



February 25, 2015

City of Sunfish Lake

Re: Benchmark Survey Proposal

WSB & Associates, Inc. appreciates this opportunity to respond to your request for proposal for surveying services.

It is our understanding that the City would like to obtain benchmark elevations within the city limits. WSB & Associates, Inc. would be able to provide this survey information in a very efficient and accurate manner by utilizing a combination of GPS and conventional level loop.

GPS collected data would be on the NAD 83 (1996) HARN horizontal Dakota County Coordinate system and level loop would be on NAVD 88 vertical datum. Unless otherwise specified by the City. WSB would set benchmarks in existing wood power poles or on concrete transmission pole bases.

WSB would provide these surveying services to the City of Sunfish on a not to exceed dollar amount basis. Based on 30 - 40 total benchmarks we propose to complete this work for **\$4,500.00** and supply the City with a comma delimited text file for your use with the City's GIS system.

*Optional cost to create the GIS base map for the City's use **\$1,000.00***

If you are in agreement with the terms as outlined above, please sign where indicated below and return one copy to our office.

Thank you for considering WSB for your surveying needs. We are looking forward to working with you on this project. If you have any questions regarding this proposal please contact me at 763-287-7159.

Sincerely,

A handwritten signature in black ink, appearing to read "Pete D. Helder".

Pete D. Helder
Survey Group Coordinator

By: _____

Title: _____

Date: _____



March 27, 2015

Re: Pavement Management Work Plan
City of Sunfish Lake, MN

I am pleased to submit this work plan on behalf of WSB & Associates, Inc. to perform City-wide culvert and road inspections. The last pavement and culvert evaluation was completed in 2012. Typically, Cities review one third of their City streets every year to monitor the condition and plan for future improvements to keep their infrastructure investment maintained. These tasks are not significant tasks to complete but will provide a snapshot of the current condition of the City's entire infrastructure which will improve how we plan and schedule infrastructure improvements. The CIP process provides a proactive rather than reactive management process for maintaining the City's infrastructure condition and managing the City's infrastructure investments.

Cost Summary

It is proposed that this project be billed hourly on a cost not to exceed basis, with total cost not exceeding **\$5,500**. If you are in agreement with the terms as outlined above, please sign where indicated below and return one copy to our office.

The following tasks will be completed as part of this work plan:

1. Detailed Inspection of City Pavement and Culverts

WSB & Associates will:

- Deployed data to iPads for use in detailed field inspections
- Rate approximately 3 miles of bituminous roadways and 57 culverts in the City of Sunfish Lake
- The pavement inspections will include:
 - View the segment condition on the ground
 - Record information on the particular distresses
 - Input that data into the Cartegraph database
 - Determine an Overall Condition Index (OCI) based on Army Corps of Engineers methodology
- The culvert inspections will include:
 - View the segment condition on the ground
 - Record information on the particular distresses
- Maintain data during the duration of the project

Cost: \$5,242

2. GIS Maps

WSB & Associates will:

- Create maps showing the condition ratings of the roads and culverts

Cost: \$258

Project Timeline

Detailed inspections of streets

May 2015

GIS Maps

June 2015

3. Extra Services

WSB & Associates can:

- Provide guidance in developing a network analysis of the City's roadway system
 - Used to determine the needs and/or effectiveness of past and current pavement rehabilitation and preventive maintenance activities
- Develop different budget scenarios that can most accurately represent the City's existing pavement management program
- Make modifications to optimize the existing system
- Develop strategies based on maintenance techniques to optimize a pavement management program
- Draft a memo containing the analysis results, budgeting parameters and maps
- Evaluate historic projects for rehabilitation alternatives, life cycle costing or feasibility
 - May include gathering current information on the pavement condition and/or a historical review of its performance
- Develop pavement performance prediction models to help the city predetermine or predict the future maintenance and rehabilitation needs for the network segments
- Create CIPs which detail future plans for maintenance and rehabilitation projects for the City's roadways
- Create presentations highlighting the findings of the analysis and the pavement management program for the City
- Take pavement cores and soil borings as part of a pavement forensics study
 - Analysis of pavement cores
 - Can be used to find depths of the pavement layers, signs of bonding or unbonding and distresses that might not be visible from the road surface

Pavement coring could be performed based on a 2 man crew taking the cores at a rate of **(\$235/hour)**, an analysis of the cores, travel time and time needed to write up a pavement forensics report performed at a rate of **(\$94/hour)**. The other tasks listed are just a few of the opportunities which exist. If interested, this work could be performed on an hourly basis **(\$147/hour)** with the details to be finalized at a later date. Additional GIS/Cartegraph technical support is available at **(\$94/hour)**.

Thank you for this opportunity to continue to develop the City of Sunfish Lake's Pavement Management System. I am confident that the level of service on this project will meet or exceed your expectations. If you should have any questions regarding this proposal, please contact me at 763-287-8313.

Sincerely,

WSB & Associates, Inc.

Andrea Azary

Andrea Azary, EIT
Pavement/Materials Specialist

ACCEPTED BY:

City of Sunfish Lake

By: _____

Title: _____

Date: _____