

APPLICANT INFORMATION

Applicant Name: Town of Broadus, Department of Public Works

Principle Individual: Raymond Ragsdale, Public Works Director

Agency: Town of Broadus

Mailing Address: 210 East Holt St., PO Box 659

City: Broadus

State: Montana

Postal Code: 59317

Contact Telephone: (406) 436-2409, (406) 935-2242 (cell)

Contact Email: townofbroadus@rangeweb.net

Contact Fax: (406) 436-2558

Department: Public Works

DATE SUBMITTED Feb 14, 2014

DATE RECEIVED

Date Received _____

Other Project Partners:

Name of contact: **Christopher Veis, PE**

Name of Agency: **Interstate Engineering, Inc.**

Street: **PO Box 20953, 1211 Grand Ave Suite 6**

City: **Billings**

County: **Yellowstone**

State: **MT**

Zip Code **59104**

Contact email address **shoots.veis@interstateeng.com**

Contact phone: **406-256-1920**

Project Title:

Broadus Metadata Project

Relevance and Public Benefit

The Town of Broadus has recently begun the process to evaluate its current Wastewater collection and treatment systems through a Preliminary Engineering Report (PER). Since GPS data will be used to collect information on the system for the purposes of the report, the Town of Broadus has decided to integrate a GIS mapping component to the project to aid the Department of Public Works and Emergency services personnel in maintenance and planning as well as contribute this functional information to the public realm.

The purpose of the Town of Broadus Metadata project will be to collect location data on proposed new and existing systems such as the water distribution network, wastewater systems, and hydrants, and to make these datasets readily available to public and private entities. This would be accomplished by publishing the data to the state GIS portal qualifying the project to receive funding under grant priority B3.1. In addition to aiding both the public and private realm through the creation of this planning tool, this project would directly aid the Montana State Library in its duty to collect, maintain, and disseminate land information established under MCA 90-1-404.

Project Description:

The Town of Broadus had requested a PER be conducted on their current wastewater treatment facilities as a result of problems detected by their wastewater treatment operator. Much of the town's wastewater piping is constructed of clay tile which has cracked due to age, intruding tree roots, and soil settlement. These cracks are allowing groundwater to infiltrate the system thereby delivering excess fluid to the wastewater lagoons. Based on the rate the lagoons are filling up, it is estimated that 30,000 to 50,000 gallons of groundwater are infiltrating the system every day. The current system consists of three lagoons designed to treat 100,000 gallons per day. This failure of the piping network, in addition to other aspects of the system beyond stressed beyond its design life, has resulted in the Town of Broadus being in violation of their DEQ Wastewater Discharge Permit.

The extent of the damage to the piping is unknown although the Town of Broadus has attempted to quantify in the past. Additionally, no electronic location data exists for the wastewater system. A significant portion of the PER will involve the creation of a base map for the Town of Broadus. The creation of this base map will require the collection of GPS data on the entire water and wastewater system. The incorporation of this data to the state GIS portal is a natural and logical addition to the project as it would benefit local government as a planning tool, inform residents of the location of utilities, and contribute to the State's overall land information efforts.

The following tasks have been identified as necessary to the successful completion of this project.

1. Hire a survey crew to begin collecting data points.
2. Travel to Helena to meet with the Montana State Library to develop a comprehensive plan for developing FGDC Metadata in ArcCatalog 10.0 SP3 to meet the Standard of the Montana GIS Portal.
 - a. Creating a Metadata Profile for the dataset
 - b. Establish a set of guidelines for each separate layer to provide a systematic method of applying QA/QC.
3. Create FGDC Metadata Templates as needed.
4. Create the metadata for the Town of Broadus Dataset.
5. Create a FTP site to the Dataset to the Montana GIS Portal for the following layers.
 - a. Addresses
 - b. Roads
 - c. Street Signs
 - d. Town of Broadus City Limits
 - e. Voting Districts
 - f. Town of Broadus Zoning
 - g. Water Pipe
 - h. Wastewater Pipe
 - i. Water Valves
 - j. Wastewater Valves
 - k. Wastewater Treatment Plant
 - l. Lagoons
 - m. Water Tank
 - n. Wells
 - o. Manholes

Project Time Line

- July 1, 2014 - Aug 1, 2014: Collection of Data Points
- Aug 1, 2014 - Oct 1, 2014: Creation of Base map, Prepare Dataset for Publication.
- Oct 1, 2014 – Oct 15, 2014: Meet with Montana State Library in preparation for creating metadata
- Oct 15, 2014 - October March 1, 2015: Create and Publish Metadata & Dataset

Project Management and Organizational Capability:

The Broadus Public Works Director will oversee the project schedule and budget in conjunction with the Broadus Clerk. The Town of Broadus has a contract with Interstate Engineering to provide the survey data collection and develop GIS metadata and dataset. They will work with Interstate Engineering to ensure the correct information is collected and useful to the town.

Raymond Ragsdale is the Public Works Director and Fire Chief for the Town of Broadus. He will direct the data collection and oversee the disbursement of grant funds. That public works department has three personnel, all of whom are certified Water and Wastewater operators. They will aid in the collection of data.

Christopher Veis, PE, of Interstate Engineering will be the designated Project Engineer for the PER as well as the GPS Data collection. Christopher has 10 years of experience as a Project Engineer and has managed several infrastructure projects.

Budget Narrative and Tables:

The full scope of the project is \$104,000 to complete the base mapping, the preliminary engineering report, and develop the GIS information. Several entities are providing funds for the project. The Town of Broadus has applied for and been awarded \$15,000 from a TSEP Grant and will match the award with \$15,000 from the towns' funds. The Town of Broadus is providing \$15,000 in-kind funding for the personnel that will be involved in the project. Broadus has applied for a grant from the Coal Board totaling \$39,000. They are requesting a grant of \$20,000 to complete the project.

The Town of Broadus is requesting funds from the MLIA to assist in the completion of the following items.

- Collection of data using GPS survey.
- The creation of an electronic base map for the Town of Broadus.
- The creation of a dataset containing the aforementioned GIS layers to be incorporated into the State of Montana GIS portal.

Applicant budget summary

Category	MLIA Share	Applicant Share	Total
a. Personnel	\$4,000.00	\$12,000.00	\$16,000.00
a.1 Fringe Benefits	0.00	\$3,000.00	\$3,000.00
b. Travel	\$500.00	0.00	\$500.00
c. Equipment	0.00	0.00	0.00
d. Supplies	0.00	0.00	0.00
e. Contractual	\$15,500	0.00	\$15,500
Totals	\$20,000.00	\$15,000	\$35,000

Partner budget summary

Category	Partner 1	Partner 2	Total
a. Personnel	\$13,000.00		\$13,000.00
a.1 Fringe Benefits			
b. Travel	\$1,000.00		\$1,000.00
c. Equipment	\$1,000.00		\$1,000.00
d. Supplies	\$500.00		\$500.00
e. Contractual	0.00		0.00
Totals	\$15,500		\$15,500

Authorizing Statement

I hereby certify that the information and all statements in this application are true, complete and accurate to the best of my knowledge and that the project or activity complies with all applicable state, local and federal laws and regulations.
I further certify that this project will comply with applicable statutory and regulatory standards.
I further certify that I am (by my signature) authorized to enter into a binding agreement with the Montana State Library to obtain a grant if this application receives approval.

Milton L. Amsden, Mayor, Town of Broadus



Date 2-12-14

Signature and Title of Authorized Representative(s) of Public Entity Applicant



February 14, 2014

Mr. Raymond Ragsdale
Public Works Director
210 East Holt St., PO Box 659
Broadus, MT 59317

RE: Town of Broadus – MLIA Grant – Letter of Support

Dear Mr. Ragsdale:

As the city engineer for the Town of Broadus, Interstate Engineering fully supports the addition of a GIS component to your initial request for a PER. The incorporation of GIS data into an electronic base map will benefit the Town of Broadus by creating ready access to utility location data. This information will aid in future planning for the Department of Public Works and emergency services. In addition, by publishing the collected data to the state GIS portal you are also contributing to the state effort to collect and maintain land information. We encourage you to apply for funding from the Montana Land Information Act Council to help you accomplish this goal.

Sincerely,

A handwritten signature in blue ink that reads 'Shoots' followed by a stylized flourish.

Shoots Veis, PE
Project Engineer

Professionals you need, people you trust

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