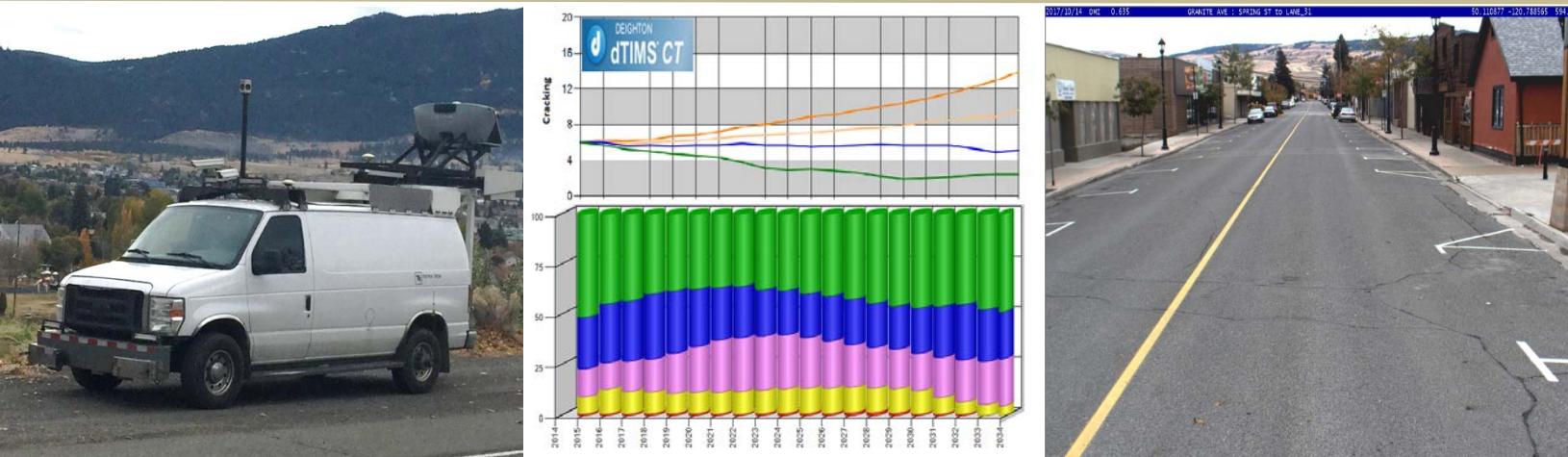




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Road Corridor Assessment



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APPENDIX SECTIONS

APPENDICES

Appendix A	Tetra Tech's Limitations on the Use of this Document
Appendix B	2017 Road Corridor Condition
Appendix C	Rehabilitation Program

ACRONYMS & ABBREVIATIONS

Acronyms/Abbreviations	Definition
ACA	All Cracking Area
AFCL	Narrow Fatigue Cracking Area
AFCW	Wide Fatigue Cracking Area
ART	Arterial Road
ASTM	American Society for Testing and Materials
COL	Collector Road
GIS	Geographic Information System
HDM	Highway Development and Management
IRI	International Roughness Index
IFR	Issued for Review
IFU	Issued for Use
LAN	Paved laneways
LCCA	Life-Cycle Cost Analysis
LCMS	Laser Crack Measurement System
LOC	Local Road
PCI	Pavement Condition Index
PSP	Pavement Surface Profiler
PV	Present Value
RAV	Moderate to High severity Raveling Area
ROW	Right-of-Way
TCA	Thermal Crack Area
TCL	Narrow Thermal and Other Cracking Area
TCW	Wide Thermal and Other Cracking Area
WRL	Low severity Weathering Area
WRH	Moderate to High severity Weathering Area

LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of City of Merritt 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 City of Merritt, 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 the Appendix or Contractual Terms and Conditions executed by both parties.

1.0 INTRODUCTION

1.1 General

The City of Merritt (The City) is in the initial stages of developing its asset management plan. Tetra Tech Canada Inc. (Tetra Tech) was retained by The City to capture and summarize road corridor inspection information for the City's paved and gravel roads. Inspections are used to identify physical layout (dimensionally), operational problems, and roadway and roadside conditions to be used in the City's asset management planning process and the annual road maintenance program.

This report documents the methodology followed to collect and analyze the road corridor data, and reports the existing paved and gravel road, and sidewalks condition, and determines the funding required to maintain the paved road network at current service levels.

2.0 NETWORK DEFINITION AND GIS INTEGRATION

The City has a paved roadway network of 68 centerline kilometres comprising Arterial (ART), Collector (COL), Local roads (LOC) and laneways (LAN) and about 10 kilometres gravel roads. Roughly half of gravel roads are downtown alleyways with the other half outside of the urban area and understood to be access roads to various reservoirs. Provincial highways and Nicola Avenue will not be included in this work scope, as it falls under the jurisdiction of the Ministry of Transportation and Infrastructure.

Correctly referenced data is considered as one of the most important aspect of pavement data management by Tetra Tech. Location referencing is the method whereby the pavement distress, historical, traffic and road attribute data are referenced to the basic road inventory.

Tetra Tech used a standardized method (PolylineM) for linear referencing on the pavement sections in a GIS (Geographic Information System). These special polylines called "Routes", allow data defined by a linear distance from the origin of the line to be linked to the correct location n along the polyline. Tetra Tech developed the routes layer using the City's shapefiles and provided orthographic photography (Figure 1).



Figure 1: Example of Merritt Routes in GIS

Tetra Tech also developed a complete list of roads for data collection as a “Master List” including the necessary location descriptions and lengths so that the collection will be complete and accurate. The process defined a data collection direction for each roadway in the City’s network, as well as set up a unique raw “file name” necessary for processing of distress data. The Master list was also used for field quality control using “TT Surveyor” application. TT Surveyor logs graphically display the status and completion of each segment during the course of data collection (Figure 2).

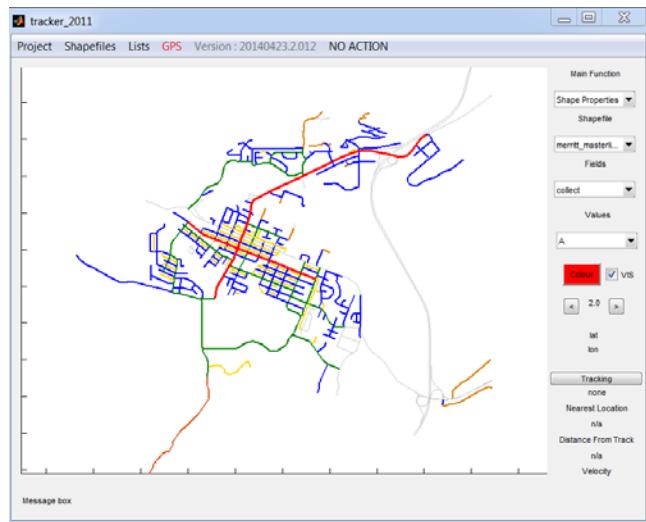


Figure 2: TT Surveyor Application used for Field Quality Control

Moreover, Tetra Tech incorporated other information provided by the City in the GIS including existing sidewalk segments and the City's Snow Removal Priority Routes map (Figure 3).

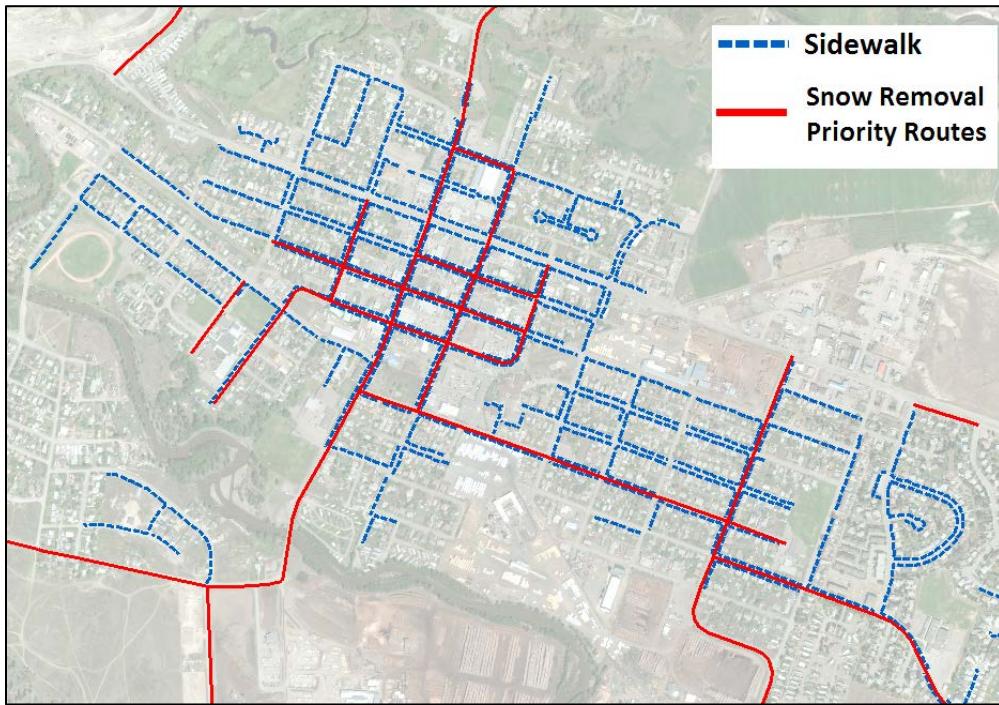


Figure 3: Sidewalk Segments and the City's Snow Removal Priority Routes in GIS

3.0 ROAD CORRIDOR DATA COLLECTION PLATFORM

3.1 Pavement Condition Survey

Tetra Tech collected pavement condition data in October 2017 on 78 centerline-km of the City's paved and gravel road network as shown in Table 1. Georeferenced pavement condition assessments were conducted with the Pavement Surface Profiler (PSP-7000) vehicle. This vehicle was used to collect pavement surface distress, International Roughness Index (IRI), and digital image log for the roadways.

The survey lane included at least one lane in one direction on all roads. On Arterial roads two directions were surveyed in most cases. Table 1 shows survey length of data collected for the road network.



Tetra Tech's PSP-7000

Table 1: Extent of Pavement Data Collection

Road Class	Paved Roads		Gravel Roads
	Centerline-km	Survey Lane-km	
ART - Arterial	6.7	12.8	9.9
COL - Collector	15.3	15.3	
LOC - Local	40.5	40.5	
LAN - Paved Laneway	5.6	5.6	
Network	68.1	74.2	9.9

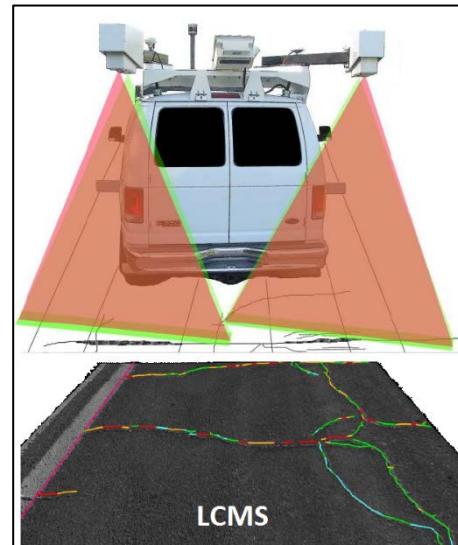
3.1.1 Paved Road Distress Assessment

Tetra Tech performed automated surface condition measurements with a 3D Laser Crack Measurement System (LCMS). The LCMS produces detailed 3D elevation maps of the pavement surface, which are used to automatically detect and classify surface distresses. The system detects and classifies cracks based on pavement surface elevation changes regardless of surface colour. The elevation data is automatically processed to generate severity and extent measures for cracks and other roadway distress types (Figure 4).

Tetra Tech collected network level distress data on all paved roads consistent with ASTM D6433 methodology whereby individual distresses are rated based on severity and extent. Surface distresses were inventoried for the entire width of the surveyed lane (4 m). The data was provided at a maximum interval of 30 m.

For this assignment, the recorded distresses included:

- Alligator cracking and wheel path Longitudinal cracking
- Non- wheel path Longitudinal cracking
- Transverse Cracking
- Weathering
- Rutting
- Potholes
- Ravelling



LCMS Operating Procedure

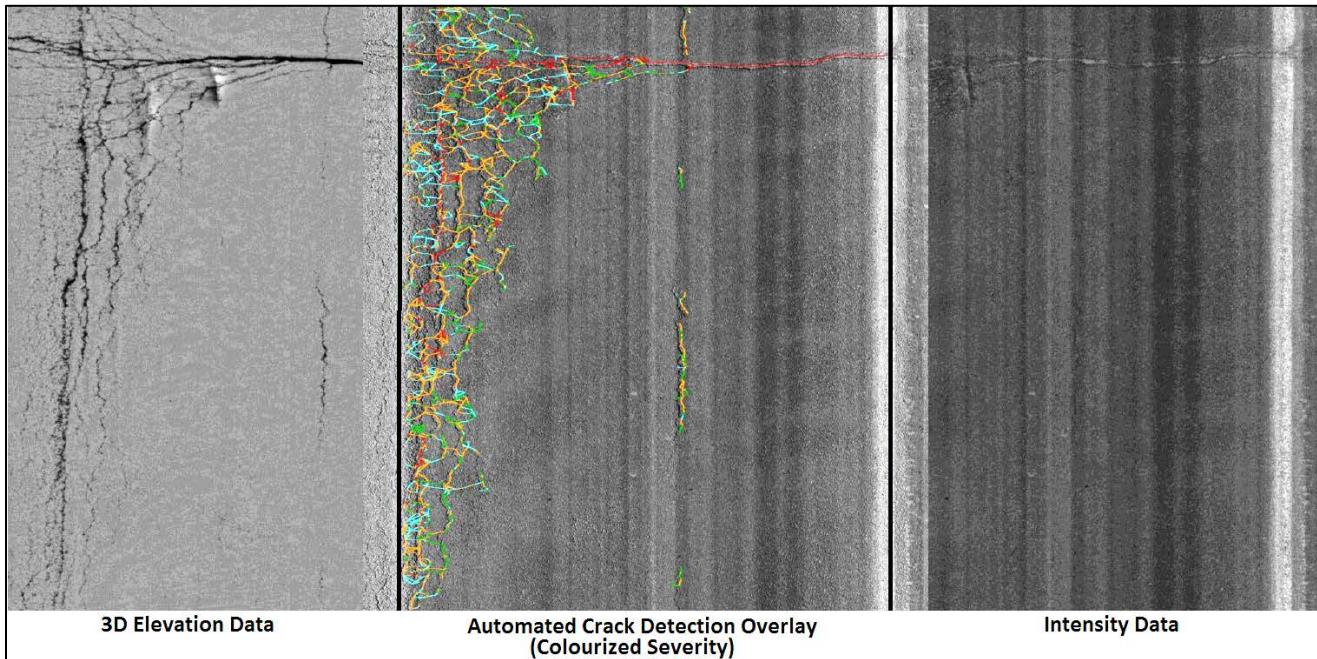


Figure 4: Automated Distress Detection using LCMS

Digital image data was collected for all PSP-7000 surveys using an integrated Digital Imaging System. This system provides a forward looking, right-of-way (ROW) full roadway view (the digital image spans from left side ROW to right side ROW). 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. Figure 5 shows an example of PSP-7000 digital image log.

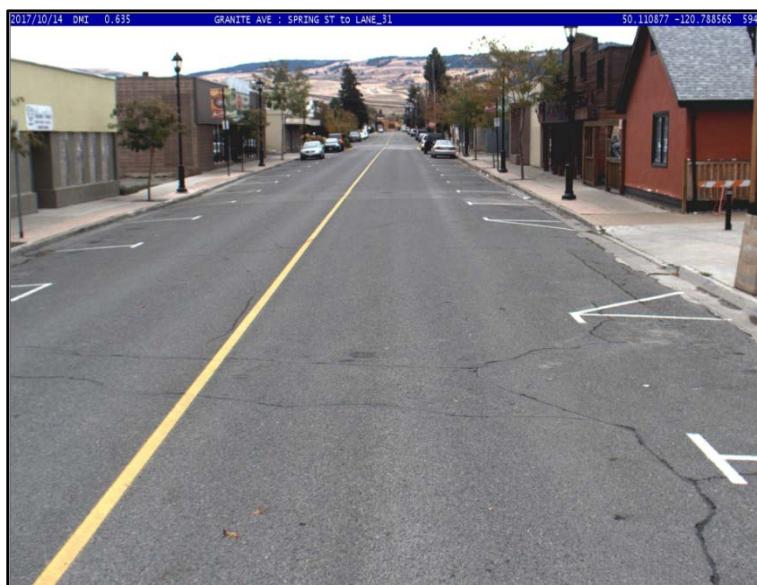


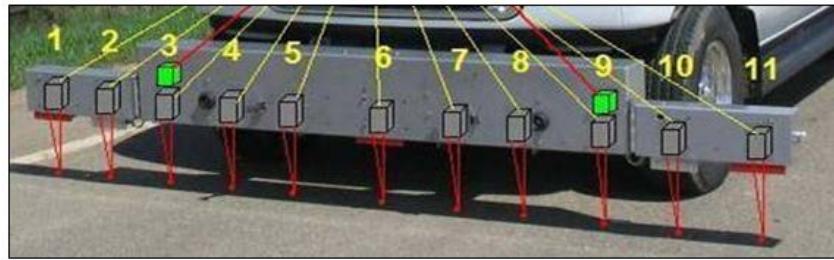
Figure 5: Example of PSP 7000 Digital Image Log

The direct linking of the ROW images into the project GIS is used by Tetra Tech as a data quality assurance tool. It provides users the ability to “virtually drive down the street” while sitting at their desk.

3.1.2 Road Profile Measurements

The PSP-7000 vehicle's longitudinal profile, transverse rut, and IRI capabilities are provided by an inertial profiling system, which is a FHWA Class II profiler and 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 wheel path accelerometers.

Tetra Tech collected the roughness expressed in the International Roughness Index (IRI) using a high precision laser sensor array and two wheelpath accelerometers. Data collection and processing for this project 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*” (October 2001, which Tetra Tech assisted in developing). Exceptions to these guidelines specific to this work include a minimum start-up length reduction to 50 m in recognition of urban roadway environments.



Close-up view of PSP bumper showing laser/accelerometer (green) positions

The roughness data was collected for all segments where the data collection platform is able to record valid roughness data. Survey speeds of 25 km/hr are required for valid IRI measurements. The data was provided at a maximum interval of 30 m.

3.1.3 Unpaved Road Condition Assessment

Tetra Tech conducted pavement condition rating on 9.9 km of the City's gravel road network, mostly containing laneways and access roads. Condition information along gravel roadway networks is transitory in nature with weather and heavy traffic volumes impacting the condition, as does the application of a grader to resolve condition issues. Therefore, Tetra Tech conducted a simple condition rating based on an overall surface condition and drainage.



3.2 Roadside Inventory Data

The presence and type of curb/sidewalk influences the type of improvement that can be made to a roadway. For example, a roadway with curb and gutter on one or both sides will not generally receive a simple overlay. In addition, the cost of improvement and replacement value of the pavement asset is a function of the size of the pavement segment (road width).

Tetra Tech used a methodology incorporating GIS polygons to collect roadside inventory data including road width and curb/sidewalk existence (Figure 6). The area and width of each polygon were calculated automatically by GIS tools. The GIS Orthophotos and ROW images were used to determine the curb/sidewalk existence for each polygon.



Figure 6: Creating GIS polygons to collect roadside inventory data

3.3 Sidewalk Condition Rating

Based on new inventory data, the City has a sidewalk network of about 42 km comprising 88% concrete, 11% asphalt, and 1% brick sidewalk.

The PSP vehicle was equipped with a high resolution second camera (side camera) for capturing sidewalks condition along the right side of the road. Tetra Tech used an in-house sidewalk application, specifically built to the City's requirements as shown in Figure 7. Within the application, the image of sidewalk was rated by a single trained personnel in-office environment to maintain a uniform quality of rated condition data. The following sidewalk distresses were rated based on their severity for each individual image:

- Cracking
- Faulting
- Obstruction
- Ponding
- Raveling
- Settlement
- Spalling
- Utility Cuts

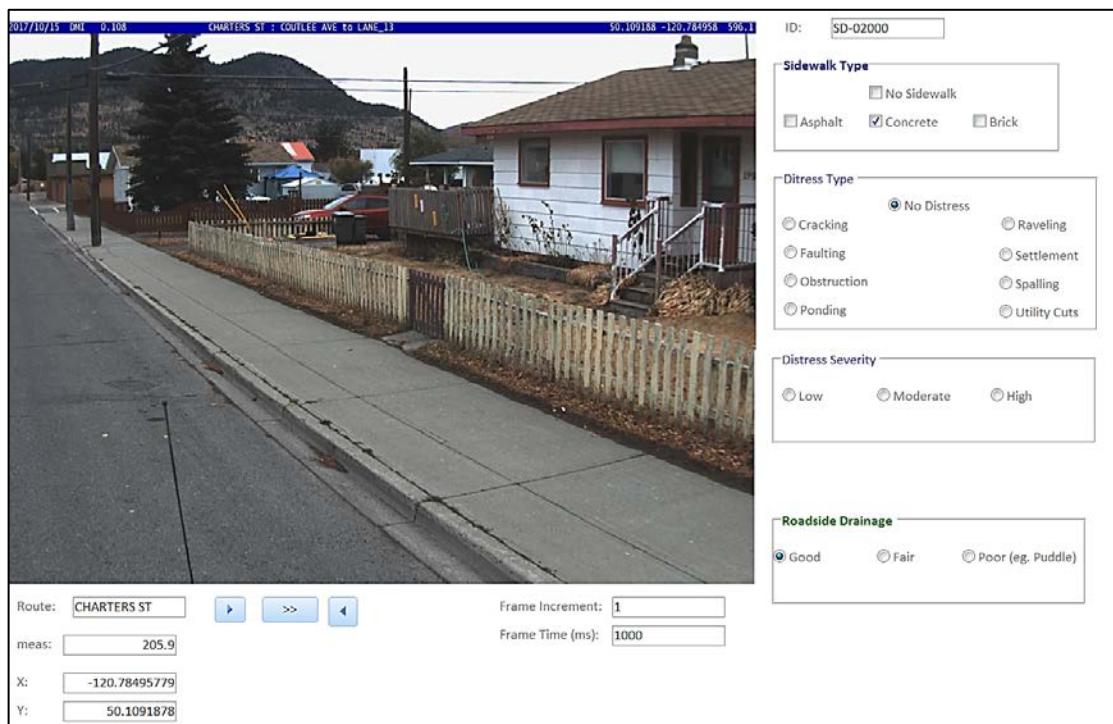


Figure 7: Tetra Tech Sidewalk Condition Assessment Application

Roadside drainage conditions considering the overall condition and existence of ponding or puddles, was also recorded.

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. Selecting an appropriate pavement condition index depends upon the purpose that the index is intended to achieve. The following indices were used in this project:

- Pavement Condition Index (PCI) to report the overall pavement condition in the network level.
- Individual pavement surface distress indices – Used to select treatments; and
- Roughness Index– Used to identify riding comfort and vehicle control issues.

4.1 Pavement Condition Index (PCI)

The PCI is a standard index commonly used in North America. It is therefore useful for comparing the overall condition of one agency's network to other agencies. It expresses the condition of the pavement surface as a function of the severity and extent of the visible surface distresses. The PCI is a numerical rating that ranges from 100 to 0 with 100 as the best possible condition and 0 as the worst possible condition. The PCI is determined using the methodology documented in the American Society for Testing and Materials standard ASTM-D6433.

4.2 Individual Pavement Surface Distress 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 (Paterson, 1987).

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 wheel path 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-wheel path 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

The Cracking Indices are usually easily understood by the public and City council because it represents what they see on the road irrespective of the cause of the cracking. The fatigue cracking is often caused by traffic loading and indicates where pavements may need strengthening or deeper patching repairs. Thermal and most other cracks are less of a concern, however, when unsealed they do allow moisture to enter the road bed and ultimately lead to loss of strength.

Raveling is the dislodging of coarse aggregate particles. Raveling may be caused by insufficient asphalt binder, poor mixture quality, insufficient compaction, segregation, or stripping. Weathering area is the wearing away of the asphalt binder and fine aggregate matrix primarily through oxidization of the bitumen due to age and environment. Since 2009, ASTM has treated these two distresses separately because the mechanism causing these distresses is different. They have, therefore, been recorded separately in this report:

- WRL (%): Low severity Weathering Area;
- WRH (%): Moderate to High severity Weathering Area; and
- RVA (%): Moderate to High severity Raveling Area.

Pavement surface ruts (RUT) can pose safety concerns where they can affect the handling characteristics of a vehicle at higher speeds and can affect the ability to clear snow and ice in the winter. The rut depth is measured in millimetres and the average of the inner and outer wheel path rut depths has been used for the condition report and pavement performance modelling.

4.3 Pavement Roughness

Pavement roughness is a measure of the irregularities in the surface of a pavement that adversely affect the ride quality from a vehicle or user standpoint. The roughness is attributed to deviations of the surface from a true planar surface with characteristic dimensions that affect vehicle dynamics, ride quality, dynamic loads and drainage, expressed as the International Roughness Index (IRI). The IRI is calculated from a measured longitudinal profile as the vertical suspension motion divided by distance travelled of a quarter-car model. It is reported in millimetres per meter or equivalently meters per kilometer. Since its introduction in 1986, IRI has become the road roughness index most commonly used worldwide for evaluating and managing higher speed road systems. Vehicle operating costs including fuel consumption, tire wear, and depreciation rise with increasing roughness and have been correlated to IRI.

5.0 ROAD CORRIDOR CURRENT CONDITION

The road condition indices of unit samples and roadside inventory data were transformed and consolidated into analysis segments using dynamic data transfer. The analysis segments are generally block-to-block segments that form the basis for current condition report and maintenance and rehabilitation projects.

5.1 2017 Paved Road Condition

As described in Section 4, the pavement condition indices including PCI, pavement percent cracking indices, and IRI are used to report pavement condition status. The current status is based on the average values within each pavement management segment and weighted by centreline length. Detailed tabular data of 2017 pavement condition indices is provided in Appendix B.

Table 2 provides a breakdown of the average PCI, pavement percent cracking (ACA) and RUT and IRI in 2017 for each roadway classification. Arterial had highest percent cracking (13.4%) and a low PCI of 58 on average, whereas collector roads had better surface condition compared with the other road classifications in 2017.

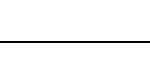
Table 2: Average 2017 Pavement Condition Indices for Road Classes

Road Class	PCI	ACA (%)	RUT(mm)	IRI (mm/m)
ART	58	13.4	7.8	3.30
COL	73	8.7	4.1	3.19
LOC	70	10.7	3.3	3.57
LAN	56	9.8	-*	
Network	68	10.5	4.2	3.41

*The IRI/RUT data are generally not useful on paved laneways where operating speeds are low. In addition, these data elements were valid only for 1.2 km of paved laneway; therefore, they were excluded from the network condition reporting.

Pavement condition represented by PCI and IRI can be classified into five categories as good, satisfactory, fair, poor or very poor. Table 3 provides the range of values used for each condition description.

Table 3: Index Ranges for Condition Description

Rating	PCI ¹ (%)	IRI (mm/m) ²		Colour Code
		ART/ COL	LOC/LAN	
Good	85-100	< 2.28	< 2.86	
Satisfactory	70 - 85	2.28– 3.59	2.86 – 4.49	
Fair	55 - 70	3.59 -4.54	4.49 -5.69	
Poor	40 - 55	4.54 – 6.25	5.69 – 8.08	
Very Poor	0 - 40	> 6.25	> 8.08	

1. The PCI is based on ASTM D6433
 2. The IRI condition range is based on (Yu, Chou, & Yau, 2006)

Drivers' perception of roadway roughness varies depending on travel speed with smoother roads (lower IRI) desired for higher speeds. To simplify the ranges of travel speeds in the City, two classifications have been selected with the IRI categories in Table 3 based on 50 km/h for Arterial /Collector and 40 km/h for Local/lane roads.

The distribution of PCI values for the network and for each roadway classification are shown on Figure 8. The road segments in poor to very poor condition that have not yet been rehabilitated, are defined as “backlog roads”. The figure indicates The City currently has 21% of its pavements in backlog (poor or very poor condition) based on PCI Index. A GIS map displaying the 2017 PCI is presented in Appendix B.

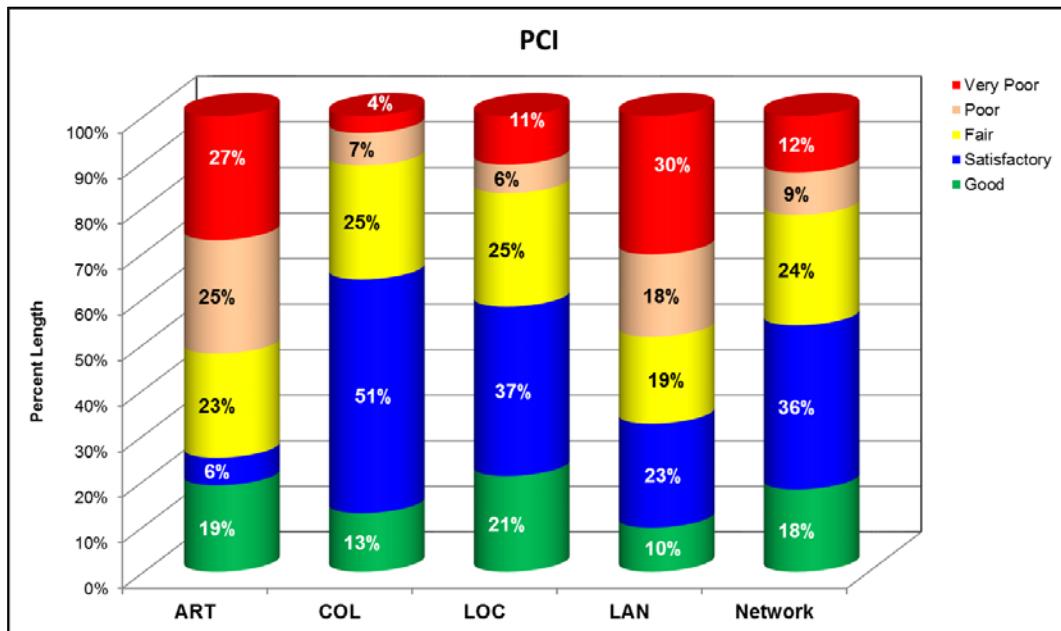


Figure 8: 2017 Pavement Condition Distribution in Terms of PCI

The distribution of IRI values for the network and for each roadway classification is shown on Figure 9. The figure indicates that 15% of the network overall, based on IRI, was in poor or very poor condition in 2017.

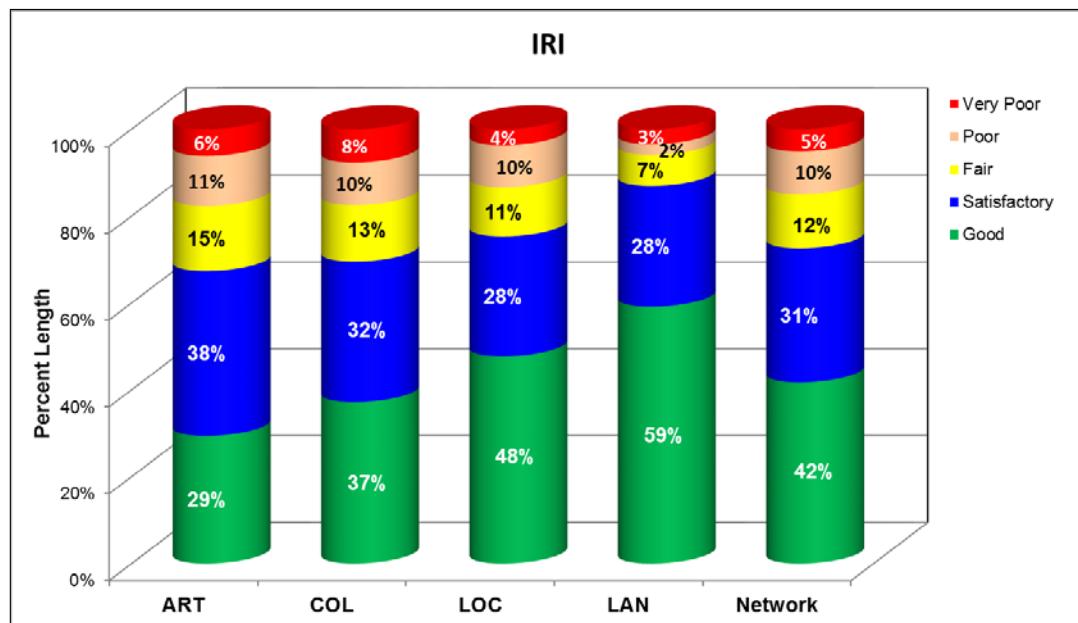


Figure 9: 2017 Pavement Condition Distribution in Terms of IRI

5.2 Gravel Road Condition

As discussed in Section 3.1.3, the gravel roads condition were assessed based an overall surface status and drainage condition. Table 4 describes gravel condition rating based on these parameters.

Table 4: Gravel Condition Rating

Parameter	Condition	Description
Overall Surface Condition	Good	Can comfortably maintain posted speeds, little excessive vehicle vibrations (for example from corrugation).
	Fair	Vehicle vibrations are significant and some reduction in speed is required for safety and comfort. Individual bumps, potholes or settlements cause the vehicle to bounce considerably creating some discomfort.
	Poor	Vehicle vibrations so excessive that speed must be reduced for safety and comfort.
Drainage	Good	No standing water on the road surface, positive surface cross fall with no evidence of rivulets on side slopes, ditches appear to be clear of obstructions.
	Fair	Some evidence of standing water or ponding on road surface. Small rivulets on surface or side slopes some obstruction of ditches.
	Poor	Standing water or clear evidence of standing water and or washouts on side slopes. No ditch exists or the ditch is blocked.

Figure 10 shows that 70% gravel road had a good condition overall in 2017. The figure also indicates that 12% of gravel roads had fair to poor drainage conditions requiring maintenance.

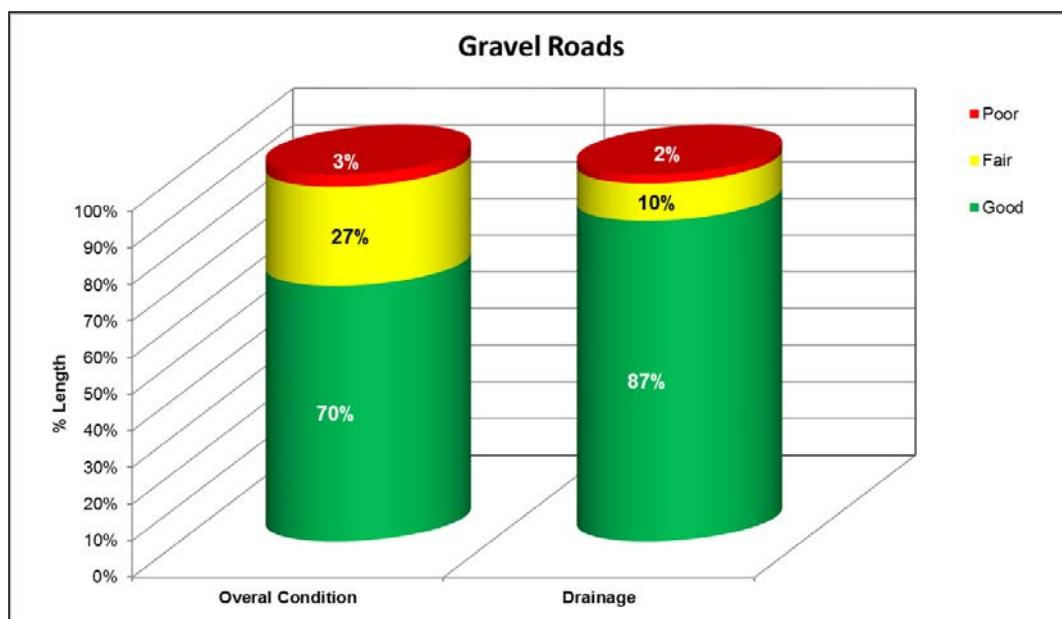


Figure 10: 2017 Gravel Road Condition

A dataset including overall surface condition and drainage condition of Gravel roads is provided in the GIS deliverables.

5.3 Sidewalk Condition

Sidewalk condition can be expressed in terms of three descriptive levels, as defined in Table 5.

Table 5: Sidewalk Condition Rating

Overall Condition	Description
Good	No Defects recorded
Fair	Low Severity Defects
Poor	Moderate to High Severity Defects

Figure 11 shows the distribution of sidewalk current condition for each sidewalk type and all sidewalk network. In general, it was found that 5% of the City's sidewalks was in poor condition in 2017. A dataset including sidewalk condition data is provided in the GIS deliverables.

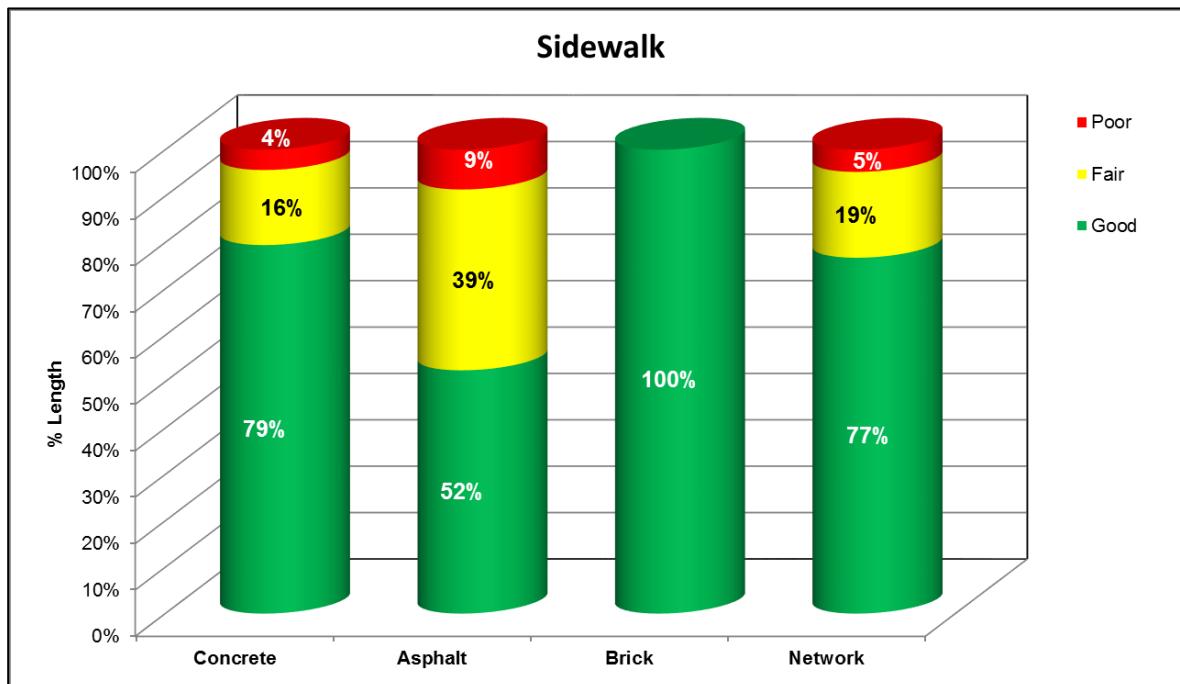


Figure 11: 2017 Sidewalk Surface Condition

6.0 ANALYSIS METHODOLOGY

6.1 Pavement Performance Modelling

Tetra Tech used the World Bank's Highway Development and Management (HDM) modelling framework that have been developed and updated by a worldwide team of experts over the past 20 years. These models are able to predict the propagation of individual distresses such as cracking, rutting, and roughness. Figure 12 illustrates the progression of these models from required inputs through to predicted condition.

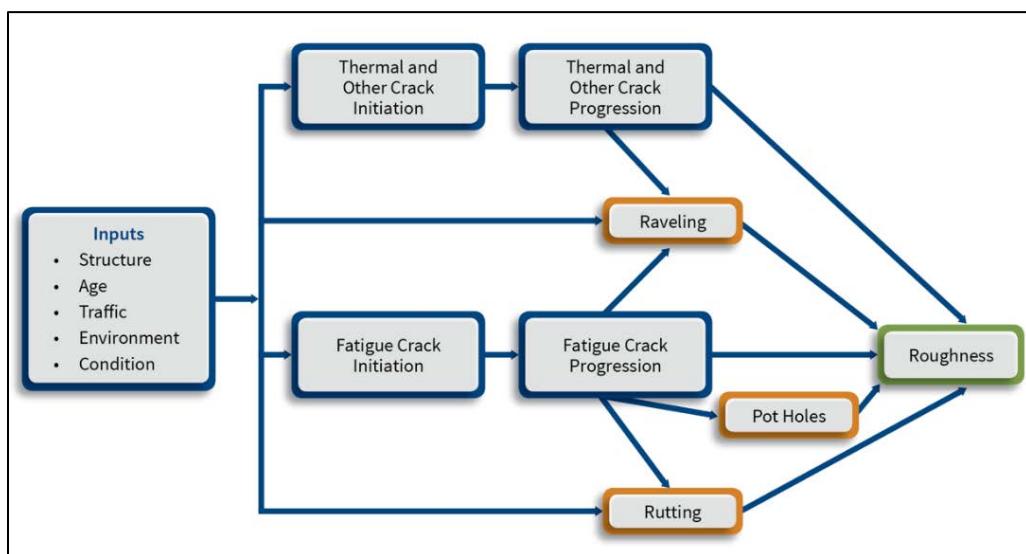


Figure 12: Predicting Pavement Performance

This enables systems using these models to select appropriate treatments, and to accurately assess current condition and value.

6.2 Rehabilitation and Maintenance Strategies

A number of maintenance and rehabilitation treatments were established, based on input from some projects in British Columbia. The treatments and their unit costs are shown in Table 6. Typically crack sealing, and surface patching are considered maintenance treatments, while the other treatments are considered rehabilitation treatments.

Table 6: Treatments and Unit Costs used in the Analysis

Type	Treatment	Unit Cost
Preventive Maintenance	Crack Sealing	\$2/L-m
Reactive Maintenance	Shallow Patch	\$15/m ²
Resurfacing	Overlay (50 mm)	\$25/m ² + (Crack Area Patching Cost *)
	Mill & Inlay (50 mm)	\$30/m ² +(Crack Area Patching Cost *)
Major Rehabilitation	Reclamation	\$50/m ²
	Reconstruction	Local/Laneway \$50/m ² ART/COL \$70/m

▪ * Crack Area Patching Cost = \$30/m²* AFCL + \$70/m²* AFCW, where:
 ▪ AFCL= Narrow fatigue crack (%); AFCW= Wide fatigue cracking (%);

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, thick overlays cannot be directly applied to sections 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” are developed so that only feasible strategies are explored. The triggers (shown in Table 7) limit the number of strategies to those that can feasibly be applied.

Table 7: Maintenance and Rehabilitation Triggers

Type	Curb /Sidewalk Existence	Trigger Criteria	Variable
Crack Sealing	-	AFCL >1% Or TCL > 1%	
Shallow Patch	-	AFCW >1% Or TCW > 1%	
Overlay (50 mm)	No	(8% ≤ AFCA < 25 % Or RVA > 10%) Or Only for ART/COL: RUT>9 mm Or ACA>30%	AFCL: Narrow fatigue crack (%) AFCW: Wide fatigue cracking (%) AFCA: All fatigue cracking (%) TCL: Narrow thermal cracking (%) TCW: Wide thermal cracking (%) ACA: All Cracking Area (%) RVA: Raveling (%) RUT: Average rutting depth
Mill &Inlay (50 mm)	Yes		
Reclamation	No	AFCA ≥ 25%	
Reconstruction	Yes		

6.2.2 Treatment Resets

With the selection and application of any given treatment, the performance of a road will improve. For example with 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 have to adjust the individual 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 of the analysis variables.

6.3 Life Cycle Cost Analysis

The objective of pavement management is to provide and preserve pavements as economically as possible (lowest life cycle cost) by generating alternative pavement preservation strategies. There are usually several alternative strategies for preserving a given pavement segment. Each alternative strategy includes one or more treatment options. Each alternative strategy is also associated with different routine maintenance and operating costs. Figure 13 illustrates three example strategies:

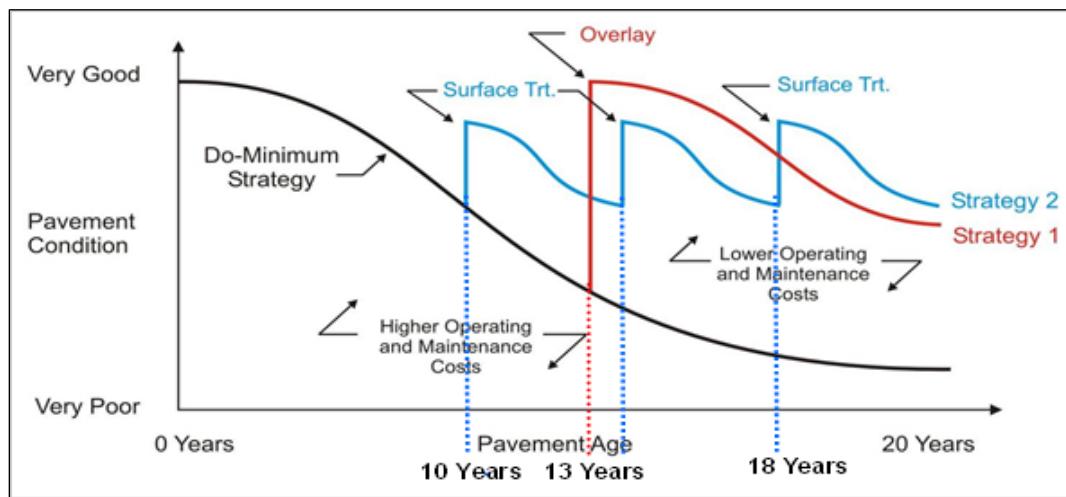


Figure 13: Life Cycle Cost Analysis Example

- The Do-Minimum strategy (base case strategy).
- Strategy 1 – Comprises a single overlay.
- Strategy 2 – Comprises three thin surface treatments.

The do-minimum strategy will result in no capital/ rehabilitation costs but extremely high reactive maintenance and operating costs. It will also have associated with it a large rehabilitation “debt”. Strategy 1 will have a higher initial treatment cost than Strategy 2; however, Strategy 2 involves three lower cost treatments spread over a period of several years. For a given road, it is not immediately obvious which strategy or even which year of strategy initiation results in the lowest possible operating and maintenance cost. Indeed, for a network it is generally not possible to pick the best option for each road segment as that may exceed the available funding in one or more years.

In this study, several initial rehabilitation treatments, overlay, mill/inlay, full depth surface replacement, reconstruction and road reclamation are considered. However, the timing of the initiation of a rehabilitation treatment is also variable. There is a window of opportunity to apply an overlay that spans several years. The amount of cracking and pavement failure that must be deep patched prior to application of the overlay increases in each year so the overall cost of the overlay increases each year. The analysis is further complicated by the fact that subsequent treatments can also be applied over a span of several years. In fact, for a given road segment there are potentially hundreds of feasible strategies, each with its own stream of predicted pavement conditions, (as defined by the models and the resets), its own stream of rehabilitation and maintenance costs and its own

stream of benefits. Without a definition of "Cost and Benefit" it is not immediately obvious which strategy or even which year of strategy initiation results in the most cost effective strategy.

The overall cost of rehabilitation treatments, routine maintenance and operating costs required to preserve the pavement under a given strategy scenario is called the Life Cycle Cost (LCC) of the strategy. In general, the LCC of a pavement is defined as the total cost over the analysis period expressed in terms of today's cost i.e. Present Value (PV). The total costs include four parameters:

$$LCC_{pv} = CC + (R+M)C_{pv} - SC_{pv}$$

Where:

LCC_{pv}	Present Value of all Life Cycle Costs
CC	Initial construction costs of the pavement structure
$(R+M)C_{pv}$	Present value of the sum of all rehabilitation and maintenance costs over the analysis period
SC_{pv}	Present value of the residual pavement structure components at the end of the analysis period (also called salvage value)

Note however, when preservation planning, the original pavement structure already exists. Therefore, the initial construction cost term, CC, does not apply. The residual value of the pavement surface also does not apply in PV cost, when an area under curve performance is considered to define benefit as explained below and Benefit/cost ratio is a criteria to compare the strategies.

6.3.1 Method to Measure Benefit

One method to derive the benefit is to multiply the area under the pavement performance curve and the length of the pavement section. The Area under the Curve was calculated by summing the present value of the difference between the condition index (such as AFCA) 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 14 shows an example of calculating the benefit based on AFCA Index, for an overlay strategy during the analysis period.

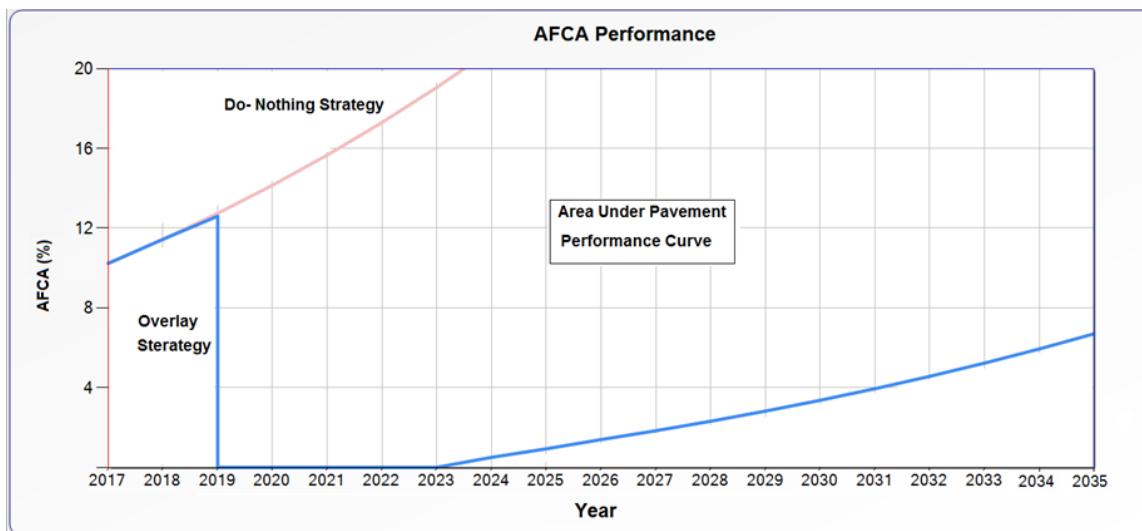


Figure 14: Example of calculating the benefit for an Overlay Strategy

Up to this step, all things being equal, a Local road with the same amount of distress would rank equally with a collector or arterial road. The ART/COL would have more traffic and would be a clear priority since there are insufficient funds to address all roads in the network at once. Moreover, the “snow removal priority routes” have high priority for the City (refer to Figure 3). Therefore, a user priority factor was also considered based on road classification and snow policy, as described in Table 8.

To sum up, the benefit was defined combining both condition and traffic, as shown in the following formula:

$$\text{Benefit} = \text{Present Value of Area under Pavement Performance Curve} \times \text{User Priority Factor}$$

Table 8: Traffic Weight Rating for each Roadway Classification

Road Class	User Priority Factor
ART and Snow Removal Priority Routes	5
COL	3
LOC	1
LAN	0.5

6.4 Budget Scenarios for Paved Road Network

It is understood that the City has an annual funding budget of \$500,000 to maintain and rehabilitate paved roads. In order to assist the City with its decision making process, four funding levels were used as budget constraint for the City’s road network. The budget levels used are given in Table 9.

The average annual funding includes rehabilitation (capital budget) and routine maintenance activities (operational budget).

Table 9: Budget Scenarios used in the 2017 Analysis

Budget Scenario	Average Annual Funding Average Over 20-Years
1 (current funding)	\$500,000
2	\$700,000
3	\$850,000
4 (staged Budget)	\$500,000 for first five years increasing to \$1M in 2023

7.0 ANALYSIS RESULTS

This section describes the analysis results for paved road network only and the maintenance plans for gravel roads and sidewalk were not included in the work scope.

7.1 Unconstrained Budget Analysis

An unconstrained budget is sometimes called a needs-based budget which represents the funding stream for the theoretical scenario where funding could be provided for each road segment in the first year that a rehabilitation

trigger is reached. An unconstrained budget scenario was analyzed to identify the rehabilitation needs and earliest intervention timing over the next 20 years. Figure 15 summarizes the rehabilitation costs based on unconstrained budget scenario. Under this scenario, the City would require \$2.9 million in the first year to repair the paved road network. Ideally, the City would require \$19 million in 20-year period (or \$950,000 per year) for pavement maintenance and rehabilitation.

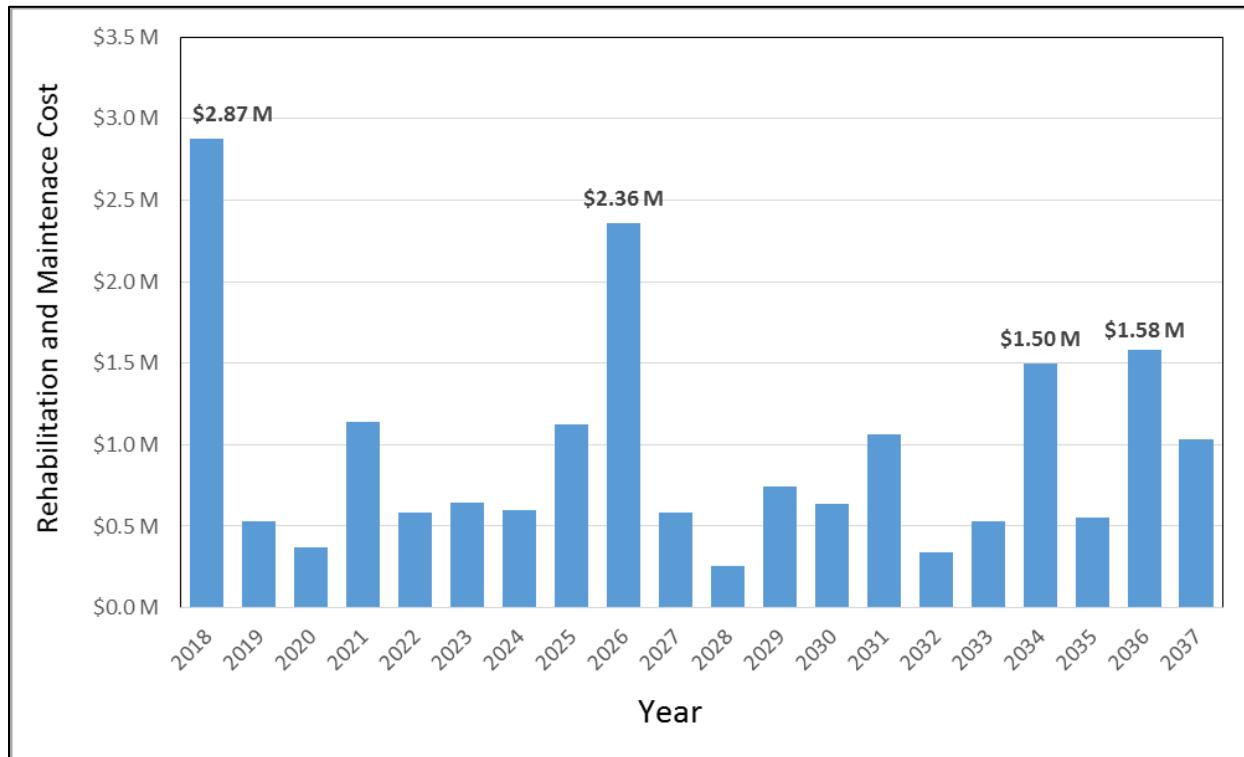


Figure 15: Rehabilitation Needs based on Unconstrained Budget Scenario

7.2 Constrained Budget Analysis

As discussed in Section 5.1, a road is said to be in backlog where there was not enough money to construct the most cost-effective rehabilitation. To evaluate the consequence of various budget scenarios, the backlog cost is used.

The effect of various funding levels in terms of backlog cost is also shown in Figure 16. The figure shows that the backlog cost would be increased from \$2.5 M in 2017 to \$13.5 M in 2036, with the City's current budget (\$500,000). To keep backlog cost around \$2.5M, a minimum funding level of \$850,000 per year is required. Figure 16 also indicates that the City would be able to maintain backlog cost in the long-term with a staged budget scenario, starting with the City's current budget until 2022, but increasing the budget to \$1 million for the remainder of analysis period.

Figure 17 shows the average cracking index (ACA) value of the road network for different budget scenarios over a 20-year period. At the current budget of \$500,000 per year, the average condition continues to deteriorate while at budgets of \$850,000 per year, the average condition stabilizes in the long-term.

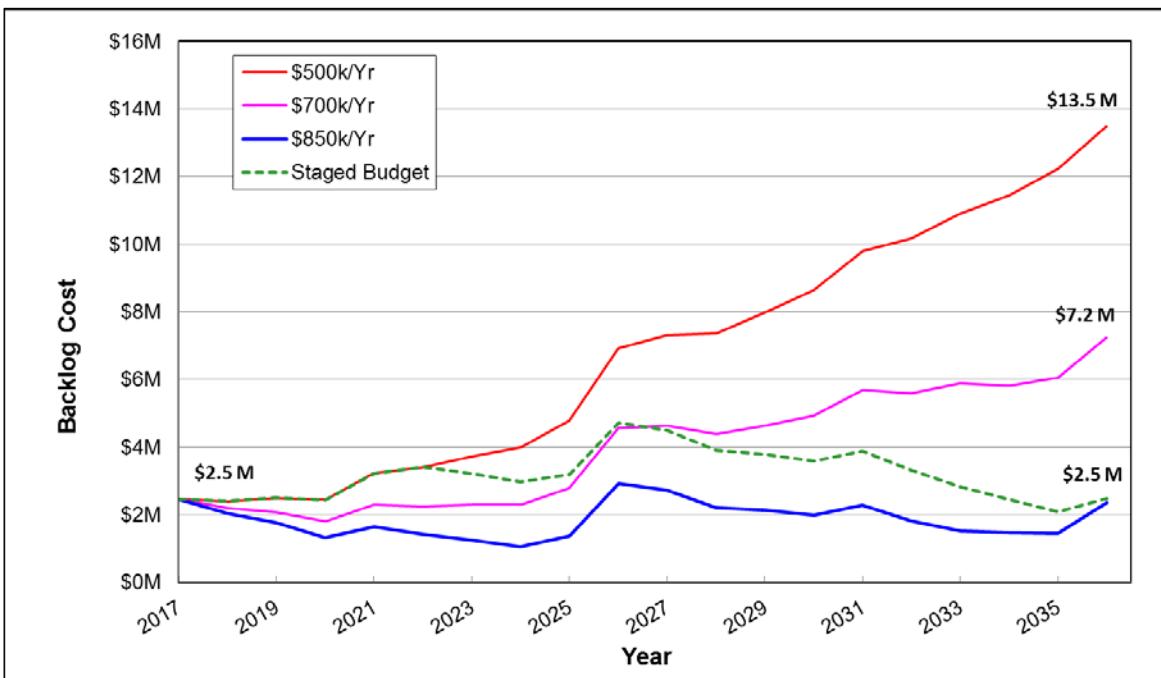


Figure 16: Future Backlog Projection based on Various Budget Scenarios

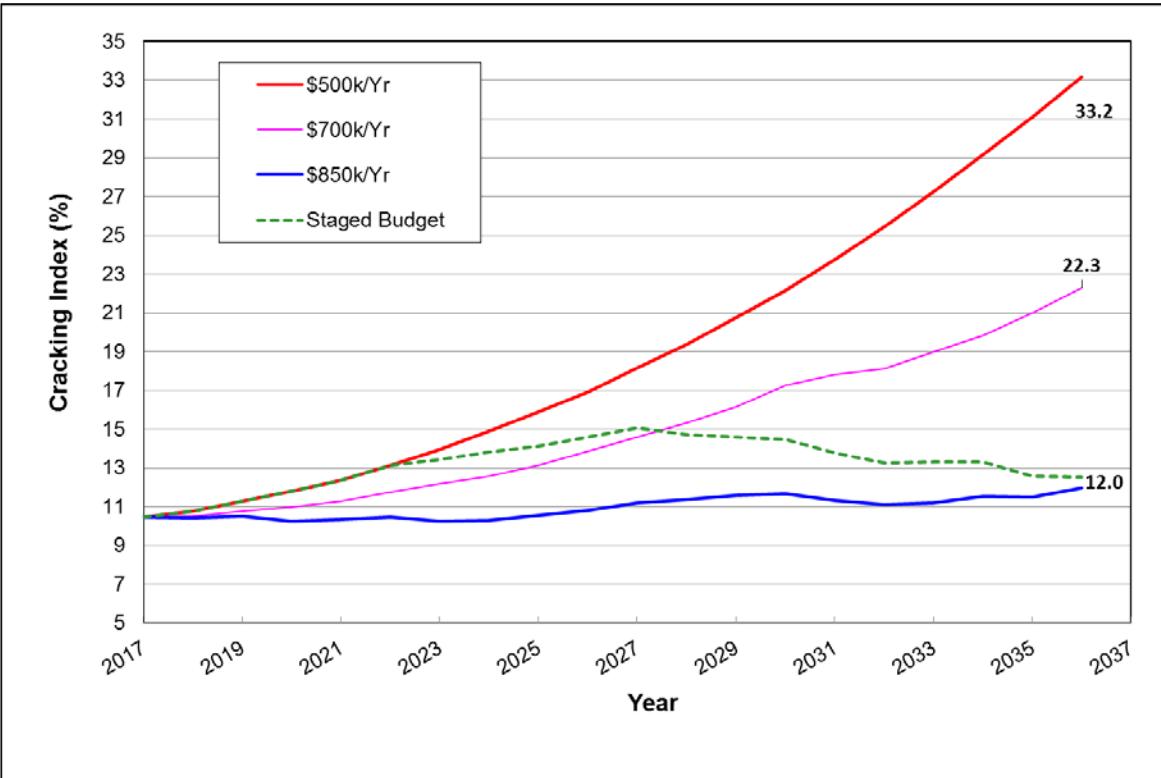


Figure 17: Predicted Cracking Index (ACA) for different Budget Scenarios

7.3 Five and Ten-Year Rehabilitation Program

A Five and ten-year paving plan based upon the staged budget (\$500,000 annual budget until 2022 and increase to \$1 million from 2023 onwards) for the paved roads network are provided in Appendix C. This program includes only the rehabilitation treatments (not routine maintenance) chosen by the analysis. The rehabilitation program suggested should be confirmed by completing project level assessments and designs.

8.0 CONCLUSIONS

Life-cycle cost analysis was conducted for each paved road segment. The purpose was to forecast the overall condition of the network with alternative budget scenarios, determine the long-term funding required to sustain the pavement network and backlog cost, and to develop a rehabilitation program.

The Scenarios investigated were annual budget of \$500,000 (City's current budget), \$700,000, \$850,000, and staged budget (\$500k for five years and \$1M per year after 2023) for the road network maintenance and rehabilitation. Total Budget of \$850,000 per year and staged budget were found to be necessary to keep condition and backlog cost of the road network over the next twenty years.

The pavement rehabilitation plan is developed at a network-level. At the time of implementation, project-level assessments and designs should be completed.

The City should consider updating the plan with new data in four to six years. This will provide an opportunity to update deterioration model calibration, include new or rehabilitated pavements in the plan. This timeframe is consistent with 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,
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APPENDIX A

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LIMITATIONS ON USE OF THIS DOCUMENT

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APPENDIX B

2017 ROAD CORRIDOR CONDITION

2017 Pavement Condition Indices Spreadsheet

GIS Map: 2017 Pavement Condition Index (PCI)

Road_ID	RoadName	From	To	StreetFrom	StreetTo	Length (m)	Class	AFCA (%)	TCA (%)	ACA (%)	RVA (%)	WRH (%)	WRL (%)	RUT (mm)	PCI	IRI (mm/m)
Ana-001-010	1ST AVE	0	101	CLEASBY ST	LANGLEY ST	101	LOC	0	4.9	4.9	0	10.1	76.7	1.4	87.1	2.07
Ana-001-020	1ST AVE	101	163	LANGLEY ST	CHAPMAN ST	62	LOC	0.4	9.1	9.5	2	68.5	15.3	1.5	69.4	3.21
Ana-001-030	1ST AVE	163	370	CHAPMAN ST	VOGHT ST	207	LOC	0.4	1.7	2.1	0	0	0	1.7	95.5	3.1
Ana-002-010	2ND AVE	0	121	West End	VOGHT ST	121	LOC	0	2.1	2.1	0	0	0	2.3	95.7	2.34
Ana-002-020	2ND AVE	121	189	VOGHT ST	Southeast End	68	LOC	0.4	6	6.4	2.5	7.1	5.8	5.5	70.7	2.5
Ana-003-010	AIRPORT DR	0	133	HIGHWAY 5A	CRAWFORD AVE	133	LOC	0.2	0.9	1.1	0	0	17.9	3.5	80.8	2.66
Ana-003-020	AIRPORT DR	133	1988	CRAWFORD AVE	Northeast End	1855	LOC	1	2.7	3.7	0	0	2.6	3.1	83.7	2.74
Ana-005-010	ARMSTRONG PL	0	121	ARMSTRONG ST	Northeast End	121	LOC	0.8	5.5	6.3	0.8	0	0	2.4	82.7	4.09
Ana-006-010	ARMSTRONG ST	0	549	RANSOM AVE	ARMSTRONG PL	549	LOC	13.8	24.5	38.3	2.3	4.3	67.7	5.7	25.3	5.76
Ana-006-020	ARMSTRONG ST	549	673	ARMSTRONG PL	BANN ST	124	LOC	7.5	21	28.5	4.4	14.8	16.1	5.4	32.8	4.54
Ana-007-010	ASPEN ST	0	90	South End	BIRCH AVE	90	LOC	1.1	2	3.1	0	43.3	42.6	1.4	80.4	3.79
Ana-007-020	ASPEN ST	90	227	BIRCH AVE	North End	137	LOC	0.2	0.7	0.9	0.5	63.7	22.3	2.3	75	4.63
Ana-008-010	BANN ST	0	211	CLAPPERTON AVE / SUNNYVIEW ST / THORPE RD	SCOTT PL	211	LOC	5.5	9	14.5	0.4	0	15.2	3.6	68.6	3.07
Ana-008-020	BANN ST	211	304	SCOTT PL	ARMSTRONG ST	93	LOC	1.3	8.8	10.1	0.5	15.6	52.1	4.4	69.3	6.11
Ana-008-030	BANN ST	304	537	ARMSTRONG ST	North End	233	LOC	0.5	3.4	3.9	0	0.3	61.3	1.9	88.2	3.34
Ana-009-010	BELSHAW ST	0	237	RIVER RANCH RD / VOGHT ST	GRANDVIEW HT	237	LOC	0.1	1.4	1.5	1.1	55.4	14.3	3.7	78.1	3.84
Ana-009-020	BELSHAW ST	237	294	GRANDVIEW HT	West End	57	LOC	3.4	10.3	13.7	0	15.7	25.3	3	63.7	2.5
Ana-009-030	BELSHAW ST	295	619	Northeast End	North End	324	LOC	2.3	8.1	10.4	0.7	0	2.7	2.6	73.8	1.99
Ana-010-010	BIRCH AVE	0	373	HILL ST	ASPEN ST	373	LOC	0.4	1.4	1.8	1.6	80.9	5.4	3.3	71.8	3.15
Ana-011-010	BLACKWELL AVE	0	195	VOGHT ST	CHARTERS ST	195	LOC	1.5	1.9	3.4	0.1	0	0	2.5	85	2.21
Ana-012-010	BLAIR ST	0	98	CLAPPERTON AVE	COLDWATER AVE	98	LOC	9.9	16.6	26.5	1.9	0	19	6.7	27.1	10.1
Ana-012-020	BLAIR ST	98	195	COLDWATER AVE	JACKSON AVE	97	LOC	10.3	22.4	32.7	1.5	0	34.5	5.1	37.7	5.56
Ana-012-030	BLAIR ST	195	248	JACKSON AVE	LANE_32 / LANE_36	53	LOC	1.4	7.3	8.7	1.4	0	7.5	4.1	72.3	3.57
Ana-012-040	BLAIR ST	248	345	LANE_32 / LANE_36	LANE_34	97	LOC	9	13.8	22.8	1	0	31.7	6.3	42.5	3.48
Ana-012-050	BLAIR ST	345	439	LANE_34	LANE_15	94	LOC	4	9.9	13.9	0.5	0	31.1	4.5	65.6	4.7
Ana-012-060	BLAIR ST	439	534	LANE_15	LANE_16 / LANE_17	95	LOC	2.4	10.8	13.2	0.3	11.8	56.7	3	66.9	2.72
Ana-012-070	BLAIR ST	534	593	LANE_16 / LANE_17	NICOLA AVE	59	LOC	1.2	7.8	9	0	15.2	36.5	4.2	73.8	2.51
Ana-012-080	BLAIR ST	593	643	NICOLA AVE	LANE_13	50	LOC	7.8	26	33.8	6.6	39.7	27	2.8	42.8	4.67
Ana-012-090	BLAIR ST	643	790	LANE_13	MERRITT AVE	147	LOC	10.7	20.6	31.3	4.9	28.9	37.2	5.6	34.6	4.88
Ana-013-010	BOYD RD	0	107	PARKER DR	GREAVES AVE	107	LOC	0.7	4.6	5.3	0	0	37.3	2.5	81.9	2.64
Ana-013-020	BOYD RD	107	256	GREAVES AVE	Northeast End	149	LOC	0.3	4.8	5.1	0	2	35.7	2	89	3.62
Ana-014-010	BREMNER AVE	0	47	WALTERS ST	Northeast End	47	LOC	0	2.8	2.8	0	0	3.3	2.7	94	2.5
Ana-015-010	BURGESS AVE	0	449	CHARTERS ST	Southeast End	449	LOC	2.8	5.2	8	0	0	0	1.7	80.5	3.48
Ana-016-010	CANFORD AVE	0	193	Northwest End	WILSON ST	193	LOC	0	3.5	3.5	0	7.5	23.8	2.1	91.8	3.45
Ana-016-020	CANFORD AVE	193	334	WILSON ST	SPRING ST	141	LOC	0.5	3.9	4.4	0	0	0	1.6	90.8	1.32
Ana-016-030	CANFORD AVE	334	413	SPRING ST	SPRING ST	79	LOC	0	0.8	0.8	0	0	0	1.2	98.9	1.28
Ana-016-040	CANFORD AVE	413	536	SPRING ST	CLEASBY ST	123	LOC	0	0.4	0.4	0	0	0	1.3	99.4	1.34
Ana-016-050	CANFORD AVE	537	656	CHAPMAN ST	RIVER ST	119	LOC	0	3.2	3.2	0	1.1	16.3	2.2	94.6	2.62
Ana-017-010	CASTILLOU CRES	0	84	PARKER DR	GILLIS CRES	84	COL	0.9	6.8	7.7	0	3.2	76.5	2	82.8	2.88
Ana-017-020	CASTILLOU CRES	84	310	GILLIS CRES	MUNRO CRES	226	COL	4.1	11	15.1	2.2	25.6	56.6	3	64.3	2.42
Ana-017-030	CASTILLOU CRES	310	523	MUNRO CRES	MUNRO CRES	213	COL	1.1	11.1	12.2	0.2	0	18	2.9	80.4	1.98
Ana-017-040	CASTILLOU CRES	523	620	MUNRO CRES	GRIMMET ST	97	COL	2.9	14.8	17.7	0.3	4.1	21.4	3.3	71.5	1.66
Ana-018-010	CHAPMAN ST	0	123	Southwest End	HAMILTON AVE	123	LOC	0	1.9	1.9	0	0.4	86.7	2.8	92.4	1.93
Ana-018-020	CHAPMAN ST	123	217	HAMILTON AVE	CANFORD AVE	94	LOC	0	3.2	3.2	0.3	45.5	41.2	3.1	73.8	2.07
Ana-018-030	CHAPMAN ST	217	313	CANFORD AVE	COLDWATER AVE	96	LOC	0.3	2	2.3	1	27.1	36.5	4.9	84.6	1.7
Ana-018-040	CHAPMAN ST	313	378	COLDWATER AVE	COUTLEE AVE / LANE_46	65	LOC	0.4	2	2.4	0.4	0	14.2	5.2	87.4	2.5
Ana-018-050	CHAPMAN ST	379	476	COUTLEE AVE	QUILCHENA AVE	97	LOC	2.7	6.7	9.4	0.5	0	10.5	4.3	60.3	2.4
Ana-018-060	CHAPMAN ST	476	572	QUILCHENA AVE	GRANITE AVE	96	LOC	5.2	18.5	23.7	0.3	0	0	4.3	56.7	4.21
Ana-018-070	CHAPMAN ST	572	668	GRANITE AVE	NICOLA AVE	96	LOC	8.9	22	30.9	1.3	0	4.9	5.6	37	3.59</

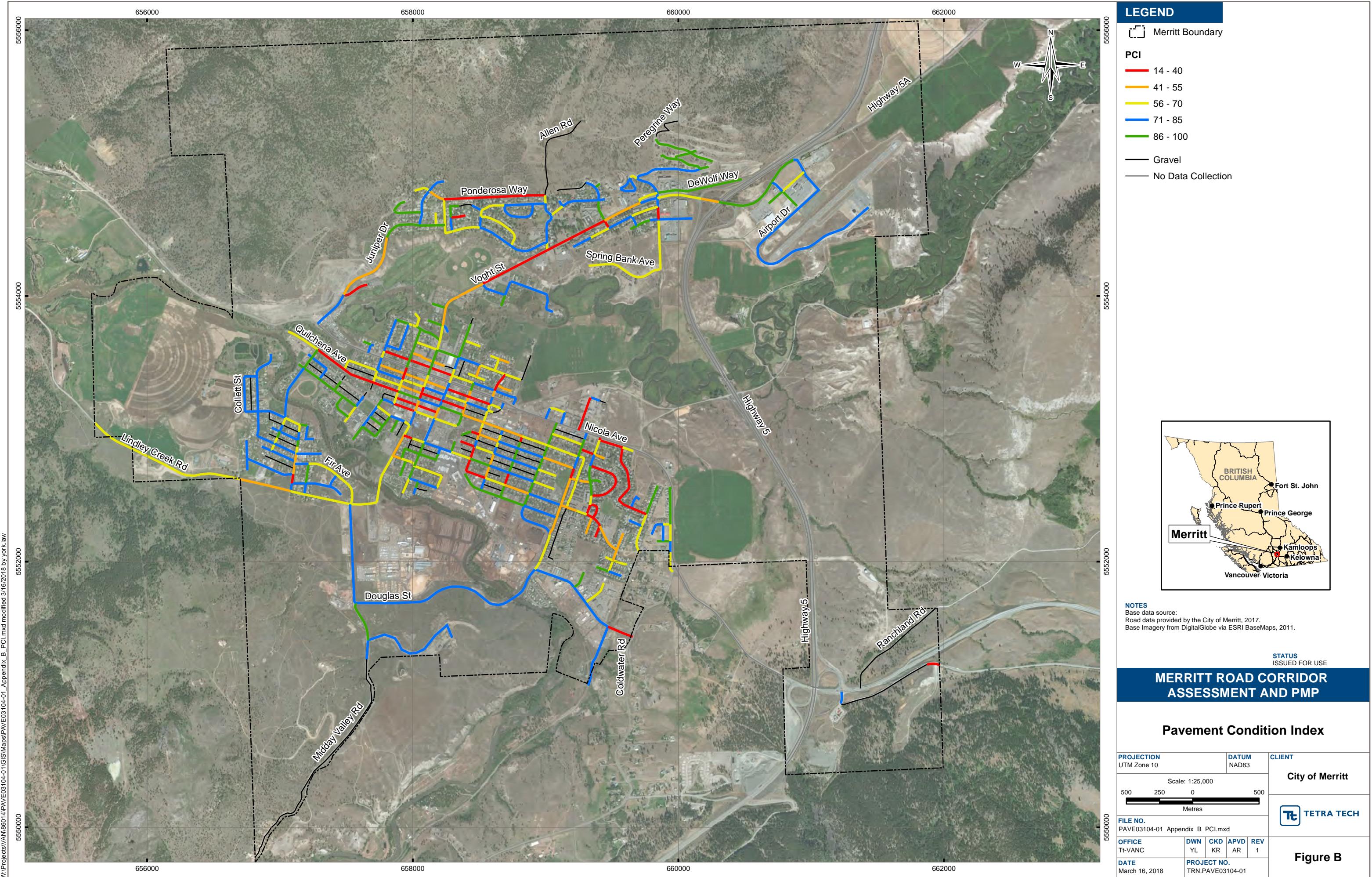
Road_ID	RoadName	From	To	StreetFrom	StreetTo	Length (m)	Class	AFCA (%)	TCA (%)	ACA (%)	RVA (%)	WRH (%)	WRL (%)	RUT (mm)	PCI	IRI (mm/m)
Ana-024-050	CLEASBY ST	334	429	QUILCHENA AVE	GRANITE AVE	95	LOC	2.1	10.9	13	0.5	12.8	74.7	3.6	63.8	4.59
Ana-024-060	CLEASBY ST	429	532	GRANITE AVE	NICOLA AVE	103	LOC	1	4.8	5.8	0.2	1.2	69.2	3.2	80.6	3.85
Ana-024-070	CLEASBY ST	532	586	NICOLA AVE	LANE_24	54	LOC	2.9	7.1	10	0	63.4	3.2	2.6	67.4	6.11
Ana-024-080	CLEASBY ST	586	839	LANE_24	1ST AVE	253	LOC	0.7	7.3	8	0.5	12.3	68.1	1.7	80	2.24
Ana-025-010	COLDWATER AVE	0	179	Northwest End	WILSON ST	179	COL	2	3.8	5.8	0.3	0	0.4	2.5	84.2	1.66
Ana-025-050	COLDWATER AVE	652	774	CHAPMAN ST	RIVER ST	122	COL	20.8	1.5	22.3	0.2	0	0	7.9	63.8	6.36
Ana-025-060	COLDWATER AVE	774	837	RIVER ST	GREIG ST	63	COL	0.4	9	9.4	2.2	1.8	8.3	4.2	81.3	4.89
Ana-025-070	COLDWATER AVE	837	887	GREIG ST	LANE_28	50	COL	2.5	11.4	13.9	0	0	7	4.1	71.7	4.7
Ana-025-080	COLDWATER AVE	887	935	LANE_28	VOGHT ST	48	COL	1.6	9	10.6	3.8	6	44.4	5.1	55.3	6.4
Ana-025-090	COLDWATER AVE	936	999	VOGHT ST	LANE_07	63	COL	4.6	24.1	28.7	1.7	0	64.7	4.3	38.6	4.65
Ana-025-100	COLDWATER AVE	999	1097	LANE_07	GARCIA ST	98	COL	1.5	22.6	24.1	0.3	0	57.2	4.3	67	3.32
Ana-025-110	COLDWATER AVE	1097	1225	GARCIA ST	CLAPPERTON AVE	128	COL	0	0.2	0.2	0.2	0	0	5.1	84.4	2.21
Ana-025-120	COLDWATER AVE	1225	1312	CLAPPERTON AVE	LANE_27	87	COL	0	0	0	0	0	0	5.6	79.3	1.98
Ana-025-130	COLDWATER AVE	1312	1465	LANE_27	BLAIR ST	153	COL	0.3	1.8	2.1	0	0	0	5.9	67.8	2.16
Ana-025-140	COLDWATER AVE	1465	1620	BLAIR ST	MAY ST	155	COL	0.5	3.3	3.8	0	0	0	3.2	91.6	2.05
Ana-025-150	COLDWATER AVE	1620	1775	MAY ST	ORME ST	155	COL	0.6	3.9	4.5	0	0	0	5.8	76.5	2.51
Ana-025-160	COLDWATER AVE	1775	1971	ORME ST	HOUSTON ST	196	COL	0.9	2.7	3.6	0	0	0	4.9	77.6	1.64
Ana-025-170	COLDWATER AVE	1971	2138	HOUSTON ST	East End	167	LOC	1.5	12	13.5	0.5	0	28.6	3.2	66.5	3.77
Ana-026-010	COLLETT ST	0	265	GOVERNMENT AVE	HICKS AVE	265	LOC	3	6.6	9.6	0.7	22.1	60.7	3.5	73.9	3.35
Ana-027-010	COUTLEE AVE	0	90	CHAPMAN ST / LANE_46	CHAPMAN ST	90	LOC	1.1	3.8	4.9	0.8	6.4	66.3	3.6	70.8	4.22
Ana-027-020	COUTLEE AVE	90	261	CHAPMAN ST	VOGHT ST	171	LOC	2.8	10.4	13.2	13.3	61	18.4	5.8	33.8	4.76
Ana-027-030	COUTLEE AVE	261	417	VOGHT ST	GARCIA ST	156	LOC	3.5	8.2	11.7	0.2	0	78	5.7	55.2	3.23
Ana-027-040	COUTLEE AVE	417	592	GARCIA ST	CHARTERS ST	175	LOC	1.6	10.9	12.5	0.6	0	6.6	3.9	65.8	4.83
Ana-027-050	COUTLEE AVE	594	655	LANE_33	BLAIR ST	61	LOC	20.1	18.5	38.6	4.9	2.1	64.1	6.2	13.6	7.41
Ana-027-060	COUTLEE AVE	655	811	BLAIR ST	MAY ST	156	LOC	5.8	20.6	26.4	0	1.4	38.9	2.5	52.4	3.28
Ana-027-070	COUTLEE AVE	811	966	MAY ST	ORME ST	155	LOC	1	7.8	8.8	0.2	0	41.2	2	78.5	2.89
Ana-027-080	COUTLEE AVE	966	1168	ORME ST	HOUSTON ST	202	LOC	1.1	10.1	11.2	0	0	40.7	2.6	76.6	2.64
Ana-027-090	COUTLEE AVE	1168	1415	HOUSTON ST	DOUGLAS ST	247	LOC	7.5	18.7	26.2	1.1	2.5	24.1	5.8	44.5	5.5
Ana-028-010	COWAN WAY	0	126	MILLER CRT	HILTON DR	126	LOC	2.5	8.2	10.7	0	0	0	2.8	83.5	4.65
Ana-029-010	COWLEY ST	0	134	South End	CLAPPERTON AVE	134	LOC	4.7	18	22.7	4.4	77.6	5.5	4.3	42.6	10.39
Ana-030-010	CRANNA CRES	0	475	MENZIES ST	MENZIES ST	475	LOC	3.3	11.6	14.9	15	83.5	2.8	7.4	23.4	5.19
Ana-031-010	CRAWFORD AVE	0	139	Southwest End	GORDON ST	139	LOC	0.5	2.4	2.9	0.2	0	14.4	2.6	85.9	4.14
Ana-031-020	CRAWFORD AVE	139	356	GORDON ST	AIRPORT DR	217	LOC	0.7	11.1	11.8	0.1	0	4.6	4	67.4	4.31
Ana-032-010	CRESSAY ST	0	81	FORKSDALE AVE / FORKSDALE PL	IRVINE RD	81	LOC	1.5	6.8	8.3	0	80.5	4.6	2.4	72.7	2.79
Ana-033-010	DEWOLF WAY	0	648	BELSHAW ST / LANE_20	East End	648	LOC	0.1	1.1	1.2	0.4	0.4	2.1	2.1	94.9	2.33
Ana-034-010	DOUGLAS ST	0	1543	MIDDAY VALLEY RD	POOLEY AVE	1543	COL	0.6	2.1	2.7	0.1	5.5	42.2	5.4	75.3	2.18
Ana-034-020	DOUGLAS ST	1543	1830	POOLEY AVE	HOUSTON ST	287	COL	0.4	5.1	5.5	0	0	8.3	5.9	69.3	3.36
Ana-034-030	DOUGLAS ST	1830	1970	HOUSTON ST	PRIEST AVE	140	COL	6.1	15	21.1	2.3	0	15.7	3.3	50.3	4.99
Ana-034-040	DOUGLAS ST	1970	2067	PRIEST AVE	CLAPPERTON AVE	97	COL	4.6	11.1	15.7	0.8	4.5	9.5	4.3	51	3.99
Ana-034-050	DOUGLAS ST	2067	2284	CLAPPERTON AVE	LANE_22	217	COL	3.9	17.2	21.1	4.9	59.3	23.3	3.3	44.8	3.96
Ana-034-060	DOUGLAS ST	2284	2361	LANE_22	COUTLEE AVE	77	COL	3.9	15.8	19.7	5.5	67.7	13.6	4.3	37.1	4.66
Ana-034-070	DOUGLAS ST	2361	2456	COUTLEE AVE	LANE_30 / QUILCHENA AVE	95	COL	2.1	12.5	14.6	0.8	1.6	70.8	3.1	71	4.47
Ana-034-080	DOUGLAS ST	2456	2515	LANE_30 / QUILCHENA AVE	GRANITE PL	59	COL	0	0.6	0.6	0	0	0	2	99.1	2.73
Ana-034-090	DOUGLAS ST	2515	2594	GRANITE PL	LANE_21	79	COL	0	0.3	0.3	0	0	0	2.6	99.6	3.11
Ana-034-100	DOUGLAS ST	2594	2644	LANE_21	NICOLA AVE	50	COL	2.1	8.7	10.8	0.8	0	19.7	4.8	71.1	3.01
Ana-034-110	DOUGLAS ST	2645	2907	NICOLA AVE	MARIAN AVE	262	LOC	10.8	15.3	26.1	1.4	2.5	69.8	4.2	38	5.06
Ana-035-010	DUNCAN ST	0	91	South End	CLAPPERTON AVE	91	LOC	13.7	23.9	37.6	4.7	43.1	35.2	4.8	34.6	4.96
Ana-036-010	EAGLE CRES	0	117	West End	FALCON CREST DR	117	LOC	0	0	0	0	0	0	1.5	100	2.6
Ana-036-020	EAGLE CRES	117	325	FALCON CREST DR	GRANDVIEW HT</											

Road_ID	RoadName	From	To	StreetFrom	StreetTo	Length (m)	Class	AFCA (%)	TCA (%)	ACA (%)	RVA (%)	WRH (%)	WRL (%)	RUT (mm)	PCI	IRI (mm/m)
Ana-046-010	GOVERNMENT AVE	0	98	COLLETT ST	PINE ST	98	LOC	0	5.3	5.3	0	57.3	29.9	2	82.6	3.13
Ana-046-020	GOVERNMENT AVE	98	182	PINE ST	LANE_02	84	LOC	1.2	6.4	7.6	0	49.9	35.7	2	76	2.69
Ana-046-030	GOVERNMENT AVE	182	313	LANE_02	MAIN ST	131	LOC	0.4	7.2	7.6	0.8	55.9	29.2	3.2	73.4	2.42
Ana-046-040	GOVERNMENT AVE	313	434	MAIN ST	HILL ST	121	COL	0.4	9.9	10.3	1	80.2	2.3	2.5	62.9	2.41
Ana-046-050	GOVERNMENT AVE	434	493	HILL ST	WILLIAMS CRES	59	LOC	0	0	0	0.5	10	5.5	2.3	93.3	13.48
Ana-047-010	GRANDVIEW HT	0	502	BELSHAW ST	EAGLE CRES	502	LOC	1.2	4.4	5.6	0.9	17.7	46.3	2.4	80.3	2.27
Ana-047-020	GRANDVIEW HT	502	567	EAGLE CRES	East End	65	LOC	0	0	0	0	0	0	1.2	100	3.63
Ana-048-010	GRANITE AVE	0	228	SPRING ST	CLEASBY ST	228	LOC	3.6	14.2	17.8	0.9	22.5	54.8	2.7	64.7	3.24
Ana-048-020	GRANITE AVE	228	431	CLEASBY ST	CHAPMAN ST	203	LOC	2.3	6.9	9.2	0.1	3.1	9.4	2.1	79.8	2.34
Ana-048-030	GRANITE AVE	431	601	CHAPMAN ST	VOGHT ST	170	LOC	4.1	14.7	18.8	0.6	1.2	38.6	2.8	61.4	4.72
Ana-048-040	GRANITE AVE	601	768	VOGHT ST	GARCIA ST	167	LOC	1.6	9.4	11	0	0	21.4	3.2	76.6	3.19
Ana-048-050	GRANITE AVE	768	943	GARCIA ST	CHARTERS ST	175	LOC	2.3	13.6	15.9	0.6	4.1	22.1	2.4	69	3.11
Ana-048-060	GRANITE AVE	943	1113	CHARTERS ST	BLAIR ST	170	LOC	2.7	8.1	10.8	0	4.7	5.6	2.6	72.9	3.94
Ana-048-070	GRANITE AVE	1113	1398	BLAIR ST	DOUGLAS ST	285	LOC	4.5	7.7	12.2	0.9	18.9	56.3	4	56.1	2.5
Ana-049-010	GRANITE PL	0	109	DOUGLAS ST	MENZIES ST	109	LOC	9.1	22.6	31.7	3.5	45.3	34.5	3.4	34	3.56
Ana-049-020	GRANITE PL	109	191	MENZIES ST	East End	82	LOC	6.7	36.1	42.8	2.7	52.4	30.5	3.3	53.7	3.86
Ana-050-010	GREAVES AVE	0	111	BOYD RD	East End	111	LOC	1.4	9.2	10.6	20.8	78.5	8.1	3.5	31.8	3.16
Ana-051-010	GREIG ST	0	112	Southwest End	COLDWATER AVE	112	LOC	0.8	1.4	2.2	0	0	0	1.5	91.9	2.36
Ana-052-010	GRIMMET ST	194	250	VOGHT ST	PARKER DR	56	COL	2.7	19.3	22	1.6	0	64.5	3	56.4	3.17
Ana-052-020	GRIMMET ST	250	470	PARKER DR	REID AVE	220	COL	2.4	11.3	13.7	1.4	13.3	64.1	3.1	70.6	3.11
Ana-052-030	GRIMMET ST	470	577	REID AVE	CASTILLOU CRES	107	COL	0.9	9.1	10	0.2	31.2	48.6	3.1	75.9	5.16
Ana-052-040	GRIMMET ST	577	638	CASTILLOU CRES	ALLEN RD / PONDEROSA WAY	61	COL	4.5	12.5	17	0	21	64.5	2.4	68	2.78
Ana-053-010	HAMILTON AVE	0	129	NO NAME / SPRING ST	CLEASBY ST	129	LOC	0.4	3	3.4	0	0	0	2.3	90.9	1.83
Ana-053-020	HAMILTON AVE	130	251	CHAPMAN ST	RIVER ST	121	LOC	0.2	3.9	4.1	0.4	11.4	10.1	2.3	90	1.74
Ana-054-010	HAMILTON HILL RD	0	100	East End		100	LOC	3.9	5.6	9.5	10	34	52.5	4.5	36.5	2.5
Ana-054-030	HAMILTON HILL RD	824	914		MERRITT-PRINCETON HWY NO 5A & 97C	90	LOC	1.1	3.3	4.4	2.5	12.4	69.6	4.6	72.3	2.35
Ana-055-010	HICKS AVE	0	97	COLLETT ST	PINE ST	97	LOC	1.2	4	5.2	1.4	58.2	27.6	3.3	73.5	5.1
Ana-056-010	HIGHWAY 5A	0	342	HIGHWAY 5A OFFRAMP / HIGHWAY 5A ONRAMP / VOGHT ST	GORDON ST	342	ART	0	0.3	0.3	0	0	0	2.7	99.6	1.32
Ana-056-020	HIGHWAY 5A	342	580	GORDON ST	AIRPORT DR	238	ART	0	0.6	0.6	0	0	0	3.4	92.5	1.44
Ana-057-010	HILL ST	0	58	LINDLEY CREEK RD	CHESTNUT AVE	58	COL	0	4.4	4.4	1.8	75.4	6.9	2.4	74.4	2.91
Ana-057-020	HILL ST	58	129	CHESTNUT AVE	BIRCH AVE	71	COL	7.4	10.3	17.7	5.3	78.2	1.1	8.5	27.7	4.96
Ana-057-030	HILL ST	129	206	BIRCH AVE	FIR AVE	77	COL	3.7	12.1	15.8	0.6	36.5	46.1	3.3	54.1	3.89
Ana-057-040	HILL ST	206	284	FIR AVE	WALNUT AVE	78	COL	2.2	13.1	15.3	1.9	75	7.1	3	51.8	4.33
Ana-057-050	HILL ST	284	338	WALNUT AVE	LANE_01	54	COL	1.4	11.1	12.5	0	25.9	57.4	3	65.3	3.94
Ana-057-060	HILL ST	338	388	LANE_01	SPRUCE AVE	50	COL	0	2.3	2.3	0	39.5	45	3	87.4	3.76
Ana-057-070	HILL ST	388	449	SPRUCE AVE	LANE_02	61	COL	0.8	2.4	3.2	2.9	38.5	42.2	3.4	71.9	2.81
Ana-057-080	HILL ST	449	506	LANE_02	GOVERNMENT AVE	57	COL	0.9	3.9	4.8	1.4	80.8	3.2	5.2	58.9	2.97
Ana-058-010	HILTON DR	0	134	Southwest End	COWAN WAY	134	LOC	5	7.3	12.3	0.2	0	0	3.1	74.2	4.67
Ana-058-020	HILTON DR	134	188	COWAN WAY	SUNSET ST	54	LOC	4.8	6.9	11.7	0.5	0	0	3.6	64.4	5.02
Ana-059-010	HOUSTON ST	0	344	DOUGLAS ST	PRIEST AVE	344	COL	1.2	7.4	8.6	0.1	0	9.5	4.9	76.7	2.96
Ana-059-020	HOUSTON ST	344	442	PRIEST AVE	CLAPPERTON AVE	98	COL	0	1.9	1.9	0	0	0	3.4	96.7	3.16
Ana-059-030	HOUSTON ST	442	540	CLAPPERTON AVE	COLDWATER AVE	98	COL	0.2	0.4	0.6	0	0	0	3.7	97.8	2.35
Ana-059-040	HOUSTON ST	540	637	COLDWATER AVE	JACKSON AVE	97	COL	0.5	1.2	1.7	0	0	0	3	94.6	2.52
Ana-059-050	HOUSTON ST	637	692	JACKSON AVE	LANE_40	55	COL	0	0	0	0	0	0	3	100	2.91
Ana-059-060	HOUSTON ST	692	787	LANE_40	LANE_35	95	COL	0	0	0	0.5	0	0	3.4	97.8	2.25
Ana-059-070	HOUSTON ST	787	925	LANE_35	GRANITE AVE	138	COL	0.2	0.5	0.7	0	0	0	3.1	97.9	2.99
Ana-059-080	HOUSTON ST	925	1016	GRANITE AVE	NICOLA AVE	91	COL	0.3	1.9	2.2	0	0	0	4.1	89.7	2.4
Ana-060-010	IRVINE RD	0	150	Southwest End	SLATER ST	150	LOC	1.5	8.7	10.2	0.2	0	5.5	2.5	75.2	2.9
Ana-060-020	IRVINE RD	150	232	SLATER ST	CEDAR RD	82	LOC	6.7	17.8	24.5	0	8.2	39	2.9	66	3.22
Ana-060																

Road_ID	RoadName	From	To	StreetFrom	StreetTo	Length (m)	Class	AFCA (%)	TCA (%)	ACA (%)	RVA (%)	WRH (%)	WRL (%)	RUT (mm)	PCI	IRI (mm/m)
Ana-086-010	LANE_23	0	154	Northwest End	Southeast End	154	LAN	0.2	0.6	0.8	0.3	0.3	21.3	8.2	87.7	2.5
Ana-087-010	LANE_24	0	203	CLEASBY ST	CHAPMAN ST	203	LAN	2.5	5.2	7.7	10.2	44.9	18.9	10.2	33.7	2.5
Ana-087-020	LANE_24	203	373	CHAPMAN ST	VOGHT ST	170	LAN	9.6	12	21.6	5.8	30.7	15.3	7.3	36.7	2.5
Ana-088-010	LANE_25	1	170	VOGHT ST	GARCIA ST	169	LAN	3.5	12.3	15.8	5.1	3.7	4.1	9	33.4	2.5
Ana-090-010	LANE_27	1	84	COLDWATER AVE	North End	83	LAN	0.3	1.1	1.4	0	0	0	1.6	94.8	2.5
Ana-093-010	LANE_30	0	218	CLAPPERTON AVE / LANE_41	LANE_22	218	LAN	2.6	3.7	6.3	1.5	1.2	0.3	5.8	59.1	4.89
Ana-093-020	LANE_30	218	438	LANE_22	DOUGLAS ST / QUILCHENA AVE	220	LAN	8.9	13.3	22.2	2.8	1	5.2	4.8	58.6	4.39
Ana-094-020	LANE_31	71	115	LANE_17	NICOLA AVE	44	LAN	0.5	3	3.5	0.5	8.7	13.8	6.7	78.5	2.5
Ana-096-010	LANE_33	0	79	LANE_32	COUTLEE AVE	79	LAN	0	0.2	0.2	0	0	0	2.5	99.4	2.18
Ana-106-010	LANE_43	1	146	CLAPPERTON AVE	MENZIES ST	145	LAN	2.4	4	6.4	13.1	6	27	9.3	37.9	2.5
Ana-107-010	LANE_44	0	81	MENZIES ST	West End	81	LAN	3.5	8.5	12	1.9	8.9	19.8	8.5	43.5	2.5
Ana-109-020	LANE_46	142	313	CHAPMAN ST	VOGHT ST	171	LAN	14.3	23.7	38	11.5	53.6	16.7	9.5	15.3	2.5
Ana-109-030	LANE_46	313	471	VOGHT ST	GARCIA ST	158	LAN	3.9	9.6	13.5	8.4	23.2	51.6	9.6	25.8	2.5
Ana-110-010	Lane_47	1	89	PRIEST AVE	CLAPPERTON AVE	88	LAN	0	1.3	1.3	2	1.7	0.3	2.7	90.1	2.5
Ana-111-010	LANGLEY RD	0	104	CLEASBY ST	LANGLEY ST	104	LOC	0.8	8	8.8	0	43	43.6	1.7	79.7	2.56
Ana-112-010	LANGLEY ST	0	207	LANGLEY RD	1ST AVE	207	LOC	0.2	3.9	4.1	0.4	40.4	46	2.3	81.9	2.43
Ana-113-010	LANGSTAFF PL	0	85	MENZIES ST	East End	85	LOC	0	0.2	0.2	0	0	0	2	99.3	3.02
Ana-114-010	LAUDER AVE	0	117	MARGARET ST	LAUDER ST	117	LOC	3	7.1	10.1	0	0	7	1.8	64.8	2.76
Ana-115-010	LAUDER ST	0	92	NICOLA AVE	LAUDER AVE	92	LOC	0.3	8.9	9.2	0.3	6	68	2	78.4	2.2
Ana-116-010	LINDLEY CREEK RD	0	1205	Northwest End		1205	LOC	2.3	5.3	7.6	3.5	55.9	11.1	4.1	59.9	2.59
Ana-116-015	LINDLEY CREEK RD	1205	1600		HILL ST	395	LOC	4.8	12.1	16.9	2.1	14.7	52.6	5.9	44.8	3.27
Ana-116-020	LINDLEY CREEK RD	1600	1706	HILL ST	MORRISSEY ST	106	COL	1.4	2.2	3.6	3.1	72.1	0	3.3	57.5	3.65
Ana-116-030	LINDLEY CREEK RD	1706	2063	MORRISSEY ST	FIR AVE / MIDDAY VALLEY RD	357	COL	1.3	5.3	6.6	2.4	62.4	12.2	5	58.5	4.95
Ana-116-040	LINDLEY CREEK RD	2063	2260	FIR AVE / MIDDAY VALLEY RD	VOGHT ST	197	COL	2.1	9.3	11.4	0.4	7.6	14.3	4	67.4	4.4
Ana-117-010	MACMILLIAN ST	0	51	South End	LANE_37	51	LOC	0.5	3.7	4.2	1	0	3.1	2	81.5	2.32
Ana-117-020	MACMILLIAN ST	51	102	LANE_37	CLARKE AVE	51	LOC	1.6	3.4	5	0	0	0	1.8	86.3	1.7
Ana-118-010	MAIN ST	0	59	FIR AVE	WALNUT AVE	59	COL	0	0.2	0.2	3.6	87.1	0	2.4	66	3.85
Ana-118-020	MAIN ST	59	109	WALNUT AVE	LANE_01	50	COL	0.5	1.7	2.2	1.5	82.2	5.8	2.6	66.8	3.93
Ana-118-030	MAIN ST	109	159	LANE_01	SPRUCE AVE	50	COL	0	0	0	0	30.3	56.8	2.1	89.8	1.97
Ana-118-040	MAIN ST	159	214	SPRUCE AVE	LANE_02	55	COL	0	2.2	2.2	0	36.2	47.3	2.5	84.6	2.17
Ana-118-050	MAIN ST	214	269	LANE_02	GOVERNMENT AVE	55	COL	0	4.8	4.8	5.9	75.5	5.5	4.1	55.2	1.59
Ana-118-060	MAIN ST	269	685	GOVERNMENT AVE	CANFORD AVE	416	COL	0.3	3.6	3.9	0.3	2.8	5.6	3.2	84.9	3.06
Ana-118-070	MAIN ST	685	784	CANFORD AVE	COLDWATER AVE	99	COL	0	0	0	0	0	0	1.4	100	2.34
Ana-118-080	MAIN ST	784	857	COLDWATER AVE	QUILCHENA AVE	73	COL	0	0	0	0	0	0	1.6	100	2.56
Ana-119-010	MAMETTE AVE	0	94	VOGHT ST	LANE_42	94	LOC	2.4	10.2	12.6	4	71.3	5.9	4.4	52.4	2.5
Ana-119-020	MAMETTE AVE	95	161	West End	CHARTERS ST	66	LOC	1.5	8	9.5	1.5	81.1	6.8	2.2	69.7	2.37
Ana-119-030	MAMETTE AVE	161	234	CHARTERS ST	East End	73	LOC	1.4	11.6	13	0.3	72.6	13.7	2.6	65.1	3.33
Ana-120-010	MARGARET ST	0	86	NICOLA AVE	LAUDER AVE	86	LOC	3.2	7.2	10.4	0	0	44.3	1.7	71.2	2.2
Ana-121-010	MARIAN AVE	0	72	DOUGLAS ST		72	LOC	0	1.5	1.5	0.4	52	31	2.2	82.9	2.13
Ana-122-010	MAXWELL AVE	0	108	West End	VOGHT ST	108	LOC	0.5	4	4.5	0.2	0	46.4	2.2	86.2	3.09
Ana-123-010	MAY ST	0	97	PRIEST AVE	CLAPPERTON AVE	97	LOC	1.6	3.2	4.8	0.8	3.6	3.1	3.7	73.2	2.57
Ana-123-020	MAY ST	97	195	CLAPPERTON AVE	COLDWATER AVE	98	LOC	5.1	12.5	17.6	0.5	13.5	55.4	3.8	51.7	4.92
Ana-123-030	MAY ST	195	293	COLDWATER AVE	JACKSON AVE	98	LOC	6.6	11	17.6	2.8	3.3	67.3	4.3	51.8	4.38
Ana-123-040	MAY ST	293	344	JACKSON AVE	LANE_36 / LANE_39	51	LOC	0.5	6.6	7.1	0	30.9	54.4	3.6	80.8	3.96
Ana-123-050	MAY ST	344	442	LANE_36 / LANE_39	LANE_34 / LANE_45	98	LOC	3.1	12	15.1	1.8	31.4	45.9	3.9	58.1	4.03
Ana-123-060	MAY ST	442	486	LANE_34 / LANE_45	QUILCHENA AVE	44	LOC	0	7.2	7.2	0.6	20.6	59.8	4	80.8	3.98
Ana-124-010	MCFARLANE WAY	0	209	POOLEY AVE	Northeast End	209	LOC	2.4	7.7	10.1	0.9	16.9	64.6	3.4	69.8	2.67
Ana-125-010	MCGORAN PL	0	70	West End	MCGOWAN ST	70	LOC	2.5	16.3	18.8	1.1	15.7	64.3	3.3	67.7	6.66
Ana-125-020	MCGORAN PL	70	151	MCGOWAN ST	East End	81	LOC	3.1	24.8	27.9	0.3	13	74.4	4.4		

Road_ID	RoadName	From	To	StreetFrom	StreetTo	Length (m)	Class	AFCA (%)	TCA (%)	ACA (%)	RVA (%)	WRH (%)	WRL (%)	RUT (mm)	PCI	IRI (mm/m)
Ana-140-050	PARKER DR	793	1086	GILLIS CRES	GRIMMET ST	293	COL	0.9	6.8	7.7	0.2	0	20.4	2.5	81.3	4.01
Ana-141-010	PEREGRINE WAY	306	598		FALCON CREST DR	292	LOC	0.1	0.1	0.2	0	0	0	1.5	97.8	2.94
Ana-141-020	PEREGRINE WAY	598	779	FALCON CREST DR	East End	181	LOC	0.1	0.1	0.2	0	0	0	1.3	98	2.72
Ana-142-010	PINE ST	0	187	WALNUT AVE	GOVERNMENT AVE	187	LOC	0.3	5.2	5.5	0.5	29.2	53.2	3.1	80.8	3.11
Ana-142-020	PINE ST	187	449	GOVERNMENT AVE	HICKS AVE	262	LOC	0.6	7.5	8.1	0.6	21.4	63.3	2.2	79.7	4.31
Ana-142-030	PINE ST	449	670	HICKS AVE	Northeast End	221	LOC	0.6	3	3.6	1.1	9.2	31.3	4.1	81.1	6.17
Ana-143-010	PINERIDGE DR	0	102	JUNIPER DR	SUNFLOWER AVE	102	LOC	1.8	7.7	9.5	0.5	3.8	22.2	2.4	75.9	3.1
Ana-143-020	PINERIDGE DR	102	281	SUNFLOWER AVE	MONTEREY WAY	179	LOC	0.8	10.1	10.9	0.4	76.8	10	3.3	70.3	3.41
Ana-143-030	PINERIDGE DR	281	419	MONTEREY WAY	Northeast End	138	LOC	0.7	9.1	9.8	0.5	33.4	47.2	3.2	75.5	4.33
Ana-144-010	MONTEREY WAY	0	121	West End	PINERIDGE DR	121	LOC	3.2	19.3	22.5	5.2	84.8	2.5	3.4	56.1	4.77
Ana-144-020	MONTEREY WAY	121	250	PINERIDGE DR	PARKER DR	129	LOC	4.1	17.4	21.5	6.8	81.4	1.7	4.6	42.2	4.28
Ana-144-030	MONTEREY WAY	250	1010	PARKER DR	ALLEN RD / GRIMMET ST	760	LOC	3.4	16.7	20.1	19.2	80.1	1	6.6	22.6	3.8
Ana-145-010	POOLEY AVE	0	332	DOUGLAS ST	LANE_18	332	COL	0	0.7	0.7	0.2	0	0	5.5	76.4	2.8
Ana-145-020	POOLEY AVE	332	475	LANE_18	MCFARLANE WAY	143	COL	0	2.5	2.5	0	0	0	5.7	70.3	2.09
Ana-145-030	POOLEY AVE	475	724	MCFARLANE WAY	NEILSON ST	249	COL	0.4	2.4	2.8	0.4	0	3.5	3.7	84.3	2.33
Ana-145-040	POOLEY AVE	724	926	NEILSON ST	COLDWATER RD	202	COL	13.7	12.2	25.9	4.7	0	45.4	5.2	36.4	6.36
Ana-146-010	PRIEST AVE	0	69	VOGHT ST	Lane_47	69	LOC	7.8	22.8	30.6	3.8	52.6	28.9	4.4	42.8	4.16
Ana-146-020	PRIEST AVE	69	186	Lane_47	GARCIA ST	117	LOC	4.4	14.9	19.3	0.4	8.7	54.4	3.2	66.7	4.43
Ana-146-030	PRIEST AVE	186	407	GARCIA ST	CHARTERS ST	221	LOC	1.7	12.2	13.9	5.5	77.8	3.1	2.5	59.3	2.68
Ana-146-040	PRIEST AVE	408	589	West End	ORME ST	181	LOC	0.1	1.6	1.7	0.7	1.2	8.1	2.9	90	3.14
Ana-146-050	PRIEST AVE	589	779	ORME ST	HOUSTON ST	190	LOC	0.8	1.4	2.2	0	0	13	2.7	92.7	2.25
Ana-146-060	PRIEST AVE	779	1039	HOUSTON ST	DOUGLAS ST	260	LOC	1.5	9.5	11	0.2	0	1.9	2.8	75.4	2.42
Ana-147-010	QUILCHENA AVE	0	262	Northwest End	MAIN ST	262	LOC	3.9	8.2	12.1	1.7	5.7	37.5	3.2	59.6	4.4
Ana-147-020	QUILCHENA AVE	262	512	MAIN ST	SPRING ST	250	ART	13.7	28.4	42.1	1.4	0.1	1.2	8.3	25.2	4.63
Ana-147-030	QUILCHENA AVE	512	751	SPRING ST	CLEASBY ST	239	ART	7.8	18	25.8	1.6	0.1	16.6	7.8	39.3	4.17
Ana-147-040	QUILCHENA AVE	751	952	CLEASBY ST	CHAPMAN ST	201	ART	13	32.5	45.5	0.6	0.8	38.2	6.3	39.6	3.59
Ana-147-050	QUILCHENA AVE	952	1122	CHAPMAN ST	VOGHT ST	170	ART	0.4	3.2	3.6	0	0	0	2.8	91.5	2.75
Ana-147-060	QUILCHENA AVE	1122	1284	VOGHT ST	GARCIA ST	162	ART	0.6	3.4	4	0	0	0	5	81	2.73
Ana-147-070	QUILCHENA AVE	1284	1465	GARCIA ST	CHARTERS ST	181	ART	1	4	5	0.1	0	2.3	3.3	86.6	3.98
Ana-147-080	QUILCHENA AVE	1465	1634	CHARTERS ST	BLAIR ST	169	ART	2.6	11.4	14	0.9	0	15.8	6.4	49.2	4.13
Ana-147-090	QUILCHENA AVE	1634	1791	BLAIR ST	MAY ST	157	ART	4.3	12	16.3	1.1	0	10.4	6.5	49.4	3.36
Ana-147-100	QUILCHENA AVE	1791	1945	MAY ST	ORME ST	154	ART	2.4	9.7	12.1	1.7	1.6	17.9	6.8	54.1	2.48
Ana-147-110	QUILCHENA AVE	1945	2149	ORME ST	HOUSTON ST	204	ART	3.7	11	14.7	0.8	0	16	5.1	58.2	2.56
Ana-147-120	QUILCHENA AVE	2149	2393	HOUSTON ST	DOUGLAS ST / LANE_30	244	ART	4	13.4	17.4	0.6	10.3	58.2	3.6	58.1	5.86
Ana-149-010	RANSOM AVE	0	182	MENZIES ST	ARMSTRONG ST	182	LOC	6.1	11.4	17.5	3.8	23.1	63.9	4.5	38.7	4.87
Ana-149-020	RANSOM AVE	182	267	ARMSTRONG ST	East End	85	LOC	6.2	12	18.2	1.2	4.1	11.2	2.3	56.3	2.84
Ana-150-010	REID AVE	0	112	GRIMMET ST	REID PL	112	LOC	7.1	20	27.1	0.4	0.4	1.1	3.2	62.7	2.89
Ana-150-020	REID AVE	112	393	REID PL	WALTERS ST	281	LOC	3.9	15.7	19.6	0	0	1.8	2.9	71.4	2.65
Ana-150-030	REID AVE	393	441	WALTERS ST	East End	48	LOC	2.2	8.1	10.3	0	0	74.8	2.6	76.1	2.5
Ana-151-010	REID PL	0	49	REID AVE	Northwest End	49	LOC	0.5	8.9	9.4	0.6	0	7.2	3	78.8	2.5
Ana-152-010	RIVER RANCH RD	0	378	SPRING BANK AVE	FORKSDALE AVE	378	LOC	5.4	18.6	24	0.4	0.7	40.3	4.6	55.1	3.39
Ana-152-020	RIVER RANCH RD	378	472	FORKSDALE AVE	IRVINE RD	94	LOC	11.7	17.1	28.8	0.8	6.9	15.2	6.5	28.7	3.05
Ana-152-030	RIVER RANCH RD	472	538	IRVINE RD	BELSHAW ST / VOGHT ST	66	LOC	1.7	6.7	8.4	0	0	2.7	3.7	84.1	5.41
Ana-153-010	RIVER ST	0	50	HAMILTON AVE	LANE_06	50	LOC	0	0.5	0.5	0	0	3.2	2.8	98.8	2.93
Ana-153-020	RIVER ST	50	144	LANE_06	LANE_29	94	LOC	0	0.4	0.4	0	0	0	2.1	99.3	2.09
Ana-153-030	RIVER ST	144	191	LANE_29	COLDWATER AVE	47	LOC	0	0.3	0.3	0	0	15.6	3.7	98.4	1.62
Ana-154-010	SAGE PL	0	134	CLAPPERTON AVE / SAGE ST	North End	134	LOC	1.9	14.1	16	1.7	83.4	2.4	5.4	48.5	8.94
Ana-155-010	SAGE ST	0	89	MCLEAN PL	TELEMON PL	89	LOC	2.6	13.6	16.2	0	18.5	33.2	4	68	5.76
Ana-155-020	SAGE ST	89	173	TELEMON PL	CLAPPERTON AVE / SAGE PL	84	LOC	3.								

Road_ID	RoadName	From	To	StreetFrom	StreetTo	Length (m)	Class	AFCA (%)	TCA (%)	ACA (%)	RVA (%)	WRH (%)	WRL (%)	RUT (mm)	PCI	IRI (mm/m)
Ana-168-020	WALTERS ST	66	230	VOGHT ST	REID AVE	164	LOC	0.3	2.8	3.1	0.6	1.4	19.5	2.6	91.7	2.99
Ana-168-030	WALTERS ST	230	333	REID AVE	BREMNER AVE	103	LOC	0.5	7.4	7.9	0	0	34.7	3	77.4	2.84
Ana-168-040	WALTERS ST	333	411	BREMNER AVE	NICOLSON AVE	78	LOC	0.6	8.5	9.1	0	0	35.5	3.1	81.2	2.35
Ana-169-010	WILDROSE WAY	0	115	SUNFLOWER AVE	Northeast End	115	LOC	0	2.5	2.5	0	1.3	76.1	2.2	91.8	2.19
Ana-170-010	WILLIAMS CRES	0	163	Southeast End	GOVERNMENT AVE	163	LOC	1.9	4.2	6.1	0.5	0	4.3	2.6	80.4	5.57
Ana-171-010	WILSON ST	0	95	CANFORD AVE	COLDWATER AVE	95	LOC	0.6	6.5	7.1	0.3	0	47	3.4	84.1	4.54



APPENDIX C

REHABILITATION PROGRAM

Rehabilitation Program Spreadsheet (\$500k for five years-\$1M in 2023)

GIS Map – 5-Year Paving Plan (\$500k for five years-\$1M in 2023)

Road_ID	Road	From	To	StreetFrom	StreetTO	Length (m)	Width (m)	Class	Curb	Snow Priority	Treatment	Year	Cost
Ana-022-100	CLAPPERTON AVE	1295	1351	MENZIES ST	LANE_43	56	10.6	COL	N	Y	OL_50	2018	\$15,702
Ana-022-110	CLAPPERTON AVE	1351	1431	LANE_43	DUNCAN ST	80	8.6	COL	N	Y	OL_50	2018	\$19,990
Ana-025-050	COLDWATER AVE	652	774	CHAPMAN ST	RIVER ST	122	8	COL	N	N	Mill_50	2018	\$29,911
Ana-147-020	QUILCHENA AVE	262	512	MAIN ST	SPRING ST	250	7.6	ART	N	N	Mill_50	2018	\$68,567
Ana-147-040	QUILCHENA AVE	751	952	CLEASBY ST	CHAPMAN ST	201	13.9	ART	N	Y	Mill_50	2018	\$85,624
Ana-166-140	VOGHT ST	1908	2452	BLACKWELL AVE	GRIMMET ST	544	12.2	ART	L	Y	Mill_50	2018	\$202,644
Ana-018-070	CHAPMAN ST	572	668	GRANITE AVE	NICOLA AVE	96	12.8	LOC	N	Y	Mill_50	2019	\$39,476
Ana-057-020	HILL ST	58	129	CHESTNUT AVE	BIRCH AVE	71	7.2	COL	N	N	OL_50	2019	\$14,359
Ana-147-030	QUILCHENA AVE	512	751	SPRING ST	CLEASBY ST	239	8	ART	N	N	Mill_50	2019	\$63,244
Ana-149-010	RANSOM AVE	0	182	MENZIES ST	ARMSTRONG ST	182	7.6	LOC	N	Y	OL_50	2019	\$38,785
Ana-166-050	VOGHT ST	751	849	COUTLEE AVE	QUILCHENA AVE	98	11.6	ART	B	Y	Mill_50	2019	\$35,515
Ana-166-060	VOGHT ST	849	945	QUILCHENA AVE	GRANITE AVE	96	11.5	ART	B	Y	Mill_50	2019	\$35,707
Ana-166-150	VOGHT ST	2452	2939	GRIMMET ST	WALTERS ST	487	12.5	ART	L	Y	Mill_50	2019	\$188,688
Ana-018-060	CHAPMAN ST	476	572	QUILCHENA AVE	GRANITE AVE	96	13.4	LOC	N	Y	Mill_50	2020	\$41,769
Ana-022-090	CLAPPERTON AVE	1214	1295	NO NAME	MENZIES ST	81	7.3	COL	N	Y	OL_50	2020	\$15,827
Ana-128-070	MENZIES ST	578	598	RANSOM AVE	NICOLA AVE	20	7.7	LOC	N	N	OL_50	2020	\$4,076
Ana-145-040	POOLEY AVE	724	926	NEILSON ST	COLDWATER RD	202	9.3	COL	N	N	OL_50	2020	\$76,044
Ana-166-010	VOGHT ST	0	376	LINDLEY CREEK RD	PRIEST AVE	376	8.8	ART	N	Y	OL_50	2020	\$88,111
Ana-166-020	VOGHT ST	376	551	PRIEST AVE	COLDWATER AVE	175	11.9	ART	B	Y	Mill_50	2020	\$65,865
Ana-166-120	VOGHT ST	1429	1565	2ND AVE	MAXWELL AVE	136	12	ART	L	Y	Mill_50	2020	\$51,617
Ana-166-190	VOGHT ST	3707	3844	VOGHT ST OFFRAMP / VOGHT ST ONRAMP	HIGHWAY 5	137	14.4	ART	N	Y	OL_50	2020	\$54,098
Ana-022-080	CLAPPERTON AVE	1089	1214	DOUGLAS ST	NO NAME	125	7.3	COL	N	Y	OL_50	2021	\$25,845
Ana-025-090	COLDWATER AVE	936	999	VOGHT ST	LANE_07	63	10.7	COL	N	Y	Mill_50	2021	\$23,134
Ana-043-060	GARCIA ST	613	711	COUTLEE AVE	QUILCHENA AVE	98	11.9	COL	B	Y	Mill_50	2021	\$39,190
Ana-057-030	HILL ST	129	206	BIRCH AVE	FIR AVE	77	6.4	COL	N	N	OL_50	2021	\$13,681
Ana-116-015	LINDLEY CREEK RD	1205	1600		HILL ST	395	6.7	LOC	N	Y	OL_50	2021	\$68,701
Ana-166-130	VOGHT ST	1565	1908	MAXWELL AVE	BLACKWELL AVE	343	12.2	ART	L	Y	Mill_50	2021	\$134,054
Ana-166-160	VOGHT ST	2939	3240	WALTERS ST	LANE_20	301	10	ART	L	Y	Mill_50	2021	\$90,300
Ana-012-080	BLAIR ST	593	643	NICOLA AVE	LANE_13	50	7.9	LOC	N	N	Mill_50	2022	\$12,477
Ana-022-120	CLAPPERTON AVE	1431	1655	DUNCAN ST	SAGE PL / SAGE ST	224	9.8	COL	B	Y	Mill_50	2022	\$80,729
Ana-034-030	DOUGLAS ST	1830	1970	HOUSTON ST	PRIEST AVE	140	7.2	COL	N	N	OL_50	2022	\$29,091
Ana-062-020	JUNIPER DR	298	877	JUNIPER DR_1		579	9	COL	R	Y	Mill_50	2022	\$189,231
Ana-129-050	MERRITT AVE	631	717	MCGOWAN ST	BLAIR ST	86	12.1	COL	B	N	Mill_50	2022	\$33,781
Ana-147-090	QUILCHENA AVE	1634	1791	BLAIR ST	MAY ST	157	7.8	ART	N	N	Mill_50	2022	\$42,585
Ana-025-100	COLDWATER AVE	999	1097	LANE_07	GARCIA ST	98	10.7	COL	L	Y	Mill_50	2023	\$31,898
Ana-027-020	COUTLEE AVE	90	261	CHAPMAN ST	VOGHT ST	171	13.7	LOC	N	Y	Mill_50	2023	\$73,306
Ana-034-040	DOUGLAS ST	1970	2067	PRIEST AVE	CLAPPERTON AVE	97	7.3	COL	N	N	OL_50	2023	\$21,067
Ana-034-100	DOUGLAS ST	2594	2644	LANE_21	NICOLA AVE	50	7.8	COL	N	N	OL_50	2023	\$10,288
Ana-043-090	GARCIA ST	902	961	NICOLA AVE	LANE_13 / LANE_25	59	13	COL	L	Y	Mill_50	2023	\$25,372
Ana-043-100	GARCIA ST	961	1014	LANE_13 / LANE_25	LANE_42	53	13.3	COL	L	Y	Mill_50	2023	\$23,318
Ana-052-010	GRIMMET ST	194	250	VOGHT ST	PARKER DR	56	11.9	COL	L	Y	Mill_50	2023	\$21,253
Ana-052-020	GRIMMET ST	250	470	PARKER DR	REID AVE	220	12.7	COL	B	Y	Mill_50	2023	\$95,215
Ana-052-040	GRIMMET ST	577	638	CASTILLOU CRES	ALLEN RD / PONDEROSA WAY	61	12.4	COL	L	Y	Mill_50	2023	\$25,022
Ana-116-040	LINDLEY CREEK RD	2063	2260	FIR AVE / MIDDAY VALLEY RD	VOGHT ST	197	9.9	COL	N	Y	OL_50	2023	\$56,066
Ana-129-040	MERRITT AVE	515	631	CHARTERS ST	MCGOWAN ST	116	10.9	COL	B	N	Mill_50	2023	\$41,826
Ana-147-080	QUILCHENA AVE	1465	1634	CHARTERS ST	BLAIR ST	169	11.8	ART	N	N	Mill_50	2023	\$69,286
Ana-147-100	QUILCHENA AVE	1791	1945	MAY ST	ORME ST	154	7.9	ART	N	N	Mill_50	2023	\$41,055
Ana-147-110	QUILCHENA AVE	1945	2149	ORME ST	HOUSTON ST	204	8.3	ART	N	N	Mill_50	2023	\$57,702
Ana-147-120	QUILCHENA AVE	2149	2393	HOUSTON ST	DOUGLAS ST / LANE_30	244	7.8	ART	N	N	Mill_50	2023	\$65,808
Ana-166-030	VOGHT ST	551	639	COLDWATER AVE	COLDWATER AVE	88	11.8	ART	B	Y	Mill_50	2023	\$34,523
Ana-166-070	VOGHT ST	945	1041	GRANITE AVE	NICOLA AVE	96	11.4	ART	B	Y	Mill_50	2023	\$37,296
Ana-166-180	VOGHT ST	3372	3707	BELSHAW ST / RIVER RANCH RD	VOGHT ST OFFRAMP / VOGHT ST ONRAMP	335	16.4	ART	N	Y	OL_50	2023	\$155,187
Ana-017-020	CASTILLOU CRES	84	310	GILLIS CRES	MUNRO CRES	226	10.9	COL	L	N	Mill_50	2024	\$84,015
Ana-017-040	CASTILLOU CRES	523	620	MUNRO CRES	GRIMMET ST	97	10.9	COL	L	N	Mill_50	2024	\$34,324
Ana-022-060	CLAPPERTON AVE	639	832	ORME ST	HOUSTON ST	193	7.5	LOC	N	N	OL_50	2024	\$43,019
Ana-024-010	CLEASBY ST	0	145	Southwest End	CANFORD AVE	145	7.4	LOC	N	Y	Mill_50	2024	\$37,478
Ana-025-010	COLDWATER AVE	0	179	Northwest End	WILSON ST	179	11.5	COL	B	N	Mill_50	2024	\$74,270
Ana-025-070	COLDWATER AVE	837	887	GREIG ST	LANE_28	50	9.8	COL	N	N	Mill_50	2024	

Road_ID	Road	From	To	StreetFrom	StreetTO	Length (m)	Width (m)	Class	Curb	Snow Priority	Treatment	Year	Cost
Ana-057-070	HILL ST	388	449	SPRUCE AVE	LANE_02	61	6.9	COL	N	N	OL_50	2025	\$12,730
Ana-057-080	HILL ST	449	506	LANE_02	GOVERNMENT AVE	57	6.9	COL	N	N	OL_50	2025	\$11,592
Ana-059-010	HOUSTON ST	0	344	DOUGLAS ST	PRIEST AVE	344	9.1	COL	N	Y	OL_50	2025	\$82,532
Ana-116-020	LINDLEY CREEK RD	1600	1706	HILL ST	MORRISSEY ST	106	6.3	COL	N	Y	OL_50	2025	\$19,679
Ana-116-030	LINDLEY CREEK RD	1706	2063	MORRISSEY ST	FIR AVE / MIDDAY VALLEY RD	357	6.9	COL	N	Y	OL_50	2025	\$74,971
Ana-140-040	PARKER DR	518	793	CASTILLOU CRES	GILLIS CRES	275	7.2	COL	N	N	OL_50	2025	\$59,110
Ana-140-050	PARKER DR	793	1086	GILLIS CRES	GRIMMET ST	293	8.8	COL	N	N	OL_50	2025	\$78,473
Ana-147-070	QUILCHENA AVE	1284	1465	GARCIA ST	CHARTERS ST	181	12.2	ART	B	Y	Mill_50	2025	\$76,532
Ana-150-010	REID AVE	0	112	GRIMMET ST	REID PL	112	12.2	LOC	N	N	Mill_50	2025	\$41,285
Ana-162-030	SUNSET ST	239	366	MILLER CRT	HILTON DR	127	6.1	LOC	N	N	OL_50	2025	\$19,543
Ana-025-130	COLDWATER AVE	1312	1465	LANE_27	BLAIR ST	153	7.2	COL	N	Y	Mill_50	2026	\$35,133
Ana-025-150	COLDWATER AVE	1620	1775	MAY ST	ORME ST	155	7.5	COL	N	Y	Mill_50	2026	\$37,075
Ana-034-010	DOUGLAS ST	0	1543	MIDDAY VALLEY RD	POOLEY AVE	1543	7.9	COL	N	Y	OL_50	2026	\$378,822
Ana-034-020	DOUGLAS ST	1543	1830	POOLEY AVE	HOUSTON ST	287	9.5	COL	N	Y	OL_50	2026	\$73,326
Ana-043-080	GARCIA ST	805	902	GRANITE AVE	NICOLA AVE	97	11.3	COL	B	Y	Mill_50	2026	\$34,957
Ana-048-050	GRANITE AVE	768	943	GARCIA ST	CHARTERS ST	175	13.5	LOC	N	Y	Mill_50	2026	\$75,658
Ana-118-020	MAIN ST	59	109	WALNUT AVE	LANE_01	50	7.2	COL	N	N	OL_50	2026	\$10,889
Ana-130-030	MIDDAY VALLEY RD	2288	3038	DOUGLAS ST	FIR AVE / LINDLEY CREEK RD	750	7.6	COL	N	Y	OL_50	2026	\$153,290
Ana-166-080	VOGHT ST	1041	1100	NICOLA AVE	LANE_24 / LANE_25	59	11.7	ART	B	Y	Mill_50	2026	\$21,650
Ana-166-170	VOGHT ST	3240	3372	LANE_20	BELSHAW ST / RIVER RANCH RD	132	12.9	ART	L	Y	Mill_50	2026	\$53,406
Ana-017-010	CASTILLOU CRES	0	84	PARKER DR	GILLIS CRES	84	9.4	COL	L	N	Mill_50	2027	\$26,646
Ana-025-060	COLDWATER AVE	774	837	RIVER ST	GREIG ST	63	10.4	COL	N	N	Mill_50	2027	\$22,581
Ana-025-140	COLDWATER AVE	1465	1620	BLAIR ST	MAY ST	155	7.3	COL	N	Y	Mill_50	2027	\$36,732
Ana-029-010	COWLEY ST	0	134	South End	CLAPPERTON AVE	134	10.3	LOC	N	N	OL_50	2027	\$41,934
Ana-043-070	GARCIA ST	711	805	QUILCHENA AVE	GRANITE AVE	94	11.1	COL	B	Y	Mill_50	2027	\$38,350
Ana-046-040	GOVERNMENT AVE	313	434	MAIN ST	HILL ST	121	8.1	COL	N	N	OL_50	2027	\$30,906
Ana-057-010	HILL ST	0	58	LINDLEY CREEK RD	CHESTNUT AVE	58	7.4	COL	N	N	OL_50	2027	\$13,341
Ana-057-060	HILL ST	338	388	LANE_01	SPRUCE AVE	50	6.7	COL	N	N	OL_50	2027	\$10,413
Ana-059-030	HOUSTON ST	442	540	CLAPPERTON AVE	COLDWATER AVE	98	13.1	COL	B	Y	Mill_50	2027	\$41,677
Ana-059-040	HOUSTON ST	540	637	COLDWATER AVE	JACKSON AVE	97	12.9	COL	B	Y	Mill_50	2027	\$40,622
Ana-059-070	HOUSTON ST	787	925	LANE_35	GRANITE AVE	138	13.3	COL	B	Y	Mill_50	2027	\$59,583
Ana-059-080	HOUSTON ST	925	1016	GRANITE AVE	NICOLA AVE	91	13.2	COL	B	Y	Mill_50	2027	\$38,995
Ana-118-010	MAIN ST	0	59	FIR AVE	WALNUT AVE	59	7.2	COL	N	N	OL_50	2027	\$13,203
Ana-118-030	MAIN ST	109	159	LANE_01	SPRUCE AVE	50	6.9	COL	N	N	OL_50	2027	\$10,723
Ana-118-040	MAIN ST	159	214	SPRUCE AVE	LANE_02	55	7	COL	N	N	OL_50	2027	\$11,966
Ana-118-050	MAIN ST	214	269	LANE_02	GOVERNMENT AVE	55	7	COL	N	N	OL_50	2027	\$11,968
Ana-123-020	MAY ST	97	195	CLAPPERTON AVE	COLDWATER AVE	98	7.5	LOC	N	N	OL_50	2027	\$22,090
Ana-129-020	MERRITT AVE	170	342	VOGHT ST	GARCIA ST	172	12.6	COL	B	Y	Mill_50	2027	\$78,676
Ana-145-030	POOLEY AVE	475	724	MCFARLANE WAY	NEILSON ST	249	7.8	COL	N	N	OL_50	2027	\$61,237
Ana-146-020	PRIEST AVE	69	186	Lane_47	GARCIA ST	117	11.1	LOC	N	N	OL_50	2027	\$33,351
Ana-147-050	QUILCHENA AVE	952	1122	CHAPMAN ST	VOGHT ST	170	11.8	ART	B	Y	Mill_50	2027	\$72,824
Ana-147-060	QUILCHENA AVE	1122	1284	VOGHT ST	GARCIA ST	162	10.5	ART	B	Y	Mill_50	2027	\$54,249
Ana-166-040	VOGHT ST	639	751	COLDWATER AVE	COUTLEE AVE	112	11.6	ART	B	Y	Mill_50	2027	\$41,435
Ana-166-200	VOGHT ST	3844	3980	HIGHWAY 5	HIGHWAY 5A / HIGHWAY 5A OFFRAMP / HIGHWAY 5A ONRAMP	136	14.5	ART	N	Y	OL_50	2027	\$62,622
Ana-001-010	1ST AVE	0	101	CLEASBY ST	LANGLEY ST	101	9.9	LOC	B	N			
Ana-001-020	1ST AVE	101	163	LANGLEY ST	CHAPMAN ST	62	9.9	LOC	B	N			
Ana-001-030	1ST AVE	163	370	CHAPMAN ST	VOGHT ST	207	8.4	LOC	N	N			
Ana-002-010	2ND AVE	0	121	West End	VOGHT ST	121	8.3	LOC	N	N			
Ana-002-020	2ND AVE	121	189	VOGHT ST	Southeast End	68	18.9	LOC	N	N			
Ana-003-010	AIRPORT DR	0	133	HIGHWAY 5A	CRAWFORD AVE	133	13.1	LOC	R	N			
Ana-003-020	AIRPORT DR	133	1988	CRAWFORD AVE	Northeast End	1855	8.7	LOC	N	N			
Ana-005-010	ARMSTRONG PL	0	121	ARMSTRONG ST	Northeast End	121	10.9	LOC	B	N			
Ana-006-010	ARMSTRONG ST	0	549	RANSOM AVE	ARMSTRONG PL	549	9.5	LOC	B	N			
Ana-006-020	ARMSTRONG ST	549	673	ARMSTRONG PL	BANN ST	124	9.1	LOC	B	N			
Ana-007-010	ASPEN ST	0	90	South End	BIRCH AVE	90	7	LOC	N	N			
Ana-007-020	ASPEN ST	90	227	BIRCH AVE	North End	137	8	LOC	N	N			
Ana-008-010	BANN ST	0	211	CLAPPERTON AVE / SUNNYVIEW ST / THORPE RD	SCOTT PL	211	12.5	LOC	B	N			
Ana-008-020	BANN ST	211	304	SCOTT PL	ARMSTRONG ST	93	12.6	LOC	B	N			
Ana-008-030	BANN ST	304	537	ARMSTRONG ST	North End	233	12.9	LOC	B	N			
Ana-009-010	BELSHAW ST	0	237	RIVER RANCH RD / VOGHT ST	GRANDVIEW HT	237	13	LOC	B	Y			
Ana-009-020	BELSHAW ST	237	294	GRANDVIEW HT	West End	57	22.9	LOC	B	Y			
Ana-0													

Road_ID	Road	From	To	StreetFrom	StreetTO	Length (m)	Width (m)	Class	Curb	Snow Priority	Treatment	Year	Cost
Ana-018-040	CHAPMAN ST	313	378	COLDWATER AVE	COUTLEE AVE / LANE_46	65	11.3	LOC	N	Y			
Ana-018-080	CHAPMAN ST	668	728	NICOLA AVE	LANE_24	60	12.4	LOC	R	N			
Ana-018-090	CHAPMAN ST	728	784	LANE_24	LANE_14	56	12.4	LOC	R	N			
Ana-018-100	CHAPMAN ST	784	872	LANE_14	MERRITT AVE	88	12.7	LOC	R	N			
Ana-018-110	CHAPMAN ST	872	975	MERRITT AVE	1ST AVE	103	14.1	LOC	N	N			
Ana-018-120	CHAPMAN ST	976	1091	1ST AVE	North End	115	13	LOC	L	N			
Ana-019-010	CHARTERS ST	0	98	CLARKE AVE	PRIEST AVE	98	7	LOC	N	N			
Ana-019-020	CHARTERS ST	99	191	COUTLEE AVE	QUILCHENA AVE	92	11.6	LOC	B	Y			
Ana-019-030	CHARTERS ST	191	287	QUILCHENA AVE	GRANITE AVE	96	11.6	LOC	B	Y			
Ana-019-040	CHARTERS ST	287	383	GRANITE AVE	NICOLA AVE	96	11.6	LOC	B	Y			
Ana-019-050	CHARTERS ST	383	444	NICOLA AVE	LANE_13	61	8.1	LOC	N	N			
Ana-019-060	CHARTERS ST	445	536	MAMETTE AVE	MERRITT AVE	91	10.9	LOC	N	N			
Ana-019-070	CHARTERS ST	537	624	South End	BLACKWELL AVE	87	7.8	LOC	N	N			
Ana-019-080	CHARTERS ST	624	734	BLACKWELL AVE	BURGESS AVE	110	7	LOC	N	N			
Ana-020-010	CHESTNUT AVE	0	106	HILL ST	MORRISSEY ST	106	6.5	LOC	N	N			
Ana-020-020	CHESTNUT AVE	106	288	MORRISSEY ST	CHESTNUT LANE	182	10.6	LOC	B	N			
Ana-020-030	CHESTNUT AVE	288	395	CHESTNUT LANE	Southeast End	107	11.1	LOC	B	N			
Ana-021-010	CHESTNUT LANE	0	103	CHESTNUT AVE	FIR AVE	103	10.6	LOC	B	N			
Ana-022-010	CLAPPERTON AVE	0	103	Lane_47	GARCIA ST	103	9.4	LOC	N	N			
Ana-022-020	CLAPPERTON AVE	103	280	GARCIA ST	LANE_08	177	12.4	LOC	N	N			
Ana-022-030	CLAPPERTON AVE	280	327	LANE_08	COLDWATER AVE	47	7.6	LOC	N	N			
Ana-022-040	CLAPPERTON AVE	328	483	BLAIR ST	MAY ST	155	7.6	LOC	N	N			
Ana-022-050	CLAPPERTON AVE	483	639	MAY ST	ORME ST	156	7.3	LOC	N	N			
Ana-023-010	CLARKE AVE	0	72	GARCIA ST	MACMILLIAN ST	72	7.8	LOC	N	N			
Ana-023-020	CLARKE AVE	72	221	MACMILLIAN ST	CHARTERS ST	149	7.3	LOC	N	N			
Ana-024-020	CLEASBY ST	145	241	CANFORD AVE	COLDWATER AVE	96	7.6	LOC	N	Y			
Ana-024-050	CLEASBY ST	334	429	QUILCHENA AVE	GRANITE AVE	95	7.3	LOC	N	N			
Ana-024-060	CLEASBY ST	429	532	GRANITE AVE	NICOLA AVE	103	13	LOC	B	N			
Ana-024-070	CLEASBY ST	532	586	NICOLA AVE	LANE_24	54	10.2	LOC	B	N			
Ana-024-080	CLEASBY ST	586	839	LANE_24	1ST AVE	253	10.5	LOC	B	N			
Ana-025-110	COLDWATER AVE	1097	1225	GARCIA ST	CLAPPERTON AVE	128	9.8	COL	L	Y			
Ana-025-120	COLDWATER AVE	1225	1312	CLAPPERTON AVE	LANE_27	87	9.6	COL	L	Y			
Ana-025-170	COLDWATER AVE	1971	2138	HOUSTON ST	East End	167	7.3	LOC	N	Y			
Ana-026-010	COLLETT ST	0	265	GOVERNMENT AVE	HICKS AVE	265	6.6	LOC	N	N			
Ana-027-010	COUTLEE AVE	0	90	CHAPMAN ST / LANE_46	CHAPMAN ST	90	9.3	LOC	N	Y			
Ana-027-030	COUTLEE AVE	261	417	VOGHT ST	GARCIA ST	156	13	LOC	L	Y			
Ana-027-040	COUTLEE AVE	417	592	GARCIA ST	CHARTERS ST	175	12.8	LOC	R	Y			
Ana-027-060	COUTLEE AVE	655	811	BLAIR ST	MAY ST	156	7.3	LOC	N	N			
Ana-027-070	COUTLEE AVE	811	966	MAY ST	ORME ST	155	7.4	LOC	N	N			
Ana-027-080	COUTLEE AVE	966	1168	ORME ST	HOUSTON ST	202	7.5	LOC	N	N			
Ana-028-010	COWAN WAY	0	126	MILLER CRT	HILTON DR	126	10.6	LOC	B	N			
Ana-030-010	CRANNA CRES	0	475	MENZIES ST	MENZIES ST	475	13.9	LOC	N	N			
Ana-031-010	CRAWFORD AVE	0	139	Southwest End	GORDON ST	139	11.5	LOC	B	N			
Ana-031-020	CRAWFORD AVE	139	356	GORDON ST	AIRPORT DR	217	12.6	LOC	B	N			
Ana-032-010	CRESSAY ST	0	81	FORKSDALE AVE / FORKSDALE PL	IRVINE RD	81	10.4	LOC	B	N			
Ana-033-010	DEWOLF WAY	0	648	BELSHAW ST / LANE_20	East End	648	15.2	LOC	B	N			
Ana-034-080	DOUGLAS ST	2456	2515	LANE_30 / QUILCHENA AVE	GRANITE PL	59	6.9	COL	N	N			
Ana-034-090	DOUGLAS ST	2515	2594	GRANITE PL	LANE_21	79	7.5	COL	N	N			
Ana-034-110	DOUGLAS ST	2645	2907	NICOLA AVE	MARIAN AVE	262	7.3	LOC	N	N			
Ana-036-010	EAGLE CRES	0	117	West End	FALCON CREST DR	117	14.5	LOC	B	Y			
Ana-036-020	EAGLE CRES	117	325	FALCON CREST DR	GRANDVIEW HT	208	11.4	LOC	B	Y			
Ana-037-010	EASTWOOD AVE	0	84	Northwest End	CASTILLOU CRES	84	12.5	LOC	R	N			
Ana-038-010	FAIRWAY PL	0	65	NICOLA AVE	FAIRWAY PL_1	65	7.1	LOC	B	N			
Ana-039-010	FAIRWAY PL_1	0	61	West End	FAIRWAY PL	61	15.9	LOC	B	N			
Ana-039-020	FAIRWAY PL_1	61	84	FAIRWAY PL	East End	23	15.9	LOC	B	N			
Ana-040-010	FALCON CREST DR	0	133	EAGLE CRES	PEREGRINE WAY	133	11.1	LOC	B	Y			
Ana-040-020	FALCON CREST DR	133	179	PEREGRINE WAY		46	10.4	LOC	B	N			
Ana-041-010	FIR AVE	0	79	Northwest End	MAIN ST	79	6.7	LOC	N	N			
Ana-041-020	FIR AVE	79	274	MAIN ST	HILL ST	195	6.8	LOC	N	N			
Ana-041-030	FIR AVE	275	379	HILL ST	MORRISSEY ST	104	6.8	LOC	N	N			
Ana-041-040	FIR AVE	379	614	MORRISSEY ST	CHESTNUT LANE	235	10.6	LOC	B	N			
Ana-041-050	FIR AVE	614	885	CHESTNUT LANE	LINDLEY CREEK RD / MIDDAY VALLEY RD	271	11.2	LOC	B	N			
Ana-042-010	FORKSDALE AVE	0	55	Southwest End	CRESSAY ST / FORKSDALE PL	55	16.6	LOC	B	N			
Ana-042-020	FORKSDALE AVE	55	163	CRESSAY ST / FORKSDALE PL	FORKSDALE CRT	108	10.9	LOC	B	N			
Ana-042-030	FORKSDALE AVE	163	228	FORKSDALE CRT	RIVER RANCH RD	65	10.5	LOC	B	N			
Ana-042-040	FORKSDALE AVE	228	483	RIVER RANCH RD	East End	255	17.6	LOC	B	N			
Ana-043-010	GARCIA ST	0	124	Southwest End	CLARKE AVE	124	7.4	LOC	N	N			
Ana-043-020	GARCIA ST	124	223	CLARKE AVE	PRIEST AVE	99	9.4	LOC	N	N			
Ana-043-030	GARCIA ST	223	321	P									

Road_ID	Road	From	To	StreetFrom	StreetTO	Length (m)	Width (m)	Class	Curb	Snow Priority	Treatment	Year	Cost
Ana-048-060	GRANITE AVE	943	1113	CHARTERS ST	BLAIR ST	170	13.1	LOC	N	N			
Ana-048-070	GRANITE AVE	1113	1398	BLAIR ST	DOUGLAS ST	285	7.6	LOC	N	N			
Ana-050-010	GREAVES AVE	0	111	BOYD RD	East End	111	12.2	LOC	B	N			
Ana-051-010	GREIG ST	0	112	Southwest End	COLDWATER AVE	112	9.2	LOC	B	N			
Ana-053-010	HAMILTON AVE	0	129	NO NAME / SPRING ST	CLEASBY ST	129	7.7	LOC	N	N			
Ana-053-020	HAMILTON AVE	130	251	CHAPMAN ST	RIVER ST	121	8	LOC	N	N			
Ana-054-010	HAMILTON HILL RD	0	100	East End		100	8.1	LOC	N	N			
Ana-054-030	HAMILTON HILL RD	824	914		MERRITT-PRINCETON HWY NO 5A & 97C	90	19.3	LOC	N	N			
Ana-055-010	HICKS AVE	0	97	COLLETT ST	PINE ST	97	6.3	LOC	N	N			
Ana-056-010	HIGHWAY 5A	0	342	HIGHWAY 5A OFFRAMP / HIGHWAY 5A ONRAMP / VOGHT ST	GORDON ST	342	15	ART	L	Y			
Ana-056-020	HIGHWAY 5A	342	580	GORDON ST	AIRPORT DR	238	16.3	ART	R	Y			
Ana-058-010	HILTON DR	0	134	Southwest End	COWAN WAY	134	12.5	LOC	B	N			
Ana-058-020	HILTON DR	134	188	COWAN WAY	SUNSET ST	54	10	LOC	B	N			
Ana-059-020	HOUSTON ST	344	442	PRIEST AVE	CLAPPERTON AVE	98	13.3	COL	B	Y			
Ana-059-050	HOUSTON ST	637	692	JACKSON AVE	LANE_40	55	13	COL	B	Y			
Ana-059-060	HOUSTON ST	692	787	LANE_40	LANE_35	95	13.1	COL	B	Y			
Ana-060-010	IRVINE RD	0	150	Southwest End	SLATER ST	150	12.2	LOC	B	N			
Ana-060-020	IRVINE RD	150	232	SLATER ST	CEDAR RD	82	12.2	LOC	B	N			
Ana-060-030	IRVINE RD	232	304	CEDAR RD	WALTERS ST	72	10.8	LOC	B	N			
Ana-060-040	IRVINE RD	304	499	WALTERS ST	CRESSAY ST	195	10.8	LOC	B	N			
Ana-060-050	IRVINE RD	499	707	CRESSAY ST	RIVER RANCH RD	208	10.5	LOC	B	N			
Ana-061-010	JACKSON AVE	33	147		BLAIR ST	114	9.4	LOC	N	N			
Ana-061-020	JACKSON AVE	147	302	BLAIR ST	MAY ST	155	7.3	LOC	N	N			
Ana-061-030	JACKSON AVE	302	457	MAY ST	ORME ST	155	7.2	LOC	N	N			
Ana-061-040	JACKSON AVE	457	656	ORME ST	HOUSTON ST	199	7.6	LOC	N	N			
Ana-061-050	JACKSON AVE	656	798	HOUSTON ST	East End	142	8	LOC	N	N			
Ana-062-010	JUNIPER DR	0	298	HIGHWAY 8 / NICOLA AVE	JUNIPER DR_1	298	8	COL	N	Y			
Ana-062-025	JUNIPER DR	877	1169		PINERIDGE DR	292	9.8	COL	B				
Ana-062-030	JUNIPER DR	1169	1291	PINERIDGE DR	PANORAMA PL	122	9.6	COL	B	N			
Ana-062-040	JUNIPER DR	1291	1359	PANORAMA PL	PARKER DR	68	9.3	COL	B	N			
Ana-063-010	JUNIPER DR_1	0	200	JUNIPER DR	Northeast End	200	7.4	LOC	N	N			
Ana-076-010	LANE_13	0	171	GARCIA ST	CHARTERS ST	171	4.2	LAN	N	N			
Ana-076-020	LANE_13	171	340	CHARTERS ST	BLAIR ST	169	4.7	LAN	N	N			
Ana-076-030	LANE_13	340	560	BLAIR ST	South End	220	5.2	LAN	N	N			
Ana-077-010	LANE_14	1	173	CHAPMAN ST	VOGHT ST	172	7.9	LAN	B	N			
Ana-078-020	LANE_15	233	435	CLEASBY ST	CHAPMAN ST	202	3.3	LAN	N	N			
Ana-078-030	LANE_15	435	605	CHAPMAN ST	VOGHT ST	170	3.7	LAN	N	N			
Ana-078-040	LANE_15	605	769	VOGHT ST	GARCIA ST	164	4.2	LAN	N	N			
Ana-078-050	LANE_15	769	947	GARCIA ST	CHARTERS ST	178	4.1	LAN	N	N			
Ana-079-010	LANE_16	1	203	CLEASBY ST	CHAPMAN ST	202	3.8	LAN	N	N			
Ana-079-020	LANE_16	203	374	CHAPMAN ST	VOGHT ST	171	3.5	LAN	N	N			
Ana-079-030	LANE_16	374	542	VOGHT ST	GARCIA ST	168	4.1	LAN	N	N			
Ana-079-040	LANE_16	542	715	GARCIA ST	CHARTERS ST	173	3.9	LAN	N	N			
Ana-079-050	LANE_16	715	884	CHARTERS ST	BLAIR ST / LANE_17	169	3.7	LAN	N	N			
Ana-080-010	LANE_17	0	90	BLAIR ST / LANE_16	LANE_31	90	4.3	LAN	N	N			
Ana-081-010	LANE_18	0	139	POOLEY AVE	Northeast End	139	11.4	LAN	N	N			
Ana-082-010	LANE_19	0	846	MIDDAY VALLEY RD	South End	846	13.1	LAN	B	N			
Ana-083-010	LANE_20	1	171	VOGHT ST	BELSHAW ST / DEWOLF WAY	170	20.1	LAN	B	N			
Ana-085-010	LANE_22	0	49	DOUGLAS ST	LANE_30	49	11.6	LAN	N	N			
Ana-086-010	LANE_23	0	154	Northwest End	Southeast End	154	9.5	LAN	N	N			
Ana-087-010	LANE_24	0	203	CLEASBY ST	CHAPMAN ST	203	3.3	LAN	N	N			
Ana-087-020	LANE_24	203	373	CHAPMAN ST	VOGHT ST	170	5.3	LAN	N	N			
Ana-088-010	LANE_25	1	170	VOGHT ST	GARCIA ST	169	3.7	LAN	N	N			
Ana-090-010	LANE_27	1	84	COLDWATER AVE	North End	83	8.1	LAN	B	N			
Ana-093-010	LANE_30	0	218	CLAPPERTON AVE / LANE_41	LANE_22	218	4.5	LAN	N	N			
Ana-093-020	LANE_30	218	438	LANE_22	DOUGLAS ST / QUILCHENA AVE	220	4.5	LAN	N	N			
Ana-094-020	LANE_31	71	115	LANE_17	NICOLA AVE	44	15	LAN	N	N			
Ana-096-010	LANE_33	0	79	LANE_32	COUTLEE AVE	79	9.1	LAN	N	N			
Ana-106-010	LANE_43	1	146	CLAPPERTON AVE	MENZIES ST	145	6.5	LAN	N	N			
Ana-107-010	LANE_44	0	81	MENZIES ST	West End	81	7.9	LAN	N	N			
Ana-109-020	LANE_46	142	313	CHAPMAN ST	VOGHT ST	171	3.6	LAN	N	N			
Ana-109-030	LANE_46	313	471	VOGHT ST	GARCIA ST	158	4.3	LAN	N	N			
Ana-110-010	Lane_47	1	89	PRIEST AVE	CLAPPERTON AVE	88	6	LAN	N	N			
Ana-111-010	LANGLEY RD	0	104	CLEASBY ST	LANGLEY ST	104	10.4	LOC	B	N			
Ana-112-010	LANGLEY ST	0	207	LANGLEY RD	1ST AVE	207	9.7	LOC	B	N			
Ana-113-010	LANGSTAFF PL	0	85	MENZIES ST	East End	85	18	LOC	N	N			
Ana-114-010	LAUDER AVE	0	117	MARGARET ST	LAUDER ST	117	7.8	LOC	N	N			
Ana-115-010	LAUDER ST	0	92	NICOLA AVE	LAUDER AVE	92	7.5	LOC	N	N			
Ana-116-010	LINDLEY CREEK RD	0	1205	Northwest End		1205	6.7	LOC	N	N			
Ana-117-01													

Road_ID	Road	From	To	StreetFrom	StreetTO	Length (m)	Width (m)	Class	Curb	Snow Priority	Treatment	Year	Cost
Ana-124-010	MCFARLANE WAY	0	209	POOLEY AVE	Northeast End	209	8.5	LOC	N	N			
Ana-125-010	MCGORAN PL	0	70	West End	MCGOWAN ST	70	11.3	LOC	N	N			
Ana-125-020	MCGORAN PL	70	151	MCGOWAN ST	East End	81	11.3	LOC	N	N			
Ana-126-010	MCGOWAN ST	0	92	MERRITT AVE	MCGORAN PL	92	10.6	LOC	N	N			
Ana-127-010	MCLEAN PL	0	100	West End	SAGE ST	100	11.6	LOC	B	N			
Ana-127-020	MCLEAN PL	100	202	SAGE ST	East End	102	12.8	LOC	B	N			
Ana-128-010	MENZIES ST	0	75	CLAPPERTON AVE	LANE_43	75	7.9	LOC	N	N			
Ana-128-020	MENZIES ST	75	147	LANE_43	CRANNA CRES	72	7.9	LOC	N	N			
Ana-128-030	MENZIES ST	147	248	CRANNA CRES	LANE_44	101	7.4	LOC	N	N			
Ana-128-040	MENZIES ST	248	373	LANE_44	CRANNA CRES	125	7.8	LOC	N	N			
Ana-128-050	MENZIES ST	373	464	CRANNA CRES	GRANITE PL	91	7.2	LOC	N	N			
Ana-128-060	MENZIES ST	464	578	GRANITE PL	RANSOM AVE	114	7.7	LOC	N	N			
Ana-129-010	MERRITT AVE	0	170	CHAPMAN ST	VOGHT ST	170	13.7	LOC	N	N			
Ana-129-060	MERRITT AVE	717	839	BLAIR ST	NO NAME	122	7.6	LOC	N	N			
Ana-130-015	MIDDAY VALLEY RD	1840	1982		LANE_19	142	9.7	COL	N	N			
Ana-130-020	MIDDAY VALLEY RD	1982	2288	LANE_19	DOUGLAS ST	306	14.3	COL	L	N			
Ana-131-010	MILLER CRT	0	100	West End	SUNSET ST	100	12.6	LOC	B	N			
Ana-132-010	MORRISSEY ST	0	83	LINDLEY CREEK RD	CHESTNUT AVE	83	6.6	LOC	N	N			
Ana-132-020	MORRISSEY ST	83	232	CHESTNUT AVE	FIR AVE	149	6.7	LOC	N	N			
Ana-133-010	MUNRO CRES	0	338	CASTILLOU CRES	CASTILLOU CRES	338	7.8	LOC	N	N			
Ana-134-010	NEILSON ST	0	471	South End	POOLEY AVE	471	7.8	LOC	N	N			
Ana-137-010	ORME ST	0	97	PRIEST AVE	CLAPPERTON AVE	97	7.7	LOC	N	N			
Ana-137-020	ORME ST	97	195	CLAPPERTON AVE	COLDWATER AVE	98	7.4	LOC	N	N			
Ana-137-030	ORME ST	195	293	COLDWATER AVE	JACKSON AVE	98	7.2	LOC	N	N			
Ana-137-040	ORME ST	293	346	JACKSON AVE	LANE_39 / LANE_40	53	7.5	LOC	N	N			
Ana-137-050	ORME ST	346	442	LANE_39 / LANE_40	LANE_35 / LANE_45	96	7.5	LOC	R	N			
Ana-138-010	PANORAMA PL	0	94	JUNIPER DR	North End	94	18.4	LOC	B	N			
Ana-139-010	PARCEL ST	0	126	South End	PRIEST AVE	126	6.5	LOC	N	N			
Ana-141-010	PEREGRINE WAY	306	598		FALCON CREST DR	292	12.1	LOC	B	Y			
Ana-141-020	PEREGRINE WAY	598	779	FALCON CREST DR	East End	181	10.9	LOC	B	Y			
Ana-142-010	PINE ST	0	187	WALNUT AVE	GOVERNMENT AVE	187	6.5	LOC	N	N			
Ana-142-020	PINE ST	187	449	GOVERNMENT AVE	HICKS AVE	262	7.1	LOC	N	N			
Ana-142-030	PINE ST	449	670	HICKS AVE	Northeast End	221	6.1	LOC	N	N			
Ana-143-010	PINERIDGE DR	0	102	JUNIPER DR	SUNFLOWER AVE	102	10.8	LOC	B	Y			
Ana-143-020	PINERIDGE DR	102	281	SUNFLOWER AVE	PONDEROSA WAY	179	10.5	LOC	B	Y			
Ana-143-030	PINERIDGE DR	281	419	PONDEROSA WAY	Northeast End	138	12.1	LOC	B	Y			
Ana-144-010	PONDEROSA WAY	0	121	West End	PINERIDGE DR	121	11.7	LOC	B	Y			
Ana-144-020	PONDEROSA WAY	121	250	PINERIDGE DR	PARKER DR	129	9.5	LOC	B	Y			
Ana-144-030	PONDEROSA WAY	250	1010	PARKER DR	ALLEN RD / GRIMMET ST	760	6.2	LOC	N	N			
Ana-145-010	POOLEY AVE	0	332	DOUGLAS ST	LANE_18	332	8.4	COL	N	N			
Ana-145-020	POOLEY AVE	332	475	LANE_18	MCFARLANE WAY	143	8	COL	N	N			
Ana-146-030	PRIEST AVE	186	407	GARCIA ST	CHARTERS ST	221	7.5	LOC	N	N			
Ana-146-040	PRIEST AVE	408	589	West End	ORME ST	181	6.4	LOC	N	N			
Ana-146-050	PRIEST AVE	589	779	ORME ST	HOUSTON ST	190	6.7	LOC	N	N			
Ana-146-060	PRIEST AVE	779	1039	HOUSTON ST	DOUGLAS ST	260	7.4	LOC	N	N			
Ana-147-010	QUILCHENA AVE	0	262	Northwest End	MAIN ST	262	8.1	LOC	N	N			
Ana-150-020	REID AVE	112	393	REID PL	WALTERS ST	281	12.4	LOC	N	N			
Ana-150-030	REID AVE	393	441	WALTERS ST	East End	48	15.1	LOC	B	N			
Ana-151-010	REID PL	0	49	REID AVE	Northwest End	49	18.1	LOC	N	Y			
Ana-152-010	RIVER RANCH RD	0	378	SPRING BANK AVE	FORKSDALE AVE	378	10.9	LOC	L	N			
Ana-152-020	RIVER RANCH RD	378	472	FORKSDALE AVE	IRVINE RD	94	10.9	LOC	B	N			
Ana-152-030	RIVER RANCH RD	472	538	IRVINE RD	BELSHAW ST / VOGHT ST	66	16.1	LOC	B	N			
Ana-153-010	RIVER ST	0	50	HAMILTON AVE	LANE_06	50	6.1	LOC	N	N			
Ana-153-020	RIVER ST	50	144	LANE_06	LANE_29	94	6.3	LOC	N	N			
Ana-153-030	RIVER ST	144	191	LANE_29	COLDWATER AVE	47	6.1	LOC	N	N			
Ana-154-010	SAGE PL	0	134	CLAPPERTON AVE / SAGE ST	North End	134	13.8	LOC	B	N			
Ana-155-010	SAGE ST	0	89	MCLEAN PL	TELEMON PL	89	10.9	LOC	B	N			
Ana-155-020	SAGE ST	89	173	TELEMON PL	CLAPPERTON AVE / SAGE PL	84	10.8	LOC	B	N			
Ana-156-010	SCOTT PL	0	105	Northwest End	BANN ST	105	12.3	LOC	B	N			
Ana-157-010	SEYOM CRES	0	117	BLAIR ST	East End	117	11.4	LOC	N	N			
Ana-158-010	SPRING BANK AVE	0	577	West End	RIVER RANCH RD	577	11.4	LOC	B	N			
Ana-159-010	SPRING ST	0	81	HAMILTON AVE / NO NAME	CANFORD AVE	81	7.7	LOC	N	N			
Ana-159-020	SPRING ST	82	167	CANFORD AVE		85	7.9	LOC	N	N			
Ana-159-040	SPRING ST	220	294	QUILCHENA AVE	GRANITE AVE	74	7.3	LOC	N	N			
Ana-160-010	SPRUCE AVE	0	68	Northwest End	MAIN ST	68	7.5	LOC	N	N			
Ana-160-020	SPRUCE AVE	68	220	MAIN ST	HILL ST	152	6.2	LOC	N	N			
Ana-161-010	SUNFLOWER AVE	0	208	PINERIDGE DR	WILDROSE WAY	208	10.8	LOC	B	Y			
Ana-162-010	SUNSET ST	0	157	COLDWATER RD	THORPE RD	157	7	LOC	N	N			
Ana-162-020	SUNSET ST	157	239	THORPE RD	MILLER CRT	82	6.4	LOC	N	N			
Ana-162-040	SUNSET ST	366	651										

