

PRELIMINARY ENGINEERING REPORT

Wastewater System Improvements

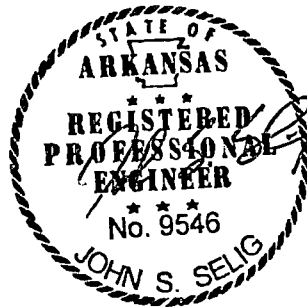
City of Flippin, Arkansas

Prepared by: Mr. John S. Selig
Registration State: Arkansas
Registration Number: 9546

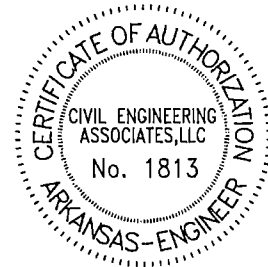
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05/14/19



CIVIL ENGINEERING ASSOCIATES, LLC

Civil Engineering Associates, LLC
2114 East Matthews Avenue
Jonesboro, AR

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WATER / WASTEWATER ADVISORY COMMITTEE

R 6/2005

WASTEWATER PRE-APPLICATION
COVER PAGE

WWAC ID #: _____

1. Applicant / Owner:	City of Flippin	2. CDBG Grantee:													
Representative & Title:	Jerald Marberry, Mayor	Representative & Title:													
Address:	P.O. Box 40	Address:													
City & Zip Code:	Flippin, Arkansas 72634	City & Zip Code:													
County:	Marion	County:													
Phone:	(870) 453-8300	Phone:													
FAX:	(870) 453-5722	FAX:													
E-Mail Address:	igmmarberry@gmail.com	E-Mail Address:													
3. Engineering Firm:	Civil Engineering Associates, LLC	4. Application Type: (Mark all that apply) <input type="checkbox"/> LMI Service Hookups <input type="checkbox"/> New Collection System or Extension <input checked="" type="checkbox"/> Rehab Existing Collection System <input type="checkbox"/> New Treatment Plant <input checked="" type="checkbox"/> Rehab Existing Treatment Plant <input type="checkbox"/> Other _____													
Project Engineer:	John S. Selig, P.E.														
Address:	2114 East Matthews Avenue														
City & Zip Code:	Jonesboro, Arkansas 72401														
Phone:	(870) 972-5316														
FAX:	(870) 932-0432														
E-Mail Address:	jselig@ce-associates.biz														
5. Number of Existing Customers:		Number of New Customers:													
		Projected Number of Customers:													
6. Arkansas Senate District	17	Arkansas House District	99												
		U. S. House District	3												
7. Provide a brief description of the project: The project will consist of the rehabilitation of the existing wastewater treatment facility to include the installation of a new influent lift station, the installation of new headworks equipment, the addition of a new oxidation ditch, the replacement of the aeration equipment in the existing oxidation ditch, the installation of two (2) new clarifiers, the construction of a sludge holding pond, and the rehabilitation of the sand filters. The project will also consist of the rehabilitation of the wastewater collection system to include the replace of gravity sewer mains and rehabilitation of existing manholes.															
8. Indicate the Agencies and Dollar Amounts you plan to use for this project: <table style="width: 100%;"> <tr> <td style="width: 15%;">\$ _____</td> <td style="width: 85%;">Community Development Block Grant Program</td> </tr> <tr> <td>\$ _____</td> <td>Arkansas Natural Resources Commission</td> </tr> <tr> <td>\$ _____</td> <td>Community Resource Group</td> </tr> <tr> <td>\$ 8,194,200.00</td> <td>USDA, Rural Development</td> </tr> <tr> <td>\$ _____</td> <td>Other Funding Source: _____</td> </tr> <tr> <td>\$ 8,194,200.00</td> <td>Total Funds Requested</td> </tr> </table>				\$ _____	Community Development Block Grant Program	\$ _____	Arkansas Natural Resources Commission	\$ _____	Community Resource Group	\$ 8,194,200.00	USDA, Rural Development	\$ _____	Other Funding Source: _____	\$ 8,194,200.00	Total Funds Requested
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\$ _____	Community Resource Group														
\$ 8,194,200.00	USDA, Rural Development														
\$ _____	Other Funding Source: _____														
\$ 8,194,200.00	Total Funds Requested														
9. I, the undersigned representative of the applicant or grant recipient, certify that the information contained herein and the attached statements, exhibits and reports are true, correct and complete to the best of my knowledge and belief.															
Applicant's Signature: <u>Jerald Marberry</u>		Date: <u>5/10/19</u>													
Application Preparer's Signature: <u>John S. Selig</u>		Date: <u>05/10/19</u>													

Application for Federal Assistance SF-424

Version 02

*** 1. Type of Submission:**

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

*** 2. Type of Application:**

- ☒ New
☐ Continuation
☐ Revision

*** If Revision, select appropriate letter(s):**

*** Other (Specify)**

*** 3. Date Received:**

Completed by Grants.gov upon submission.

4. Applicant Identifier:

5a. Federal Entity Identifier:

*** 5b. Federal Award Identifier:**

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

*** a. Legal Name:** City of Flippin, Arkansas

*** b. Employer/Taxpayer Identification Number (EIN/TIN):**

71-0335606

*** c. Organizational DUNS:**

082086591

d. Address:

*** Street1:** P.O. Box 40

Street2:

*** City:** Flippin

County:

Marion

*** State:** Arkansas

Province:

*** Country:** United States

*** Zip / Postal Code:** 72634

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr.

*** First Name:** John

Middle Name: S.

*** Last Name:** Selig

Suffix: P.E.

Title: Member/Project Engineer

Organizational Affiliation:

Civil Engineering Associates, LLC

*** Telephone Number:** 870-972-5316

Fax Number: 870-932-0432

*** Email:** jselig@ce-associates.biz

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

C

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

USDA - Rural Development

11. Catalog of Federal Domestic Assistance Number:

10-760

CFDA Title:

Water/Wastewater Disposal System

*** 12. Funding Opportunity Number:**

* Title:

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

City of Flippin, Marion County, Arkansas

*** 15. Descriptive Title of Applicant's Project:**

Wastewater System Improvements

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant

* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

* a. Start Date:

* b. End Date:

18. Estimated Funding (\$):

* a. Federal	<input type="text" value="\$8,194,200.00"/>
* b. Applicant	<input type="text"/>
* c. State	<input type="text"/>
* d. Local	<input type="text"/>
* e. Other	<input type="text"/>
* f. Program Income	<input type="text"/>
* g. TOTAL	<input type="text" value="\$8,194,200.00"/>

* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?

- ☒ a. This application was made available to the State under the Executive Order 12372 Process for review on
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review..
- ☐ c. Program is not covered by E.O. 12372.

* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)

☐ Yes ☒ No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:

Middle Name:

* Last Name:

Suffix:

* Title:

* Telephone Number: Fax Number:

* Email:

* Signature of Authorized Representative:

Jerald Marberry

* Date Signed:

Authorized for Local Reproduction

Standard Form 424 (Revised 10/2005)
Prescribed by OMB Circular A-102

BUDGET INFORMATION - Construction Programs

OMB Approval No. 4040-0008
Expiration Date 04/30/2008

NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case, you will be notified.

COST CLASSIFICATION	a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Columns a-b)
1. Administrative and legal expenses	\$ 34,600.00	\$	\$ 34,600.00
2. Land, structures, rights-of-way, appraisals, etc.	\$ 0.00	\$	\$ 0.00
3. Relocation expenses and payments	\$ 0.00	\$	\$ 0.00
4. Architectural and engineering fees	\$ 615,000.00	\$	\$ 615,000.00
5. Other architectural and engineering fees	\$ 0.00	\$	\$ 0.00
6. Project inspection fees	\$ 324,000.00	\$	\$ 324,000.00
7. Site work	\$ 0.00	\$	\$ 0.00
8. Demolition and removal	\$ 0.00	\$	\$ 0.00
9. Construction	\$ 6,338,460.00	\$	\$ 6,338,460.00
10. Equipment	\$ 0.00	\$	\$ 0.00
11. Miscellaneous	\$ 248,300.00	\$	\$ 248,300.00
12. SUBTOTAL (sum of lines 1-11)	\$ 7,560,360.00	\$ 0.00	\$ 7,560,360.00
13. Contingencies	\$ 633,840.00	\$	\$ 633,840.00
14. SUBTOTAL	\$ 8,194,200.00	\$ 0.00	\$ 8,194,200.00
15. Project (program) income	\$	\$	\$ 0.00
16. TOTAL PROJECT COSTS (subtract #15 from #14)	\$ 8,194,200.00	\$ 0.00	\$ 8,194,200.00
FEDERAL FUNDING			
17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.) Enter eligible costs from line 16c Multiply X 100 % Enter the resulting Federal share.			\$ 8,194,200.00

ASSURANCES - CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0042), Washington, DC 20503.

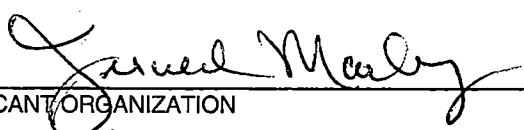
PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction subagreements.
14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL		TITLE	
		Mayor	
APPLICANT ORGANIZATION		DATE SUBMITTED	
City of Flippin		5/10/19	

h) Total Project Cost

i) Income

j) O&M Costs

k) Debt Repayments

l) Short Lived Asset Reserves

7) Conclusions and Recommendations

The City of Flippin needs to make improvements to its wastewater system. At the present time, the entire wastewater collection system is gravity fed to a single lift station, which is located at the wastewater treatment facility. The old gravity mains and manholes need some rehabilitative work. The City contracted with the Arkansas Rural Water Association early this year to perform system wide televising and smoke testing of the system. The results of this work identified the areas of the collection system that are in need of rehabilitative work.

In addition to the rehabilitative work associated with the wastewater collection system, there is also some work that needs to be performed at the wastewater treatment facility. At the present time, the wastewater treatment facility is having problems maintaining compliance with its existing NPDES discharge permit. There are large fluctuations in flow during rainfall events, which are primarily due to I/I in the collection system, that overload the treatment units. The City would like to take the appropriate steps needed to bring the facility back into compliance with its NPDES discharge permit.

In addition to all of the rehabilitative work, both on the collection system and the treatment facility, there are also some areas that lie within the city limits of Flippin that are not currently served by the wastewater collection system. The City would like to expand its collections system to serve all of the areas that are currently within the city limits.

The overall cost of the proposed improvements is more than the City of Flippin can afford to pay out of its existing funds. The City will need to seek financial assistance and intends to file a funding application with the USDA - Rural Development. The City will use the revenue generated from the wastewater customers to make the payments on the loan received to pay for the project. The proposed project will increase the customer base for the City, so the proposed rate increase will take the added customers into account.

Current Facility Description

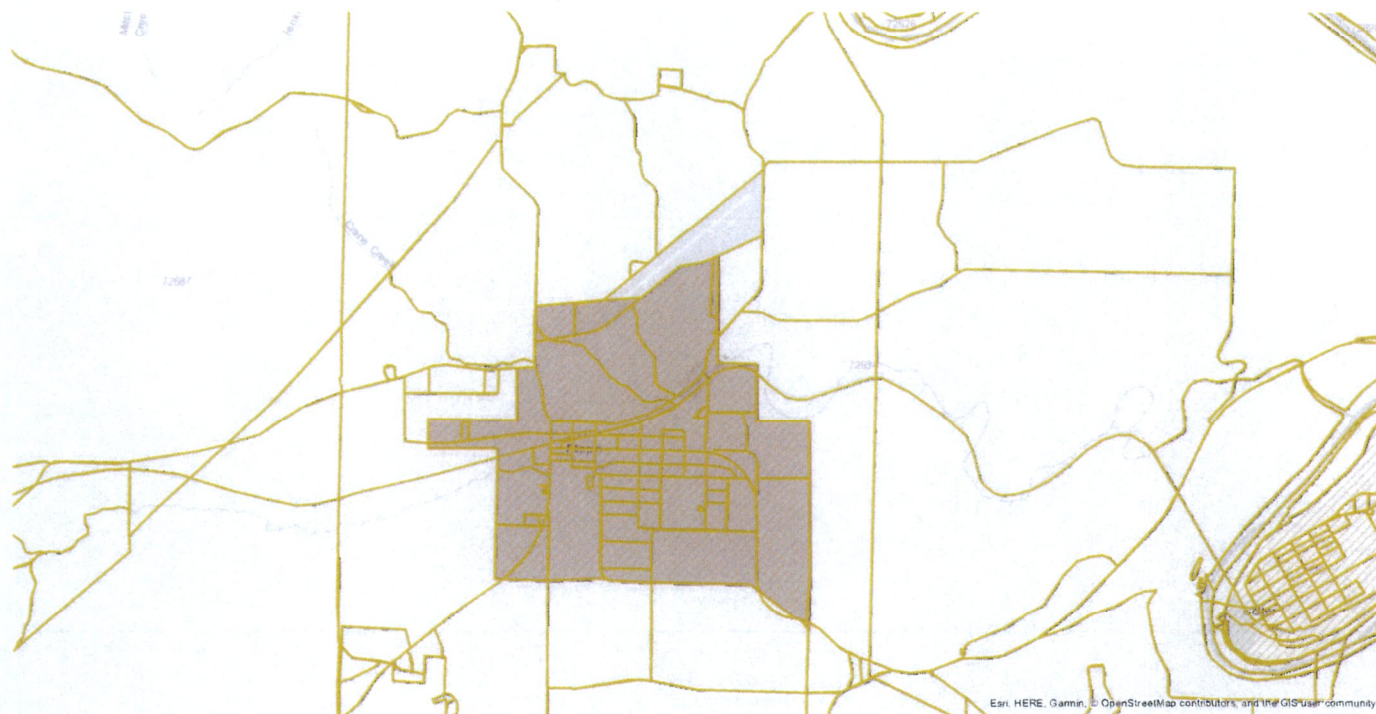
The wastewater treatment facility consists of the wastewater lift station and the actual treatment units. The wastewater lift station lifts the wastewater to the screening unit, which then gravity flows through the oxidation ditch, the clarifiers (two (2) which are operated in series), a dosing tank, the intermittent sand filters, the ultra violet disinfection unit, and then a cascade, post-aeration structure. The treatment facility is also equipped with a sludge digester and drying beds to handle the bio-solids that are generated at the facility. There is also an equalization basin that is utilized to try to "cushion" the high flows that are seen during rainfall events. The existing lift station is a wet-well, dry-well station. The pumps are located in the dry-well, which is approximately 25-feet deep. The existing layout of the station makes it difficult to maintain the pumps because of the narrow "tube" leading down to the larger portion of the station. The dry-well portion of the lift station is constructed of metal that shows signs of deterioration. City personnel report that they have to routinely repair the seams on the dry-well in an attempt to keep groundwater from seeping into the station. The existing screening unit is old and outdated and needs to be replaced with a more modern type of screening unit. The existing oxidation ditch is in a decent state of repair. The rotors that are used to circulate the wastewater in the ditch and provide air for treatment purposes need to be replaced. The existing clarifiers are too small and have to be run in series in order to effectively treat the wastewater. The clarifiers need to be replaced with newer, larger clarifiers that can be operated independently of each other. The intermittent sand filters are functional. The primary concern with the sand filters is that a portion of the filter media has been removed over the years during cleaning, making the filters a less effective. The aeration system in the sludge digester does not function properly, making it difficult to handle the bio-solids. The ultra violet disinfection unit was installed approximately four (4) years ago and is in good working order. The wastewater collection system consists of the entire collection system network, gravity sewer mains and manholes. The existing collection system is very old and consists of varying types of pipe material. The existing collection system was recently cleaned and televised by the Arkansas Rural Water Association. The findings from this work revealed that there are numerous lines that need to be replaced and multiple point repairs that need to be made. In addition, most of the manholes in the collection system need some sort of rehabilitative work, or simply replaced. There is a tremendous amount of I/I entering the collection system. There are approximately 540 customers connected to the wastewater collection system.

Proposed Facility Description

The proposed improvements to the wastewater treatment facility will include the replacement of the existing lift station with a new submersible pump lift station. The proposed pumps will be sized to handle the existing flows, plus the anticipated flows that will be generated by the proposed customers. The lift station will be equipped with a flow meter that can be compared to the amount of water sold by the City to track the amount of I/I that is entering the system. A new headworks unit will be installed before the oxidation ditch to replace the existing screen. The new headworks will include a new screening unit and a grit collector. Both units will be the screw type with a dewatering chamber that discharge to either a bagger or an open dumpster. Either of the discharge methods will produce material suitable for disposal in a landfill. A new 0.18 MGD oxidation ditch will be constructed next to the existing oxidation ditch. The proposed improvements will also include the replacement of the existing rotors on the oxidation ditch with new rotors. The new rotors will be sized to fit the existing structure. In addition, two (2) new 25-ft. diameter clarifiers will be installed as part of the proposed improvements. The new clarifiers will be capable of being operated independently of each other so that they can be taken out of service when needed for routine maintenance. The proposed

improvements will also include the installation of new sludge handling equipment. The new dewatering device will be installed next to one of the existing intermittent sand filters so that the discharge from the device can run through the filter and ultimately through the ultra violet disinfection. The "dried" sludge can then be dumped onto a concrete pad and handled with a skid steer or backhoe. The "dried" sludge will be stored until it is hauled to the landfill. The proposed improvements will also include a new office/lab building that will be constructed near the treatment units. The controls for the treatment units will be located in the new building. In addition, a new backup generator will also be installed as part of the project to provide standby power for the facility when the utility's power is out of service. The proposed improvements to the wastewater collection system will include the replacement of some of the existing sewer mains with new sewer mains, some pipe bursting of the existing mains, the rehabilitation of many of the manholes, and the reconnection of the existing service lines to the new mains. Once the work is completed, the amount of I/I entering the collection system should be effectively reduced to a minimum. Most of the work will include replacing the existing mains with new mains of the same size.

Service Area(s)		
Service Area Name	Population	Square Miles
Flippin - Existing Area	1355	1.83

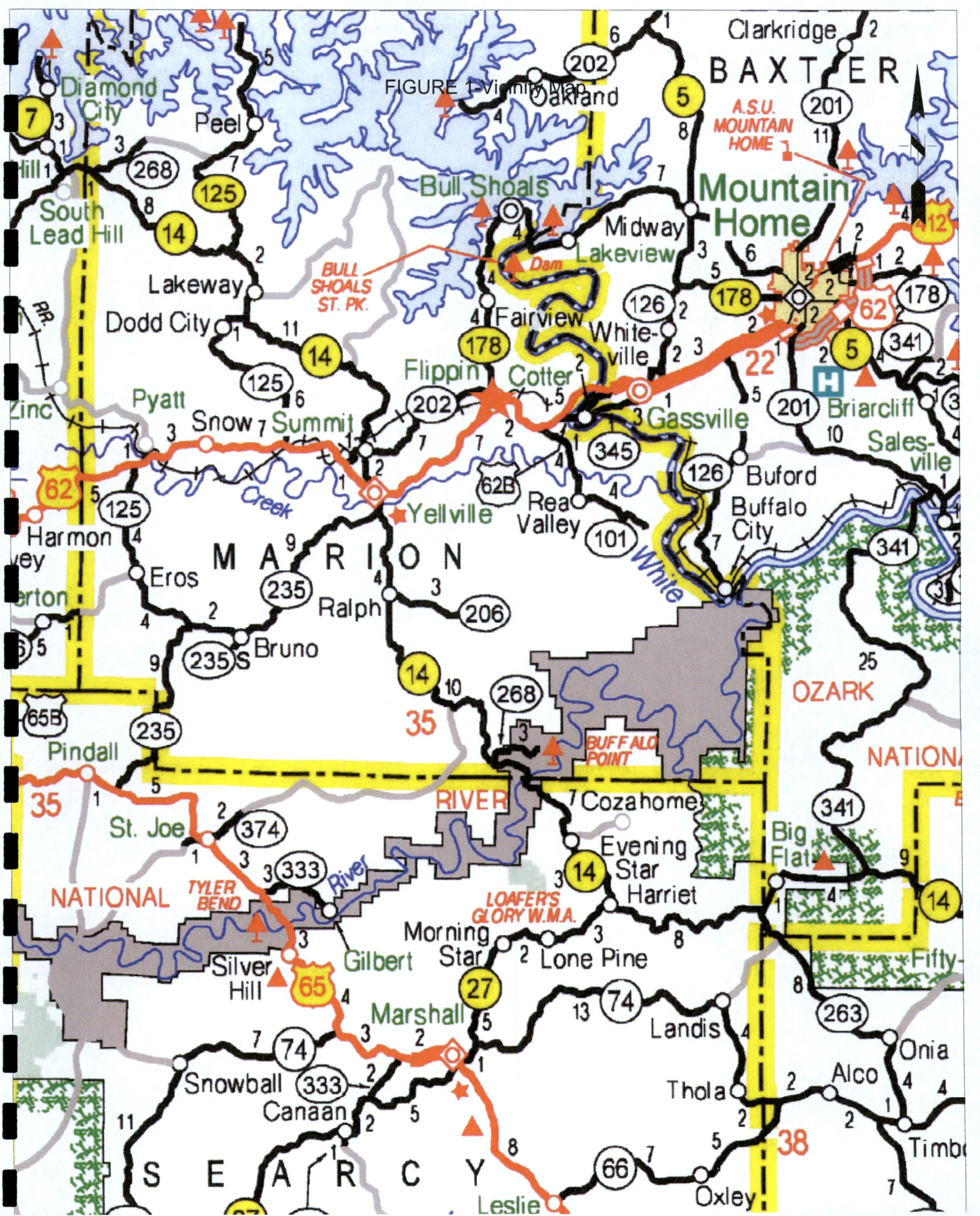


The City of Flippin is located in north central Arkansas, in eastern Marion County. The figure below shows the relationship of the City of Flippin to Marion County and the surrounding area of the State. The City lies just north of U.S. Highway 62 along State Highway 178. State Highway 202 also enters the City from the west in the northern portion of the City. The closest city of any size would be the City of Mountain Home (population 12,448), approximately 15-miles to the east.

The climate in Flippin is typical of north central Arkansas with mild winters and humid summers, but day-to-day weather can vary significantly. The summers are hot and humid (90° and above for an average of 80-days) and the winters relatively mild with a few hard freezes in January and February. Snow is not uncommon in the part of the State, but it is usually light and seldom remains on the ground for more than a few days. The average annual rainfall is approximately 48-inches.

The topography of eastern Marion County is generally rolling, with a few high hills. This portion of the County is largely agriculture, with a few smaller communities scattered throughout. The major land use in this portion of the County is pastureland for livestock. The White River forms the eastern border of Marion County is approximately 3 miles east of Flippin. The Missouri & North Arkansas Railroad runs east and west through the northern portion of the City. The soils in this portion of the County are typically gravelly or cherty silt loam to a depth of 24", with the unweathered bedrock varying in depth from 24" to 72" below the surface. Storm water runoff in the area is typically quick due to the rolling nature of the terrain.

The proposed improvements are located within the jurisdictional limits of the City of Flippin. In addition, it should be noted that none of the proposed improvements are being proposed for real estate developers.



As previously mentioned, the White River follows the eastern border of Marion County, which is approximately 3-miles east of the City of Flippin. Bull Shoals Lake is also located in Marion County, approximately 5-miles to the north. Because of the proximity to these waterways, and the rolling nature of the terrain, there are a couple of large drainage ways (ditches/creeks) that run through the City. However, there are no mapped flood hazard zones within the City.

There are no other environmental resources present within the city limits that will be affected by the construction associated with the proposed project.

Population Trends

Service Area	1990	2000	2010	Annual Growth	2020	2030	2040	2050
Flippin	1,317	1,354	1,355	0.019%	1,380	1,399	1,418	1,437
Total	1,317	1,354	1,355		1,380	1,399	1,418	1,437

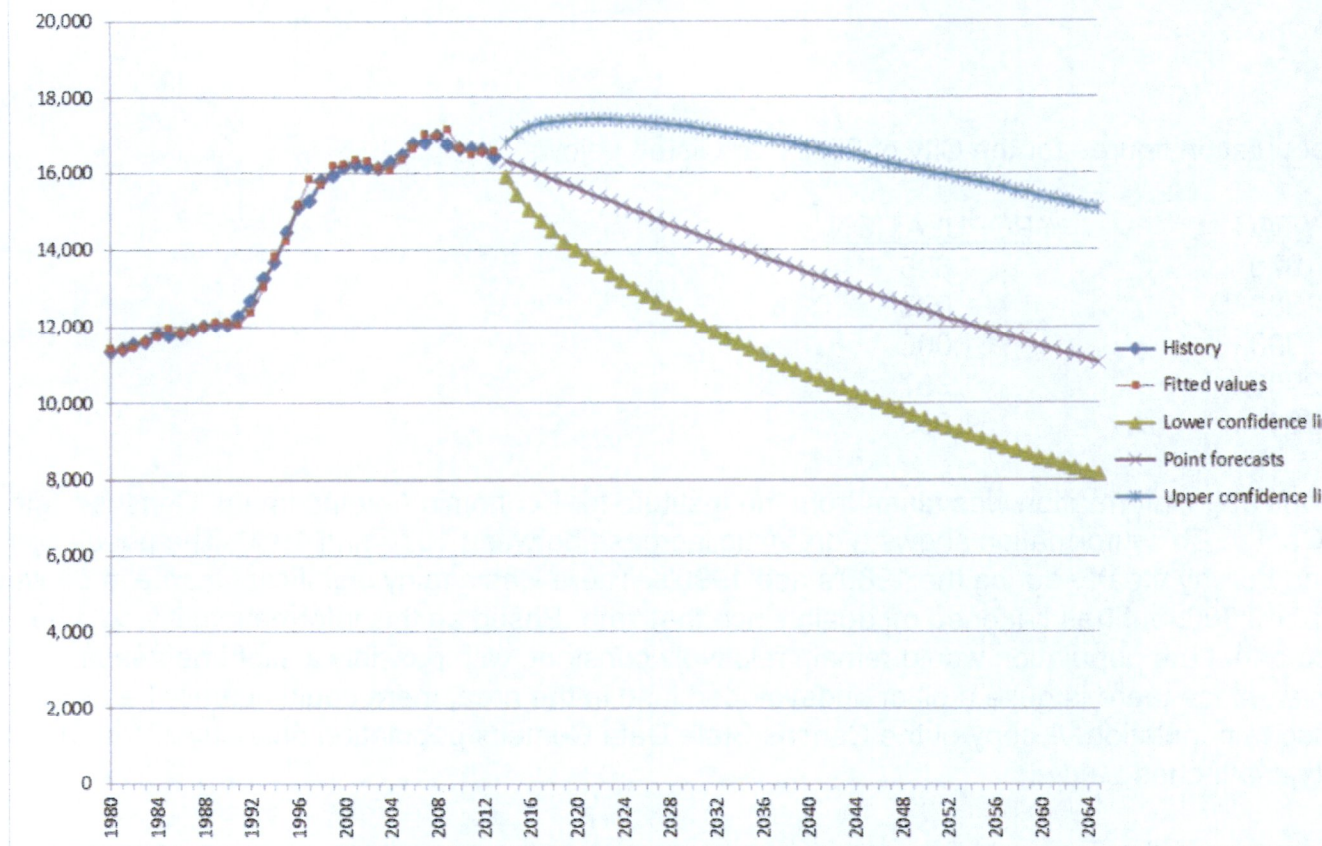
Past population figures for the City of Flippin are listed below:

<u>YEAR</u>	<u>POPULATION</u>
1970	626
1980	1,072
1990	1,006
2000	1,357
2010	1,355

The population information was taken from the Institute for Economic Advancement, Census State Data Center. This information shows a dramatic increase between 1970 and 1980. The population remained pretty steady during the 1980's and 1990's. There was a fairly significant increase between 1990 and 2000, but has flattened off again since that time. Based on this information, it would be expected that the population would remain relatively constant, with possibly a slight decrease. However, since there is quite a bit of undeveloped land in the area, there could actually be an increase in population. A copy of the Census State Data Center's population project for Marion County is attached below.

The economy in the Flippin area is somewhat dependent on the agricultural economy in the area. There are a couple of manufacturing facilities that are located in the area that help to hold the economy fairly steady. In addition, this area of the State also sees a fairly descent amount of tourism, which also helps to hold the economy fairly steady. The median household income for the City of Flippin is reported to be approximately \$24,568.

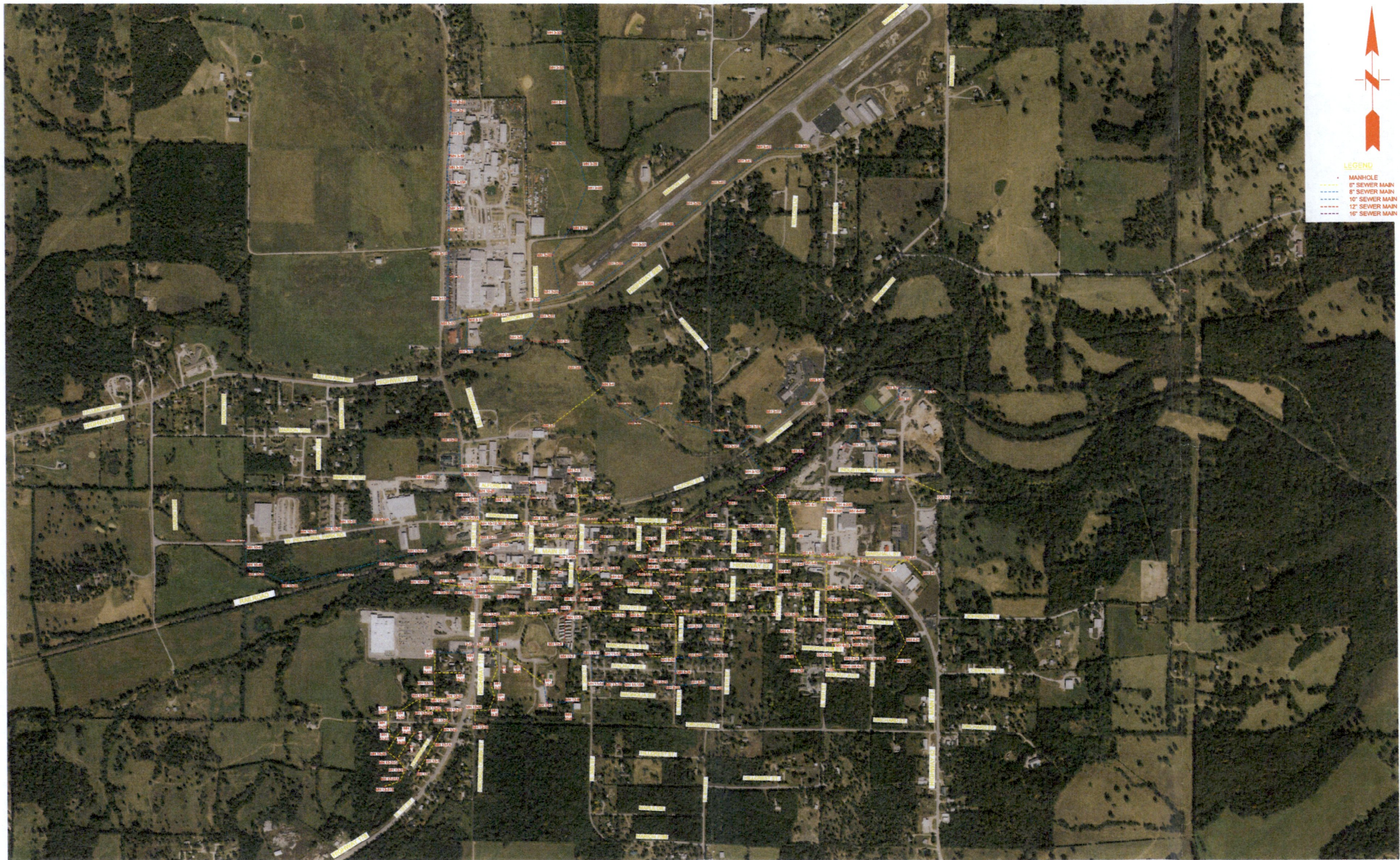
EXHIBIT 1-Population Estimates
Marion County
Population Estimates and Projections
1980-2065



At this point, there has not been an official public meeting to discuss the needs of the wastewater system. However, these needs have been openly discussed at several City council meetings, which are open to the public. In addition, City personnel have been engaged with the Arkansas Department of Environmental Quality (ADEQ) for a couple of years concerning the issues associated with the wastewater system, which is also available to the public through ADEQ's website.

Below is a map showing the approximate location of the existing wastewater collection system and wastewater treatment facilities. As can be seen, the wastewater treatment facility is located in the north central portion of the City, adjacent to Fallen Ash Creek. The treatment facility is located at 222 East Industrial Park Road.

As previously stated, there is only one (1) wastewater lift station in the system, which is located on the wastewater treatment facility property. The wastewater collection system gravity flows from its furthest points to this lift station.



LEGEND
 • MANHOLE
 --- 8" SEWER MAIN
 --- 10" SEWER MAIN
 --- 12" SEWER MAIN
 --- 16" SEWER MAIN

Date	Revision	By

Designed _____
 Checked _____
 Drawn _____
 Approved _____

UTILITY SYSTEMS MAP CITY OF FLIPPIN, ARKANSAS

SYSTEMS
 MAP

Scale
 1"=500'
 Date
 FEBRUARY 2019

Job No.
 Sheet 1

The existing wastewater treatment facility was constructed in 1986. The original plant was converted to sludge disposal as part of the new facility when it was constructed. A flow diagram for the facility is attached below. As previously stated, the influent to the facility enters through the wastewater lift station, is pumped to the screen, and then gravity flows through the oxidation ditch, the clarifiers, the dosing tank, the sand filters, through the ultra violet disinfection unit, and down the cascade, post-aeration to the discharge. There is an existing earthen equalization basin that is utilized during rain events. In addition, the City utilizes an aerated digester, followed by sludge drying beds, for sludge treatment prior to landfilling.

The wastewater treatment facility has had a difficult time maintaining compliance with its NPDES discharge permit. For this reason, the City has had to submit non-compliance reports to ADEQ on a fairly regular basis. These non-compliance reports are reflective of the steps taken by the City to bring the facility back into and maintain compliance with the NPDES discharge permit.

The existing wastewater collection system is the original system. The system has been expanded over the years to accommodate the growth within the City. Because of the age of the original system, there are some, a portion of the system is constructed with outdated materials that have met their useful life expectancy. For this reason, there is a tremendous amount of I/I that enters the system. The I/I contributes to the difficulties that personnel have maintaining compliance at the wastewater treatment facility.

There are approximately 540 customers connected to the existing wastewater collection system. Of those, approximately 427 are considered residential customers, 9 are considered industrial customers, and 104 are considered commercial customers.

The existing wastewater system has been well maintained and operated over the years. The facilities experience large fluctuations in flow during rainfall events, which overloads the individual treatment units at the wastewater treatment facility. The large amounts of I/I are entering the wastewater facilities at various locations due to the materials of construction in the collection system and their age. When these high flows hit the wastewater treatment facility, they overload the individual treatment process causing the discharge permit excursions.

Operating personnel have had a difficult time maintaining compliance with the wastewater treatment facility's NPDES discharge permit. In fact, on multiple occasions in recent months, the facility has been non-compliant. Therefore, the City has had to provide non-compliance reports to ADEQ on a fairly frequent basis. For this reason, ADEQ has requested a timeline from the City stipulating how long it will take for the City to make the necessary improvements to be able to maintain compliance. The timeline has been accepted by ADEQ and the City has worked as diligently as possible to maintain this timeline in order to avoid the issuance of a "Consent Administrative Order".

The financial status of the wastewater department is similar to other smaller communities in rural Arkansas. The department is sound, but does not have a large excess of money available to fund the proposed project. The only debt associated with the wastewater system is the recent loan that was secured from the Arkansas Natural Resources Commission to pay ARWA to televise and smoke test the wastewater collection system. This loan was for \$216,300.00 for ten (10) years at 2.75% interest.

The City recently secured the services of the ARWA to perform a rate analysis for the wastewater system. The rates were adjusted accordingly with the results of this analysis. The proposed improvements were not included as part of the rate analysis. Therefore, the City will have to make further adjustments to the rates to generate the necessary revenue needed for the repayment of the loan.

The existing operating budget for the wastewater system is shown below.

EXHIBIT 2-Existing Sewer Budget
City of Pippin

Sewer Operating Budget

Income		
	User Fees	\$146,750.00
Expenses		
	Health Insurance	\$4,350.00
	Life Insurance	\$340.00
	Utilities	\$12,900.00
	Dues/Licenses	\$600.00
	Equipment	\$1,000.00
	Equipment Repair/Maintenance	\$750.00
	Supplies	\$1,500.00
	Training/Travel	\$275.00
	Insurance	\$600.00
	Sludge Removal	\$13,750.00
	Legal/Accounting	\$300.00
	Wages/Salaries	\$59,000.00
	Payroll Taxes	\$8,600.00
	APERS Expense	\$4,500.00
	DMR Reports	\$1,680.00
	Total Expenses	\$110,145.00
NET INCOME(LOSS)		\$36,605.00

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THE WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
P. O. BOX 40
FLIPPIN, ARKANSAS 72634
(870) 453-8300

AUDITED FINANCIAL STATEMENTS

15 months ended December 31, 2015

BRIAN L. HAAS
CERTIFIED PUBLIC ACCOUNTANT
1616 HIGHWAY 62 WEST
MOUNTAIN HOME, AR 72653
(870) 424-2181

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR

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BRIAN L. HAAS, CPA

DRAFT
Certified Public Accountant
1616 Highway 62 West
Mountain Home, AR 72653

Phone: (870) 424-2181

Fax: (870) 425-1339

INDEPENDENT AUDITOR'S REPORT

To The Honorable Mayor and City Council
Water and Wastewater Department
of the City of Flippin, AR
P. O. Box 40
Flippin, Arkansas 72635

I have audited the accompanying financial statements of the City of Flippin Water and Wastewater Fund, as of 15 months ended December 31, 2015, and for the year then ended. These financial statements are the responsibility of the Water and Wastewater Department of the City of Flippin, AR's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. I believe that my audit provides a reasonable basis for my opinion.

As discussed in Note 1, the financial statements present only the City of Flippin Water and Wastewater Fund and do not purport to, and do not present fairly the financial position of the City of Flippin Water and Wastewater Fund as of 15 months ended December 31, 2015, and the changes in financial position and cash flows, where applicable, for the year then ended in conformity with accounting principles generally accepted in the United States of America.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Water and Wastewater Department of the City of Flippin, AR, as of 15 months ended December 31, 2015, and the changes in financial position and cash flows thereof for the year ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government of the United States Auditing Standards, I have also issued my report dated August 17, 2016 on my consideration of the Water and Wastewater Department of the City of Flippin, AR's internal control over financial reporting and my test of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting or on compliance.

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That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in conjunction with this report in considering the results of my audit.

The management discussion and analysis on pages 3 through 7, and the budgetary comparison on page 23 are not a required part of the basic financial statements but is supplementary information required by accounting principles generally accepted in the United States. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no

My audit was made for the purpose of forming an opinion on the City of Flippin Water and Wastewater Fund's financial statements taken as a whole. The accompanying supplementary information, a schedule of operating expenses, is presented for purposes of additional analysis and is not a required part of the Water and Wastewater Fund's financial statements. The information in this section has been subjected to the auditing procedures applied in the examination of the financial statements and, in my opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

Brian L. Haas
Certified Public Accountant
1616 Highway 62 West
Mountain Home, AR 72653

August 17, 2016

As management of the Water and Wastewater Department of the City of Flippin, AR, we offer readers of the Department's financial statements this narrative overview and analysis of the Department's financial performance during the fiscal years ended 15 months ended December 31, 2015. Please read it in conjunction with the Department's financial statements, which follow this section.

The Water and Wastewater Department of the City of Flippin, AR's financial statements consist of only one proprietary Department. The Board operates a water utility for customers (members) on a fee for services and related costs basis.

FINANCIAL HIGHLIGHTS

As of 15 months ended December 31, 2015:

- The Department's assets exceeded its liabilities by \$1,242,100 (net assets) for the fiscal year reported. This compares to the previous year when assets exceeded liabilities by \$2,538,671.
- Total net assets are comprised of the following:
 - Capital assets, net of related debt of \$1,316,477, including property and equipment net of accumulated depreciation.
- Temporarily restricted assets of \$374,582 are reserved by constraints imposed by outside the Water and Sewer System, such as debt covenants, grantors, laws or regulations.
- Unrestricted net assets of \$(448,859) represent portion available to maintain ongoing operations.

OVERVIEW OF THE FINANCIAL STATEMENTS

- The Department's annual audit report includes three major financial statements. These statements provide both long-term and short-term information about the Department's overall status. Financial reporting at this level uses accrual basis accounting as in the private sector.
- The first of these statements is the Statement of Department Net Assets – Proprietary Department. This is the Department's statement of financial position presenting information that includes all of the Department's assets and liabilities with the difference reported as net assets. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the Department as a whole is improving or deteriorating.
- The second statement is the Statement of Net Assets – Proprietary Department. This statement reports how the Department's net assets changed during the current fiscal year. All current year revenues and expenses are included regardless of when cash is received or paid. An important purpose of the design of the Statement of Revenues, Expenses, and Changes in Department Assets – Proprietary Department is to show the effectiveness of Department rate structure and related revenues to adequately cover the operational costs of providing water services to the Department's membership.

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- The third major statement is the Statement of Cash Flows. This statement presents cash flows provided by operations, investing and financing on a net change basis.

REQUIRED FINANCIAL STATEMENTS

- The financial statements of the Department's report information of the Department using accounting methods similar to those used by private sector companies. These statements offer short and long-term financial information about its activities. The Statement of Department Net Assets – Proprietary Department includes all of the Department's assets and liabilities and provides information about the nature and amounts of investments in resources (assets) and the obligations to Department's creditors (liabilities). These also provide the basis for evaluating the capital structure of the Department and assessing the liquidity and financial flexibility of the Department.
- All of the prior years and current year's revenues and expenses are accounted for in the Statement of Revenues, Expenses, and Changes in Department Assets – Proprietary Department. This statement measures the success of the Department's operations over the past two years and can be used to determine whether the Department has successfully recovered all its costs through its user fees and other charges, profitability and credit worthiness.
- The final required financial statement is the Statement of Net Assets – Propriety Department. This statement reports cash receipts, cash payments, and net changes in cash resulting from operations, investing, and financing activities and provide answers to such questions as where did cash come from, what was cash used for, and what was the change in the cash balance during the reporting periods.

FINANCIAL ANALYSIS OF THE DEPARTMENT

- The Department's net assets increased due to an excess of revenue over expenses of \$58,306. Total operating revenues were up from 2014 by \$25,407 to \$463,287. Total operating expenses were lower in 2015, \$404,981 compared to \$404,981 in 2014.

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NET ASSETS

- To begin our analysis, a summary of the Department's Statements of Net Assets are presented in Table A-1.

Table A-1
The Department's Net Assets
15 months ended December 31, 2015 and 12 months ended September 30, 2014

	2015	2014
Current Assets	\$ 176,433	\$ 205,241
Capital and non-current assets	<u>1,369,998</u>	<u>1,606,371</u>
Total Assets	1,546,431	1,811,612
Current Liabilities	19,821	43,555
Long-term Liabilities	<u>514,922</u>	<u>526,948</u>
Total Liabilities	534,743	570,503
Net Assets	<u>\$ 1,011,688</u>	<u>\$ 1,241,109</u>
Invested in capital assets net of related debt	\$ 667,254	\$ 1,316,477
Temporarily restricted	187,823	216,883
Unrestricted	<u>156,522</u>	<u>(292,251)</u>
Total Net Assets	<u>\$ 1,011,599</u>	<u>\$ 1,241,109</u>

The Department's net assets increased by \$991 or 1.0% over 2014. Additional information regarding capital assets is available in the Notes to the Basic Financial Statements.

A portion of the net assets is either restricted as to the purposes they can be used for or they are invested in capital assets. Unrestricted net assets may be used to Department the Department's programs in the next fiscal year. However, this does not mean that the Department has significant surplus resources available to pay its bills next year. Rather, it is the result of having long-term commitments that are less than currently available resources. The balance has remained similar to the prior years.

BUDGETARY HIGHLIGHTS

For 2015, the Department's revenues were more than budgeted estimates by \$76,437. Expenses were lower than budget estimates. Total operating expenses were approximately \$22,130 under original budget.

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CAPITAL ASSETS AND DEBT ADMINISTRATION

• Capital Assets

At the end of 2015, the Department had invested \$1,342,673 a broad range of assets, including land, water distribution system, equipment and vehicles.

This was an increase over 2014. Additional information regarding Capital Assets is available in the Notes to the Basic Financial Statements.

Land	\$ 6,886
System & Improvements	3,177,506
Machinery & Equipment	331,008
Vehicles	46,298
Less accumulated depreciation	<u>(2,456,302)</u>
Net capital assets	<u>\$ 1,105,396</u>

• Debt Administration

At the end of 2015, the Department's long-term debt consisted of the following:

Arkansas Soil & Water Commission	\$ 77,026
USDA	361,116
Less current maturities	<u>-</u>
Total long-term debt	<u>\$ 438,142</u>

More information about the Department's debt is presented in the Notes to the Basic Financial Statements.

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ECONOMIC FACTORS NEXT YEAR'S BUDGET AND RATES

- No capital improvements were done in 2015. We are still working on water loss with leak detection and daily consumption reports. This year we are trying to get rate studies done for water and sewer so this matter can be addressed in 2016.

CONTACTING THE Department'S FINANCIAL MANAGER

- This financial report is designed to provide a general overview of the Department's finances, comply with finance-related laws and regulations, and demonstrate the Department's commitment to public accountability. If you have questions about this report or would like to request additional information, contact the Department's manager at:

P.O. Box 40
Flippin, Arkansas 72653

Phone number: (870) 453-8300

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
STATEMENT OF FUND NET ASSETS - PROPRIETARY FUND

DRAFT

15 months ended December 31, 2015

ASSETS

CURRENT ASSETS:

Cash and cash equivalents (Note 1)	\$ 99,817
Accounts receivable - consumers	76,616
Inventory - material and supplies	0
Prepaid note payment	<u>0</u>
Total current assets	176,433

RESTRICTED ASSETS: (NOTES 1 AND 2)

Cash:

Meter deposits-CD 9013	20,000
Water Depreciation	11,378
Water meter deposits	44,203
CD 66	75,000
W/S 1976 bond	7,579
Water 1987 bond	59,993
Water 1993 bond	46,450
Water Revenue 1976	<u>0</u>

Total restricted assets	264,603
-------------------------	---------

PROPERTY, PLANT, AND EQUIPMENT

Property, plant and equipment (Note 2)	3,561,698
Less accumulated depreciation	<u>(2,456,302)</u>
Property, plant and equipment - net	<u>1,105,395</u>
Total assets	<u><u>\$1,546,432</u></u>

See accompanying notes to financial statements.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
STATEMENT OF FUND NET ASSETS - PROPRIETARY FUND

DRAFT

15 months ended December 31, 2015

LIABILITIES AND RETAINED EARNINGS

CURRENT LIABILITIES:

Accounts payable	\$ 15,189
Sales tax payable	4,632
Interest payable	0
Accrued payroll taxes payable	0
Current maturities - long-term debt	0

Total current liabilities	19,821
---------------------------	--------

Meter deposits (Note 2)	76,780
-------------------------	--------

LONG-TERM DEBT: (Note 3)

Notes payable:

ASWCC #WSSW-25-01-D	71,294
ASWCC #WSSW-97-10-L	5,732
USDA #92-11 2027	105,025
USDA #91-15 2033	28,677
USDA #91-13 2033	199,018
USDA #91-09 2019	8,286
USDA #91-04 2017	20,109
Less current maturities	0

Total long-term debt, net of current maturities	438,142
---	---------

Total liabilities	534,743
-------------------	---------

NET ASSETS:

Invested in capital assets, net of related debt	667,254
Temporarily restricted	187,823
Unrestricted	156,522

Total net assets	1,011,599
------------------	-----------

Total liabilities and net assets	<u>\$ 1,546,342</u>
----------------------------------	---------------------

See accompanying notes to financial statements.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN FUND ASSETS
PROPRIETARY FUND

DRAFT

For the 15 months ended December 31, 2015

OPERATING REVENUES:

Water sales	\$ 836,945
Wastewater service fees	184,810
Wholesale water sales	0
Penalties and late charges	32,295
New installation fees	9,330
Sales tax	69,227
Miscellaneous income	40,387
Permits	815
Deposits	0
Sanitation fees	93,484
Testing fees	6,149
Sprinkler system fees	650
Returned checks	1,379

Total operating revenues	1,275,471
--------------------------	-----------

OPERATING EXPENSE

1,201,797

Operating income (loss) before depreciation expense	73,674
---	--------

Depreciation expense	(128,145)
----------------------	-----------

Total depreciation	<u>(128,145)</u>
--------------------	------------------

Income (loss) from operations	(54,471)
-------------------------------	----------

NONOPERATING REVENUE (EXPENSE):

Sales tax revenue - restricted	0
Interest income	461
Interest expense	(43,820)
ADFA fees	0
Grant	8,000

Total nonoperating revenue (expense)	<u>(35,359)</u>
--------------------------------------	-----------------

Change in net assets	(89,830)
----------------------	----------

Net assets as of beginning of year	<u>1,101,429</u>
------------------------------------	------------------

Net assets as of end of year	<u><u>\$ 1,011,599</u></u>
------------------------------	----------------------------

See notes to accompanying financial statements.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
15 months ended December 31, 2015

DRAFT

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting entity:

The waste and water fund is an enterprise fund that provides water and sewer services to the City of Flippin and the surrounding area. Enterprise funds are for operations which are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expenses, including depreciation) of providing services to the general public be financed or recovered primarily through user charges. The City's comprehensive financial report is prepared by state legislative audit and does not include the water and wastewater fund, which is separately reported herein.

Basis of accounting:

The accounting policies of the Water and Wastewater Department of the City of Flippin, Arkansas, conform to generally accepted accounting principles as applicable to governmental units. The accrual basis of accounting is followed.

Budgets and budgetary accounting:

Enterprise fund service delivery levels are determined by the extent of consumer demand. Because enterprise fund revenues and expenses fluctuate with the changing service delivery levels, generally accepted accounting principles do not require the financial statements to include budgetary comparisons. Accordingly, such comparisons have not been included.

Inventories:

Inventories consist of expendable material and supplies held for consumption. Inventory is valued at the lower of cost or market, on a First-Out basis. Cost is deemed to approximate market value.

Cash and cash equivalents:

For the purpose of the statement of cash flows, the Water and Wastewater Department of the City of Flippin, Arkansas, considers current nonrestricted cash accounts as cash.

Cash accounts and certificates of deposit are displayed separately on the balance sheet as "current" and "restricted" cash. The bank balances are categorized to give an indication of the level of risk assumed by the Water and Wastewater Department of the City of Flippin as follows

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
15 months ended December 31, 2015

DRAFT

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Cash and cash equivalents: (Continued)

Cash accounts and certificates of deposit are displayed separately on the balance sheet as "current" and "restricted" cash. The bank balances are categorized to give an indication of the level of risk assumed by the Water and Wastewater Department of the City of Flippin, Arkansas as follows:

Current cash	\$ 99,817
Restricted cash	<u>264,603</u>
Total on deposit	<u>\$364,420</u>
Insured by the FDIC or collateralized by financial institutions	<u>\$364,420</u>
Uninsured and uncollateralized	<u>\$ -</u>

Accounts receivable:

Consumer accounts receivable reflects the balances due from the individuals and businesses using the water and wastewater services provided by the City. The individuals and businesses are residents of the City of Flippin.

The water and wastewater department uses the direct write-off method of accounting for bad debts. No allowances for uncollectible accounts have been provided since historically such accounts have been minimal.

Restricted assets:

These assets consist of cash restricted by various bond ordinances for debt service and depreciation reserves.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
15 months ended December 31, 2015

DRAFT

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Property, plant, and equipment:

Property, plant and equipment are stated at cost and are depreciated by the straight-line method over the estimated useful lives of the various assets. Assets are constructed and acquired by four methods: by department work crews; by independent contractors financed by department funds; by grant financed water and sewer improvement projects; and by real estate developers in conjunction with a property development and contributed to the department. Assets acquired from grant fund improvement projects and real estate developers result in donated capital on the books of the department, which has been classified as contributed capital, and is reduced annually through a transfer to unreserved retained earnings of an amount based on the life of the system. Donors and transfers are as follows:

	Capital assets, depreciated					Total
	Land	System & Improve.	Machinery & Equip.	Vehicles	Sewer plant expansion	
Balance, 12-31-14	\$ 6,886	\$ 3,102,557	\$ 331,008	\$ 20,102	\$ -	\$ 3,460,553
Additions				26,196		26,196
Dispositions						-
Balance, 12-31-15	6,886	3,102,557	331,008	46,298	-	3,486,749
Accum. Depr.						
Balance, 12-31-14	-	1,963,663	364,493	-	-	2,328,156
Increases		128,145				128,145
Decreases		-				-
Balance, 12-31-15	-	2,091,808	364,493	-	-	2,456,301
Capital assets - net	\$ 6,886	\$ 1,010,749	\$ (33,485)	\$ 46,298	\$ -	1,030,448

The costs of assets retired from service are credited to the appropriate property, plant and equipment account. Costs of removal in addition to the asset cost are charged to the reserve for depreciation. Maintenance, repairs and minor renewals are charged against earnings when incurred. Additions and major renewals are capitalized.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF SLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
15 months ended December 31, 2015

DRAFT

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Infrastructure (GASB 34):

Under the transition provisions of GASB 34, the City is not required to retroactively report major general infrastructure assets. There were no infrastructure additions to the water/sewer system for the year ended 15 months ended December 31, 2015.

Use of estimates:

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reported period. Actual results could differ from those estimates.

NOTE 2: RESTRICTED ASSETS

Ordinance #2002-03 of the City of Slippin authorized the issuance of the series of revenue bonds. This ordinance established the funds and reserves required by the bond issues and their bond requirements. This ordinance established certain other funds and the manner in which revenues are to be deposited and transferred between the various funds.

The bond requires monthly payments be put in escrow to fund the semiannual payments made in April and October. The balance in escrow as of 15 months ended December 31, 2015 was \$18,009.

Sales tax revenues generated for repayment of the ADFA loan have been segregated and restricted for future use. The balance at 15 months ended December 31, 2015, was \$73,657.

Other requirements:

Water and wastewater depreciation fund – an amount equal to 3% of the gross revenues of the system is to be transferred from the revenue fund the first of each month until a reserve of \$4,000 is attained. The balance of \$4,995 in this account at 15 months ended December 31, 2015, was \$995 in excess of the requirement.

Meter deposits are refundable customer deposits for which reserves in an amount sufficient to refund the deposits in total must be held. Meter deposits totaled \$37,565. The balance in this account at 15 months ended December 31, 2015, of \$22,192 was \$15,373 less than the requirement.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
15 months ended December 31, 2015

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NOTE 4: RETIREMENT PLAN

The Arkansas Public Employees Retirement System is a separate entity, which issues separate audited financial statements. A copy of the most current financial report, for the fiscal year ended 15 months ended December 31, 2015, is on file at Flippin City Hall.

All full-time employees that have been employed 30 days or longer are eligible to participate in the Arkansas Public Employee Retirement System (APERS) pension plan. This is a multiple-employer, cost sharing defined benefit pension plan that was established by Act 177 of 1957. Act 793 of 1977 established a noncontributory plan. The City of Flippin employees participate in the noncontributory plan.

Benefits:

Benefit provisions are established by state law and may be amended only by the Arkansas General Assembly. Members are eligible for full benefits as follows:

1. At age sixty-five (65) with five (5) years of actual service,
2. At any age with twenty-eight (28) years of actual service, or
3. Under the non-contributory plan, at age fifty-five (55) with thirty-five (35) years of credited service.

The normal benefit amount, paid on a monthly basis is determined by the member's final average salary and the number of years of service, five (5) or at any age with twenty-eight (28) years of actual service. APERS also provided for disability and survivor benefits.

Funding policy:

Contribution provisions applicable to the State, County, Municipal, and School Divisions are established by state law and may be amended only by the Arkansas General Assembly. The employer contribution rate for the Municipal Division non-contributory plan, as established by an actuarially determined reserve requirement for benefit payments, is six percent (6%) of covered employees' payroll.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
15 months ended December 31, 2015

DRAFT

NOTE 4: RETIREMENT PLAN (CONTINUED)

The Water and Wastewater Department of the City of Flippin, AR's total required contribution for the year ended 15 months ended December 31, 2015, was \$13,800 and included an allowable purchase for the years of service prior to Flippin's enrollment in the System in 1995. The required contributions for the 15 months have been made.

Funding status and progress:

Per the most current APERS audit report, the excess of the actuarial value of assets over the accrued liability of the System, as adjusted to fair value based on the Entry Age Normal Cost Method, was \$2,125 [dollars in millions] at 15 months ended December 31, 2015. Total applicable assets at smoothed market related value were \$6,159 [dollars in millions], at 15 months ended December 31, 2015. APERS does not conduct separate measurements for the separate divisions or employers of the System.

Significant assumptions used to compute the actuarial value of assets and accrued liabilities along with the schedule of funding status and progress, which presents the progress in accumulating sufficient assets to pay benefits when due, and other statistical data are also presented in the APERS annual financial report.

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SUPPLEMENTAL INFORMATION

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR

SCHEDULE OF OPERATING EXPENSES
For the 15 months ended December 31, 2015

DRAFT

	<u>Water System</u>	<u>Wastewater System</u>	<u>Combined</u>
Advertising	0	0	0
APERS Expense	49,609	0	49,609
Bank Charges	589	0	589
Capital Improvements	8,326	0	8,326
Computer Support	89	0	89
Contract Labor	0	0	0
DMR Reports	2,025	0	2,025
Dues & Licenses	10,208	0	10,208
Education/Conferences	1,027	0	1,027
Equipment R&M	3,508	954	4,462
Fuel	14,997	0	14,997
Gargage Contract	121,510	0	121,510
Health Insurance	40,626	0	40,626
Legal & Accounting	12,850	0	12,850
Life Insurance	2,731	0	2,731
Non Vehicle R&M	1,265	0	1,265
Office Supplies	1,029	0	1,029
Operating Supplies	38,397	0	38,397
Other Insurance	4,482	0	4,482
Payroll Taxes	26,228	0	26,228
Postage & Freight	6,411	0	6,411
Sludge Removal	9,788	0	9,788
Uniforms	3,779	0	3,779
Utilities	10,561	14,337	24,898
Vehicle R&M	3,902	0	3,902
Wages & Salaries	335,125	0	335,125
Water Excise Tax	77,925	0	77,925
Water Purchase	397,401		397,401
Miscellaneous expense	212		212
Engineering fees	1,900		1,900
Bank Charges	6		6
Rounding correction	0	0	0
	<u>0</u>	<u>0</u>	<u>0</u>
Total operating expense \$	<u>1,186,508</u>	<u>\$ 15,291</u>	<u>\$ 1,201,797</u>

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
REQUIRED SUPPLEMENTARY INFORMATION
15 months ended December 31, 2015

DRAFT

WATER & WASTEWATER BUDGET

<u>ACCOUNT</u>		<u>Actual</u>	<u>%</u>	<u>Final Budget</u>	<u>%</u>	<u>Variance over (under)</u>	<u>Original Budget</u>
<u>Income</u>							
Water user fees	\$	836,945	65.19%	\$664,337	75.75%	\$172,608	664,337
Sewer user fees		184,810	14.39%	48,579	5.54%	136,231	48,579
Connection fees		0	0.00%	1,163	0.13%	(1,163)	1,163
Permits		815	0.06%	75	0.01%	740	75
Penalties		32,295	2.52%	25,547	2.91%	6,748	25,547
Tie-on fees		9,330	0.73%	4,090	0.47%	5,240	4,090
Water testing fees		6,149	0.48%	1,168	0.13%	4,981	1,168
Sales tax		69,227	5.39%	55,668	6.35%	13,559	55,668
Sanitation income		93,484	7.28%	73,887	8.42%	19,597	73,887
Sewer interest income		461	0.04%	225	0.03%	236	225
Sprinkler systems		225	0.02%	355	0.04%	(130)	355
Multi sprinklers		425	0.03%	350	0.04%	75	350
Miscellaneous income		49,766	3.88%	1,565	0.18%	48,201	1,565
Total income	\$	<u>1,283,934</u>	<u>100.00%</u>	<u>\$877,010</u>	<u>100.00%</u>	<u>\$406,924</u>	<u>\$ 877,010</u>
<u>Expenses</u>							
Salaries and wages	\$	335,125	27.89%	\$240,065	27.52%	\$ 95,061	\$ 240,065
Overtime		0	0.00%	0	0.00%	0	0
Payroll taxes		26,228	2.18%	19,445	2.23%	6,783	19,445
Health insurance		40,626	3.38%	33,535	3.84%	7,091	33,535
Life insurance		2,731	0.23%	3,019	0.35%	(289)	3,019
APERS pension expense		49,609	4.13%	35,993	4.13%	13,616	35,993
Other insurance		4,482	0.37%	3,755	0.43%	727	3,755
DMR reports		2,025	0.17%	1,485	0.17%	540	1,485
Dues, licenses, fees		10,208	0.85%	5,641	0.65%	4,566	5,641
Advertising		0	0.00%	398	0.05%	(398)	398
Contract labor		0	0.00%	0	0.00%	0	0
Audit and legal		12,850	1.07%	0	0.00%	12,850	0
Computer support		89	0.01%	363	0.04%	(274)	363
Utilities		24,898	2.07%	9,467	1.09%	15,431	9,467
Capital improvements		8,326	0.69%	23,556	2.70%	(15,230)	23,556
Office supplies		1,029	0.09%	201	0.02%	828	201
Office equipment		0	0.00%	0	0.00%	0	0
Maintenance & repairs-non vehicle		1,265	0.11%	1,163	0.13%	102	1,163

See note to required supplementary information.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
REQUIRED SUPPLEMENTARY INFORMATION
15 months ended December 31, 2015

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WATER & WASTEWATER BUDGET (continued)

Postage and freight	6,411	0.53%	5,423	0.62%	988	5,423
Education and conferences	1,027	0.09%	869	0.10%	158	869
Operating supplies	38,397	3.19%	19,362	2.22%	19,035	19,362
Sludge removal	9,788	0.81%	890	0.10%	8,898	890
Uniforms	3,779	0.31%	2,182	0.25%	1,597	2,182
Maintenance & repairs-vehicles	3,901	0.32%	3,826	0.44%	75	3,826
Maintenance & repairs-equipment	4,462	0.37%	2,064	0.24%	2,397	2,064
Fuel	14,997	1.25%	12,696	1.46%	2,301	12,696
Water purchases	397,401	33.07%	289,868	33.23%	107,534	289,868
Cleaning service	0	0.00%	0	0.00%	0	0
Drinking water	0	0.00%	0	0.00%	0	0
Garbage contract	121,510	10.11%	88,198	10.11%	33,312	88,198
Meals for prisoners	214	0.02%	0	0.00%	214	0
Water excise tax	77,925	6.48%	68,543	7.86%	9,382	68,543
Miscellaneous expense	2,495	0.21%	366	0.04%	2,129	366
Garbage pick up	0	0.00%	0	0.00%	0	0
 Total	 \$ 1,201,798	 100.00%	 \$ 872,374	 100.00%	 \$ 329,424	 \$ 872,374

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR

BOARD OF DIRECTORS
For the 15 months ended December 31, 2015

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The Board of Directors of the Water and Wastewater Department of the City of Flippin, AR was composed of the following individuals at September 30, 2013:

Jerald Murberry	Mayor
Sam Neilson	Council Member
Heith Hogan	Council Member
Joe Cantrell	Council Member
Jennifer Porter	Council Member

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
INSURANCE COVERAGE
15 months ended December 31, 2015

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Coverage

GENERAL LIABILITY:

Damage	\$1,000,000
Personal injury	\$1,000,000
Medical	\$5,000

Property	\$1,200,971
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VEHICLES:

Property damage	\$1,000,000
Medical	\$50,000

Theft loss	\$699,000
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Mechanical equipment	\$79,600
Misc floater for hand tools, pollutant cleanup	\$5,000
Additional debris cleanup	\$10,000

Umbrella	\$1,000,000
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WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR

USERS BY CLASS
15 months ended December 31, 2015

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Customer category (usage in gallons)	Customer Count			
	Water Only	Sewer Only	Water and Sewer	Total
< 2,000	418	3	210	631
2,001 - 10,000	498	1	303	802
10,001 - 15,000	13	0	12	25
15,001 - 30,000	9	0	8	17
30,001 - 65,000	1	0	7	8
> 65,000	0	0	8	8
	<u>939</u>	<u>4</u>	<u>548</u>	<u>1491</u>

RATE STRUCTURE:

The following rates are in effect for customers as of September 30, 2013.

IN CITY:
All over 2,000 gallons \$ 14.55 for the first 2,000 gallons or less
\$ 5.10 per 1,000 gallons or portion thereof

RURAL:
All over 1,500 gallons \$ 18.45 for the first 1,500 gallons or less
\$ 6.35 per 1,000 gallons or portion thereof

TIE ON FEE:

3/4 Inch \$ 475.00 City
\$ 575.00 County
1 Inch \$ 650.00
1-1/2 Inch \$ 925.00
2 Inch \$ 1,200.00

ADDITIONAL INFORMATION

Water loss figures for the year ended 15 months ended December 31, 2015 are as follows:

Gallons of water pumped	123,024,000
Gallons of water sold and used	<u>104,551,110</u>
Gallons of water lost	<u><u>18,472,890</u></u>

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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF
FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING
STANDARDS

To The Honorable Mayor and City Council
Water and Wastewater Department
of the City of Flippin, AR
P. O. Box 28
Flippin, Arkansas 72635

I have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the Water and Wastewater Department of the City of Flippin, AR, as of and for the year ended 15 months ended December 31, 2015, and the related notes to the financial statements, which collectively comprise the Water and Wastewater Department of the City of Flippin, AR's basic financial statements have issued my report thereon dated August 17, 2016.

Internal control over financial reporting

In planning and performing my audit of the financial statements, I considered the Water and Wastewater Department of the City of Flippin, AR's internal control over financial reporting to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing my opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Water and Wastewater Department of the City of Flippin, AR's internal control. Accordingly, I do not express an opinion on the effectiveness of the Water and Wastewater Department of the City of Flippin, AR's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

My consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during my audit I did not identify any deficiencies in internal control that I consider to be material weaknesses. However, material weaknesses may exist that have not been identified. I did identify certain deficiencies in internal control, described in the accompanying schedule of findings and questioned costs that I consider to be significant deficiencies (Finding #2).

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
15 months ended December 31, 2015

DRAFT

SUMMARY OF AUDIT RESULTS

1. The auditor's report expresses an unqualified opinion on the financial statements of the Water and Wastewater Department of the City of Flippin, AR.
2. Two significant deficiencies disclosed during the audit of the financial statements are reported in the report on compliance and internal control. The staff is not trained to draft financial statements and footnotes. The conditions reported are not a material weakness.

FINDINGS - FINANCIAL STATEMENTS AUDIT

SIGNIFICANT DEFICIENCIES:

1. Segregation of duties:

Criteria:	Duties should be segregated to provide reasonable assurance that transactions are handled properly.
Condition:	The City does not have a proper segregation of duties. This condition also existed in prior years.
Causes:	The staff is so small there are only a limited number of people for certain functions.
Effect:	Transactions could be mishandled, which could affect accuracy of the financial statement.
Recommendation:	Duties should be separated as much as possible and alternative controls used to compensate for lack of separation.
Response:	Management has determined that it is not economically feasible to have the necessary segregation of duties required to have a more adequate internal control system.

2. Establish internal control over financial statement preparation and review:

Criteria:	Management is responsible for establishing and maintaining control and for the fair presentation of the net assets, supplementary information, and disclosures in the financial statements, in conformity with generally accepted accounting standards.
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WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
SCHEDULE OF FINDINGS AND QUESTIONED COSTS (CONTINUED)
15 months ended December 31, 2015

DRAFT

- Condition:** The Water and Wastewater Department of the City of Flippin, AR does not have a system of internal control that would provide management with reasonable assurance that the financial statements and related disclosures are complete and presented in accordance with generally accepted accounting standards. As such, management requested me to compile and prepare a draft of the financial statements, including the related note disclosures. This condition also existed in prior years.
- Cause:** There are limited personnel with proper training and skills to provide the necessary reporting skills for fair presentation of all the financial information.
- Effect:** Financial statements and related footnote disclosures and supplementary information required by generally accepted accounting standards, and accounting standards would not be complete.
- Recommendation:** Use of an outside consultant to use as an aid to drafting the financial statements.
- Response:** Management has determined that it is not economically feasible to acquire an employee capable of drafting the financial statements. These conditions have persisted from prior years into the current year which has not allowed the company to improve this aspect of controls.

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THE WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
P. O. BOX 40
FLIPPIN, ARKANSAS 72634
(870) 453-8300

AUDITED FINANCIAL STATEMENTS

DECEMBER 31, 2016

BRIAN L. HAAS
CERTIFIED PUBLIC ACCOUNTANT
1616 HIGHWAY 62 WEST
MOUNTAIN HOME, AR 72653
(870) 424-2181

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR

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BRIAN L. HAAS, CPA

DRAFT
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Arkansas License No. 4723R

INDEPENDENT AUDITOR'S REPORT

To the Honorable Mayor and City Council
Water and Wastewater Department of the City of Flippin, AR
P.O. Box 40
Flippin, Arkansas 72635

Dear Members of the Board:

Report on the Financial Statements

I have audited the accompanying financial statements of Water and Wastewater Department of the City of Flippin, AR, as of and for the year ended December 31, 2016, and the related notes to the financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, I

express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Basis for Qualified Opinion

Audits of several prior years financial statements have not been performed. I was not able to fully satisfy myself as to the carrying values of net assets from those prior years and the possible side effects on current values of property, equipment and net assets.

Qualified Opinion

In my opinion, except for possible effects of matters described in the "basis for qualified opinion" paragraph, the respects, the financial statements referred to above present fairly, in all material position of Water and Wastewater Department of the City of Flippin, AR as of December 31, 2016, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principals generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting Principles generally accepted in the United States of America require that the management's discussion and analysis and budgetary comparison information be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. I have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to my inquiries, the basic financial statements, and other knowledge I obtained during my audit of the basic financial statements. I do not express an opinion or provide any assurance on the information because the limited procedures do not provide me with sufficient evidence to express an opinion or provide any assurance.

Supplemental Information

My audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The schedule of operating expenses and users by class is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the

United States of America. In my opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

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Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, I have also issued my report dated January 16, 2018, on my consideration of Water and Wastewater Department of the City of Flippin, AR's internal control over financial reporting and on my tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of my testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Water and Wastewater Department of the City of Flippin, AR's internal control over financial reporting and compliance.

Brian L. Haas, CPA
Mountain Home, AR 72653

January 16, 2018

As management of the Water and Wastewater Department of the City of Flippin, AR, we offer readers of the Department's financial statements this narrative overview and analysis of the Department's financial performance during the fiscal year ended December 31, 2016. Please read it in conjunction with the Department's financial statements, which follow this section.

The Water and Wastewater Department of the City of Flippin, AR's financial statements consist of only one proprietary Department. The Board operates a water utility for customers (members) on a fee for services and related costs basis.

FINANCIAL HIGHLIGHTS

As of December 31, 2016:

- The Department's assets exceeded its liabilities by \$943,861 (net assets) for the fiscal year reported. This compares to the previous year when assets exceeded liabilities by \$1,029,642.
- Total net assets are comprised of the following:

Capital assets, net of related debt of \$611,176, including property and equipment net of accumulated depreciation.
- Temporarily restricted assets of \$246,365 are reserved by constraints imposed by outside the Water and Sewer System, such as debt covenants, grantors, laws or regulations.
- Unrestricted net assets of \$86,320 represent portion available to maintain ongoing operations.

OVERVIEW OF THE FINANCIAL STATEMENTS

- The Department's annual audit report includes three major financial statements. These statements provide both long-term and short-term information about the Department's overall status. Financial reporting at this level uses accrual basis accounting as in the private sector.
- The first of these statements is the Statement of Department Net Assets – Proprietary Department. This is the Department's statement of financial position presenting information that includes all of the Department's assets and liabilities with the difference reported as net assets. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the Department as a whole is improving or deteriorating.
- The second statement is the Statement of Net Assets – Proprietary Department. This statement reports how the Department's net assets changed during the current fiscal year. All current year revenues and expenses are included regardless of when cash is received or paid. An important purpose of the design of the Statement of Revenues, Expenses, and Changes in Department Assets – Proprietary Department is to show the effectiveness of Department rate structure and related revenues to adequately cover the operational costs of providing water services to the Department's membership.

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- The third major statement is the Statement of Cash Flows. This statement presents cash flows provided by operations, investing and financing on a net change basis.

REQUIRED FINANCIAL STATEMENTS

- The financial statements of the Department's report information of the Department using accounting methods similar to those used by private sector companies. These statements offer short and long-term financial information about its activities. The Statement of Department Net Assets – Proprietary Department includes all of the Department's assets and liabilities and provides information about the nature and amounts of investments in resources (assets) and the obligations to Department's creditors (liabilities). These also provide the basis for evaluating the capital structure of the Department and assessing the liquidity and financial flexibility of the Department.
- All of the prior years and current year's revenues and expenses are accounted for in the Statement of Revenues, Expenses, and Changes in Department Assets – Proprietary Department. This statement measures the success of the Department's operations over the past two years and can be used to determine whether the Department has successfully recovered all its costs through its user fees and other charges, profitability and credit worthiness.
- The final required financial statement is the Statement of Net Assets – Proprietary Department. This statement reports cash receipts, cash payments, and net changes in cash resulting from operations, investing, and financing activities and provide answers to such questions as where did cash come from, what was cash used for, and what was the change in the cash balance during the reporting periods.

FINANCIAL ANALYSIS OF THE DEPARTMENT

- The Department's net assets decreased due to an excess of expenses over revenue of \$15,856. Total operating revenues were down from 2015 by \$278,901 to \$1,003,959. Total operating expenses were lower in 2016, \$935,015 compared to \$1,199,268 in 2015.

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NET ASSETS

- To begin our analysis, a summary of the Department's Statements of Net Assets are presented in Table A-1.

Table A-1
The Department's Net Assets
Year ended December 31, 2016 and December 31, 2015

	2015	2016
Current Assets	\$ 176,433	\$ 159,817
Capital and non-current assets	<u>1,384,899</u>	<u>1,332,158</u>
Total Assets	1,561,331	1,491,975
Current Liabilities	57,066	113,794
Long-term Liabilities	<u>474,624</u>	<u>434,320</u>
Total Liabilities	531,689	548,115
Net Assets	<u>\$ 1,029,642</u>	<u>\$ 943,861</u>
Invested in capital assets net of related debt	\$ 682,154	\$ 611,176
Temporarily restricted	187,823	246,365
Unrestricted	<u>159,665</u>	<u>86,320</u>
Total Net Assets	<u>\$ 1,029,642</u>	<u>\$ 943,861</u>

The Department's net assets decreased by \$15,856. Additional information regarding capital assets is available in the Notes to the Basic Financial Statements.

A portion of the net assets is either restricted as to the purposes they can be used for or they are invested in capital assets. Unrestricted net assets may be used to Department the Department's programs in the next fiscal year. However, this does not mean that the Department has significant surplus resources available to pay its bills next year. Rather, it is the result of having long-term commitments that are less than currently available resources. The balance has remained similar to the prior years.

BUDGETARY HIGHLIGHTS

For 2016, the Department's revenues were more than budgeted estimates by \$483,540. Expenses were higher than budget estimates. Total operating expenses were approximately \$322,361 over original budget.

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CAPITAL ASSETS AND DEBT ADMINISTRATION

• Capital Assets

At the end of 2016, the Department had invested \$3,606,617 a broad range of assets, including land, water distribution system, equipment and vehicles.

This was an increase over 2015. Additional information regarding Capital Assets is available in the Notes to the Basic Financial Statements.

Land	\$ 6,886
System & Improvements	3,192,867
Machinery & Equipment	380,668
Vehicles	26,196
Less accumulated depreciation	<u>(2,597,603)</u>
Net capital assets	<u>\$1,009,013</u>

• Debt Administration

At the end of 2016, the Department's long-term debt consisted of the following:

Arkansas Soil & Water Commission	\$ 64,829
USDA	333,008
Less current maturities	<u>(40,297)</u>
Total long-term debt	<u>\$ 357,540</u>

More information about the Department's debt is presented in the Notes to the Basic Financial Statements.

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ECONOMIC FACTORS NEXT YEAR'S BUDGET AND RATES

- ~~No capital improvements were done in 2015. We are still working on water loss with leak detection and daily consumption reports. This year we are trying to get rate studies done for water and sewer so this matter can be addressed in 2016.~~

CONTACTING THE Department's FINANCIAL MANAGER

- This financial report is designed to provide a general overview of the Department's finances, comply with finance-related laws and regulations, and demonstrate the Department's commitment to public accountability. If you have questions about this report or would like to request additional information, contact the Department's manager at:

P.O. Box 40
Flippin, Arkansas 72653

Phone number: (870) 453-8300

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
STATEMENT OF FUND NET ASSETS - PROPRIETARY FUND

DRAFT

Year ended December 31, 2016

LIABILITIES AND RETAINED EARNINGS

CURRENT LIABILITIES:

Accounts payable	\$ 5,270
Sales tax payable	5,803
Interest payable	0
Accrued payroll taxes payable	5,959
Interdepartmental transfers	56,464
Current maturities - long-term debt	<u>40,297</u>
Total current liabilities	113,794

Meter deposits (Note 2)

76,780

LONG-TERM DEBT: (Note 3)

Notes payable:

ASWCC #WSSW-25-01-D	64,829
ASWCC #WSSW-97-10-L	0
USDA #92-11 2027	97,824
USDA #91-15 2033	27,541
USDA #91-13 2033	191,445
USDA #91-09 2019	6,349
USDA #91-04 2017	9,849
Less current maturities	<u>(40,297)</u>

Total long-term debt, net of current maturities

357,540

Total liabilities

548,115

NET ASSETS:

Invested in capital assets, net of related debt	611,176
Temporarily restricted	246,365
Unrestricted	<u>86,320</u>

Total net assets

943,861

Total liabilities and net assets

\$1,491,975

See accompanying notes to financial statements.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN FUND ASSETS
PROPRIETARY FUND

DRAFT

For the year ended December 31, 2016

OPERATING REVENUES:	
Water sales	\$ 667,561
Wastewater service fees	145,491
Wholesale water sales	0
Penalties and late charges	26,268
New installation fees	11,265
Sales tax	57,268
Miscellaneous income	550
Permits	785
Deposits	12,192
Sanitation fees	76,160
Testing fees	5,006
Sprinkler system fees	530
Returned checks	883
	<hr/>
Total operating revenues	1,003,959
OPERATING EXPENSE	<hr/>
	935,015
Operating income (loss) before depreciation expense	68,944
Depreciation expense	(133,316)
	<hr/>
Total depreciation	(133,316)
Income (loss) from operations	(64,372)
NONOPERATING REVENUE (EXPENSE):	
Sales tax revenue	0
Interest income	388
Interest expense	(21,605)
ADFA fees	0
Sales tax expense	(249)
	<hr/>
Total nonoperating revenue (expense)	(21,466)
Change in net assets	(85,838)
Net assets as of beginning of year	<hr/>
	1,045,498
Net assets as of end of year	<hr/>
	\$ 959,660

See notes to accompanying financial statements.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
Year ended December 31, 2016

DRAFT

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting entity:

The waste and water fund is an enterprise fund that provides water and sewer services to the City of Flippin and the surrounding area. Enterprise funds are for operations which are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expenses, including depreciation) of providing services to the general public be financed or recovered primarily through user charges. The City's comprehensive financial report is prepared by state legislative audit and does not include the water and wastewater fund, which is separately reported herein.

Basis of accounting:

The accounting policies of the Water and Wastewater Department of the City of Flippin, Arkansas, conform to generally accepted accounting principles as applicable to governmental units. The accrual basis of accounting is followed.

Budgets and budgetary accounting:

Enterprise fund service delivery levels are determined by the extent of consumer demand. Because enterprise fund revenues and expenses fluctuate with the changing service delivery levels, generally accepted accounting principles do not require the financial statements to include budgetary comparisons. Accordingly, such comparisons have not been included.

Inventories:

Inventories consist of expendable material and supplies held for consumption. Inventory is valued at the lower of cost or market, on a First-Out basis. Cost is deemed to approximate market value.

Cash and cash equivalents:

For the purpose of the statement of cash flows, the Water and Wastewater Department of the City of Flippin, Arkansas, considers current nonrestricted cash accounts as cash.

Cash accounts and certificates of deposit are displayed separately on the balance sheet as "current" and "restricted" cash. The bank balances are categorized to give an indication of the level of risk assumed by the Water and Wastewater Department of the City of Flippin as follows

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
Year ended December 31, 2016

DRAFT

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Cash and cash equivalents: (Continued)

Cash accounts and certificates of deposit are displayed separately on the balance sheet as "current" and "restricted" cash. The bank balances are categorized to give an indication of the level of risk assumed by the Water and Wastewater Department of the City of Flippin, Arkansas as follows:

Current cash	\$ 69,676
Restricted cash	<u>323,145</u>
Total on deposit	<u>\$392,820</u>
Insured by the FDIC or collateralized by financial institutions	<u>\$392,820</u>
Uninsured and uncollateralized	<u>\$ -</u>

Accounts receivable:

Consumer accounts receivable reflects the balances due from the individuals and businesses using the water and wastewater services provided by the City. The individuals and businesses are residents of the City of Flippin.

The water and wastewater department uses the direct write-off method of accounting for bad debts. No allowances for uncollectible accounts have been provided since historically such accounts have been minimal.

Restricted assets:

These assets consist of cash restricted by various bond ordinances for debt service and depreciation reserves.

	Cash	Certificates of Deposits	Total
Depreciation	\$ 9,175	\$ -	\$ 9,175
Customer Deposits	44,318	20,000	64,318
1976 Bond	7,597	-	7,597
1987 Bond	72,145	-	72,145
1993 Bond	48,451	-	48,451
Equity Maintenance	46,458	-	46,458
Other	<u>-</u>	<u>75,000</u>	<u>75,000</u>
	<u>\$228,144</u>	<u>\$ 95,000</u>	<u>\$ 323,145</u>

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
Year ended December 31, 2016

DRAFT

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Property, plant, and equipment:

Property, plant and equipment are stated at cost and are depreciated by the straight-line method over the estimated useful lives of the various assets. Assets are constructed and acquired by four methods: by department work crews; by independent contractors financed by department funds; by grant financed water and sewer improvement projects; and by real estate developers in conjunction with a property development and contributed to the department. Assets acquired from grant fund improvement projects and real estate developers result in donated capital on the books of the department, which has been classified as contributed capital, and is reduced annually through a transfer to unreserved retained earnings of an amount based on the life of the system. Donors and transfers are as follows:

	Capital assets, depreciated					
	Land	System & Improve.	Machinery & Equip.	Vehicles	Sewer plant expansion	Total
Balance, 12-31-15	\$ 6,886	\$ 3,177,507	\$ 373,994	\$ 26,196	\$ -	\$ 3,584,583
Additions			6,674		15,360	22,034
Dispositions						-
Balance, 12-31-16	6,886	3,177,507	380,668	26,196	15,360	3,606,617
Accum. Depr.						
Balance, 12-31-15	-	2,212,526	246,521	5,240	-	2,464,287
Increases		114,652	13,424	5,240		133,316
Decreases						-
Balance, 12-31-16	-	2,327,178	259,945	10,480	-	2,597,603
Capital assets - net	<u>\$ 6,886</u>	<u>\$ 850,329</u>	<u>\$ 120,723</u>	<u>\$ 15,716</u>	<u>\$ 15,360</u>	<u>1,009,014</u>

The costs of assets retired from service are credited to the appropriate property, plant and equipment account. Costs of removal in addition to the asset cost are charged to the reserve for depreciation. Maintenance, repairs and minor renewals are charged against earnings when incurred. Additions and major renewals are capitalized.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
Year ended December 31, 2016

DRAFT

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Infrastructure (GASB 34):

Under the transition provisions of GASB 34, the City is not required to retroactively report major general infrastructure assets. There were no infrastructure additions to the water/sewer system for the year ended December 31, 2016.

Use of estimates:

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reported period. Actual results could differ from those estimates.

NOTE 2: LONG-TERM DEBT

	<u>2015</u>	<u>Additions</u>	<u>Retired</u>	<u>2016</u>
Note payable - Arkansas Soil & Water Conservation Commission in the amount of \$125,000 dated September 2004, bears interest at 5%, payable in annual installment of \$10,030.22, maturing 2024.	\$ 71,294	\$ -	\$ 6,465	\$ 64,829
Note payable - Arkansas Soil & Water Conservation Commission in the amount of \$75,000 dated October 1996, bears interest at 5%, payable in annual installment of \$6,018.19, maturing 2027.	5,732	-	\$ 5,732	\$ -
USDA #92-11 \$210,200 dated May 1987, bearing interest at 5%, payable in monthly installments of \$1,024, maturing 2027.	105,025	-	\$ 7,201	\$ 97,824

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
Year ended December 31, 2016

DRAFT

NOTE 2: LONG-TERM DEBT

	<u>2015</u>	<u>Additions</u>	<u>Retired</u>	<u>2016</u>
USDA #91-15 \$43,000 dated 2000, bearing interest at 5%, payable in monthly installments of \$212, secured by system, maturing 2027.	\$ 28,677	\$ -	\$ 1,136	\$ 27,541
USDA #91-13 \$294,400 dated September 1993, bearing interest at 5%, payable in monthly installments of \$1,446, secured by system, maturing 2027.	199,018	-	\$ 7,573	\$191,445
USDA #91-09 \$40,000 dated March 1979, bearing interest at 5%, payable in annual installments of \$2,351, maturing 2027.	8,286	-	\$ 1,937	\$ 6,349
USDSA #91-04 \$190,000 dated 1977, bearing interest at 5%, payable in annual installments of \$11,266, secured by system, maturing 2017.	<u>20,109</u>	<u>-</u>	<u>10,260</u>	<u>9,849</u>
Total long-term debt	<u>\$438,141</u>	<u>\$ -</u>	<u>\$ 40,304</u>	<u>\$397,837</u>

Maturities of long-term debt to the five (5) years subsequent to December 31, 2016, are approximately:

<u>Year</u>	<u>Principal</u>	<u>Interest</u>
2017	\$ 40,297	\$ 21,550
2018	35,379	16,524
2019	26,816	17,747
2020	28,102	16,399
2021	27,225	14,987
Thereafter	<u>240,018</u>	<u>-</u>
Total	<u>\$397,837</u>	<u>\$ 87,207</u>

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
NOTES TO FINANCIAL STATEMENTS
Year ended December 31, 2016

DRAFT

NOTE 3: RETIREMENT PLAN

The Arkansas Public Employees Retirement System is a separate entity, which issues separate audited financial statements. A copy of the most current financial report, for the fiscal year ended December 31, 2016, is on file at Flippin City Hall.

All full-time employees that have been employed 30 days or longer are eligible to participate in the Arkansas Public Employee Retirement System (APERS) pension plan. This is a multiple-employer, cost sharing defined benefit pension plan that was established by Act 177 of 1957. Act 793 of 1977 established a noncontributory plan. The City of Flippin employees participate in the noncontributory plan.

Benefits:

Benefit provisions are established by state law and may be amended only by the Arkansas General Assembly. Members are eligible for full benefits as follows:

1. At age sixty-five (65) with five (5) years of actual service,
2. At any age with twenty-eight (28) years of actual service, or
3. Under the non-contributory plan, at age fifty-five (55) with thirty-five (35) years of credited service.

The normal benefit amount, paid on a monthly basis is determined by the member's final average salary and the number of years of service, five (5) or at any age with twenty-eight (28) years of actual service. APERS also provided for disability and survivor benefits.

Funding policy:

Contribution provisions applicable to the State, County, Municipal, and School Divisions are established by state law and may be amended only by the Arkansas General Assembly. The employer contribution rate for the Municipal Division non-contributory plan, as established by an actuarially determined reserve requirement for benefit payments, is six percent (6%) of covered employees' payroll.

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SUPPLEMENTAL INFORMATION

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR

SCHEDULE OF OPERATING EXPENSES
For the year ended December 31, 2016

DRAFT

	<u>Water System</u>	<u>Wastewater System</u>	<u>Combined</u>
Advertising	598	0	598
APERS Expense	36,303	2,287	38,590
Bank Charges	502	0	502
Capital Improvements	0	0	0
Computer Support	600	0	600
Contract Labor	0	0	0
DMR Reports	2,411	0	2,411
Dues & Licenses	11,809	0	11,809
Education/Conferences	648	272	920
Equipment R&M	9,826	142	9,969
Fuel	7,168	0	7,168
Garbage Contract	89,210	0	89,210
Health Insurance	40,368	0	40,368
Legal & Accounting	17,200	0	17,200
Life Insurance	2,113	75	2,189
Non Vehicle R&M	0	0	0
Office Supplies	0	0	0
Operating Supplies	20,556	1,407	21,963
Other Insurance	4,108	535	4,643
Payroll Taxes	20,217	0	20,217
Postage & Freight	4,885	0	4,885
Sludge Removal	0	11,422	11,422
Uniforms	3,940	0	3,940
Utilities	9,278	13,408	22,685
Vehicle R&M	1,770	0	1,770
Wages & Salaries	245,843	15,770	261,612
Water Excise Tax	61,056	0	61,056
Water Purchase	299,053	0	299,053
Miscellaneous expense	236	0	236
Engineering fees	0	0	0
Rounding correction	0	0	0
	<u>0</u>	<u>0</u>	<u>0</u>
Total operating expense \$	<u>889,699</u>	<u>\$ 45,318</u>	<u>\$ 935,015</u>

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
REQUIRED SUPPLEMENTARY INFORMATION
Year ended December 31, 2016

DRAFT

WATER & WASTEWATER BUDGET

<u>ACCOUNT</u>					Variance	
	<u>Actual</u>	<u>%</u>	<u>Final</u>	<u>%</u>	<u>over</u>	<u>Original</u>
<u>Income</u>			<u>Budget</u>		<u>(under)</u>	<u>Budget</u>
Water user fees	\$ 669,010	67.36%	\$ 657,445	63.93%	\$ 11,565	657,445
Sewer user fees	145,491	14.65%	146,746	14.27%	(1,255)	146,746
Connection fees	25	0.00%	10,315	1.00%	(10,290)	10,315
Permits	785	0.08%	1,223	0.12%	(438)	1,223
Penalties	26,268	2.64%	16,306	1.59%	9,962	16,306
Tie-on fees	11,240	1.13%	3,623	0.35%	7,617	3,623
Water testing fees	5,006	0.50%	4,885	0.48%	121	4,885
Sales tax	57,268	5.77%	55,079	5.36%	2,189	55,079
Sanitation income	76,160	7.67%	74,380	7.23%	1,780	74,380
Sewer interest income	0	0.00%	321	0.03%	(321)	321
Sprinkler systems	180	0.02%	180	0.02%	0	180
Multi sprinklers	350	0.04%	413	0.04%	(63)	413
Miscellaneous income	1,433	0.14%	57,460	5.59%	(56,027)	57,460
Total income	\$ 993,216	100.00%	\$ 1,028,376	100.00%	\$ (35,160)	\$ 1,028,376
<u>Expenses</u>						
Salaries and wages	\$ 261,612	28.08%	\$ 243,521	29.06%	\$ 18,091	\$ 243,521
Overtime	0	0.00%	0	0.00%	0	0
Payroll taxes	19,324	2.07%	19,609	2.34%	(285)	19,609
Health insurance	46,428	4.98%	29,990	3.58%	16,438	29,990
Life insurance	1,923	0.21%	2,380	0.28%	(457)	2,380
APERS pension expense	38,590	4.14%	35,719	4.26%	2,871	35,719
Other insurance	4,643	0.50%	1,090	0.13%	3,553	1,090
DMR reports	2,411	0.26%	1,620	0.19%	791	1,620
Dues, licenses, fees	11,809	1.27%	9,110	1.09%	2,699	9,110
Advertising	598	0.06%	0	0.00%	598	0
Contract labor	0	0.00%	0	0.00%	0	0
Audit and legal	17,200	1.85%	0	0.00%	17,200	0
Computer support	600	0.06%	0	0.00%	600	0
Utilities	22,685	2.44%	21,374	2.55%	1,311	21,374
Capital improvements	0	0.00%	0	0.00%	0	0
Office supplies	0	0.00%	1,117	0.13%	(1,117)	1,117
Office equipment	0	0.00%	0	0.00%	0	0
Maintenance & repairs-non vehicle	0	0.00%	667	0.08%	(667)	667

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
REQUIRED SUPPLEMENTARY INFORMATION
Year ended December 31, 2016

DRAFT

WATER & WASTEWATER BUDGET (continued)

Postage and freight	4,885	0.52%	4,986	0.60%	(101)	4,986
Education and conferences	920	0.10%	760	0.09%	160	760
Operating supplies	21,963	2.36%	25,185	3.01%	(3,222)	25,185
Sludge removal	11,422	1.23%	9,347	1.12%	2,075	9,347
Uniforms	3,940	0.42%	2,862	0.34%	1,078	2,862
Maintenance & repairs-vehicles	1,770	0.19%	3,197	0.38%	(1,427)	3,197
Maintenance & repairs-equipment	2,166	0.23%	1,152	0.14%	1,014	1,152
Fuel	7,168	0.77%	11,561	1.38%	(4,393)	11,561
Water purchases	299,053	32.10%	259,556	30.98%	39,497	259,556
Cleaning service	0	0.00%	0	0.00%	0	0
Drinking water	0	0.00%	0	0.00%	0	0
Garbage contract	89,210	9.58%	93,853	11.20%	(4,643)	93,853
Meals for prisoners	0	0.00%	0	0.00%	0	0
Water excise tax	61,056	6.55%	58,802	7.02%	2,254	58,802
Miscellaneous expense	236	0.03%	459	0.05%	(223)	459
Garbage pick up	0	0.00%	0	0.00%	0	0
 Total	 \$ 931,611	 100.00%	 \$ 837,917	 100.00%	 \$ 93,694	 \$ 837,917

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
BOARD OF DIRECTORS
For the year ended December 31, 2016

DRAFT

The Board of Directors of the Water and Wastewater Department of the City of Flippin, AR was composed of the following individuals at December 31, 2016:

Jerald Murberry	Mayor
Sam Neilson	Council Member
Heith Hogan	Council Member
Joe Cantrell	Council Member
Jennifer Porter	Council Member

See note to required supplemental information.

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR

USERS BY CLASS
Year ended December 31, 2016

DRAFT

Customer category (usage in gallons)	Customer Count			
	Water Only	Sewer Only	Water and Sewer	Total
< 2,000	418	3	210	631
2,001 - 10,000	498	1	303	802
10,001 - 15,000	13	0	12	25
15,001 - 30,000	9	0	8	17
30,001 - 65,000	1	0	7	8
> 65,000	0	0	8	8
	<u>939</u>	<u>4</u>	<u>548</u>	<u>1491</u>

RATE STRUCTURE:

The following rates are in effect for customers as of December 31, 2016.

IN CITY:
 All over 2,000 gallons \$ 14.55 for the first 2,000 gallons or less
 \$ 5.10 per 1,000 gallons or portion thereof

RURAL:
 All over 1,500 gallons \$ 18.45 for the first 1,500 gallons or less
 \$ 6.35 per 1,000 gallons or portion thereof

TIE ON FEE:

3/4 Inch	\$ 475.00 City
	\$ 575.00 County
1 Inch	\$ 650.00
1-1/2 Inch	\$ 925.00
2 Inch	\$ 1,200.00

ADDITIONAL INFORMATION

Water loss figures for the year ended December 31, 2016 are as follows:

Gallons of water pumped	123,024,000
Gallons of water sold and used	<u>104,551,110</u>
Gallons of water lost	<u><u>18,472,890</u></u>

WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
Year ended December 31, 2016

DRAFT

SUMMARY OF AUDIT RESULTS

1. The auditor's report expresses an unqualified opinion on the financial statements of the Water and Wastewater Department of the City of Flippin, AR.
2. Two significant deficiencies disclosed during the audit of the financial statements are reported in the report on compliance and internal control. The staff is not trained to draft financial statements and footnotes. The conditions reported are not a material weakness.

FINDINGS - FINANCIAL STATEMENTS AUDIT

SIGNIFICANT DEFICIENCIES:

1. Segregation of duties:

Criteria:	Duties should be segregated to provide reasonable assurance that transactions are handled properly.
Condition:	The City does not have a proper segregation of duties. This condition also existed in prior years.
Causes:	The staff is so small there are only a limited number of people for certain functions.
Effect:	Transactions could be mishandled, which could affect accuracy of the financial statement.
Recommendation:	Duties should be separated as much as possible and alternative controls used to compensate for lack of separation.
Response:	Management has determined that it is not economically feasible to have the necessary segregation of duties required to have a more adequate internal control system.

2. Establish internal control over financial statement preparation and review:

Criteria:	Management is responsible for establishing and maintaining control and for the fair presentation of the net assets, supplementary information, and disclosures in the financial statements, in conformity with generally accepted accounting standards.
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WATER AND WASTEWATER DEPARTMENT
OF THE CITY OF FLIPPIN, AR
SCHEDULE OF FINDINGS AND QUESTIONED COSTS (CONTINUED)
Year ended December 31, 2016

DRAFT

- Condition: The Water and Wastewater Department of the City of Flippin, AR does not have a system of internal control that would provide management with reasonable assurance that the financial statements and related disclosures are complete and presented in accordance with generally accepted accounting standards. As such, management requested me to compile and prepare a draft of the financial statements, including the related note disclosures. This condition also existed in prior years.
- Cause: There are limited personnel with proper training and skills to provide the necessary reporting skills for fair presentation of all the financial information.
- Effect: Financial statements and related footnote disclosures and supplementary information required by generally accepted accounting standards, and accounting standards would not be complete.
- Recommendation: Use of an outside consultant to use as an aid to drafting the financial statements.
- Response: Management has determined that it is not economically feasible to acquire an employee capable of drafting the financial statements. These conditions have persisted from prior years into the current year which has not allowed the company to improve this aspect of controls.

**CITY OF FLIPPIN
PO BOX 40
FLIPPIN, AR 72634
WATER DEPARTMENT
TRIAL BALANCE**

December 31, 2017

Client No: 2478

Page 1

<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
107060	CIB-WATER M&O/FSB 273	252,476.43	
107160	CIB-WATER REVENUE-FSB 265	95.13	
107360	CIB-WATER BILLS-IFB 691	33.05	
107460	CIB-WATER REVENUE-TLC 163	17.98	
107560	CIB-WATER REVENUE-ARVEST 137	198.38	
107760	CIB-WATER BILLS-FSB 245	143.12	
108160	CIB-EQUIP MAINT & DEPR/FSB 1695	31,143.97	
121060	ACCOUNTS RECEIVABLE	207,300.78	
155060	CIB-WATER METER DEPOSIT-FSB 013	20,000.00	
157060	CIB-WATER CD-FSB 066	75,000.00	
157360	CIB-WATER DEPRECIATION-FSB 151	10,153.90	
157660	CIB-WATER METER DEPT CD-FSB 043	44,444.52	
157960	CIB-WATER 1987 BOND/FSB 178	30,715.47	
161060	LAND	6,886.00	
162060	WATER & SEWER SYSTEM	3,059,549.64	
163060	BUILDING IMPROVEMENTS	118,872.05	
164060	EQUIPMENT	375,427.39	
165060	VEHICLES	26,196.00	
169960	ACCUMULATED DEPRECIATION		2,464,287.21
170060	WORK IN PROGRESS	8,400.00	
175060	DUE FROM GENERAL	55,196.40	
175760	DUE FROM SEWER	64,265.76	
191560	INTERDEPARTMENTAL TRANSFERS		20,918.48
211060	ACCOUNTS PAYABLE		5,270.36
215060	DUE TO GENERAL		104,871.07
215760	DUE TO SEWER		151,209.32
226060	PAYROLL LIABILITIES		3,176.29
227060	FICA & MEDICARE W/H PAYABLE		890.61
228060	FEDERAL W/H PAYABLE		422.54
229060	STATE W/H PAYABLE		413.31
235060	SALES TAX PAYABLE		5,856.07
241060	METER DEPOSITS		92,497.05
252060	N/P WSSW-25-01-D		54,474.84
261060	N/P USDA RD DCFO #92-11 2027		90,255.32
263060	N/P USDA RD DCFO #91-13 2033		183,483.54
270560	N/P-FSB 2017 CHEVY 1500		23,077.35
271560	N/P-FSB 2016 BACKHOE		68,221.25
319860	FUND BALANCE	12,974.78	
320060	RETAINED EARNINGS	476,147.75	

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
325060	CURRENT EARNINGS	476,147.75	
330060	OPENING BALANCE EQUITY		1,316,477.32
	Balance Sheet Totals	5,351,786.25	4,585,801.93

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
413060	PLUMBING PERMITS		870.00
416160	GAS INSPECTION PERMIT		90.00
418060	MISCELLANEOUS		3,489.00
420060	INTEREST INCOME		294.78
483160	WATER-STATE TAX COLLECTED		53,823.79
483260	WATER-CITY TAX COLLECTED		3,739.74
483360	WATER-COUNTY TAX COLLECTED		13,492.44
485160	WATER USER FEES		851,800.63
486560	SANITATION INCOME		76,224.66
487160	PENALTIES-LATE CHARGES/RET PYMTS		16,985.84
487260	PENALTIES-RECONNECT CHARGE		10,816.43
487360	WATER-WATER TIE ON		4,000.00
487460	WATER-INSTALLMENT CHARGE		150.00
488160	WATER TESTING FEES		5,005.00
488260	SPRINKLER SYSTEM		75.00
488360	MULT SPRINKLERS		300.00
488460	RETURNED CHECK		1,242.15
488560	RETURNED CHECK FEE		822.27
489060	WATER-MISC CASH ADJUSTMENT		135.00
603060	HEALTH INSURANCE	25,568.78	
603160	LIFE INSURANCE	1,703.43	
606060	WATER UTILITIES	9,966.05	
607060	WATER-DUES/LICENSES	3,749.41	
610060	WATER NON VEHICLE MAINT/REPAIR	7,403.55	
611060	EQUIPMENT	145,306.26	
611160	WATER FUEL	8,231.31	
612060	EQUIPMENT MAINT/REPAIR	721.11	
612160	UNIFORM ALLOWANCE	8,378.41	
613060	WATER OPERATING SUPPLIES	25,021.27	
615060	POSTAGE & FREIGHT	5,097.78	
616060	ADVERTISING	511.26	
617060	EDUCATION/CONFERENCES	4,065.07	
622160	INSURANCE	2,908.90	
628160	VEHICLE MAINT/REPAIR	4,620.13	
629060	CONTRACT LABOR	250.00	
639060	DMR REPORTS	1,260.00	
642060	WATER PURCHASE	348,233.05	
644060	GARBAGE CONTRACT	84,305.37	
645060	WATER EXCISE TAX	74,785.00	

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
654060	BANK CHARGES	60.00	
658060	MISCELLANEOUS	6.32	
675060	INTEREST EXPENSE	18,112.48	
693060	LEGAL & ACCOUNTING	950.00	
750060	WAGES/SALARIES-WATER	142,878.03	
770060	TAXES-PAYROLL-WATER	10,756.40	
776060	APERS/LOPFI PENSION EXPENSE	19,511.58	
	Revenue and Expense Totals	954,360.95	1,043,356.73
	Total For All Accounts	6,306,147.20	5,629,158.66
	Warning ! Cost Center is out of Balance ! Cost Centers are not required to balance.		
	Net Income		88,995.78

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
175670	DUE FROM WATER	151,209.32	
215070	DUE TO GENERAL		6,789.59
215670	DUE TO WATER		64,265.76
227070	FICA & MEDICARE W/H PAYABLE		379.84
228070	FEDERAL W/H PAYABLE		254.11
229070	STATE W/H PAYABLE		172.17
310170	INTERDEPARTMENTAL A/R-A/P	160,053.32	
319870	FUND BALANCE		239,401.17
	Balance Sheet Totals	311,262.64	311,262.64

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
417070	SEWER PERMIT		15.00
485270	SEWER USER FEES		165,760.09
487570	WASTE WATER TIE ON		1,250.00
603070	HEALTH INSURANCE	6,970.84	
603170	LIFE INSURANCE	336.72	
606070	SEWER UTILITIES	19,213.80	
607070	DUES/LISCENSES/FEES	26.70	
611070	EQUIPMENT	32.85	
612070	EQUIPMENT MAINT/REPAIRS	1,786.36	
612170	UNIFORM ALLOWANCE	627.36	
613070	SUPPLIES	1,119.75	
617070	TRAINING/TRAVEL/DUES	31.51	
639070	DMR REPORTS	589.00	
641070	SLUDGE REMOVAL	9,966.17	
693070	LEGAL & PROFESSIONAL	8,970.00	
730070	ENGINEERING	3,600.00	
750070	WAGES/SALARIES-SEWER	63,999.05	
770070	PAYROLL TAXES-SEWER	4,979.91	
776070	APERS/LOPFI PENSION EXPENSE	8,996.05	
	Revenue and Expense Totals	131,246.07	167,025.09
	Total For All Accounts	442,508.71	478,287.73
	Warning ! Cost Center is out of Balance ! Cost Centers are not required to balance.		
	Net Income		35,779.02

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
107060	CIB-WATER M&O/FSB 273	260,391.04	
107160	CIB-WATER REVENUE-FSB 265	95.72	
107360	CIB-WATER BILLS-IFB 691	295.32	
107460	CIB-WATER REVENUE-TLC 163	125.06	
107560	CIB-WATER REVENUE-ARVEST 137	16,409.38	
107760	CIB-WATER BILLS-FSB 245	100.52	
108160	CIB-EQUIP MAINT & DEPR/FSB 1695	25,183.97	
121060	ACCOUNTS RECEIVABLE	226,964.08	
125060	A/R FRADULANT CHECKS	2,386.56	
155060	CIB-WATER METER DEPOSIT-FSB 013	20,000.00	
157060	CIB-WATER CD-FSB 066	75,000.00	
157360	CIB-WATER DEPRECIATON-FSB 151	10,261.02	
157660	CIB-WATER METER DEPT CD-FSB 043	44,577.99	
157960	CIB-WATER 1987 BOND/FSB 178	30,776.95	
161060	LAND	6,886.00	
162060	WATER & SEWER SYSTEM	3,059,549.64	
163060	BUILDING IMPROVEMENTS	118,872.05	
164060	EQUIPMENT	375,427.39	
165060	VEHICLES	26,196.00	
169960	ACCUMULATED DEPRECIATION		2,464,287.21
170060	WORK IN PROGRESS	8,400.00	
175060	DUE FROM GENERAL	55,196.40	
175760	DUE FROM SEWER	64,265.76	
191560	INTERDEPARTMENTAL TRANSFERS		822.40
211060	ACCOUNTS PAYABLE		5,270.36
215060	DUE TO GENERAL		104,871.07
215760	DUE TO SEWER		151,209.32
226060	PAYROLL LIABILITIES		3,176.29
227060	FICA & MEDICARE W/H PAYABLE		1,131.68
228060	FEDERAL W/H PAYABLE		321.13
229060	STATE W/H PAYABLE		492.98
235060	SALES TAX PAYABLE		5,547.07
241060	METER DEPOSITS		109,085.16
252060	N/P WSSW-25-01-D		47,346.52
261060	N/P USDA RD DCFO #92-11 2027		77,967.32
263060	N/P USDA RD DCFO #91-13 2033		166,131.54
270560	N/P-FSB 2017 CHEVY 1500		17,323.59
271560	N/P-FSB 2016 BACKHOE		52,021.25
319860	FUND BALANCE		76,021.00

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
320060	RETAINED EARNINGS	476,147.75	
325060	CURRENT EARNINGS	476,147.75	
330060	OPENING BALANCE EQUITY		1,316,477.32
	Balance Sheet Totals	5,379,656.35	4,599,503.21

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
413060	PLUMBING PERMITS		765.00
416160	GAS INSPECTION PERMIT		15.00
420060	INTEREST INCOME		290.63
483160	WATER-STATE TAX COLLECTED		54,971.87
483260	WATER-CITY TAX COLLECTED		3,960.47
483360	WATER-COUNTY TAX COLLECTED		14,175.02
485160	WATER USER FEES		818,126.10
486560	SANITATION INCOME		75,912.22
487160	PENALTIES-LATE CHARGES/RET PYMTS		18,978.18
487260	PENALTIES-RECONNECT CHARGE		13,166.07
487360	WATER-WATER TIE ON		5,700.00
487960	WATER-PREVIOUS BALANCE		102.76
488160	WATER TESTING FEES		5,007.90
488360	MULT SPRINKLERS		300.88
488460	RETURNED CHECK		1,975.04
488560	RETURNED CHECK FEE		819.30
603060	HEALTH INSURANCE	13,117.10	
603160	LIFE INSURANCE	1,748.54	
606060	WATER UTILITIES	6,154.95	
607060	WATER-DUES/LICENSES	14,036.56	
611060	EQUIPMENT	7,364.05	
611160	WATER FUEL	9,136.94	
612060	EQUIPMENT MAINT/REPAIR	3,265.80	
612160	UNIFORM ALLOWANCE	6,590.05	
613060	WATER OPERATING SUPPLIES	31,076.60	
615060	POSTAGE & FREIGHT	5,995.07	
616060	ADVERTISING		463.90
617060	EDUCATION/CONFERENCES	2,912.91	
622160	INSURANCE	4,650.29	
628160	VEHICLE MAINT/REPAIR	3,417.75	
628560	VEHICLE PURCHASE	20,000.00	
640060	WATER-CAPITAL IMPROVEMENTS	5,359.90	
642060	WATER PURCHASE	398,211.00	
644060	GARBAGE CONTRACT	77,350.17	
645060	WATER EXCISE TAX	77,247.00	
654060	BANK CHARGES	65.00	
675060	INTEREST EXPENSE	2,902.10	
693060	LEGAL & ACCOUNTING	5,000.00	
730060	ENGINEERING	1,805.00	

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
750060	WAGES/SALARIES-WATER	153,403.67	
770060	TAXES-PAYROLL-WATER	12,261.05	
776060	APERS/LOPFI PENSION EXPENSE	21,952.83	
789060	WATER-MISC CASH ADJUSTMENT		32.40
790060	CARRYOVER	792.58	
	Revenue and Expense Totals	885,816.91	1,014,762.74
	Total For All Accounts	6,265,473.26	5,614,265.95
	Warning ! Cost Center is out of Balance ! Cost Centers are not required to balance.		
	Net Income		128,945.83

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
109070	CIB-CITY SEWER M&O	117,623.96	
109270	CIB-SEWER DEPRECIATION	7,196.44	
175670	DUE FROM WATER	151,209.32	
191570	INTERDEPARTMENTAL TRANSFERS		12,673.80
215070	DUE TO GENERAL		6,789.59
215670	DUE TO WATER		64,265.76
227070	FICA & MEDICARE W/H PAYABLE		393.37
228070	FEDERAL W/H PAYABLE		210.69
229070	STATE W/H PAYABLE		189.27
310170	INTERDEPARTMENTAL A/R-A/P	160,053.32	
319870	FUND BALANCE		275,180.19
	Balance Sheet Totals	436,083.04	359,702.67

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<u>Acct</u>	<u>Description</u>	<u>Debits</u>	<u>Credits</u>
485270	SEWER USER FEES		248,562.47
487570	WASTE WATER TIE ON		1,640.00
603070	HEALTH INSURANCE	13,254.12	
603170	LIFE INSURANCE	346.08	
606070	SEWER UTILITIES	12,412.84	
607070	DUES/LISCENSES/FEES	506.65	
610070	NON VEHICLE MAINT/REPAIR	843.88	
610570	SEWER NON VEHICLE MAINT/REPAIRS	162.47	
611070	EQUIPMENT	1,113.20	
611170	FUEL	726.25	
612070	EQUIPMENT MAINT/REPAIRS	2,156.32	
612170	UNIFORM ALLOWANCE	2,892.00	
613070	SUPPLIES	3,802.77	
617070	TRAINING/TRAVEL/DUES	9.34	
622170	Insurance	1,497.66	
628170	VEHICLE MAINT/REPAIR	60.88	
639070	DMR REPORTS	3,231.00	
641070	SLUDGE REMOVAL	13,018.04	
654070	BANK CHARGES	5.00	
730070	ENGINEERING	9,660.00	
750070	WAGES/SALARIES-SEWER	66,582.69	
770070	PAYROLL TAXES-SEWER	5,169.84	
776070	APERS/LOPFI PENSION EXPENSE	9,599.37	
	Revenue and Expense Totals	147,050.40	250,202.47
	Total For All Accounts	583,133.44	609,905.14
	Warning ! Cost Center is out of Balance ! Cost Centers are not required to balance.		
	Net Income		103,152.07

As previously mentioned, the City's wastewater collection system is the old original collection system. For this reason, many of the gravity mains and manholes are constructed of outdated materials that have met their useful life expectancy. Therefore, there is a tremendous amount of I/I entering the system and overloading it. When this occurs, it causes backups in the collection system, which ultimately leads to SSO's. Because the main truck line servicing the City runs along Fallen Ash Creek, these SSO's can discharge directly into the creek, causing a health and sanitation issue.

In addition to the SSO's that occur during the high flow events, the City's wastewater treatment facility cannot handle the wet weather flows as well. Some of the treatment units are undersized for the biological and hydraulic loadings that enter the facility. When the high flows are allowed to push through the facility, the discharge from the facility is non-compliant with the facility's NPDES discharge permit. This causes a health issue as the receiving stream is a tributary to the White River. In fact, the facility has been non-compliant for several months and has had to submit non-compliance reports to ADEQ. Because of the number of non-compliance reports that have been submitted, ADEQ requested that the City provide a timeline stipulating when improvements would be made to the treatment facility to help maintain compliance. The City submitted the request timeline and has been working as diligently as possible to stay on track with the timeline. The open and frank discussion between the City and ADEQ is the only thing that has kept ADEQ from issuing a Consent Administrative Order to the City.

As previously mentioned, the City of Flippin secured a loan from the Arkansas Natural Resources Commission to contract with the Arkansas Rural Water Association to clean and televise the entire wastewater collection system. The findings from this work revealed that there is some major rehabilitative work that needs to be performed on the collection system. The collection system is the originally installed infrastructure. Therefore, there is a major part of the system that is relative old. The oldest part of the system was constructed of materials that are outdated for contemporary collection system installations and that has met its useful life expectancy. This is evidenced by the fact that there are some pipes that do not have a bottom in them anymore, and others that do not have a top. In addition, there are some manholes that do not have a bottom.

In addition to the issues associated with the collection system, the current wastewater treatment facility has also met its useful life expectancy. In addition, the City of Flippin has experienced enough growth, since the original construction of the facility, to outgrow the design capacity of certain processes utilized in the treatment. With all of this mind, improvements have to be made at the treatment facility in order to maintain compliance with its NPDES discharge permit.

As shown in the population projections section of this report, there is the potential for a moderate amount of growth to occur over the planning period associated with this project. Most of the growth should be within the existing service area, with a few minor extensions being added. The majority of the growth that should occur on the wastewater system is expected to be on the undeveloped land that is currently within the existing service area of the system. In addition, there has been some discussions with a few of the City's industries concerning expansion of their facilities. These expansions would more than likely contribute to the volume of wastewater entering the collection system and ultimately needing to be treated.

Alternatives Description Details	
System Component Type:	Treatment
System Component Name:	Wastewater Treatment Facility
Description	
Alternative Name:	New
Is this alternate solution feasible or is it not feasible?	
Feasibility	✓ Yes

This alternative consists of the rehabilitation of the existing wastewater treatment facility with the construction of a new treatment unit. This alternative would include the rehabilitation of the existing influent lift station, the installation of a new headworks system (both a screening unit and a grit removal unit), the construction of a new 0.3 MGD Sequential Batch Reactor (SBR) treatment unit, the installation of new sludge dewatering equipment, the construction of a roof structure over the existing sand filters, the construction of a new blower/control room/lab building, all associated electrical work needed for the proposed improvements, and the installation of a new generator set for backup power supply. All of this work will be performed on the existing wastewater treatment facility property.

System Component Type:

System Component Name:

Alternative Name:

New

This alternative would include the complete rehabilitation of the existing wastewater treatment facility. The existing influent lift station would be replaced with a new 700-gpm, submersible pump, lift station. The new lift station would be constructed with a building over the top of it with a davit crane to facilitate pulling the pumps for maintenance. In addition, a new headworks unit would be constructed. The new headworks would include a screening unit for the inorganic material and a grit removal unit. Both units would be automatic. In addition, a new 0.3 MGD, SBR treatment unit would be constructed to take the place of the existing oxidation ditch and clarifiers. This alternative would also include the construction of a new blower/control room/lab building near the head of the treatment process. The new building would house the new blowers required for the SBR treatment unit, all of the controls for the treatment facility, as well as a new laboratory for plant personnel to perform their tests on the wastewater being treated. This alternative would also include the construction of a roof covering for the existing sand filter beds. The installation of this roof structure will allow operating personnel to utilize the filter beds even during the wettest times of the year. In addition, sludge dewatering equipment will be installed next to one of the filter beds to facilitate the sludge handling process at the facility. The water from the dewatering equipment will pass through the filter bed and eventually to the effluent of the facility. The effluent from the facility will continue to flow through the existing UV unit before ultimately discharging to the creek. In addition, this alternative will include the installation of a new generator set that is adequately sized to operate the entire treatment facility during periods of power outage from the electric company. All of the work associated with this alternative would be performed in accordance with the rules and regulations of the Arkansas Department of Health, the Arkansas Department of Environmental Quality, and Ten State Standards.

System Component Type:

System Component Name:

Alternative Name:

New

All of the work proposed to be performed under this alternative will be done so on the existing wastewater treatment facility property. A map of the existing facility, which also includes the layout of the proposed equipment, follows.

**CITY OF FLIPPIN, AR
PROPOSED WWTF IMPROVEMENT**

FIGURE 3-Proposed Facility Layout

PROPOSED SLUDGE
HOLDING POND

PROPOSED SBR
TREATMENT UNIT

PROPOSED HEADWORKS
(SCREEN & GRIT REMOVAL)

INFLUENT PUMP
STATION

PROPOSED BLOWER/
CONTROL/LAB BUILDING



CIVIL ENGINEERING ASSOCIATES, LLC

CONWAY • JONESBORO • POPLAR BLUFF

2114 E. MATTHEWS
JONESBORO, ARKANS
(870) 972-5316
FAX (870) 932-0431

System Component Type:

System Component Name:

Alternative Name:

New

This alternative will have a fairly significant impact on the surrounding environment. As previously stated, the existing treatment facility cannot hardly treat the flows entering the facility while maintaining compliance with the current NPDES discharge permit. The proposed improvements will provide the necessary treatment capacity to handle the flows entering the treatment facility while also maintaining compliance with the NPDES discharge permit. Therefore, the effluent from the facility will have a much better quality after the construction of the proposed improvements. Since all of the work proposed under this alternative will be completely contained within the existing wastewater treatment facility property, the proposed project will have no impact on land use or other environmental justices in the area. Best management practices will be utilized by the installing contractor during the course of construction to limit the impact that erosion or settlement can have on the surrounding environment.

System Component Type:

System Component Name:

Alternative Name:

New

As perviously mentioned, all of the work proposed to be performed as part of this alternative will be completely contained within the existing wastewater treatment facility property. Therefore, no new land will have to be acquired.

System Component Type:

System Component Name:

Alternative Name:

New

There are no potential construction problems anticipated with this alternative. All of the work associated with this alternative will be performed within the existing wastewater treatment facility property. Operating personnel will continue to operate the facility as efficiently as possible until all of the construction is completed and the new treatment units can be brought on-line.

System Component Type:

System Component Name:

Alternative Name:

New

This alternative will do nothing to improve the water efficiency within the City of Flippin. The same amount of water will theoretically be used after this project is completed as is currently used.

The amount of energy utilized at the wastewater treatment facility will be similar to that which is currently being used. The new influent pumps may be a little more efficient than the existing pumps, but there will be additional energy utilized by the additional treatment units being added to the facility. Therefore, there is not a major change in energy consumption anticipated as part of the project.

System Component Type:

System Component Name:

Alternative Name:

New

One aspect associated with this alternative that might be considered "green" infrastructure is the fact that if the project is not performed, wastewater surcharges will continue to occur, especially during rain events. As long as these surcharges are allowed to occur, the potential for contamination of the waters of the state remains. There is not a significant change in electric usage anticipated as part of this alternative.

Another issue associated with this alternative that might be considered "green" is that the water being discharged from the treatment facility will be cleaner than the water that is currently being discharged. As previously stated, the plant has to be operated in "by-pass" mode, especially during the wet season, which means that the discharge from the facility is not compliant with the facility's NPDES discharge permit. Once construction of the proposed improvements is completed, the facility should be able to operate normally, even during the wet season. With this in mind, the discharge from the facility should be compliant with the NPDES discharge permit. Therefore, a higher quality of water will be discharged from the facility which will reduce the chance of having a negative impact on the receiving stream.

System Component Type:

System Component Name:

Alternative Name: New

There are no other sustainability issues associated with this alternative.

Treatment

System Component Name:

Wastewater
Treatment
Facility

Alternative Name:

New

Annual O&M

Expense Item	Description	Annual Amount
Insurance	Employee Insurance (Health/Life)	\$4,681.00
Insurance	Equipment Insurance	\$600.00
Other	Dues/Licenses	\$600.00
Other	Training/Travel	\$275.00
Other	Chemicals	\$5,000.00
Other	Equipment, Equipment Repair/Maintenance	\$1,750.00
Supplies	Supplies	\$1,500.00
Utilities	Utilities	\$61,043.00
Contract Services - Other	DMR Reports	\$1,680.00
Contract Services - Other	Sludge Removal	\$13,750.00
Salaries/Benefits	Wages/Salaries, Payroll Taxes, APERS	\$72,100.00
Legal	Legal/Accounting	\$300.00
	Total:	\$163,279.00

The O&M expenses associated with this alternative are expected to be similar to the existing O&M expenses already seen by the wastewater department. There will be an increase in the utility expenses and an added chemical expense with the new treatment facility. The only other significant change will be associated with the debt payment required to pay back any amount of loan that is received as part of the funding package for the proposed improvements. In addition to the debt payments, the City will need to establish a short-lived asset reserve account for the wastewater system. This will be an additional expense.

**System Component
Type:**

Treatment

**System Component
Name:**

Wastewater
Treatment Facility

Alternative Name:

New

Construction Costs

Item	Description	Cost
Development (Construction)		\$2,585,600.00
	Total Construction	\$2,585,600.00

Non Construction Costs

Item	Description	Cost
Engineering - Design	Engineering Design & Construction Management	\$200,400.00
Legal Services	Legal Fee	\$15,600.00
Engineering - Preliminary Engineering Report	PER & ER	\$51,700.00
Contingencies	Construction Contingencies (10%)	\$258,560.00
Engineering - Additional Services	AIS Engineering Fee	\$10,000.00
Other	Interest During Construction (3.125%)	\$102,600.00

Engineering - Resident Project Representative	270 Day Contract @ \$600/day	\$162,000.00
	Total Non Construction	\$800,860.00

**ESTIMATED QUANTITIES AND COSTS
WASTEWATER TREATMENT FACILITY IMPROVEMENTS
CITY OF FLIPPIN, ARKANSAS
APRIL 2019**

Item	Description	Units	Unit Cost	Subtotal
1	New Influent Lift Station (Including Influent Flow Meter)	1 LS	\$180,000.00	\$180,000.00
2	New 6" PVC Force Main	580 L.F.	\$20.00	\$11,600.00
3	New Automatic Fine Screen and Grit Removal Unit	1 LS	\$165,000.00	\$165,000.00
4	New 0.3 MGD SBR Treatment Unit	1 LS	\$1,000,000.00	\$1,000,000.00
5	New Blower/Control Room/Lab Bldg	1 LS	\$500,000.00	\$500,000.00
6	Rehabilitation of Intermittent Sand Filters (2 Ea.)	1 LS	\$107,500.00	\$107,500.00
7	Roof Structure for Sand Filters	1 LS	\$125,000.00	\$125,000.00
8	New Sludge Holding Pond	1 LS	\$75,000.00	\$75,000.00
9	Yard Piping	1 LS	\$75,000.00	\$75,000.00
10	Site Electrical	1 LS	\$160,000.00	\$160,000.00
11	Standby Generator	1 LS	\$95,000.00	\$95,000.00
12	Sitework/Roadway	1 LS	\$75,000.00	\$75,000.00
13	Demolition of Existing Clarifiers	1 LS	\$15,000.00	\$15,000.00
14	Trench Excavation Safety System	1 LS	\$1,500.00	\$1,500.00
TOTAL ESTIMATED CONSTRUCTION COST				\$2,585,600.00
CONSTRUCTION CONTINGENCIES				\$258,600.00
LEGAL FEE				\$15,600.00
AIS ENGINEERING FEE				\$10,000.00
INTEREST DURING CONSTRUCTION (3.125%)				\$102,600.00
PRELIMINARY ENGINEERING FEE				\$51,700.00
BASIC ENGINEERING FEE				\$200,400.00
CONSTRUCTION INSPECTION FEE (270-Day Construction Contract @ \$600/day)				\$162,000.00
TOTAL PROJECT COST				\$3,386,500.00

NOTES: THIS QUANTITIES ESTIMATE IS BASED ON A PRELIMINARY, NOT FINAL, DESIGN OF THE PROJECT. THE FINAL QUANTITIES MAY VARY BASED ON MORE DETAILED INFORMATION DEVELOPED DURING THE FINAL DESIGN PHASE.

THIS PRELIMINARY COST ESTIMATE IS BASED ON RECENT BIDS RECEIVED ON SIMILAR PROJECTS. ACTUAL COSTS MAY VARY DEPENDING ON CONTRACTOR'S METHODS, SOURCES OF PROJECT FUNDING, MODIFICATIONS TO THE PROJECT BY REVIEW AGENCIES OR CLIENT AFTER DATE OF ESTIMATE, MARKET CONDITIONS, TIME OF YEAR OF THE BID LETTING, AND AGE OF ESTIMATE.

The construction estimate for this alternative is \$2,585,600.00, with an additional construction contingency estimate of \$258,560.00. The non-construction components associated with this alternative total approximately \$542,300.00.

Alternatives Description Details

System Component Type: Treatment

System Component Name: Wastewater
Treatment Facility

Description

Alternative Name: Rehabilitation

Is this alternate solution feasible or is it not feasible?

Feasibility

✓ Yes

This alternative consists of the rehabilitation of the existing wastewater treatment facility. This alternative would include the rehabilitation of the existing influent pump station, the installation of a new headworks system (both a screening unit and a grit removal unit), the replacement of the existing rotors on the oxidation ditch with new rotors that are appropriately sized for the installation, the construction of a new 0.18 MGD oxidation ditch next to the existing ditch, the construction of two (2) new clarifiers that will operate independently of each other, the installation of new sludge dewatering equipment, the construction of a roof structure over the existing sand filters, the construction of a new office/lab building, all associated electrical work needed for the proposed improvements, and the installation of a new generator set for backup power supply. All of this work will be performed on the existing wastewater treatment facility property.

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

This alternative would include the complete rehabilitation of the existing wastewater treatment facility. The existing influent lift station would be replaced with a new 700-gpm, submersible pump, lift station. The new lift station would be constructed with a building over the top of it with a davit crane to facilitate pulling the pumps for maintenance. In addition, a new headworks unit would be constructed. The new headworks would include a screening unit for the inorganic material and a grit removal unit. Both units would be automatic. In addition, the rotors in the existing oxidation ditch would be replaced with new, appropriately sized rotor units. There would also be a new 0.18 MGD oxidation ditch constructed next to the existing ditch. The two (2) oxidation ditches would work in parallel with each other to basically double the current capacity of the treatment facility. This alternative would also include the construction of two (2) new 25-ft. diameter clarifiers, which would take the place of the existing clarifiers. The existing clarifiers would be demolished as part of the project. There would also be a new control/lab building constructed near the head of the treatment process. The new building would house all of the controls for the new treatment facility, as well as a new laboratory for plant personnel to perform their tests on the wastewater being treated. This alternative would also include the construction of a roof covering for the existing sand filter beds. The installation of this roof structure will allow operating personnel to utilize the filter beds even during the wettest times of the year. In addition, sludge dewatering equipment will be installed next to one of the filter beds to facilitate the sludge handling process at the facility. The water from the dewatering equipment will pass through the filter bed and eventually to the effluent of the facility. The effluent from the facility would then flow through the existing UV unit before ultimately discharging to the creek. All of the work associated with this alternative would be performed in accordance with the rules and regulations of the Arkansas Department of Health, the Arkansas Department of Environmental Quality, and Ten State Standards.

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

All of the work proposed to be performed under this alternative will be done so on the existing wastewater treatment facility property. A map of the existing facility, which also includes the layout of the proposed equipment, follows.

**CITY OF FLIPPIN, AR
PROPOSED WWTF IMPROVEMENT**

FIGURE 4-Proposed Facility Layout

PROPOSED SLUDGE
HOLDING POND

PROPOSED
CLARIFIERS

PROPOSED
OXIDATION DITCH

PROPOSED CONTROL/
LAB BUILDING

INFLUENT PUMP
STATION

PROPOSED HEADWORKS
(SCREEN & GRIT REMOVAL)



CIVIL ENGINEERING ASSOCIATES, LLC

CONWAY • JONESBORO • POPLAR BLUFF

2114 E. MATTHEWS
JONESBORO, ARKANS
(870) 972-5316
FAX (870) 932-0431

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

This alternative will have a fairly significant impact on the surrounding environment. As previously stated, the existing treatment facility cannot hardly treat the flows entering the facility while maintaining compliance with the current NPDES discharge permit. The proposed improvements will provide the necessary treatment capacity to handle the flows entering the treatment facility while also maintaining compliance with the NPDES discharge permit. Therefore, the effluent from the facility will have a much better quality after the construction of the proposed improvements. Since all of the work proposed under this alternative will be completely contained within the existing wastewater treatment facility property, the proposed project will have no impact on land use or other environmental justices in the area. Best management practices will be utilized by the installing contractor during the course of construction to limit the impact that erosion or settlement can have on the surrounding environment.

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

As previously mentioned, all of the work proposed to be performed as part of the this alternative will be completely contained within the existing wastewater treatment facility property. Therefore, no new land will have to be acquired

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

There are no potential construction problems anticipated with this alternative. All of the work associated with the alternative will be performed within the existing wastewater treatment facility property. Operating personnel will continue to operate the facility as efficiently as possible until all of the construction is completed and the new treatment units can be brought on-line.

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

This alternative will do nothing to improve the water efficiency within the City of Flippin. The same amount of water will theoretically be used after this project is completed as is currently used.

The amount of energy utilized at the wastewater treatment facility will be similar to that which is currently being used. The new influent pumps may be a little more efficient than the existing pumps, but there will be additional energy utilized by the additional treatment units being added to the facility. Therefore, there is not a major change in energy consumption anticipated as part of the project.

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

One aspect associated with this alternative that might be considered "green" infrastructure is the fact that if the project is not performed, wastewater surcharges will continue to occur, especially during rain events. As long as these surcharges are allowed to occur, the potential for contamination of the waters of the state remains. There is not a significant change in electric usage anticipated as part of this alternative.

Another issue associated with this alternative that might be considered "green" is that the water being discharged from the treatment facility will be cleaner than the water that is currently being discharged. As previously stated, the plant has to be operated in "by-pass" mode, especially during the wet season, which means that the discharge from the facility is not compliant with the facility's NPDES discharge permit. Once construction of the proposed improvement is completed, the facility should be able to operate normally, even during the wet season. With this in mind, the discharge from the facility should be compliant with the NPDES discharge permit. Therefore, a higher quality of water will be discharged from the facility which will reduce the chance of having a negative impact on the receiving stream.

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

There are no other sustainability issues associated with this alternative.

Treatment

System Component Name:

Wastewater
Treatment
Facility

Alternative Name:

Rehabilitation

Annual O&M

Expense Item	Description	Annual Amount
Contract Services - Other	Sludge Removal	\$13,750.00
Contract Services - Other	DMR Reports	\$1,680.00
Supplies	Supplies	\$1,500.00
Legal	Legal/Accounting	\$300.00
Other	Equipment, Equipment Repair/Maintenance	\$1,750.00
Other	Training/Travel	\$275.00
Other	Dues/Licenses	\$600.00
Salaries/Benefits	Wages/Salaries, Payroll Taxes, APERS	\$72,100.00
Insurance	Employee Insurance (Health/Life)	\$4,681.00
Insurance	Equipment Insurance	\$600.00
Utilities	Utilities	\$62,480.00
	Total:	\$159,716.00

The O&M expenses associated with this alternative are expected to be similar to the existing O&M expenses already seen by the wastewater department. There will be added costs to the utilities because of the additional mechanical equipment at the wastewater treatment facility. The only other significant change will be associated with the debt payment required to pay back any amount of loan that is received as part of the funding package for the proposed improvements. In addition to the debt payments, the City will need to establish a short-lived asset reserve account for the wastewater system. This will be an additional expense.

**System Component
Type:**

Treatment

**System Component
Name:**

Wastewater
Treatment Facility

Alternative Name:

Rehabilitation

Construction Costs

Item	Description	Cost
Development (Construction)		\$2,545,600.00
	Total Construction	\$2,545,600.00

Non Construction Costs

Item	Description	Cost
Engineering - Additional Services	AIS Engineering Fee	\$10,000.00
Other	Interest During Construction (3.125%)	\$101,100.00
Contingencies	Construction Contingencies (10%)	\$254,560.00
Engineering - Design	Engineering Design & Construction Administration	\$197,300.00
Engineering - Preliminary Engineering Report	PER & ER	\$50,900.00
Legal Services	Legal Fees	\$15,400.00

Engineering - Resident Project Representative	270 Contract @ \$600/day	\$162,000.00
	Total Non Construction	\$791,260.00

**ESTIMATED QUANTITIES AND COSTS
WASTEWATER TREATMENT FACILITY IMPROVEMENTS
CITY OF FLIPPIN, ARKANSAS
APRIL 2019**

Item	Description	Units	Unit Cost	Subtotal
1	New Influent Lift Station (Including Influent Flow Meter)	1 LS	\$180,000.00	\$180,000.00
2	New 6" PVC Force Main	580 L.F.	\$20.00	\$11,600.00
3	New Automatic Fine Screen and Grit Removal Unit	1 LS	\$165,000.00	\$165,000.00
4	New 0.18 MG Oxidation Ditch	1 LS	\$450,000.00	\$450,000.00
5	New Aeration for Existing Oxidation Ditch	1 LS	\$100,000.00	\$100,000.00
6	New 25-ft. Diameter Clarifier	2 EA.	\$350,000.00	\$700,000.00
7	New Control/Lab Bldg	1 LS	\$150,000.00	\$150,000.00
8	Rehabilitation of Intermittent Sand Filters (2 Ea.)	1 LS	\$107,500.00	\$107,500.00
9	Roof Structure for Sand Filters	1 LS	\$125,000.00	\$125,000.00
10	New Sludge Holding Pond	1 LS	\$75,000.00	\$75,000.00
11	Yard Piping	1 LS	\$75,000.00	\$75,000.00
12	Site Electrical	1 LS	\$160,000.00	\$160,000.00
13	Standby Generator	1 LS	\$95,000.00	\$95,000.00
14	Controls	1 LS	\$60,000.00	\$60,000.00
15	Sitework/Roadway	1 LS	\$75,000.00	\$75,000.00
16	Demolition of Existing Clarifiers	1 LS	\$15,000.00	\$15,000.00
17	Trench Excavation Safety System	1 LS	\$1,500.00	\$1,500.00
TOTAL ESTIMATED CONSTRUCTION COST				\$2,545,600.00
CONSTRUCTION CONTINGENCIES				\$254,560.00
LEGAL FEE				\$15,400.00
AIS ENGINEERING FEE				\$10,000.00
INTEREST DURING CONSTRUCTION (3.125%)				\$101,100.00
PRELIMINARY ENGINEERING FEE				\$50,900.00
BASIC ENGINEERING FEE				\$197,300.00
CONSTRUCTION INSPECTION FEE (270-Day Construction Contract @ \$600/day)				\$162,000.00
TOTAL PROJECT COST				\$3,336,860.00

NOTES: THIS QUANTITIES ESTIMATE IS BASED ON A PRELIMINARY, NOT FINAL, DESIGN OF THE PROJECT. THE FINAL QUANTITIES MAY VARY BASED ON MORE DETAILED INFORMATION DEVELOPED DURING THE FINAL DESIGN PHASE.

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The construction estimate for this alternative is \$2,545,600.00, with an additional construction contingency estimate of \$254,560.00. The non-construction components associated with this alternative total approximately \$536,700.00.

Alternatives Description Details	
System Component Type:	Collection
System Component Name:	Wastewater Collection System
Description	
Alternative Name:	Replacement
Is this alternate solution feasible or is it not feasible?	
Feasibility	✓ Yes

This alternative would include the replacement of the sewer lines where deficiencies were found during the cleaning and televising of the wastewater collection system. This alternative would also include the replacement of all of the manholes associated with the sewer line replacement. In addition, all of the existing sewer connections would have to be reconnected to the new gravity mains once they have been completed.

System Component Type:

System Component Name:

Alternative Name: Replacement

This alternative would include the replacement of the existing gravity sewer mains with new sewer mains of a similar size. This alternative would also include the replacement of the existing manholes that are involved with the gravity sewers being replaced with new manholes. All of the new mains and manholes would be installed at similar depths to the existing mains and manholes. Once the new sewer mains and manholes have been adequately tested, the existing sewer services would be tie-in to the new gravity mains. All of the work associated with this alternative would be designed in accordance with the rules and regulations of the Arkansas Department of Health and Ten State Standards.

System Component Type:

System Component Name:

Alternative Name:

Replacement

Since the proposed sewer lines that will be installed to replace the existing sewer mains will be installed next to the existing mains, except where the existing mains are currently located running down a paved road, there will be no changes to the basic layout of the existing wastewater collection system. Below is a copy of the map showing the existing collection system. The only lines that would actually be relocated would be those that are currently running down a paved road. If they are currently running with and under the pavement, they will be moved over so that they are no longer under the pavement. The basic location will be maintained so that the existing sewer service connections can be reconnected to the new mains as easily as possible.



LEGEND
 * MANHOLE
 --- 6" SEWER MAIN
 --- 8" SEWER MAIN
 --- 10" SEWER MAIN
 --- 12" SEWER MAIN
 --- 16" SEWER MAIN

Date	Revision	By

Designed _____
 Checked _____
 Drawn _____
 Approved _____

UTILITY SYTEMS MAP
 CITY OF FLIPPIN, ARKANSAS

SYSTEMS
 MAP

Scale 1"=500'	Job No.
Date FEBRUARY 2019	Sheet 1

System Component Type:

System Component Name:

Alternative Name: Replacement

This alternative will have no significant negative impact on the surrounding environment. There will be some ground disturbance during the actual construction activities, but once the construction is complete and the cleanup work performed, everything will be just as it is now. This alternative will have a positive impact on the surrounding environment. Once the proposed improvements are made, the frequency of SSO's should be significantly reduced, which should help the surrounding environment by keeping raw sewage from running overland.

System Component Type:

System Component Name:

Alternative Name:

Replacement

Although this alternative is labeled as wastewater collection system replacement, all of the work will be performed within the existing road rights-of-way or within existing sewer easements. Most of the sewer mains to be replaced will be done so by installing the new gravity sewer main right next to the existing gravity sewer main. As stated all of the work will be performed on property that the City of Flippin already has rights to for the installation of the wastewater collection system. Therefore, there will not have to be any new land acquired in order to complete the proposed construction associated with this alternative.

System Component Type:

System Component Name:

Alternative Name: Replacement

There are no potential construction problems expected to occur with this alternative. The installing contractor will have to maintain sewer service to all those connected to the existing wastewater system while the installation of the new collection mains and manholes progresses. This may necessitate the installing contractor to have to by-pass pump for a period of time. If the existing sewer mains can be left undisturbed during the installation of the new gravity sewer mains, by-pass pumping will not be required. Once the new gravity sewer mains have been installed and properly tested, the existing sewer services can be moved over to the new mains with no interruption to sewer service.

System Component Type:

System Component Name:

Alternative Name:

Replacement

This alternative will have no impact on water efficiency for the City of Flippin. The amount of water that is currently being used will not be changed by the installation of the new gravity sewer lines associated with this alternative.

This alternative could have a fairly significant on the energy efficiency associated with the wastewater system. The proposed improvements should effectively eliminate the I/I entering the wastewater collection system, at least for a while. By eliminating the I/I entering the system, the ultimate flows going to the wastewater treatment facility should be significantly reduced during the wet-weather events. Therefore, the influent pump station located at the wastewater treatment facility will not have to work quite as much, nor would the wastewater treatment facility have to work as much. Therefore, the electric needed to the run these facilities should be effectively reduced.

System Component Type:

System Component Name:

Alternative Name: Replacement

Because this alternative will have a significant impact on eliminating the SSO's that occur, the project would be considered green. The replacement of the existing wastewater collection system should basically eliminate the chances of SSO's occurring the collection system. Therefore, there will no longer be any raw sewer running overland in the area during the wet-weather events. For this reason, the environment in the area will be helped by the proposed improvements.

System Component Type:

System Component Name:

Alternative Name: Replacement

There are no other sustainability considerations that would be impacted by the proposed improvements associated with this alternative.

Collection

System Component Name:

Wastewater
Collection
System

Alternative Name:

Replacement

Annual O&M

Expense Item	Description	Annual Amount
Legal	Legal/Accounting	\$300.00
Salaries/Benefits	Wages/Salaries, Payroll Taxes, APERS	\$72,100.00
Insurance	Employee Insurance (Health/Life)	\$4,681.00
Insurance	Equipment Insurance	\$600.00
Contract Services - Other	DMR Reports	\$1,680.00
Contract Services - Other	Sludge Removal	\$13,750.00
Supplies	Supplies	\$1,500.00
Other	Dues/Licenses	\$600.00
Other	Equipment, Equipment Repair/Maintenance	\$1,750.00
Other	Chemicals	\$5,000.00
Other	Training/Travel	\$275.00
Utilities	Utilities	\$61,043.00
Total:		\$163,279.00

The O&M expenses associated with this alternative are expected to be similar to the existing O&M expenses already seen by the wastewater department. The reduction in I/I entering the collection system, should help to decrease the amount of electricity that is used at the wastewater treatment facility by the influent pump station and other treatment units. The only other significant change will be associated with the debt payment required to pay back any amount of loan that is received as part of the funding package acquired for the proposed improvements. In addition to the debt payments, the City will need to establish a short-lived asset reserve account for the wastewater system.

**System Component
Type:**

Collection

**System Component
Name:**

Wastewater
Collection System

Alternative Name:

Replacement

Construction Costs

Item	Description	Cost
Development (Construction)	Estimated Construction Cost	\$4,571,410.00
	Total Construction	\$4,571,410.00

Non Construction Costs

Item	Description	Cost
Engineering - Preliminary Engineering Report	PER/ER Engineering Fee	\$68,600.00
Engineering - Design	Basic Engineering Fee/Construction Management	\$354,300.00
Contingencies	@ 10%	\$457,140.00
Engineering - Resident Project Representative	270-Day Construction Contract @ \$600/day	\$162,000.00
Legal Services	Legal Fee	\$21,500.00

Alternatives Considered - Project Costs

Other	Interest During Construction (@ 3.125%)	\$176,300.00
Engineering - Additional Services	AIS Engineering Fee	\$6,000.00
	Total Non Construction	\$1,245,840.00

**ESTIMATED QUANTITIES AND COSTS
WASTEWATER COLLECTION SYSTEM REPLACEMENT
CITY OF FLIPPIN, ARKANSAS
APRIL 2019**

Item	Description	Units	Unit Cost	Subtotal
1	Install New 8" PVC Gravity Sewer Main	34,303 L.F.	\$40.00	\$1,372,120.00
2	Install New 10" PVC Gravity Sewer Main	60 L.F.	\$55.00	\$3,300.00
3	Install New 12" PVC Gravity Sewer Main	8 L.F.	\$65.00	\$520.00
4	Install New 4' Diameter Manhole (0-6' Deep)	302 EA.	\$4,000.00	\$1,208,000.00
5	Install Extra Vertical Foot of Manhole	1,208 V.F.	\$300.00	\$362,400.00
6	Reconnect Existing Sewer Service	269 EA.	\$500.00	\$134,500.00
7	By-Pass Pumping	241 Days	\$150.00	\$36,150.00
8	Asphalt Surface Repair	12,066 L.F.	\$55.00	\$663,630.00
9	Site Restoration	1.55 Ac.	\$1,800.00	\$2,790.00
10	Point Repairs	77 EA.	\$4,000.00	\$308,000.00
11	Abandon Existing Service	3 EA.	\$160,000.00	\$480,000.00
TOTAL ESTIMATED CONSTRUCTION COST				\$4,571,410.00
CONSTRUCTION CONTINGENCIES				\$457,140.00
LEGAL FEE				\$21,500.00
AIS ENGINEERING FEE				\$6,000.00
INTEREST DURING CONSTRUCTION (3.125%)				\$176,300.00
PRELIMINARY ENGINEERING FEE				\$68,600.00
BASIC ENGINEERING FEE				\$354,300.00
CONSTRUCTION INSPECTION FEE (270-Day Construction Contract @ \$600/day)				\$162,000.00
TOTAL PROJECT COST				\$5,817,250.00

NOTES: THIS QUANTITIES ESTIMATE IS BASED ON A PRELIMINARY, NOT FINAL, DESIGN OF THE PROJECT. THE FINAL QUANTITIES MAY VARY BASED ON MORE DETAILED INFORMATION DEVELOPED DURING THE FINAL DESIGN PHASE.

THIS PRELIMINARY COST ESTIMATE IS BASED ON RECENT BIDS RECEIVED ON SIMILAR PROJECTS. ACTUAL COSTS MAY VARY DEPENDING ON CONTRACTOR'S METHODS, SOURCES OF PROJECT FUNDING, MODIFICATIONS TO THE PROJECT BY REVIEW AGENCIES OR CLIENT AFTER DATE OF ESTIMATE, MARKET CONDITIONS, TIME OF YEAR OF THE BID LETTING, AND AGE OF ESTIMATE.

The total estimated construction cost associated with this alternative is \$4,571,410.00, with an additional construction contingency of \$457,140.00. The non-construction costs associated with this alternative total another \$788,700.00. These are estimated costs and will not be finalized until after the project is publicly bid.

Alternatives Description Details	
System Component Type:	Collection
System Component Name:	Wastewater Collection System
Description	
Alternative Name:	Rehabilitation
Is this alternate solution feasible or is it not feasible?	
Feasibility	✓ Yes

This alternative would include the rehabilitation of the existing facilities. This rehabilitation will actually include the replacement of certain sections of the collection system by standard open-cut methods, while other sections of the system are replaced by pipe bursting methods. In addition to the gravity main replacement, most of the manholes in the collection system require a certain amount rehabilitative work. As this rehabilitative work is performed, the existing service lines will be reconnected to the new gravity mains. All of this work is being performed to effectively reduce the amount of I/I entering the collection system.

System Component Type:

System Component Name:

Alternative Name: Rehabilitation

The existing wastewater collection system is adequately sized to handle the wastewater flows generated within the City of Flippin. The collection becomes overloaded during wet-weather events due to the amount of I/I entering the system. Therefore, this alternative will not change the gravity sewer main sizes. The mains will simply be replaced with new PVC mains. These new mains will be tied into the existing manholes. Once the new mains are installed and have been tested, the existing service lines will have to be reconnected. In addition, the manholes in the areas of this work will be rehabilitated. This rehabilitation will include sealing the sidewalls on all of them and reworking the benches and inverts in those that need it. In addition to this work, there are a few point repairs that will have to be made. This will include digging up the existing main and repairing a short section. There will also be a few sections of gravity sewer main that will be replaced by pipe bursting. All of the work associated with this alternative will be performed in accordance with the rules and regulations of the Arkansas Department of Health and 10 State Standards.

System Component Type:

System Component Name:

Alternative Name: Rehabilitation

Since this alternative involves the rehabilitation of the existing wastewater collection system, the locations of the facilities will not be changed. Attached is a copy of the existing facility layout that depicts the location of the existing sewer lines.



LEGEND
 * MANHOLE
 --- 6" SEWER MAIN
 --- 8" SEWER MAIN
 --- 10" SEWER MAIN
 --- 12" SEWER MAIN
 --- 16" SEWER MAIN

Date	Revision	By

Designed _____
 Checked _____
 Drawn _____
 Approved _____

UTILITY SYTEMS MAP
 CITY OF FLIPPIN, ARKANSAS

SYSTEMS
 MAP

Scale 1"=500'	Job No.
Date FEBRUARY 2019	Sheet 1

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

This alternative will have no significant negative impact on the surrounding environment. There will be some ground disturbance during the actual construction activities, but once the construction is complete and the cleanup work performed, everything will be just as it is now. This alternative will have a positive impact on the surrounding environment. Once the proposed improvements are made, the frequency of SSO's should be significantly reduced, which should help the surrounding environment by keeping raw sewage from running overland.

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

Because this alternative consists of the rehabilitation of the existing wastewater collection system, there will be no new land required for its completion. All of the work associated with this alternative will be performed on the existing facilities and within existing road rights-of-way or existing easements.

System Component Type:

System Component Name:

Alternative Name: Rehabilitation

There are no potential construction problems expected to occur with this alternative. All of the work associated with this alternative is on existing wastewater collection system facilities and will be performed within existing road rights-of-way and existing easements. The only issue that the installing contractor will have to deal with during the construction of the improvements is maintaining sewer service to all of the existing customers on the system. This is not uncommon for this type of work, so it is not considered a construction problem.

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

This alternative will have no impact on water efficiency for the City of Flippin. The amount of water that is currently being used will not be changed by the installation of the new gravity sewer lines associated with this alternative.

This alternative could have a fairly significant on the energy efficiency associated with the wastewater system. The proposed improvements should effectively eliminate the I/I entering the wastewater collection system, at least for a while. By eliminating the I/I entering the system, the ultimate flows going to the wastewater treatment facility should be significantly reduced during the wet-weather events. Therefore, the influent pump station located at the wastewater treatment facility will not have to work quite as much, nor would the wastewater treatment facility have to work as much. Therefore, the electric needed to the run these facilities should be effectively reduced.

System Component Type:

System Component Name:

Alternative Name: Rehabilitation

Because this alternative will have a significant impact on eliminating the SSO's that occur, the project would be considered green. The replacement of the existing wastewater collection system should basically eliminate the chances of SSO's occurring the collection system. Therefore, there will no longer be any raw sewer running overland in the area during the wet-weather events. For this reason, the environment in the area will be helped by the proposed improvements.

System Component Type:

System Component Name:

Alternative Name:

Rehabilitation

There are no other sustainability considerations that would be impacted by the proposed improvements associated with this alternative.

Collection

System Component Name:

Wastewater
Collection
System

Alternative Name:

Rehabilitation

Annual O&M		
Expense Item	Description	Annual Amount
Supplies	Supplies	\$1,500.00
Legal	Legal/Accounting	\$300.00
Insurance	Employee Insurance (Health/Life)	\$4,681.00
Insurance	Equipment Insurance	\$600.00
Contract Services - Other	DMR Reports	\$1,680.00
Contract Services - Other	Sludge Removal	\$13,750.00
Salaries/Benefits	Wages/Salaries, Payroll Taxes, APERS	\$72,100.00
Other	Dues/Licenses	\$600.00
Other	Equipment, Equipment Repair/Maintenance	\$1,750.00
Other	Chemicals	\$5,000.00
Other	Training/Travel	\$275.00
Utilities	Utilities	\$61,043.00
Total:		\$163,279.00

The O&M expenses associated with this alternative are expected to be similar to the existing O&M expenses already seen by the wastewater department. The only significant change will be associated with the debt payment required to pay back any amount of loan that is received as part of the funding package for the proposed improvements. In addition to the debt payments, the City will need to establish a short-lived asset reserve account for the wastewater system. This will be an additional expense.

**System Component
Type:**

Collection

**System Component
Name:**

Wastewater
Collection System

Alternative Name:

Rehabilitation

Construction Costs

Item	Description	Cost
Development (Construction)	Estimated Construction Cost	\$3,792,860.00
	Total Construction	\$3,792,860.00

Non Construction Costs

Item	Description	Cost
Engineering - Additional Services	AIS Engineering Fee	\$6,000.00
Other	Interest During Construction @ 3.125%	\$147,200.00
Engineering - Resident Project Representative	270-Day Construction Contract @ \$600/day	\$162,000.00
Engineering - Design	Design & Construction Management	\$293,900.00
Legal Services	Legal Fees	\$19,200.00
Engineering -	PER/ER	\$56,900.00

Alternatives Considered - Project Costs

Preliminary Engineering Report		
Contingencies	@ 10%	\$379,280.00
	Total Non Construction	\$1,064,480.00

**ESTIMATED QUANTITIES AND COSTS
WASTEWATER COLLECTION SYSTEM REHABILITATION
CITY OF FLIPPIN, ARKANSAS
APRIL 2019**

Item	Description	Units	Unit Cost	Subtotal
1	Install New 8" PVC Gravity Sewer Main	32,829 L.F.	\$40.00	\$1,313,160.00
2	Install New 10" PVC Gravity Sewer Main	60 L.F.	\$55.00	\$3,300.00
3	Install New 12" PVC Gravity Sewer Main	8 L.F.	\$65.00	\$520.00
4	Tie-In to Existing Manhole	302 EA.	\$1,000.00	\$302,000.00
5	Rehabilitation of Existing Manhole	302 EA.	\$1,500.00	\$453,000.00
6	Reconnect Existing Sewer Service	269 EA.	\$500.00	\$134,500.00
7	By-Pass Pumping	241 Days	\$150.00	\$36,150.00
8	Asphalt Surface Repair	12,066 L.F.	\$55.00	\$663,630.00
9	Site Restoration	1.55 Ac.	\$1,800.00	\$2,790.00
10	Point Repairs	77 EA.	\$4,000.00	\$308,000.00
11	Abandon Existing Service	3 EA.	\$160,000.00	\$480,000.00
12	8" Pipe Bursting	1,474 L.F.	\$65.00	\$95,810.00
TOTAL ESTIMATED CONSTRUCTION COST				\$3,792,860.00
CONSTRUCTION CONTINGENCIES				\$379,300.00
LEGAL FEE				\$19,200.00
AIS ENGINEERING FEE				\$6,000.00
INTEREST DURING CONSTRUCTION (3.125%)				\$147,200.00
PRELIMINARY ENGINEERING FEE				\$56,900.00
BASIC ENGINEERING FEE				\$293,900.00
CONSTRUCTION INSPECTION FEE (270-Day Construction Contract @ \$600/day)				\$162,000.00
TOTAL PROJECT COST				\$4,857,360.00

NOTES: THIS QUANTITIES ESTIMATE IS BASED ON A PRELIMINARY, NOT FINAL, DESIGN OF THE PROJECT. THE FINAL QUANTITIES MAY VARY BASED ON MORE DETAILED INFORMATION DEVELOPED DURING THE FINAL DESIGN PHASE.

THIS PRELIMINARY COST ESTIMATE IS BASED ON RECENT BIDS RECEIVED ON SIMILAR PROJECTS. ACTUAL COSTS MAY VARY DEPENDING ON CONTRACTOR'S METHODS, SOURCES OF PROJECT FUNDING, MODIFICATIONS TO THE PROJECT BY REVIEW AGENCIES OR CLIENT AFTER DATE OF ESTIMATE, MARKET CONDITIONS, TIME OF YEAR OF THE BID LETTING, AND AGE OF ESTIMATE.

The total estimated construction cost for this alternative is approximately \$3,792,860.00, with an additional construction contingency of approximately \$379,300.00. The non-construction costs associated with this alternative are estimated to be approximately \$685,200.00.

System Component Type: Treatment

System Component Name: Wastewater
Treatment Facility

Alternative List			
Alternative Name	Net Present Value (NPV)	Created By	Best NPV
New	\$5,342,298.96	J Selig	
Rehabilitation	\$5,242,130.27	J Selig	✓

System Component Type: Treatment

System Component Name: Wastewater
Treatment Facility

Non-Monetary Factors						
Alternative Name	Social Considerations	Environmental Considerations	Regulatory Considerations	Operational Considerations	Total	Best
Rehabilitation	10	10	10	10	40	✓
New	10	10	10	9	39	

The main purpose of this preliminary engineering report is to determine the most cost effective way, both capital costs and operation and maintenance costs, to address all of the problems associated with the wastewater treatment facility.

A factor that plays an important role in the selection of the best alternative is how to handle future growth. Since there is the potential for continued growth in the wastewater system, it would be easier to expand the existing treatment facilities rather than constructing a completely new treatment facility and abandoning the existing facility. The expansion of the existing treatment facility will allow the City to continue operation during the construction phase of the project and provide operating personnel with the same type of treatment process at the completion of the construction that they are already accustomed to operating and maintaining. Therefore, the transition to the additional treatment capacity will be smoother compared to operating personnel having to learn a completely new treatment process.

The actual construction costs associated with the project will be determined by competitive bidding after construction plans and specifications have been prepared by the consulting engineer and approved by the appropriate review agencies. The basic engineering fee would pay for all costs normally associated with the design of the project (performing field work, preparing bidding and contract documents, preparing detailed construction plans and technical specifications, working with any review and funding agencies, guidance through the bid letting, and contract award stage).

System Component Type: Treatment

System Component Name: Wastewater
Treatment Facility

Alternative List					
Alternative Selected	Alternative Name	NPV	Best NPV	Non Monetary Factor	Best Non Monetary Factor
	New	\$5,342,298.96		39	
✓	Rehabilitation	\$5,242,130.27	✓	40	✓

System Component Type: Collection

System Component Name: Wastewater
Collection System

Alternative List

Alternative Name	Net Present Value (NPV)	Created By	Best NPV
Replacement	\$6,819,078.21	J Selig	
Rehabilitation	\$6,233,194.46	J Selig	✓

System Component Type: Collection

System Component Name: Wastewater
Collection System

Non-Monetary Factors						
Alternative Name	Social Considerations	Environmental Considerations	Regulatory Considerations	Operational Considerations	Total	Best
Rehabilitation	10	10	10	10	40	✓
Replacement	5	10	10	10	35	

Both of the alternatives reviewed as remedies to the deficiencies associated with the wastewater collection system are similar in nature. Both alternatives will effectively resolve the issues associated with the collection system. Both alternatives will effectively handle the wastewater flows generated within the City of Flipping over the planning period of the project. Therefore, the best alternative is the one that ultimately has the least amount of impact on the citizens of the Flippin. This would equate to the alternative that has the least amount of capital costs associated with it. This alternative will impact user rates the least.

System Component Type: Collection

System Component Name: Wastewater
Collection System

Alternative List

Alternative Selected	Alternative Name	NPV	Best NPV	Non Monetary Factor	Best Non Monetary Factor
	Replacement	\$6,819,078.21		35	
✓	Rehabilitation	\$6,233,194.46	✓	40	✓

The proposed project will include the rehabilitation of the existing wastewater collection system. This rehabilitation will include replacing certain gravity sewer mains with new gravity sewer mains by traditional open-cut methods. Other gravity sewer mains will be replaced by trenchless technology. The project will also include the rehabilitation of all of the manholes that are involved in the gravity sewer main rehabilitation. This manhole rehabilitation will include lining the walls of the manholes in all of these manholes. Some of the manholes will also have rehabilitative work done on the benches and inverts. After the new gravity sewer lines are installed and the manholes rehabilitated, the existing sewer services will be connected to the new mains. The installing contractor will have to perform by-pass pumping during this collection system rehabilitation in order to maintain sewer service to the existing customers.

The proposed project will also include the replacement of the influent lift station with a new, submersible pump lift station. An additional force main will be installed so that each of the pumps in the lift station has a dedicated force main to the headworks of the facility. A new headworks assembly will be installed that will include a fine screen to remove the larger solids, as well as a grit collector. A splitter box will be installed after the headworks to split the flow between the existing oxidation ditch and the proposed oxidation ditch. The aeration rotors in the existing oxidation ditch will be replaced with a new aeration system. Two (2) new 25-foot diameter clarifiers will be constructed following the oxidation ditches. A new sludge holding pond will also be constructed as part of the project. Two (2) of the existing sand filter beds will be rehabilitated and a new roof structure will be placed over the beds. In addition, a new ultra-sonic flow meter will be installed in the channel after the existing UV disinfection unit to measure the effluent from the facility.

The proposed project will be designed in accordance with the rules and regulations of the Arkansas Department of Environmental Quality, the Arkansas Department of Health, and 10 State Standards. The treatment facility expansion will be appropriately sized to handle the existing wastewater flows, plus an appropriate amount of growth for the planning period associated with the design. All of the construction work associated with the proposed improvements will be performed on the existing wastewater treatment facility property, which is already owned by the City. Therefore, no new land will have to be purchased in order to complete the proposed improvements.

Details for Proposed Project - Waste Water Collection

Wastewater Collection Types Type

✓ Conventional Gravity

The proposed project will include the rehabilitation of approximately 34,303-l.f. of 8" gravity sewer main. Of this total, approximately 1,474-l.f. will be replaced by trenchless technology (pipe bursting). The remaining 8" gravity sewer main will be replaced by traditional open-cut methods. There will also be approximately 60-l.f. of 10" gravity sewer main and 10-l.f. of 12" gravity sewer main replaced as part of the project. In addition to the work associated with the gravity sewer mains, there will be approximately 302 manholes rehabilitated as part of the project. This rehabilitation will include lining the walls of all of the manholes and performing the bench and invert rehabilitation in those requiring this work. All of the existing sewer services that are connected to the existing gravity sewer mains being replaced as part of this alternative will be reconnected to the new gravity sewer mains. In addition, there are approximately 77 locations that will be dug up and point repairs performed.

All of the proposed work is being performed on the existing wastewater collection system in an effort to effectively eliminate the I/I entering the system. All of the work associated with the proposed improvements will be performed in accordance with the rules and regulations of the Arkansas Department of Health and 10 State Standards.

Details for Proposed Project - Waste Water Treatment

Physical Unit Operations

- ✓ Screening
- ✓ Grit Removal
- ✓ Sedimentation
- ✓ Aeration

Chemical Unit Processes

Suspended Growth Biological Treatment

- ✓ Oxidation Ditches

Attached Growth Biological Treatment

Anaerobic Treatment

Advanced Wastewater Treatment

Disinfection

- ✓ Ultraviolet

As previously mentioned, the proposed project will include the rehabilitation/expansion of the existing wastewater treatment facility. The existing influent pump station will be replaced with a new, submersible pump lift station. One of the pumps in the new lift station will be tied to the existing force main to the headworks of the treatment facility. A second force main will be installed to the headworks so that each of the pumps has a dedicated force main. The existing headworks unit will be replaced with a new headworks unit that includes both a screening unit and a grit collection unit. A new splitter box will be installed after the headworks to split the flow between the existing oxidation ditch and the proposed oxidation ditch. Two (2) new 25-foot diameter clarifiers will be constructed following the oxidation ditches to provide the necessary settlement/clarification process. The effluent from the clarifiers, if adequately clean, will then flow directly to the existing UV disinfection unit. A new ultrasonic flow meter will be installed after the existing UV unit before the discharge flows through the existing cascade aerator and to the ultimate discharge. A new sludge holding pond will be constructed next to the existing EQ basin, replacing two (2) of the existing sand filters. The other two (2) sand filters will be rehabilitated and a new roof structure will be constructed over them. The yard piping will be arranged such that the operating personnel have the option of sending the effluent from the clarifiers to the sand filters if they feel additional treatment is needed prior to flowing to the UV unit.

The existing wastewater treatment facility is permitted for a design flow 0.175 MGD. The proposed expansion will allow for a new design flow of 0.35 MGD.

Project Schedule		
Type	Description	Date
Milestone Date	Submission of PER to WWAC & USDA-RD	05/15/2019
Milestone Date	Submission of ER to USDA-RD	06/28/2019
Milestone Date	Letter of Conditions Issued by USDA-RD	07/31/2019
Milestone Date	Submission of Plans & Specs to ADH, ADEQ, & RD	10/31/2019
Milestone Date	Approval of Plans & Specs	04/30/2020
Proposed Start of Construction	Initiation of Construction	07/01/2020
Proposed End of Construction	Substantial Completion	03/31/2021

Due to the complexity of the project, and the fact that it includes both wastewater collection improvements and wastewater treatment improvements, the review and approval process will be somewhat lengthy. In addition, there will be considerable lead times associated with some of the equipment that will have to be obtained for the wastewater treatment improvements. Therefore, we would anticipate the construction time for the project to be approximately 270-days long. With this in mind, the overall completion of the project will more than likely not occur until the first part of 2021.

Land Rights	
Number of Acres To Be Acquired - Fee Simple	.0
Number of Acres To Be Acquired - Lease	.0
Acres To Be Acquired - Purchase Price	\$.00
Acres To Be Acquired - Value	\$.00
Number of Acres Now Owned - Fee Simple	7.0
Number of Acres Now Owned - Lease	.0
Acres Now Owned - Purchase Price	\$21,000.00
Acres Now Owned - Value	\$21,000.00
Describe Other Rights (such as water rights or rights-of-way)	

All of the work associated with this alternative will be performed on the existing wastewater treatment facility property. There will not be any land purchased to accommodate the construction activities associated with this alternative.

The only major permit requirement associated with this project will be the construction permit and modification of the NPDES discharge permit that will have to be obtained from ADEQ. A construction permit/discharge permit modification application, along with copies of the detailed construction drawings and technical specifications, will have to be submitted to ADEQ for review and approval. Based on previous experiences associated with the acquisition of these permits, this process will take approximately six (6) months.

There will also be permit requirements associated with crossing highway rights-of-way and the railroad right-of-way. The appropriate permit application forms and necessary plans and specifications will be submitted to the appropriate agency for review and approval. These permits will be obtained simultaneously to the acquisition of the construction permit from ADEQ.

The proposed project will not have any impact on the water efficiency associated with the City of Flippin.

The proposed project will have a minimal impact on the energy efficiency associated with the City of Flippin. The proposed project includes the addition of a few electrical motors, but it also include the replacement of most of the existing electrical motors at the facility. The new motors should be a little more energy efficient than the existing motors. Therefore, even with the addition of a few electric motors, the overall electric consumption at the facility should not be significantly different.

The overall project could be considered "green" in nature. This alternative will make improvements at the wastewater treatment facility such that the facility will treat the wastewater more effectively. Therefore, the issues that the City has experienced in recent years of washing sludge out into the receiving stream, or having to run the facility in "by-pass" mode should not occur anymore. This in turn means that the discharge from the facility should be a higher quality than the present discharge. Therefore, the overall environmental impact that the discharge from the facility has on the receiving stream should be significantly less.

There are not other sustainability considerations associated with the proposed project.

Total Project Cost (Engineer's Opinion of Probable Cost)		
Cost Classification	Description	Cost
Development (Construction)	Wastewater Treatment Facility - Development (Construction) -	\$2,545,600.00
Development (Construction)	Wastewater Collection System - Development (Construction) - Estimated Construction Cost	\$3,792,860.00
Engineering - Additional Services	Wastewater Treatment Facility - Engineering - Additional Services - AIS Engineering Fee	\$10,000.00
Other	Wastewater Treatment Facility - Other - Interest During Construction (3.125%)	\$101,100.00
Contingencies	Wastewater Treatment Facility - Contingencies - Construction Contingencies (10%)	\$254,560.00
Engineering - Design	Wastewater Treatment Facility - Engineering - Design - Engineering Design & Construction Administration	\$197,300.00
Legal Services	Wastewater Treatment Facility - Legal Services - Legal Fees	\$15,400.00
Engineering - Preliminary Engineering Report	Wastewater Treatment Facility - Engineering - Preliminary Engineering Report - PER & ER	\$50,900.00
Engineering - Resident Project Representative	Wastewater Treatment Facility - Engineering - Resident Project Representative - 270 Contract @ \$600/day	\$162,000.00
Engineering - Resident Project Representative	Wastewater Collection System - Engineering - Resident Project Representative - 270-Day Construction Contract @ \$600/day	\$162,000.00
Engineering - Design	Wastewater Collection System - Engineering - Design - Design & Construction Management	\$293,900.00
Other	Wastewater Collection System - Other - Interest During Construction @ 3.125%	\$147,200.00
Contingencies	Wastewater Collection System - Contingencies - @ 10%	\$379,280.00
Engineering - Preliminary	Wastewater Collection System - Engineering - Preliminary Engineering Report - PER/ER	\$56,900.00

Proposed Project - Wastewater - Total Project Cost

Engineering Report		
Engineering - Additional Services	Wastewater Collection System - Engineering - Additional Services - AIS Engineering Fee	\$6,000.00
Legal Services	Wastewater Collection System - Legal Services - Legal Fees	\$19,200.00
	Total:	\$8,194,200.00

It is difficult to accurately estimate the total project costs without knowing the true method of funding

and the date that the project will actually go to construction. The estimated costs given in this report are based upon construction starting before the end of 2020.

Because the cost of construction is more than the City of Flippin can afford to pay out of its existing accounts, the City will have to seek financial assistance in order to complete the proposed project. The uncertainty of the funding source(s) and the type of funding that might be received, makes it difficult to determine exactly how much money the City will have to pay back. Therefore, for the purposes of this report, it is assumed the project will be funded with 100% loan money. Therefore, based on an \$8,194,200.00 loan at 3.375% interest for 40-years, payments would be as follows:

Annual Debt Payment	\$373,586.64
Annual Debt Reserve	\$ 37,358.67
Short-Lived Asset Reserve	<u>\$ 5,300.00</u>
Total Annual Debt Payment	\$416,245.31
Total Monthly Debt Payment	\$ 34,687.11

Based on that fact, and the total number of existing services connected to the wastewater system, the sewer rates would have to be raised approximately \$64.24 on average, per month, in order for the wastewater department to cash flow. This is an extremely high rate increase. Based on the fact that the average sewer bill for 4,000-gallons of usage is already \$25.50, it is difficult to image that the citizens of Flippin would be able to afford such a rate increase. For this reason, the City of Flippin will be seeking some grant funds for financing the project to offset this huge increase.

Annual Operating Budget - Income		
Type of Income	Description	Yearly Income
	Total:	\$.00

As previously stated, it is difficult to imagine that the City of Flippin would be able to increase its sewer rates enough to cover the cost of the proposed project if it were funded with 100% loan. For this reason, it is nearly impossible at this point to figure what the income of the wastewater department will actually be. Once the overall financing of the proposed project is fully determined, the City will work with its engineer and the Arkansas Rural Water Association to determine an appropriate rate structure.

Annual Operating Budget - O&M Costs

Expense Item	Description	Annual Amount
Insurance	Wastewater Treatment Facility - Insurance - Employee Insurance (Health/Life)	\$4,681.00
Insurance	Wastewater Treatment Facility - Insurance - Equipment Insurance	\$600.00
Legal	Wastewater Treatment Facility - Legal - Legal/Accounting	\$300.00
Contract Services - Other	Wastewater Treatment Facility - Contract Services - Other - Sludge Removal	\$13,750.00
Contract Services - Other	Wastewater Treatment Facility - Contract Services - Other - DMR Reports	\$1,680.00
Salaries/Benefits	Wastewater Treatment Facility - Salaries/Benefits - Wages/Salaries, Payroll Taxes, APERS	\$72,100.00
Other	Wastewater Treatment Facility - Other - Equipment, Equipment Repair/Maintenance	\$1,750.00
Other	Wastewater Treatment Facility - Other - Training/Travel	\$275.00
Other	Wastewater Treatment Facility - Other - Dues/Licenses	\$600.00
Supplies	Wastewater Treatment Facility - Supplies - Supplies	\$1,500.00
Utilities	Wastewater Treatment Facility - Utilities - Utilities	\$62,480.00
Utilities	Wastewater Collection System - Utilities - Utilities	\$61,043.00
Contract Services - Other	Wastewater Collection System - Contract Services - Other - DMR Reports	\$1,680.00
Contract Services - Other	Wastewater Collection System - Contract Services - Other - Sludge Removal	\$13,750.00
Legal	Wastewater Collection System - Legal - Legal/Accounting	\$300.00
Salaries/Benefits	Wastewater Collection System - Salaries/Benefits - Wages/Salaries, Payroll Taxes, APERS	\$72,100.00
Insurance	Wastewater Collection System - Insurance - Employee Insurance (Health/Life)	\$4,681.00
Insurance	Wastewater Collection System - Insurance - Equipment Insurance	\$600.00
Other	Wastewater Collection System - Other - Dues/Licenses	\$600.00
Other	Wastewater Collection System	\$1,750.00

Proposed Project - Wastewater - O&M Costs

Other	Wastewater Collection System - Other - Chemicals	\$5,000.00
Other	Wastewater Collection System - Other - Training/Travel	\$275.00
Supplies	Wastewater Collection System - Supplies - Supplies	\$1,500.00
	Total:	\$322,995.00

The O&M expenses shown above are approximately twice as high as they should be for the wastewater system (all of the items have been duplicated). In addition to these expenses, the wastewater system will also see the expenses associated with the proposed debt in connection to the wastewater system improvements. Again, it is very difficult to imagine that the cost of the proposed improvements would be financed with 100% loan, so it is hard to estimate the exact O&M expenses that would be seen by the system. Once the funding for the project is completely secured, the O&M expenses and system income can be more accurately determined.

Does the potential applicant have any Existing Debt with Terms?								✓Yes
Annual Operating Budget - Debt Repayments								
Type of Loan	Owed to	Purpose	Terms(yrs)	Date of First Payment	Annual Payment	Annual Reserve	Interest Rate	Due Date
Existing USDA Loan	USDA	Sewer	40	06/17/1987	\$12,288.00	\$1,228.00	5.00%	06/17/2027
Existing Other Loan	ANRC	Sewer	10	01/31/2019	\$25,034.00	\$.00	2.75%	01/31/2029

The capital costs associated with the proposed improvements are far more than the City of Flippin can afford to pay without financial assistance. For this reason, the City will seek assistance from the USDA - Rural Development, and possibly from the Community Development Block Grant Program. Since the primary funding source for the project is expected to be USDA-Rural Development, the following information is based upon the City of Flippin receiving a 100% loan from Rural Development.

Annual Debt Service Payment	\$373,586.64
Annual Debt Service Reserve Payment	<u>\$ 37,358.67</u>
Annual Debt Payment	\$410,945.31
Monthly Debt Payment	\$ 34,245.45

This financial information is based upon the City of Flippin receiving a loan in the amount of \$8,194,200.00 at a 3.375% interest for 40-years. Based on the fact that the City of Flippin has approximately 540 customers, the average sewer bill would have to be increased by \$63.42 per month in order to cover the debt payment and the debt payment reserve. The average sewer bill would have to be increased slightly higher than this in order to fund the short-lived asset reserve. Since the average sewer bill for 4,000-gallons of water usage is already \$25.50, this is far more than the citizens of Flippin can afford to pay on a monthly basis. Therefore, the City of Flippin would hope to receive some amount of grant to help fund the project.

Does the client have any Short Lived Assets to report? ☒ Yes ☐ No

Annual Operating Budget - Short Lived Asset Reserves

Description	Replacement Cost	Useful Life	Annual Reserve
Influent Pump (2 Ea.)	\$30,000.00	6-10 yrs	\$3,000.00
Aerator Motors (Ea.)	\$10,000.00	6-10 yrs	\$1,000.00
Aerator Blower Motors (2 Ea.)	\$5,000.00	6-10 yrs	\$500.00
Clarifier Motor (2 Ea.)	\$3,000.00	6-10 yrs	\$300.00
Headworks Motor (2 Ea.)	\$5,000.00	6-10 yrs	\$500.00
	Total: \$53,000.00		Total: \$5,300.00

In addition to the debt service and debt service reserve that will be associated with any amount of loan that is received as part of the overall project financing, the City of Flippin will have to fund a short-lived asset reserve account. The purpose of this account is to build money to replace those items that will wear out from time to time in the wastewater system. This fund would be unrestricted, as far as the City being able to utilize the money without having to ask for permission, but it should be limited to use for those items that are considered short-lived assets.

Total Cost		
Project Type: Wastewater		
Non Construction Total:	\$1,855,740.00	
Construction Total:	\$6,338,460.00	
Total Cost For Project Type:	\$8,194,200.00	
Grand Total		
Grand Total All Types:	\$8,194,200.00	

The City of Flippin's wastewater system is in need of rehabilitative work on both the collection system and the treatment facility. The City does not have the necessary financial resources to complete the proposed improvements on its own. Therefore, the City will have to seek financial assistance. Because of the overall estimated cost of the proposed improvements, and the fact that the City will not be able to afford the project if it is afforded with 100% loan funds, it is recommended that the City seek financial assistance from both the USDA - Rural Development and the AEDC. Any amount of funding that the City can obtain in the form of grant will make the proposed project more economically feasible for the customers connected to the wastewater collection system.