## **Cityworks And ITPipes**

## **Cityworks.com**/2016/08/itpipes/

Greenwood Metropolitan District (GMD) is a special purpose district formed in Greenwood County, South Carolina, to provide sewer services to the properties within the district boundary. Several years ago, we decided Cityworks would become our core system because of its tight integration with GIS. Once that decision was made, we wanted to incorporate our existing satellite systems into Cityworks to eliminate redundant information and the communication problems among several other systems. The integration of ITpipes and Cityworks was a natural step in that direction. For the first time, we had two open systems that shared information easily and allowed users a seamless way to plan, collect, and utilize that information. We knew the benefits of making this work would be tremendous and it has proven us correct.

Prior to the ITpipes and Cityworks integration, all our CCTV work was created, performed, and processed manually. The operators would make a new inspection on the truck using ITpipes and manually type in all the related information. They used printed maps to determine their location and to look up necessary asset inspection information. This required a lot of manual involvement from the CCTV field crews to get the inspections data and verify the information before the actual inspection could be performed. Every Friday, the information from the CCTV vehicles was uploaded and transferred to the ITpipes server, where the information could then be reviewed and used. This created a significant delay from when the data was collected to when it was made available to users.

Since integrating ITpipes with Cityworks, we can set up the work to be done before sending it to the CCTV operators. Through Cityworks, we can select the assets to be inspected and build work orders. This allows us to improve our scheduling of the CCTV crews and ensures we are working in the desired areas of our system. Scheduling now involves using Cityworks to create CCTV work orders and assign them to the CCTV crews with a user ID we set up for them. The CCTV vehicles are connected to our wireless network so the work orders are synced automatically and show up in an ITpipes SmartTab©. The crews go out, view the SmartTab called "New Work Orders" that lists all work orders assigned to their user ID, and use ITpipes to perform the necessary inspections.

When they are back on premise, the work orders are automatically synced with Cityworks and all the inspection information, including the videos, is uploaded. Now inspection data is available the same day, and everything is stored in one location.

Before implementing Cityworks, the two CCTV trucks averaged 150 inspections per day that had to be downloaded and checked for errors. With the integration, work orders are set up in the office and synced to the vehicles. When inspectors are ready to do the work in the field, all the required information is already there and ready to go. Furthermore, they know they have the right asset with the correct information.

It's important to know where our crews are working, what costs are associated with the work being done, and how much work is being performed. This includes our video footage and crews. With Cityworks Analytics, we can see the work that was done on the lines and what the costs were over time. From there, we can go to the work orders and view the videos and inspection information in Cityworks without having to use a viewer to do so. In the past we had trouble viewing the videos remotely, but now we can stream the videos effortlessly, even while in the field. If a crew is about to do work on a line and wants to look over the line video, they can do so utilizing the ITpipes-Cityworks integration.

The next step for GMD is Cityworks' mobile solutions, along with the ITPipes Sync module. This will allow our team leaders to enter unscheduled, follow-up work orders in the field. These could address issues they find while on the job or while responding to customer complaints. Once the work orders are created for an inspection, the sync does the rest!

The elimination of human involvement has cut both time and cost. There is no need to insert systems simply to have

a place to store data. This integration helps GMD acquire actionable intelligence from the data collected. Integrating the CCTV system allows us to see the work and all the relevant information in one place. Whether we're looking at the videos and inspection information, viewing cost and asset history, performing analysis, or planning work, integrating the systems has helped us to be more efficient in our responsibilities to our ratepayers. You can't maintain a sewer system without good, reliable geographical and visual information. This is what bringing ITpipes and Cityworks together does for us!

By Ken Davis, IT Director, Greenwood Metropolitan District