PROPOSAL

CITY OF GILLETTE Pavement Management (PAVER) Update on 1/3rd of Inventory



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TR Consulting Services

TR Consulting Services specializes in Pavement Management Implementations using the PAVER software and GIS. TR Consulting Services prides itself in being a technology innovator, with a primary focus on creating advanced data collection tools and using state-of-the-art in field GIS and GPS applications for sampling accuracy. TR Consulting Services is conveniently located in Fort Collins, Colorado—within 5-hours of the City of Gillette. Tyler was the project lead for the Full PAVER Implementation for the City in 2016, Project No. 16EN21 and the Newly Annexed Roads PAVER Implementation in 2018, Project No. 19EN04. Completing both projects gives TR Consulting Services extensive knowledge of Gillette's PAVER database and road network. Tyler Rossow worked conjointly with Todd Merchen, Steve Peterson, Joe Schoen, and Lee Pratt during each project and has continued to stay in touch to answer PAVER related questions whenever needed.

TR Consulting Services will work with the city's personnel during all phases of the project. The goal is to exceed expectations and provide the city with a useful pavement management tool for years to come. Below is the approach we will take to complete the Pavement Management (PAVER) Update on 1/3rd of the Inventory. The proposal is negotiable based on the understanding of the work required

Primary Point of Contracts (POC's)

This proposal is in response to City of Gillette's request to split the pavement network into thirds and survey/update the database annually. Tyler Rossow and all personnel of TR Consulting Services completed all previous pavement management efforts for the City of Gillette in the past, with great success. Tyler will service as primary POC and will be responsible for all deliverables and invoicing.

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Scope of Services

General

The scope of services is for Pavement Management (PAVER) Updates on 1/3rd of the inventory at Gillette, WY (Note: The City has elected to split the managed roads into thirds, so that a third can be inspected annually). The services include updating the existing PAVER database, creating a sample unit polygon shapefile for the inspected third, inputting work history into the PAVER Database for the entire network, inspecting a third of the inventoried roads (Zone 1 of 3, which is shown in attached map), rerunning prediction models and summarizing results in brief report.

Task 1. PAVER Update

1.1. The City will provide the consultant with a copy of the current PAVER database.

1.2. TR Consulting will create sample unit shapefile for the defined sections within Zone 1. This will increase the accuracy of the inspection and increase productivity in the field. The consultant will add the sample unit shapefile for Zone 2 and 3 once they are inspected in the future.

Task 2. Work History Input

2.1. The City will provide a list detailing 2018-2019 construction projects (the more detailed the list, the more detailed the input into PAVER). Consultant will organize the list and add necessary fields in order to properly input into PAVER. Each project will be mapped, so that parameters can be verified in the field.

Task 3. Field Inspections

3.1. TR Consulting will inspect all managed roadways within Zone 1. There are roughly 1150 sections to inspect per zone. The number of inspected sample units per section will follow the ASTM 6433 standard. Additional sample units will be added when necessary to reflect the condition of the section. Tablets will be used in the field to enter inspection data and to pinpoint locations of inspected sample units. Two pictures of each sample units will be taken, along with a georeferenced point shapefile showing exactly where the picture was taken.

3.2. While inspecting Zone 1, the consultant will notate whether each section has crack sealing (if crack sealed, will specify condition of crack seal). This will help the Gillette with localized maintenance efforts.

3.3. As mentioned in 2.1, the consultant will verify each of the completed construction projects in the field. This will allow the consultant to ensure that the lengths/widths, To's/From's and all physical properties are accurate and that no significant deficiencies are found within the newly constructed areas.

Task 4. Field Adjustments Within PAVER

4.1. TR Consulting will make all necessary field edits in GIS and the PAVER database accordingly. The field edits will be tracked within PAVER and comments will be made to explain how/why the section was adjusted.

Task 5. Update Prediction Models

5.1. TR Consulting will use historical inspection data and all the collected inspection data from Zone 1 to update the already established Prediction Models. Also, the consultant will verify that all data is properly linked within the PAVER database.

Task 6. Condition Reports

6.1. Establish a brief report summarizing the work completed, showing the inspection results, maps of work history and screen shots of prediction models.

6.2. Generate a PCI Condition Report that compares the 2016 inspection data to the 2019 inspection data. This table will also show the individual deterioration rate of each inventoried section.

6.3. Submit an electronic copy of all PDF Files, PAVER Database, Shapefiles and pictures in a Final Deliverables Folder which will be delivered via GoogleDrive.

Period of Services

All work will be completed before December 31st, 2019 (weather and contracting dependent).

Cost of Services

Task	Amount
Task 1: PAVER Update	\$3,500
Task 2: Work History Input	\$5,300
Task 3: Field Inspections	\$41,500
Task 4: Field Adjustment Within PAVER	\$5,000
Task 5: Update Prediction Models	\$3,500
Task 6: Condition Report	\$5,000
Grand Total	\$63,800