

PRELIMINARY INVESTIGATIVE REPORT (PIR) Revision 1



Donatello's Village Area (Fort Wayne City Utilities)

Whitley County Regional Water and Sewer District

March 23, 2018



Introduction

The purpose of the Whitley County Regional Water and Sewer District (District) is to provide the residents of Whitley County an agency for which residents in the unincorporated areas of the County could seek the provision of sanitary sewer service and public potable water service.

In September of 2017, the Board of Trustees of the District instructed BCS Management, Inc. (BCS) to prepare a Preliminary Investigative Report (PIR) for the provision of potable water and fire protection service to the Donatello's Village neighborhood. In partnership with Fort Wayne City Utilities (FWCU), BCS has prepared this PIR to determine the reasonably available service options and to estimate the expected costs and funding for such systems.

The effective date of this PIR is March 22nd, 2018.

PIR Approach

The PIR included a review of available information, discussions with representatives of FWCU Engineering, comparison with similar utility projects the use of generally accepted engineering, finance, cost estimating and revenue projection practices.

The PIR included the utilization of the following information:

- Construction costs for comparable infrastructure from other private and public projects located within Indiana within the previous two years.
- Financing rates and options for similar projects
- Current Administrative and Infrastructure replacement rates for similar projects

Although this information is adequate for the preparation of this PIR, the PIR cannot be considered for the use of actual construction of the described facilities.

Description of the Study Area and Service Providers

The Donatello's Village neighborhood is located in unincorporated Whitley County (Jefferson Township and Union Township) approximately one half mile north of State Road 14 along County Line Road. The neighborhood consists of ninety-six homes that have been included in this investigation. This neighborhood is surrounded by farmland with agricultural runoff which can pose a threat to well water that the homes rely on for drinking and household use.

The neighborhood currently receives flat rate sanitary sewer service from Aqua Indiana. The nearest potable water service provider is the City of Fort Wayne, City Utilities (FWCU) with infrastructure on the Allen County side of CR 800 E. FWCU has expressed a willingness to provide fire protection and/or potable water service for this proposed project.

Potable Water and/or Fire Protection Service Options with Estimated Costs

Three infrastructure options for providing fire service with optional potable water service to the study area were determined. Of these three, two are presented as the most cost effective or economically feasible options for the neighborhood as a whole.

For each option, an estimated construction cost, contingency, engineering and other costs were determined and then combined as an estimated total project cost.

Option 1. Fire Protection Fee Only

The first option includes the least amount of infrastructure and assists the fire protection issue at a low cost. This option includes a tap into the existing Allen County infrastructure and extension of an 8" water main under CR 800 and extending North to include fire hydrant installations at each community entrance.



The advantage of this option is that it is least cost and brings accessible fire hydrants to the Whitley County side of the road at each community road entrance. Disadvantage is that only the homes close enough to fire hydrants will have optimal fire protection and access to city water.

Option 1 Total Estimated Project Cost: \$100,000.

Total estimated project cost includes project-engineering design, all infrastructure, construction, restoration and contingency allowance.

Option 2. Fire Protection Fee with Potable Water Service optional connection

The second option includes the extension and installation of water main infrastructure throughout the neighborhood and the installation of fire hydrants at standard 500' intervals along the street. This approach includes the option to connect to the line for potable water service for all homeowners.



The advantage of this approach is that everyone has fire protection and everyone has the option to connect to the city water system if they choose. Water mains increase property value. Note that connection to the water line includes a one time tap and connection cost to the homeowner.

Option 2 Total Estimated Project Cost: \$620,000.

Total estimated project cost includes project-engineering design, all infrastructure, construction, restoration and contingency allowance.

Monthly Rates Comparison

The resulting monthly rate for the area is dependent on several factors. The factors include the assessed fire protection fee and cost of potable water service from FWCU, the debt service payment for the infrastructure, Administration, operations and maintenance of the local infrastructure, and funds that are set aside for the infrastructure replacement. A significant component of the bill is the number of homeowners who participate and therefore share in the cost.

The following table provides a realistic estimate of expected monthly rates for each of options presented in this PIR. Note that Option 2 with potable water service is for homeowners who choose to connect to the Fort Wayne City Water line for potable water service. This connection is optional.

Please note that Aqua Indiana is charging a flat rate for their sanitary sewer service due to the lack of metered water service to gauge actual usage.

Every home participates in the project	126		
	Option 1	Option 2 (no connection)	Option 2 (with potable water service connection)
Fire Protection Fee*			
Administration Fee	\$ 10.00	\$ 10.00	\$ 10.00
Infrastructure (Debt Service)**	\$ 4.83	\$ 29.65	\$ 29.65
Potable Water Usage***	\$ -	\$ -	\$ 21.25
Total Estimated Monthly Bill	\$ 14.83	\$ 39.65	\$ 60.90

80% of homes participate without FWCU Assistance		100.8	
	Option 1	Option 2 (no connection)	Option 2 (with potable water service connection)
Fire Protection Fee*			
Administration Fee	\$ 10.00	\$ 10.00	\$ 10.00
Infrastructure (Debt Service)**	\$ 6.04	\$ 37.06	\$ 37.06
Potable Water Usage***	\$ -	\$ -	\$ 21.25
Total Estimated Monthly Bill	\$ 16.04	\$ 47.06	\$ 68.31

60% of homes participate without FWCU Assistance		75.6	
	Option 1	Option 2 (no connection)	Option 2 (with potable water service connection)
Fire Protection Fee*			
Administration Fee	\$ 10.00	\$ 10.00	\$ 10.00
Infrastructure (Debt Service)**	\$ 8.06	\$ 49.42	\$ 49.42
Potable Water Usage***	\$ -	\$ -	\$ 21.25
Total Estimated Monthly Bill	\$ 18.06	\$ 59.42	\$ 80.67

Assumptions:

- *Fire Protection Fee Waived
- **Municipal Bond Financing – 20 year term, 2.5% APR (highly conservative estimate)
- **Infrastructure (Debt Service) drops from bill after 20 years
- ***Potable water usage charges are based on actual metered usage
- **Fort Wayne City Utilities will contribute funds to fill in the cost gap if at least 70-75% of homeowners participate voluntarily in option 2 so the \$29.65 debt service line can be assumed.**
- Water connection allows for metered usage of actual sanitary sewer use from Aqua IN.

Cost Offsets:

1. The installation of fire hydrants within the neighborhood has a small, positive impact on home insurance rates.
2. Potable water main access in comparison to a well provides some increase in real and perceived home value.
3. For lower usage customers (1-2 residents in a home), the installation of a water meter can reduce your sanitary sewer bill by transitioning from Aqua Indiana's flat rate of \$63.85 to a base rate plus metered rate for usage. \$30.00 + \$4.00/1000 gallons of usage

reducing your sanitary sewer bill between \$13.00 and \$26.00 per month, depending on usage.

4. You may still use your well for watering lawn, etc to reduce usage cost from FWCU

Conclusions and Recommendations

This PIR examined possible service options and expected costs for fire protection and potable water service to the study area. The PIR presents such reasonable infrastructure options and expected cost scenarios and was based on information and the performance of similar projects, utility agencies and industry standards.

The Whitley County RSD recommends a majority survey approach to this project if one is to be pursued. The project moving forward would require additional discussions with the community association and feedback from residents.

We will hold a second meeting to assess feedback and potential project revisions based on that feedback.