

**Handout for Public Hearing  
2017 City of North Vernon  
Wastewater Service to North Area of City  
March 13, 2017 Meeting Date**

**Overview**

The City of North Vernon annexed an area adjacent to its north boundary in 2015. The area is currently served by on-site septic systems. The City desires to construct a gravity sewer sanitary wastewater collection system in the annexed area in keeping with the provisions for gravity sewers in the City. The Report prepared for the Annexation indicated that a gravity sewer collection system would be installed due to the Annexation.

This project considers only wastewater utility service. For instance, the water service will be continued to be provided by the current water provider.

The area like much of Jennings County has soils that are not effective for use as on-site absorption fields. The Jennings County Health Department has provided a support letter to indicate that on-site systems have failed in the area and that a community collection system should improve the environment in the area.

Due to the cost of the project, various agencies were reviewed for financing of the project. For various factors, no grant funds are available for the project. The project is proposed to be financed by the Indiana Finance Authority (IFA) through the State Revolving Loan Fund (SRF) program. The SRF funding was determined to be the best financing alternative for the City for this project. The City has utilized the SRF program recently for another project.

The funding process requires that a Preliminary Engineering Report (PER) be prepared for the project meeting the guidelines of the SRF program. The Public Hearing is to relay information from the PER to the public and to gather comments from the public.

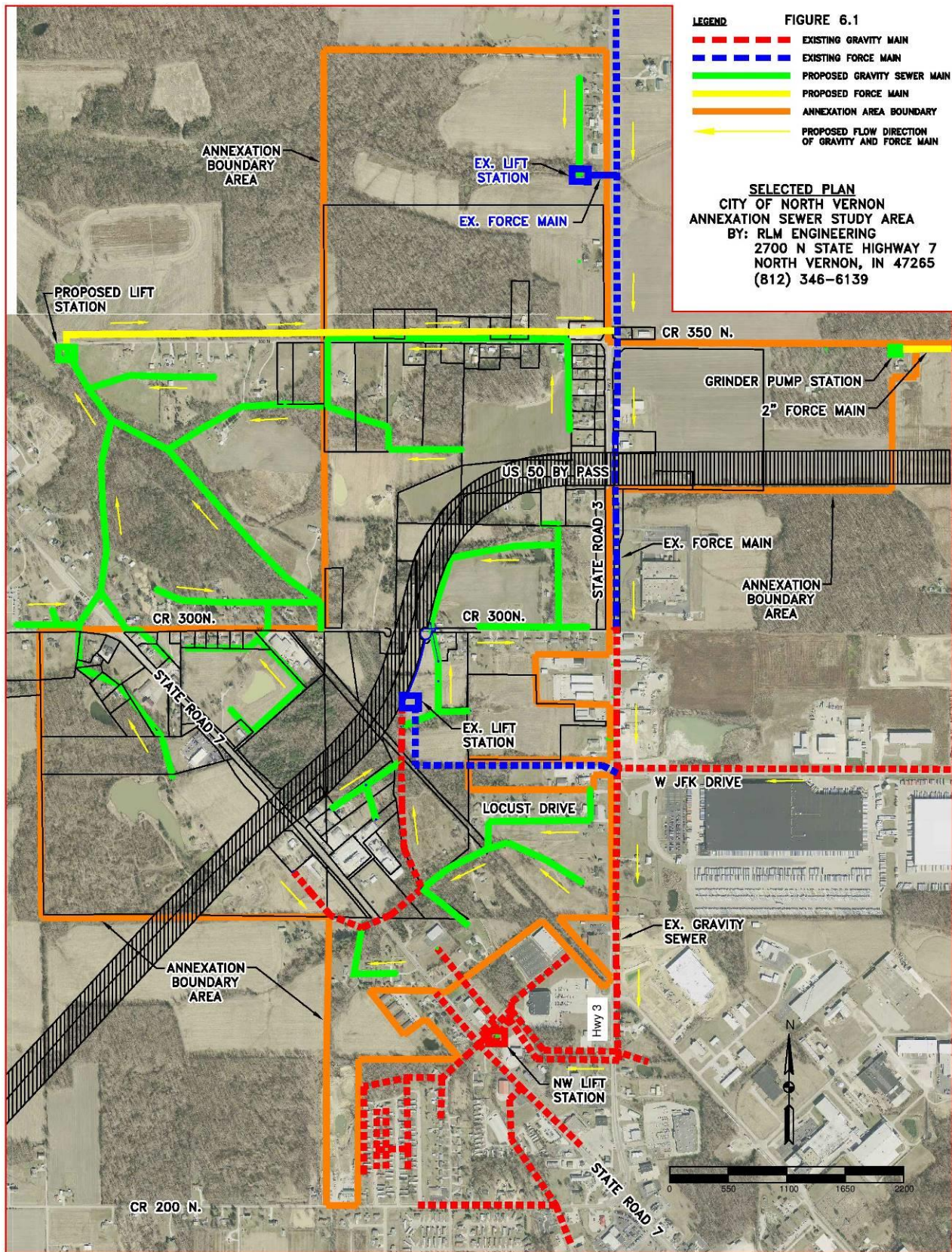
**Project Area**

A Study Area was determined for the project. The Study Area includes an area outside of the Annexed Area. The reason an area outside of the City's boundary was included was for technical or design reasons. The alternative analysis section of the report determined that including the area is beneficial with the long term costs being reduced and more on-site systems being removed. The Study Area is shown on Figure 1.02.

There are two projects underway in the Project Area concerning wastewater collection. One is a construction project near SR 7 south of the US 50 bypass (SR 750). A project to provide sanitary sewer for a development at the southwest corner of the intersection of SR 7 and SR 750 is in construction. The configuration of the project will benefit the nearby area as the layout being planned for the PER was used. A second project is installing a lift station for the industry along SR3. The lift station will be used for servicing the nearby area. Both of these projects are funded by other means and are not included in the PER. However, both projects are helpful in providing wastewater service to portions of the Study Area.







**Planned Project**

Figure 6.1 indicates the selected plan. Figure 6.1 is an aerial map of the project area with the proposed locations of the gravity sewers, lift stations, and force mains. The project will install approximately

35,000 feet of 8 inch gravity sewer, 107 manholes, 5200 feet of 4 inch force main, one 85 gpm lift station, one grinder pump station, 1100 feet of 2 inch force main, the necessary pavement repairs, road bores, etc. for 133 service connections.

The proposed improvements will connect to the existing collection system. The existing collection system has adequate capacity to receive the wastewater flows and get the flow to the wastewater treatment facility. The wastewater treatment facility also has the capability to treat the additional flow.

The total construction cost of the project is estimated at \$3,018,300.00. Non-constructions are estimated at \$870,000.00 with the total project cost estimated at \$3,888,300.00. There are some costs that are not eligible for funding which means that about \$3,778,300.00 will need to be financed.

### **Environmental Considerations**

The requirements for the PER requires that various environmental issues be reviewed and be included within the PER. The following items were included in the PER:

- Disturbed/Undisturbed land
- Historical, Architectural, and Archeological Sites
- Wetlands
- Groundwater
- 100-year flood plain
- Plants and animals
- Prime farmland
- Air quality
- Open space and recreational opportunities
- Lake Michigan coastal management zone impacts
- National Natural Landmarks Impacts

The project should not adversely affect any of the above items. As the project does not remove any existing buildings with most of the construction taking place in residential areas and land that has been disturbed, then the projects impacts are minimal. Mitigation measures will be enacted where appropriate. The information contained in the report is reviewed by the SRF program and they make additional coordination with other agencies to determine whether additional mitigation measures are appropriate.

### **Project Schedule**

The project is at the Public Hearing stage. The public hearing process is complete once the comment period is over and the summary of the public hearing process and comments are included into the PER. Any changes to the PER by the Utility Services Board and City Council are then added to the PER. The City Council provides a PER acceptance resolution and then the PER is forwarded to the SRF program for review.

SRF reviews the PER, conducts interagency environmental coordination, provides comments, and approves the PER.

Once the PER has been approved, then design, easement acquisition, permits, etc. are completed. After plan approval by IDEM, the project will be advertised for bids. After the receipt of bids, the project



budget is revised (and along with other documents being completed), then the loan is closed. Construction of the project cannot begin until the loan is closed.

The construction of the project will take 9 to 12 months to complete. However, some portions of the proposed sewer will be available for use prior to the final completion.

### **Financial Information**

The project is proposed to be funded through the Indiana SRF. The SRF is 20 year financing. London Witte Group (LWG) is a financial firm that worked on the recent SRF funding for the wastewater treatment facility improvements. LWG provided a review of the potential financing costs and wastewater department budget to determine the effect on user's rates.

LWG used a very conservative approach in assuming what the users rates may be with the project. The interest rate for the project will not be established until the loan is closed on the project which is after the project has been bid. With this possibly being a year away, the interest rate used was increased over the current rate that is in effect. The length of the loan is 20 years. LWG also used a slightly higher project cost in the rate analysis to provide a conservative (or high side) amount for the potential rate increase. In addition, the wastewater annual budget was increased for potential inflationary factors.

Efforts are also being made to enlist the North Vernon Redevelopment Commission to aide in making the loan payments. Any funding by the NVRC on the annual loan payment will offset any rate increase needed.

Until loan closing and a determination by NVRC, the final rate increase cannot be determined. LWG analysis can be considered a worst case scenario. Their results indicate that the residential wastewater rate would increase by \$5.32 for the minimum bill (less than 3000 gallons per month) and by \$6.58 for an average usage of 4000 gallons per month. Of the PER project related items, the attributed increase due to the project would be \$3.40 for the minimum monthly bill and \$4.21 for the average monthly bill.

Since the amount of assistance by NVRC has not been determined and the analysis includes inflation factors to the budget, then it is possible that no or little rate increase may be needed. Therefore, a rate increase from \$0.00 to \$5.32 for the minimum bill and \$0.00 to \$6.58 for the average bill is the forecast from the financial analysis for what the wastewater department may need once the loan is closed for the PER project.

### **Project Area Items of Interest for Property Owners**

The following contains information for property owners in the Project Area concerning easements, service line construction requirements, and costs for connecting to the proposed sewer system.

#### **What do we need easements for?**

Generally, we need easements for the construction of sewers, manholes, force mains, and access drives to the lift stations. Lift stations sites are not constructed in easements, but are titled transferred to the Utility. Some locations will be in existing street right-of-way, but due to the location of other utilities, etc., most locations for this project will be in easements. Easements may be purchased, but the property owner may donate the easement.

### **What size are the easements?**

A permanent easement of 20 feet wide works for most locations. The sewer main will typically be located in the center of the 20 feet wide easement. Due to the depth of excavation needed for the gravity sewer, an additional 20 feet wide temporary construction easement is typical.

### **What about sewer service lines to residences and businesses?**

The Sewer Use Ordinance indicates that the property owner is to construct, maintain, and pay for the service lines to connect the structure to the main sewer. The Utility will provide a stub-out for each property owner to connect to. As the Utility is not constructing service lines, the Utility will not need an easement for the service lines.

### **Location of the connection for the service line**

The property owner will be contacted during construction to determine the location desired for the connection point. The connection point will be either on the main line easement (if the building is on the same side of the street as the sewer main) or it will be at the road right-of-way (if the building is on the opposite side of the street).

The location of the service line on the individual's property is dependent upon each property owner determination as what is best for the property owner. That is, the property owner could determine that it may be better to change where the drain line exits the building or to connect to the existing pipe just outside of the building. The location where it needs to connect to on the sewer main needs to be determined prior to the construction of the main near the property.

Use of any existing buried piping will need to be approved by the Wastewater Superintendent as per the Sewer Use Ordinance. The construction and materials used for the service line must meet the construction requirements for the Utility. The Sewer Use Ordinance and Construction requirements are available on the City's Utility website at <http://northvernon-in.gov/wastewater/ordinances.php>

### **What happens to the existing septic tank or on-site system?**

Indiana requires that the on-site system be abandoned properly (Referenced 410 IAC 6-8.3-90 for residential systems and 410 IAC 6-10.1-98 for commercial systems). The property owner is responsible for the abandonment and costs for abandonment of the on-site system. Basically, the procedures involve:

- removal of all power and equipment from source (if any),
- pumping and disposal of the tank(s) by licensed hauler
- Removal of the tanks or crushing the lids into the tanks and filling the tank with clean backfill
- Grade and establish vegetation
- Any effluent present on the property must be covered with hydrated lime
- The absorption field does not have to be removed, but if it is removed, then proper procedures must be followed.
- Written documentation by receipt of the contractor doing the abandonment must be provided to the Wastewater Superintendent and the county health department.
- Refer to the above IAC requirements for clarifications.

### **When do I have to connect to the sewer?**

The Sewer Use Ordinance requires the connection to the sewer for properties within 300 feet of the sewer within 90 days of being notified by the Wastewater Department.

### **What are the property owner's costs?**

The sewer mains, lift stations, manholes, and design will be a funded project through the Utility. The property owner will be required to construct and pay for the service line and abandonment of the on-site system. It is anticipated that most property owner's cost for the service line and abandonment will range from \$1500.00 to \$1800.00.

The Utility also has a tap fee of \$250.00 and a capacity fee of \$600.00 for a total of \$850.00 for each residential connection. Non-residential fees are treated as residential equivalents for the flow of 400 gpd by building use factors.

### **Rates**

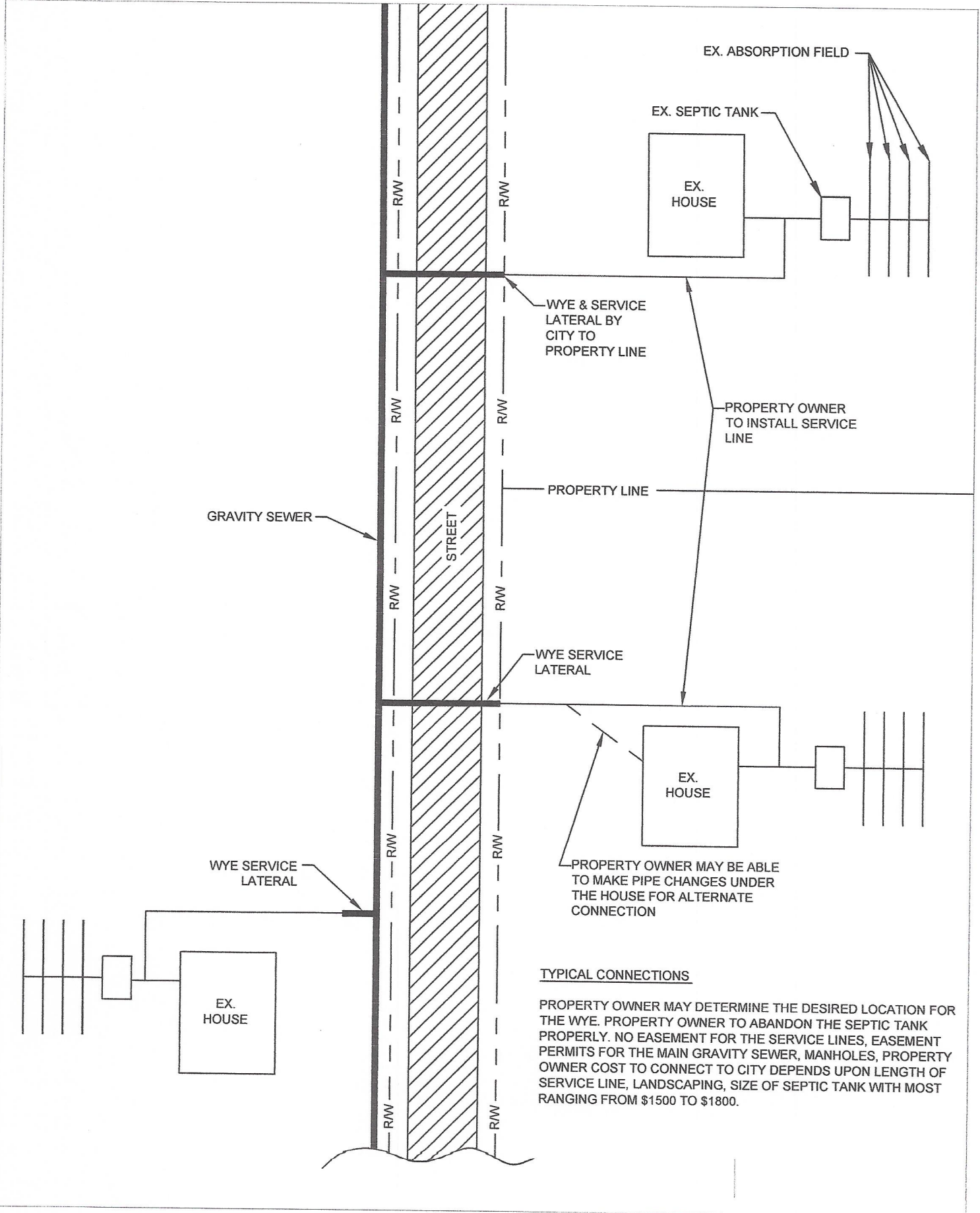
Each user will pay monthly usage rates based upon water meter readings. The rates for the annexation area will be the same as all existing customers. The current 2017 monthly rates are:

|                    |                          |
|--------------------|--------------------------|
| First 3000 gallons | \$ 28.96 (minimum)       |
| Next 1000 gallons  | \$ 7.03 per 1000 gallons |
| Above 4000 gallons | \$ 7.03 per 1000 gallons |

For example, the following indicates the billing for various amounts of usage:

| Amount used  | Cost  |
|--------------|---|
| 1000 gallons | \$ 28.96  |
| 2000 gallons | \$ 28.96  |
| 3000 gallons | \$ 28.96  |
| 4000 gallons | \$ 35.99 (Considered as the average residential bill) |
| 5000 gallons | \$ 43.02  |
| 6000 gallons | \$ 50.05  |

The user rates after the project are dependent upon several factors, including the interest rate at the time of loan closing, inflationary factors for the existing wastewater department items, and the amount of financial assistance from NVRC. See the previous financial discussion as to how this may impact the rates.



**TYPICAL CONNECTIONS**

PROPERTY OWNER MAY DETERMINE THE DESIRED LOCATION FOR THE WYE. PROPERTY OWNER TO ABANDON THE SEPTIC TANK PROPERLY. NO EASEMENT FOR THE SERVICE LINES, EASEMENT PERMITS FOR THE MAIN GRAVITY SEWER, MANHOLES, PROPERTY OWNER COST TO CONNECT TO CITY DEPENDS UPON LENGTH OF SERVICE LINE, LANDSCAPING, SIZE OF SEPTIC TANK WITH MOST RANGING FROM \$1500 TO \$1800.