

A Brief History of Heidelberg Beach's Infrastructure Projects

Written by Jane Chidester, Association President, in the Summer of 2019

Milestones

1930: 2" Byers Iron pipes were laid for water. The water was drawn from the lake and stored in a cistern buried in the sand. The water was treated and then pumped up the cliff to the water lines that ran under each of the roads. To allow gravity to help distribute the water, the lines sloped southward and terminated at the south end of each road.

Date Unknown: 6" and 8" clay pipe was laid for a "storm" sewer in each road. This pipe was probably laid in 1930 at the same time as the water lines because it lies directly underneath the water line in most areas. These clay pipes slope south and drain directly into Fichtel Ditch. This sewer is used for both rain water run-off and septic tank run-off.

Dates Vary from the late 1920's to 1950's: As each cottage was built, a septic tank was placed. There are a few newer tanks, but most were placed before 1960.

Late 1950's to 1964: After years of high expense and many problems keeping the old cistern system running and safe for drinking, the community wanted to tie into Huron's public water system. By 1964, a plan was in place and approved by the membership to replace the water lines, add fire hydrants, and add a gravity-based sanitary sewer system. A 3.5% interest loan was secured through the Erie County Commissioners, under the direction of one of Heidelberg Beach's residents, Paul Reutenik, who was the Financial Administrator for Erie County.

This plan was never implemented.

1965: As a stop-gap measure, Heidelberg Beach's water source was changed to Huron city public water without replacing the private water lines within the community. The plumbing was shut off at the lake side, a connection line was run from the city's main in Rt. 6 to a newly-installed water meter near the Heidelberg Beach sign just south of the Hayman & Warder cottages.

1965 to Present: The 1964 plan was contingent upon Erie County upgrading the lines in Rt. 6 and initially there were construction delays on the part of the county. The new lines were installed by the late 1960's and Paul Reutenik's term ended as an Erie County Commissioner. Then time just continued to pass. It is unknown why the Board of Trustees, the county, and the community did not follow-up on implementing the full plan.

Dates Unknown: Over time, more tweaks and fixes were made to the water line to reduce the rusty brown water due to stagnation and address the water pressure problems. Some of the lines were connected to simulate circuits. This allowed the pressurized water not to sit still at the end of each water line as had been the case.

At some point, the new water meter was moved to the south end of W. Virginia Road, in the grass south of Willowdale Drive.

A few manholes were added over the years to access the pipes. It is unclear what this access provided or what actions were taken as a result.

1985: Until this point the only fire hydrant for the neighborhood was up at Rt. 6. A new 8" line was run from our internal water meter at the south end of W. Virginia to the playground area, where a second water meter was installed along with a fire hydrant.

2000-2010: The makeup of the year-round residents started evolving—some moved, some passed away, some made Heidelberg Beach their new home. While some outside contractors had been used in past years, to this point, much of the repair work had been done by the generations of Heidelberg Beach residents who had the knowledge and equipment to do it.

2010-Present: While there were sporadic issues all along, in about 2012, problems started arising more frequently. 2014 was a particularly cold winter, and that increased the pace of problems for a year or two. For three years (February 2014 to February 2017), there were 9 repairs, averaging one repair about every 4 months.

During these years, the help of outside contractors was used more. The contractors gave us further insight into the current state of our system, the state of the county and government entities that oversaw public health, and the situation we were in.

2015: With the increasing frequency and severity of the leaks and breaks, the Board of Trustees re-opened the discussion about infrastructure and what the Board should be doing to protect our members, be in compliance with standards and regulations, and fulfill our responsibility to the community.

The Premise: The folklore for years was that “money was out there” to help us. We would never have to pay for a new system ourselves. When Erie County “made us” do it, they would also pay for it—so we should just “wait.” The corollary to this stance was always that there was no need to save money. We wanted to “look poor” to get all grant money possible and the project would be paid for by someone else anyway.

The Beginning: With this premise, the Board decided that it was time to try to “find the money,” pick up the ball that was dropped in the 1960’s, and proactively consider getting our aging 85-year-old system replaced.

With the help and connections of an Association member who was a career property developer, Jeff Springer, the Board started to do research. Jeff Springer and Jane Chidester (current President of the Association) consulted with all of those in the community who might have any information. Jeff reached out to engineering firms to gauge ability and interest in creating a *Feasibility Study* for us. (Note, that in infrastructure nomenclature, this is akin to creating a *Grant Proposal* in other industries. The primary purpose of this document is to “shop for money.”) Jeff and Jane narrowed the field and made a recommendation to the Board to contract with OHM Advisors, which the Board accepted and approved.

Why OHM? The engineers from this firm were the engineers for the City of Huron and regularly worked with Erie County officials on a range of related projects. They had a pre-existing working relationship with the people that would be involved in our project. Also, and not insignificantly, a Kramer family member worked at OHM and oversaw the engineers who were working for us. The work done for us far exceeded the price we paid.

The Strategy: OHM surveyed Heidelberg Beach, made drawings, did topological studies, and assessed our current situation.

The solution OHM suggested was to have our new infrastructure become a *public system* and therefore, become Erie County’s responsibility. As such, this plan needed to meet all the city, county, state, and federal codes for compliance. It was the Board’s hope that after going through this major upheaval, we could turn over all future maintenance of our infrastructure to the county.

Since it was our premise that the cost for a public system would be free or very low-cost to us, this was the strategy we took. Also, in the spirit of all “*Grant Proposals*,” the cost was estimated high with the expectation we may not get all the funds we were asking for.

Roughly, for the entire project, the estimate was \$2.3 million dollars.

2016: With the completed *Feasibility Study* in hand, OHM, Jane Chidester, Jeff Springer, and the Board set to work on finding the money.

OHM made presentations and submitted applications. Board members attended meetings with the Erie County Commissioners and other agencies that oversaw water and sewer projects. For good measure, we also shopped for loans at local and commercial banks.

In May 2016, Heidelberg Beach was granted a \$900,000 EPA low-interest water line loan. Unfortunately, we discovered the money had to be given to and administered for our benefit through Erie County—and the county was unwilling to do this. They refused the funds.

The Bottom Fell out of our Plan: Put simply, through this process, we learned that our premise was completely wrong. Because Heidelberg Beach is a private property, Erie County will *never* let us have access to any grants or loans from outside agencies like the EPA or USDA. It is the firm policy of Erie County to not assist homeowners or private communities with this type of large-scale infrastructure effort. The County does, at times, assist in much smaller and narrower ways, with individual homeowners who meet certain low-income criteria. And finally, even if we paid for this outright and built to public standards, it would be difficult, if not impossible, to get the county to take over the maintenance responsibility.

The Board Re-Grouped: Because commercial loans are complicated to get, interest rates are high, large down-payments are required, and repayment schedules are short, the Board concluded the best course for Heidelberg Beach was to pay for it ourselves and save as aggressively as possible. OHM re-estimated the project as an internal, private system that we will maintain.

Roughly, for the entire project, the estimate was \$1.8 million dollars. \$700,000 for a water line. \$800,000 for gravity sanitary sewer. \$300,000 for storm sewer.

Determining the Assessment Structure: Since Heidelberg Beach now had to pay for this, the Board evaluated how to assess it.

The three standard ways to collect money for an infrastructure project are (1) based on property value, (2) based on front footage, or (3) based on “taps.” After a summer of discussion and feedback, the Board enacted option (3), an equal sharing of the cost between existing cottages. Any new cottages built in the future will have to pay a “tap in” fee equal to what the existing 48 cottages have paid. See the full [Assessment Methods Summary](#) for more details.

2017: At the summer Annual Membership Meeting, the community voted to move forward with the replacement of the water lines. Then at the Board’s fall budget meeting, the Board levied a new assessment of \$15,000 per cottage (\$720,000 total) to be collected over 5 or 10 years, depending on the assessment level chosen. See the [2017 Binding Resolution of the Board](#) for full details.

The installment distribution is as follows:

13 cottages chose an accelerated installment (\$5,000 or greater, collected in 3 years or less)

16 cottages chose the standard installment (\$3,000 collected in 5 years)

19 cottages chose the delayed installment (\$1,000 collected for 5 years, then \$2,000 for 5 years)

2018: A water main connection to a cottage failed and leaked for about 4 months before it was found and fixed. Continued to collect funds for the Infrastructure Reserve.

2019: Another cottage's water main connection failed and leaked for about 4 months. Major water line break in April—and currently pursuing at least two other problems. Still collecting funds.

Expected 2020-2021: The target of \$500,000 in savings should be reached. The Board will set up open community meetings with an engineer, contractors willing to consult, and anyone and everyone in the community that can share experience and expertise, to begin the detailed decision-making process.

Follow-on Insights

The two most painful aspects of this three-year investigation are not understanding why the effort to replace and upgrade our system did not continue after the community voted to do so in 1964—and why the years of folklore got the facts so wrong.

Why did the 1964 effort fail? As we learned in the 2016 meetings with Erie County officials, it is not standard practice to fund or administrate projects for a private community like Heidelberg Beach. We laid the lines we use, under the roads we maintain, and in the County's view, they are our lines to maintain. There are very rare instances where the County will financially participate with a person or community. The most probable scenario is if the person or subdivision is cited for EPA violations. If Erie County administers a loan, they are bound to repay it. A few years ago, Erie County helped Beulah Beach fund a pump station, but many residents defaulted and did not pay, which left Erie County on the hook for that money. This closed the door permanently for other private communities seeking Erie County's help.

The best guess at explaining why beach members thought getting outside funding was even a possibility was probably because of Paul Reutenik. We now believe that Paul Reutenik's time as an Erie County Commissioner in the 1960's was not just helpful in moving the effort along—it *was the only thing*.

The Misunderstood Process and the Mistaken Folklore: It was also not understood that Heidelberg Beach was so beholden to needing the County's help in receiving outside grants or low-interest loans. The EPA and other agencies do not work directly with private communities or Homeowners Associations—they only work with municipalities. The Association members who had connections to these government agencies from their career experience, knew these agencies had money to allocate, but did not understand that it required Erie County's administration. As pointed out above, Erie County does not designate money or facilitate infrastructure projects for private homeowners or private communities.

Then there was the folklore. It was ardently believed that there were no sanitary lines at Rt. 6 to connect to. It was also believed that the Huron Processing Plant did not have the capacity to process our sewage. Despite the evidence and facts, these notions were still hard to dispel in 2015 because the myths had been passed around for years with such "authority."

Also, in a community mainly comprised of farmers and ministers, "subsidies" were a way of life. It was easy to believe, and the community wanted to believe, that someone else would pay for this.

Finally, there were and are many differing opinions on "how bad" our current system is. We know things were considered "so bad" with the system 30 years after its initial installation that the community took active measures to replace it in 1964.

Logic dictates that at 89 years it is time to look seriously at replacing our system, but emotions still run high. Just 3 years ago *no one* had any idea what we faced and how much it was going to cost. Most of the cottages at Heidelberg Beach are passed down generationally, so having ample resources to face a crisis like this is not a given. This was a true shock to everyone. *No one* was happy to learn we have this huge unexpected cost, but it is particularly difficult for those with very limited means.

Known Water Line Issues

- The water main is greatly undersized with 2” lines. The current standard is 8”.
- The water main was laid at a time when water was drawn from Lake Erie, so the layout and design focused on that.
- Plumbing standards have changed dramatically in the last 89 years. Switching the water source from the lake to municipal water without laying new lines created many problems throughout the years.
- To do repairs on the water lines, or repairs at the connections to an individual cottage, we must shut off the water to the entire neighborhood. We can only do this by shutting the main valve by Rt. 6—which we are technically not supposed to be using because it is owned by the county. We cannot use our own internal shut-offs because they don’t fully stop the water flow because of our hopscotch of pipe connections. Hence, the new system must be designed with logical shut-off sections.
- We still only have one fire hydrant for the entire neighborhood, and it makes it hard for members to get good home insurance coverage.
- The lines are very fragile now. The iron has degraded and rusted, especially in the roads that used the acidic cinders from the neighboring farm’s furnace to line the ditches. The pipes are filled with pinhole leaks—only being held together by the compacted clay around the rusted-out pipe. The pipe is so weak that anytime we touch it to make a fix, we generally create another leak.
- Cottage owner’s faulty exterior water valve shut-offs have been a constant source of leaks and problems over the years.
- The water system does not meet Erie County Building and Health Department codes.

Known Sewer Line & Septic Issues

- Most of the septic tanks tie directly into the storm sewer (no treatment or leach field).
- Output from the storm sewer (and thus septic tanks) flows directly into Fichtel Ditch, and then the lake.
- Many septic tanks are undersized for a cottage’s occupancy.
- The septic “system” (which is not really a system) does not meet Health Department codes.

Things to Keep in Mind in Design

- Try to minimize disruption as much as possible. Possibly use small circuits or a double system.
- The Association owns the following easements widths. A new system would have to work within these boundaries or new easements would have to be negotiated.
 - 6’ down the tree line pathways
 - 16’ Pennsylvania Road
 - 20’ W. Virginia, Kentucky, Indiana, Michigan, and Ohio Roads
 - 30’ Willowdale Drive
 - 40’ Entrance to Willowdale across bridge
- 8” is standard water line size, 6” could possibly be used in some places. Fire hydrants require 8” line.
- The Erie County water line down Rt. 6 is an 8” line. No current plans for upgrade.
- The Erie County sanitary line down Rt. 6 is pressurized (not sure of dimension).
- Heidelberg Beach will need a pump station (could be “underground” up near Rt. 6).
- There are septic tanks that are in or near tree line pathways: 62 Kentucky and 69 Kentucky.
- A storm line crosses the tree line pathway easement: 8 Pennsylvania to between 24 & 25 W. Virginia.
- Areas of bad drainage:
 - 60 Kentucky
 - 79 Indiana (street area)
 - South end of Michigan
 - Across Willowdale by the Tennis Court