WATER POLLUTION CONTROL AUTHORITY

Town of Trumbull

CONNECTICUT

TOWN HALL
(203) 452-5048

5866 MAIN STREET
TRUMBULL, CT 06611

JANUARY 14, 2026
AGENDA

NOTICE is hereby given that the Water Pollution Control Authority of the Town of Trumbull, CT will hold a special meeting via videoconference on Wednesday, January 14, 2026, at 6:00 p.m.

Join the meeting:
Water Pollution Control Authority Special Meeting
Jan 14, 2026, 6:00 PM
Join from PC, Mac, iPad, or Android:
https://us06web.zoom.us/j/88084951486?pwd=X00R2GNYTb229blEUDoFn5nG1rgw7D.1
Webinar ID: 880 8495 1486
Password: 508452
Join by telephone: (309) 205-3325 / Webinar ID: 880 8495 1486

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1. Call to Order:

2. Roll Call:

3. Approval of November 20, 2025, Meeting Minutes:
   https://www.trumbull-ct.gov/AgendaCenter/ViewFile/Minutes/_11202025-5917

4. New Business:
   - New Sewer Maintainer Position Update
   - Trumbull WPCA 2026 Capital Improvement Plan (CIP)-$2,700,000 Bond Issuance

5. Old Business:
   - 2135-2145 & 2155 Reservoir Avenue Sanitary Sewer Connection Request

6. Adjournment

CATEGORY	LOCATION	DESCRIPTION	*Potential CY2026 Funding Source*	CY 2026 5YR Capital Plan TC Approved	CY 2026 1yr. Funding Request	*CY2026 Funding Sources*				CY 2026 BONDING REQUEST		BOF APPROVED
						LOCIP/TAR	*GRANT*	*OTHER*	*BOND*			
WPCA	Townwide	Pump Station and sewer system evaluation and preliminary design	*Bond*	*400,000*	*200,000*				*200,000*	*200,000*		
WPCA	Wildwood Pump Station	Wildwood Pump Station Rehabilitation Upgrade *(design funded CIP2024)*	*Bond*	2,000,000	2,000,000				*2,000,000*	2,000,000		
WPCA	Various	Force Main evaluations for pump stations	*Bond*	250,000	-				-	-		
WPCA	Various	I/I evaluations, design and repairs for various pump stations	*Bond*	250,000	-				-	-		
WPCA	Various	Gravity main and system pipe lining	*Bond*	250,000	-				-	-		
WPCA	Hawley Lane Pump Station	Hawley Ln. Pump Station upgrade *Phase I Design - funded CIP2025* ***Phase II Construction***	*Bond*	990,000	-				-	-		
WPCA	Beardsley Pump Station	Beardsley Pump Station Garage Floor Repair	*Bond*	500,000	500,000				*500,000*	500,000		
									-	-		
		Total WPCA		**4,640,000**	**2,700,000**	-	-	-	*2,700,000*	**2,700,000**		-

WPCA
Townwide Pump Station and Sewer Systems

Cost Justification - WPCA Townwide Pump Station and Sewer System Evaluations and Preliminary Design

This project funds an evaluation of the Town's pump stations and sewer infrastructure to see what condition they're in, how well they're working, and whether they have enough capacity. The evaluation will identify problems, capacity issues, and what upgrades are needed based on growth, regulatory requirements, and long-term needs.

The work includes inspecting existing pump stations, analyzing the sewer system's capacity, reviewing operations, and creating preliminary designs for needed upgrades. This ensures the Town's wastewater system stays reliable, meets regulations, and can handle capacity.

On-Call Engineering Firm Rates (Bid #6527):

- Project Manager: $260/hr
- Project Engineer: $165/hr
- Assistant Engineer: $135/hr
- Draftsperson: $140/hr
- Project Environmental Scientist: $195/hr
- Environmental Scientist: $125/hr
- Clerical: $95/hr

The department will use the on-call engineering contract for system evaluations, capacity analysis, condition assessments, regulatory reviews, and preliminary design work. Priorities for upgrades and construction will be set based on what the initial assessment finds.

Costs will be based on the existing on-call contract rates and follow the Town's purchasing policy. All work will stay within the approved project budget (Not to Exceed).

WPCA
Wildwood Pump Station

Memo

ARCADIS

SUBJECT
Wildwood Pump Station
Confirmation of Existing Conditions and Alternatives Review

TO
Town of Trumbull WPCA
William Maurer, PE – Town Engineer

DATE
September 19, 2025

OUR REF
30115445

The purpose of this memorandum is to document the analyses performed to evaluate three alternatives to rehabilitate the Wildwood Pump Station located in Trumbull, Connecticut.

Existing Conditions

The Wildwood Pump Station is a wet pit/dry pit, can-style pump station utilizing two constant speed centrifugal pumps in a lead/lag configuration. According to pump nameplates, the existing pumps are designed for 420 gallons per minute (GPM) at 66 feet of total dynamic head (TDH).

To confirm the existing design capacity of each pump, Arcadis performed drawdown testing at the Wildwood Pump Station on May 14, 2025. The drawdown testing involved (1) recording the observed time to fill the wet well and pump run time to confirm the flow rate of the pumps and (2) reviewing as-built drawings to determine wet well capacity and dimensions. The drawdown testing confirmed that Pump 1 has an average flow of 519 gpm and Pump 2 has an average flow of 735 gpm. Arcadis used the observed flow rates from the drawdown testing in further analyses to determine recommendations for the pump station rehabilitation.

Feasibility Review

Three alternatives were considered for rehabilitation of the Pump Station:

1. **Option 1:** Install new submersible pumps in the existing wet well.
2. **Option 2:** Install a new pre-cast submersible pump station with integral vault structure to replace the existing dry well.
3. **Option 3:** Replace the pumps in-kind within the existing dry well and relocate electrical and controls at grade.

Following discussions with the Town, Option 3 was removed from consideration due to the challenges associated with maintaining pumps in the existing configuration.

For both Options 1 and 2, electrical and control systems will be located above grade in weatherproof enclosures beneath a canopy, and the generator will be replaced. Both options will also include new isolation and check valves on each pump, a bypass connection, and a flow meter. The recommended pump for both options is the Flygt NP 3153 HT (duplex configuration: 1 duty, 1 standby), sized for 750 GPM to maintain a minimum force main velocity of 3 feet per second in accordance with TR-16 guidance. At this flow rate, the anticipated TDH required by the pump is approximately 67 feet, based on an analysis of the existing record drawings and the results of the drawdown testing discussed above.

Option 1: New Submersible Pumps in Existing Wet Well

This alternative involves reconfiguring the existing wet well to accommodate new submersible pumps, along with installation of new piping, valves, and appurtenances to connect to the existing force main. Review of as-built drawings indicates sufficient space for two new submersible centrifugal pumps within the wet well, but insufficient space for the required isolation and check valves. Consequently, a separate concrete valve vault (approximately 10’ x 12’ x 11’ deep) would be constructed to house these components. Locating valves in a separate structure is also advantageous due to the corrosive atmosphere in the wet well.

Construction would require demolition of the entrance to the existing dry pit and filling in the structure to support the new valve vault. Additional modifications to the wet well would include:

- Creating new openings in the top and intermediate slabs for pump maintenance access.
- Installing a baffle wall to improve hydraulic conditions and reduce air entrainment.
- Partially filling the wet well to improve flow toward the pumps and minimize dead spots.
- Creating wall penetrations for piping from each pump to the valve vault.

Benefits:

- Requires less demolition of the dry pit and reuses existing structures.
- Expected to be less costly than constructing a new wet well.

Disadvantages:

- Risks associated with modifying and reusing the existing wet well, including construction challenges and potential for differential settlement between the wet well and new valve vault.

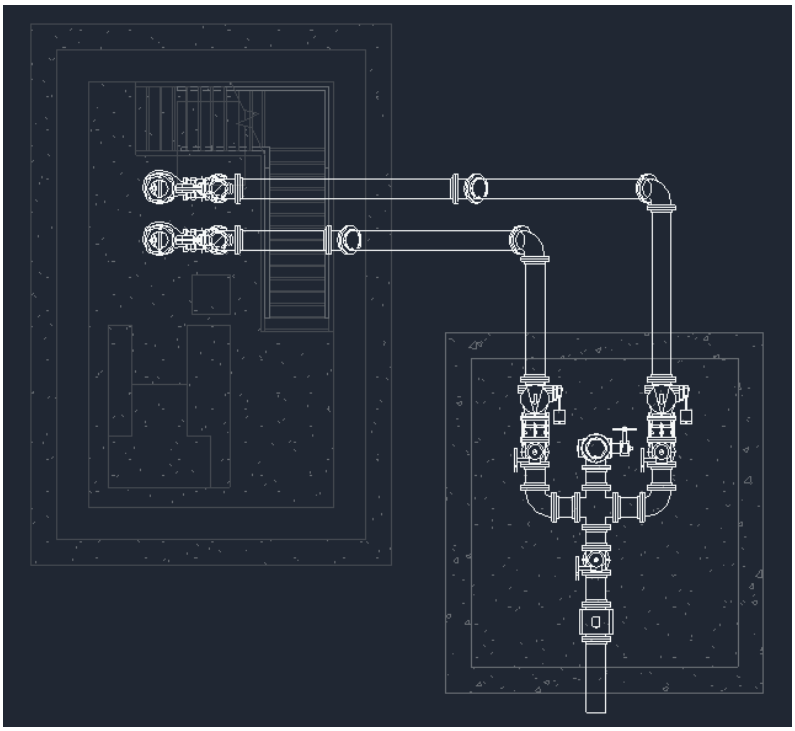


Figure 1. Option 1 plan view.

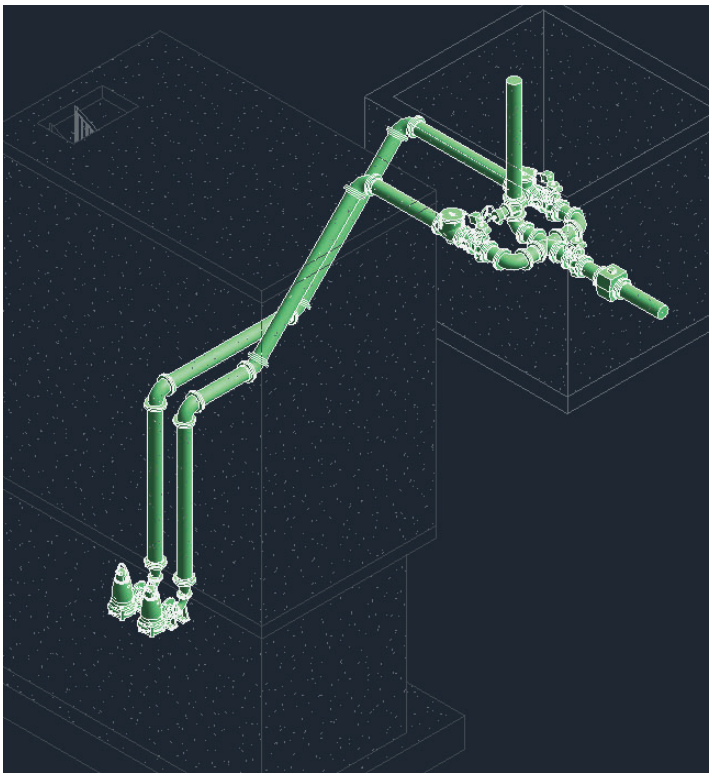


Figure 2. Option 1 isometric view.

Option 2: New Submersible Station with Integral Valve Vault

This alternative involves demolishing the existing dry pit and installing a new pre-cast concrete combination wet well and valve vault structure. The existing wet well would be modified to direct flow to the new structure. This approach is consistent with upgrades completed at the Reservoir Avenue and Old Town Road Pump Stations in 2025.

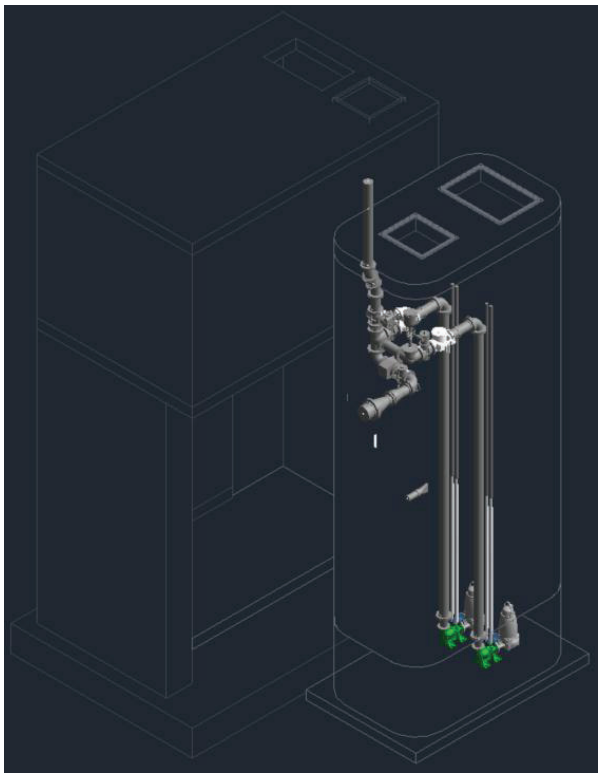


Figure 3. Option 2 isometric view.

Benefits:

- Provides a new, integrated wet well and valve vault, minimizing settlement risks.
- Aligns with recent pump station upgrades, facilitating consistent operations and maintenance.
- Offers operational flexibility and potential for additional storage; the existing wet well could be bypassed in the future if needed.

Disadvantages:

- Requires additional demolition of the existing dry pit.
- Higher construction costs compared to Option 1.

Cost Summary

For cost comparison, it was assumed that operating and maintenance costs for Options 1 and 2 would be similar. The major differences between these two options are summarized below:

Option 1:

1. Construction of concrete valve vault structure.
2. Partial demolition of dry-pit and installation of fill where dry-pit does not need to be demolished.
3. Additional piping and fittings associated with connecting pumps to the separate valve vault
4. Modifications to the existing wet well for submersible pump installation, including new openings, fill, and baffle wall(s).

Option 2:

1. Demolition of existing dry-pit
2. Installation of new wet well structure with integral valve vault
3. Modifications to existing wet well to direct flow to new wet well.

The primary cost differences are summarized below:

Option	Estimated Cost of Option Specific Scope Items
Option 1: Install Submersible Pumps in Existing Wet Well	$323,000
Option 2: New Submersible Pump Station	$433,000
Cost Difference (Option 2 - Option 1):	**$110,000**

Estimated total project cost: Approximately $2 million, based on recent bid results for similar projects.

Recommendation

While Option 1 presents a modest cost savings (~5% of anticipated total project cost), Option 2 is recommended. Option 2 aligns with the design of recently upgraded pump stations, reduces long-term risks, and provides greater operational consistency.

Beardsley Pump Station
Garage Floor Repairs

DeStefano & Chamberlain
Incorporated

WPCA # 3

March 6, 2025

William C. Maurer, P.E., L.S.
Town Engineer / WPCA Administrator
Town of Trumbull
5866 Main Street
Trumbull, CT

Re: Beardsley Pumping Station - 119 White Plains Road, Trumbull CT 06661

Dear William:

As a follow up to our first report dated March 6th, 2025, DeStefano & Chamberlain was retained to perform additional testing of the first-floor garage slab of the Beardsley Pumping Station located at 119 White Plains Road in Trumbull CT.

The concrete slab in the south half of the garage, adjacent to the overhead doors had been patched in several locations on the top side. Additionally, there are areas of spalling and deterioration of the reinforcement visible on the underside of the slab.

As part of the first round of testing on January 23, 2025, Connecticut Materials Testing Laboratory was retained to take two (2) cores around the slab closest to the overhead doors to determine the water-soluble chloride ion content of the concrete. To further understand the extent of deterioration of the remainder of the garage floor slab, Connecticut Materials testing laboratory returned on April 16, 2025, to take three (3) additional cores to be tested for water soluble ion content.

The results from these tests confirmed our findings indicated in the first report that the concrete slab in the front half of the garage forward of the second column should be removed and replaced. A plan view taken from the original construction documents is attached below showing the area of damaged concrete with the location of the core samples indicated.

Due to the nature of the structure, this repair would be phased to limit disturbance to the existing facility. The new structure would consist of a steel framed slab-on-metal deck with a waterproofing membrane and a topping slab pitched to the existing drainage system or another slab protection system.

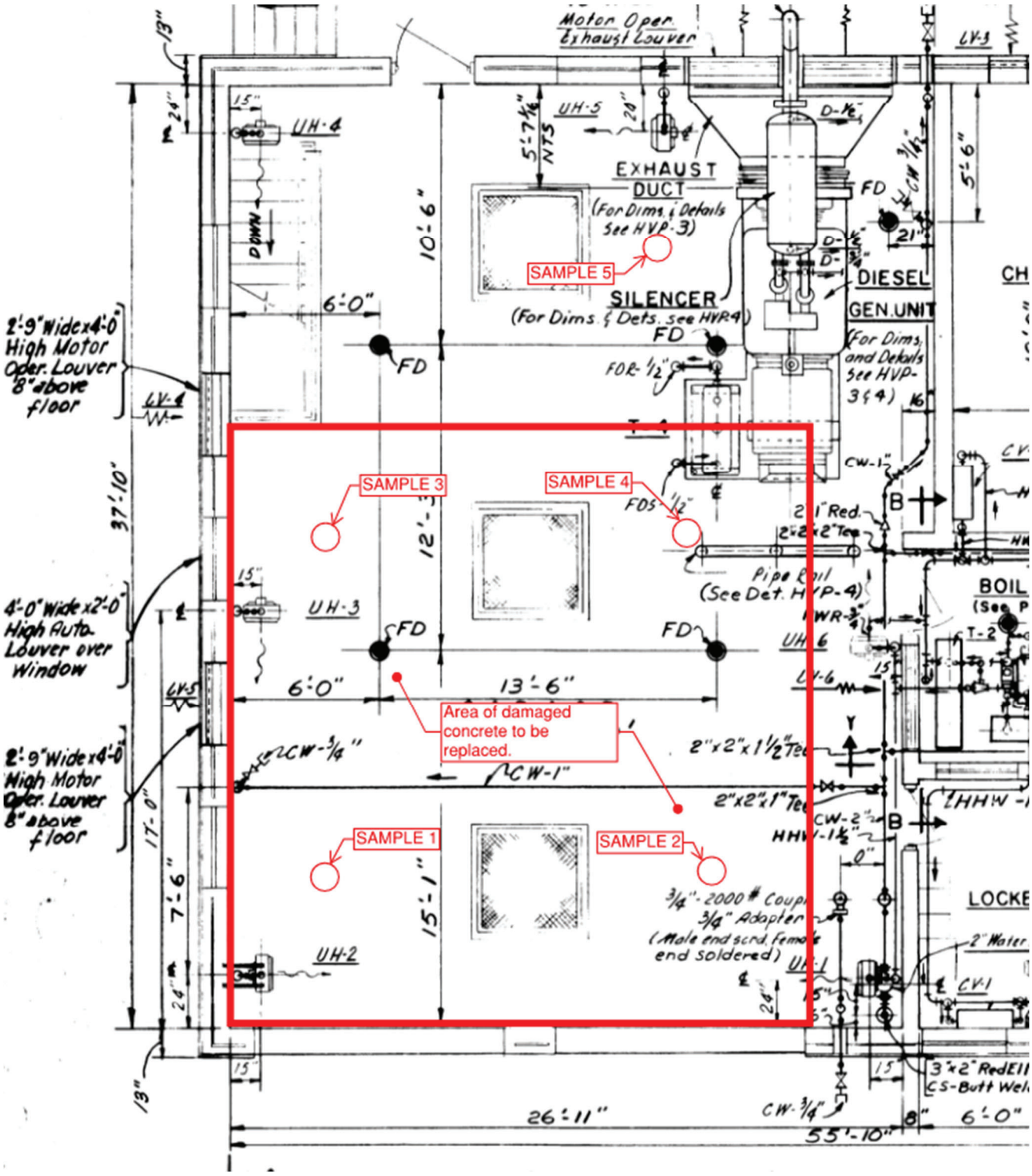
While the structure is not in immediate risk of collapse, the loose and spalling concrete on the underside of the slab will continue and likely get worse over time. This constitutes a falling debris risk to people and machinery operating below in the deep basement area. The replacement of the floor structure should be part of a larger capital improvement plan for the pump station.

The scope of this report is limited to the garage floor slab. No other areas of the building were reviewed as part of this investigation.

Please review this report and contact me with any questions or areas where more discussion would be helpful.

Respectfully,

Richard Way, P.E.



Existing First Floor Plan – Not To Scale

REPORT OF CHLORIDE ANALYSIS

Project:
Beardsley Pump Station

Reported To:
Connecticut Materials Testing Lab, Inc
7 Lexington Ave.
South Norwalk, CT 06854

Attn: Robin Marshlow
APS Project No.: P-0040489
Date: February 17, 2025

INTRODUCTION

This report presents the results of laboratory work performed by our firm on two (2) concrete core samples you submitted on January 28, 2025. The scope of our work was limited to documenting the water-soluble chloride content of the cores at specified depths in accordance with ASTM C1218.

TEST RESULTS

Table 1 – Water-Soluble Chloride Content

Sample Identification	Sample Depth, in.	By Mass of Sample %	By Mass of Sample ppm (mg/kg)
#1	0 - ½	0.017	170
Sample #1	1¾ - 2¼	0.065	650
	3¾ - 4¼	0.051	510
	5¾ - 6¼	0.045	450
	7¾ -8¼	0.007	70
#2	0 - ½	0.182	1820
Sample #2	1¾ - 2¼	0.115	1150
	3¾ - 4¼	0.091	910
	5¾ - 6¼	0.111	1110
	7¾ -8¼	0.176	1760

550 Cleveland Avenue North | Saint Paul, MN 55114
Phone (651) 659-9001 | (800) 972-6364 | Fax (651) 659-1379 | teamAET.com | AA/EEO

TEST PROCEDURES

Laboratory testing was performed on February 11, 2025, and subsequent dates in accordance with ASTM C1218-20, “Standard Test Method for Water-Soluble Chloride in Mortar and Concrete.” The core samples were cut at the designated depths, crushed, dried in an oven, and processed to pass a U.S.A. Standard Test Sieve No. 20. Results presented in Table 1 are reported on a dry weight 105 °C basis.

REMARKS

The test sample(s) will be retained for a period of at least sixty days from the date of this report. Unless further instructions are received by that time, the sample(s) may be discarded. The test results relate only to the sample(s) tested. No warranty, expressed or implied, is made.

Sincerely,
American Engineering Testing
An AASHTO Accredited Laboratory – Aggregates, Cement & Concrete

Report Prepared by:

Nick Wahl
Scientist II
nwahl@teamAET.com
Work: 651-523-1271

Report Reviewed by:

Kattie Reamer
Scientist II
kreamer@teamAET.com
Work: 651-523-1270

REPORT OF CHLORIDE ANALYSIS

Project:
Chloride-Ion Testing

Reported To:
Connecticut Materials Testing Lab, Inc
7 Lexington Avenue
South Norwalk, CT 06854

Attn: Jesus Fanas
APS Project No.: P-0043032
Date: May 8, 2025

INTRODUCTION

This report presents the results of laboratory work performed by our firm on three (3) concrete core samples you submitted on April 22, 2025. The scope of our work was limited to documenting the water-soluble chloride content of the cores at depths of 0-1, 1-2, 2-3, 3-4, and 4-5 inches in accordance with ASTM C1218.

TEST RESULTS

Table 1 – Water-Soluble Chloride Content

Sample Identification	Sample Depth, in.	By Mass of Sample %	By Mass of Sample ppm (mg/kg)
1 Sample #3	0 - 1	0.067	670
	1 - 2	0.004	40
	2 - 3	0.002	20
	3 - 4	0.002	20
	4 - 5	0.004	40
2 Sample #4	0 - 1	0.020	200
	1 - 2	0.089	890
	2 - 3	0.087	870
	3 - 4	0.073	730
	4 - 5	0.064	640
3 Sample #5	0 - 1	0.012	120
	1 - 2	0.004	40
	2 - 3	0.003	30
	3 - 4	0.003	30
	4 - 5	0.003	30

TEST PROCEDURES

Laboratory testing was performed on May 5, 2025, and subsequent dates in accordance with ASTM C1218-20, “Standard Test Method for Water-Soluble Chloride in Mortar and Concrete.” The core samples were cut at the designated depths, crushed, dried in an oven, and processed to pass a U.S.A. Standard Test Sieve No. 20. Results presented in Table 1 are reported on a dry weight 105 °C basis.

REMARKS

The test sample(s) will be retained for a period of at least sixty days from the date of this report. Unless further instructions are received by that time, the sample(s) may be discarded. The test results relate only to the sample(s) tested. No warranty, expressed or implied, is made.

Sincerely,
American Engineering Testing
An AASHTO Accredited Laboratory – Aggregates, Cement & Concrete

Report Prepared by:

Kattie Reamer
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Work: 651-523-1270

Report Reviewed by:

Nick Wahl
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nwahl@teamAET.com
Work: 651-523-1271