



Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511
203.466.5280 p 203 772.1564 f www.gnhwpca.com

REGULAR MEETING OF THE
GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY
BOARD OF DIRECTORS
WEDNESDAY, JANUARY 13, 2021 6:00 P.M.
260 EAST STREET
NEW HAVEN, CONNECTICUT

****In accordance with Section 2.10 of the Authority's Bylaws and Governor Lamont's Executive Orders concerning "Stay Safe, Stay Home" and the conduct of public meetings remotely, the meeting will be conducted via teleconference of the Board of Directors.*

NO IN-PERSON PUBLIC ATTENDANCE WILL BE PERMITTED.

*A recording or transcript of the meeting will be accessible to the public online after the meeting at the GNHWPCA website at gnhwpca.com.****

CALL-IN INFORMATION:

Dial: (929) 205-6099

Enter meeting ID number 831 4647 3160 and press #

Enter passcode 977681 and press #

AGENDA

1. Approval of minutes of December 8, 2020 – Regular Meeting.
2. Public participation relating to agenda items.
- 3 A. Election of Chairman of the Board.
- 3 B. Election of Vice Chairman of the Board.
- 3 C. Appointment of Treasurer.
- 3 D. Appointment of Secretary.
4. Consideration and approval of a resolution authorizing the Executive Director, Sidney J. Holbrook, to negotiate, execute and deliver an agreement with Duke's Root Control, Inc. for CCTV and condition assessment services of approximately 380 manholes, for an aggregate amount not to exceed \$63,820.00.
5. Executive summary and department updates and presentations.

6. Consideration and approval, as necessary, of any other new business of the Authority.
7. Call to the public.
8. Adjournment.

4. Consideration and approval of a resolution authorizing the Executive Director, Sidney J. Holbrook, to negotiate, execute and deliver an agreement with Duke's Root Control, Inc. for CCTV and condition assessment services of approximately 380 manholes, for an aggregate amount not to exceed \$63,820.00.

RESOLVED: That the agreement with Duke's Root Control, Inc. for CCTV and condition assessment services of approximately 380 manholes, as further described in the Exhibit to Agenda Item # 4, in an aggregate amount not to exceed \$63,820.00, is hereby approved, and the Executive Director, Sidney J. Holbrook, be and hereby is authorized, empowered and directed, for and on behalf of the Authority, to negotiate, execute and deliver such agreement and any and all reasonable and necessary documents in furtherance thereof.



MEMORANDUM

DATE: January 5, 2021

TO: Sidney J. Holbrook

FROM: Thomas Sgroi, PE
Director of Engineering

RE: Duke's 360 Manhole Inspection & Assessment

Sid:


I request that the above-mentioned recommendation be added to the January 13, 2021 Board Agenda for resolution.

The Engineering Department contracted with Midwest Water Group last year to perform CCTV and condition assessment of approximately 400 manholes as part of our Capacity, Management, Operations and Maintenance (CMOM) program. Dukes recently purchased Midwest Water and the Engineering Department would like to use their proprietary inspection / consulting services again to perform the same work on 380 manholes (MH). Dukes provides state of the art proprietary 3D video of the manhole that gives us a complete report with all PACP coding. Each complete inspection only takes 10 to 15 minutes at each MH to complete and Dukes has agreed to perform the work at the same MH price we received in the last 2018 Midwest Water agreement with no increase in cost. There is no comparable MH inspection service.

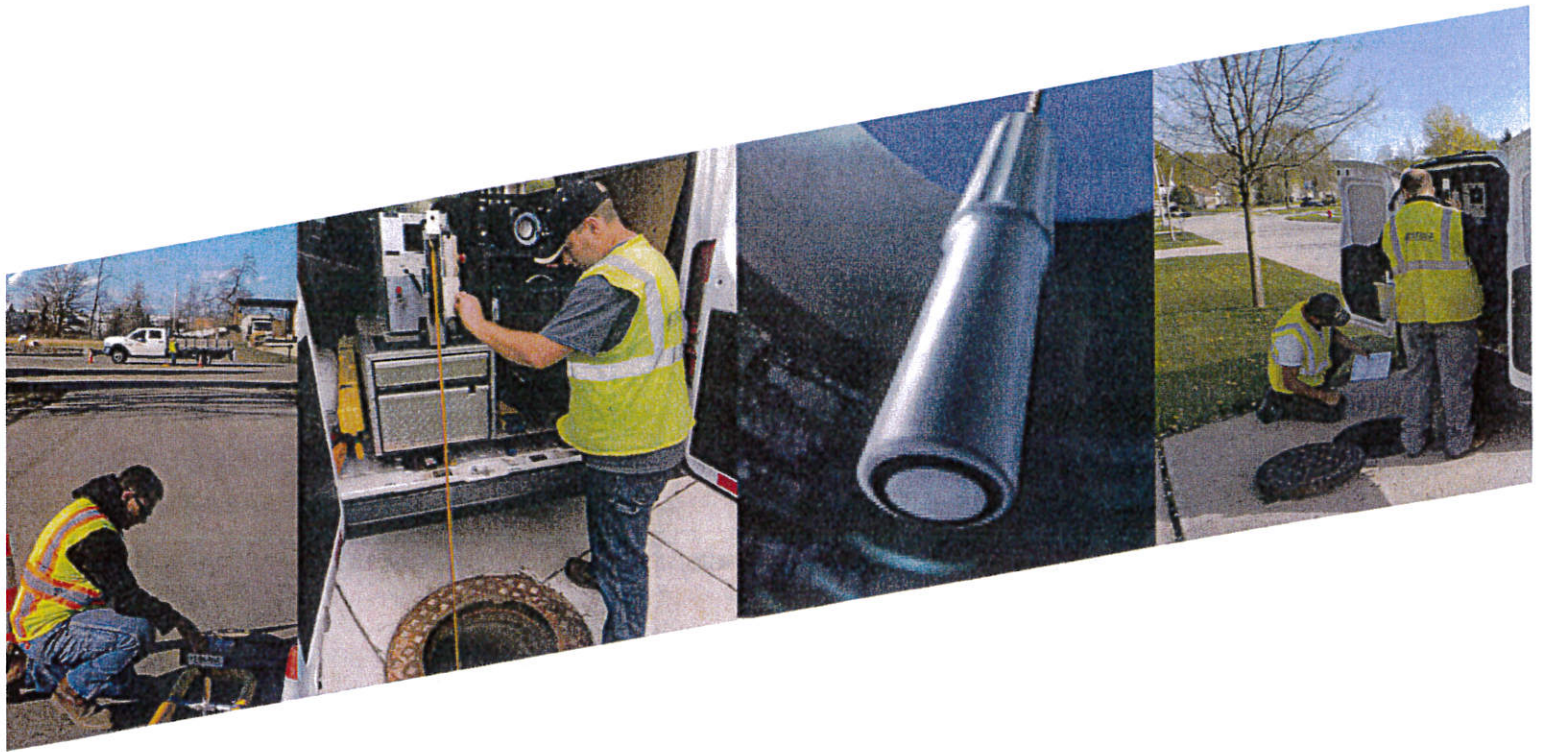
We believe this service provides extreme value and recommend that the board approve a purchase order agreement with Dukes in the amount of \$ 46,200 plus 10% contingency for a total amount not to exceed of \$50,820. This work will also require City Police at an estimated cost of \$13,000 billed hourly. The total request for this project authorization to include both Dukes and City Police is \$63,820.

Dukes Purchase Order NTE - \$50,820
City Police Cost (Estimated) - \$13,000
Total Manhole Inspection and Assessment Cost NTE = \$63,200

This project is funded from the Authority's FY 20-21 Operating Budget


Thomas V. Sgroi, PE
Director of Engineering

cc: Gabe Varca (e-copy)
Gary Zrelak (e-copy)
Lou Criscuolo (e-copy)
Ricardo Ceballos (e-copy)



PROPOSAL

Level 2 MACP Manhole Inspection Program

Prepared for:

Greater New Haven Water Pollution
Control Authority

800.447.6687 | dukes.com





10 / 13 / 2020

Ricardo Ceballos
Greater New Haven Water Pollution Control Authority
260 East Street
New Haven, CT 06511

PROJECT NAME: Level 2 MACP Manhole Inspection Program

Dear Ricardo,

Duke's Root Control, Inc. is pleased to submit this proposal to Greater New Haven Water Pollution Control Authority for the Level 2 MACP Manhole Inspection Program project. All details regarding this project are contained within the pages of this proposal and include sample deliverables, scope of service descriptions, and pricing.

This proposal is being submitted based on interpretations made from the study maps or information we have been provided. Please review for accuracy.

Thank you for your consideration and the opportunity to illustrate our services. Please do not hesitate to contact me with any questions regarding this proposal.

Sincerely,
Duke's Root Control, Inc.

Larry Aldrich
Northeast Regional Manager
860-798-0982
larry@dukes.com

Manhole Inspections - Scope of Services

Process (All Levels of Service)

1. Making every reasonable effort to access each manhole, complete field televising using a digital manhole camera system (Panoramo 360 SI) at all times possible. Upon occasion, access with the camera system will not be possible due to terrain, resident access issues or location. At those times, crews will use a digital pole camera to obtain video files. Verify all field measurements with survey stick, pipe diameter verification tool and tap measure.
2. Contractor to provide all equipment and personnel as required to complete inspections, including at least (1) NASSCO certified inspector onsite during inspections per camera truck.
3. Provide all data in Access (NASSCO export DB) and .CSV / Excel format. Provide all digital scan files (.IPF file extension) as well as the free required view software to view the IPF files. Provide all PDF reports including appropriate attribute information collected per level of inspection detailed below. Provide access to these files via FTP or web link and provide them via USB external hard drive when requested.
4. Update GIS client portal system in real time to display completed, surcharged, or missing structures.

Level 1 MACP Inspection Specifics	Level 2 MACP Inspection Specifics
Complete inspection using Panoramo 360 SI digital scanning camera equipment to perform full Level 1 MACP inspections including "non-entry" observations such as Cover, Frame, Chimney, Wall, Bench & Invert condition (Pass/Fail), confirmation of location, type of structure and evidence of surcharge and all other Level 1 MACP fields. Any additional fields not listed on the MACP Level 1 can be added as required by the client with advanced notice prior to start of project (additional fees may apply).	Complete inspection using Panoramo 360 SI digital scanning camera equipment to perform full Level 2 MACP inspections including "remote entry" observations including all Level 1 MACP fields as well as all Cover dimensions (diameter, surface bearing, condition, lid type); Frame dimensions (all measurements, condition, inflow); Cover Insert (yes/no, condition); Frame Adj Ring (yes/no, height, condition); Chimney (yes/no, material, condition, depth); Cone (yes/no, type, material, condition, depth); Wall/Barrel (type, material, condition, depth); Bench (yes/no, type, material, condition, lining); Channel/Invert (yes/no, type, material, condition, lining); Pipe (All Rim-to-Invert dimensions for each pipe, pipe size/shape, condition, and material). Any additional fields not listed on the MACP Level 2 can be added as required by the client with advanced notice prior to start of project (additional fees may apply).

Manhole Inspections Scope of Services (continued)

Optional Services

Repair Recommendations (Executive Dashboard Program)

When included in proposal, repair recommendations for each manhole will be provided. The means in which this data will be delivered will be via Excel VBA driven spreadsheet program and will include the Asset ID#, Severity Rating (0 = good condition – no I/I and/or no structural defect or repair that should be considered as preventative or made within 7-10 years; 1 = fair condition – light I/I and/or structural defect that should be repaired within 5-7 years; 2 = moderate severity – regular flowing I/I and/or structural repair that should be made within 1-3 years; 3 = severe condition – heavy I/I and/or severe structural defect that should be repaired immediate to 1 year), Type of Repair by category (e.g. grout, curtain grout, chimney seal, lining, inside drop, bench rehab or replacement, etc), estimated budget price for repair and notes on condition or repair. All data from the original survey will be presented in drill down format through our Executive Dashboard Program.

GPS Coordinates / Geodatabase deliverable

When included in proposal, contractor to shoot each asset using Trimble GNSS R2 receiver with sub-foot accuracy with data correction services. Exceptions to sub-foot accuracy might occur based on tree cover or other satellite obstruction. Contractor will make every possible effort to ensure sub-foot accuracy is achieved for each asset. All data will be delivered via Geodatabase format including updating the client's existing attribute table and linking PDF reports to the asset (if requested).

Integration Into Client Asset Management or Work Order System

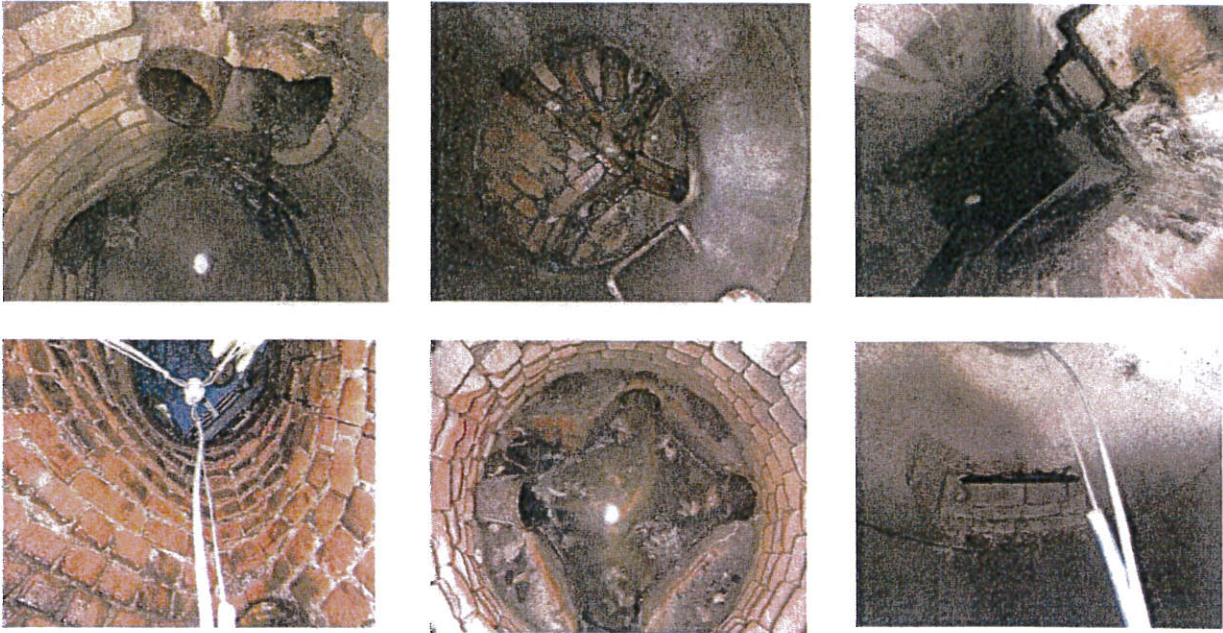
When included in proposal, and when available, consultant to work with utility to define repair types and populate those into client's work order management system.

Responsibilities of Consultant	Responsibilities of Client
<ol style="list-style-type: none"> 1. Provide all necessary crew and equipment to complete the project 2. Require and enforce that all staff wear proper identification and PPE including, but not limited to hi-vis vests. 3. Ensure that all vehicles are properly marked and have adequate safety lighting 4. Act in a polite, professional manner at all times and especially when dealing with the public 5. Report any severe observations to the point person from the client's office assigned to this project. 	<ol style="list-style-type: none"> 1. Provide contractor with all electronic data to successfully complete the project (see data requirements page) 2. Assist contractor with public issues or concerns 3. Assist with locating or exposing "cannot locate" or "cannot access" structures. 4. Provide point of contact for project. 5. Provide access to traffic control and reimbursement for safety officer at cost to Consultant. 6. Make every possible effort to ensure that the survey map is current and accurate and that manhole lids are accessible so that project can be completed in designated time frame.

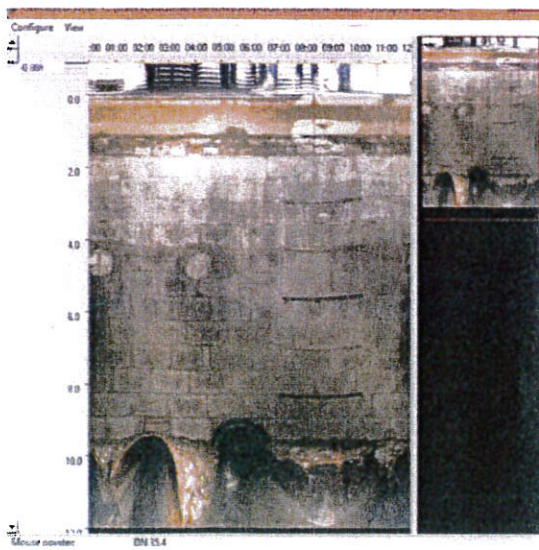
Manhole Inspections - Sample Deliverables

Video Files & Functionality

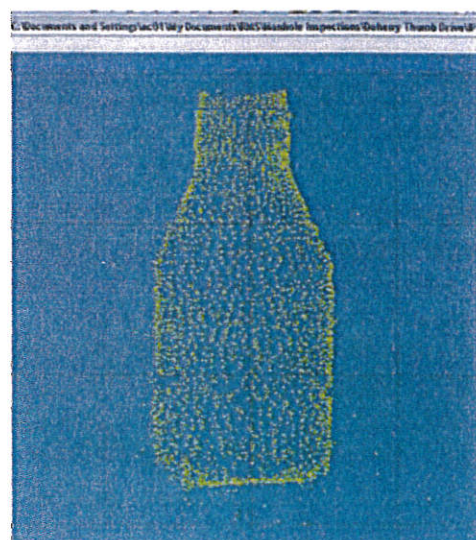
Sample Panoramio 360 SI Imaging (Level 1 & Level 2 services). There are three views within the Panoramio camera files - the 360 view which allows the user to pan/tilt and move up/down through the structure, the unfolded view which allows the user to take measurements and the point cloud view which allows the user to determine structure type and import into CAD. Collectively, these three perspectives portray the condition, size and defects within the structure.



360 Perspective View





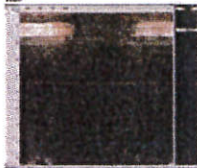



Unfolded View



Point Cloud View

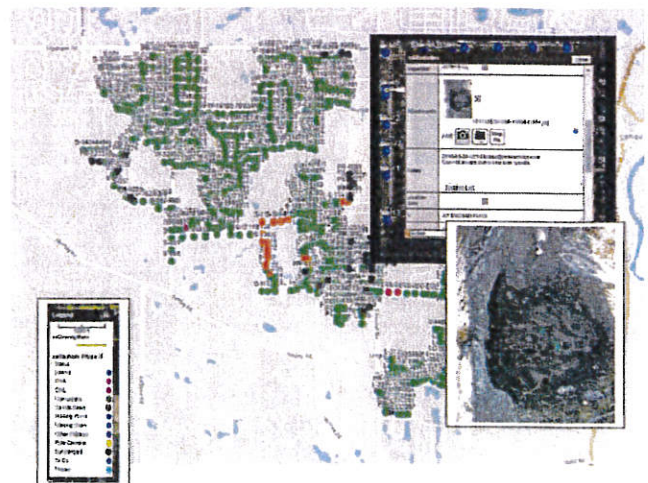
Client will receive reports delivered in PDF format from a NASSCO certified software (Pipelogix). Based on the level of inspection (Level 1 or Level 2), fields within the report will be entered according to the required fields for the survey. For a level 2 survey, customer will receive a picture defect report, in addition to the standard MACP report pictured below. In addition to PDF format, all data is also delivered in a current NASSCO MACP compliant MS Access Database (.MDB) and MS Excel (.XLS) format for easy integration into most software platforms. Other reports such as the NASSCO Quick Rating score report and summary reports is also prepared as part of the standard deliverables package. Please reach out to us if you have specific data integration needs.

MACP Survey Report 4				Report Date 2013/05/19	
Sheet No. 5	Surveyor's name Simon	Certificate Number T-1114-1714	Date 2013/05/19	Time 13:19	
Survey Customer	Drainage Area	System Name			
P.O. No.	Location (Mile & Point)	3527 KENNEDY CR			
Farther Location Details	Outgoing Mile to Invert	Rise to Grade	Use of Sewer	Sanitary	Year Re-Built/Repaired
Outgoing Mile to Invert					Year Last
Cover  File Date 2013/05/19 15:05	Flume  File Date 2013/05/19 15:06	Chimney  File Date 2013/05/19 15:07	Cove  File Date 2013/05/19 15:07	Wall  File Date 2013/05/19 15:09	Wall  File Date 2013/05/19 15:08

PipeLogix Inc. Phone: 866-299-3150 Fax: 760-406-9023

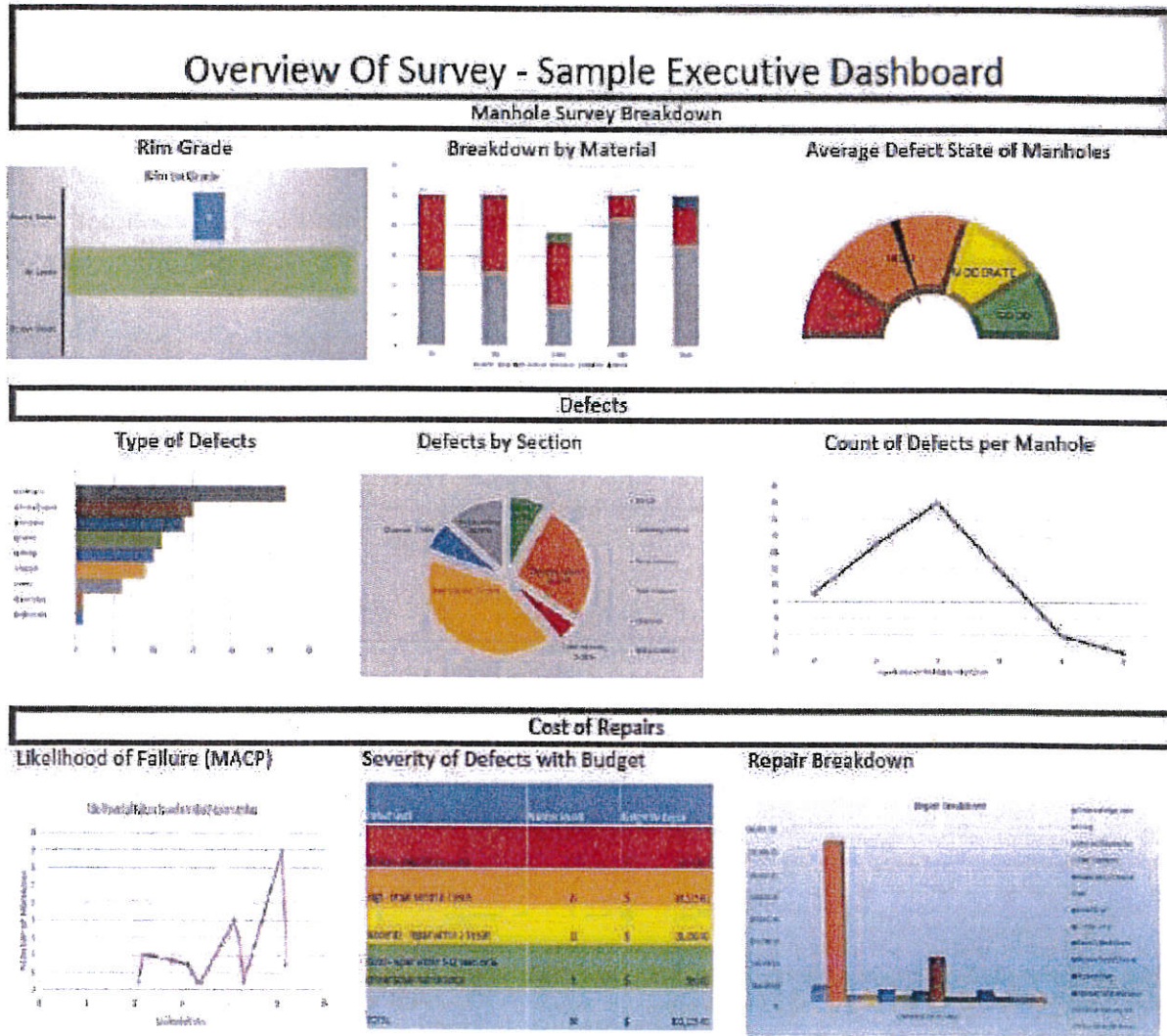
Defect Picture Report

Our field collection process is real time, and at your fingertips. We do this through our hosted GIS platform in which we grant you access during the project. You can use it to view crew progress, identify and help remedy access issues and identify surcharges or immediate issues before deliverables are created. At the end of the project, we submit all data to you back in Geodatabase format, including repair recommendations, issue structures and found structures. We believe in easy data integration so we prepare your deliverables in a variety of formats that integrate into GIS, ERP and Asset Management Systems. Just ask!



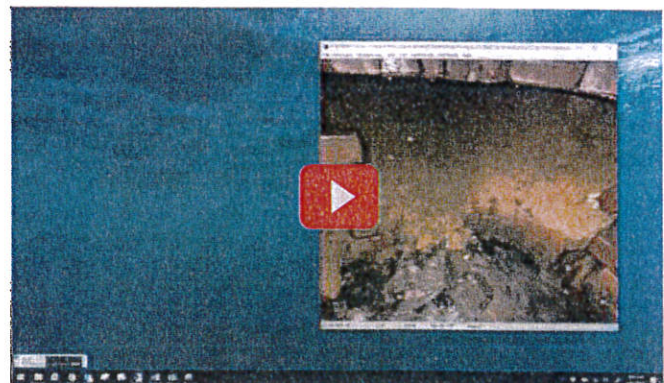
Executive Level Analysis and Reporting Options

Our dynamic Dashboard tool allows you to quickly view, query and sort your data to drill down to the information you need to perform critical repairs or to generate bid files for CIP programs. View pictures from the tool, group like manholes together and print combined reports in PDF. The power of the project is at your fingertips!



Want to see more?

View our deliverables presentation now by clicking on the video button to the right of this message.



Investment



The prices quoted herein will remain in effect for the length of this contract, unless changes are agreed upon in writing by both parties. Services will be billed at completion of project deliverables.

TYPE OF SERVICE	Price	Unit	QTY	Subtotal
Manhole Inspections				
Level 2 MACP Inspection with Camera Level 2 MACP Inspection with Panoramo 360 SI camera, repair recommendations, defect coding and Executive Dashboard. GDB deliverables. Manholes that are cannot access or cannot locate after 15 minutes of time and effort, will be billed at \$40 ea. All records of such assets are delivered, with pictures in the final Geodatabase export. Price excludes applicable CTDOT permit bonds and applications.	\$110.00	EA	380	\$41,800.00
Repair Recommendations & Dashboards Dashboard generation and repair recommendations program	\$5.00	EA	380	\$1,900.00
Mobilization	\$2,500.00	LS	1	\$2,500.00
				\$46,200.00

***Greater New Haven to reimburse costs associated with Police / Traffic control and utility and CTDOT permit costs*



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