

MEMORANDUM

DATE: January 22, 2013

TO: Brian Dissette, City of South Haven
Roger Huff, City of South Haven
Amanda Morgan, City of South Haven

FROM: Christopher J. Cook, PE

CC: Cindy Clendenon, MDEQ
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RE: City of South Haven – Sewer Study Progress Report

The following will summarize our progress to-date on the City of South Haven Sewer Study:

UTILITY MAPPING

We have completed this work. This task entailed compiling City record drawings, maps and field data into a comprehensive sanitary sewer system map. We converted city GIS information into AutoCAD for presentation, modeling, field investigation and study purposes. Draft final maps were submitted to city staff in November, following our presentation at the BPU meeting.

FIELD INVESTIGATION AND DATA REVIEW

Recently, we completed field work on the sewer lines to determine the size and slope of key runs and mapping that information for the modeling effort. This should essentially complete our work on this portion of the project.

COMPUTER MODELING AND FLOW MONITORING

This task included flow meters at strategic locations in the system to be used for identifying infiltration and inflow and for calibration of the sewer model. The flow meters were removed on January 15, after the weekend rains. We extended the flow metering

of Phase III in an effort to obtain data during a significant rain event. With metering now complete, efforts have transitioned to the computer modeling phase. Computer modeling will use calibration methods to adjust and fine tune the model and ensure that it closely matches actual flows observed during metering. Once the model has been calibrated, the results will be used to predict the system response during certain large scale wet weather events (25 year, 24 hour storm). Modeling work is underway and we expect to have results in mid-February.

SMOKE TESTING

We completed smoke testing of several key areas in the south-central portion of the City in June and presented the results to the BPU in June and November. At this point we do not anticipate further smoke testing.

SEWER TELEVISIONING

We have been reviewing televising completed by the city over the past several years. Our analysis indicates that some of this prior video inspection work can be utilized in this study. We determined which additional areas require video inspection and have been working with Plummer's to do this work. They are currently underway with sewer cleaning and televising the Kalamazoo/Center Street district from Van Buren to Aylworth.

SRF PROJECT PLAN

We continue to work on the sections of the Plan that we can address, before all of the data is received. We are roughly 40% complete with this task with the bulk of work expected to be completed this winter before the July 1 deadline. We presented a PowerPoint update to the BPU in November.

OVERALL SCHEDULE

The schedule going forward is expected to proceed as follows:

Smoke Testing Complete	December, 2012
Televising	December 2012 – January 2013
Computer Modeling	December 2012 – February 2013
Flow Monitoring Complete	January, 2013
Project Plan Complete	April 2013
Public Hearings Conducted	May 2013
Final Plan Adopted	June 2013
Plan Submitted to DNRE	July 1, 2013

