

Bellwood, IL

3800 Feet of constricted sanitary lines.



City of Bellwood, IL had 3800 feet of sanitary lines, catch basin and lift stations that had this build up in them.

Estimate cost to remove the lines and replace from several engineering firms at \$1.1 million dollars. Bellwood needed a different solution.

W.T. United was asked to advise on the problem

In Feb. of 2015 W. T. United was invited to walk the sanitary collection system and review the situation. After spending a couple days with Bellwood's personnel. A sample of the hardened Soda Ash was pulled from the lines and put thru a bench test to determine if United had a solution.

Bellwood had a manufacturer that had been using their sanitary collection system to get rid of a by-product of their production for years. The end results was 3,800 feet of their sanitary collection system totally blocked. The blockages were causing Out of System Issues with Rain Events. Was creating situations where they had to report occurrences of outages to the E.P.A. Was causing disruptions of services to customers.

This is a photo from above of a manhole opening.

The deposit below is the amount of soda ash that had set up in the system at this one point.



What Bellwood had to determine

- One:** Cost in disruption of services to the City if they decided to replace the system.
- Two:** How to pay the est. 1.1 million dollars of the replacement proposal.
- Three:** Their collection system feed into another Cities treatment operations. Therefore there was the concern in regards to staying in compliance with that City.
- Four:** The amount of time, personnel and resources needed to replace 3,800 feet of sanitary collection lines.



As you can see by the photo, this system was very close to being totally off line because of restriction in the lines.

W.T. United Solution

After on sight inspections with a licensed waste water operator from home office and the local waste water field rep United had a solution.

Testing a special blended product of ESA on sight it was determined that we could clean up the system without the need to replace pipes, extensive time and expensive special equipment.

Product in place, with Bellwood's own personnel and two support personnel from W.T. United the removal process began.

The process started around the middle of May. Was not operational everyday because of routine task and weather.

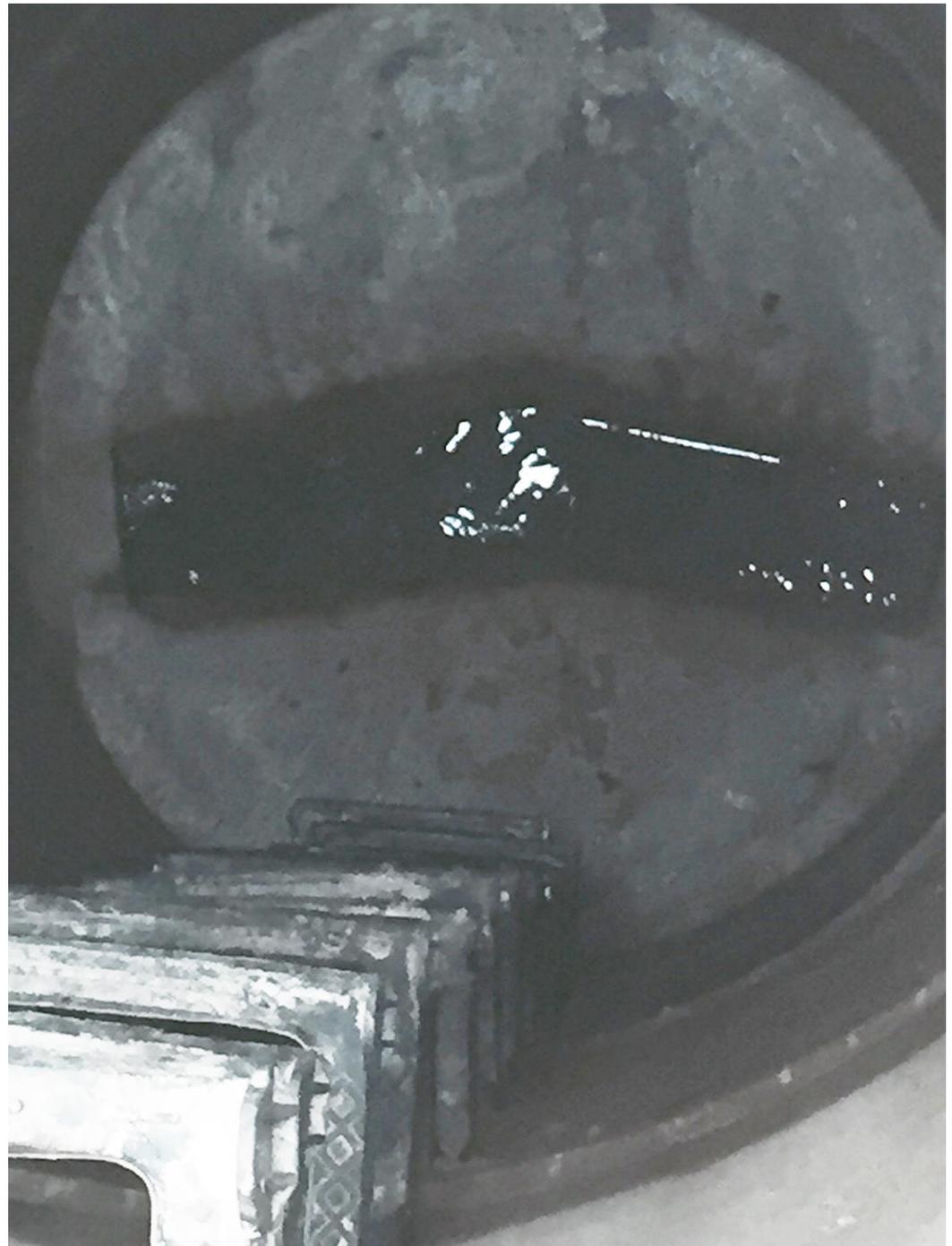
Entire 3,800 feet of sanitary system was rid of Soda Ash before the 1st of October 2015.

At a total cost of material of less that \$70,000.00.

Here is that same view from above of the previous manhole.

All the build-up removed.

The entire system was this clean in less than 5 months.



The City of Bellwood was so pleased with the end results that they are working with W.T. United on several ventures to help restore their sanitary and storm water collections systems to peak operational efficiency.