

NOTES FROM MEETING WITH SUSAN COCKRELL, TOWN MANAGER, KILMARNOCK
Spring 2020
Ref: Possible Water /Sewer connection for Irvington

Costs to residents:

The minimum bill for water/sewer for residents is \$80.00 bi-monthly. \$ 29.00 of that is applied to water costs; the rest to sewer. This includes usage up to 6000 gallons; 6001 gallons=31.97; 7001 gallons =34.94; 8001=37.91. THIS IS FOR THE WATER USAGE ONLY. This represents @36% of the bill; an additional 64% represents sewage usage. ALSO THESE FIGURES ARE FOR IN TOWN RESIDENTS. IRVINGTON RESIDENTS WOULD PAY SUBSTANTIALLY HIGHER.

HOOK-UP Fees -At that time the hook up fees were \$10,095 for Kilmarnock residents. The hook-up fees represent the charge for hooking up to the system as well as, a “capital recovery charge” -a fee for buying into the system. (Think of it as their way of recovery capital investment costs of equipment, personnel, regulatory requirements and anticipated future capital expenses. Again, the fees for Irvington residents will be higher. Using the number given to Ed Sulick in 2016, I expect the actual number to be \$16,000. per Irvington Household. Any additional costs to get service from the meter to the home are the responsibility of the resident.

***Draper Aden Associates shows Kilmarnock's “out of town differential” as 1.5 the charges made to in town residents.

Costs to the Town of Irvington:

--negotiated costs for engineering studies. She estimates \$50,000-\$100,000. The towns will negotiate who will pay what share of the preliminary studies and engineering costs. (I spoke to an engineer who quoted \$200,000-300,000 for engineering studies)

The rest of the costs are entirely ours:

--Cost per foot to get the lines from Hills Quarter to Irvington

--Cost of water towers and pumping stations She estimates \$100,000-\$200,000 for pumping station alone. Engineering studies will decide if water towers are required and how many pumping stations are required. (I spoke to an engineer who noted that since you are basically pumping effluent uphill, we would need either a very large pump (1,000,000. cost) OR a series of smaller ones (@ 200,000 each).

- Cost to deliver to individual homes-to get lines from the main to meters.
- Cost to "buy back" water system from Aqua Virginia

**Again using Ed Sulick's milage figures and subtracting the miles between the bypass road and Hills Quarter: @ \$80.00/ linear foot: 6.2 miles X 5280 feet/mile= 32736 feet = \$2,618,880 for the lines alone.

GETTING STARTED

Start with a working group between the two towns. Irvington initiates a task force to pursue this. Money needs to be spent just to determine if it makes sense economically.

Authorize discussion at the Town Council level-- Council to Council. Agreements between the two parties as to how we want to work together and how costs will be shared. These costs include mapping, engineering studies, survey costs, system costs --such as pumping stations and water towers.

Arrive at a "Memorandum of Understanding" between the Towns as to all engineering costs and how they will be shared; construction costs -nail down a per foot charge; what is the water/sewer package residents will pay ?

Our charter code must include wording that if your septic system fails, you are required to hook on. Any new construction MUST hook on. Kilmarnock will consider how many residents will buy into the system initially to decide if it is worth it to pursue.

ITEMS TO CONSIDER:

- Community income levels. Do we have pockets of individuals who would qualify for grants?
- Do we have an ongoing agreement with Aqua that they are Irvington's primary supplier? Is there a legal arrangement through the State Corporation Commission? Does Aqua own the "system" ie. the hardware and the accounts?

NOTES:

Ms Cockrell was eager to pursue a connection with Irvington. She kept pointing out that the distance is shorter now that Hills Quarter has bought on (and presumably, Compass Entertainment Center). She hopes to rope in RWC and that will allow costs to Pittman's Quarter to be shared. Kilmarnock needs more capacity to make their numbers work.

However, she was FIRM that they must have the water, as well as, the sewer. They meter the water going into each property to determine gallons used with the assumption that what goes in comes out one way or the other. Quite recently, however, they are reexamining that position. I could not get any information from her about updated costs. She acknowledged that they are looking into providing "sewer only" service, but was not able to provide details as to how that might work. I have to assume that since their policy is that the homeowner has the responsibility to pay for the water line from the meter to the house, the same would apply for the new sewer line. The homeowner pays for the trenching and laying the pipe to deliver household waste to the main. This, in addition to the "hook-up" fee.

Kilmarnock has had two water/sewer rate increases since this conversation. One, an across the board increase for both water and sewer. My base rate went from \$150.00 to \$160.00. The second is described as an increase in the "sewer only" part of the bill. My new rate is \$170.00 minimum. As in "all things Kilmarnock", the rates for outside Kilmarnock customers will be 1.5 times the basic rate: a minimum of \$255.00 bimonthly. This applies to all business owners -regardless of actual usage. An office with a toilet and sink pays the same minimum rate.

I did look into Irvington's "relationship" with Aqua, Va. It seems that a past Town Council gave the system to Sydnor who subsequently sold it to Aqua. There is no contract and we have no negotiating power. Aqua owns the infrastructure and the right to supply Irvington's water.

Going with a "Sewer only" option will result in wasteful duplication of infrastructure and wasteful use of limited energy resources--- and most importantly, leave our residents with TWO ongoing bills for services that are bound to increase exponentially as energy costs continue to increase.

Another note: due to the projected exponential increases in power costs, the EPA no longer supports pumping effluent for long distances. This is not viewed as a wise use of limited energy resources.

POSSIBILITY OF HOOKING UP WITH WHITE STONE

The White Stone Water/Sewer Project is planned in multiple phases with the first phase becoming operational in the 4th quarter of 2021 or the first quarter of 2022. They are in the process of an inspection of the first phase by a third party independent inspector. The estimated cost for phase 1 and 2 in the Preliminary Engineering study was \$7,888,000.

Phase 1-

- cost 5 million
- paid all with grants; the largest from USDA
- will be functional 4th quarter this year or early next year
- processes 40,000 gallons/day; basically a “glorified septic tank”; each building is equipped with a buried grinder pump which grinds waste which is then pumped into tank. Effluent is then pumped to an 8 acre septic field: a “forced pump with drip system”.

Phase 2-

- design documents are not quite ready
- plan to add service to additional 125 homes
- additional 40,000 gal./day capability

Phase 3 and a possible Phase 4 are planned.

THERE IS NO CAPABILITY TO CONNECT WITH IRVINGTON IN THE NEAR FUTURE.
In fact, grant agreements prohibit this for 2 years AFTER completion.

BUILD OUR OWN SYSTEM

This would involve acquiring property, building an infrastructure of sewer lines and a plant to process effluent (or a system similar to White Stone's), possible power upgrades, costs of future maintenance and repairs, as well as, salaries for personnel to operate the system.

As Ed Sulick concluded in 2016, based on the size of Irvington, the numbers just don't work. We do not have the number of buildings or population to support it. Even if we were to get grant money for some or all of a project of this scope, our taxpayers would be on the hook for: hook up charges, lateral sewer lines between their residence and the main, plant maintenance and repairs, energy upgrades, operation costs, regulatory requirements and personnel, likely tax increases AND monthly sewer fees going forward.

DECENTRALIZED SYSTEMS

In rural areas, the EPA currently supports (properly functioning) septic systems in individual homes as the BEST solution environmentally AND for conserving limited energy resources. The thinking is that septic systems in individual homes act as a series of mini "septic treatment plants" that uniformly distribute effluent into the soils for final processing. This is more environmently sound and requires no additional energy cost for pumping. In fact, the EPA no longer supports pumping effluent for miles as a wise use of energy resources. This is important because energy costs are rising exponentially and are expected to continue to rise. Increased energy costs for pumping effluent WILL keep monthly residential sewer bills continually rising.

The current recommendation, where soils do not support traditional septic fields is a "decentralized" system servicing a cluster of homes. See information on Caroline County, Va. where this model has been adopted.

In Irvington, this would involve identifying properties with failed septic systems and building a "package unit" for any cluster of houses and/or individual engineered systems for properties where clustering is not feasible.