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MEMORANDUM

DATE: January 20, 2015

TO: Roger Huff, City of South Haven

FROM: Timothy Drews, PE, Abonmarche

CC: Brian Dissette, City of South Haven
Larry Halberstadt, City of South Haven
Steve Oosting, City of South Haven
Cindy Clendenon, MDEQ
Tony McGhee, Abonmarche
Christopher J. Cook, PE, Abonmarche

RE: City of South Haven – SAW Grant Progress Report

The following will summarize our progress to-date on the City of South Haven SAW Grant project:

ASSET MANAGEMENT PLAN

1. Inventory – A majority of the initial data collection work has been completed. The attached map shows data points that have been collected. City staff is reviewing the data for accuracy and determining if additional points are needed. This task is on hold until the snow melts enough to continue.
2. Condition Assessment
    a. Manhole Inspection - City staff has requested that manhole MACP Level 1 inspection data be collected with a few additional data fields from Level 2. The attached "Requirements for Manhole Inspections" form indicates the information to be gathered for each manhole. As a pilot program, we have started this work for manholes that are within the boundaries of streets that have had topographic survey completed for design work. The pilot program will provide a format for the remainder of the storm and sanitary systems and production rates to optimize the available budget.
    b. CCTV work – City staff and Abonmarche met with Plummer's Environmental Services to discuss CCTV work related to the SAW

program. It was decided to implement a pilot program to determine preliminary costs, interaction with city staff pre-cleaning sewers, GIS integration, etc. This pilot program will concentrate on small sections of the system that are critical to the upcoming SAW-related design work.

c. Storm Sewer System Metering and Modeling – this task will likely be eliminated and the budget re-allocated to other Asset Management efforts.

3. Level of Service – Not yet started
4. Criticality of Assets – Not yet started
5. O&M Strategies/Revenue Structure/Funding/Report – Not yet started
6. Other costs – We are starting to look at available Asset Management software packages, and will be scheduling demos in the near future.

PHASE 1 Design Projects

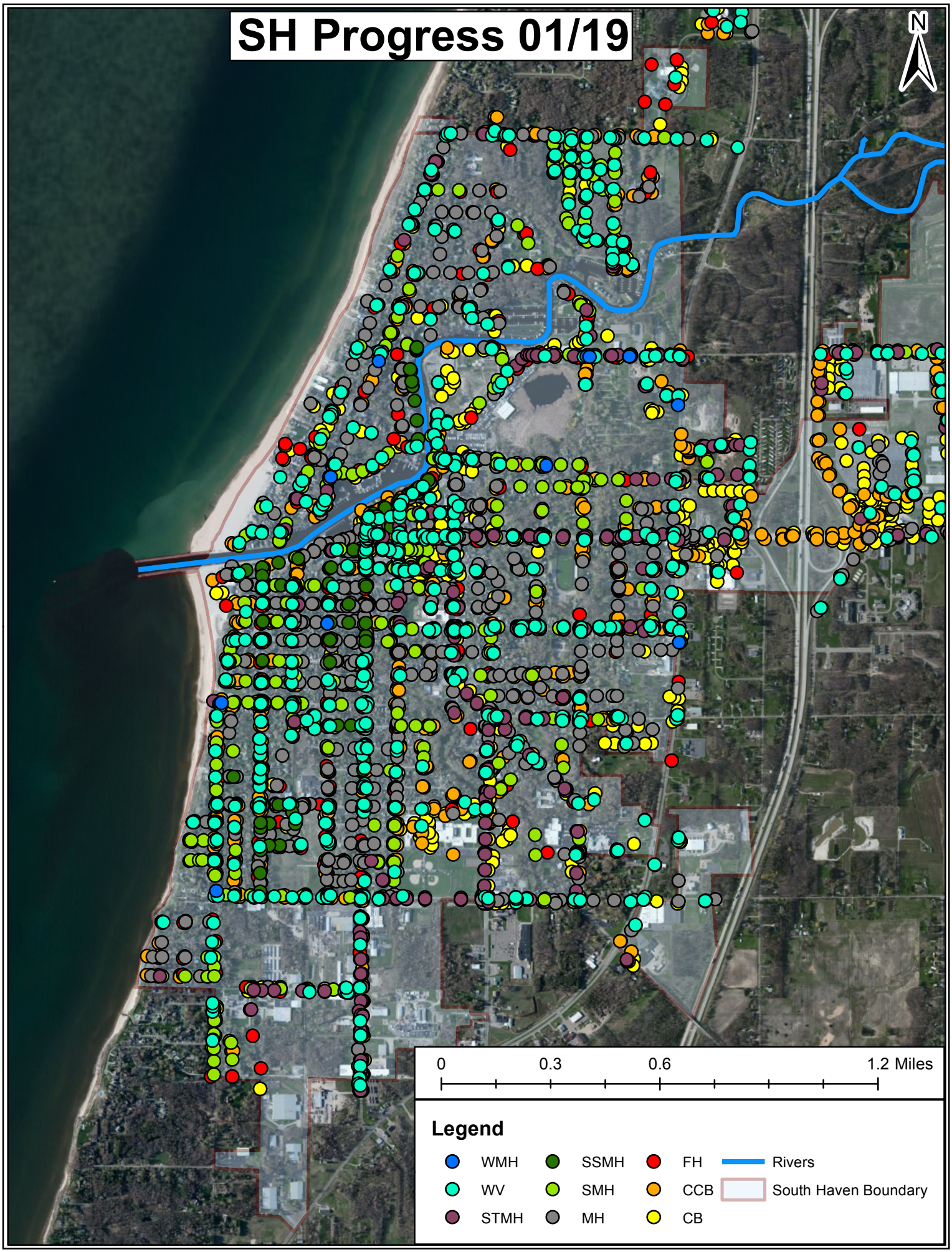
Progress has been made as follows on the Phase 1 SAW Grant funded design projects:

1. Dyckman Avenue Reconstruction – Design complete, under construction, complete by Memorial Day
2. Black River Street Reconstruction – Topographic survey work complete, base drawing in progress.
3. North Shore Drive Reconstruction – Topographic survey work complete, base drawing complete, preliminary design underway including cross-section options.
4. Main Pump Station Consolidation – Topographic survey work complete, base drawing in progress. Abonmarche to contact HRC for a proposal to assist with design services.
5. Indian Grove Lift Station – Topographic survey work complete, base drawing complete, preliminary design underway including cross-section options. This project will coincide with the Monroe Boulevard project. Preliminary design is underway.
6. Peterson Ravine – Abonmarche to develop a bid package for manhole rehabilitation.
7. Center Street Sewer Separation – Topographic survey work complete, base drawing complete.

PHASE 2 Design Projects

As the weather allows, we will kickoff the topographic survey work for the following Phase 2 SAW Grant funded design projects.

1. Center Street Reconstruction
2. Kalamazoo Street Reconstruction
3. Abell Avenue Reconstruction
4. Lyon Street Reconstruction
5. Indiana Avenue Reconstruction
6. Edgell Avenue Rehabilitation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South Haven Boundary

City of South Haven SAW Grant Project No. 1179-01

Requirements for Manhole Inspections

South Haven desires to record as much information as can be observed while still containing costs by not requiring personnel to enter manholes or utilize highly specialized equipment. Accordingly, South Haven's manhole inspections could be described as "MACP level 1 Plus" inspections which will include:

- *All* MACP level 1 data
- *Plus* select data fields from the MACP level 2 inspection forms
- *Plus* an abbreviated version of a defect assessment.

Manhole Inventory Data

For each manhole, record the following information:

- All MACP level 1 Mandatory data
- Any MACP Optional data which is known to the inspector
- MACP Field 60 – Frame Clear Opening Diameter
- MACP Field 65 – Frame Depth
- MACP Field 69 – Chimney Depth
- MACP Field 93 – Rim to Invert (Each Pipe Connection)
- MACP Field 95 – Pipe Material (Each Pipe Connection)
- MACP Field 97 – Pipe Diameter (Each Pipe Connection)
- MACP Field 100 – Seal Condition (Each Pipe Connection).

Manhole Defect Observations

South Haven does not find value in the higher cost of a comprehensive defect assessment for manholes according to MACP level 2 methodology due to the high level of detail needed for even minor defects. However, South Haven does not want the inspector to ignore major defects which may require immediate or short term response action on the part of the City. To that end, the following procedure should be used when performing manhole inspections:

Inspector should identify and photograph any defect of potential concern. Defects the City is most concerned about would be obstructions in the flow line or structural defects with soil or voids visible. If more than defect is present, identify and photograph each defect separately.

Special Instructions

Inspector to meet with City's GIS technician in advance to review data formatting, photograph numbering, and data collection/transfer protocols.

Obtain a block of unused manhole numbers from the City prior to performing manhole inspections. If inspecting any previously unmapped manhole, assign a new number from those provided. Describe location and record approximate distances to nearby identifiable features appearing on City GIS map. City will return to map GPS coordinates at a later date.

When reinstalling manhole covers which support traffic, take care to thoroughly remove all debris from the bearing surfaces to ensure the best possible fit. Field 49 "cover fit" should be the final observation made, after reinstalling the cover.