120 Water

Lead Service Line Inventory Scope Of Work

This Scope of Work is incorporated in the agreement between 120 Water Audit, Inc., and Snow Hill, MD. Deliverables : The "Works," as defined in the Agreement, comprise the deliverables stated in this SOW for each phase.

Goal: Define and execute a plan to comply with the revised Lead and Copper Rule, including developing an inventory, categorized by customer address, for Snow Hill, MD with fully known SL material information. Available in 120Water Platform and ArcGIS-compatible format (via 120Water-Esri Connector), and provide water quality lead and copper sampling services.

Inventory Development Methodology:
There are 7 separate phases to developing a full LSLI. They are:

1)   Program Start and Customer Alignment
2)   Data Investigation and Submission
3)   Data Analysis
4)   Preliminary Findings and Software Alignment
5)   Software Import and Training
6)   LSLI Verification Strategy
7)   LSLI Verifications

Further information on each of these phases, along with a general timetable to complete, can be found below.

Phase 1: Program Start and Customer Alignment (1-2 weeks) | The purpose of this program stage is for the 120Water and Snow Hill, MD teams to initiate the lead service line inventory (LSLI) program and align on program expectations
- Customer Kick-Off Meeting: the 120Water team will host an introductory meeting to establish the cross-functional Program Team and confirm roles and responsibilities. The session will also establish the program approach including success metrics and project timelines, and the cadence of program reviews, client updates, and any additional Snow Hill, MD goals and expectations
- Deliverable(s): Document containing metrics, timelines, and roles and responsibilities.

Phase 2: Data Investigation and Submission (4-6 weeks) | The purpose of this program stage is for the 120Water team to identify, review, document, and collaboratively understand the existing data source(s) and systems.
- Data Investigation Call with 120Water LSLI Lead Program Consultant: The 120Water team will schedule a guided review meeting with Snow Hill, MD to identify sources of data the 120Water team can use to build out a preliminary lead service line inventory. Common data sources include:
  - GIS records
  - Billing system records
  - Work order system record
  - Paper reports, tap cards, as-builts, etc.

     o   Recent capital projects

- Data Request: After the Data Investigation Call, the LSLI Lead Program Consultant will submit a formal data request to Snow Hill, MD. The data request will outline the specific sources of data the 120Water team will need to analyze in order to identify all service locations, identify or rule-out sources of lead, and prioritize and strategize for lead service line inventory and replacement efforts.
  - Data Submission: 120Water will review all submitted data sources. Once all data is submitted, the 120Water team will determine the best analysis approach to bring the data together into a single data set that reflects all service line locations and associated attributes.
    - ESRI Partnership Solution: Since Snow Hill, MD will have the ability to visualize data in ArcGIS Online (AGOL), 120Water will set up Snow Hill, MD specific AGOL environment for data submission. 120Water will update the AGOL environment with preliminary inventory findings and continued inventory updates from the 120Water platform, as Snow Hill, MD progresses through their lead service line inventory program
  - Deliverable(s): Data requests, data analysis plan options

Phase 3: Data Analysis (4-8 weeks) | The purpose of this program stage is to combine all submitted data to develop a preliminary, location-based lead service line inventory that includes EPA complaint service line material categorizations for all identified service lines. The aim is to use existing client data to identify locations, and use the data to rule out potential sources of lead.

- Initiate Analysis: The 120Water data analysis team will conduct a thorough review of the submitted data, to ensure all data fields are understood and data integrity is maintained.
- Build Records-Based Inventory: The 120Water data analysis team will clean and combine all appropriate data sources into a single service line inventory dataset. The final dataset in this stage will include service line locations and material type categorizations for each identified service line in the distribution network, as well as all associated location and service line attributes.
- Note: Should Snow Hill, MD have records of lead service lines within the system, Snow Hill, MD may then choose to use a data science driven selection approach to identify a statistically-driven selection of locations *(less than 400 service connections)* for physical field verification (not included in scope). 120Water will use the verification results as the basis for lead service line probability predictions. This approach may require additional investment from Snow Hill, MD chosen (or 120Water Service Partner) field services firm to execute potholing/hydrovacing/home inspections.
- Deliverable(s): Dataset containing the information described above in this phase.

Phase 4: Preliminary Findings and Software Alignment (2-4 weeks) | The purpose of this program stage is to deliver the results of the preliminary inventory, and gather any additional feedback from the client to support inventory development—both in terms of reviewing the inventory itself and ensuring the 120Water platform sets the client up for success in long-term inventory management.

- Preliminary Findings Session: The 120Water team will meet with Snow Hill, MD to deliver the preliminary inventory findings. The session will cover a discussion of service line locations, material type associations, the number of service lines the 120Water team was able to categorize as non-lead, geographic trends, etc.

120 Water

     o   Data Verification: Using the findings the 120Water team will work with Snow Hill, MD to determine if additional data is required to inform the inventory.

     o   Software Alignment: During the session, the 120Water team will propose the methodology for customizing the 120Water platform to meet Snow Hill, MD needs (e.g., customization data fields, location and service line identifiers, prioritization set-up, etc.).

- Additional Data Incorporation: If Snow Hill, MD submits additional data to be incorporated into the lead service line inventory, 120Water will process the data and integrate the new information into the preliminary inventory.
- Deliverable(s): Report of preliminary inventory findings, configuration documentation.

Phase 5: Software Import and Training (2-4 weeks) | The purpose of this program stage is to introduce Snow Hill, MD to their data in the software, and train Snow Hill, MD team on how best to use the software for continued inventory management.

- Software Configuration: Setup and configure 120Water platform software account and setup user(s) account(s)
- Inventory Software Import: Import the prepared data *(and/or)* use client's existing records into the 120Water software

     o   <u>Note</u>: If Snow Hill, MD does elect to use the Lead Service Line Probability Finder (predictive model), the 120Water data analysis team will run the model to assess service lines that have the highest probability of containing lead. The preliminary inventory will need to contain sufficient data on SL locations in order to run the model. If the preliminary inventory does not contain the necessary data, 120Water will determine the best path to getting enough observations with Snow Hill, MD.

- Software Training: The 120Water team will train Snow Hill, MD user(s) on the 120Water software platform using Snow Hill, MD's data. During this session, the 120Water team and the client will discuss current data systems and processes and provide guidance on using 120Water platform for long-term LSL management
- AGOL Training: the 120Water team will also train Snow Hill, MD users on the use of Snow Hill, MD specific 120Water-AGOL environment.
- Deliverable (s): Supporting documentation from training sessions

Phase 6: Lead Service Line Inventory Verification Strategy (1-2 Weeks) | The purpose of this program stage is to strategize with Snow Hill, MD on how best to proceed with verifying the material types of service lines that are categorized as Unknown in the lead service line inventory.

- Establish the Prioritization Team: the 120Water team will meet with the client to determine the key decision-maker who will own the prioritization and scheduling
- Hold Prioritization and Verification Workshop: The 120Water team and the Prioritization Team will work through inventory findings, prioritization metrics, geographic considerations, neighborhood information, and other details to define the method for organizing ongoing inventory efforts. In addition, both teams will discuss and strategize verification methods that are best suited to support inventory efforts. Additional 120Water offerings include:

     o   Customer LSLI Postcard or Letter Survey Campaigns
     o   Lead Check Swab Kits + Customer LSLI Postcard Survey Campaigns
     o   Physical Field Validation Checks
     o   Sampling

120 Water

- Initiate and Continue Inventory Efforts: Snow Hill, MD will continue leveraging 120Water software to keep the LSLI updated.
- Continuous Inventory Review: Review the LSLI for compliance throughout the inventory process to ensure the lead service line inventory meets state and federal requirements
- Deliverable(s): Validation plan document

Phase 7: Lead Service Line Inventory Verification (varies) | The purpose of this program stage is to execute on the strategies decided upon during the Verification Strategy phase. Snow Hill, MD team will have the option to use 120Water or 120Water Partner services to execute the chosen Verification Strategies, or perform those methods internally. In either case the 120Water Platform will serve as the database of record for all Service Line material updates, and the Platform will deliver that data back to Snow Hill, MD's GIS via the 120Water-Esri Connector.
- Deliverable(s): data produced by the platform.

120 Water

Town of Snow Hill - MD - LSLI

Town of Snow Hill - MD
103 Bank Street
-
Snow Hill, MD 21863
United States

Reference: 20221115-092130422
Quote created: November 15, 2022
Quote expires: December 15, 2022
Quote created by: Joe Riitano

joe@120water.com

Rick Pollitt
townmanager@snowhillmd.com
410.632.2080

Comments from Joe Riitano

Contract start date is at time of signature.

Products & Services

Item Name & Description	Unit Price	Quantity	Term (months)
Pro - Public Water System Annual subscription PWS Pro package to manage programs and data. Unlimited users	$5,680.00 / year	1	24
Professional Services (Assist) Discrete tappable specifics under each scope area (block of 20 hours)	$2,500.00 / year	2	24

Item Name & Description	Unit Price	Quantity	Term (months)
Implementation	$1,500.00	1	
Setup, Configuration and Guided Web Training of the 120Water Account			

Subtotals

Annual subtotal	$10,680.00
One-time subtotal	$1,500.00
Total	**$12,180.00**

Purchase terms

Net 30 billing.
Invoice Terms:
Billing Street Address:
Billing City:
Billing State:
Billing Zip Code:
Billing Country:
Billing Notes (if applicable):

This Order Form, together with the Master Services Agreement available at https://120water.com/master-services-agreement/ (the "MSA"), shall become a legally binding contract upon the earlier of (a) the date both parties execute the Order Form or (b) the date Customer initially began using the Services. Any capitalized word not otherwise defined in this Order Form shall have the same meaning as set forth in the MSA.

120Water may reject this Order Form if: (1) the signatory below does not have the authority to bind Customer to this Order Form, (2) changes have been made to this Order Form (other than completion of the purchase order information and signature block), or (3) the requested purchase order information or signature is incomplete or does not match our records or the rest of this Order Form. Subscriptions are non-cancelable before their end of the Term.

Signature

(signature)

Signature

_2/14/23_

Date

Michael R. Pruitt

Printed name

Countersignature

_____

Countersignature

_____

Date

_____

Printed name

Questions? Contact me

Joe Riitano
joe@120water.com

120Water
250 S Elm St
Zionsville, IN 46077
US