



CITY OF ALBION CITY COUNCIL MEETING AGENDA

Meetings: First and Third Mondays – 7:00 p.m.

City Council Chambers ♦ Second Floor ♦ 112 West Cass Street ♦ Albion, MI 49224

COUNCIL-MANAGER
GOVERNMENT

Council members and
other officials normally in
attendance.

Joseph V. Domingo
Mayor

Maurice Barnes, Jr.
Council Member
1st Precinct

Lenn Reid
Council Member
2nd Precinct

Garrett Brown
Council Member
3rd Precinct

Rebecca Decker
Council Member
4th Precinct

Cheryl Krause
Council Member
5th Precinct

Andrew French
Mayor Pro Tem
Council Member
6th Precinct

Sheryl L. Mitchell
City Manager

The Harkness Law Firm
Atty Cullen Harkness

Jill Domingo
City Clerk

NOTICE FOR PERSONS WITH
HEARING IMPAIRMENTS
WHO REQUIRE THE USE OF A
PORTABLE LISTENING DEVICE

Please contact the City
Clerk's office at
517.629.5535 and a listening
device will be provided
upon notification. If you
require a signer, please
notify City Hall at least five
(5) days prior to the posted
meeting time.

AGENDA

STUDY SESSION-COUNCIL CHAMBERS Monday, October 17, 2016

6:00 P.M.

PLEASE TURN OFF CELL PHONES DURING MEETING

- I. CALL TO ORDER
- II. ROLL CALL
- III. CITIZEN'S COMMENTS (Persons addressing the City Council shall limit their comments to **agenda items only** and to no more than five (5) minutes. Proper decorum is required.)
- IV. ITEMS FOR INDIVIDUAL DISCUSSION
 - A. Wightman & Associates to Assist with the USDA Grant for the Water Tower and Water System Improvements
- V. CITIZENS COMMENTS (Persons addressing the City Council shall limit their comments to no more than five (5) minutes. Proper decorum is required.)
- VI. ADJOURN

RESOLUTION #2016-61

Approval to Retain Additional Services of Wightman & Associates, Inc. for USDA Water System Grant Application

Purpose and Finding: The City's water tower and water systems are in need of updating and repair. The United States Department of Agriculture (USDA) has a grant available municipalities for water system improvements providing for up to 45% of the funds along with a low financing rate of 2.50% percent for the remaining costs. However, given the specialized information required for this grant and the depth of detail required, an engineer is required to assist. The City is seeking to retain the services of Wightman & Associates, Inc. to provide those services. The City already employs Wightman & Associates, Inc. as the City's engineer, however, the services to be provided for this grant would exceed the scope of the services they currently provide. The additional services to be provided by Wightman & Associates, Inc. for this grant application are outlined in their correspondence dated September 9, 2016, which is incorporated by reference. The total cost of services to be provided by Wightman & Associates, Inc. will be \$29,000.00. Should the City successfully obtain grant funding from the USDA, the \$29,000.00 will be satisfied out of those funds. If the City is not successful, the City would be required to pay the \$29,000.00.

Council Member _____ moved, supported by Council Member _____, to approve the following resolution

RESOLVED, the City of Albion authorizes the retention of Wightman & Associates, Inc. for the provision of additional services in obtaining a USDA water system improvement grant.

BE IT FURTHER RESOLVED, the City of Albion authorizes the payment of \$29,000.00 to Wightman & Associates, Inc. for services rendered relative to the USDA grant application.

I hereby certify that the above resolution was adopted on October 17, 2016 in a regular session of the Albion City Council, and this is a true copy of that resolution.

Ayes _____

Nays _____

Absent _____

Jill Domingo, Clerk

October 17, 2016

September 9, 2016

City of Albion
112 W. Cass Street
Albion, MI 49224

Attention: Mr. James Lenardson, Director of Public Services

RE: USDA FUNDING APPLICATION

Dear Jim:

Thank you for this opportunity to present our proposal for preparing a full application for USDA Rural Development financing for water system improvements. USDA is an excellent source of financing as they offer competitive rates and up to a 40 year amortization period. Grants are offered when your water rates exceed a predetermined threshold of the City's Median Household Income. Most recently, USDA has offered up to 45% grant along with a 2.50% financing rate. We have successfully assisted many communities with application and implementation of this program.

We have been very successful in the past in receiving USDA funding for both water and wastewater improvements. Wightman and Associates, Inc. was responsible for obtaining the financing, completing the design, and managing the construction for these USDA funded projects. We have attached a partial list with details of a few of these projects and could gladly furnish a more extensive list.

Based upon our knowledge of the City's water system, we have developed the following proposal for your consideration. Our proposal includes preparation of all items required for the application. Should the City wish to perform some of the work, our fees would be reduced accordingly.

Scope of Services:

Following is a detailed listing of the services which we would provide. Prior to starting the work, we would meet with City staff to define the improvements that will be included in the application. A primary component of the project will be an evaluation of the elevated water storage tank. Specifically, we would evaluate options for: 1) painting of the existing tank; 2) construction of a new tank with abandonment of the existing tank; and 3) painting of the existing tank and construction of a new tank. The City's water distribution system contains many undersized mains and aged pipes that include cast iron and asbestos cement, which often contribute to higher maintenance costs due to likelihood of breaking. We would utilize the City's existing model to determine a prioritization of mains to be replaced based upon the greatest positive impact to available fire flows. We would also perform condition assessments on the water supply (wells) and treatment components (iron filtration plant) for any needed improvements.

1. We would develop the Preliminary Engineering Report in accordance with Rural Development requirements. The report would include the results of our water system evaluation, a rate analysis to show how the loan portion would be repaid, as well as all other USDA Rural Development required information in accordance with the following outline:

Allegan Office:
264 Western Ave.
Allegan, MI 49010

Telephone:
(269) 673-8465

Website:
www.wightman-assoc.com

- PURPOSE AND SCOPE
- PROJECT PLANNING AREA
 - Location
 - Environmental Resources Present
 - Population Trends
 - Community Engagement
- EXISTING FACILITIES
 - Location Map
 - History
 - Condition of Existing Facilities
 - Financial Status of Existing Facilities
- NEED FOR PROJECT
 - Health, Sanitation and Security
 - Aging Infrastructure
 - Reasonable Growth
- ALTERNATIVES CONSIDERED
 - No Action
 - Description
 - Environmental Impacts
 - Potential Construction Problems
 - Sustainability Considerations
 - Cost Estimates
 - Painting the existing water tower along with water main improvements
 - Description
 - Design Criteria
 - Map
 - Environmental Impacts
 - Land Requirements
 - Potential Construction Problems
 - Sustainability Considerations
 - Cost Estimates
 - Abandoning the existing water tower and constructing a new water tower along with water main improvements
 - Description
 - Design Criteria
 - Map
 - Environmental Impacts
 - Land Requirements
 - Potential Construction Problems
 - Sustainability Considerations
 - Cost Estimates
 - Painting the existing water tower and constructing a new water tower along with water main improvements
 - Description
 - Design Criteria
 - Map
 - Environmental Impacts
 - Land Requirements
 - Potential Construction Problems

- Sustainability Considerations
 - Cost Estimates
 - SELECTION OF AN ALTERNATIVE
 - Life Cycle Cost Analysis
 - Non-Monetary Factors
 - RECOMMENDED ALTERNATIVE
 - Preliminary Project Design
 - Water Storage
 - Distribution System
 - Water Supply
 - Water Treatment
 - Project Schedule
 - Permit Requirements
 - Sustainability Considerations
 - Total Project Cost Estimate
 - Annual Operating Budget
 - Income
 - Annual Operation and Maintenance Costs
 - Debt Repayment
 - Reserves
 - CONCLUSIONS AND RECOMMENDATIONS
2. We would prepare the Environmental Report in accordance with Rural Development requirements. We would work with Rural Development to obtain all required environmental clearances under this item. The report would include all information required by Rural Development in accordance with the following outline:
- Purpose and Need for Project
 - Project Description
 - Purpose and Need for Project
 - Alternatives to the Proposed Action
 - No Action Alternative
 - Painting the existing water tower along with water main improvements
 - Abandoning the existing water tower and constructing a new water tower along with water main improvements
 - Painting the existing water tower and constructing a new water tower along with water main improvements
 - Affected Environment/Environmental Consequences
 - Land Use/Important Farmland/Formally Classified Lands
 - Affected Environment
 - Environmental Consequences
 - Mitigation
 - Floodplains
 - Affected Environment
 - Wetlands
 - Affected Environment
 - Environmental Consequences
 - Mitigation
 - Historic Properties

- Affected Environment
 - Biological resources
 - Affected Environment
 - Environmental Consequences
 - Mitigation
 - Water Quality Issues
 - Affected Environment
 - Environmental Consequences
 - Mitigation
 - Coastal Resources
 - Affected Environment
 - 3.8 Socio-Economic/Environmental Justice Issues
 - Affected Environment
 - Environmental Consequences
 - Mitigation
 - Miscellaneous Issues
 - Air Quality
 - Affected Environment
 - Environmental consequences
 - Mitigation
 - Transportation
 - Affected environment
 - Environmental Consequences
 - Mitigation
 - Noise
 - Affected Environment
 - Environmental consequences
 - Mitigation
 - Summary of Mitigation
 - Correspondence
 - Copy of SHPO Clearance and Application
 - Copy of US Fish and Wildlife Correspondence
 - Exhibits/Maps
 - Prime Farmland Map and Data
 - Floodplain Map
 - Project Area Wetland Map
 - Project Planning Area Map
3. We would obtain the customer data as required to complete Rural Development “Michigan Guide 2, Attachment 1”. The user data is critical, must be accurate, and will ultimately be certified to by the City.
 4. After completion of the above three items, we will prepare the application for federal assistance, form SF-424 along with all required attachments for signature by the City.
 5. We would publish the required “Public Notice of Intent to File an Application with Rural Development” in the Albion Recorder or other local publication and obtain the required affidavit of publication.

6. We would obtain State and Regional Clearinghouse comments from the State and Regional Planning Commissions and obtain a letter from the Southcentral Michigan Planning Council stating that the proposed project is consistent with the current "Area Comprehensive Plan".
7. Prepare a certification of inability to obtain commercial credit for signature by the City.
8. Obtain a copy of the latest audit report for the City to be submitted with the application
9. Prepare a proposed engineering agreement for the design and construction engineering for the project on the form required by Rural Development to be submitted with the application.
10. Work with the City attorney to prepare a legal services agreement on the required Rural Development form to be submitted with the application.
11. Obtain the City's federal CAGE# or assist the City in obtaining a federal CAGE# for inclusion as a part of the application.
12. Prepare all other certifications for signature by the City, including the "Equal Opportunity Agreement", "Assurance Agreement", "Certification Regarding Debarment", "Certification Regarding Drug-Free Workplace", etc., and all other items required to obtain an obligation of grant/loan funding from the USDA Rural Development.

Proposed Cost:

We would propose to perform all work for preparation of the USDA Rural Development funding application on a time and materials basis with payment to be made upon an offer of the Rural Development financing. Should the City decide not to submit or not to accept the Rural Development financing, payment will be due within 30 days.

1. Preliminary Engineering Report	\$13,000.00
2. Environmental Report	6,000.00
3. Customer Data, Michigan Guide 2, Attachment 1	5,000.00
4. Application Form and Attachments	800.00
5. Write and Publish Notice of Intent	200.00
6. Obtain Clearinghouse Comments	500.00
7. Prepare Commercial Credit Certification	500.00
8. Obtain Audit Copy	0.00
9. Prepare Engineering Agreement	0.00
10. Assist Preparation of Legal Contract	500.00
11. Obtain City's CAGE#	500.00
12. All Other Required Certifications, Etc.	<u>2,000.00</u>
Total Proposed Cost for USDA RD Application	\$29,000.00

We hope that our proposal is acceptable to the City of Albion and that we can continue to work with the City to improve your water system. We have attached a listing of similar projects for your information along with a copy of our standard hourly rates.

City of Albion
Mr. James Lenardson, Director of Public Services
September 9, 2016
Page 6

If you have any comments or questions concerning our proposal, please feel free to contact me.

Very truly yours,

WIGHTMAN & ASSOCIATES, INC.



Mickey E. Bittner, P.E.
mbittner@wightman-assoc.com

Enclosures

Standard Terms and Conditions

Updated 8.21.2015

1. Agreement. Wightman & Associates, Inc. (hereinafter "Consultant") shall provide to the Client the scope of services described in Consultant's Proposal attached hereto. These Standard Terms and Conditions are incorporated into Consultant's Proposal, and together may be referred to as the "Agreement" and shall reflect the professional services (or "Project") for which Consultant is responsible. This Agreement shall be the full extent of the Consultant's obligations. The Consultant shall not be responsible for any obligations or costs except as contained in the Agreement.
2. Authorization. Client shall provide Consultant written authorization to proceed, provided that this signed Agreement by Client shall give the Consultant the right to proceed with the Project.
3. Standard of Care. The Consultant's Standard of Care for the purposes of this Agreement shall be that consistent with the level of care and skill ordinarily exercised by members of its profession currently practicing under similar conditions in similar locations.
4. Terms of Payment/Late Payment Actions/Fees. Payment is due upon presentation of invoice and is past due thirty (30) days from invoice date. Client agrees to pay a finance charge of one and one-half percent (1 ½ %) per month, or the maximum rate allowed by law, whichever is less, on past due accounts.
5. Scope of Services/Additional Services/Changes. If the services covered by this Agreement have not been completed within twelve (12) months of the date of this Agreement (unless otherwise stipulated in the proposal), through no fault of Consultant, extension of Consultant's services beyond that time shall be compensated as "Additional Services." All Additional Services shall be billed separately and the scope of the services and compensation shall be mutually agreed between the parties, but in any case, not less than Consultant's Hourly Rate, and all of Consultant's Reimbursable Expenses shall also be paid by Client to Consultant, in the amounts set forth below.
6. Hidden Conditions. Consultant is not responsible for latent deficiencies or hidden or concealed conditions not discovered by Consultant within the scope of its services. If Consultant has reason to believe that such a condition may exist, it will advise Client as to the nature of the suspected condition and its significance. Client will be responsible for all risks associated with this condition and for undertaking, at its sole cost and expense, additional investigation and corrective work, if required. If Consultant repairs or corrects any such deficiencies or conditions, Consultant shall be compensated for the same, as Additional Services.
7. Betterment. If, due to Consultant's negligence, a required item or component of the project is omitted from Consultant's construction documents, Consultant shall not be responsible for paying the cost required to add such item or component to the extent that such item or component should have been included in the original construction documents. Consultant shall not be responsible or liable for any cost or expense that provides betterment or upgrades or enhances the value of the Project.
8. Opinions of Cost. Consultant's opinions or estimates of probable construction cost are prepared on the basis of Consultant's experience and qualifications and represent Consultant's judgment as a professional generally familiar with the industry. However, since Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, other contractor's methods of determining prices, or over competitive bidding or market conditions, Consultant cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from Client's budget or from Consultant's opinions or estimates of probable construction cost.
9. Code Interpretations. The Client acknowledges that the requirements of the Americans with Disabilities Act, as amended ("ADA") (as well as all state and local laws, codes, or ordinances), will be subject to various and possibly contradictory interpretations. Consultant will endeavor to use reasonable professional efforts to interpret applicable ADA and other building code requirements as they may apply to Consultant's services. Consultant cannot and does not promise, warrant, or guarantee that its services will comply with interpretations of building code requirements as they apply currently or in the future and unless the Consultant is negligent, the Client shall pay for any additional costs or expenses which are necessary to keep the Project in compliance with the ADA and all other laws, codes, or ordinances. Any changes made by Consultant shall be billed as Additional Services.
10. Use of Drawings, Specifications, and Other Documents. The drawings, specifications and other documents prepared by Consultant for this project are instruments of Consultant's services for use solely with respect to this Project and, unless otherwise provided, Consultant shall be deemed the author of these documents and shall retain all common law, statutory, and other reserved rights, including the copyright.
11. Retaining Records. Consultant will retain pertinent records relating to the services performed for a period of five years following submission of the report, during which period the records will be made available to Client at reasonable times.
12. Insurance Coverage. Consultant shall maintain the following types of insurance: (a) Professional Liability; (b) Commercial General Liability; (c) Workers' Compensation; (d) Employers' Liability; (e) Hired and non-owned automobiles. Client shall be responsible for purchasing and maintaining its own commercial liability and property insurance, including an all-

risk policy covering all damages or casualty which occurred to the Project in an amount not less than the then full replacement cost of the Project. The Client's commercial liability insurance policy shall be written for an amount of not less than \$1 million, single-limit coverage. The Client's commercial liability and property insurance policy shall not be cancelled or modified without Consultant having received not less than thirty (30) days prior written notice. Consultant shall be named an additional insured on the Client's insurance policies. Client and Consultant waive rights against each other for loss, damage and/or liability to the extent covered by the insurance policies required to be maintained hereunder and each insurance policy hereunder shall contain a waiver of the insurer's rights of subrogation.

13. Limitations/Exclusions. Client agrees that Consultant's total, aggregate liability to Client and any third parties arising from Consultant's professional acts, errors or omissions, shall not exceed Consultant's total fee received for the Project.
14. The Law/Suspension/Termination/Non-Severability. All obligations arising prior to termination of this Agreement shall survive the completion of the services and termination of this Agreement. This Agreement shall be governed in all respects by the laws of the State of Michigan.
15. Indemnity. Except for the limitations set forth herein, Consultant agrees to indemnify and hold the Client harmless from all damage, liability or cost (including reasonable attorney fees and costs of defense) to the extent caused by Consultant's negligent acts, errors, or omissions in the performance of professional services under this Agreement and those of its subconsultants or anyone for whom the Consultant is legally liable. The Client agrees to indemnify and hold Consultant harmless, from all damage, liability or cost (including reasonable attorney fees and costs of defense) to the extent caused by the Client's negligent acts, errors or omissions and by those for whom the Client is legally liable.
16. Certificate of Merit Requirement. Client shall make no claim for professional negligence, either directly or by way of a cross complaint against Consultant, unless Client has first provided Consultant with a written certification executed by an independent consultant currently practicing in the same discipline as Consultant and licensed in the state where the Project issue is located. This certification shall: (a) contain the name and license number of the certifier; (b) specify the acts or omissions that the certifier contends are not in conformance with the Standard of Care for a consultant performing professional services under similar circumstances; and (c) state in detail the basis for the certifier's opinion that such acts or omissions do not conform to the Standard of Care. This certificate shall be provided to Consultant not less than thirty (30) calendar days prior to the filing of any claim. This Certificate of Merit clause will take precedence over any existing state law in force at the time of any claim.
17. Jurisdiction and Venue. Notwithstanding anything in this Agreement to the contrary, Client agrees that any suit related to any dispute related to this Agreement shall be heard in the appropriate Court in the county of the Project. Client agrees

that the appropriate County court shall have the subject matter jurisdiction and will be the appropriate venue for any interpretation or dispute related to this Agreement.

18. Termination. Consultant may terminate this Agreement for convenience by written notice to Client and in such event, the Consultant shall be paid only for all work under this Agreement that Consultant has completed to the date of termination on a prorated, equitable basis as reasonably determined by Consultant and which shall include Consultant's prorated profits, general conditions, and overhead.

19. Billing Rates.

Principal.....	\$180.00/hour
Senior Licensed Staff.....	\$140.00/hour
Licensed Staff II.....	\$120.00/hour
Licensed Staff I.....	\$110.00/hour
Senior Interior Designer	\$120.00/hour
Technical Manager.....	\$120.00/hour
Professional Staff III.....	\$100.00/hour
Professional Staff II.....	\$90.00/hour
Professional Staff I.....	\$80.00/hour
Technician III.....	\$80.00/hour
Technician II.....	\$70.00/hour
Technician I.....	\$65.00/hour
Administrative.....	\$60.00/hour
3 Man Survey Crew.....	\$170.00/hour
2 Man Survey Crew.....	\$140.00/hour
1 Man Survey Crew.....	\$95.00/hour
3 Man Survey Crew (Construction Staking).....	\$195.00/hour
2 Man Survey Crew (Construction Staking).....	\$165.00/hour
1 Man Survey Crew (Construction Staking).....	\$125.00/hour
Mortgage Inspection.....	\$250.00/each
Expert Witness/Testimony.....	\$300-\$500/hour

Reimbursable Expenses. Compensation for reimbursable expenses shall be computed as a multiple of 1.1 times the expense incurred for the following: Outside Consultants, Travel, Lodging, Postage, UPS, FedEx, Messenger, and Outside Reproduction. Compensation for mileage expenses shall be computed as a multiple of 1.1 times the Federal Rate. In-House Prints/Copies/Plots shall be charged as follows:

- Black & White Prints/Copies
 - 8 ½ x 11 \$0.19/sheet
 - 8 ½ x 14 \$0.19/sheet
 - 11 x 17 \$0.19/sheet
- Color Prints/Copies
 - 8 ½ x 11 \$0.85/sheet
 - 8 ½ x 14 \$0.85/sheet
 - 11 x 17 \$1.25/sheet
- Black & White Plots
 - 12 x 18 \$1.50/sheet
 - 18 x 24 \$2.75/sheet
 - 24 x 36 \$5.00/sheet
 - 30 x 42+ \$7.50/sheet
- Color Plots
 - 12 x 18 \$9.00/sheet
 - 18 x 24 \$18.00/sheet
 - 24 x 36 \$30.00/sheet
 - 30 x 42+ \$42.00/sheet

WATER SYSTEMS

INNOVATIVE AND PRACTICAL SOLUTIONS FOR WATER SYSTEMS.

- ◆ Significant and innovative experience in developing practical water systems.
- ◆ Proven history of providing accurate rate studies and estimates.
- ◆ Able to work with clients to implement changes as needed during project.
- ◆ Total Engineering Fees include study costs, design engineering, easement surveying and acquisition, and complete construction engineering which includes full time inspection, construction staking, testing and construction administration.



BROAD RANGE OF EXPERIENCE

Our designs start with what will be in the best interest of our clients. The solutions must be cost-effective and practical. Our engineering experience encompasses a broad range of projects including water distribution systems and treatment, wastewater collection systems and treatment, storm sewers, road and bridge reconstruction and renovation, subdivisions, and site design.

We provide full service planning, surveying, design engineering, construction staking, inspection, environmental, right-of-way acquisition, material testing, and project management services.

DIAMOND & DONNELL LAKES WATER SYSTEM IMPROVEMENTS PROJECT

CALVIN, JEFFERSON, LAGRANGE AND PENN TOWNSHIPS, CASS COUNTY, MI



Client Reference:

Cass County Board of Public Works
Mr. Robert Wagel, Chairman,
(269) 445-4420

Project Cost: \$10,015,000

Services Provided:

- ◆ Feasibility Study
- ◆ System Modeling
- ◆ Surveying
- ◆ Property Acquisition
- ◆ Engineering
- ◆ Environmental

Description of Project:

The system includes:

- ◆ 78,710 linear feet of 12" Water Main
- ◆ 39,960 linear feet of 8" Water Main
- ◆ 8,050 linear feet of 6" Water Main
- ◆ 4,680 linear feet of 12" directionally drilled Water Main
- ◆ 220 6" Hydrants
- ◆ 1698 1" Water Services
- ◆ Complete restoration

Staff Involved:

- ◆ Thomas Deneau, P.E.
Project Manager

The Cass County Regional Water System received a \$10 million loan through the American Recovery and Reinvestment Act administered by the USDA Rural Development to provide reliable water service and improved fire protection for residents and businesses in four townships. The project when completed in November will provide water service and fire protection to over 1,800 dwelling units located in Calvin, Jefferson, La Grange and Penn townships.

The project was broken into three phases. The phase now under construction includes the developed areas around Diamond Lake. Phase two on Diamond Isle is scheduled for the fall of 2011. Phase three around Donnell Lake is scheduled to begin September 1 and end November 15, 2011.

WAI provided all engineering requirements for this project including the study, USDA application, system modeling, design engineering, construction staking and inspection.

Village of Lawton Water System Improvements Project

Van Buren County, MI

Client:

Village of Lawton

Contact:

Mr. David Cornish,
Village President,
(269) 624-6407

Project Date:

2009-2011

Project Cost:

\$3,240,000

Loan Forgiveness:

\$1,296,000

Description of Project

- 4,550' of 12-inch and 3,650' of 8-inch water main
- New 1000gpm production well
- New pump control system and radio telemetry
- New 500,000 hydro-spheroid water tower
- New radio read water metering system
- Demolition of Existing 250,000 Gallon Pedestal Water Tower

Services Provided:

- MDNRE/DWRF Project Plan
- DWRF Funding Application and Administration
- Surveying
- Design Engineering
- Construction Monitoring
- Construction Administration
- Permitting
- Easement Acquisition
- ARRA Quarterly Reporting

List of Key Personnel:

Jamie Harmon, P.E.
Matt Davis, P.E.



The Village of Lawton received funding from the Michigan Department of Environmental Quality Drinking Water Revolving Fund program that included a 40 percent principal forgiveness of the final loan amount. Combined with the competitive bidding by contractors that reduced costs by \$510,000, the Village will save approximately \$1.8 million in costs of the originally estimated \$3.75 million water project.

Lawton received the \$1,296,000 loan principal forgiveness amount as part of the American Recovery and Reinvestment Act (ARRA). The energy efficiency improvements to upgrade the water main and existing wells and a new radio read meter system amounted to \$883,872 of the forgiveness amount.

The water project also includes a new 500,000 gallon spheroid water tower, a new well, and the abandonment and demolition of the existing water tower and two aging wells. The largest component of the project is a new water tower which will be approximately 40 feet taller than the existing water tower. The new tower will raise the water pressure and provide increased fire protection on the east side of the Village and at the middle and high schools.

"We started this process over a year ago and we are looking forward to starting this project in February. We are especially pleased that our costs will be significantly under our original estimate. There were five contracts awarded and there are several local contractors who will be working on the project," stated David Cornish, Village President.

Village Engineer, Wightman & Associates, Inc. assisted the Village to identify the scope of the project and completed all the design work to meet the schedule for 2010 first quarter funding in order to receive the American Recovery and Reinvestment Act funds.

M-139 WATER AND SEWER

ORONOKO CHARTER TOWNSHIP/VILLAGE OF BERRIEN SPRINGS, MI



Client Reference:

Berrien County Board of Public Works

Contact:

Dan Fette (Berrien County),

Mike Hildebrand (Supervisor, Oronoko Charter Twp),

Milt Richter (President, Village of Berrien Springs)

Start Date: March 2015

Completion Date: September 2015

Project Cost: \$4.9 Million

Services Provided:

- USDA Funding Application and Coordination
- Water
- Sewer
- Roadway Design
- Bidding Services
- Construction Administration

Staff Involved:

- Dan Yerks, PE, Project Manager
- Matt Davis, PE, QA/QC
- Dave Mitchell, Project Representative



Extended Water and Sewer along M-139 from George Street to US-31, installed water main through the Fairgrounds from M-139 to Shawnee Road and improved various lines within the Village to provide improved fire protection, and potable water and sewer service.

- Over 9,000 feet of Sanitary Sewer
- One lift station
- Over 14,000 feet of Water Main
- Dozens of new Fire Hydrants

Citizens, land owners, and the health department have all been asking for a project such as this to be completed for over 20 years. Previous attempts to make these improvements have been abandoned due to the immense cost of the endeavor. Thanks to the collaboration of County, Village, and Township, and the additional financial contributions of Andrews University, the Berrien County Youth Fair, key property owners, MDOT and USDA, a two decade dream became reality.

SW MICHIGAN REGIONAL SANITARY SEWER & WATER AUTHORITY

BERRIEN COUNTY, MI



Client Reference:

Mr. Steve Tilly, Chairman,
(269) 429-2501

Project Cost: \$6,225,000

Services Provided:

- ◆ Surveying
- ◆ Planning
- ◆ Engineering
- ◆ Design
- ◆ Permitting
- ◆ Plan Design
- ◆ Construction Monitoring

Problems:

- ◆ Low water pressure in Stevensville, MI
- ◆ New status as water supplier

Solutions:

- ◆ System modeling and calibration
- ◆ Study and design to correct pressure problems
- ◆ Implement permitting procedure as water supplier

Staff Involved:

- ◆ Thomas A. Deneau, P.E.
- ◆ Oscar R. Loveless, P.E.
- ◆ Alan C. Smaka, P.E.



Wightman & Associates, Inc. provides on-going engineering services to the Lake Michigan Shoreline Water and Sewage Treatment Authority. We assisted in negotiating the current contract between the Authority and the City of St. Joseph for water treatment and operation and maintenance services. The contract required that the Authority become the water supplier, a service the City of St. Joseph previously supplied. We developed a procedure for reviewing plans and MDEQ submittals for the Authority and provide the review service on an on-going basis.

In response to increasing water demands and a pressure problem in the Stevensville area, we created and calibrated a water model for the water system with the six municipalities, servicing over 16,000 customers. Through modeling and a feasibility study that included cost estimates for numerous alternatives and a decision matrix, it was determined that the most cost effective and reliable solution was to construct two 1,000,000 gallon water towers and two booster stations to solve the system problems. It was necessary to install pressure reducing valves in lower lying areas due to system topography and to isolate the Authority system from the City system to maintain a higher pressure district. The project includes a state of the art radio SCADA/Control System. Our firm provided all surveying and design services and all construction monitoring during the construction phase.

LAKES AREA SEWER AUTHORITY WASTEWATER COLLECTION & TREATMENT SYSTEM
FISH, FINCH AND WEST SADDLEBAG LAKES, MARCELLUS AND VOLINIA TOWNSHIPS, CASS COUNTY
GRAVEL LAKE, PORTER TOWNSHIP, VAN BUREN COUNTY



Client Reference:

Cass County Board of Public Works
Mr. Robert Wagel, Chairman
(269) 445-4420

Project Cost: \$10,833,000

Services Provided:

- ◆ Feasibility Study
- ◆ Surveying
- ◆ Property Acquisition
- ◆ Engineering
- ◆ Environmental

Description of Project:

Collection and treatment system to serve 730 customers around 4 lakes and the 230 Village of Marcellus customers.

Collection System:

- ◆ 8 Miles of 8" to 10" Sewers
- ◆ 13 Miles of 2" to 12" Forcemain
- ◆ 14 Lift Stations
- ◆ 3 Backup Generators

Treatment Plant:

- ◆ 250,000 gpd Extended Aeration Plant
- ◆ Ferric Chloride Feed System
- ◆ Tertiary Filtration
- ◆ UV Disinfection
- ◆ Rotary Sludge Press

Staff Involved:

- ◆ Alan C. Smaka, P.E.
Project Manager
- ◆ Thomas A. Deneau, P.E.
Project Engineer
- ◆ Chris Brayak, A.I.A.
Project Architect



The Lakes Area Sewer Authority, through the Cass County Board of Public Works, obtained USDA funding and has constructed a \$10.833 million wastewater collection and treatment system project to construct sanitary sewers around the Finch, Fish, Gravel and West Saddlebag Lake areas in Marcellus and Volinia Townships in Cass County and Porter Township in Van Buren County.

The wastewater treatment plant serves the lake areas as well as the Village of Marcellus customers. The collection system is a gravity system with lift stations while the treatment plant is a 250,000 gpd activated sludge process, expandable to 1.0 mgd. The basin designs permit the receipt of septage, through a septage receiving station and associated headworks/piping/etc. which were constructed as part of the project, paid for with remaining contingency funds.

This project received the 2011 Southwest Michigan Planning Commission "Graham Woodhouse Intergovernmental Effort" Award and the 2011 Local and State ASCE "Quality of Life" Award

2014 WASTEWATER SYSTEM IMPROVEMENTS PROJECT

CITY OF HARTFORD, VAN BUREN COUNTY, MI



Client Reference:
Mr. Yemi Akinwale,
City Manager, 269.621.2477

Project Cost: \$1,909,000.00

Start Date: Design Engineering –
February 2014, Bidding – August
2014, Construction Engineering –
Spring 2015

Completion Date: Fall 2015

Services Provided:

- ◆ Design Engineering
- ◆ Bidding Services
- ◆ Construction Engineering

Staff Involved:

- ◆ Thomas A. Deneau, P.E.
- ◆ Oscar R. Loveless, P.E.
- ◆ Mary Nykamp, P.E.
- ◆ Jeff Landers, P.E.

Contract A – Wastewater Treatment Plant Improvements: The construction of new and replacement treatment equipment at the City of Hartford Wastewater Treatment Plant including purchase, disassembly, moving and installation of a mechanical screen, grit removal system, primary and secondary clarifier components, rotating biological contactors (RBCs), ultraviolet disinfection unit, sludge pumps, sludge storage tank, construction of all equipment weather shelter structures, HVAC replacement components, electrical, and piping in accordance with the plans and specifications which are made a part of this Contract.

Contract B – Lift Station Improvements: The installation of replacement lift stations, forcemain, equipment and all required restoration at the existing City of Hartford C.R. 687 (C-1) and C.R. 372 (P-1) lift station sites in Van Buren County, Michigan in accordance with the plans and specifications which are made a part of this Contract.

WASTEWATER COLLECTION AND TREATMENT SYSTEM

PORTER TOWNSHIP, CASS COUNTY, MI



Client Reference:

Cass County Board of Public Works
Mr. Robert Wagel, Chairman
(269) 445-4420

Project Cost: \$17,150,000

Services Provided:

- ◆ Feasibility Study
- ◆ Surveying
- ◆ Property Acquisition
- ◆ Engineering
- ◆ Environmental
- ◆ Architecture

Collection System

- ◆ 25 Miles of 8 to 15" Sewers
- ◆ 18 Miles of 2 to 12" Forcemain
- ◆ 30 Lift Stations
- ◆ 5 Backup Generators
- ◆ Bioxide Feed System

Treatment Plant

- ◆ 400,000 gpd SBR Plant
- ◆ Ferric Chloride Feed System
- ◆ Tertiary Filtration
- ◆ UV Disinfection
- ◆ Lime Sludge Stabilization
- ◆ Septage Receiving Station
- ◆ Fine Screen

Staff Involved:

- ◆ Thomas Deneau, P.E.
Project Manager
- ◆ Matt Davis, P.E.
Project Engineer

Shortly after starting the project the majority of the Township Board was recalled and the County Board elected to move forward and sell the bonds based on the preliminary estimates from the feasibility study prior to completing the design. As a result, the design had to be completed and construction bids received in less than 3 months and all permits needed to be obtained within 6 months to close on the financing.

By proactively managing the entire project and understanding the critical path for the design, permitting and approvals, a treatment plant site was acquired, the collection system and plant were designed and bids were received in less than 3 months. The final service area was expanded and over 5 miles of sewers were added to the project. The bids for the project were \$13,000 under the estimates prepared in the study and all the permits including the NPDES and Part 41 permits were obtained on time.

Wightman & Associates provided construction administration and startup assistance for the collection system and plant. The connections to the system were phased with the construction and startup of the plant and all customers were connected within 90 days of having service available. Despite the recall, limited schedule and significant opposition to the project, WAI was able to work with the residents, Township Board and County to keep the project moving forward and turn a potentially disastrous project into a successful one.