



Meeting Minutes RE: Drainage GIS Investigation Kickoff

Date: April 14, 2016
Location: Public Works Conference Room
156 School Street
Sanford, Maine 04073
Attendees: City of Sanford, Matthew Hill, Mike Casserly, Peter Smith, Jamie Goodwin, GIS Mapping & Analysis, Tom Burns, SGC Engineering, Jim Wilson
Prepared by: M. Hill

This meeting was held to kick-off the effort to identify locations and connections of the entire drainage network in Sanford and Springvale in a cooperative effort between DPW forces and GIS Mapping and Analysis of Portland, Maine.

I. Schedule & Timing

- A. Term of Contract should be about 18 months (December 31, 2017).
B. Work can commence once contract is agreed upon and signed (likely June 8, 2016).
C. Coordination meetings to be held approximately every 45 days.
D. SGC Engineering will be performing as a sub-contractor for the data collection.

II. Scope of Work

- A. The approved contract actually includes two separate proposals:
1. The proposal dated August 23, 2015 will provide Sanford DPW with hardware and software in order to document, track, and inspect the catch basin cleaning program currently performed by DPW crew.
2. The proposal dated March 11, 2016 will be a cooperative effort between the Contractor and DPW in order to verify connections, sizes, and locations of drainage infrastructure throughout the City. The effort basically as much research as possible before actually physically confirming locations and connections.

### III. Proposal of August 23, 2015: CB Inspections & Maintenance

#### A. Specifications on the Hardware

1. A powerful iPad with a data plan will be required. A durable hard cover case with hand strap and screen protector will be required for a rough working environment. A mounting arm in the Vac-All cab will be required as well as a charger for the iPad.

#### B. Specifications on Software

1. The inspection program is already developed and in use for other Municipalities.
2. Sanford DPW will review the list of required inspection items provided by GIS Mapping & Analysis and tailor the program to meet Sanford's specific needs.
3. It was noted that the program can incorporate pictures as part of the available data for each basin. However, one current picture per structure is likely advisable due to data limitations.
4. T. Burns noted that a dashboard analysis program of the drainage system is available but not included as a cost in this proposal. M. Hill replied that the DPW would likely be interested in the future but not until a large majority of the system was included in the model and it was verified by this process. The issue will be re-visited near the completion of the project.

### IV. Proposal of March 11, 2016: Drainage Investigation & Connectivity Investigation

- A. Classify existing data with regard to source;
- B. Rank connections by confidence level;
- C. City staff mark-up storm water Atlas (stored in DPW conference room);
- D. Exhaust staff institutional knowledge;
- E. Review 130 submitted site plans since 2004 (M. Casserly to coordinate);
- F. Sources of all information on structures and pipe will be coded;
- G. Surveyed Site Plan
- H. Field Observation
- I. Mechanical Observation
- J. 'Use of 'Water Buffalo' Tank Truck
- K. Dye Test connection
- L. Jetter/Vactor if obtained before or during project
- M. CCTV observation
- N. Request hard copy site plans from public works that are not digital;
- O. Obtain video taken by SSD by request of Sanford DPW;
- P. Mapping-grade GPS using GeoXH or better, plus-or-minus 3-foot accuracy;
- Q. Seek data from local Surveyors (i.e. Corner Post, Pinkham & Greer, etc.);
- R. Integrate Hoyle Tanner data for Airport storm water connections;
- S. Implement ArcGIS Online Administrative Viewer and Field application.
- T. Field Investigation with 2-man crew.
- U. Through the use of these techniques and procedures, there may be 30-40 specific areas where the more intensive investigative techniques would need to occur.

### V. Strategy for Investigation

- A. The Department identified the Goodall Brook watershed as the most desirable target for initial data collection. The work will coincide with the Goodall Brook Watershed Management Plan improvements.

#### VI. Traffic Control

- A. Much of the work will be a mobile operation but will require traffic control for worker safety.
- B. As needed, DPW will provide flaggers and signs to facilitate an expedient operation.
- C. As needed, DPW will provide Police vehicle(s) to facilitate an expedient operation.

#### VII. Public Outreach

- A. Project progress will be posted on Sanford DPW web page.

#### VIII. Action Items

- A. DPW to coordinate with IT on specs and purchase of powerful iPad and accessories.
- B. T. Burns to provide an example of inspection choices to be included in the proposed software.
- C. DPW to assign personnel and staff colors for drainage review atlas markups.
- D. DPW to assign L. Stone to some of the atlas work mapping connectivity of drainage systems.
- E. T. Burns to formally request scans of plans from Corner Post Survey and others on behalf of Sanford DPW and coordinate with M. Casserly on any outstanding Public plan records.
- F. DPW to perform outreach to landowners contributing to the Public storm water system, have them sign a non-hazardous discharge letter, and secure permission to map their property.

Cc: Attendees, S. Buck, S. Lord, B. Botting, A. Cleveland, N. LeBrun, A. Burbank