

## **Request for Proposals Lunt Road Cured-In-Place Storm Drain Lining November 7, 2023**

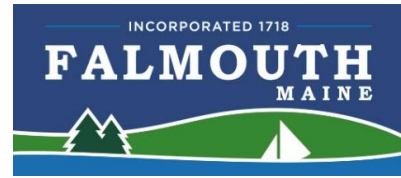
The Town of Falmouth Public Works Department seeks qualified contractors to satisfactorily complete the rehabilitation of approximately 1,266 linear feet (LF) of storm drain varying in size from 12" to 30" diameter. **The rehabilitation must be done by Ultra-Violet (UV) cured-in-placed lining as specified in both the contract and technical specifications.** The work shall also consist of cleaning approximately 70 LF of storm drain, separate from the pipes to be lined. Sealed bids shall be submitted to the Town using the enclosed bid form. Bids shall be submitted by **Wednesday, November 29<sup>th</sup>, 2023 at 11:00 AM.** There will not be a pre-bid meeting or a formal bid opening for this project. All pre-bid correspondence shall be submitted electronically to Justin Early, Town Engineer, at [jearly@falmouthme.org](mailto:jearly@falmouthme.org). Questions regarding this bid/proposal shall be accepted until 11:00am, Monday, November 27<sup>th</sup>, 2023.

### **General Contract Specifications**

1. All excavation, restoration, materials and maintenance of traffic control shall adhere to Maine Department of Transportation and Town of Falmouth specifications. If there are conflicting requirements, the stricter shall apply.
2. Contractor shall maintain alternating 1-way traffic, at a minimum. Contractor is responsible for work zone/traffic control.
3. Contractor shall provide the Town of Falmouth a construction schedule containing the construction sequence and the estimated time required to complete the project.
4. The project shall be completed no later than June 30<sup>th</sup>, 2024.
5. Contractor shall be responsible for contacting Dig Safe and non-Dig Safe utility operators as required by law.
6. All improvements included in the project shall have a one-year warranty. The contractor will not be required to hold any retainage funds.
7. Awarded bidder shall enter into agreement (attached) and provide the required insurance certificate per the agreement.
8. Anything not otherwise specified, that is necessary to complete the project as specified, shall be considered incidental.
9. The Town of Falmouth reserves the right to accept or reject any and all bids.
10. Refer to the project description and enclosed technical specification for project specifics.

### **General Description of Work**

**Location:** Lunt Road between Falmouth Road and MEDOT train tracks. See attached plan.

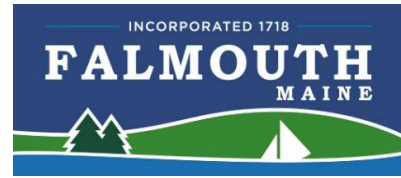


### ***Scope of Work/Project Information:***

- Install approximately 1,266 linear feet of UV Cured-In-Place pipe liner according to the attached technical specifications.
- Inspection: The interior of the pipeline to be restored shall be inspected to locate all damage and/or obstructions which would prohibit correct installation of the new liner. A post-installation video (CCTV) inspection shall be provided to the Town. Cost associated with inspections are considered incidental to the lining of the pipe.
- All available previous inspections are included as an attachment to this RFP. Pipe segment 1433 was not inspected because it needs cleaning before an inspection can be completed. A picture of this segment is provided in this RFP. The cost of pre-cleaning to prepare for the CIP liner shall be considered incidental to the Install Cured-In-Place Liner bid item.
- Obstruction Removal: The Contractor shall repair or remove from the line all obstructions (e.g. sediments, bricks, roots, joint obstructions, etc.), which can prohibit insertion of the pipe. All roots or other obstructions shall be cut flush with the wall of the pipe to be restored, and the debris will be removed from the line. If there is an obstruction that cannot be removed by trenchless methods without excavation, the Contractor shall bring it to the attention of the Town Engineer.
- Water Access: Permission to use a fire hydrant for water access must be obtained by completing the attached application and submitting it to the Portland Water District for approval. The Portland Water District guidelines for hydrant use are also attached.
- Clean two separate 34 LF segments of RCP as shown on the plan. These pipes have heavy sediment accumulation up to approximately one half of the pipe diameter. It is not anticipated to install a CIP liner in these segments, but the condition will be re-evaluated after the pipes have been cleaned.
- Perform all other incidental as described in the specifications.

### ***Environmental Sustainability Policy***

Bidders are asked to view the Town of Falmouth's environmentally preferable procurement policy (See [Section XI](#)) and demonstrate how their proposal will support the policy by describing environmentally-preferable attributes of the products and services to be purchased. Bidders are also encouraged to highlight company-wide environmental sustainability policies and practices (examples of environmental sustainability are outlined in the [Town of Falmouth's Sustainable Business Recognition Program](#)).



**Bid Form**  
**(Lunt Road Cured-In-Place Storm Drain Lining)**

Bid Item	Description	Estimated Quantity	Unit	Unit Price (\$)	Total Price (\$)
1	Install 12" Cured-in-Place Liner	11	LF		
2	Install 18" Cured-in-Place Liner	34	LF		
3	Install 24" Cured-in-Place Liner	537	LF		
4	Install 30" Cured-in-Place Liner	684	LF		
5	Clean 12"-18" Storm Drain Pipe	68	LF		

Total Bid Price (numerals): \_\_\_\_\_

Total Bid Price (written): \_\_\_\_\_

Bid Submittal: Sealed bids shall be addressed to Town of Falmouth, Public Works Department, 101 Woods Road, Falmouth, ME 04105.

Sealed bids shall be submitted by **Wednesday, November 29<sup>th</sup>, 2023 at 11:00 AM** Eastern Standard Time.

There will not be a pre-bid meeting or a formal bid opening for this project.

Bid results will be distributed electronically shortly following the bid submittal date.

A bid bond is not required for this project.

All pre-bid correspondence shall be submitted in electronically to Justin Early, Town Engineer, at [jeary@falmouthme.org](mailto:jeary@falmouthme.org)

Questions regarding this bid/proposal shall be accepted until 11:00am, Monday, November 27<sup>th</sup>, 2023.

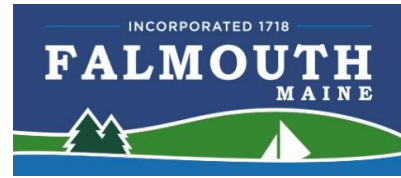
I have read and understand the content of this Request for Proposal (RFP):

Contractor: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_



## **AGREEMENT**

### **I. PARTIES**

This contract (hereinafter referred to as "Agreement") is made and entered into on this \_\_\_\_\_ day of \_\_\_\_\_, 2023, by and between the Inhabitants of the Town of Falmouth with a mailing address of 271 Falmouth Road, Falmouth, Maine 04105 (hereinafter referred to as "Town"); and \_\_\_\_\_, with a mailing address of \_\_\_\_\_ (hereinafter referred to as "Contractor"). In consideration of the mutual promises contained herein, Contractor agrees to perform the following services for the Town.

### **II. SCOPE OF WORK**

In consideration of the compensation set forth herein, the Contractor shall perform the services as outlined in a request for proposal dated \_\_\_\_\_ and attached hereto as Exhibit A and the response attached hereto as Exhibit B.

### **III. COMMENCEMENT AND COMPLETION**

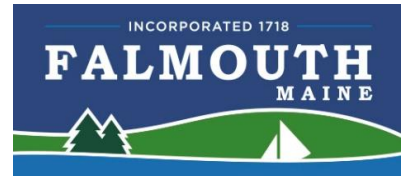
The Contractor will commence work on or before \_\_\_\_\_, 2024 and will complete work on or before \_\_\_\_\_, 2024.

### **IV. PAYMENT TERMS**

The Contractor shall submit an invoice on or about the first of each month reflecting services performed at the Contractor's normal professional billing rates, attached hereto as Exhibit C. The Contractor understands that the payment for completion of the services outlined in Section II shall not exceed \_\_\_\_\_ Dollars (\$\_\_\_\_), and the Contractor agrees to perform the services on that basis. Invoices shall list separately all out of pocket expenses being billed.

### **V. TERMINATION**

Either party may terminate this Agreement for cause after giving the other party written notice and a reasonable opportunity to cure. The Town may terminate without cause by giving the Contractor fourteen (14) days notice, and compensating the Contractor equitably to the termination date.



## **VI. DISPUTE RESOLUTION**

Any controversy or claim arising out of or related to this Agreement, which cannot be resolved between the parties shall be submitted to the Maine Superior Court (Cumberland County). This agreement shall be governed by Maine law.

## **VII. QUALIFICATIONS**

The Contractor represents it holds, and will continue to hold during the term hereof any and all qualifications, licenses and certifications required to perform its services in Maine. The contractor shall perform all services in accordance with professional standards.

## **VIII. SUBCONTRACTORS**

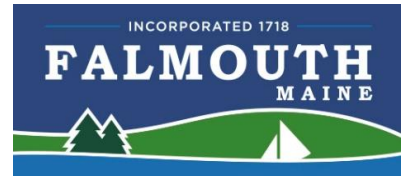
The Contractor shall be fully responsible to the Town for the acts and omissions of any subcontractors, and of persons either directly or indirectly employed by it, and shall hold subcontractors to the same terms and conditions as Contractor is held under this Agreement. No subcontractors shall be retained on this Agreement without the specific prior written approval of the Town.

## **IX. INSURANCE**

The Contractor shall purchase and maintain Workers' Compensation Insurance, General Public Liability and Property Damage Insurance including vehicle coverage and professional liability insurance, all with limits and terms satisfactory to the Town. The Town shall be named as an additional insured on the liability policy.

## **X. INDEMNIFICATION**

The Contractor will indemnify and hold harmless the Town, its officers, agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the Agreement by the Contractor, its officials, employees, agents and subcontractors.



## **XI. ENTIRE AGREEMENT**

This Agreement and its attachments represent and contain the entire agreement between the parties. Prior discussions or verbal representations by the parties that are not contained in this Agreement and its attachments are not a part of this Agreement. Where there is any conflict between the provisions of this Agreement and the provisions of any attachment, the provisions of this Agreement shall control.

Date: \_\_\_\_\_

By: \_\_\_\_\_

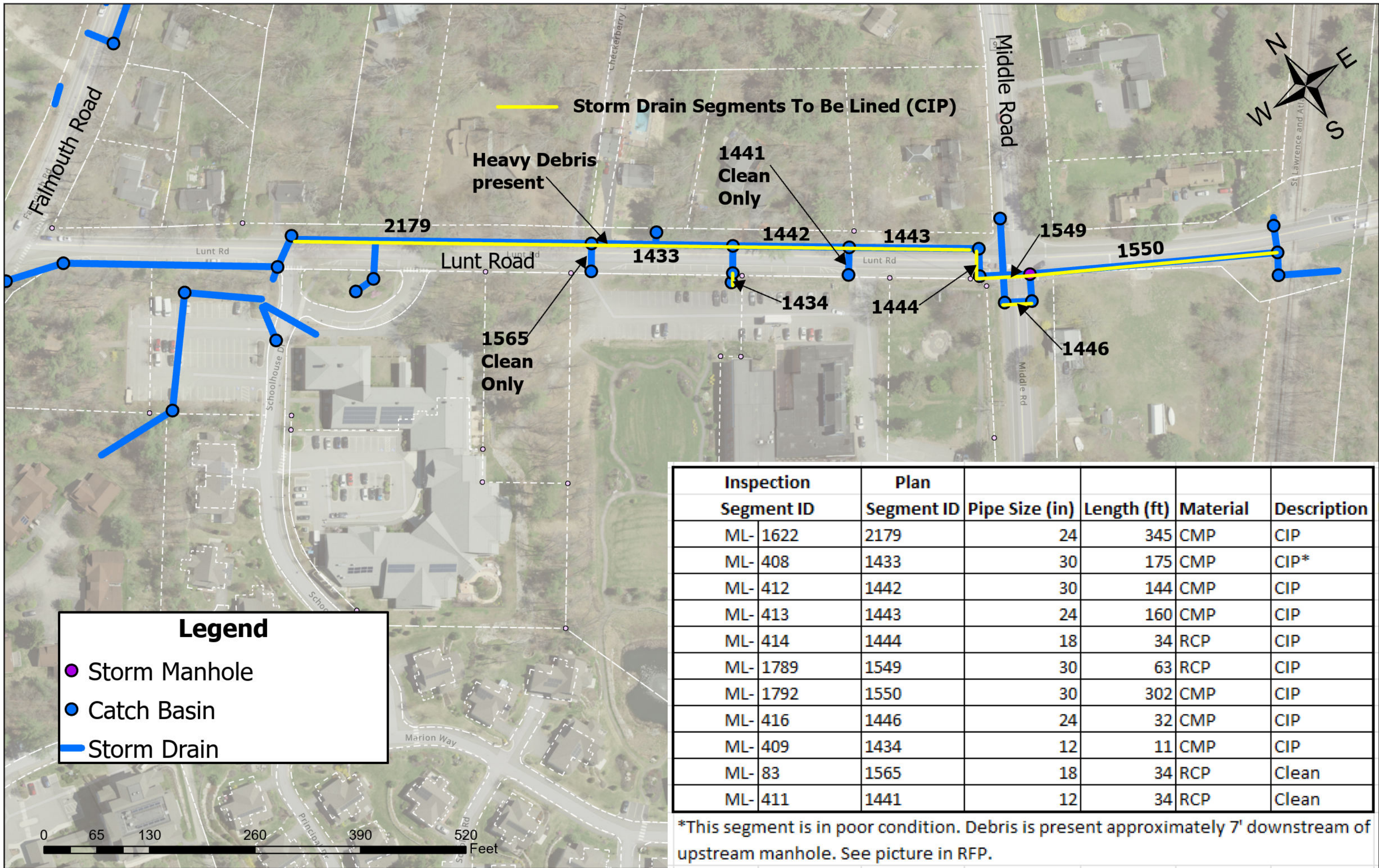
Title: \_\_\_\_\_

Date: \_\_\_\_\_

INHABITANTS OF THE  
TOWN OF FALMOUTH, MAINE

By: \_\_\_\_\_  
Nathan A. Poore, Town Manager







# Customer Information for Non-Emergency Use of Fire Hydrants

(Updated 07.11.2019)

The primary purpose of a hydrant is to provide a source of water for firefighting. The District, in cooperation with the fire departments, will rigidly control any other use of a public hydrant to ensure that the hydrants are in working condition in the event of an emergency.

## ◆ GENERAL CONDITIONS

- 1) All non-emergency hydrant use will be metered, and utilize a backflow device.
- 2) Fire hydrants will not be permitted for long term, continuous usage. In such cases a temporary construction service, new or existing, should be utilized (with appropriate metering).
- 3) Non-emergency use will be permitted for short intervals. Anything over 30 days will have to be approved by the Water Operations Supervisor.
- 4) Non-emergency use is restricted to hours of 8 AM to 7 PM weekdays. Usage will also be restricted to warm weather months, generally May 1st to October 1st.
- 5) Any unauthorized use of a fire hydrant is considered to be theft of PWD property.

## ◆ GENERAL RULES FOR CUSTOMERS USING HYDRANTS

- 1) PWD will be the sole operator of the fire hydrant.
- 2) Customer is responsible for contacting the PWD when meter and backflow device need to be removed.
- 3) Meter and backflow device will not be left unattended, and the customer will be liable for damage and loss if left unattended.
- 4) Customer will also be liable for any damage to the meter and backflow device determined to have been caused by misuse. Customer will also be liable for any damage caused by vandals or any other misuse of hydrant meter.
- 5) PWD does not supply hoses.
- 6) Hoses will not be allowed to cross streets without permission from Public Works or field inspector approval.
- 7) Hoses will not cross private property, including driveways, without permission of the owners/resident.
- 8) During regular business hours the cost to install the hydrant meter and backflow device is a flat fee of \$100.00 plus the cost of water used at the current rate per hundred cubic feet (approximately 750 gallons). Outside of regular business hours the cost of installation will be \$165.00 plus the cost of the water used.





## Date: \_\_\_\_\_

**Company or Individual name:** \_\_\_\_\_

Billing Address:			
Address	City	State	Zip

Specific location of hydrant: \_\_\_\_\_  
 \_\_\_\_\_ Street number and town or city

**Authorizing signature (only necessary if hydrant is private):** \_\_\_\_\_

- ☐ 2" Standard Hydrant Meter Assembly: Comes with 3" Meter, 2" Backflow Preventer, and a 2.5" NH (Fire Hose) male outlet connection.
- ☐ 1" Standard Hydrant Meter Assembly: Comes with 1" Meter, 1" Backflow Preventer, and a 1" Female Iron Pipe outlet connection.

**\*Applicant will be responsible for the security and protection of Portland Water District property. It is the responsibility of the customer to adapt their application to fit the connections provided on the Hydrant Meter Assemblies\***

It is the responsibility of the applicant to protect the hydrant meter and hydrant, including keeping from freezing. The applicant will be fully liable for any damage to the equipment or infrastructure of the Portland Water District.

Authorizing signature \_\_\_\_\_

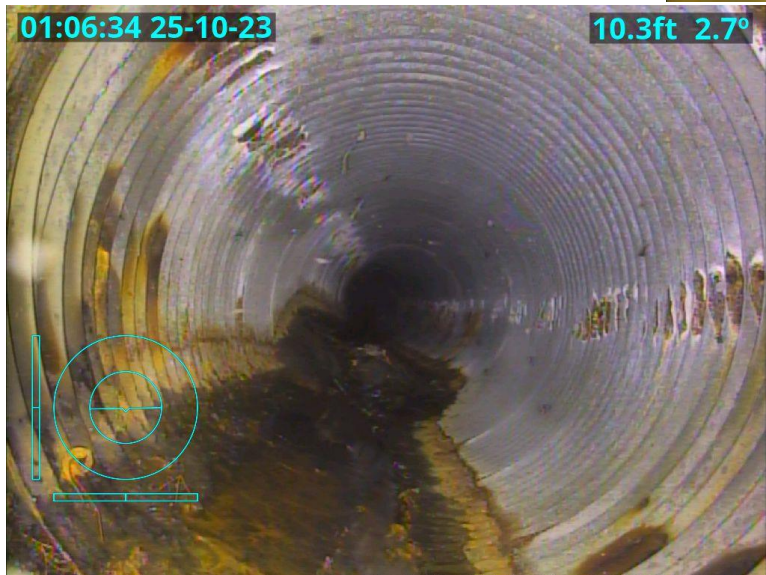
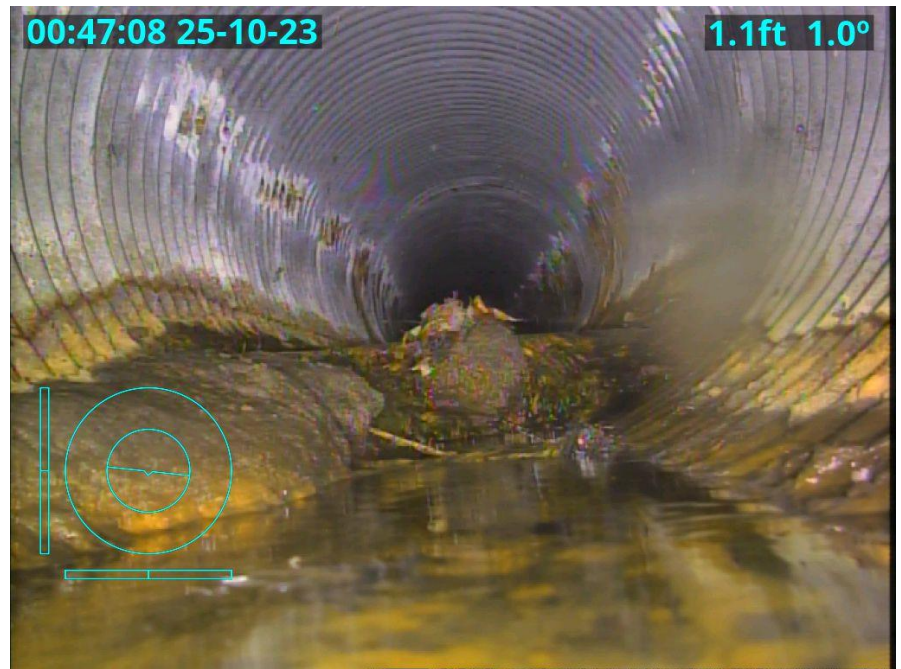
Set Date: Removal Date Request:

<input type="checkbox"/> <b>Swimming Pool</b>	<input type="checkbox"/> <b>Demolition</b>
<input type="checkbox"/> <b>Irrigation/Landscaping</b>	<input type="checkbox"/> <b>Road Construction</b>
<input type="checkbox"/> <b>Building Construction</b>	<input type="checkbox"/> <b>Other (please specify):</b>

PWD USE ONLY

Service Request # \_\_\_\_\_ Hydrant # \_\_\_\_\_

Pictures of heavy  
debris in SP 1433



## **SPECIFICATION FOR INSTALLING UV CURED-IN-PLACE-PIPE (CIPP)**

The cure-in-place pipe material shall meet the requirements of ASTM F1216, Section 5.1 and the following:

- A. The cure-in-place tube shall be fabricated to a size and shape such that when it is installed it will tightly fit the internal circumference and length of the pipe to be lined. Allowance shall be made for circumferential stretching during inversion.
- B. The outside layer of the cure-in-place tube (before wet-out and inversion) shall be coated with a translucent flexible polyethylene material that is compatible with the resin system used and allows inspection of the impregnation procedure. The coating shall not be subject to delamination after cure. No materials shall be included in the tubes that are subject to delamination after cure.
- C. The interior pipe surface of the cure-in-place pipe shall be of a color to allow a clean detailed examination by closed circuit television.
- D. The resin used in the cure-in-place pipe shall meet the requirements of the appropriate ASTM standard and shall use UV light to cure the pipe. The liquid UV resin shall saturate the tube and produce a properly cured liner, which is resistant to abrasion due to solids, grit, and sand.
- E. The UV cured-in-place pipe system shall utilize resins which will withstand the corrosive effect of the existing residential, commercial, and industrial effluents, liquids and/or gases.
- F. Liner thickness shall be determined by the contractor for the existing site conditions. The liner, when installed and fully cured in the existing pipe, shall be a strength equivalent to or greater than that of ASTM-D3034-SDR-35, PVC pipe of the same diameter of the existing pipe. Calculations for the determination of liner thickness shall be signed by a licensed professional engineer and submitted to the Town. The finished cured physical strength shall meet these specified below:

a. Flexural Modulus (minimum)	725,000 psi
b. Flexural Strength (minimum)	15,000 psi
c. Long term E-modulus	675,000 psi
d. Long term tensile bending strength	13,500 psi
- G. The CIPP liner shall include the installation of a Hydrophilic end seal. The end seals shall be installed between the host pipe and liner near the storm drain ends prior to the curing of the liner.



- H. The CIPP liner shall include the installation of a pre-lining tube or outer film. The pre-liner shall be continuous with the proposed liner in length from both ends of the storm drain.

### **STRUCTURAL REQUIREMENTS:**

The cure-in-place pipe shall conform to the appropriate ASTM section and shall also conform to the following:

- A. The cure-in-place pipe shall be designed for a fully deteriorated design condition where the original pipe is assumed to provide no structural support. The cure-in-place pipe shall therefore be able to carry the following loads:
1. Soil
  2. Groundwater, thereby minimizing infiltration (hydrostatic loads)
  3. Other superimposed loads. (Static and dynamic loads)
- B. The depth of soil cover, groundwater level (if known), and other loading information will be provided to the contractor upon issuance of notice to proceed with a particular lining project. The design calculations necessary to insure the structural integrity of the cure-in-place pipe shall be completed by the contractor. These calculations may be requested by the Town.
- C. The design of imposed loading shall take into consideration the following:
1. The design shall assume no bonding to the original pipe wall.
  2. The long-term flexural modulus shall not exceed 50% of the demonstrated short-term values. The Town may, at the expense of contractor, request that the long-term flexural modulus be verified by an independent testing facility.
  3. The Town may, at the expense of the contractor, request verification of the external hydrostatic design, including enhancement factor by an acceptable third party.
- D. No part of the cure-in-place tube shall be left unsaturated by resin.

### **INSTALLATION:**

Installation of the liner shall be done in accordance with the manufacturer's recommendations.

Curing shall be accomplished by ultraviolet light under the following conditions:

- A. A constant tension winch should be used, as specified by the liner manufacturer, to pull the glass fiber liner into position in the pipe. The liner shall have a longitudinal fiberglass reinforcement band which runs the entire length of the liner ensuring that the pulling force is transferred to the band and not the fiberglass liner. Once inserted, end plugs shall be used to cap each end of the glass fiber liner to prepare for pressurizing the liner. The end plugs shall be secured to prevent them from being expelled due to pressure. Liner restraints shall be used in manholes.
- B. A slip sheet shall be installed on the bottom one third to one half of the pipe prior to liner insertion (if it is not already part of the manufactured outer film of the liner), for the purpose of protecting the liner during insertion and reduce the drag, or as recommend by the liner manufacturer.
- C. The glass fiber liner shall be cured with UV light sources at a constant inner pressure. When inserting the curing equipment in the liner, care shall be taken to not damage the inner film material.
- D. The UV light sources shall be assembled according to the manufacturer's specifications for the liner diameter. For the liner to achieve the required water tightness and specified mechanical properties, the following parameters must be controlled during the entire curing process, giving the Engineer a record of the curing parameters over every segment of the entire length of the liner. This demonstrates that the entire liner is cured properly.

The recording shall include:

  - 1. Curing speed
  - 2. Light source working & wattage
  - 3. Inner air pressure
  - 4. Curing temperatures
  - 5. Date and time
  - 6. Length of liner
- E. All light train sensor readings, recorded by the tamper proof computer, shall provide output documenting the cure along the entire length of the installed liner. The cure procedure shall be in accordance with the manufacturer's recommendation and shall be submitted by the contractor.
- F. The optimal curing speed, or travel speed of the energized UV light sources, is determined for each length of liner based on liner diameter, liner thickness, and exothermic reaction temperature. Curing speed shall be as recommended by the

manufacturer and determined by contractor based on various site specific field conditions.

- G. If the liner is manufactured with a removable inner film, the inner film material shall be removed and discarded after curing to provide optimal quality of the final product.

No additional payment shall be made for excavations necessary to remove equipment stuck in the pipe for access. The Contractor shall be responsible for all costs and liability associated with such excavation and restoration. Excavation in the roadway shall be made only after a road excavation permit is obtained from the Town. The Contractor shall be responsible to read the Permit and Ordinance, and shall be thoroughly familiar with the repairs to the roadway expected.

## **SUBMITTALS**

The Contractor shall submit the following information in advance of commencing the fabrication of the CIPP tubes for this project:

- A. CIPP System Manufacturer's certification that the materials to be used on the project meet the appropriate qualifications based requirements of ASTM D5813 for the type CIPP System proposed. Included in this certification package shall be the Manufacturer's recommendations for the shipping, storage and handling of all the components of the CIPP System throughout the construction process; as well as the Manufacturer's recommended UV-light intensity level(s) and exposure times for the initiator cocktail used and the internal pressure(s) to be used throughout the various phases of the installation process.
- B. Design calculations for the reach specific wall thickness designs in accordance with accepted engineering design methodologies for the pipe geometry of the pipe structure.
- C. Summary table of CIPP material properties, including short-term flexural modulus of elasticity, 50-year flexural modulus of elasticity, short-term flexural strength (bending stress), 50-year flexural strength (bending stress), and chemical resistance. Certified test reports shall be submitted verifying each value as described below.
- D. Independent third party certified laboratory test reports demonstrating that the exact resin/liner combination to be used for this project meets the requirements for initial structural properties and chemical resistance (performed in accordance with ASTM F1216).



- E. Independent third party certified laboratory test reports demonstrating that the exact resin and liner to be used for this project has been tested for long-term flexural modulus of elasticity and long-term flexural strength (i.e. 10,000 hour creep testing performed in accordance with ASTM 2990 or DIN 761 for design conditions applicable to this project).
- F. Manufacturer's product specific information on the pre-liner or outer polymeric membrane (film) designed to encapsulate the resin system in the tube and provide for a water-tight, styrene emission abatement barrier on this project. Also included shall be specific information on the inner polymeric membrane, whether permanent or temporary, that is designed for the CIPP System's installation process which also has been designed to provide for the abatement of any styrene gas emission during the transportation and installation process.
- G. The Manufacturer's product specific data and instructions for the end sealing materials to be used at the manholes (or other designated mainline access structures) to ensure a long-term, groundwater-tight connection between the host pipe and the new CIPP will be achieved. The sealing material must be shown in the product literature to be compatible with (or formulated for) the environmental service conditions of the pipe being lined and capable of serving for the design life of the CIPP liner installed.
- H. A Detailed Bypass Plan demonstrating how the existing flows stated in the contract documents will be adequately maintained throughout construction, including provisions for wet weather flow.

## Main Inspections Small Photos and Scoring

Mainline ID: <b>ML-1622</b>	City: <b>Falmouth ME</b>	Street: <b>Lunt Rd</b>	Project name: <b>Stormwater Pipe Inspections</b>
Start date/time: <b>9/29/2021 9:53 AM</b>	Total length: <b>345.0 ft.</b>	Weather: <b>1</b>	Surveyed by: <b>Travis Palmer</b>
Upstream MH No: <b>CB-414</b>	Depth US:	Downstream MH No: <b>CB-3652</b>	Depth DS:
Shape: <b>C</b>	Material: <b>CMP</b>	Height: <b>24 in.</b>	Width:
Additional info:			

### Scores

Calculated at: **10/13/2021 2:44:09 PM**


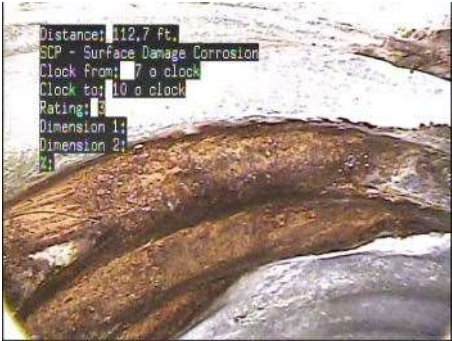

Grade	Structural:				O&M:				Overall:	
	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index
1	0	57	3B00	3.0	0	6	4121	3.0	63	3.0
2	0				2					
3	57				0					
4	0				4					
5	0				0					

### Observations

Distance	Dir.	For	Dista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	U			/	ACB			CB-3652






## Observations




Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	U		/	MWL			
							
112.7 ft.	U		7 / 10	SCP		3	
							
114.8 ft.	U		7 / 10	SCP		3	
							



## Observations

Distance	Dir. For	Dista	From/To	Code	Modifier	Rating	Remarks
114.8 ft.	U		7 / 11	IR		4	
							
115.9 ft.	U		3 / 5	SCP		3	
							
161.7 ft.	U		7 / 10	SCP		3	
							

## Observations

Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
161.7 ft.	U		3 / 5	SCP		3	
							
269.9 ft.	U		10 /	TB			
							
345.0 ft.	U		6 /	OBR		2	
							

## Observations

Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
345.0 ft.	U		/	MSA			Cannot navigate further due to rock - unable to perform reversal because pipe is missing bottom near upstream CB



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## Inspection's photos



## Main Inspections Small Photos and Scoring

Mainline ID: <b>ML-412</b>	City: <b>Falmouth ME</b>	Street: <b>Lunt Rd</b>	Project name: <b>Stormwater Pipe Inspections</b>
Start date/time: <b>9/29/2021 11:35 AM</b>	Total length: <b>143.9 ft.</b>	Weather: <b>1</b>	Surveyed by: <b>Travis Palmer</b>
Upstream MH No: <b>CB-3656</b>	Depth US:	Downstream MH No: <b>CB-3657</b>	Depth DS:
Shape: <b>C</b>	Material: <b>CMP</b>	Height: <b>30 in.</b>	Width:
Additional info:			

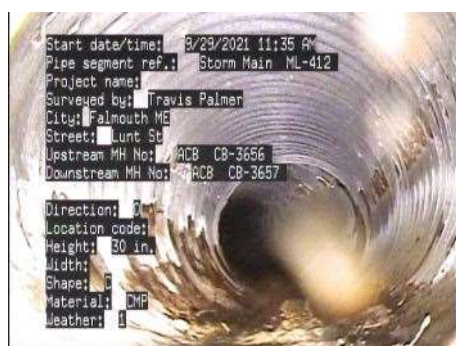
### Scores

Calculated at: **10/14/2021 7:21:56 AM**




Grade	Structural:				O&M:				Overall:	
	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index
1	0	3	3100	3.0	0	2	2100	2.0	5	2.5
2	0				2					
3	3				0					
4	0				0					
5	0				0					

### Observations

Distance	Dir.	For	Dista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	D			/	ACB			CB-3656



## Observations

Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	D		/	MWL			
							
24.8 ft.	D		7 / 11	SCP		3	
							
33.4 ft.	D		6 / 7	OBR		2	
							

## Observations

Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
143.9 ft.	D		/	ACB			CB-3657



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## Inspection's photos

## Main Inspections Small Photos and Scoring

Mainline ID: <b>ML-413</b>	City: <b>Falmouth ME</b>	Street: <b>Lunt Rd</b>	Project name: <b>Stormwater Pipe Inspections</b>
Start date/time: <b>9/29/2021 12:56 PM</b>	Total length: <b>160.3 ft.</b>	Weather: <b>1</b>	Surveyed by: <b>Travis Palmer</b>
Upstream MH No: <b>CB-3657</b>	Depth US:	Downstream MH No: <b>CB-3659</b>	Depth DS:
Shape: <b>C</b>	Material: <b>CMP</b>	Height: <b>24 in.</b>	Width:
Additional info:			

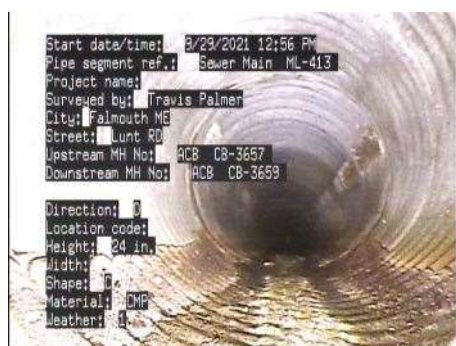
### Scores

Calculated at: **10/14/2021 8:43:52 AM**




Grade	Structural:				O&M:				Overall:	
	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index
1	0	0	0000	0.0	0	0	0000	0.0	0	0.0
2	0				0					
3	0				0					
4	0				0					
5	0				0					

### Observations

Distance	Dir.	For/Dista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	D		/	ACB			CB-3657



## Observations

Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	D		/	MWL			
							
39.2 ft.	D		/	MGO			Staining from drainage holes at intermittent spots throughout pipe
							
52.7 ft.	D		10 /	RPP			Unknown material - possibly epoxy or rubber
							



## Observations

Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
131.5 ft.	D		10 /	SZ			Possible hole or patch - unable to obtain good view



160.3 ft.	D		/	ACB			CB-3659
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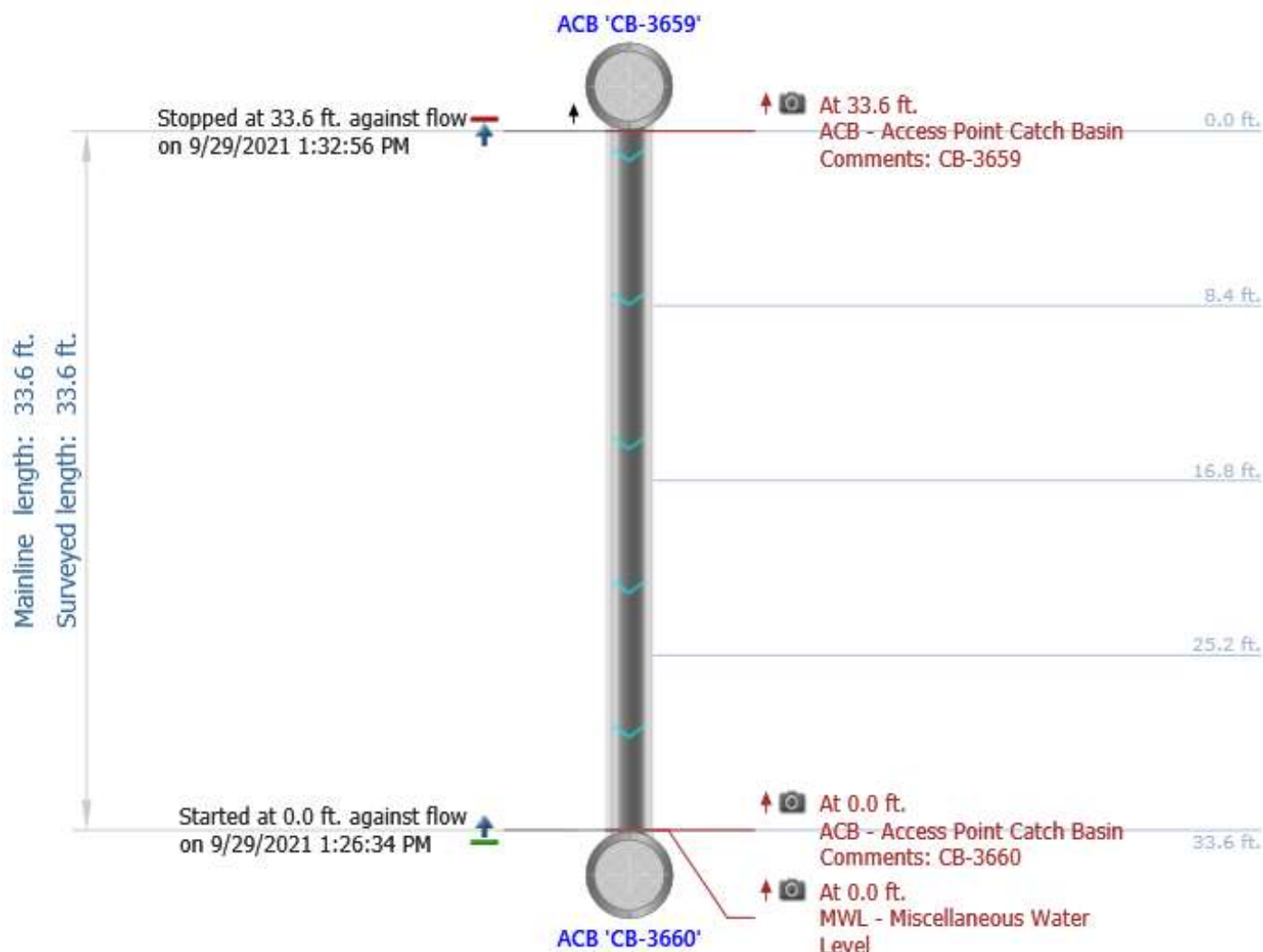


## Inspection's photos



## Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Street:
<b>Stormwater Pipe Inspections</b>	<b>ML-414</b>	<b>Falmouth ME</b>	<b>Lunt Rd</b>
Start date/time:	Direction:	Weather:	Location code:
<b>9/29/2021 1:26 PM</b>	<b>U</b>	<b>1</b>	<b>B</b>
Shape:	Material:	Height:	Width:
<b>C</b>	<b>RCP</b>	<b>24 in.</b>	



## Main Inspections Small Photos and Scoring

Mainline ID: <b>ML-1789</b>	City: <b>Falmouth ME</b>	Street: <b>Lunt Rd</b>	Project name: <b>Stormwater Pipe Inspections</b>
Start date/time: <b>9/29/2021 1:39 PM</b>	Total length: <b>62.5 ft.</b>	Weather: <b>1</b>	Surveyed by: <b>Travis Palmer</b>
Upstream MH No: <b>CB-3660</b>	Depth US:	Downstream MH No: <b>MH-15</b>	Depth DS:
Shape: <b>C</b>	Material: <b>RCP</b>	Height: <b>30 in.</b>	Width:
Additional info:			

### Scores

Calculated at: 10/14/2021 7:33:09 AM

Grade	Structural:				O&M:				Overall:	
	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index
1	0	0	0000	0.0	0	0	0000	0.0	0	0.0
2	0				0					
3	0				0					
4	0				0					
5	0				0					

### Observations

Distance	Dir.	For	Dista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	D			/	ACB			CB-3660



## Observations

Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
----------	------	----------	---------	------	----------	--------	---------

0.0 ft.    D                    /    MWL



62.5 ft.    D                    /    AMH

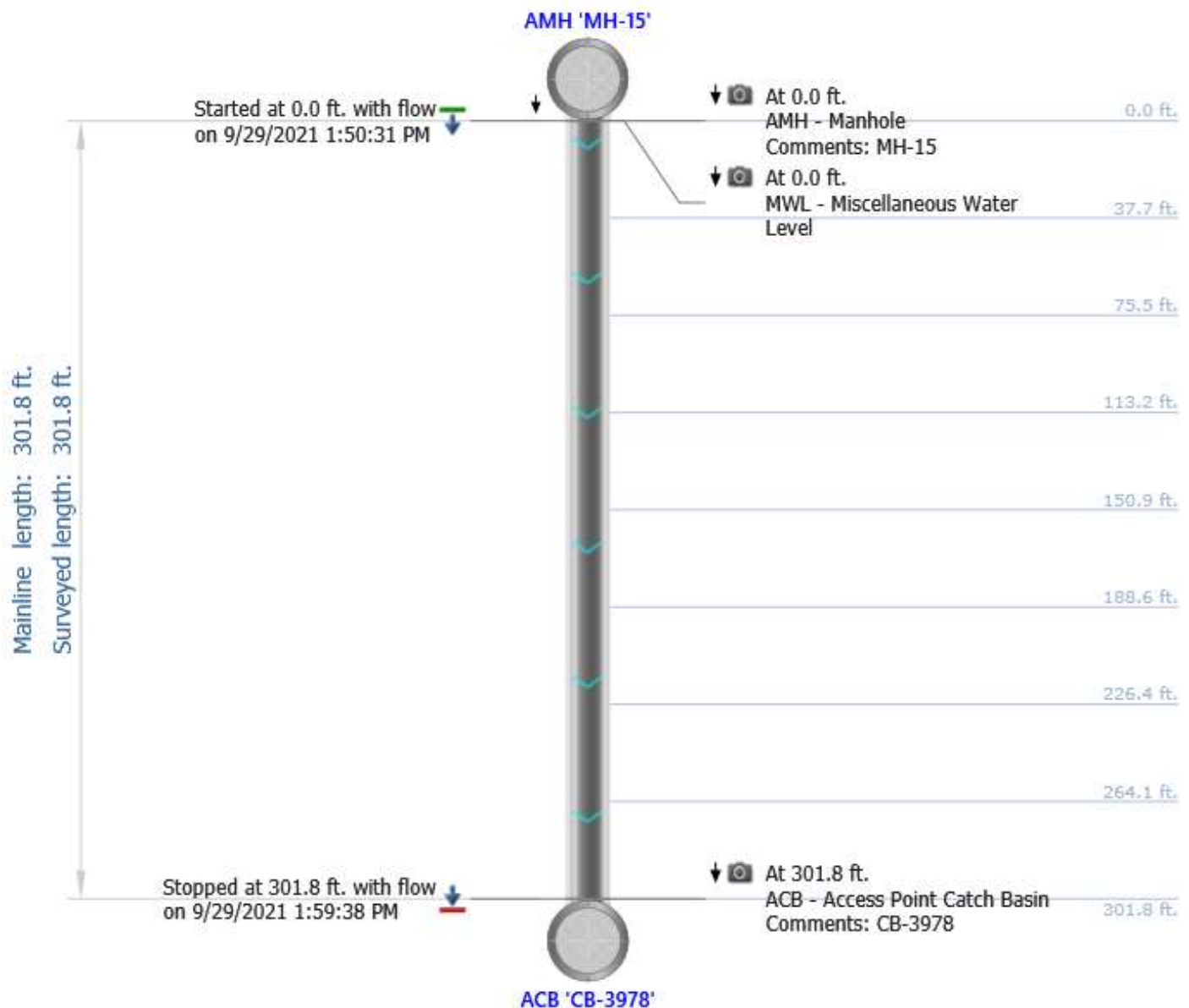
MH-15



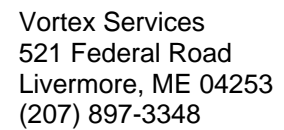
Inspection's photos

## Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Street:
<b>Stormwater Pipe Inspections</b>	<b>ML-1792</b>	<b>Falmouth ME</b>	<b>Lunt Rd</b>
Start date/time:	Direction:	Weather:	Location code:
<b>9/29/2021 1:50 PM</b>	<b>D</b>	<b>1</b>	<b>B</b>
Shape:	Material:	Height:	Width:
<b>C</b>	<b>CMP</b>	<b>30 in.</b>	





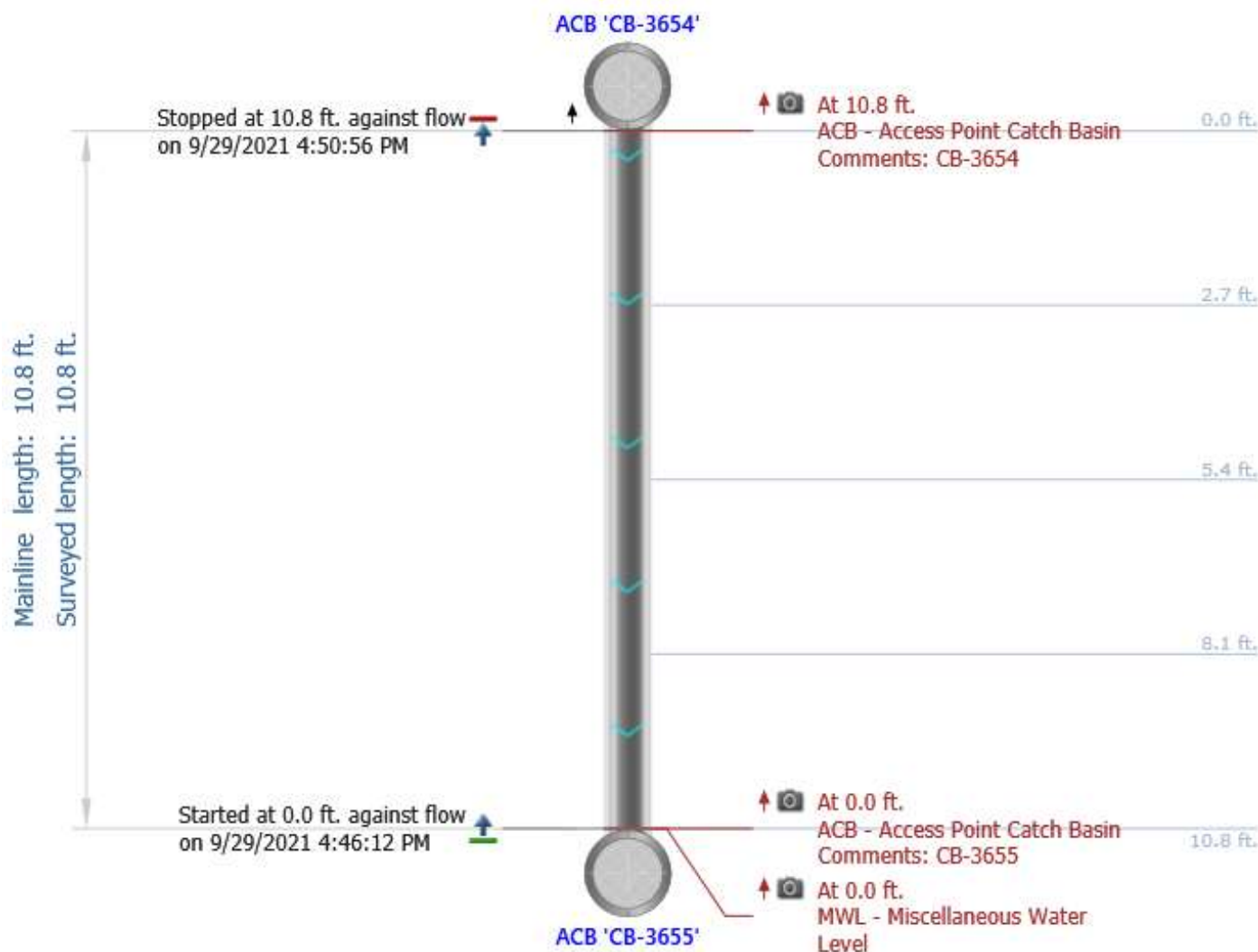


Project name:	Mainline ID:	City:	Street:
Stormwater Pipe Inspections	ML-416	Falmouth ME	Middle Rd
Start date/time:	Direction:	Weather:	Location code:
9/29/2021 2:39 PM	D	1	B
Shape:	Material:	Height:	Width:
C	CMP	24 in.	



## Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Street:
<b>Stormwater Pipe Inspections</b>	<b>ML-409</b>	<b>Falmouth ME</b>	<b>Lunt Rd</b>
Start date/time:	Direction:	Weather:	Location code:
<b>9/29/2021 4:46 PM</b>	<b>U</b>	<b>1</b>	<b>F</b>
Shape:	Material:	Height:	Width:
<b>C</b>	<b>CMP</b>	<b>12 in.</b>	



## Main Inspections Small Photos and Scoring

Mainline ID: <b>ML-83</b>	City: <b>Falmouth ME</b>	Street: <b>Lunt Rd</b>	Project name: <b>Stormwater Pipe Inspections</b>
Start date/time: <b>9/29/2021 10:55 AM</b>	Total length: <b>13.0 ft.</b>	Weather: <b>1</b>	Surveyed by: <b>Travis Palmer</b>
Upstream MH No: <b>CB-3653</b>	Depth US:	Downstream MH No: <b>CB-3652</b>	Depth DS:
Shape: <b>C</b>	Material: <b>RCP</b>	Height: <b>18 in.</b>	Width:
Additional info:			

### Scores

Calculated at: **10/13/2021 2:46:25 PM**




Grade	Structural:				O&M:				Overall:	
	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index
1	0	0	0000	0.0	0	4	2200	2.0	4	2.0
2	0				4					
3	0				0					
4	0				0					
5	0				0					

### Observations

Distance	Dir.	For	Dista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	U			/	ACB			CB-3652



## Observations

Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	U		/	MWL			
							
0.0 ft.	U		5 / 7	DNF		2	
							
10.0 ft.	U		5 / 7	DSF		2	
							

## Observations

Distance	Dir.	ForDista	From/To	Code	Modifier	Rating	Remarks
----------	------	----------	---------	------	----------	--------	---------

13.0 ft.    U                      5 / 7    DSF

2



13.0 ft.    U                      /    MSA

Unable to navigate  
through debris -  
needs cleaning





## Inspection's photos



## Main Inspections Small Photos and Scoring

Mainline ID: <b>ML-411</b>	City: <b>Falmouth ME</b>	Street: <b>Lunt Rd</b>	Project name: <b>Stormwater Pipe Inspections</b>
Start date/time: <b>9/29/2021 12:44 PM</b>	Total length: <b>33.1 ft.</b>	Weather: <b>1</b>	Surveyed by: <b>Travis Palmer</b>
Upstream MH No: <b>CB-3658</b>	Depth US:	Downstream MH No: <b>CB-3657</b>	Depth DS:
Shape: <b>C</b>	Material: <b>RCP</b>	Height: <b>12 in.</b>	Width:
Additional info:			

### Scores

Calculated at: 10/14/2021 7:28:20 AM

Grade	Structural:				O&M:				Overall:	
	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Segment Grade	Pipe Rating	Quick Rating	Pipe Rating Index	Pipe Rating	Pipe Rating Index
1	0	0	0000	0.0	0	5	5100	5.0	5	5.0
2	0				0					
3	0				0					
4	0				0					
5	0				5					

### Observations

Distance	Dir.	For/Dista	From/To	Code	Modifier	Rating	Remarks
0.0 ft.	U		/	ACB			CB-3657



## Observations

Distance	Dir.	For/Dista	From/To	Code	Modifier	Rating	Remarks
----------	------	-----------	---------	------	----------	--------	---------

0.0 ft.    U                    /    MWL



11.1 ft.    U                    4 / 8    DSC

5



33.1 ft.    U                    /    ACB

CB-3658



## Inspection's photos