RESIDENTIAL	B	999	1.2	19.6	42	3.8	5.66
Ana-033-0020	DEVR0002	DEVONSHIRE RD	142	303	PORTER RD	FAIRVIEW RD	161	10.7	RESIDENTIAL	B	999	1	9.6	72	2.9	4.44
Ana-033-0030	DEVR0003	DEVONSHIRE RD	303	398	FAIRVIEW RD	CAVE ST	95	9.8	RESIDENTIAL	B	999	2.8	27	22	4.9	6.87
Ana-033-0040	DEVR0004	DEVONSHIRE RD	398	659	CAVE ST	DOMINION RD	261	9.6	RESIDENTIAL	B	999	7.9	39.6	23	5.7	6.74
Ana-034-0010	DIND0001	DINGLEY DELL	0	82	SELKIRK AVE	North End	82	8.1	RESIDENTIAL	B	999	3.5	11.9	72	4.1	6.67
Ana-035-0010	DOMR0001	DOMINION RD	0	130	ESQUIMALT RD	OLD ESQUIMALT RD	130	8	RESIDENTIAL	B	999	1.2	6	76	3	4.06
Ana-035-0020	DOMR0002	DOMINION RD	131	304	DEVONSHIRE RD	ELLERY ST	173	12.6	RESIDENTIAL	B	2339	0.8	4.7	89	2.7	3.99
Ana-035-0030	DOMR0003	DOMINION RD	304	395	ELLERY ST	ANDERSON AVE	91	11.5	RESIDENTIAL	B	2339	3.5	16.9	64	2.6	4.21
Ana-035-0040	DOMR0004	DOMINION RD	395	478	ANDERSON AVE	COLVILLE RD	83	11.5	RESIDENTIAL	B	2339	3.8	15.3	56	2.3	4.61
Ana-035-0050	DOMR0005	DOMINION RD	478	539	COLVILLE RD	CRAIGFLOWER RD	61	11.6	RESIDENTIAL	B	999	1.9	5.9	77	2.6	4.04

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Ana-036-0010	DRAA0001	DRAKE AVE	0	81	PARK TERR	EFFINGHAM ST	81	7.9	RESIDENTIAL	B	999	0.2	3.1	77	1.9	2.69
Ana-036-0020	DRAA0002	DRAKE AVE	81	195	EFFINGHAM ST	Northwest End	114	6.5	RESIDENTIAL	B	999	2	16.5	63	2.8	4.91
Ana-037-0010	DUNR0001	DUNSMUIR RD	0	247	LAMPSON ST	MACAULAY ST	247	7.9	RESIDENTIAL	B	2317	5.6	29.5	63	4	4.49
Ana-037-0020	DUNR0002	DUNSMUIR RD	247	662	MACAULAY ST	HEAD ST	415	8.3	RESIDENTIAL	B	2317	1.7	17.5	68	3.7	4.38
Ana-037-0030	DUNR0003	DUNSMUIR RD	663	777	HEAD ST	WEST BAY TERR	114	7.7	RESIDENTIAL	B	2317	0	1.3	98	2.2	4.36
Ana-037-0040	DUNR0004	DUNSMUIR RD	777	972	WEST BAY TERR	GARRETT PL	195	8.6	RESIDENTIAL	B	2317	2.1	10.1	75	1.9	3.37
Ana-037-0050	DUNR0005	DUNSMUIR RD	972	1061	GARRETT PL	SEA TERR	89	8.6	RESIDENTIAL	B	2317	6.3	23	52	5	6.43
Ana-037-0060	DUNR0006	DUNSMUIR RD	1061	1091	SEA TERR	WOLLASTON ST	30	8.6	RESIDENTIAL	B	2317	3	15.9	69	3.6	5.8
Ana-037-0070	DUNR0007	DUNSMUIR RD	1091	1173	WOLLASTON ST	ESQUIMALT RD	82	8.3	RESIDENTIAL	B	2317	0.2	2.1	88	3.5	6.16
Ana-038-0010		E N Rail Trail	0	362	HUTCHINSON AVE	MACLEOD AVE	362	3.7	Laneway	N	99	2	12.2	68	3.5	
Ana-039-0010	EFFS0001	EFFINGHAM ST	0	166	GRENVILLE AVE	DRAKE AVE	166	7.7	RESIDENTIAL	B	999	0.5	9.5	79	2	6.29
Ana-040-0010	ELLS0001	ELLERY ST	0	281	LAMPSON ST	LAMPSON ST	281	6.2	RESIDENTIAL	B	999	1.8	14.5	37	9.7	7.53
Ana-040-0020	ELLS0002	ELLERY ST	281	536	LAMPSON ST	FAIRVIEW RD	255	8.3	RESIDENTIAL	B	999	3	20.7	57	2.7	5.47
Ana-040-0030	ELLS0003	ELLERY ST	536	637	FAIRVIEW RD	CAVE ST	101	8.4	RESIDENTIAL	B	999	4.2	27.6	54	3.2	6.56
Ana-040-0040	ELLS0004	ELLERY ST	637	777	CAVE ST	CARRIE ST	140	8.9	RESIDENTIAL	B	999	2.3	13.5	70	2.6	4.47
Ana-040-0050	ELLS0005	ELLERY ST	777	933	CARRIE ST	DOMINION RD	156	8.1	RESIDENTIAL	B	999	0.5	8	82	2.5	4.19
Ana-041-0010	ELRP0001	ELRICK PL	0	189	West End	ROCKHEIGHTS AVE	189	8.9	RESIDENTIAL	B	999	3.8	30.8	47	4.2	4.83
Ana-042-0010	ESQR0001	ESQUIMALT RD	0	40	West End	CANTEEN RD	40	13.4	MAJOR	B	4338	1.3	12.9	51	5.7	6.73
Ana-042-0020	ESQR0001	ESQUIMALT RD	40	142	CANTEEN RD	GRAFTON ST	102	13.4	MAJOR	B	4338	6.5	27.9	47	5.2	6.46
Ana-042-0030	ESQR0002	ESQUIMALT RD	142	197	GRAFTON ST	ST PAULS PL	55	13.6	MAJOR	B	4338	6.3	42.9	31	7.5	6.24
Ana-042-0040	ESQR0003	ESQUIMALT RD	197	245	ST PAULS PL	FOSTER ST	48	13.5	MAJOR	B	4338	4	30	43	5.8	5.5
Ana-042-0050	ESQR0004	ESQUIMALT RD	245	351	FOSTER ST	STURDEE ST	106	13.6	MAJOR	B	4338	4	35	31	6.3	4.5
Ana-042-0060	ESQR0005	ESQUIMALT RD	351	444	STURDEE ST	NELSON ST	93	13.5	MAJOR	B	4338	3.7	25.1	52	5	3.95
Ana-042-0070	ESQR0006	ESQUIMALT RD	444	505	NELSON ST	CONSTANCE AVE	61	13.6	MAJOR	B	4338	3.9	19.6	53	4.2	4.36
Ana-042-0080	ESQR0007	ESQUIMALT RD	505	597	CONSTANCE AVE	ADMIRALS RD / ADMIRALS RD_1	92	15.5	MAJOR	B	4338	2.5	21	33	5.3	4.32
Ana-042-0090	ESQR0008	ESQUIMALT RD	597	699	ADMIRALS RD / ADMIRALS RD_1	GRENVILLE AVE	102	12.2	MAJOR	B	10596	3.2	25.9	39	5.6	5.9
Ana-042-0100	ESQR0010	ESQUIMALT RD	699	760	GRENVILLE AVE	PARK PL	61	7.6	MAJOR	B	10596	4	28.9	19	10.8	7.96
Ana-042-0110	ESQR0011	ESQUIMALT RD	760	942	PARK PL	FRASER ST	182	9.5	MAJOR	B	10596	3.6	29.8	25	7.4	7.15
Ana-042-0120	ESQR0012	ESQUIMALT RD	942	1133	FRASER ST	FERNHILL RD	191	10.1	MAJOR	B	10596	0.8	7.2	63	6.2	4.5
Ana-042-0130	ESQR0013	ESQUIMALT RD	1133	1272	FERNHILL RD	JOFFRE ST	139	11	MAJOR	B	10596	1.2	19.4	37	5.8	4.26
Ana-042-0140	ESQR0014	ESQUIMALT RD	1272	1352	JOFFRE ST	LAMPSON ST	80	13.5	MAJOR	B	10596	1.9	7.7	57	6.3	5.27
Ana-042-0150	ESQR0015	ESQUIMALT RD	1352	1600	LAMPSON ST	MACAULAY ST	248	13.8	MAJOR	B	10897	2.2	13.4	57	4	2.59
Ana-042-0160	ESQR0016	ESQUIMALT RD	1600	1760	MACAULAY ST	CARLTON TERR	160	13.6	MAJOR	B	10897	2	13.2	60	4.5	4.13
Ana-042-0170	ESQR0017	ESQUIMALT RD	1760	1881	CARLTON TERR	HEAD ST	121	15.1	MAJOR	B	10897	2.2	16	55	3.9	3.87
Ana-042-0180	ESQR0018	ESQUIMALT RD	1881	2343	HEAD ST	DUNSMUIR RD	462	9.7	MAJOR	B	14817	4.1	24	44	4.7	5.68
Ana-042-0190	ESQR0019	ESQUIMALT RD	2343	2395	DUNSMUIR RD	DOMINION RD	52	11.5	MAJOR	B	14817	3.5	18.2	53	5	6.68
Ana-043-0010	FAIR0001	FAIRVIEW RD	0	164	ALDEBURY RD / VIEWFIELD RD	DEVONSHIRE RD	164	8.3	RESIDENTIAL	B	2082	0.2	1.9	96	2.8	3.28
Ana-043-0020	FAIR0002	FAIRVIEW RD	165	334	DEVONSHIRE RD	ELLERY ST	169	7.7	RESIDENTIAL	B	999	2.2	24.6	51	3.3	5.47
Ana-044-0010	FERR0002	FERNHILL PL	0	44	West End	FERNHILL RD	44	5.3	RESIDENTIAL	B	999	4.9	20.9	29	6.7	
Ana-045-0010	FERR0001	FERNHILL RD	0	111	ESQUIMALT RD	FERNHILL PL	111	5.8	RESIDENTIAL	B	999	4.6	17.7	45	5.2	6.46
Ana-045-0020	FERR0003	FERNHILL RD	111	472	FERNHILL PL	LAMPSON ST	361	5.8	RESIDENTIAL	N	999	5.5	24.1	56	4	6.03
Ana-046-0010	FLES0001	FLEMING ST	0	161	COLVILLE RD	Northwest End	161	7.7	RESIDENTIAL	B	999	3.2	18	61	4.1	5.89
Ana-047-0010	FORR0001	FORSHAW RD	0	267	CRAIGFLOWER RD	Northeast End	267	8.2	RESIDENTIAL	B	999	6.5	22	62	4	5.73
Ana-048-0010	FOSS0001	FOSTER ST	0	253	South End	LYALL ST	253	8.4	RESIDENTIAL	B	999	1	16.2	68	3.7	5.83
Ana-048-0020	FOSS0002	FOSTER ST	253	395	LYALL ST	ESQUIMALT RD	142	6.7	RESIDENTIAL	B	999	2.1	11.2	74	3.4	4.25
Ana-049-0010	FRAS0000	FRASER ST	0	386	Southwest End	MUNRO ST	386	12	RESIDENTIAL	B	999	2.2	19.2	47	4.2	7.35
Ana-049-0020	FRAS0001	FRASER ST	386	500	MUNRO ST	GREENWOOD AVE	114	8.2	COLLECTOR	B	1149	2	20.9	60	2.4	5.4

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Ana-049-0030	FRAS0002	FRASER ST	500	607	GREENWOOD AVE	WYCHBURY AVE	107	8.5	COLLECTOR	B	1149	1.6	16.5	53	1.7	3.79
Ana-049-0040	FRAS0003	FRASER ST	607	709	WYCHBURY AVE	JUNO ST	102	8.5	COLLECTOR	B	1149	1.4	32.8	48	3.1	5.6
Ana-049-0050	FRAS0004	FRASER ST	709	822	JUNO ST	LYALL ST	113	8.4	COLLECTOR	B	1149	1.6	10.9	72	1.7	4.51
Ana-049-0060	FRAS0005	FRASER ST	822	936	LYALL ST	CARLISLE AVE	114	8.7	COLLECTOR	B	2090	4.2	23.2	56	2.7	3.63
Ana-049-0070	FRAS0006	FRASER ST	936	1071	CARLISLE AVE	ESQUIMALT RD	135	8.3	COLLECTOR	B	2090	6.1	30.8	46	4.6	6.02
Ana-050-0010	GARP0001	GARRETT PL	0	96	Southeast End	DUNSMUIR RD	96	7.8	RESIDENTIAL	B	999	3	12.9	76	2.8	3.42
Ana-051-0010	GARPE0001	GARTHLAND PL E	0	63	GARTHLAND RD	Southeast End	63	9.9	RESIDENTIAL	B	999	0	0.2	90	2	3.64
Ana-052-0010	GARPW0001	GARTHLAND PL W	0	68	Northwest End	GARTHLAND RD	68	9.5	RESIDENTIAL	B	999	7.5	32.7	59	4.3	
Ana-053-0010	GARR0001	GARTHLAND RD	0	110	CRAIGFLOWER RD	GARTHLAND PL W	110	9	RESIDENTIAL	B	999	0.2	5.8	89	2.7	3.46
Ana-053-0020	GARR0003	GARTHLAND RD	110	218	GARTHLAND PL W	RHODA LANE	108	9.6	RESIDENTIAL	B	999	5.3	33.1	51	3.8	7.04
Ana-053-0030	GARR0004	GARTHLAND RD	218	278	RHODA LANE	Northeast End	60	4.6	RESIDENTIAL	B	999	2.7	26	45	7.1	11
Ana-054-0010	GLER0001	GLEN VALE RD	0	85	CRAIGFLOWER RD	Northeast End	85	7.8	RESIDENTIAL	B	999	0	2.8	96	2.1	5.75
Ana-055-0010	GLEP0001	GLENGARRY PL	0	94	KINDERSLEY ST	Northeast End	94	5.9	RESIDENTIAL	N	999	2.1	10.6	70	3.1	3.57
Ana-056-0010	GORS0001	GORE ST	0	118	LYALL ST	HEAD ST	118	7.7	COLLECTOR	B	2864	0.5	3.8	90	2.9	5.41
Ana-057-0010	GOSC0001	GOSPER CRES	0	638	TILLICUM RD	GOSPER CRES_1	638	8.4	RESIDENTIAL	B	999	1.3	9	81	2.7	4.24
Ana-057-0020	GOSC0004	GOSPER CRES	638	694	GOSPER CRES_1	GOSPER CRES_1	56	9	RESIDENTIAL	B	999	0.5	7.7	85	3.2	4.49
Ana-058-0010	GOSC0003	GOSPER CRES_1	0	105	TILLICUM RD	GOSPER CRES	105	7.9	RESIDENTIAL	B	999	1.2	15.3	57	3.1	8.28
Ana-058-0020	GOSC0002	GOSPER CRES_1	105	260	GOSPER CRES	GOSPER CRES	155	8.2	RESIDENTIAL	B	999	1	10.6	83	2.7	2.73
Ana-059-0010	GRAS0001	GRAFTON ST	0	61	South End	BEATTY ST	61	8.2	RESIDENTIAL	B	999	4.5	21.4	71	3.6	3.31
Ana-059-0020	GRAS0002	GRAFTON ST	61	153	BEATTY ST	CRADDOCK ST	92	8.6	RESIDENTIAL	B	999	3.4	21.9	63	3.1	4.38
Ana-059-0030	GRAS0003	GRAFTON ST	153	256	CRADDOCK ST	LYALL ST	103	8	RESIDENTIAL	B	999	3.9	27.9	60	3	7.2
Ana-059-0040	GRAS0004	GRAFTON ST	256	380	LYALL ST	ESQUIMALT RD	124	8.4	RESIDENTIAL	B	999	3.2	24.4	51	4.5	7.57
Ana-060-0010	GREEA0001	GREENWOOD AVE	0	113	West End	FRASER ST	113	7.1	RESIDENTIAL	B	999	3.7	16.6	54	6	11.22
Ana-060-0020	GREEA0002	GREENWOOD AVE	114	461	FRASER ST	KINVER ST	347	8.1	RESIDENTIAL	B	999	3.7	28.4	34	6	6.82
Ana-060-0030	GREEA0003	GREENWOOD AVE	461	620	KINVER ST	LAMPSON ST	159	7.6	RESIDENTIAL	B	999	4.1	30.8	55	3.4	6.08
Ana-061-0010	GREA0001	GRENVILLE AVE	0	49	ESQUIMALT RD	PARK TERR	49	13.3	COLLECTOR	B	1774	1.5	26.6	25	6.8	14.25
Ana-061-0020	GREA0002	GRENVILLE AVE	49	163	PARK TERR	EFFINGHAM ST	114	8.7	RESIDENTIAL	B	999	1.1	14.5	55	2.9	5.62
Ana-061-0030	GREA0003	GRENVILLE AVE	163	324	EFFINGHAM ST	WOODWAY RD	161	8.5	RESIDENTIAL	B	999	1.2	14.7	55	3.4	6.16
Ana-061-0040	GREA0004	GRENVILLE AVE	324	504	WOODWAY RD	GRENVILLE AVE_2	180	8.4	RESIDENTIAL	N	999	2.2	16	59	4.2	8.67
Ana-064-0010	HADA0001	HADFIELD AVE	0	268	MUNRO ST	KINVER ST	268	8	RESIDENTIAL	B	999	3.5	16.8	65	4.4	4.74
Ana-064-0020	HADA0002	HADFIELD AVE	269	428	KINVER ST	LAMPSON ST	159	6.8	RESIDENTIAL	B	999	3	13.2	70	4	10.33
Ana-065-0010	HEA0001	HEAD ST	0	130	Southeast End	GORE ST	130	8.6	RESIDENTIAL	B	999	2.9	24.7	38	5	6.06
Ana-065-0020	HEA0002	HEAD ST	130	274	GORE ST	PARADISE ST	144	8.4	COLLECTOR	B	4011	2	6.9	78	2.9	4.72
Ana-065-0030	HEA0003	HEAD ST	274	379	PARADISE ST	DUNSMUIR RD	105	8.6	COLLECTOR	B	4011	1.4	7.7	74	3.6	5.22
Ana-065-0040	HEA0004	HEAD ST	379	472	DUNSMUIR RD	WOLLASTON ST	93	9.4	COLLECTOR	B	4011	2.5	17.2	48	4	5.33
Ana-065-0050	HEA0005	HEAD ST	472	565	WOLLASTON ST	ESQUIMALT RD	93	7.9	COLLECTOR	B	4011	3.2	21.4	51	3	
Ana-065-0060	HEA0006	HEAD ST	565	788	ESQUIMALT RD	BRYDEN CRT	223	10.1	COLLECTOR	B	4011	1.9	12.7	66	2.8	4.21
Ana-065-0070	HEA0007	HEAD ST	788	909	BRYDEN CRT	OLD ESQUIMALT RD	121	10.7	COLLECTOR	B	4011	1	5.3	78	2.4	3.31
Ana-065-0080	HEA0008	HEAD ST	909	947	OLD ESQUIMALT RD	LAMPSON ST	38	5.9	RESIDENTIAL	B	999	3	11.9	80	2	
Ana-066-0010	HEAA0003	HEALD AVE	0	158	West End	SWINFORD ST	158	8.5	RESIDENTIAL	B	999	7.1	32.6	56	4	4.91
Ana-066-0020	HEAA0004	HEALD AVE	158	208	SWINFORD ST	KINVER ST	50	8.6	RESIDENTIAL	B	999	0.9	15.8	64	4	7.21
Ana-066-0030	HEAA0005	HEALD AVE	208	253	KINVER ST	JOFFRE ST S	45	8.3	RESIDENTIAL	B	999	4.5	15.1	69	3.4	6.95
Ana-067-0010	HEAA0001	HEALD AVE_1	0	113	HEALD AVE	LYALL ST	113	7.5	RESIDENTIAL	B	999	2.3	18.3	72	3.3	
Ana-068-0010	HIGA0001	HIGHROCK AVE	0	314	INTERVALE AVE / ROCKCREST AVE	ROCKHEIGHTS AVE	314	9.1	RESIDENTIAL	B	999	1.4	8.4	82	2.3	3.96
Ana-068-0020	HIGA0002	HIGHROCK AVE	314	399	ROCKHEIGHTS AVE	HIGHROCK PL	85	7.7	RESIDENTIAL	B	999	1.9	11.7	78	3.1	6.68
Ana-068-0030	HIGA0003	HIGHROCK AVE	399	472	HIGHROCK PL	East End	73	9.4	RESIDENTIAL	B	999	3.5	19.3	70	3.7	6.31
Ana-069-0010	HIGP0001	HIGHROCK PL	0	52	South End	HIGHROCK AVE	52	9.1	RESIDENTIAL	B	999	3	21.3	69	3.9	21.04

Analysis_ID	Township_SectionID	RoadName	From	To	From_Description	To_Description	Length (m)	Width (m)	Class	Curb	AADT (veh/day)	AFCA (%)	ACA (%)	PCI	RUT (mm)	IRI (m/mm)
Ana-069-0020	HIGP0002	HIGHROCK PL	52	124	HIGHROCK AVE	Northeast End	72	8.7	RESIDENTIAL	B	999	0.4	9	88	2.5	7.86
Ana-070-0010	HUTA0001	HUTCHINSON AVE	0	218	HUTCHINSON PL / ROCKHEIGHTS AVE	Unnamed_2	218	8.1	RESIDENTIAL	B	999	3.3	24.1	61	3.4	6.55
Ana-070-0020	HUTA0001	HUTCHINSON AVE	218	262	Unnamed_2	LOCKLEY RD	44	8.1	RESIDENTIAL	B	999	4.1	17.5	67	3.2	5.65
Ana-070-0030	HUTA0002	HUTCHINSON AVE	262	328	LOCKLEY RD	E N Rail Trail	66	7.7	RESIDENTIAL	B	999	3.3	16.2	66	3.4	5.72
Ana-070-0040	HUTA0003	HUTCHINSON AVE	328	370	E N Rail Trail	COLVILLE RD	42	8	RESIDENTIAL	B	999	0	4.6	77	3.5	
Ana-071-0010	HUTP0001	HUTCHINSON PL	0	46	Southeast End	HUTCHINSON AVE / ROCKHEIGHTS AVE	46	8.4	RESIDENTIAL	B	999	0.6	5.9	82	2.9	
Ana-072-0010	INSS0001	INSKIP RD	0	101	West End	AGNES ST	101	8.4	RESIDENTIAL	B	999	2.9	15.2	76	2	6.44
Ana-072-0020	INSS0002	INSKIP RD	101	210	AGNES ST	ARCADIA ST	109	8.1	RESIDENTIAL	B	999	2.3	14.4	77	3	5.64
Ana-073-0010	INTA0001	INTERVALE AVE	0	138	HIGHROCK AVE / ROCKCREST AVE	Unnamed_2	138	8.5	RESIDENTIAL	B	999	0.1	16.1	46	3.7	6.65
Ana-073-0020	INTA0001	INTERVALE AVE	138	182	Unnamed_2	LOCKLEY RD	44	8.5	RESIDENTIAL	B	999	0.3	20.3	45	3.2	5.95
Ana-073-0030	INTA0002	INTERVALE AVE	183	290	LOCKLEY RD	COLVILLE RD	107	7.2	RESIDENTIAL	B	999	2.7	23	36	5.3	7.64
Ana-074-0010	ISBS0001	ISBISTER ST	0	65	ADMIRALS RD_2	Northeast End	65	8.3	RESIDENTIAL	B	999	1	8.6	86	3.1	
Ana-075-0010	JOFS0001	JOFFRE ST	0	263	LYALL ST	ESQUIMALT RD	263	8	RESIDENTIAL	B	999	8	33.1	51	3	4.19
Ana-076-0010	SJOS0001	JOFFRE ST S	0	114	HEALD AVE	LYALL ST	114	7.8	RESIDENTIAL	B	999	1.5	9.6	79	3.6	4.39
Ana-077-0010	JUNS0001	JUNO ST	0	221	ADMIRALS RD_1	FRASER ST	221	7.9	RESIDENTIAL	B	999	0.6	9.7	82	2.8	6.45
Ana-078-0010	KINR0001	KINDERSLEY ST	0	86	CUNNINGHAM RD	GLENGARRY PL	86	8.5	RESIDENTIAL	B	999	1.1	13.3	79	2.6	2.66
Ana-078-0020	KINR0002	KINDERSLEY ST	86	152	GLENGARRY PL	COLES ST	66	8.5	RESIDENTIAL	B	999	1.1	21.5	68	3.1	3.47
Ana-078-0030	KINR0003	KINDERSLEY ST	152	283	COLES ST	NADEN ST	131	8	RESIDENTIAL	B	999	5.2	19.7	64	3.1	4.48
Ana-079-0010	KINGR0001	KINGSMILL RD	0	73	PARKLANDS DR	ALEXANDER RD	73	7.2	RESIDENTIAL	B	999	4	18.9	66	3.3	3.46
Ana-079-0020	KINGR0002	KINGSMILL RD	73	217	ALEXANDER RD	ALEXANDER RD	144	7.2	RESIDENTIAL	B	999	7	35.3	51	3.4	5.62
Ana-079-0030	KINGR0003	KINGSMILL RD	217	404	ALEXANDER RD	PARKLANDS DR	187	7.2	RESIDENTIAL	B	999	5.3	25.5	68	2.7	4.03
Ana-080-0010	KINS0001	KINVER ST	0	102	South End	MUNRO ST	102	8.7	RESIDENTIAL	B	999	2.2	18.7	70	3.2	7.39
Ana-080-0020	KINS0002	KINVER ST	103	215	MUNRO ST	HADFIELD AVE	112	7.9	RESIDENTIAL	B	999	3.4	19.3	66	3.2	6.95
Ana-080-0030	KINS0003	KINVER ST	215	328	HADFIELD AVE	BEWDLEY AVE	113	8.5	RESIDENTIAL	B	999	1.1	11	74	3.1	5.4
Ana-080-0040	KINS0004	KINVER ST	328	431	BEWDLEY AVE	GREENWOOD AVE	103	8.5	RESIDENTIAL	B	999	4	21.2	63	3.5	8.49
Ana-080-0050	KINS0005	KINVER ST	431	534	GREENWOOD AVE	WYCHBURY AVE	103	8.5	RESIDENTIAL	B	999	2	13	77	3.2	9.09
Ana-080-0060	KINS0006	KINVER ST	534	629	WYCHBURY AVE	HEALD AVE	95	7.7	RESIDENTIAL	B	999	1.1	12.3	75	4.1	6.73
Ana-081-0010	LAMP0001	LAMPSON PL	0	128	LAMPSON ST	Southeast End	128	8.5	RESIDENTIAL	B	999	1.7	8	74	2.8	4.71
Ana-082-0010	LAMS0001	LAMPSON ST	0	113	MUNRO ST	HADFIELD AVE	113	8	COLLECTOR	B	3138	5.7	36	31	5.6	6.51
Ana-082-0020	LAMS0002	LAMPSON ST	113	225	HADFIELD AVE	BEWDLEY AVE	112	8.5	COLLECTOR	B	3138	2.5	21.7	52	4.7	4.71
Ana-082-0030	LAMS0003	LAMPSON ST	225	328	BEWDLEY AVE	GREENWOOD AVE	103	8.5	COLLECTOR	B	3138	0.5	4.7	90	2.8	4.81
Ana-082-0040	LAMS0004	LAMPSON ST	328	431	GREENWOOD AVE	WYCHBURY AVE	103	8.5	COLLECTOR	B	3138	0.3	4.7	91	3.7	2.92
Ana-082-0050	LAMS0005	LAMPSON ST	431	642	WYCHBURY AVE	LYALL ST	211	8.2	COLLECTOR	B	3138	1.4	14.4	61	5.5	4.36
Ana-082-0060	LAMS0006	LAMPSON ST	642	734	LYALL ST	DUNSMUIR RD	92	7.7	COLLECTOR	B	3138	6.7	33.6	62	2.9	3.53
Ana-082-0070	LAMS0007	LAMPSON ST	734	825	DUNSMUIR RD	WOLLASTON ST	91	8.6	COLLECTOR	B	3138	5.2	27.9	67	2	3.83
Ana-082-0080	LAMS0008	LAMPSON ST	825	907	WOLLASTON ST	ESQUIMALT RD	82	9.7	COLLECTOR	B	3138	8.6	42.1	58	3	5.27
Ana-082-0090	LAMS0009	LAMPSON ST	907	972	ESQUIMALT RD	WORDSLEY ST	65	9.6	MAJOR	B	6783	1.4	5.3	53	8.7	11.87
Ana-082-0100	LAMS0010	LAMPSON ST	972	1062	WORDSLEY ST	NORMA CRT	90	10.8	MAJOR	B	6783	2.1	22.3	42	8.3	9.65
Ana-082-0110	LAMS0011	LAMPSON ST	1062	1127	NORMA CRT	FERNHILL RD	65	10.6	MAJOR	B	6783	3.7	30.2	40	4	4.91
Ana-082-0120	LAMS0013	LAMPSON ST	1127	1349	FERNHILL RD	OLD ESQUIMALT RD	222	10.9	MAJOR	B	6783	5.4	31.9	41	3.8	4.17
Ana-082-0130	LAMS0014	LAMPSON ST	1349	1381	OLD ESQUIMALT RD	HEAD ST	32	12	MAJOR	B	8984	0.1	1.1	96	1.6	5.14
Ana-082-0140	LAMS0015	LAMPSON ST	1381	1662	HEAD ST	DEVONSHIRE RD	281	11.2	MAJOR	B	8984	7.7	37.1	30	3	2.4
Ana-082-0150	LAMS0016	LAMPSON ST	1662	1699	DEVONSHIRE RD	ROCKHEIGHTS AVE	37	11.1	MAJOR	B	8984	1.9	5.2	89	2	2.88
Ana-082-0160	LAMS0017	LAMPSON ST	1699	1785	ROCKHEIGHTS AVE	WURTELE PL	86	11	MAJOR	B	8984	0.3	1.4	95	2.4	2.18
Ana-082-0170	LAMS0018	LAMPSON ST	1785	1837	WURTELE PL	ELLERY ST	52	11	MAJOR	B	8984	0.3	3	94	2.4	3.88
Ana-082-0180	LAMS0019	LAMPSON ST	1837	1938	ELLERY ST	ELLERY ST	101	10.9	MAJOR	B	8984	2.7	8.7	65	2.5	3.13
Ana-082-0190	LAMS0021	LAMPSON ST	1938	2013	ELLERY ST	COLVILLE RD	75	9.9	MAJOR	B	8984	1.1	7.2	79	3.2	2.59

Analysis_ID	Township_SectionID	RoadName	From	To	From_Description	To_Description	Length (m)	Width (m)	Class	Curb	AADT (veh/day)	AFCA (%)	ACA (%)	PCI	RUT (mm)	IRI (m/mm)
Ana-082-0200	LAMS0022	LAMPSON ST	2013	2083	COLVILLE RD	TRANSFER ST	70	9.5	MAJOR	B	12962	3.2	16.6	55	2.6	3.49
Ana-082-0210	LAMS0023	LAMPSON ST	2083	2305	TRANSFER ST	CRAIGFLOWER RD	222	8.5	RESIDENTIAL	B	999	0.6	8.7	80	2.3	3.98
Ana-083-0010	LOCR0001	LOCKLEY RD	0	222	ADMIRALS RD	INTERVALE AVE	222	10.5	RESIDENTIAL	B	999	6.1	22.1	55	2.7	3.36
Ana-083-0020	LOCR0002	LOCKLEY RD	222	277	INTERVALE AVE	INTERVALE AVE	55	8.4	RESIDENTIAL	B	999	4.3	29.4	27	5.9	6.46
Ana-083-0030	LOCR0003	LOCKLEY RD	277	407	INTERVALE AVE	LUGRIN PL_1	130	8.6	RESIDENTIAL	B	999	0.8	11.3	66	3.5	6.91
Ana-083-0040	LOCR0004	LOCKLEY RD	407	515	LUGRIN PL_1	HUTCHINSON AVE	108	8.5	RESIDENTIAL	B	999	1.7	14.5	56	5.1	4.61
Ana-083-0050	LOCR0005	LOCKLEY RD	515	691	HUTCHINSON AVE	East End	176	8.9	RESIDENTIAL	B	999	0.5	7.9	79	3	5.69
Ana-084-0010	LUGP0002	LUGRIN PL	0	115	West End	East End	115	10	RESIDENTIAL	B	999	1.2	8.1	81	2.5	
Ana-085-0010	LUGP0001	LUGRIN PL_1	0	44	LUGRIN PL	Unnamed_2	44	7.1	RESIDENTIAL	B	999	0.5	3	77	2.4	
Ana-085-0020	LUGP0001	LUGRIN PL_1	44	88	Unnamed_2	LOCKLEY RD	44	7.1	RESIDENTIAL	B	999	1.5	6.3	77	3.4	
Ana-086-0010	LUSP0001	LUSCOMBE PL	0	229	West End	ADMIRALS RD_2	229	8.5	RESIDENTIAL	B	999	3	15.4	75	4.2	5.82
Ana-087-0010	LYAS0001	LYALL ST	0	115	West End	GRAFTON ST	115	9.3	COLLECTOR	B	2193	1.9	13.6	67	3.8	4.19
Ana-087-0020	LYAS0002	LYALL ST	115	215	GRAFTON ST	FOSTER ST	100	10.7	COLLECTOR	B	2193	2.7	16.2	67	2.3	4.15
Ana-087-0030	LYAS0003	LYALL ST	215	266	FOSTER ST	Unnamed_1	51	10.7	COLLECTOR	B	2193	4.4	27.8	67	2.5	4.24
Ana-087-0040	LYAS0004	LYALL ST	266	315	Unnamed_1	STURDEE ST	49	10.5	COLLECTOR	B	2193	3.4	35.7	44	3	4.21
Ana-087-0050	LYAS0005	LYALL ST	315	414	STURDEE ST	NELSON ST	99	10.7	COLLECTOR	B	2193	6.6	42.3	44	4.5	8.79
Ana-087-0060	LYAS0006	LYALL ST	414	479	NELSON ST	CONSTANCE AVE	65	10.8	COLLECTOR	B	2193	2.1	25.9	52	3.2	4.28
Ana-087-0070	LYAS0007	LYALL ST	479	567	CONSTANCE AVE	ADMIRALS RD_1	88	10.6	COLLECTOR	B	2193	4.8	19.9	50	4.3	4.36
Ana-087-0080	LYAS0008	LYALL ST	567	651	ADMIRALS RD_1	COMERFORD ST	84	10.7	COLLECTOR	B	3565	4.6	26.5	32	6.6	10.06
Ana-087-0090	LYAS0009	LYALL ST	651	824	COMERFORD ST	FRASER ST	173	10.7	COLLECTOR	B	3565	6.3	29.4	41	5	7.24
Ana-087-0100	LYAS0010	LYALL ST	824	924	FRASER ST	HEALD AVE_1	100	10.5	COLLECTOR	B	3614	6.7	29	48	4	7.96
Ana-087-0110	LYAS0011	LYALL ST	924	1065	HEALD AVE_1	SWINFORD ST	141	10.5	COLLECTOR	B	3614	1.1	6.7	86	2.3	4.88
Ana-087-0120	LYAS0012	LYALL ST	1065	1161	SWINFORD ST	JOFFRE ST S	96	10.6	COLLECTOR	B	3614	0.7	6.5	84	2.1	5.19
Ana-087-0130	LYAS0013	LYALL ST	1161	1195	JOFFRE ST S	JOFFRE ST	34	10.6	COLLECTOR	B	3614	0.1	0.8	98	2.5	3.58
Ana-087-0140	LYAS0014	LYALL ST	1195	1275	JOFFRE ST	LAMPSON ST	80	10.7	COLLECTOR	B	3614	0.7	3.4	89	2.1	3.78
Ana-087-0150	LYAS0015	LYALL ST	1275	1522	LAMPSON ST	MACAULAY ST	247	10.6	COLLECTOR	B	2864	2.1	18.8	56	4	5.42
Ana-087-0160	LYAS0016	LYALL ST	1522	1682	MACAULAY ST	PARADISE ST	160	10	COLLECTOR	B	2864	3.3	27.2	49	4.1	4.8
Ana-087-0170	LYAS0017	LYALL ST	1682	1801	PARADISE ST	GORE ST	119	10	COLLECTOR	B	2864	1.3	11.4	70	2	2.88
Ana-087-0180	LYAS0018	LYALL ST	1801	1986	GORE ST	HEAD ST	185	10	RESIDENTIAL	B	999	3.5	18	65	3.2	4.26
Ana-088-0010	MACS0001	MACAULAY ST	0	91	LYALL ST	DUNSMUIR RD	91	8.2	RESIDENTIAL	B	999	1.8	17.6	66	2.8	4.98
Ana-088-0020	MACS0002	MACAULAY ST	91	182	DUNSMUIR RD	WOLLASTON ST	91	8.6	RESIDENTIAL	B	999	8.8	45.2	39	4.1	7.17
Ana-088-0030	MACS0003	MACAULAY ST	182	259	WOLLASTON ST	ESQUIMALT RD	77	7.7	RESIDENTIAL	B	999	2.1	9	75	2.6	7.09
Ana-089-0010	MACA0001	MACLEOD AVE	0	76	South End	COLVILLE RD	76	8.3	RESIDENTIAL	B	999	0	9	74	3.1	3.2
Ana-090-0010	MATA0001	MATHESON AVE	0	87	South End	MATHESON PL	87	8.5	RESIDENTIAL	B	999	1.4	9.8	73	2.7	4.77
Ana-090-0020	MATA0002	MATHESON AVE	87	178	MATHESON PL	ROCKHEIGHTS AVE	91	7.7	RESIDENTIAL	B	999	2.2	18.8	57	3.5	5.21
Ana-091-0010	MATP0001	MATHESON PL	0	72	Northwest End	MATHESON AVE	72	7.8	RESIDENTIAL	B	999	1.8	13.9	73	2.8	
Ana-092-0010	MCAP0001	McADAM PL	0	58	PARKLANDS DR	Southeast End	58	8.7	RESIDENTIAL	B	999	5.6	25.9	65	3.5	3.9
Ana-093-0010	MCNA0001	McNAUGHTON AVE	0	147	TILLICUM RD	UGANDA AVE	147	7.9	RESIDENTIAL	B	999	2.3	15.8	65	2.7	5.62
Ana-093-0020	MCNA0002	McNAUGHTON AVE	147	196	UGANDA AVE	East End	49	7.3	RESIDENTIAL	B	999	0.2	7.2	87	2.6	4.06
Ana-094-0010	MESP0001	MESHER PL	0	79	DELLWOOD RD	MESHER PL_1	79	7.3	RESIDENTIAL	B	999	0.7	11.1	58	4.7	6.22
Ana-095-0010	MESP0002	MESHER PL_1	0	36	Southwest End	MESHER PL	36	9.2	RESIDENTIAL	B	999	2.6	17.4	60	4.4	5.17
Ana-095-0020	MESP0003	MESHER PL_1	36	75	MESHER PL	Northeast End	39	11.2	RESIDENTIAL	B	999	1.5	20.3	53	4.3	6.11
Ana-096-0010	MILS0001	MILES ST	0	67	NELSON ST	CONSTANCE AVE	67	5.6	RESIDENTIAL	B	999	0.2	1.6	91	3.3	
Ana-096-0020	MILS0002	MILES ST	67	110	CONSTANCE AVE	East End	43	6.4	RESIDENTIAL	B	999	1.5	5.3	87	2	
Ana-097-0010	MUNS0001	MUNRO ST	0	139	FRASER ST	HADFIELD AVE	139	8.8	COLLECTOR	B	849	3.2	30.3	42	3.1	5.96
Ana-097-0020	MUNS0002	MUNRO ST	139	286	HADFIELD AVE	PLASKETT PL	147	8.6	COLLECTOR	B	849	1.8	24.5	47	3.4	5.89
Ana-097-0030	MUNS0003	MUNRO ST	286	466	PLASKETT PL	KINVER ST	180	8.2	COLLECTOR	B	849	3	20.9	52	3.5	6.35

Analysis_ID	Township_SectionID	RoadName	From	To	From_Description	To_Description	Length (m)	Width (m)	Class	Curb	AADT (veh/day)	AFCA (%)	ACA (%)	PCI	RUT (mm)	IRI (m/mm)
Ana-097-0040	MUNS0004	MUNRO ST	466	615	KINVER ST	LAMPSON ST	149	8.6	COLLECTOR	B	849	1.6	26.8	39	4.7	6.45
Ana-097-0050	MUNS0005	MUNRO ST	615	667	LAMPSON ST	CLIFTON TERR	52	7.8	RESIDENTIAL	B	999	0.3	13.4	57	4.9	8.89
Ana-097-0060	MUNS0006	MUNRO ST	667	724	CLIFTON TERR	POOLEY PL	57	7.8	RESIDENTIAL	N	999	3.4	20.3	35	8.3	11.42
Ana-097-0070	MUNS0007	MUNRO ST	724	761	POOLEY PL	East End	37	5.8	RESIDENTIAL	N	999	3.2	17.8	43	6.6	10.78
Ana-098-0010	NADS0001	NADEN ST	0	79	South End	KINDERSLEY ST	79	8.8	RESIDENTIAL	B	999	1.2	9.4	83	1.5	3.83
Ana-099-0010	NELS0001	NELSON ST	0	200	South End	LYALL ST	200	7.3	RESIDENTIAL	B	999	2.9	17.6	71	3	4.73
Ana-099-0020	NELS0002	NELSON ST	200	242	LYALL ST	WOOD ST	42	8	RESIDENTIAL	B	999	3.6	19	62	3.3	7.24
Ana-099-0030	NELS0002	NELSON ST	242	368	WOOD ST	ESQUIMALT RD	126	8	RESIDENTIAL	B	999	3.3	18.1	71	3.7	8.84
Ana-099-0040	NELS0003	NELSON ST	369	426	ESQUIMALT RD	MILES ST	57	7.4	RESIDENTIAL	B	999	0	11.6	62	2.4	3.88
Ana-099-0050	NELS0004	NELSON ST	426	480	MILES ST	SUSSEX ST	54	8.6	RESIDENTIAL	B	999	1.4	24	44	2.8	5.4
Ana-099-0060	NELS0005	NELSON ST	480	582	SUSSEX ST	North End	102	8.6	RESIDENTIAL	B	999	1.2	17.9	42	4.1	7.53
Ana-100-0010	NORC0001	NORMA CRT	0	109	West End	LAMPSON ST	109	7.8	RESIDENTIAL	B	999	1	9.8	75	2.7	
Ana-101-0010	OLDR0001	OLD ESQUIMALT RD	0	139	PARK TERR	ROCKHEIGHTS AVE	139	8.5	COLLECTOR	B	1774	4.3	35	25	7	8.98
Ana-101-0020	OLDR0002	OLD ESQUIMALT RD	139	354	ROCKHEIGHTS AVE	WARDER PL	215	8.5	COLLECTOR	B	1774	5.2	28.4	42	4.8	5.71
Ana-101-0030	OLDR0003	OLD ESQUIMALT RD	354	623	WARDER PL	CAIRN RD	269	8.5	COLLECTOR	B	1774	4.8	35.4	32	4.6	4.67
Ana-101-0040	OLDR0004	OLD ESQUIMALT RD	623	692	CAIRN RD	LAMPSON ST	69	8.1	COLLECTOR	B	1774	8.2	36.2	38	5.1	6.76
Ana-101-0050	OLDR0005	OLD ESQUIMALT RD	692	727	LAMPSON ST	HEAD ST	35	7.5	COLLECTOR	B	2921	0	0.3	100	1.5	7.58
Ana-101-0060	OLDR0006	OLD ESQUIMALT RD	727	1097	HEAD ST	ALDEBURY RD	370	8.3	COLLECTOR	B	2921	2.3	19.5	51	4.9	7.85
Ana-101-0070	OLDR0007	OLD ESQUIMALT RD	1097	1440	ALDEBURY RD	East End	343	9.1	COLLECTOR	B	2921	2	19.9	47	4.8	7.27
Ana-102-0010	PARS0001	PARADISE ST	0	303	LYALL ST	HEAD ST	303	8.1	RESIDENTIAL	B	999	2.3	14.4	76	2.6	5.65
Ana-103-0010	PARP0001	PARK PL	0	117	CARLISLE AVE	ESQUIMALT RD	117	9.4	RESIDENTIAL	B	999	2.8	45.7	16	6.8	
Ana-104-0010	PART0001	PARK TERR	0	188	GRENVILLE AVE	DRAKE AVE	188	8.3	COLLECTOR	B	1774	0.9	8.9	69	2.8	5.18
Ana-104-0020	PART0002	PARK TERR	188	251	DRAKE AVE	OLD ESQUIMALT RD	63	8.7	COLLECTOR	B	1774	1.6	10.6	64	3.5	3.48
Ana-104-0030	PART0003	PARK TERR	251	357	OLD ESQUIMALT RD	Northeast End	106	5.6	RESIDENTIAL	B	999	8	49.7	4	13.4	
Ana-105-0010	PARD0001	PARKLANDS DR	0	113	ADMIRALS RD_2	McADAM PL	113	8	RESIDENTIAL	B	999	6.5	44.8	29	4.5	8.9
Ana-105-0020	PARD0002	PARKLANDS DR	113	157	McADAM PL	Unnamed_3	44	8.6	RESIDENTIAL	B	999	3	48.6	27	4.6	6.26
Ana-105-0030	PARD0002	PARKLANDS DR	157	294	Unnamed_3	KINGSMILL RD	137	8.6	RESIDENTIAL	B	999	4.8	45.2	34	3.4	5.58
Ana-105-0040	PARD0003	PARKLANDS DR	294	399	KINGSMILL RD	CUNNINGHAM RD	105	7	RESIDENTIAL	B	999	4.7	39.1	36	4.5	6.39
Ana-105-0050	PARD0004	PARKLANDS DR	399	535	CUNNINGHAM RD	KINGSMILL RD	136	7.3	RESIDENTIAL	B	999	3.8	35.6	48	4	6.52
Ana-106-0010	PHIP0001	PHILION PL	0	43	West End	ARAL RD	43	8.4	RESIDENTIAL	B	999	5.5	36.9	52	3.4	
Ana-107-0010	PHOS0001	PHOENIX ST	0	171	COLVILLE RD	CRAIGFLOWER RD	171	7.8	RESIDENTIAL	B	999	4	39	17	7	10.19
Ana-108-0010	PLAP0001	PLASKETT PL	0	53	West End	PLASKETT PL_1	53	9.3	RESIDENTIAL	B	999	0.3	0.8	96	2	
Ana-108-0020	PLAP0001	PLASKETT PL	53	212	PLASKETT PL_1	MUNRO ST	159	9.3	RESIDENTIAL	B	999	0.7	5.6	90	2.6	3.47
Ana-109-0010	PLAP0001	PLASKETT PL_1	0	64	South End	PLASKETT PL	64	9.3	RESIDENTIAL	B	999	0	0.6	96	1.9	
Ana-110-0010	POOP0001	POOLEY PL	0	135	MUNRO ST	North End	135	9.2	RESIDENTIAL	B	999	5.1	30	61	2.8	4.98
Ana-111-0010	PORR0001	PORTER RD	0	205	SHEARWATER ST	DEVONSHIRE RD	205	7.9	RESIDENTIAL	B	999	0.4	6.5	89	2.9	4.41
Ana-112-0010	RANR0001	RANKIN RD	0	141	CRAIGFLOWER RD	TREEBANK RD W	141	8	RESIDENTIAL	B	999	12.3	54.2	27	5.7	6.65
Ana-112-0020	RANR0002	RANKIN RD	141	213	TREEBANK RD W	Northeast End	72	9.7	RESIDENTIAL	B	999	16.9	70.1	28	4.9	4.19
Ana-113-0010	REEP0001	REEVE PL	0	60	LAMPSON ST	East End	60	6.5	RESIDENTIAL	B	999	0.7	2.8	81	2.6	
Ana-114-0010	RHOL0001	RHODA LANE	0	151	GARTHLAND RD	SHIRLEY RD	151	7.2	RESIDENTIAL	B	999	3.2	17.9	65	5.2	9.62
Ana-114-0020	RHOL0002	RHODA LANE	151	236	SHIRLEY RD	FORSHAW RD	85	3.9	RESIDENTIAL	B	999	0.6	5.1	87	3.2	
Ana-115-0010	ROCKA0001	ROCKCREST AVE	0	165	ROCKHEIGHTS AVE	ROCKCREST PL	165	8	RESIDENTIAL	B	999	1.8	14.1	74	2.9	3.46
Ana-115-0020	ROCKA0002	ROCKCREST AVE	165	213	ROCKCREST PL	WOODWAY RD	48	8.2	RESIDENTIAL	B	999	7.6	33.4	55	4.5	7.05
Ana-115-0030	ROCKA0003	ROCKCREST AVE	213	522	WOODWAY RD	HIGHROCK AVE / INTERVALE AVE	309	8.6	RESIDENTIAL	B	999	1.2	7.2	86	2	3.19
Ana-116-0010	ROCP0001	ROCKCREST PL	0	54	South End	ROCKCREST AVE	54	8.7	RESIDENTIAL	B	999	0.5	4.4	82	4.2	
Ana-117-0010	ROCA0001	ROCKHEIGHTS AVE	0	122	OLD ESQUIMALT RD	ROCKCREST AVE	122	8	RESIDENTIAL	B	999	5.2	22.3	51	4.2	5.01
Ana-117-0020	ROCA0002	ROCKHEIGHTS AVE	122	216	ROCKCREST AVE	HIGHROCK AVE	94	8.5	RESIDENTIAL	B	999	4	21.8	59	3.1	4.11

Analysis_ID	Township_SectionID	RoadName	From	To	From_Description	To_Description	Length (m)	Width (m)	Class	Curb	AADT (veh/day)	AFCA (%)	ACA (%)	PCI	RUT (mm)	IRI (m/mm)
Ana-117-0030	ROCA0003	ROCKHEIGHTS AVE	216	409	HIGHROCK AVE	HUTCHINSON AVE / HUTCHINSON PL	193	8.5	RESIDENTIAL	B	999	1.8	13.1	75	3	3.72
Ana-117-0040	ROCA0004	ROCKHEIGHTS AVE	409	639	HUTCHINSON AVE / HUTCHINSON PL	ELRICK PL	230	8.6	RESIDENTIAL	B	999	5.8	21.3	63	2.9	4.05
Ana-117-0050	ROCA0005	ROCKHEIGHTS AVE	639	843	ELRICK PL	MATHESON AVE	204	8.5	RESIDENTIAL	B	999	4.1	21.1	53	3.1	4.56
Ana-117-0060	ROCA0006	ROCKHEIGHTS AVE	843	954	MATHESON AVE	LAMPSON ST	111	7.8	RESIDENTIAL	B	999	4.7	17.2	55	4.9	4.99
Ana-118-0010	SAUS0001	SAUNDERS ST	0	80	West End	NELSON ST	80	8.3	RESIDENTIAL	B	999	0.8	4.5	86	4.3	
Ana-120-0010	SEAT0001	SEA TERR	0	95	DUNSMUIR RD	East End	95	7.4	RESIDENTIAL	B	999	2.4	14.6	62	5.7	5.57
Ana-121-0010	SELA0001	SELKIRK AVE	0	73	TILLICUM RD	UGANDA AVE	73	7.4	RESIDENTIAL	B	1528	0.4	10.4	61	2.6	2.68
Ana-121-0020	SELA0002	SELKIRK AVE	73	237	UGANDA AVE	AGNES ST	164	8.5	RESIDENTIAL	B	1528	0.7	6.3	83	2.7	4.59
Ana-121-0030	SELA0003	SELKIRK AVE	237	347	AGNES ST	ARCADIA ST	110	8.6	RESIDENTIAL	B	1528	3.8	32.1	31	4.4	6.63
Ana-121-0040	SELA0004	SELKIRK AVE	347	474	ARCADIA ST	DECOSTA PL	127	8.5	RESIDENTIAL	B	1528	2.1	21.6	63	3.9	6.32
Ana-121-0050	SELA0005	SELKIRK AVE	474	564	DECOSTA PL	DINGLEY DELL	90	8.5	RESIDENTIAL	B	1528	2.1	13.8	69	4.1	5.05
Ana-121-0060	SELA0006	SELKIRK AVE	564	668	DINGLEY DELL	ARM ST	104	8.6	RESIDENTIAL	B	1528	5.2	21	57	3.5	3.87
Ana-121-0070	SELA0007	SELKIRK AVE	668	746	ARM ST	East End	78	8.7	RESIDENTIAL	B	999	0.5	1.3	95	1.5	3.02
Ana-122-0010	SHES0001	SHEARWATER ST	0	79	West End	PORTER RD	79	10.2	RESIDENTIAL	B	999	3.6	20	67	3.7	5.48
Ana-122-0020	SHES0002	SHEARWATER ST	79	254	PORTER RD	ALDEBURY RD	175	8.3	RESIDENTIAL	B	999	3.6	25.9	55	4.3	7.65
Ana-123-0010	SHIR0001	SHIRLEY RD	0	239	CRAIGFLOWER RD	RHODA LANE	239	8.3	RESIDENTIAL	B	999	1.7	22.9	59	3.8	6.46
Ana-124-0010	SIOP0001	SIOUX PL	0	127	CRAIGFLOWER RD	Northeast End	127	6.7	RESIDENTIAL	B	999	3.5	12	73	3.2	5.81
Ana-125-0010	STPP0001	ST PAULS PL	0	52	ESQUIMALT RD	ST PAULS PL_1	52	6.5	RESIDENTIAL	B	999	3.9	14.7	70	3.6	
Ana-126-0010	STPP0002	ST PAULS PL_1	0	30	West End	ST PAULS PL	30	8.5	RESIDENTIAL	B	999	0.9	18.4	78	2.5	
Ana-126-0020	STPP0002	ST PAULS PL_1	30	60	ST PAULS PL	East End	30	8.5	RESIDENTIAL	B	999	0.3	8.4	88	2.5	
Ana-127-0010	STAP0001	STANCOMBE PL	0	139	Southwest End	ADMIRALS RD_2	139	8.6	RESIDENTIAL	B	999	6.1	27.9	62	2.9	3.35
Ana-128-0010	STUS0001	STURDEE ST	0	224	South End	LYALL ST	224	7.3	RESIDENTIAL	B	999	6.8	37.3	39	5.3	7.57
Ana-128-0020	STUS0002	STURDEE ST	224	266	LYALL ST	WOOD ST	42	7	RESIDENTIAL	B	999	10.8	41.6	39	4.6	9.1
Ana-128-0030	STUS0003	STURDEE ST	266	384	WOOD ST	ESQUIMALT RD	118	8	RESIDENTIAL	B	999	4.2	32.6	39	4.9	10.56
Ana-128-0040	STUS0004	STURDEE ST	385	445	ESQUIMALT RD	North End	60	12.3	RESIDENTIAL	B	999	0	23	41	5.1	6.65
Ana-129-0010	SUSS0001	SUSSEX ST	0	81	West End	NELSON ST	81	8.6	RESIDENTIAL	B	999	0.7	4.4	73	3.6	
Ana-130-0010	SWIS0001	SWINFORD ST	0	114	HEALD AVE	LYALL ST	114	7.2	RESIDENTIAL	B	999	1.4	14.4	70	4	
Ana-131-0010	TILR0001	TILLICUM RD	0	137	COLVILLE RD	TRANSFER ST	137	10.6	COLLECTOR	B	4979	0	3.4	95	2.3	3.61
Ana-131-0020	TILR0002	TILLICUM RD	137	351	TRANSFER ST	CRAIGFLOWER RD	214	13.1	MAJOR	B	14560	3.1	10	76	2.8	2.79
Ana-131-0030	TILR0003	TILLICUM RD	351	509	CRAIGFLOWER RD	SELKIRK AVE	158	13.5	MAJOR	B	19171	0.3	2.1	94	2.2	2.66
Ana-131-0040	TILR0005	TILLICUM RD	509	586	SELKIRK AVE	GOSPER CRES_1	77	13.4	MAJOR	B	19171	0.7	1.7	95	1.7	2.08
Ana-131-0050	TILR0006	TILLICUM RD	586	637	GOSPER CRES_1	McNAUGHTON AVE	51	13.4	MAJOR	B	19171	0	1.2	98	1.9	2.05
Ana-131-0060	TILR0007	TILLICUM RD	637	865	McNAUGHTON AVE	North End	228	15.7	MAJOR	B	19171	0.1	0.5	99	1.9	2.74
Ana-132-0010	TRAS0001	TRANSFER ST	0	112	TILLICUM RD	LAMPSON ST	112	6.5	MAJOR	B	11434	1.2	3.3	88	2.7	3.33
Ana-133-0010	TRERE0001	TREEBANK RD E	0	88	Northwest End	DELLWOOD RD	88	7.9	RESIDENTIAL	B	999	4.3	23.8	69	2.8	4.96
Ana-134-0010	TRERW0001	TREEBANK RD W	0	184	ARAL RD	RANKIN RD	184	7.9	RESIDENTIAL	B	999	7.5	37.5	60	3.3	4.63
Ana-134-0020	TRERW0002	TREEBANK RD W	184	266	RANKIN RD	Southeast End	82	8.4	RESIDENTIAL	B	999	6	22.6	72	3.5	4.56
Ana-135-0010	UGAA0001	UGANDA AVE	0	220	SELKIRK AVE	McNAUGHTON AVE	220	8.2	RESIDENTIAL	B	999	1.4	14.9	69	2.9	5.78
Ana-135-0020	UGAA0002	UGANDA AVE	220	266	McNAUGHTON AVE	North End	46	8.8	RESIDENTIAL	B	999	3.6	13.9	65	4.8	
Ana-136-0010		Unnamed_1	0	91	LYALL ST	North End	91	3.2	Laneway	N	99	1	9.1	76	3.5	
Ana-137-0010		Unnamed_2	0	55	West End	INTERVALE AVE	55	3.5	Laneway	N	99	0	12.6	65	5.2	
Ana-137-0020		Unnamed_2	55	239	INTERVALE AVE	LUGRIN PL_1	184	4.2	Laneway	N	99	2.8	18.5	36	8.9	
Ana-137-0030		Unnamed_2	239	347	LUGRIN PL_1	HUTCHINSON AVE	108	4.2	Laneway	N	99	0.5	9.6	39	12.1	
Ana-137-0040		Unnamed_2	347	488	HUTCHINSON AVE	East End	141	4.2	Laneway	N	99	2	16.7	38	12.5	
Ana-138-0010	VIER0001	VIEWFIELD RD	0	345	ALDEBURY RD / FAIRVIEW RD	OLD ESQUIMALT RD	345	9	RESIDENTIAL	B	2082	2.1	26.9	55	4.5	4.89
Ana-139-0010	WARP0001	WARDER PL	0	42	OLD ESQUIMALT RD	North End	42	6.3	RESIDENTIAL	B	999	0	4.3	93	2.8	
Ana-140-0010	WEST0001	WEST BAY TERR	0	99	Southeast End	DUNSMUIR RD	99	6.8	RESIDENTIAL	B	999	0.3	2.3	95	2.4	

Analysis_ID	Township_SectionID	RoadName	From	To	From_Description	To_Description	Length (m)	Width (m)	Class	Curb	AADT (veh/day)	AFCA (%)	ACA (%)	PCI	RUT (mm)	IRI (m/mm)
Ana-141-0010	WOLS0001	WOLLASTON ST	0	247	LAMPSON ST	MACAULAY ST	247	8	RESIDENTIAL	B	999	3.5	21.7	42	7.3	8.44
Ana-141-0020	WOLS0002	WOLLASTON ST	247	593	MACAULAY ST	HEAD ST	346	8.1	RESIDENTIAL	B	999	1.6	15.2	72	4	4.69
Ana-141-0030	WOLS0003	WOLLASTON ST	593	1007	HEAD ST	DUNSMUIR RD	414	8.2	RESIDENTIAL	B	999	1.4	7.5	78	4.1	6.38
Ana-142-0010	WOOS0001	WOOD ST	0	98	STURDEE ST	NELSON ST	98	7.5	RESIDENTIAL	B	999	7.3	24.2	47	4.4	6.54
Ana-143-0010	WOOR0001	WOODWAY RD	0	121	ADMIRALS RD	GRENVILLE AVE	121	7.4	RESIDENTIAL	B	999	1.3	24.1	36	6.7	
Ana-143-0020		WOODWAY RD	166	216	Southwest End	ROCKCREST AVE	50	3.2	Laneway	N	99	0	2.2	61	7.4	
Ana-144-0010	WORS0001	WORDSLEY ST	0	91	LAMPSON ST	East End	91	7.5	RESIDENTIAL	B	999	0.9	7.1	81	3.2	
Ana-145-0010	WURP0001	WURTELE PL	0	385	West End	LAMPSON ST	385	8.3	RESIDENTIAL	B	999	1.5	7.7	73	3.5	2.55
Ana-146-0010	WYCA0001	WYCHBURY AVE	0	92	West End	FRASER ST	92	9.1	RESIDENTIAL	B	999	1	8.3	85	2	3.77
Ana-146-0020	WYCA0002	WYCHBURY AVE	93	421	FRASER ST	KINVER ST	328	8	RESIDENTIAL	B	999	8.1	41.2	61	2.3	3.35
Ana-146-0030	WYCA0003	WYCHBURY AVE	421	582	KINVER ST	LAMPSON ST	161	6.6	RESIDENTIAL	B	999	1	17.6	76	2.8	7.07
Ana-146-0040	WYCA0004	WYCHBURY AVE	582	773	LAMPSON ST	East End	191	8.1	RESIDENTIAL	B	999	3	18.7	54	5.4	8.23
Ana-147-0010	YARP0001	YARROW PL	0	123	CRAIGFLOWER RD	Northeast End	123	8.5	RESIDENTIAL	B	999	0.5	7.7	89	2.2	4.49

APPENDIX C

REHABILITATION PROGRAM

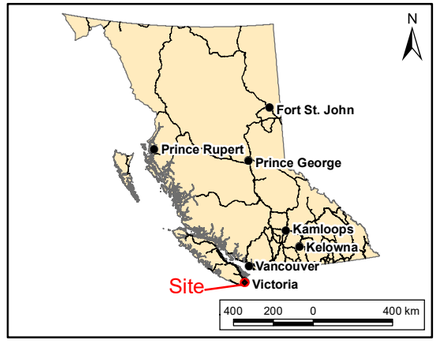
Figure C1 – 10-Year Paving Plan ($650,000 per year)

Rehabilitation Program Spreadsheet

LEGEND

Treatment Year

- 2026-2027
- 2028-2030
- 2031-2035
- Linear Route
- Township of Esquimalt Boundary



NOTES
Base data source:
Township of Esquimalt road centreline data retrieved from Open Data Portal.
Imagery provided by ESRI Basemaps via Maxar, 2022.

STATUS
ISSUED FOR USE

TOWNSHIP OF ESQUIMALT PAVEMENT CONDITION ASSESSMENT

10-Year Paving Plan Based on $650,000 Capital Budget

PROJECTION UTM Zone 10 CSRS	**DATUM** NAD83			**CLIENT** Township of Esquimalt
Scale: 1:15,000 0.25 0.125 0 0.25 Kilometres				TETRA TECH
FILE NO. ASMT03168-01_Esquimalt_10yr_PP_Figure D1.mxd				
OFFICE Tt-VANC	**DWN** AV	**CKD** NN	**APVD** KR	**REV** 0
DATE December 11, 2025	**PROJECT NO.** TRN.ASMT03168-01			**Figure C1**

G:\TRANSPORTATION\ASMT\ASMT03168-01_Esquimalt\GIS\Maps\ASMT03168-01_Esquimalt_10yr_PP_Figure D1.mxd modified 11/2/2025 by akansha.vaish

Analysis_ID	Township_SectionID	RoadName	From	To	From_Description	To_Description	Length (m)	Width (m)	Class	Curb Exist	Traffic Factor	Treatment	Treatment Year	Treatment Cost
Ana-013-0020	BEWA0001	BEWDLEY AVE	83	146	SAXE PL	FRASER ST	63	8.5	COLLECTOR	B	1.98	FDM	2026	$64,260
Ana-042-0100	ESQR0010	ESQUIMALT RD	699	760	GRENVILLE AVE	PARK PL	61	7.6	MAJOR	B	3.26	FDM	2026	$64,904
Ana-042-0180	ESQR0018	ESQUIMALT RD	1881	2343	HEAD ST	DUNSMUIR RD	462	9.7	MAJOR	B	3.85	Mill_50	2026	$517,176
Ana-013-0010	BEWA0001	BEWDLEY AVE	0	83	ADMIRALS RD_1	SAXE PL	83	8.5	COLLECTOR	B	1.98	FDM	2027	$84,660
Ana-029-0040	CRAR0004	CRAIGFLOWER RD	613	722	RANKIN RD	DELLWOOD RD	109	12.9	MAJOR	B	3.7	Mill_50	2027	$162,666
Ana-042-0040	ESQR0003	ESQUIMALT RD	197	245	ST PAULS PL	FOSTER ST	48	13.5	MAJOR	B	2.08	Mill_50	2027	$74,816
Ana-042-0090	ESQR0008	ESQUIMALT RD	597	699	ADMIRALS RD / ADMIRALS RD_1	GRENVILLE AVE	102	12.2	MAJOR	B	3.26	Mill_50	2027	$144,531
Ana-042-0130	ESQR0013	ESQUIMALT RD	1133	1272	FERNHILL RD	JOFFRE ST	139	11	MAJOR	B	3.26	Mill_50	2027	$181,447
Ana-024-0050	COLR0005	COLVILLE RD	1112	1206	CONDOR AVE	TILLICUM RD	94	10.7	COLLECTOR	B	2.23	FDM	2028	$120,696
Ana-024-0090	COLR0009	COLVILLE RD	1659	1753	PHOENIX ST	CARRIE ST	94	8.4	COLLECTOR	B	2.23	FDM	2028	$94,752
Ana-024-0100	COLR0010	COLVILLE RD	1753	1943	CARRIE ST	DOMINION RD	190	8.1	COLLECTOR	B	2.23	FDM	2028	$184,680
Ana-042-0110	ESQR0011	ESQUIMALT RD	760	942	PARK PL	FRASER ST	182	9.5	MAJOR	B	3.26	FDM	2028	$242,060
Ana-042-0190	ESQR0019	ESQUIMALT RD	2343	2395	DUNSMUIR RD	DOMINION RD	52	11.5	MAJOR	B	3.85	Mill_50	2029	$67,012
Ana-044-0010	FERR0002	FERNHILL PL	0	44	West End	FERNHILL RD	44	5.3	RESIDENTIAL	B	1	Mill_50	2029	$20,408
Ana-082-0140	LAMS0015	LAMPSON ST	1381	1662	HEAD ST	DEVONSHIRE RD	281	11.2	MAJOR	B	3	FDM	2029	$440,608
Ana-082-0200	LAMS0022	LAMPSON ST	2013	2083	COLVILLE RD	TRANSFER ST	70	9.5	MAJOR	B	3.6	Mill_50	2029	$76,979
Ana-105-0020	PARD0002	PARKLANDS DR	113	157	McADAM PL	Unnamed_3	44	8.6	RESIDENTIAL	B	1	Mill_50	2029	$39,732
Ana-024-0040	COLR0004	COLVILLE RD	1021	1112	MACLEOD AVE	CONDOR AVE	91	10.7	COLLECTOR	B	2.23	FDM	2030	$116,844
Ana-024-0060	COLR0006	COLVILLE RD	1206	1299	TILLICUM RD	LAMPSON ST	93	8.6	COLLECTOR	B	2.23	FDM	2030	$95,976
Ana-029-0010	CRAR0001	CRAIGFLOWER RD	0	217	Northwest End	YARROW PL	217	13	MAJOR	B	3.7	Mill_50	2030	$324,971
Ana-082-0110	LAMS0011	LAMPSON ST	1062	1127	NORMA CRT	FERNHILL RD	65	10.6	MAJOR	B	2.61	FDM	2030	$96,460
Ana-029-0030	CRAR0003	CRAIGFLOWER RD	387	613	ARAL RD	RANKIN RD	226	9.6	MAJOR	B	3.7	Mill_50	2031	$255,620
Ana-042-0010	ESQR0001	ESQUIMALT RD	0	40	West End	CANTEEN RD	40	13.4	MAJOR	B	2.08	Mill_50	2031	$61,363
Ana-042-0170	ESQR0017	ESQUIMALT RD	1760	1881	CARLTON TERR	HEAD ST	121	15.1	MAJOR	B	3.3	Mill_50	2031	$215,820
Ana-082-0100	LAMS0010	LAMPSON ST	972	1062	WORDSLEY ST	NORMA CRT	90	10.8	MAJOR	B	2.61	Mill_50	2031	$114,520
Ana-029-0050	CRAR0005	CRAIGFLOWER RD	722	885	DELLWOOD RD	GLEN VALE RD	163	9.2	MAJOR	B	3.7	Mill_50	2032	$173,522
Ana-029-0130	CRAR0013	CRAIGFLOWER RD	2308	2388	ARCADIA ST	PHOENIX ST	80	9.5	MAJOR	B	3.61	Mill_50	2032	$85,219
Ana-042-0150	ESQR0015	ESQUIMALT RD	1352	1600	LAMPSON ST	MACAULAY ST	248	13.8	MAJOR	B	3.3	Mill_50	2032	$404,354
Ana-065-0050	HEA0005	HEAD ST	472	565	WOLLASTON ST	ESQUIMALT RD	93	7.9	COLLECTOR	B	2	Mill_50	2032	$72,970
Ana-029-0060	CRAR0006	CRAIGFLOWER RD	885	1027	GLEN VALE RD	GARTHLAND RD	142	11.7	MAJOR	B	3.7	Mill_50	2033	$193,892
Ana-042-0140	ESQR0014	ESQUIMALT RD	1272	1352	JOFFRE ST	LAMPSON ST	80	13.5	MAJOR	B	3.26	Mill_50	2033	$120,761
Ana-042-0160	ESQR0016	ESQUIMALT RD	1600	1760	MACAULAY ST	CARLTON TERR	160	13.6	MAJOR	B	3.3	Mill_50	2033	$258,494
Ana-053-0030	GARR0004	GARTHLAND RD	218	278	RHODA LANE	Northeast End	60	4.6	RESIDENTIAL	B	1	Mill_50	2033	$26,562
Ana-029-0020	CRAR0002	CRAIGFLOWER RD	217	387	YARROW PL	ARAL RD	170	9.1	MAJOR	B	3.7	Mill_50	2034	$178,716
Ana-029-0080	CRAR0008	CRAIGFLOWER RD	1175	1257	SHIRLEY RD	FORSHAW RD	82	10.3	MAJOR	B	3.7	Mill_50	2034	$96,940
Ana-029-0090	CRAR0009	CRAIGFLOWER RD	1257	1326	FORSHAW RD	SIOUX PL	69	9.7	MAJOR	B	3.7	Mill_50	2034	$77,320
Ana-082-0120	LAMS0013	LAMPSON ST	1127	1349	FERNHILL RD	OLD ESQUIMALT RD	222	10.9	MAJOR	B	2.61	FDM	2034	$338,772
Ana-087-0040	LYAS0004	LYALL ST	266	315	Unnamed_1	STURDEE ST	49	10.5	COLLECTOR	B	1.48	Mill_50	2034	$53,556
Ana-001-0050	ADMR0008	ADMIRALS RD	953	1164	COLVILLE RD	ADMIRALS RD_2 / COLES ST	211	13.5	MAJOR	B	3.73	Mill_50	2035	$322,710
Ana-029-0140	CRAR0014	CRAIGFLOWER RD	2388	2485	PHOENIX ST	CARRIE ST	97	12.7	MAJOR	B	3.61	Mill_50	2035	$138,820
Ana-082-0180	LAMS0019	LAMPSON ST	1837	1938	ELLERY ST	ELLERY ST	101	10.9	MAJOR	B	3	Mill_50	2035	$126,712