S1891-005
May 21, 2025

Salisbury Water Pollution Control Authority
Curtis Rand, First Selectman
Town of Salisbury
27 Main Street, PO Box 548
Salisbury, CT 06068

Re: **Town of Salisbury, CT – Wake Robin Inn Redevelopment – Review of Downstream Capacity Analysis – Sanitary Sewer**

Dear Members of the Salisbury WPCA and First Selectman Rand,

This letter summarizes Tighe & Bond's review of the Wake Robin Inn developer Aradev's *"Downstream Capacity Analysis – Sanitary Sewer, SLR, April 28, 2025"* (Capacity Analysis) and provides recommendations regarding sanitary sewer system capacity. Tighe & Bond has reviewed this document in accordance with the "Connecticut Public Health Code On-site Sewage Disposal Regulations, Technical Standards for Subsurface Sewage Disposal Systems" Section IV, Table 4 and "*Guidance for Design of Large-Scale On-Site Wastewater Renovation Systems*" (CT PHC) and TR-16 Guides for the Design of Wastewater Treatment Works.

Executive Summary

The ability of the Salisbury WPCF to accept flows from the Wake Robin Inn is limited by inflow and infiltration (I/I) in the collection system. During peak storms both the collection system and WPCF have no (zero) capacity to accept additional flow. In order to accept additional flow, I/I must be removed from the system. We have recommended an I/I mitigation project for this proposed development. We have also recommended that the Town develop fees and procedures for any additional proposed flow to the WPCF as any new or increased connections must be paired with I/I reduction or the plant will quickly exceed design capacity and trigger CTDEEP compliance actions.

Wastewater Flow

Table 1, found on page 3, provides a summary of the proposed calculated typical flows. Tighe & Bond has reviewed these calculations and have identified no inconsistencies with the CT PHC. We note that the quantity of bedrooms resulting from the guest rooms and cottages has been reduced by three (3) and eight (8) respectively. The WPCA should confirm that this is consistent with other documents submitted to the Town. The proposed typical flows total 19,770 gpd (13.7 gpm). A peaking factor of 3.0 was applied to calculate maximum day flow of 41 gpm. The peaking factor utilized is consistent with ASCE MOP 9 Sewer Design & Construction "Relation of Extreme Discharges on Maximum and Minimum Days".

In addition to these typical flows, the Capacity Analysis presents the flows resulting from the hot tub and pools. As noted in SLR's analysis, these units can be drained on a schedule allowing them to avoid peak flow conditions. We recommend the following be incorporated into the project's formal approval:

- WPCF staff be informed of schedule prior to drainage activities

- Unit drainage is not permitting to occur:
  - Concurrently
  - Between 6:30 am to 9:30 am on Monday through Saturday
  - Between 11am and 1 pm on Sunday
  - During times of precipitation

In order to account for these drainage flows, the capacity analysis utilized an additional 30 gpm to result in an analysis wastewater production of 71 gpm.

Collection System Capacity

Flow metering was completed to identify typical existing flows in the collection system and to characterize the impact of inflow and infiltration on collection system capacity. Appendix D provides the gravity flow calculations for each pipe segment. Tighe & Bond reviewed these calculations and the calculation methodology is consistent with engineering standards. Table 1 below demonstrates the sewer system capacity utilized by the project. As presented, the section from SMH-7 to SMH-3 is impacted by the increased flows due to the lower capacity of this section resulting from flatter pipe slopes.

Table 1 – Flow Metering Results

Section	Upstream MH No.	Ext. Peak Flow (gpm)	% Full Ext. Flow (%)	Proj. Peak Flow (gpm)	% Full Peak Flow (%)
SMH-SR5 to SMH-1	SMH-SR5	224.0	37%	295	49.3%
	SMH-SR4	224.0	52%	295	69.0%
	SMH-SR3	224.0	44%	295	58.4%
	SMH-SR2	224.0	13%	295	17.2%
	SMH-SR1	224.0	12%	295	15.9%
	SMH-WH1	224.0	8%	295	11.0%
	SMH-M7	224.0	8%	295	10.0%
	SMH-M6	267.0	14%	338	17.3%
	SMH-M5	267.0	14%	338	17.3%
	SMH-A1	267.0	7%	338	8.4%
	SMH-10	267.0	9%	338	11.1%
	SMH-9	267.0	18%	338	23.2%
	SMH-8	267.0	36%	338	45.8%
	SMH-7	267.0	49%	338	62.5%
	SMH-6	413.0	62%	484	73.1%
	SMH-5	413.0	62%	484	72.5%
	SMH-3A	413.0	75%	484	88.1%
	SMH-3	413.0	36%	484	42.2%
	SMH-2A	413.0	31%	484	35.8%
	SMH-2	413.0	56%	484	65.1%

Additionally, while flow metering was able to document the impact of several precipitation events, the largest rain event during the flow monitoring period was 0.46-inches. During the flow metering period, the peak flow experienced at the WPCF was 0.44 MGD. In times of more substantial rainfall, the WPCF experiences flows far exceeding those that occurred during the flow metering period. Table 2 below provides the date, rainfall and resulting WPCF flow during two storms in comparison to the 1-year return frequency, 24-hour storm event.

Table 2 – Extreme Rainfall Events

Date	Rainfall (in)	WPCF Flow (MGD)
December 18, 2023	2.51	0.91
January 10, 2024	2.38	1.14
May 9, 2025	2.31	1.60
1-year, 24-hour storm	2.55	---

It is important to note that during these storm events, pipe sections are likely exceeding capacity regardless of contributions from the Wake Robin Inn or any other development/redevelopment project.

It is recommended that in order to connect to the collection system, an I/I mitigation contribution is made which will permit the WPCA to fund activities to offset the impact of additional flows.

Wastewater Pollution Control Facility Capacity

The design capacity of the WPCF is 0.67 MGD. Table 3 provides the average and peak day flows over the last three years and to date.

Table 3 – WPCF Flows

Flow Condition	2022	2023	2024	2025*
Annual Average Flow (MGD)	0.35	0.42	0.34	0.50
Peak Day Flow (MGD)	0.56	0.60	0.57	0.79

* Average and peak flow to date

The WPCF's NPDES permit as issued by the CTDEEP notes:

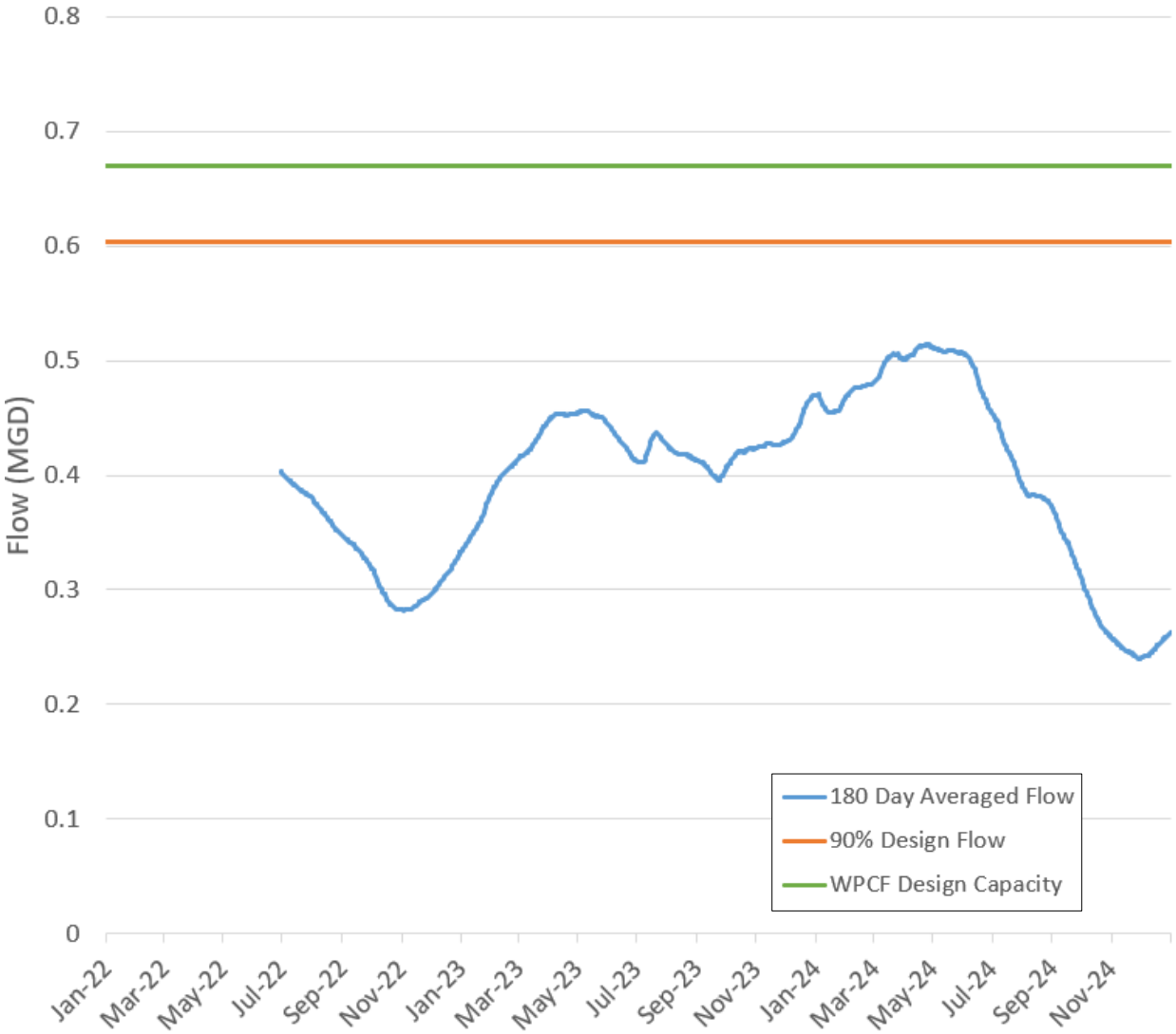
4.(B) No new discharge of domestic sewage from a single source to the POTW in excess of 33,500 gallons per day shall be allowed by the Permitee until the Permitee has notified in writing the Connecticut Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse, Water Planning and Management Division, Municipal Wastewater Section, 79 Elm Street, Hartford, CT 06106-5127 of said new discharge.

4.(Q) When the arithmetic mean of the average daily flow from the POTW for the previous 180 days exceeds 90% of the design flow rate, the Permitee shall develop and submit within one year, for the review and approval of the Commissioner, a plan to accommodate future increases in flow to the plant. This plan shall include a schedule for completing any recommended improvements and a plan for financing the improvements.

The proposed flow to the WPCF is 19,770 gpd and thus notification requirements provided by 4.(B) is not triggered.

In order to assess compliance with paragraph 4.(Q) the 2022 – 2024 WPCF flow data was modified to include the additional flow contribution from the Wake Robin Inn. This is presented in Figure 1. This analysis indicates that the plant will remain in compliance with paragraph 4.(Q) with the additional flows from the Wake Robin Inn.

Figure 1 – 2022 – 2024 WPCF with Calculated WRI Additional Flows



Recommendations

Tighe & Bond recommends approval of the Wake Robin Inn project by the Salisbury WPCA with the following conditions:

1. It is recommended that in order to connect to the collection system, an I/I mitigation contribution is made which will permit the WPCA to fund activities to offset the impact of additional flows. From previous analysis, there are opportunities to mitigate infiltration to the Salisbury collection system. We recommend the following basis for estimating the I/I mitigation efforts, which assumes 0.1 gpm/linear foot can be removed from lining pipe sections previously identified as potential sources of I/I. This estimate also includes the cost of the engineering per review of this capacity analysis, and the WPCF capacity analysis presented below.

Table 3 – Recommended I/I Mitigation Contribution

	Unit	Cost		Total	
Heavy Cleaning	700	$	6	$	4,200
CCTV	700	$	2	$	1,400
CIP Lining	400	$	50	$	20,000
Lateral T-Liner	3	$	7,500	$	22,500
Remove Protruding Tap	3	$	500	$	1,500
				$	49,600

2. The following items should be included in the formal approval:
   - WPCF staff be informed of schedule prior to drainage activities
   - Unit drainage is not permitting to occur:
     - Concurrently
     - Between 6:30 am to 9:30 am on Monday through Saturday
     - Between 11am and 1 pm on Sunday
     - During times of precipitation

3. The applicant provide an escrow for engineering review.

It has been indicated that the Salisbury WPCA has received increased interest in development that may impact the WPCF. For communities with capacity concerns, including those impacted by inflow and infiltration within the collections system, an established process for wastewater system connections for new development and redevelopment is valuable. Many communities utilize the following process:

- Establish a WPCA application form

- Obtain on-call services from an engineering consultant who can provide review on behalf of the WPCA.

- Once the application is received the consulting engineer will work with the WPCA and developer to convey the engineering analysis required to determine the documentation that must be provided by the developer. As completed in this case, a determination of flows, collection system capacity analysis and WPCF capacity analysis would be typical.

- The consultant would recommend an escrow amount to be provided by the developer to the WPCA. In this case the escrow of $15,000 would be recommended. In this case, Tighe & Bond reviewed initial flow estimates and produced a flow memo (attached), reviewed the collection capacity analysis and provided the WPCF capacity evaluation. This escrow amount should be based upon the time required to review and provide appropriate support to the WPCA.

- Once the developer's consultants have provided the WPCF consultant the required documents, the review is completed, and a letter documenting the findings would be provided to the WPCA, so they can act upon the application, which would then be approved, more information requested, or rejected.

- Based upon other similar communities, fees paid by development and redevelopment companies is a suitable and common way to mitigate the increased demand on the collection system by funding projects that address inflow and infiltration and as a result increase collection system capacity.

- The WPCF is part of the Connecticut Nitrogen Credit Exchange. When the WPCF experiences high flows, the plant experiences higher nitrogen concentrations in the effluent. When the loading exceeds to programs cap, Salisbury must 'purchase' credit. In 2024, Salisbury spent approximately $11,000 on nitrogen cap exceedances. As flows increase these costs will also increase. Additionally, phosphorus treatment requires the use of chemicals. As flows increase, chemical usage and thus chemical costs increase. Both of these issues will impact user costs. The impact of additional flow on the costs of all users should be considered.

Please let us know if you have any questions or comments regarding this analysis or recommendations.

Very truly yours,

TIGHE & BOND, INC.

Erin K. Moore, PE
Project Director

Enclosures: Downstream Capacity Analysis – Sanitary Sewer, SLR, April 28, 2025
Wake Robin Inn, Sewer Gallons per Day Calculations, Tighe & Bond, December 10, 2024

SLR

Wake Robin Inn - 104 & 106 Sharon Road, Salisbury, Connecticut

Downstream Capacity Analysis – Sanitary Sewer

ARADEV, LLC

352 Atlantic Avenue, Unit 2
Brooklyn, NY 11217

Prepared by:

SLR International Corporation

99 Realty Drive, Cheshire, Connecticut, 06410

Thomas Knowlton
4-28-25

SLR Project No.: 141.21278.00001
Client Ref. No.: 22100

April 28, 2025

Making Sustainability Happen

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Acronyms and Abbreviations

CTDEEP	Connecticut Department of Energy & Environmental Protection
CTDPH	Connecticut Department of Public Health
EST	EST Associates, Inc.
FEMA	Federal Emergency Management Agency
GAL	Gallon
GPM	Gallons Per Minute
HP	Horsepower
I/I	Inflow and Infiltration
RII	Rainwater Induced Infiltration
SLR	SLR International Corporation
SMH	Sanitary Manhole

1.0 Introduction

Aradev, LLC ("the Client") is planning the redevelopment of the Wake Robin Inn, located at 104 and 106 Sharon Road in Salisbury, Connecticut, into a boutique hotel with an event space, restaurant, bar, pool, and spa. On behalf of Aradev, SLR International Corporation (SLR) has prepared the following downstream capacity analysis of the sanitary sewer collection system for Wake Robin Inn. SLR obtained available sewer mapping from the Town's Consultant, Tighe & Bond. SLR hired a metering consultant to perform sewer flow metering at three locations between the Wake Robin Inn and the wastewater treatment plant located at 50 Walton Street, Lakeville.

2.0 Project Overview

Aradev is planning the redevelopment of the Wake Robin Inn into a boutique hotel that will serve both the local Salisbury and greater areas. The project will include the restoration and expansion of the main inn building, four cottages spread throughout the property, an outdoor seasonal pool, a spa, and event space attached to the main inn building to hold 125-person gatherings. A food and beverage program will be spread across the buildings to serve both patrons of the property and local community members.

2.1 Inn and Addition

The existing Main Inn will have 14 guest rooms, and a new addition will provide 39 guest rooms for a total of 53 guest rooms in the Inn.

2.2 Cottages

Four stand-alone two-bedroom cottages will be added on the property.

2.3 Event Space

The event space can be rented out any day of the week, and most events will take place on weekends/holidays with occasional afternoon or midday events on the weekends (trade shows, art fairs, or corporate events as examples). Events within the event space that occur on Monday, Tuesday, Wednesday, or Thursday will be allowed between the hours of 9 a.m. and 10 p.m. Events within the event space that occur on Friday, Saturday, Sunday, or any Holiday will be allowed between the hours of 9 a.m. and 12 a.m. (midnight).

Capacity: The event space will have a capacity limit of 125 guests, whether seated or standing. The venue may be reserved for private events by both hotel guests and members of the public. In addition, Aradev anticipates utilizing the event space to host a range of community-oriented and public events, including but not limited to trade shows, art exhibitions, philanthropic gatherings, and town hall meetings.

2.4 Restaurant and Bar

The three-meal restaurant inside the hotel will be open daily at 7 a.m. and conclude service in accordance with the proposed hours of operation.

Capacity: Anticipated interior usage at one time will be between 40 to 80 persons and exterior usage at 40 to 80 persons.

2.5 Pool

The seasonal pool will feature lounge chairs, umbrellas, and tables for hotel guests only. Guests will be able to order drinks and lite bites at the pool which will be serviced from the main inn building. The hours of operation will be 9 a.m. to 8 p.m. daily.

Capacity: An estimated occupancy of 40 to 50 people, with a total of 100 persons per day.

2.6 Spa

The spa will contain a tranquility/reading room, 4 to 5 treatment rooms, women's lockers, men's lockers, hot and cold plunges, a sauna, and a yoga studio. The hours of operation will be 7 a.m. to 7 p.m. daily. The spa is open to the public via advanced reservations for treatments only. Hotel guests receive priority in booking treatments and are allowed to purchase day passes (maximum 2 hours of use) with no more than 5 day passes in use at a time (depending on the capacity of treatments booked).

Capacity: The spa can accommodate 10 to 12 guests at a time, potentially up to 50 guests each day, allocated 10-gallons per person to accommodate plunge pool showering, for a total consumption rate of 500-gallons per day. Connecticut Public Health Code recommends using 100 gpd per pedicure chair/spa (5-gallon maximum basin) each for four treatment rooms for a total of 400 gpd. Connecticut Public Health Code recommends using 20 gpd per employee, so six employees will have a total of 120 gpd. This results in a total estimated spa discharge of 1,020 gpd.

3.0 Site Description

The approximately 13.4-acre subject site located at 104 and 106 Sharon Road has frontage on both Sharon Road and Wells Hill Road. Two of the cottages will discharge by gravity to the Town's 8" gravity collection system on Wells Hill Road. The rest of the property will discharge by gravity to the Town's 10" gravity collection system on Sharon Road. One of the cottages and the Spa building will each have a sewage grinder pump and force main to discharge into the new onsite 8" gravity collection system, which will also serve all the other buildings onsite. The two restaurants and bar will be served by two 3,000-gallon grease interceptor tanks. The proposed site plan is included in Appendix A.

4.0 Sanitary Sewer Flow Estimate

Unit flow rates are taken from the "Connecticut Public Health Code On-Site Sewage Disposal Regulations and Technical Standards for Subsurface Sewage Disposal Systems" (January 2024) Section IV, Table 4. Although the proposed development will be connected to municipal sewer and not have an onsite subsurface sewage disposal system, this more conservative flow estimation method is being used for ease of review and approval. Table 1 provides a summary of proposed sewer flows.

Table 1 – Proposed Average Daily Sanitary Sewer Flows

Source	Unit	Quantity	Flow/Unit (gpd)	AVG Daily Flow (gpd)
Main Hotel + Extension				
Restaurant	Seat (1)	120	45	5,400
Bar	Seat (2)	40	22.5	900
Total Guest Rooms	Bedroom (3)	53	100	5,300
Cottages	Bedroom (3)	8	100	800
Laundry Facilities	Washing machines (4)	4	400	1,600
Spa	Day	1	1,020	1,020
Event Space + Fast Casual				
Event Space	Persons (5)	125	30	3,750
Fast Casual Restaurant	Meals per day (6)	100	5	500
Pool + Pool House	Bather (7)	50	10	500
			Total Flow (gpd):	**19,770**

Notes:

1- Seat flow/unit factor from Table 4 of the Connecticut Department of Public Health (CTDPH) standard for “Restaurant (Public toilets provided), per seat” increased 50% for 3 meals served per day
2- Seat flow/unit factor from Table 4 of the CTDPH standard for “Bar/Cocktail Lounge (no meals), per seat” increased 50% for meals served
3- Bedroom flow/unit factor from Table 4 of the CTDPH standard for “Motel (transient, with kitchenette but no laundry facilities), per room”
4- Washing machine flow/unit factor from Table 4 of the CTDPH standard for “Laundromat (non-Connecticut Department of Energy & Environmental Protection [CTDEEP] regulated), per machine”
5- Calculation assumes meals served in Event Space; flow/unit factor from Table 4 of the CTDPH standard for “Restaurant (Public toilets provided), per seat”
6- Meal per day flow/unit factor from Table 4 of the CTDPH standard for “Take-out food service, per meal served”
7- Bather flow/unit factor from Table 4 of the CTDPH standard for “Swimming pool, per bather”

4.1 Pool Drainage

The proposed development will include an inground pool (outdoors so it will be used seasonally) and indoor hot tub and cold plunge pool. Each of these pools and hot tub require draining and refilling periodically. The draining will be discharged into the sanitary sewer system. However,

the filter cartridges do not require backwash discharge to the sewer system. They are further described as follows:

4.1.1 Inground Pool

- 50'L x 20'W x 5'D = 37,400 gallons
- Salt water
- Only in use from May – October
- 30 gallons per minute (GPM) (2" diameter drain line – via gravity) 21 hours to drain or
  60 GPM (2" diameter drain line – via 0.5 HP pump) 10.5 hours to drain
- Drained and refilled once a year

4.1.2 Hot Tub

- 3.5' Radius x 3'D = 860 gallons
- Open year round
- 16.5 GPM (1.5" diameter drain line – via gravity) 52 minutes to drain or
  33 GPM (1.5" diameter drain line – via 0.5 HP pump) 26 minutes to drain
- Drained and refilled once a month

4.1.3 Cold Plunge Pool

- 31'L x 6'W x 4.5'D = 6,260 gallons
- Open year-round
- 30 GPM (2" diameter drain line – via gravity) 3.5 hours to drain or
  60 GPM (2" diameter drain line – via 0.5 HP pump) 1.75 hours (105 minutes) to drain
- Drained and refilled twice a year

These two pools and hot tub shall be scheduled to drain one at a time. The maximum pumped discharge for any one pool is 60 gpm or 30 gpm by gravity flow. The draining could also be scheduled to occur during sewer off-peak time. Peak sewer flow generally occurs between 7:00 and 9:00 a.m. Monday through Saturday and between noon and 1:00 p.m. on Sunday.

5.0 Sanitary Sewer Flow Metering

The Town requested the applicant perform sanitary sewer flow metering to determine the flow in the existing collection system. The Town was concerned that they have elevated levels of inflow and infiltration (I/I). Inflow is the direct discharge of stormwater into the sanitary sewer system and infiltration is the direct discharge of groundwater into the collection system via cracks in pipes or manholes. SLR contracted with EST Associates, Inc. located in Needham, Massachusetts to provide and install temporary flow meters in the sanitary sewer main downstream of the Wake Robin Inn. SLR coordinated with the Town and Tighe & Bond to select three meter locations: Meter #1 was installed in manhole SMH-2 at Walton Road (easement) near the wastewater treatment plant, Meter #2 in manhole SMH-6 at 10 Farnum Road (Harrington Building Supply), and Meter #3 in manhole SMH-M6 at 41 Montgomery Road. A collection system map provided by the Town with manhole numbers is included in Appendix B. The path of sewer discharge from the Wake Robin Inn to the wastewater treatment plant is indicated with a red line over the sewer main as shown on the collection system map. This is the portion of the Town's collection system that was analyzed for downstream capacity in order to accommodate the proposed development.

A temporary rain gauge was installed near the wastewater treatment plant to record rainfall measurements in 15-minute increments. The three meters and rain gauge were installed on March 24, 2025 and removed on April 9, 2025.

A copy of EST's Flow Monitoring Report is included in Appendix C. Table 2 summarizes the average daily flow, peak flow, and associated peaking factor for each of the three meters.

Table 2 - Summary of Flow Meter Data

Meter Number	Manhole Number	Average Flow (gpm)	Peak Flow (gpm)	Peaking Factor
1	SMH-2	207.4	413.3	2.0
2	SMH-6	104.0	267.1	2.6
3	SMH-M6	84.1	224.2	2.7

Source: EST Associates, Inc.

SLR performed a downstream capacity analysis of each of the pipe segments between the Wake Robin Inn and the wastewater treatment plant. SLR's survey department surveyed the locations and invert elevations of all the manholes except one invert (SMH-M5 on Sharon Road), which could not be opened. Utilizing the pipe diameter, pipe material, invert elevations and lengths of each pipe segment, SLR used Manning's Equation to calculate the estimated flow capacity of each pipe. The peak meter flows for each meter were used in the upstream segments of sewer main between each meter. The peak flow rate at Meter #3 picked up flows from both Sharon Road (including the Hotchkiss School) and Wells Hill Road. Therefore, the peak metered flow could not be used for the analysis on Wells Hill Road so the existing peak flow on Wells Hill Road was estimated using a house count of 12 houses with an average daily flow of 450 gpd/house and a peaking factor.

A peaking factor of 3.0 was applied to the estimated average daily flow of the proposed development (19,770 gpd) to estimate a peak flow of 41 gpm. This flow rate along with the peak gravity pool drainage flow rate of 30 gpm was added to the existing peak flows to perform the capacity analysis. Appendix D contains the results of the downstream capacity analysis. Each pipe segment is projected to be flowing less than 90% of the total pipe capacity, which is a Town requirement.

6.0 Rainfall Data and Infiltration

Measurable rainfall was recorded on 12 of the 15 days the meters were installed. The highest single rainfall event was 0.46" in 3 hours (March 31, 2025 to April 1, 2025); the second was 0.41" over 23 hours (April 5, 2025 to April 6, 2025). There was no observed immediate spike in metered flows following these rainfall events, which would be indicative of inflow. The spike observed on April 1, 2025 following the rain event coincided with the normal peak morning flow around 9 a.m. The spike on Sunday (April 6, 2025) occurred with the normal peak flow at around 1:00 p.m. as occurred on the previous Sunday. There may have been a slight increase due to infiltration, but negligible. The highest flow recorded at Meter #1 didn't occur during either of these rain events. The flow came back to near dry weather flows within hours of each rain event. There was no prolonged increase in flow over a day or two that would be indicative of excessive rainwater induced infiltration (RII).

To estimate infiltration, data from the 3 consecutive dry days (March 26, 2025 to March 28, 2025) during the night hours of 2:00 to 6:00 a.m. were analyzed, which is indicative of infiltration in areas that do not have nighttime industrial or commercial flows like Salisbury.

- Meter #1 averaged 156 gpm flow during this time period over 3 days. Immediately following the two rain events, the flow increased to 183 gpm on April 1, 2025 and 177 on April 7, 2025. The difference is contributed to RII, which was minimal. However, Meter #1 had an average flow rate of 207 gpm over the 2-week metering period, so the infiltration amount of 156 gpm is about 75% of the flow going to the plant.

- Meter #2 had a nighttime average of 66 gpm on dry days (March 26, 2025 to March 28, 2025) and an average of 76 gpm on April 1, 2025 and April 7, 2025 following the rain events. Again, not much RII.

- Meter #3 had a nighttime average of 43 gpm on dry days (March 26, 2025 to March 28, 2025) and an average of 49 gpm on April 1, 2025 and 46 gpm on April 7, 2025 following the rain events. Again, not much RII.

- Most of the infiltration and RII is manifesting at Meter #1, which is to be expected since most of the town's collection system comes in just upstream of where Meter #1 was placed.

7.0 Conclusion

The downstream capacity analysis illustrates that there is a high percentage of infiltration flow in the existing sewer collection system. However, the RII was minimal and the inflow was negligible during the two storms observed during the metering period. The downstream capacity analysis shows that with the added development flows each pipe segment stays below the 90% capacity threshold required by the Town. Therefore, it appears that there is sufficient capacity to allow the proposed development at the Wake Robin Inn to connect to the Town's sanitary sewer collection system. A single pool draining by gravity at 30 gpm can also be accommodated, but the Town could choose to require the applicant to discharge during off-peak periods during the day or night.

If you have any questions regarding this report, please do not hesitate to contact the undersigned at (203) 271-1773.
Regards,

SLR International Corporation

Thomas A. Knowlton, PE
Principal Water & Wastewater Engineer
tknowlton@slrconsulting.com

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Appendix A Proposed Site Plan

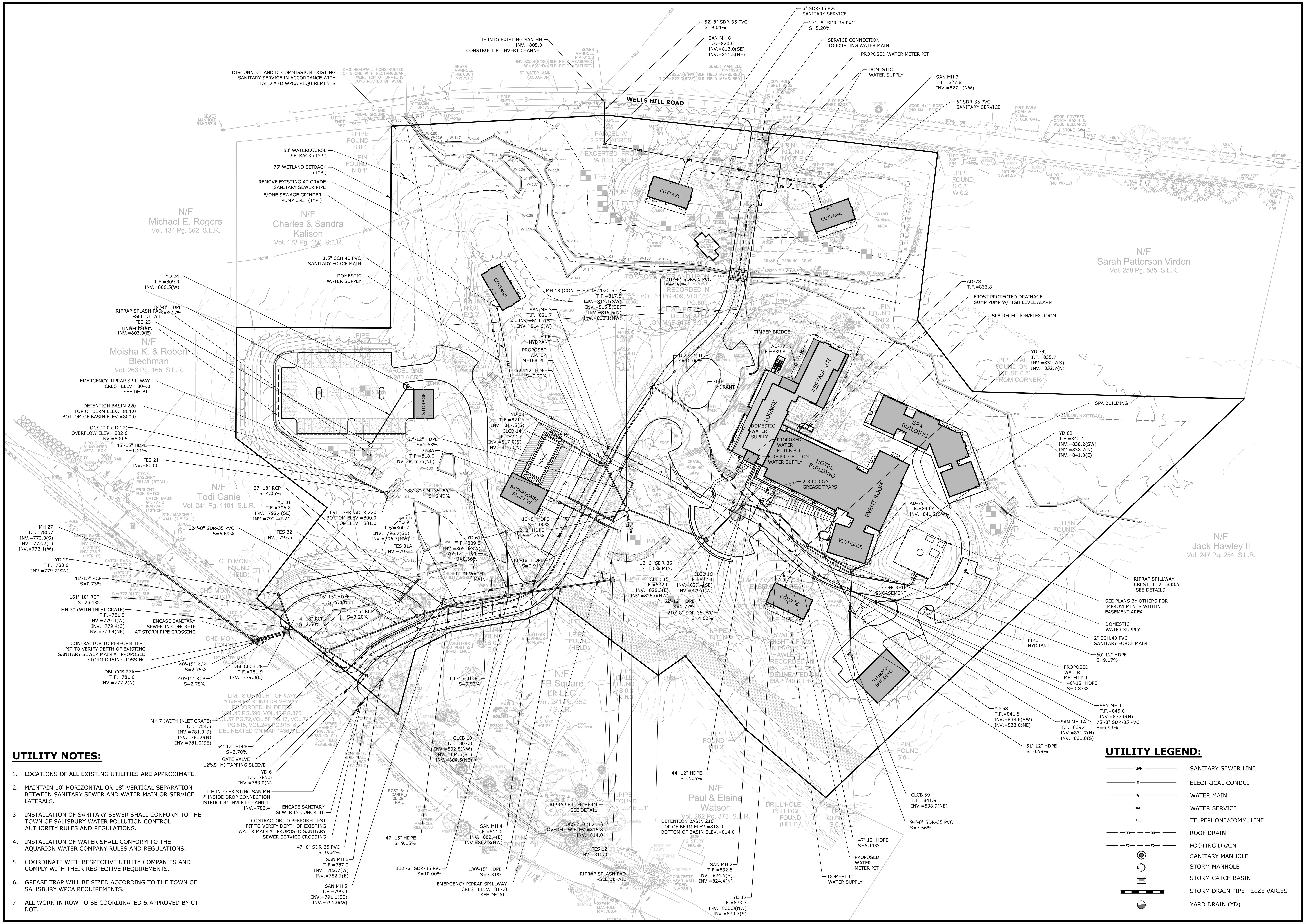
Wake Robin Inn - 104 & 106 Sharon Road, Salisbury, Connecticut

Downstream Capacity Analysis – Sanitary Sewer

ARADEV, LLC

SLR Project No.: 141.21278.00001
Client Ref. No.: 22100

April 28, 2025



UTILITY NOTES:

1. LOCATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE.
2. MAINTAIN 10' HORIZONTAL OR 18" VERTICAL SEPARATION BETWEEN SANITARY SEWER AND WATER MAIN OR SERVICE LATERALS.
3. INSTALLATION OF SANITARY SEWER SHALL CONFORM TO THE TOWN OF SALISBURY WATER POLLUTION CONTROL AUTHORITY RULES AND REGULATIONS.
4. INSTALLATION OF WATER SHALL CONFORM TO THE AQUARION WATER COMPANY RULES AND REGULATIONS.
5. COORDINATE WITH RESPECTIVE UTILITY COMPANIES AND COMPLY WITH THEIR RESPECTIVE REQUIREMENTS.
6. GREASE TRAP WILL BE SIZED ACCORDING TO THE TOWN OF SALISBURY WPCA REQUIREMENTS.
7. ALL WORK IN ROW TO BE COORDINATED & APPROVED BY CT DOT.

UTILITY LEGEND:

- SANITARY SEWER LINE
- ELECTRICAL CONDUIT
- WATER MAIN
- WATER SERVICE
- TELPEPHONE/COMM. LINE
- ROOF DRAIN
- FOOTING DRAIN
- SANITARY MANHOLE
- STORM MANHOLE
- STORM CATCH BASIN
- STORM DRAIN PIPE - SIZE VARIES
- YARD DRAIN (YD)

SLR
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
SLRCONSULTING.COM

DESCRIPTION	DATE	BY

SITE PLAN - UTILITIES

WAKE ROBIN INN REDEVELOPMENT

104 & 106 SHARON ROAD & 53 WELLS HILL ROAD
SALISBURY, CONNECTICUT

DESIGNED	DRAWN	CHECKED
SM	SM	TR

SCALE: 1"=50'

DATE: APRIL 18, 2025

PROJECT NO.: 22100.00001

SHEET NO.: 07 OF 23

SHEET NAME: UT

Appendix B Sewer Collection System Map

Wake Robin Inn - 104 & 106 Sharon Road, Salisbury, Connecticut

Downstream Capacity Analysis – Sanitary Sewer

ARADEV, LLC

SLR Project No.: 141.21278.00001
Client Ref. No.: 22100

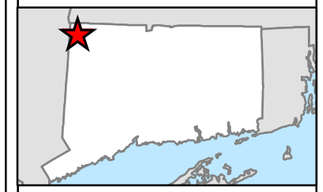
April 28, 2025

EXISTING COLLECTION SYSTEM

LEGEND

- Sewer Manhole
- Sewer Main

LOCUS MAP



N

0 125 250 500

Feet

1:6,000

NOTES

Sewer Rehabilitation Project
Town of Salisbury, CT

Appendix C – Map of Existing Collection System

May, 2017

Tighe&Bond
Engineers | Environmental Specialists

Path: G:\GIS\CT\SalisburyCT\avproj\SalisburyExisting.mxd

S-1891

Appendix C Flow Monitoring Report by EST Associates

Wake Robin Inn - 104 & 106 Sharon Road, Salisbury, Connecticut

Downstream Capacity Analysis – Sanitary Sewer

ARADEV, LLC

SLR Project No.: 141.21278.00001
Client Ref. No.: 22100

April 28, 2025

EST Associates, Inc.

Flow Monitoring Report

March - April 2025

Prepared For:

SLR Consulting

Services Performed In:

Salisbury, CT

Prepared by:

EST Associates Inc.
124 Crescent Road, Needham, MA 02494 Tel: (781) 455-0003
ESTAssociates.com

Meter 1 - Salisbury, CT

Outside View

Downhole View

Downstream View

Upstream View

124 Crescent Road, Needham, MA 02494
tel: 781-455-0003 fax: 781-455-8336

Environmental Monitoring
Pipeline Services
Operations Maintenance

SITE INVESTIGATION FORM

Client: SLR Consulting

Meter ID: **Meter 1**

Location: Salisbury, CT

Address: Walton Street

INSTALL DATA

Date: 3/24/2025

Time: 11:45 AM

GPS Coordinates: 41.9668405, -73.4327644

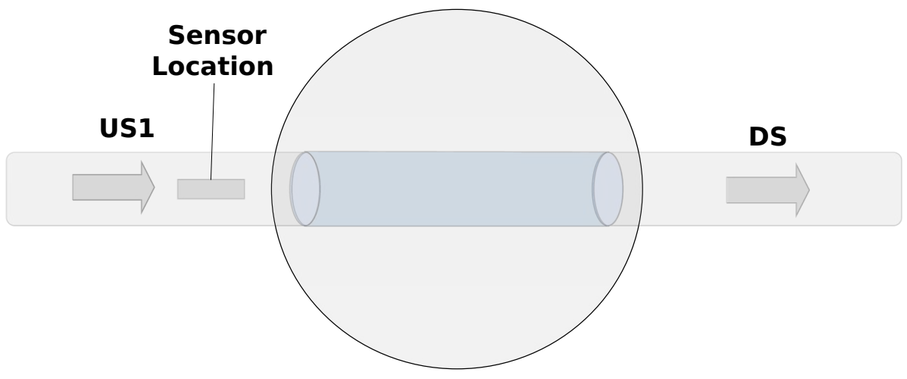
Sensor Location: US1

Installed By: MK/TA

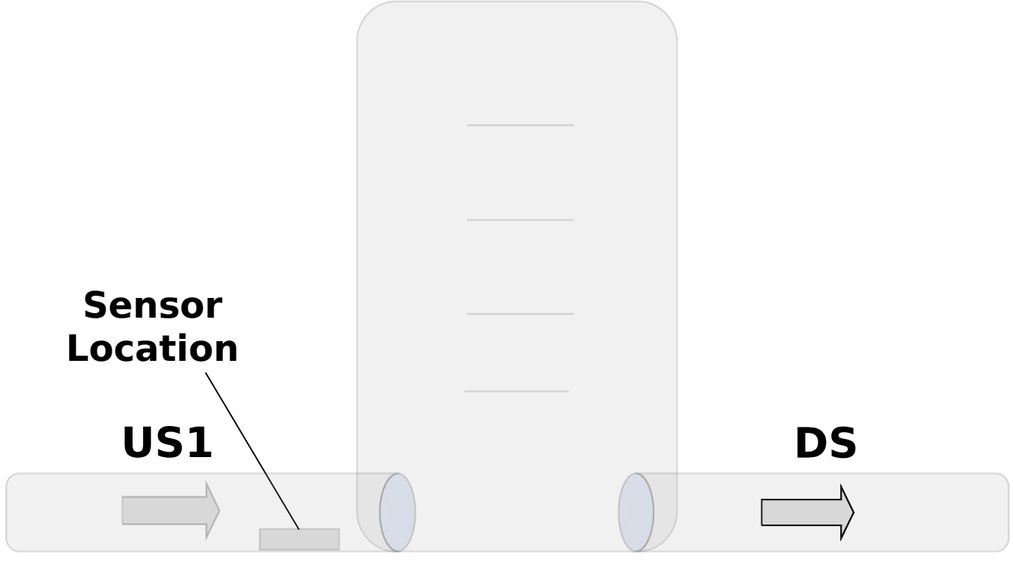
LINE DESCRIPTIONS

	Size *(in)*	Pipe Material	Debris *(in)*	Shape	Depth *(ft, in)*
DS	15"	VCP	0"	CIR	5'
US1	15"	VCP	0"	CIR	4'11"

PLAN VIEW



PROFILE VIEW



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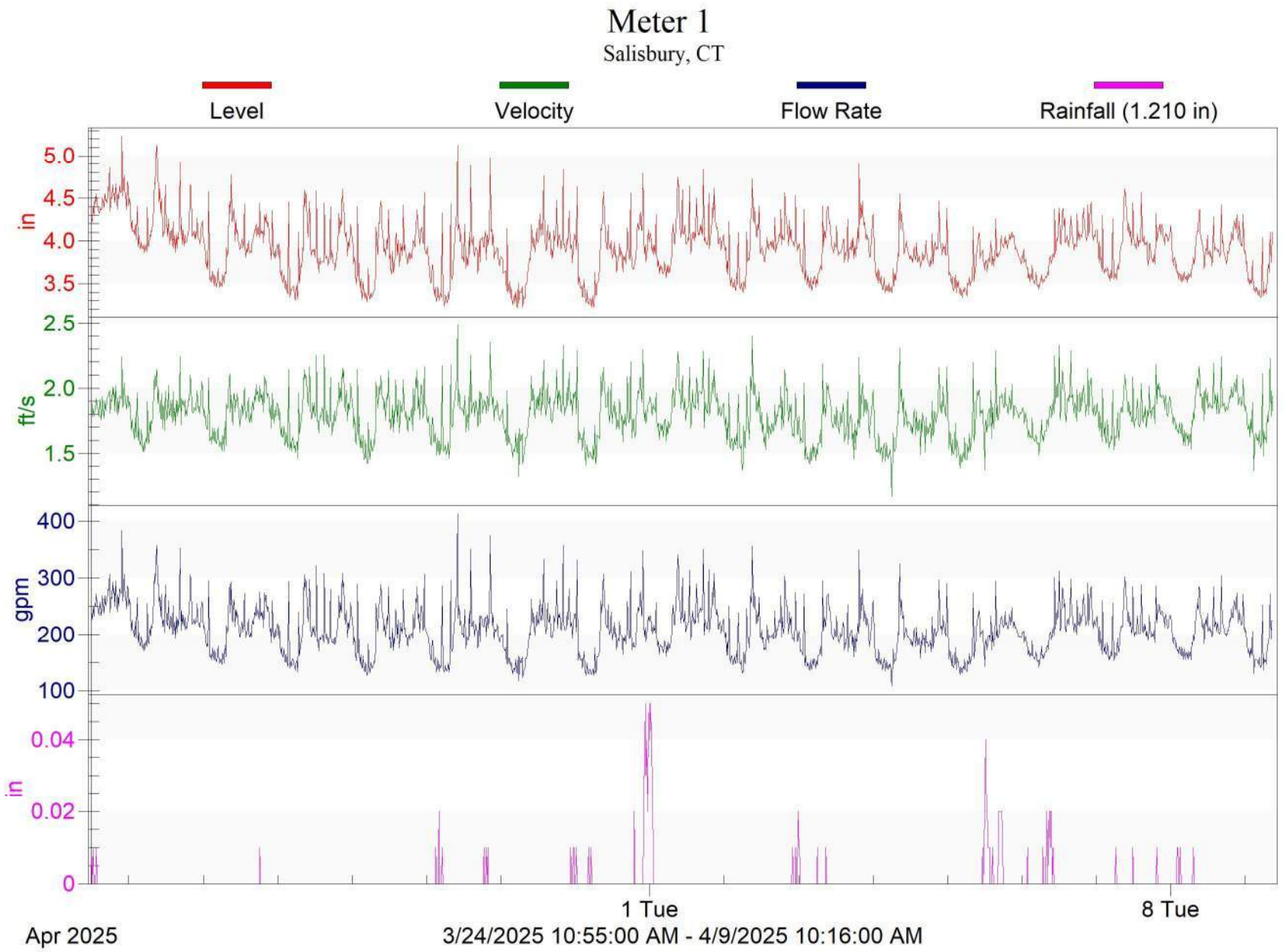

Meter 1
Salisbury, CT
Level
Velocity
Flow Rate
Rainfall (1.210 in)
in
5.0
4.5
4.0
3.5
ft/s
2.5
2.0
1.5
gpm
400
300
200
100
in
0.04
0.02
0
1 Tue
8 Tue
Apr 2025
3/24/2025 10:55:00 AM - 4/9/2025 10:16:00 AM

EST Associates, Inc.

Meter 1, Salisbury, CT

Daily Flow Rate Table

Date/Time (m/d/yyyy)	Average Flow Rate (gpm)	Minimum Flow Rate (gpm)	Time of Minimum Flow Rate (h:mm)	Maximum Flow Rate (gpm)	Time of Maximum Flow Rate (h:mm)	Total Flow (gal)
3/24/2025	264.4	226.5	12:15 PM	383.5	9:45 PM	380,783.6
3/25/2025	229.5	170.0	5:00 AM	356.8	9:00 AM	330,421.6
3/26/2025	211.1	146.0	6:00 AM	295.3	1:45 AM	303,969.4
3/27/2025	205.9	133.2	6:30 AM	321.5	12:30 PM	296,552.7
3/28/2025	201.6	127.2	4:45 AM	307.3	11:15 PM	290,368.9
3/29/2025	202.0	132.7	7:15 AM	413.3	10:00 AM	290,873.2
3/30/2025	201.8	117.1	5:45 AM	358.2	8:00 PM	290,636.3
3/31/2025	197.9	126.9	3:15 AM	348.2	9:45 PM	284,959.6
4/1/2025	226.0	160.3	5:15 AM	350.8	5:15 PM	325,511.3
4/2/2025	202.7	130.9	5:45 AM	356.6	9:00 AM	291,930.0
4/3/2025	198.8	135.8	3:30 AM	349.4	7:30 PM	286,200.1
4/4/2025	188.8	108.8	6:00 AM	325.4	8:30 AM	271,890.9
4/5/2025	188.9	128.5	4:00 AM	294.9	3:30 PM	272,067.6
4/6/2025	209.9	141.6	5:30 AM	312.3	12:00 PM	302,217.2
4/7/2025	211.1	152.6	5:45 AM	302.3	9:15 AM	304,009.1
4/8/2025	210.4	154.3	6:30 AM	304.1	4:15 PM	302,944.7
4/9/2025	174.5	130.4	2:45 AM	272.3	8:00 AM	251,259.3
Flow Total (gal)	**Average Flow Rate Total (gpm)**	**Minimum Flow Rate (gpm)**	**Time of Minimum Flow Rate (m/d/yyyy h:mm)**	**Maximum Flow Rate (gpm)**	**Time of Maximum Flow Rate (m/d/yyyy h:mm)**	**Average Total Flow (gal)**
5,076,596	207.4	108.8	4/4/2025 6:00	413.3	3/29/2025 10:00	298,623.3

EST
Associates, Inc.

Pipeline Services
Sampling Monitoring
Operations Maintenance

CALIBRATION & DATA COLLECTION

Client: SLR Consulting **Meter ID:** SMH-2 Salisbury, CT

Address: Walton Rd. Easement

SERVICES PERFORMED

Date: 3-24-25 **Technicians:** MK/TA

Time: 1145 **Meter Serial Number:** EST 291

- ☐ Sensor Cleaning
- ☐ Calibration Check
- ☐ Data Download
- ☑ Other: Meter Install

Data Downloaded: ☑ Yes ☐ No

- ☐ By Modem on: _____
- ☑ To Laptop Serial Number: # MK

Battery Replacement: ☐ Yes ☑ No

Existing voltage: 12.5 New voltage: _____

Dessicant Status: Good

Replaced: ☐ Yes ☑ No

METER READINGS

Levels: Meter: 4.17 *(in.)* Actual: 4.17 *(in.)*

Recalibrated: ☐ Yes ☑ No

Sensor Type: ☑ Area Velocity ☐ Ultrasonic ☐ Laser

Velocity: Meter: 1.891 *(ft/s)* Actual: 1.9 *(ft/s)*

NOTES

Notes: _____

EST
Associates, Inc.

Pipeline Services
Sampling Monitoring
Operations Maintenance

CALIBRATION & DATA COLLECTION

Client: SLR Consulting **Meter ID:** SMH-2

Address: Walton Rd. Easement

SERVICES PERFORMED

Date: 3-31-25 **Technicians:** MK/TA

Time: 1156 **Meter Serial Number:** EST 294

- [x] Sensor Cleaning
- [x] Calibration Check
- [x] Data Download
- [ ] Other: _____

Data Downloaded: [x] Yes [ ] No

- [ ] By Modem on: _____
- [x] To Laptop Serial Number: # MK

Battery Replacement: [ ] Yes [x] No

Existing voltage: 12.3 New voltage: _____

Dessicant Status: Good

Replaced: [ ] Yes [x] No

METER READINGS

Levels: Meter: 3.779 *(in.)* Actual: 3.75 *(in.)*

Recalibrated: [ ] Yes [x] No

Sensor Type: [x] Area Velocity [ ] Ultrasonic [ ] Laser

Velocity: Meter: 1.780 *(ft/s)* Actual: 1.8 *(ft/s)*

NOTES

Notes: _____

EST
Associates, Inc.

Pipeline Services
Sampling Monitoring
Operations Maintenance

CALIBRATION & DATA COLLECTION

Client: SLR Consulting **Meter ID:** SMH-2

Address: Walton Rd

SERVICES PERFORMED

Date: 4/9/25 **Technicians:** JC/TA

Time: 08:54 **Meter Serial Number:** EST-294

- [x] Sensor Cleaning
- [x] Calibration Check
- [x] Data Download
- [x] Other: Meter Removal

Data Downloaded:

- [x] Yes
- [ ] No
- [ ] By Modem on: _____
- [x] To Laptop Serial Number: JR

Battery Replacement:

- [ ] Yes
- [x] No

Existing voltage: 12.0 New voltage: _____

Dessicant Status: Good

Replaced:

- [ ] Yes
- [x] No

METER READINGS

Levels: Meter: 4.04 *(in.)* Actual: 4.0 *(in.)*

Recalibrated:

- [ ] Yes
- [ ] No

Sensor Type:

- [x] Area Velocity
- [ ] Ultrasonic
- [ ] Laser

Velocity: Meter: 2.05 *(ft/s)* Actual: 2.05 *(ft/s)*

NOTES

Notes: _____

Meter 2 - Salisbury, CT

Outside View

Downhole View

Downstream View

US1 View

US2 View

124 Crescent Road, Needham, MA 02494
tel: 781-455-0003 fax: 781-455-8336

EST Associates, Inc.

Environmental Monitoring
Pipeline Services
Operations Maintenance

SITE INVESTIGATION FORM

Client: SLR Consulting **Meter ID:** **Meter 2**

Location: Salisbury, CT **Address:** Farnum Street

INSTALL DATA

Date: 3/24/2025

Time: 11:00 AM

GPS Coordinates: 41.9648447, -73.4360581

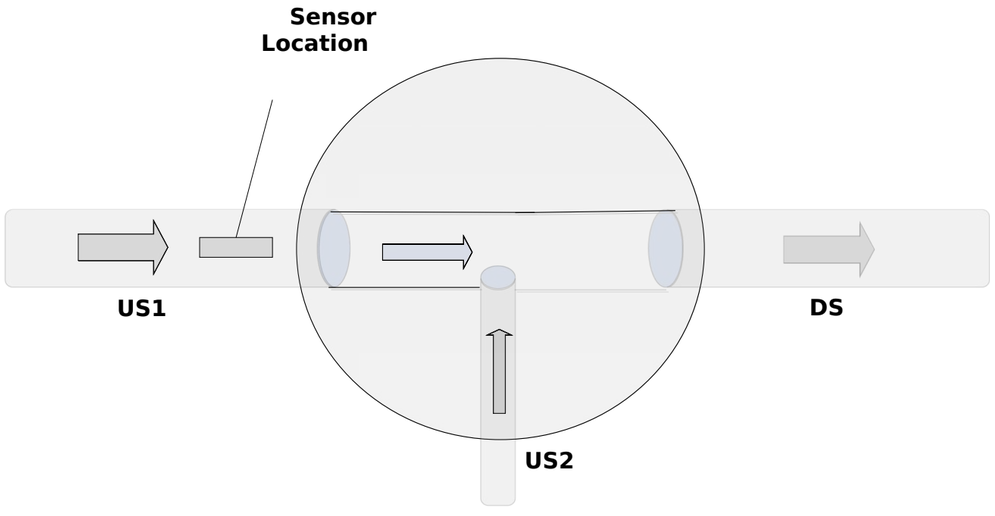
Sensor Location: US1

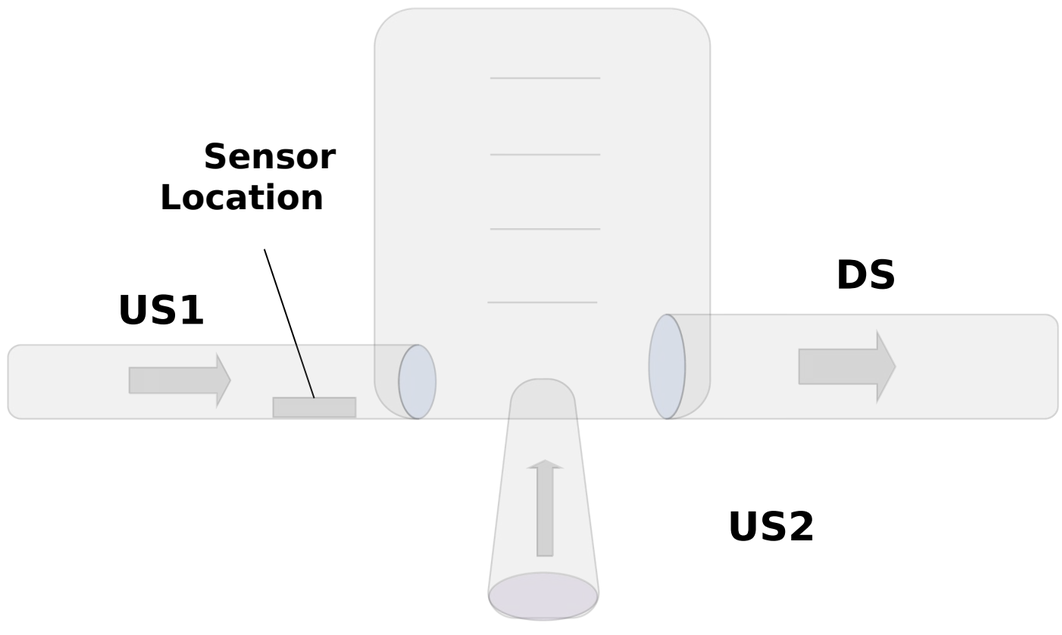
Installed By: MK/TA

LINE DESCRIPTIONS

	Size *(in)*	Pipe Material	Debris *(in)*	Shape	Depth *(ft, in)*
DS	12'	Cast Iron	0"	CIR	8'3"
US1	12'	Cast Iron	0"	CIR	8'2"
US2	6"	PVC	0"	CIR	6'7"

PLAN VIEW PROFILE VIEW





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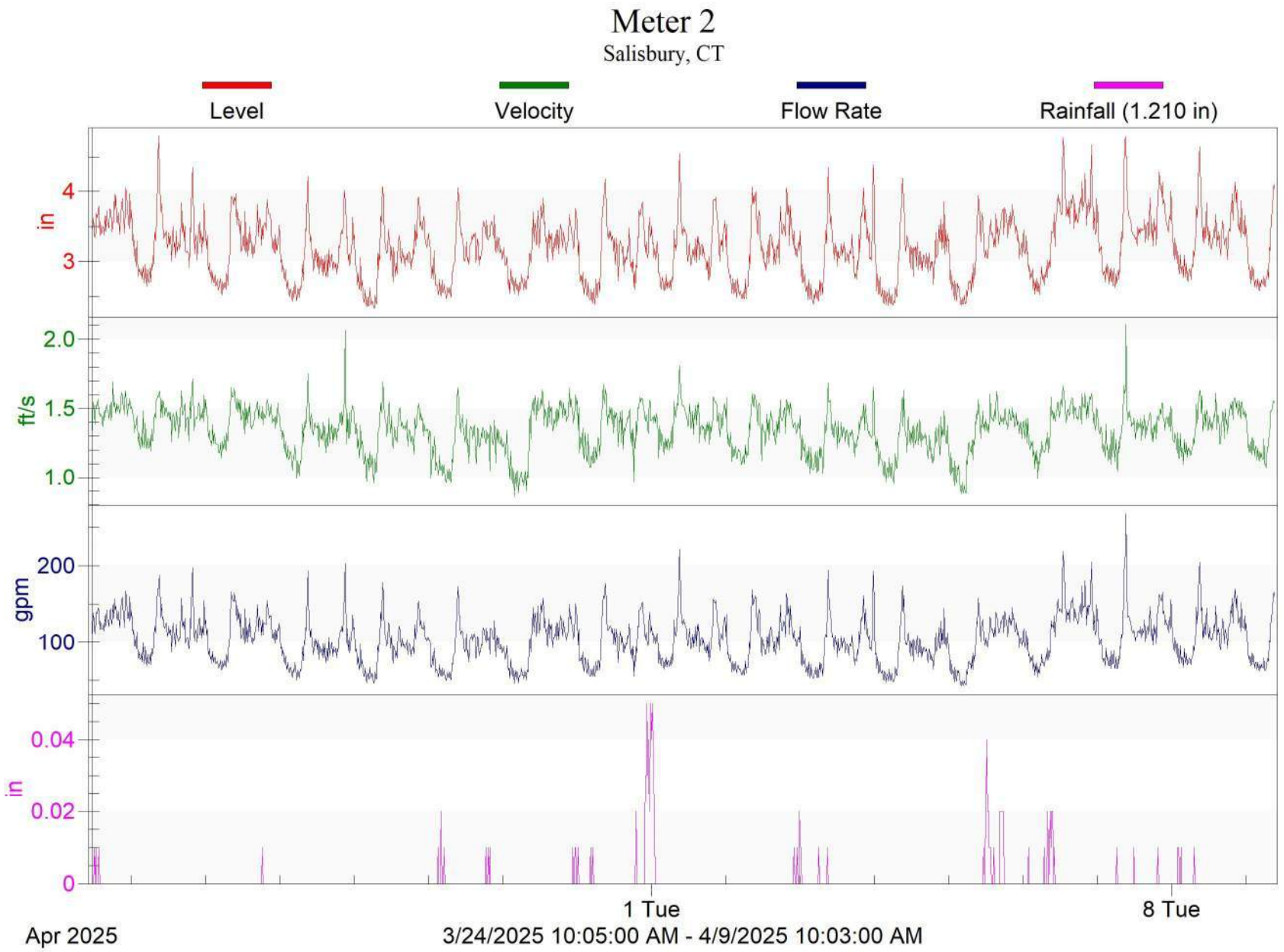

Meter 2
Salisbury, CT
Level
Velocity
Flow Rate
Rainfall (1.210 in)
in
4
3
ft/s
2.0
1.5
1.0
gpm
200
100
in
0.04
0.02
0
1 Tue
8 Tue
Apr 2025
3/24/2025 10:05:00 AM - 4/9/2025 10:03:00 AM

EST Associates, Inc.

Meter 2, Salisbury, CT

Daily Flow Rate Table

Date/Time (m/d/yyyy)	Average Flow Rate (gpm)	Minimum Flow Rate (gpm)	Time of Minimum Flow Rate (h:mm)	Maximum Flow Rate (gpm)	Time of Maximum Flow Rate (h:mm)	Total Flow (gal)
3/24/2025	134.1	98.7	11:15 AM	166.9	10:15 PM	193,082.9
3/25/2025	112.9	69.6	5:00 AM	196.9	7:45 PM	162,582.3
3/26/2025	110.4	64.3	5:00 AM	166.1	8:15 AM	159,038.4
3/27/2025	94.3	51.2	5:30 AM	202.0	9:00 PM	135,720.4
3/28/2025	94.5	46.3	6:15 AM	177.8	9:15 AM	136,137.5
3/29/2025	91.8	50.2	5:45 AM	173.0	9:30 AM	132,125.9
3/30/2025	100.6	46.6	3:45 AM	157.9	1:00 PM	144,896.7
3/31/2025	100.4	55.2	5:45 AM	176.9	9:00 AM	144,545.2
4/1/2025	107.2	65.0	4:00 AM	221.5	9:00 AM	154,313.2
4/2/2025	102.3	57.4	6:00 AM	168.5	8:30 AM	147,279.2
4/3/2025	95.4	52.9	4:15 AM	193.8	9:00 AM	137,347.9
4/4/2025	87.9	47.7	3:45 AM	173.6	9:00 AM	126,607.4
4/5/2025	98.5	43.3	4:00 AM	157.8	9:30 AM	141,903.8
4/6/2025	120.1	54.9	4:45 AM	218.1	12:45 PM	173,002.6
4/7/2025	115.0	65.4	4:15 AM	267.1	9:15 AM	165,599.6
4/8/2025	113.8	67.2	3:45 AM	204.2	9:00 AM	163,844.5
4/9/2025	88.5	62.1	4:15 AM	165.3	9:00 AM	127,505.9
Flow Total (gal)	**Average Flow Rate Total (gpm)**	**Minimum Flow Rate (gpm)**	**Time of Minimum Flow Rate (m/d/yyyy h:mm)**	**Maximum Flow Rate (gpm)**	**Time of Maximum Flow Rate (m/d/yyyy h:mm)**	**Average Total Flow (gal)**
2,545,533	104.0	43.3	4/5/2025 4:00	267.1	4/7/2025 9:15	149,737.3

EST
Associates, Inc.

Pipeline Services
Sampling Monitoring
Operations Maintenance

CALIBRATION & DATA COLLECTION

Client: SLR Consulting **Meter ID:** SMH-6 Salisbury, CT

Address: 10 Farnum Rd (Harrington Building Supply)

SERVICES PERFORMED

Date: 3-24-25 **Technicians:** MK/TA

Time: 1115 **Meter Serial Number:** EST 253

- ☐ Sensor Cleaning
- ☐ Calibration Check
- ☐ Data Download
- ☑ Other: Meter Install

Data Downloaded:

- ☑ Yes
- ☐ No
- ☐ By Modem on: _____
- ☑ To Laptop Serial Number: HMR

Battery Replacement:

- ☐ Yes
- ☒ No

Existing voltage: 12.4 New voltage: _____

Dessicant Status: Good

Replaced:

- ☐ Yes
- ☒ No

METER READINGS

Levels: Meter: 3.5 *(in.)* Actual: 3.5 *(in.)*

Recalibrated:

- ☐ Yes
- ☑ No

Sensor Type:

- ☑ Area Velocity
- ☐ Ultrasonic
- ☐ Laser

Velocity: Meter: 1.49 *(ft/s)* Actual: 1.5 *(ft/s)*

NOTES

Notes: _____

EST
Associates, Inc.

Pipeline Services
Sampling Monitoring
Operations Maintenance

CALIBRATION & DATA COLLECTION

Client: SLR Consulting **Meter ID:** SMH-6

Address: 10 Fairpoint Rd.

SERVICES PERFORMED

Date: 3-31-25 **Technicians:** MK/TA

Time: 1116 **Meter Serial Number:** EST 253

- [x] Sensor Cleaning
- [x] Calibration Check
- [x] Data Download
- [ ] Other: _____

Data Downloaded: [x] Yes [ ] No

- [ ] By Modem on: _____
- [x] To Laptop Serial Number: #nr

Battery Replacement: [ ] Yes [x] No

Existing voltage: 12.6 New voltage: _____

Dessicant Status: Good

Replaced: [ ] Yes [x] No

METER READINGS

Levels: Meter: 3.265 *(in.)* Actual: 3.25 *(in.)*

Recalibrated: [ ] Yes [ ] No

Sensor Type: [ ] Area Velocity [ ] Ultrasonic [ ] Laser

Velocity: Meter: 1.439 *(ft/s)* Actual: 1.4 *(ft/s)*

NOTES

Notes: _____

EST
Associates, Inc.

Pipeline Services
Sampling Monitoring
Operations Maintenance

CALIBRATION & DATA COLLECTION

Client: SLR Consulting **Meter ID:** SMH-4

Address: 10 Farnum Rd

SERVICES PERFORMED

Date: 4/9/25 **Technicians:** JC/TA

Time: 0918 **Meter Serial Number:** FST-25J

- [x] Sensor Cleaning
- [x] Calibration Check
- [x] Data Download
- [x] Other: Meter Removal

Data Downloaded:

- [x] Yes
- [ ] No
- [ ] By Modem on: _____
- [x] To Laptop Serial Number: JR

Battery Replacement:

- [ ] Yes
- [x] No

Existing voltage: 11.1 New voltage: _____

Dessicant Status: Good

Replaced:

- [ ] Yes
- [x] No

METER READINGS

Levels: Meter: 4.14 (in.) Actual: 4.00 (in.)

Recalibrated:

- [ ] Yes
- [ ] No

Sensor Type:

- [x] Area Velocity
- [ ] Ultrasonic
- [ ] Laser

Velocity: Meter: 1.59 (ft/s) Actual: 1.59 (ft/s)

NOTES

Notes: _____

Meter 3 - Salisbury, CT

Outside View

Downhole View

Downstream View

Upstream View

124 Crescent Road, Needham, MA 02494
tel: 781-455-0003 fax: 781-455-8336

EST Associates, Inc.

Environmental Monitoring
Pipeline Services
Operations Maintenance

SITE INVESTIGATION FORM

Client: SLR Consulting **Meter ID:** **Meter 3**

Location: Fairfield, CT **Address:** Montgomery Street

INSTALL DATA

Date: 3/24/2025

Time: 10:30 AM

GPS Coordinates: 41.962330, -73.4390414

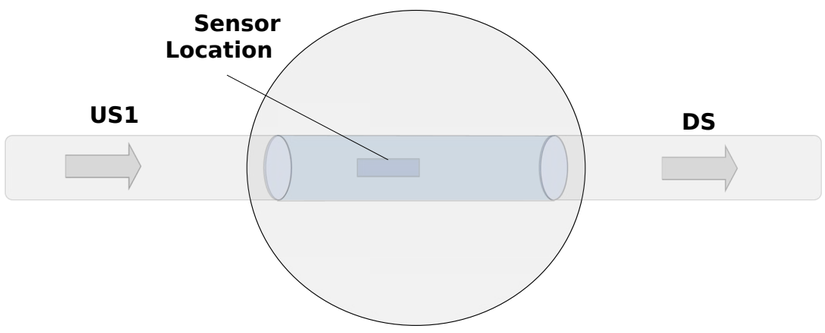
Sensor Location: US1

Installed By: MK/TA

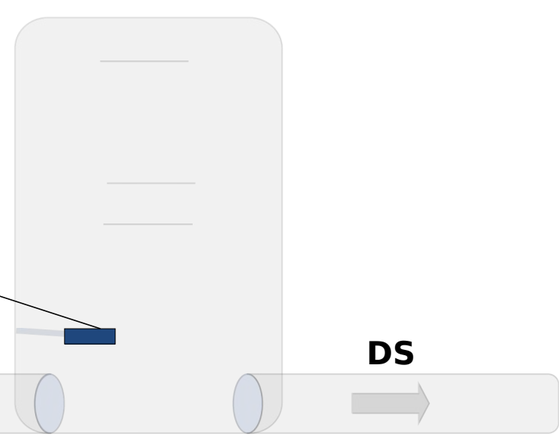
LINE DESCRIPTIONS

	Size *(in)*	Pipe Material	Debris *(in)*	Shape	Depth *(ft, in)*
DS	8"	VCP	0"	CIR	8'3"
US1	8"	VCP	0"	CIR	8'5"

PLAN VIEW



VIEW



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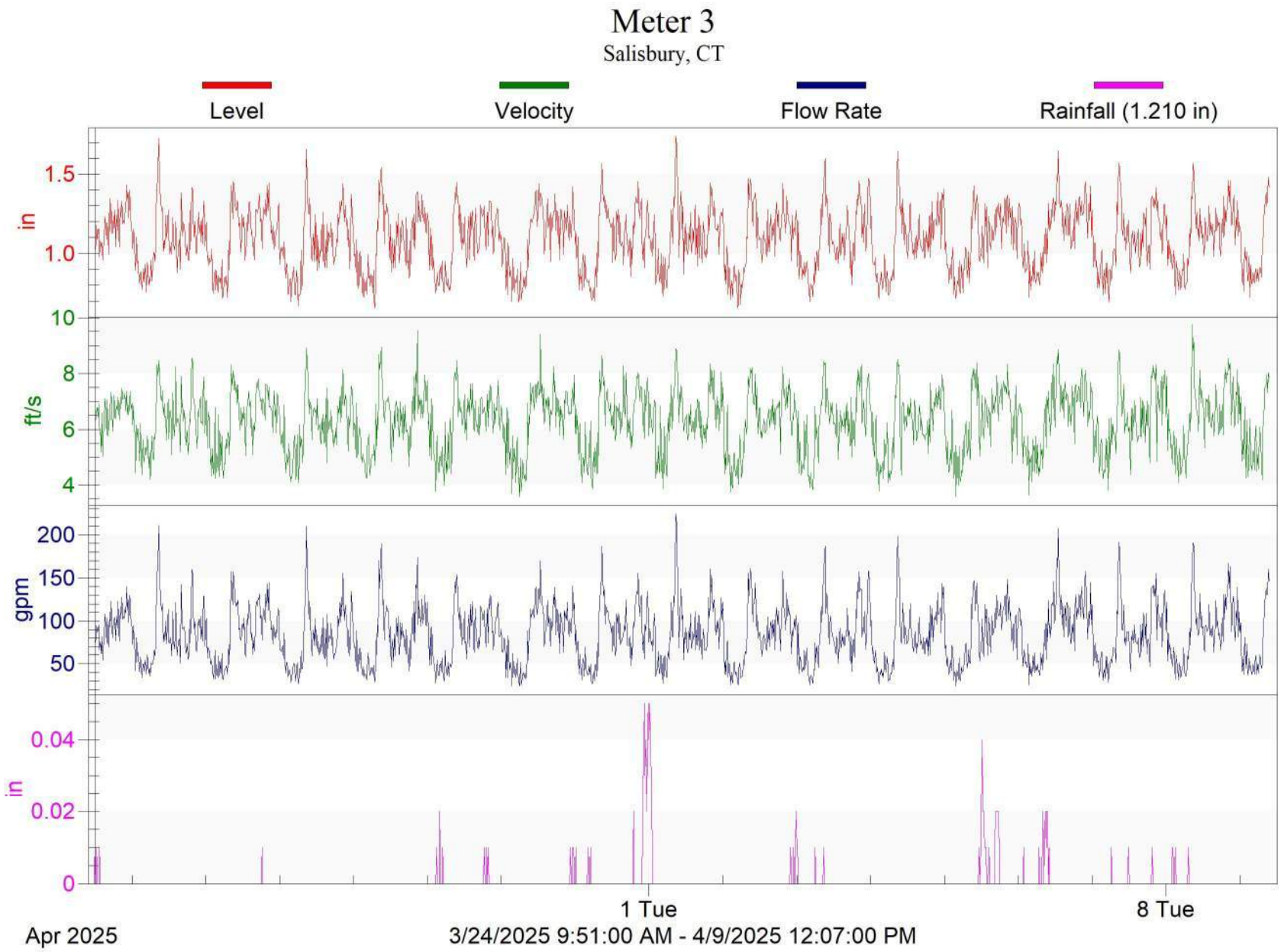

Meter 3
Salisbury, CT
Level
Velocity
Flow Rate
Rainfall (1.210 in)
in
1.5
1.0
ft/s
10
8
6
4
gpm
200
150
100
50
in
0.04
0.02
0
1 Tue
8 Tue
Apr 2025
3/24/2025 9:51:00 AM - 4/9/2025 12:07:00 PM

EST Associates, Inc.

Meter 3, Salisbury, CT

Daily Flow Rate Table

Date/Time (m/d/yyyy)	Average Flow Rate (gpm)	Minimum Flow Rate (gpm)	Time of Minimum Flow Rate (h:mm)	Maximum Flow Rate (gpm)	Time of Maximum Flow Rate (h:mm)	Total Flow (gal)
3/24/2025	96.0	53.8	2:30 PM	140.1	10:15 PM	138,204.5
3/25/2025	82.7	34.1	3:15 AM	210.9	8:45 AM	119,105.9
3/26/2025	87.0	31.6	5:45 AM	157.4	8:15 AM	125,231.8
3/27/2025	78.2	27.0	6:00 AM	209.4	8:45 AM	112,633.7
3/28/2025	82.2	28.7	7:00 AM	189.4	9:00 AM	118,416.2
3/29/2025	82.1	28.0	2:45 AM	153.9	9:30 AM	118,276.7
3/30/2025	85.0	24.5	3:30 AM	169.7	12:45 PM	122,354.3
3/31/2025	84.1	27.0	5:30 AM	187.1	8:45 AM	121,041.4
4/1/2025	87.8	27.5	4:45 AM	224.2	8:45 AM	126,478.2
4/2/2025	82.8	25.4	5:00 AM	161.3	9:00 AM	119,294.9
4/3/2025	83.1	25.9	4:15 AM	187.0	9:15 AM	119,708.4
4/4/2025	80.2	26.0	2:45 AM	198.2	8:45 AM	115,492.4
4/5/2025	82.7	24.7	3:45 AM	148.0	8:30 PM	119,113.4
4/6/2025	92.5	25.4	3:30 AM	207.0	1:00 PM	133,213.9
4/7/2025	83.5	28.7	5:15 AM	191.1	8:45 AM	120,278.6
4/8/2025	89.6	31.4	4:00 AM	190.8	8:45 AM	129,054.0
4/9/2025	69.6	36.9	2:45 AM	159.9	9:15 AM	100,183.8
Flow Total (gal)	**Average Flow Rate Total (gpm)**	**Minimum Flow Rate (gpm)**	**Time of Minimum Flow Rate (m/d/yyyy h:mm)**	**Maximum Flow Rate (gpm)**	**Time of Maximum Flow Rate (m/d/yyyy h:mm)**	**Average Total Flow (gal)**
2,058,082	84.1	24.5	3/30/2025 3:30	224.2	4/1/2025 8:45	121,063.7

EST
Associates, Inc.

Pipeline Services
Sampling Monitoring
Operations Maintenance

CALIBRATION & DATA COLLECTION

Client: SLR Consulting **Meter ID:** SMH - Mo Salisbury, CT

Address: 41 Montgomery St.

SERVICES PERFORMED

Date: 3-24-25 **Technicians:** MK / TA

Time: 0945 **Meter Serial Number:**

☐ Sensor Cleaning ☐ Calibration Check

☐ Data Download ☑ Other: Meter Install

Data Downloaded: ☑ Yes ☐ No

☐ By Modem on:

☑ To Laptop Serial Number: MK

Battery Replacement: ☐ Yes ☑ No

Existing voltage: 11.0 New voltage:

Dessicant Status: Good

Replaced: ☐ Yes ☑ No

METER READINGS

Levels: Meter: 1.164 *(in.)* Actual: 1.17 *(in.)*

Recalibrated: ☐ Yes ☑ No

Sensor Type: ☐ Area Velocity ☐ Ultrasonic ☑ Laser

Velocity: Meter: 6.615 *(ft/s)* Actual: 6.6 *(ft/s)*

NOTES

Notes:

EST
Associates, Inc.

Pipeline Services
Sampling Monitoring
Operations Maintenance

CALIBRATION & DATA COLLECTION

Client: SLR Consulting **Meter ID:** SMH - ML

Address: 41 Montgomery St.

SERVICES PERFORMED

Date: 3-31-25 **Technicians:** MK/TA

Time: 1146 **Meter Serial Number:** Dura - 9

- [x] Sensor Cleaning
- [x] Calibration Check
- [x] Data Download
- [ ] Other:

Data Downloaded: [x] Yes [ ] No

- [ ] By Modem on:
- [x] To Laptop Serial Number: #MK

Battery Replacement: [ ] Yes [x] No

Existing voltage: 11.7 New voltage:

Dessicant Status: Good

Replaced: [ ] Yes [x] No

METER READINGS

Levels: Meter: 1.192 *(in.)* Actual: 1.2 *(in.)*

Recalibrated: [ ] Yes [x] No

Sensor Type: [ ] Area Velocity [ ] Ultrasonic [x] Laser

Velocity: Meter: 7.752 *(ft/s)* Actual: 7.8 *(ft/s)*

NOTES

Notes:

EST
Associates, Inc.

Pipeline Services
Sampling Monitoring
Operations Maintenance

CALIBRATION & DATA COLLECTION

Client: SLR Consulting **Meter ID:** SMH-6

Address: 411 Montgomery St

SERVICES PERFORMED

Date: 4/9/25 **Technicians:** JC/JA

Time: 0533 **Meter Serial Number:** DVL 9

- [x] Sensor Cleaning
- [x] Calibration Check
- [x] Data Download
- [x] Other: Meter Removal

Data Downloaded:

- [x] Yes
- [ ] No
- [ ] By Modem on: _____
- [x] To Laptop Serial Number: JR

Battery Replacement:

- [ ] Yes
- [x] No

Existing voltage: 11.60 New voltage: _____

Dessicant Status: Good

Replaced:

- [ ] Yes
- [x] No

METER READINGS

Levels: Meter: 1.41 (in.) Actual: 1.4 (in.)

Recalibrated:

- [ ] Yes
- [ ] No

Sensor Type:

- [x] Area Velocity
- [ ] Ultrasonic
- [ ] Laser

Velocity: Meter: 7.83 (ft/s) Actual: 7.8 (ft/s)

NOTES

Notes: _____

Environmental Monitoring
Pipeline Services
Operations Maintenance

SITE INVESTIGATION FORM

Client: SLR Consulting

Gauge ID: **Salisbury Rain Gauge**

Location: Salisbury, CT

Gauge Type: Rain Gauge

INSTALL DATA

Date: 3/24/2025

Time: 11:20 AM

GPS Coordinates: 41.967845, -73.430007

Installed By: MK/TA

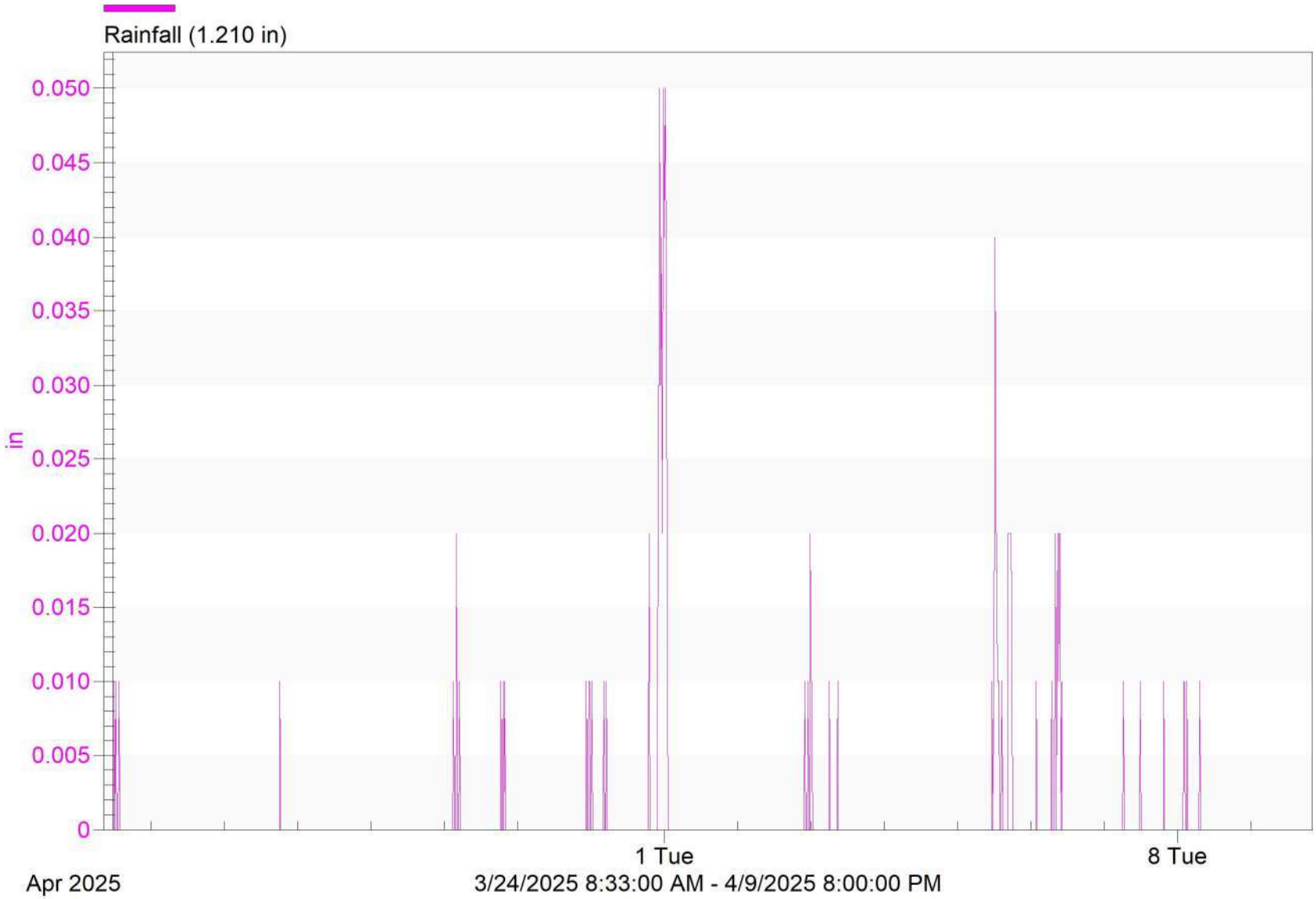
Monitored By: EST

GAUGE AREA

124 Crescent Road, Needham, MA 02494 • Tel (781) 455-0003 Fax (781) 455-8336
www.estassociates.com

Rain Gauge

Salisbury, CT



EST Associates, Inc.

Rain Gauge, Salisbury, CT

Daily Flow Rate Table

Date/Time (m/d/yyyy)	Average Flow Rate (gpm)	Minimum Flow Rate (gpm)	Time of Minimum Flow Rate (h:mm)	Maximum Flow Rate (gpm)	Time of Maximum Flow Rate (h:mm)	Total Flow (gal)
3/24/2025	0.000	0.000	11:30 AM	0.000	11:30 AM	0.000
3/24/2025	0.005	0.000	12:15 PM	0.010	12:00 PM	0.020
3/24/2025	0.003	0.000	1:00 PM	0.010	1:30 PM	0.010
3/24/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
3/24/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
3/24/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
3/24/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
3/24/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
3/24/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
3/24/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
3/24/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
3/24/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
3/24/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000
3/25/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
3/25/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
3/25/2025	0.000	0.000	1:00 AM	0.000	1:00 AM	0.000
3/25/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
3/25/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
3/25/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
3/25/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
3/25/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
3/25/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
3/25/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
3/25/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000
3/25/2025	0.000	0.000	10:00 AM	0.000	10:00 AM	0.000
3/25/2025	0.000	0.000	11:00 AM	0.000	11:00 AM	0.000
3/25/2025	0.000	0.000	12:00 PM	0.000	12:00 PM	0.000
3/25/2025	0.000	0.000	1:00 PM	0.000	1:00 PM	0.000
3/25/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
3/25/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
3/25/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
3/25/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
3/25/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
3/25/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
3/25/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
3/25/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
3/25/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
3/25/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000

3/26/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
3/26/2025	0.000	0.000	1:00 AM	0.000	1:00 AM	0.000
3/26/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
3/26/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
3/26/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
3/26/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
3/26/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
3/26/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
3/26/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
3/26/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000
3/26/2025	0.000	0.000	10:00 AM	0.000	10:00 AM	0.000
3/26/2025	0.000	0.000	11:00 AM	0.000	11:00 AM	0.000
3/26/2025	0.000	0.000	12:00 PM	0.000	12:00 PM	0.000
3/26/2025	0.000	0.000	1:00 PM	0.000	1:00 PM	0.000
3/26/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
3/26/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
3/26/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
3/26/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
3/26/2025	0.003	0.000	6:00 PM	0.010	6:15 PM	0.010
3/26/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
3/26/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
3/26/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
3/26/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
3/26/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000
3/27/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
3/27/2025	0.000	0.000	1:00 AM	0.000	1:00 AM	0.000
3/27/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
3/27/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
3/27/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
3/27/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
3/27/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
3/27/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
3/27/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
3/27/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000
3/27/2025	0.000	0.000	10:00 AM	0.000	10:00 AM	0.000
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3/27/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
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3/28/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
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3/29/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
3/29/2025	0.003	0.000	3:15 AM	0.010	3:00 AM	0.010
3/29/2025	0.005	0.000	4:15 AM	0.020	4:00 AM	0.020
3/29/2025	0.003	0.000	5:15 AM	0.010	5:00 AM	0.010
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3/29/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
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3/30/2025	0.005	0.000	11:00 PM	0.010	11:15 PM	0.020
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3/31/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
3/31/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
3/31/2025	0.003	0.000	4:00 AM	0.010	4:15 AM	0.010
3/31/2025	0.003	0.000	5:15 AM	0.010	5:00 AM	0.010
3/31/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
3/31/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
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3/31/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
3/31/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
3/31/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
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3/31/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
3/31/2025	0.005	0.000	7:15 PM	0.020	7:00 PM	0.020
3/31/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
3/31/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
3/31/2025	0.035	0.030	10:00 PM	0.050	10:30 PM	0.140
3/31/2025	0.038	0.020	11:15 PM	0.050	11:45 PM	0.150
4/1/2025	0.040	0.030	12:45 AM	0.050	12:15 AM	0.160
4/1/2025	0.003	0.000	1:15 AM	0.010	1:00 AM	0.010
4/1/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
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4/1/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
4/1/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
4/1/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
4/1/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
4/1/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
4/1/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000
4/1/2025	0.000	0.000	10:00 AM	0.000	10:00 AM	0.000
4/1/2025	0.000	0.000	11:00 AM	0.000	11:00 AM	0.000
4/1/2025	0.000	0.000	12:00 PM	0.000	12:00 PM	0.000
4/1/2025	0.000	0.000	1:00 PM	0.000	1:00 PM	0.000
4/1/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
4/1/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
4/1/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
4/1/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
4/1/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
4/1/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
4/1/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
4/1/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
4/1/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
4/1/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000
4/2/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
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4/2/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
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4/2/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
4/2/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
4/2/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
4/2/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
4/2/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000
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4/2/2025	0.000	0.000	11:00 AM	0.000	11:00 AM	0.000
4/2/2025	0.000	0.000	12:00 PM	0.000	12:00 PM	0.000
4/2/2025	0.000	0.000	1:00 PM	0.000	1:00 PM	0.000
4/2/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
4/2/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000

4/2/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
4/2/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
4/2/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
4/2/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
4/2/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
4/2/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
4/2/2025	0.003	0.000	10:15 PM	0.010	10:00 PM	0.010
4/2/2025	0.008	0.000	11:15 PM	0.020	11:45 PM	0.030
4/3/2025	0.005	0.000	12:30 AM	0.010	12:00 AM	0.020
4/3/2025	0.000	0.000	1:00 AM	0.000	1:00 AM	0.000
4/3/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
4/3/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
4/3/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
4/3/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
4/3/2025	0.003	0.000	6:15 AM	0.010	6:00 AM	0.010
4/3/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
4/3/2025	0.003	0.000	8:00 AM	0.010	8:45 AM	0.010
4/3/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000
4/3/2025	0.000	0.000	10:00 AM	0.000	10:00 AM	0.000
4/3/2025	0.000	0.000	11:00 AM	0.000	11:00 AM	0.000
4/3/2025	0.000	0.000	12:00 PM	0.000	12:00 PM	0.000
4/3/2025	0.000	0.000	1:00 PM	0.000	1:00 PM	0.000
4/3/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
4/3/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
4/3/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
4/3/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
4/3/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
4/3/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
4/3/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
4/3/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
4/3/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
4/3/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000
4/4/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
4/4/2025	0.000	0.000	1:00 AM	0.000	1:00 AM	0.000
4/4/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
4/4/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
4/4/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
4/4/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
4/4/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
4/4/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
4/4/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
4/4/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000
4/4/2025	0.000	0.000	10:00 AM	0.000	10:00 AM	0.000
4/4/2025	0.000	0.000	11:00 AM	0.000	11:00 AM	0.000
4/4/2025	0.000	0.000	12:00 PM	0.000	12:00 PM	0.000
4/4/2025	0.000	0.000	1:00 PM	0.000	1:00 PM	0.000

4/4/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
4/4/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
4/4/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
4/4/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
4/4/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
4/4/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
4/4/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
4/4/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
4/4/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
4/4/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000
4/5/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
4/5/2025	0.000	0.000	1:00 AM	0.000	1:00 AM	0.000
4/5/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
4/5/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
4/5/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
4/5/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
4/5/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
4/5/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
4/5/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
4/5/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000
4/5/2025	0.000	0.000	10:00 AM	0.000	10:00 AM	0.000
4/5/2025	0.005	0.000	11:00 AM	0.010	11:15 AM	0.020
4/5/2025	0.025	0.020	12:00 PM	0.040	12:15 PM	0.100
4/5/2025	0.008	0.000	1:45 PM	0.010	1:00 PM	0.030
4/5/2025	0.003	0.000	2:00 PM	0.010	2:30 PM	0.010
4/5/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
4/5/2025	0.010	0.000	4:00 PM	0.020	4:30 PM	0.040
4/5/2025	0.018	0.010	5:45 PM	0.020	5:00 PM	0.070
4/5/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
4/5/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
4/5/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
4/5/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
4/5/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
4/5/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000
4/6/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
4/6/2025	0.003	0.000	1:00 AM	0.010	1:45 AM	0.010
4/6/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
4/6/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
4/6/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
4/6/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
4/6/2025	0.003	0.000	6:00 AM	0.010	6:45 AM	0.010
4/6/2025	0.003	0.000	7:00 AM	0.010	7:45 AM	0.010
4/6/2025	0.013	0.000	8:15 AM	0.020	8:00 AM	0.050
4/6/2025	0.013	0.000	9:45 AM	0.020	9:15 AM	0.050
4/6/2025	0.003	0.000	10:15 AM	0.010	10:00 AM	0.010
4/6/2025	0.000	0.000	11:00 AM	0.000	11:00 AM	0.000

4/6/2025	0.000	0.000	12:00 PM	0.000	12:00 PM	0.000
4/6/2025	0.000	0.000	1:00 PM	0.000	1:00 PM	0.000
4/6/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
4/6/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
4/6/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
4/6/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
4/6/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
4/6/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
4/6/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
4/6/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
4/6/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
4/6/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000
4/7/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
4/7/2025	0.000	0.000	1:00 AM	0.000	1:00 AM	0.000
4/7/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
4/7/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
4/7/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
4/7/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
4/7/2025	0.003	0.000	6:00 AM	0.010	6:15 AM	0.010
4/7/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
4/7/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
4/7/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000
4/7/2025	0.000	0.000	10:00 AM	0.000	10:00 AM	0.000
4/7/2025	0.003	0.000	11:00 AM	0.010	11:45 AM	0.010
4/7/2025	0.000	0.000	12:00 PM	0.000	12:00 PM	0.000
4/7/2025	0.000	0.000	1:00 PM	0.000	1:00 PM	0.000
4/7/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
4/7/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
4/7/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
4/7/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
4/7/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
4/7/2025	0.003	0.000	7:00 PM	0.010	7:30 PM	0.010
4/7/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
4/7/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
4/7/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
4/7/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000
4/8/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
4/8/2025	0.000	0.000	1:00 AM	0.000	1:00 AM	0.000
4/8/2025	0.005	0.000	2:30 AM	0.010	2:00 AM	0.020
4/8/2025	0.003	0.000	3:15 AM	0.010	3:00 AM	0.010
4/8/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
4/8/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
4/8/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
4/8/2025	0.003	0.000	7:00 AM	0.010	7:15 AM	0.010
4/8/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
4/8/2025	0.000	0.000	9:00 AM	0.000	9:00 AM	0.000

4/8/2025	0.000	0.000	10:00 AM	0.000	10:00 AM	0.000
4/8/2025	0.000	0.000	11:00 AM	0.000	11:00 AM	0.000
4/8/2025	0.000	0.000	12:00 PM	0.000	12:00 PM	0.000
4/8/2025	0.000	0.000	1:00 PM	0.000	1:00 PM	0.000
4/8/2025	0.000	0.000	2:00 PM	0.000	2:00 PM	0.000
4/8/2025	0.000	0.000	3:00 PM	0.000	3:00 PM	0.000
4/8/2025	0.000	0.000	4:00 PM	0.000	4:00 PM	0.000
4/8/2025	0.000	0.000	5:00 PM	0.000	5:00 PM	0.000
4/8/2025	0.000	0.000	6:00 PM	0.000	6:00 PM	0.000
4/8/2025	0.000	0.000	7:00 PM	0.000	7:00 PM	0.000
4/8/2025	0.000	0.000	8:00 PM	0.000	8:00 PM	0.000
4/8/2025	0.000	0.000	9:00 PM	0.000	9:00 PM	0.000
4/8/2025	0.000	0.000	10:00 PM	0.000	10:00 PM	0.000
4/8/2025	0.000	0.000	11:00 PM	0.000	11:00 PM	0.000
4/9/2025	0.000	0.000	12:00 AM	0.000	12:00 AM	0.000
4/9/2025	0.000	0.000	1:00 AM	0.000	1:00 AM	0.000
4/9/2025	0.000	0.000	2:00 AM	0.000	2:00 AM	0.000
4/9/2025	0.000	0.000	3:00 AM	0.000	3:00 AM	0.000
4/9/2025	0.000	0.000	4:00 AM	0.000	4:00 AM	0.000
4/9/2025	0.000	0.000	5:00 AM	0.000	5:00 AM	0.000
4/9/2025	0.000	0.000	6:00 AM	0.000	6:00 AM	0.000
4/9/2025	0.000	0.000	7:00 AM	0.000	7:00 AM	0.000
4/9/2025	0.000	0.000	8:00 AM	0.000	8:00 AM	0.000
Flow Total (gal)	**Average Flow Rate Total (gpm)**	**Minimum Flow Rate (gpm)**	**Time of Minimum Flow Rate (m/d/yyyy h:mm)**	**Maximum Flow Rate (gpm)**	**Time of Maximum Flow Rate (m/d/yyyy h:mm)**	**Average Total Flow (gal)**
1.210	0.001	0.000	3/24/2025 11:30	0.050	3/31/2025 22:30	0.003

Appendix D Downstream Capacity Analysis

Wake Robin Inn - 104 & 106 Sharon Road, Salisbury, Connecticut

Downstream Capacity Analysis – Sanitary Sewer

ARADEV, LLC

SLR Project No.: 141.21278.00001
Client Ref. No.: 22100

April 28, 2025

Wake Robin Inn, Salisbury, CT
Sanitary Sewer Pipe Capacity Calculations
Project No. 141.V21278.00001, Phase 0015
Revision Date: 4/25/25

Manning's Numbers

PVC	0.009
AC	0.013
RCP	0.014
Clay	0.014

Metered Flow Rates

Meter	Manhole Run	Peak (gpm)	Avg (gpm)
Meter #1	SMH-1 through SMH-3A	413	207
Meter #2	SMH-3A through SMH-M6	267	104
Meter #3	SMH-M6 through SMH-SR5	224	84

Total development peak flow: 71 gpm* *includes 30 gpm for pool drain flow

	Manhole No.	Manhole Invert		Pipe Material	Pipe Length	Slope	Pipe Diameter	Manning's Number	Pipe Capacity	Proj. Peak Flow	% Full at Peak Flow
			(ft)		(ft)	(ft/ft)	(in)		(gpm)	(gpm)	(%)
SMH-SR5 to SMH-1	SMH-SR5	In	773.14								
		Out	773.14								
				AC	95	0.004	10	0.013	598.5	295	49.3%
	SMH-SR4	In	772.79								
		Out	772.79								
				AC	197	0.002	10	0.013	427.3	295	69.0%
	SMH-SR3	In	772.42								
		Out	772.42								
				AC	240	0.003	10	0.013	505.2	295	58.4%
	SMH-SR2	In	771.79								
		Out	771.79								
				AC	116	0.030	10	0.013	1720.0	295	17.2%
	SMH-SR1	In	768.26								
		Out	767.70								
				AC	136	0.035	10	0.013	1852.3	295	15.9%
	SMH-WH1	In	762.90								
		Out	762.30								
				AC	246	0.074	10	0.013	2674.4	295	11.0%
	SMH-M7	In	744.20								
		Out	744.20								
				AC	221	0.090	10	0.013	2951.2	295	10.0%
	SMH-M6	In	724.40								
		Out	724.40								
				AC	249	0.039	10	0.013	1955.9	338	17.3%
	SMH-M5	In									
		Out									
				AC	244	0.039	10	0.013	1955.9	338	17.3%
	SMH-A1	In	705.00								
		Out	704.70								
				AC	127	0.063	12	0.013	4024.0	338	8.4%
	SMH-10	In	696.70								
		Out	695.70								
				PVC	296	0.017	12	0.009	3039.9	338	11.1%
	SMH-9	In	690.60								
		Out	690.30								
				PVC	302	0.004	12	0.009	1459.8	338	23.2%
	SMH-8	In	689.10								
		Out	688.80								
				RCP	447	0.002	12	0.014	738.5	338	45.8%
	SMH-7	In	687.70								
		Out	687.60								
				RCP	303	0.001	12	0.014	540.9	338	62.5%
	SMH-6	In	687.20								
		Out	687.20								
				RCP	303	0.002	12	0.014	662.5	338	51.0%
	SMH-5	In	686.60								
		Out	686.60								
				RCP	298	0.002	12	0.014	668.0	338	50.6%
	SMH-3A	In	686.00								
		Out	686.00								
				RCP	294	0.001	12	0.014	549.1	484	88.1%
	SMH-3	In	685.60								
		Out	685.60								
				RCP	277	0.002	15	0.014	1146.8	484	42.2%
	SMH-2A	In	685.10								
		Out	685.00								
				RCP	319	0.003	15	0.014	1351.8	484	35.8%
	SMH-2	In	684.20								
		Out	684.10								
				RCP	132	0.001	15	0.014	743.0	484	65.1%
	SMH-1	In	684.00								
		Out	683.90								

Wake Robin Inn, Salisbury, CT
Sanitary Sewer Pipe Capacity Calculations
Project No. 141.V21278.00001, Phase 0015
Revision Date: 4/25/25

Manning's Numbers	
PVC	0.009
AC	0.013
RCP	0.014
Clay	0.014

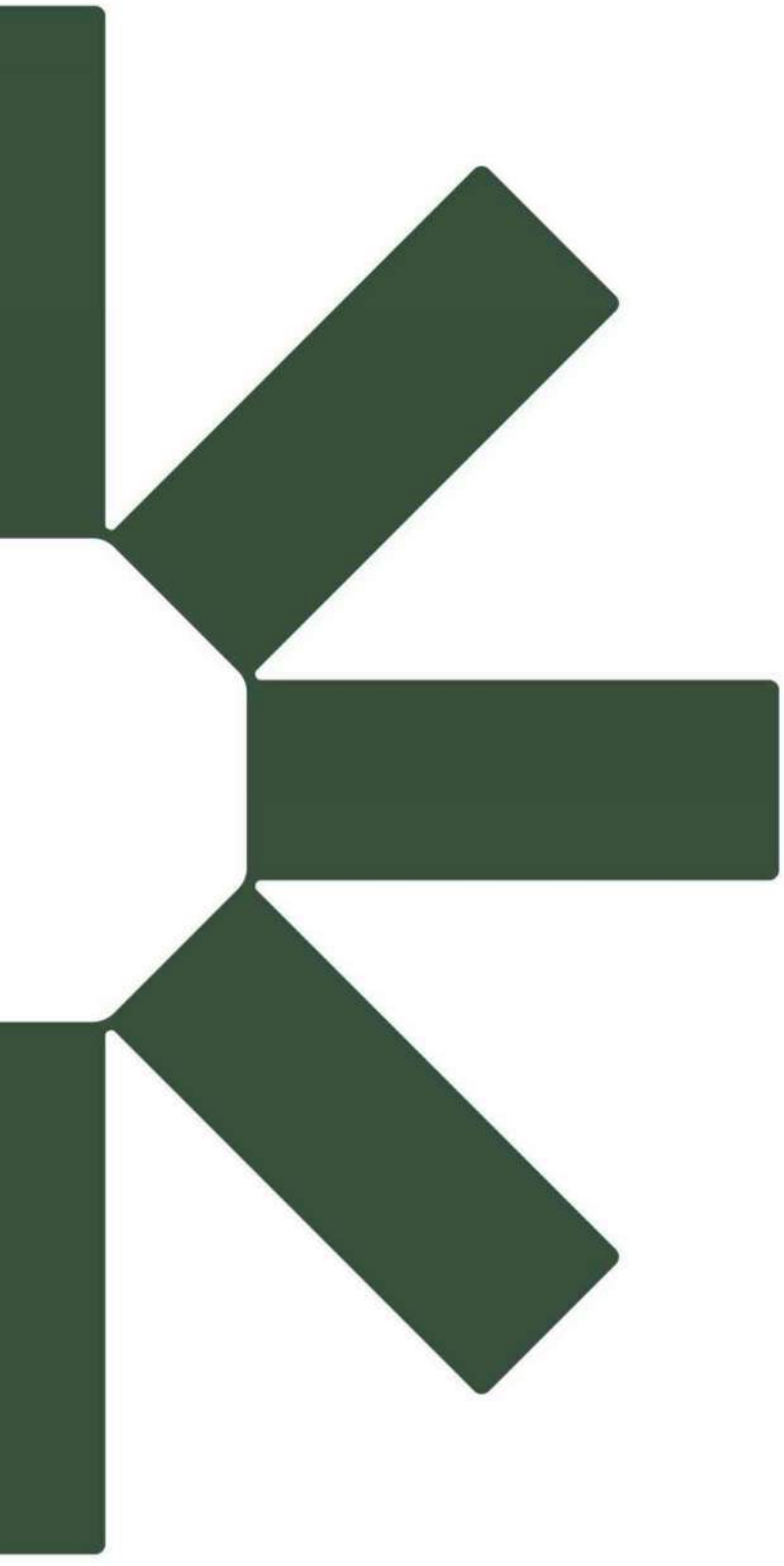
Metered Flow Rates

Meter	Manhole Run	Peak (gpm)	Avg (gpm)
Meter #1	SMH-1 through SMH-3A	413	207
Meter #2	SMH-3A through SMH-M6	267	104
Meter #3	SMH-M6 through SMH-SR5	224	84

Total development peak flow: 71 gpm* *includes 30 gpm for pool drain flow

	Manhole No.	Manhole Invert		Pipe Material	Pipe Length	Slope	Pipe Diameter	Manning's Number	Pipe Capacity	Proj. Peak Flow	% Full at Peak Flow
		(ft)			(ft)	(ft/ft)	(in)		(gpm)	(gpm)	(%)
Wells Hill Road											
SMH-WH5 to SMH-WH1	SMH-WH6	In	805.40								
		Out	804.60	Clay	191	0.066	8	0.014	1302.1	21.0	1.6%
	SMH-WH5	In	791.90								
		Out	791.70	Clay	277	0.044	8	0.014	1055.4	21.0	2.0%
	SMH-WH4	In	779.60								
		Out	779.20	Clay	284	0.049	8	0.014	1117.1	21.0	1.9%
	SMH-WH3	In	765.30								
		Out	764.70	Clay	216	0.007	8	0.014	420.8	21.0	5.0%
	SMH-WH2	In	763.20								
		Out	763.20	Clay	219	0.002	8	0.014	241.3	21.0	8.7%
	SMH-WH1	In	762.70								
		Out	762.30								

NOTES:
1-With the proposed development added to the peak metered flows, every pipe segment is flowing less than 90% pipe capacity as required by the Town
2-SMH-M5 could not be opened. Calculations done between SMH-M6 and SMH-A1.



Making Sustainability Happen

S1891-005
December 10, 2024

Curtis Rand, First Selectman
Town of Salisbury
27 Main Street, PO Box 548
Salisbury, CT 06068

Re: **Town of Salisbury, CT – Wake Robin Inn Redevelopment – Sewer Gallons per Day Calculations**

Dear Curtis,

This memorandum summarizes Tighe & Bond's review of the Wake Robin Inn developer Aradev's *"Proposed Wake Robin Inn Redevelopment – Sewer Gallons per Day Calculations"* (Aradev's Calculations) in accordance with the "Connecticut Public Health Code On-site Sewage Disposal Regulations and Technical Standards for Subsurface Sewage Disposal Systems" Section IV, Table 4 and "*Guidance for Design of Large-Scale On-Site Wastewater Renovation Systems*" (Connecticut Public Health Code).

In addition to this review, Tighe & Bond has been asked to provide an evaluation of sewer collection system capacity, and a review of available treatment system capacity. These will be provided under separate cover.

Wastewater Flow Calculations

A summary of the flows presented in the provided calculations is summarized in Table 1.

TABLE 1
Wastewater Design Flow Analysis

Source	Unit	Quantity[1]	Flow/Unit (gpd)[2]	Flow (gpd)
Main Hotel + Extension				
Restaurant	seat[3]	120	30	5,400
Bar	seat[4]	40	30	1,200
Total Guest Rooms	bedroom[5]	56	150	8,400
Cottages	bedroom[5]	16	150	2,400
Laundry Facilities	washing machine[6]	4	400	1,600
Spa	day[7]	---	---	1,020
Event Barn + Fast Casual				
Event Barn - Banquet	person[8],[9]	125	30	3,750
Fast Casual Restaurant	meal per day[10]	100	5	500
Pool + Pool House	bather[11]	100	10	1,000
Total Flow (gpd)				**25,270**

1. Quantity values from Wake Robin Inn - Project Narrative - 106 Sharon Road (September 2024), prepared by Aradev.

2. From Table 4 of Connecticut Public Health Code: On-site Sewage Disposal Regulations and Technical Standards for Subsurface Sewage Disposal Systems (January 2024)
3. Seat flow/unit factor from Table 4 of the CTDPH standard for "Restaurant (Public toilets provided), per seat".
4. The seat flow/unit factor from Table 4 of the CTDPH standard for "Bar/Cocktail Lounge (No meals), per seat" is 15 gpd. Food service increases design flow by 50%, reflected in the flow/unit quantity.
5. Bedroom flow/unit factor from Table 4 of the CTDPH standard for "Motel (Transient, With Kitchenette but no Laundry Facilities), per room".
6. Washing machine flow/unit factor from Table 4 of the CTDPH standard for "Laundromat (Non-DEEP Regulated) per machine".
7. Please see discussion below on calculation methodology
8. Calculations presented anticipated flow while space in use for social event, not included in total as banquet use is more conservative.
9. Person flow/unit factor from Table 4 of the CTDPH standard for "Restaurant (Public toilets provided), per seat".
10. Meal per day flow/unit factor from Table 4 of the CTDPH standard for "Take-out Food Service, per meal served".
11. Bather flow/unit factor from Table 4 of the CTDPH standard for "Swimming pool, per bather".

As indicated in the Table above, Tighe & Bond has calculated a design average flow of 25,270 gpd slightly higher than the 24,925 gpd presented by Aradev's calculations. However, there are two additional items; plunge pool maintenance and swimming pool filter maintenance that have not been calculated in this review. Aradev should provide those values.

In addition to this summary, specific comments are provided below.

1: Restaurant and Bar

- **Restaurant**

  Per Aradev's Calculations, they are proposing to construct a 120-seat, three meals per day restaurant. The water consumption rate for this restaurant style would be 30 gallons per seat, plus 50% due to three meals per day served in accordance with Connecticut Public Health Code. The total flow allocation for the restaurant is 5,400 gallons per day.

- **Bar**

  Per Aradev's Calculations, they are proposing to construct a 40-seat bar with a water consumption rate of 30 gallons per seat in accordance with Connecticut Public Health Code. Assuming that food service is provided at the bar, the total flow allocation for the bar is 1,200 gallons per day.

2. Hotel

Per the Wake Rob Inn – Project Narrative (Project Narrative) dated September 12, 2024, and Aradev's Calculations, they are proposing the redevelopment to have the following rooms available for guests and staff:

- **Existing Guest Rooms**

  Per Aradev's Calculations, the existing Wake Robin Inn has 14 guest rooms. A discrepancy exists between Aradev's room count and ctvisit.com's website on the Robin Wake Inn, which states that the Inn is a "historical destination with 28 rooms…". The total number of existing guest rooms should be verified.

  Assuming the existing Wake Robin Inn has 14 guest rooms, with each room having a water consumption rate of 150 gallons per day, the total flow allocation to the existing inn's rooms is 2,100 gallons per day.

- **Additional Guest Rooms**

  Per the Project Narrative, the developer plans to construct a new hotel structure with a total of 39 guest rooms and 3 staff rooms. Hotel rooms are allocated a water consumption rate of 150 gallons per bedroom, per day. The total flow allocation for the expanded inn's rooms is 6,300 gallons per day.

- **Cottages**

  Per Aradev's Calculations, the developer plans to construct 12 cottages with a total of 16 rooms. Hotel rooms are allocated a water consumption rate of 150 gallons per bedroom, per day. The total flow allocation for the cottages is 2,400 gallons per day.

- **Laundry Facilities**

  Per Aradev's Calculations, the development will have a laundry facility with four washing machines. Per the Connecticut Public Health Code, laundry facilities are allocated 400 gallons per day, per machine. The total flow allocation for the laundry facility is 1,600 gallons per day.

2: Spa

Per the Wake Robin Inn – Project Narrative dated September 12, 2024, Aradev is proposing to construct a spa consisting of "a tranquility/reading room, 4 treatment rooms, women's lockers, men's lockers, hot and cold plunges, and a sauna." The spa has "an estimated occupancy of 10-12 people (not including staff)." Aradev's consultant estimated approximately 50 guests would use the spa each day, allocated 10-gallons per person, for a total consumption rate of 500-gallons per day.

Tighe & Bond notes that spa flow is notoriously difficult to estimate because of the variability of spa services and the potential for services to change over time due to trends in desired services. We recommend a more conservative approach to facilitate potential future use of the treatment rooms as follows:

- Connecticut Public Health guidance at a consumption rate of 100 gallons per pedicure chair/spa (5-gallon maximum basin) each for 4 treatment rooms for a total of 400 gallons per day.
- Connecticut Public Health guidance at a consumption rate of 10 gallons/person at 50 guests per day for a total of 500 gpd to accommodate plunge pool showering.
- Connecticut Public Health guidance at a consumption rate of 20 gallons/employee at 6 employees per day for a total of 120 gpd.

This results in a total estimated spa discharge of 1,020 gallons per day.

The item which requires further clarification is the maintenance of the plunge pools. It should be specified how often the pools are drained and refilled.

3: Event Barn

Per Aradev's Calculations, they are proposing to construct an event barn to host private events, trade shows, corporate events, etc. The developer split their flow estimates based on whether the event is social or a banquet (food served). A discrepancy exists between Aradev's Calculations (125 persons) and the Project Narrative (175 persons) regarding the Event Barn's capacity. A newspaper article from the Register Citizen dated November 1, 2024 states the

Event Barn size was reduced to 125 persons; Tighe & Bond has assumed this will be the capacity of the facility but it should be verified.

Tighe & Bond estimated flow allocation based on banquets due to the higher flow allocation of 30 gallons per person per Connecticut Public Health Code. The total flow allocation for the Event Barn is 3,750 gallons per day.

4: Fast Casual Restaurant

Per Aradev's Calculations, they are proposing to construct a 100 meal per day fast casual restaurant. Per the project narrative, it will be "an order at the counter service and picnic tables & tables placed throughout the porch. No official capacity as this is outdoors…". The water consumption rate for this restaurant style would be 5 gallons per meal; the total flow allocation for the restaurant is 500 gallons per day.

5: Pool & Pool House

Per Aradev's Calculations, they are proposing to construct a pool that will host an estimated 100 bathers per day. Per the "Connecticut Public Health Code On-site Sewage Disposal Regulations and Technical Standards for Subsurface Sewage Disposal Systems" Section IV, Table 4, 10-gallons of water per day is allocated per bather. The total flow allocation for the pool is 1,000 gallons per day.

The item which requires further clarification is the maintenance of the swimming pool. The value per bather does not include pool filter backwash. The quantity of backwash and where it will be discharge must be specified.

Very truly yours,

TIGHE & BOND, INC.

Erin K. Moore, PE
Project Director

Enclosure:

Wake Robin Inn – Project Narrative dated September 12, 2024
Revised Sewer Gallons per Day Calculations

REVISED Proposed Wake Robin Inn Redevelopment – Sewer Gallons per Day Calculations
Special Permit Application #2024-0257
December 9, 2024

The below numbers were obtained from the Connecticut Public Health Code On-site Sewage Disposal Regulations and Technical Standards for Subsurface Sewage Disposal Systems and are based on the sanitary discharge rates found in Section IV, Table 4.

Building / Use	Gallons Per Day *Assumes operation at 100% occupancy*	Maximum Annual Usage *Assumes operation at 100% all 365 days of the calendar year*	Anticipated Annual Usage	Notes
Main Hotel + Extension				
Restaurant + Bar	6,600	2,409,000	1,372,800	Open 320 days a year at 65% occupancy
Existing Guest Rooms (Main Hotel)	2,100	766,500	421,575	Open 365 days a year at 55% occupancy
Additional Guest Rooms	5,850	2,135,250	1,174,388	Open 365 days a year at 55% occupancy
Laundry Facilities	1,600	584,000	584,000	Open 365 days a year at 100% occupancy
Spa	500	182,500	140,000	Open 350 days a year at 80% occupancy
Event Barn + Fast Casual				
Event Barn	625	228,125	22,500	Assuming 3 events per month = 36 events
Event Barn (banquet)	3,750	1,368,750	97,500	Assuming 1 event every other weekend = 26 events
Fast Casual Restaurant	500	182,500	146,000	Open 365 days a year at 80% capacity
Pool + Pool House	1,000	365,000	150,000	Open for 5 months of the year = 150 days at 100% occupancy
Cottages	2,400	876,000	481,800	Open 365 days a year at 55% occupancy
TOTAL	**24,925**	**9,097,625**	**4,590,563**	

The "Gallons Per Day" above (24,925) and its reflective "Maximum Annual Usage" (9,097,625) assume that all spaces are 100% occupied all 365 days of the year which will never be the case. The "Anticipated Annual Usage" accounts for the projected occupancy and programming of the facility.

Restaurant:
120 Seats
30 Gallons per seat
3 Meals per day
Calculation (120 Seats X 30 Gallons per seat X 1.5 meals) = 5,400 GPD

Bar:
40 seats
30 Gallons per seat
Calculation (40 Seats X 30 Gallons per seat) = 1,200 GPD

Existing Guestrooms (Main Hotel Structure only):
14 Guestrooms (14 Bedrooms)
150 Gallons per room
Calculation (14 Bedrooms X 150 Gallons per room) = 2,100 GPD

Additional Guestrooms:
39 Guestrooms
150 Gallons per room
39 Bedrooms
Calculation (39 Bedrooms X 150 Gallons per room) = 5,850 GPD

Laundry Facilities:
4 Washing Machines
400 Gallons per machine
Calculation (4 Machines X 400 Gallons per machine) = 1,600 GPD

Spa:
50 persons per day
10 Gallons per person
Calculation (50 People X 10 Gallons per person) = 500 GPD

Event Barn (social event):
125 People
5 Gallons per person
Calculation (125 People X 5 Gallons per person) = 625 GPD

Event Barn (banquet):
125 People
30 Gallons per person
Calculation (125 People X 30 Gallons per person) = 3,750 GPD

Fast Casual Restaurant:
100 Meals per day
5 Gallons per meal
Calculation (100 Meals X 5 Gallons per day) = 500 GPD

Pool + Pool House:
100 Bathers
10 Gallons per bather
Calculation (100 Bathers per day X 10 Gallons per bather) = 1,000 GPD

Cottages:
12 Rooms accounting for 16 Bedrooms
150 Gallons per bedroom
Calculation (16 Bedrooms X 150 Gallons per bedroom) = 2,400 GPD

Overview

Aradev is planning the redevelopment of the Wake Robin Inn into a boutique hospitality campus that will serve both the local Salisbury and greater areas. The project will include the restoration and expansion of the main inn building and headmasters house, cottages nestled into the woods, an outdoor seasonal pool, a spa, and an event barn. A food & beverage program will be spread across the buildings to serve both patrons of the property and local community members. There will be walking paths to highlight the natural features of the area. The property will be redeveloped with a focus on sustainability throughout its stormwater management practices, the use of pervious pavement when practical, the installation of rain gardens, and the enhancement of natural landscapes, including wetland buffer improvements.

Event Barn + Fast Casual

The event barn can be rented out any day of the week, but most events will take place on weekends/holidays with occasional afternoon or midday events on the weekends (trade shows, art fairs, or corporate events as examples). Most events will end at midnight, but some events will run until 2am. Private events (located **INSIDE** the event barn) will be able to continue until 1AM (Monday, Tuesday, Wednesday, Thursday, and Friday) and 2AM (Saturday, Sunday, and the day after a holiday) per Connecticut Liquor Control Act (Ch 545) Sec. 30-91(a). All doors and windows open to the outside elements will be closed at 9pm to eliminate any sound outside. Note: fireworks will not be permitted at any time

The fast casual restaurant will be open daily from 11am to 9pm, and will be closed on days/nights when there is an Event Barn private event. Both the fast casual restaurant and event barn are open to the public, but private event reservation is required to utilize the event barn.

All events and liquor sales will be in accordance with the hours set forth in the Connecticut Liquor Control Act (Ch 545) Sec. 30-91(a). *"The sale, dispensing, consumption or presence in glasses or other receptacles suitable to allow for the consumption of alcoholic liquor by an individual in places operating under…restaurant permits issued under section 30-22… shall be unlawful on: (1) Monday, Tuesday, Wednesday, Thursday and Friday between the hours of one o'clock a.m. and nine o'clock a.m.; (2) Saturday between the hours of two o'clock a.m. and nine o'clock a.m.; (3) Sunday between the hours of two o'clock a.m. and ten o'clock a.m."*

Usable Space (sf): 4,434 sq ft

Event Barn Capacity

Anticipated events will be around 175 people seated. The maximum seating and standing capacity will be determined during the construction documents phase pending Fire Marshal approval.

Fast Casual Capacity

The fast casual restaurant will be an order at the counter service and picnic tables + tables placed throughout the porch. No official capacity as this is outdoors but expected peak patronage at one time around 30 – 40 people.

Restaurant + Bar

The three-meal restaurant will have daily hours 7:30am to 11pm. The bar will operate from 11am to 11pm. Private events (located **INSIDE** the restaurant/bar) will be able to continue until 1AM (Monday, Tuesday, Wednesday, Thursday, and Friday) and 2AM (Saturday, Sunday, and the day after a holiday) per Connecticut Liquor Control Act (Ch 545) Sec. 30-91(a). All outdoor food and alcohol service will end at 9pm and be moved indoors.

Usable Space (sf): 2,800 sq ft

Anticipated interior usage at one time will be between 40 – 80 persons and exterior usage at 40 – 80 persons.

The maximum seating & standing capacity will be determined during the construction documents phase pending Fire Marshal approval.

All events and liquor sales will be in accordance with the hours set forth in the Connecticut Liquor Control Act (Ch 545) Sec. 30-91(a). *"The sale, dispensing, consumption or presence in glasses or other receptacles suitable to allow for the consumption of alcoholic liquor by an individual in places operating under...restaurant permits issued under section 30-22... shall be unlawful on: (1) Monday, Tuesday, Wednesday, Thursday and Friday between the hours of one o'clock a.m. and nine o'clock a.m.; (2) Saturday between the hours of two o'clock a.m. and nine o'clock a.m.; (3) Sunday between the hours of two o'clock a.m. and ten o'clock a.m."*

Pool

The seasonal pool will feature lounge chairs, umbrellas, and tables for hotel guests only. Guests will be able to order drinks and lite bites at the pool deck. The hours of operation will be 9am to 8pm daily.

Usable Space (sf): 5,000 sq ft with an estimated occupancy of 40-50 people (not including staff). The usable space number includes 1,860 sq ft of actual buildings (pool house, restrooms, and storage).

Spa

The spa will contain a tranquility/reading room, 4 treatment rooms, women's lockers, men's lockers, hot and cold plunges, and a sauna. The hours of operation will be 7am to 7pm daily. The spa is open to the public via advanced reservations for treatments only. Hotel guests receive priority in booking treatments and are allowed to purchase day passes (maximum 2 hours of use) with no more than 5 day passes in use at a time (depending on the capacity of treatments booked).

Usable Space (sf): 3,760 sq ft with an estimated occupancy of 10-12 people (not including staff)

Employees

Venue	Employee Count
Hotel	20
Food & Beverage	23-28
Event Barn Events	30-40
Spa	6 – 7
Pool	3 – 4

Assumes peak weekend (assume 30% less during weekday hours).

Key Census

Room Type	Count	Average SF
Cottages	12 – 14	825
Existing Main Hotel	12	382
Existing Headmasters House	6	514
New Hotel Structure	39	391
Event Barn Staffing*	3	312
Total Keys	**69-71 not including staff housing**	

**To be used for overnight accommodations when there is an event.*

Building Totals

Building	Basement	Total Above Grade
Cottages	-	10,420 sf
Main Hotel + Addition	7,849 sf	38,973 sf
Event Barn	4,400 sf	7,629 sf
Spa	-	4,175 sf
Pool House + Storage	-	1,860 sf

Parking & Traffic

- All deliveries will be made from Sharon Rd;
- All guests will enter/exit via Sharon Rd;
- Hotel + restaurant guests will be directed to drive to the main Hotel entrance and use Valet parking;
- All events will either (or both) have valet parking or parking lot attendants to ensure proper use of parking areas and traffic control;
- During non-event, weekdays, it is expected that guests will have the option to self-park in marked, available parking spots in vicinity of the Hotel/Inn pedestrian entry;
- Parking Analysis included as a separate document;

Peak Hours (Arrival)

- Check in: 2pm to 4pm daily;
- Events: 3pm to 4:30pm with an estimated 30% of people staying at the hotel;
- F&B (dinner & bar only): 6pm to 8pm with an estimated 50% of people staying at the hotel;

Peak Hours (Departure)

- Check out: 10am to 11am daily;
- Events: 9:30pm to 11:30pm with an estimated 30% of people staying at the hotel;
- F&B (dinner & bar only): 8pm to 10pm with an estimated 50% of people staying at the hotel;

Security, Training, and Safety

For any private event at the hotel, an executed contract will be mandatory in which the presence of private security will be required. Security personnel will be responsible for overseeing traffic operations, closing of doors/windows, and alcohol compliance. In addition, all of the staff serving alcohol (waiters, waitresses, bartenders, etc.) will be required to be certified in ServSafe Alcohol training to promote safe alcohol consumption and be in compliance with the regulations set forth by the Connecticut Liquor Control.

The hotel will have cameras throughout the property (with a focus on the property lines, entrance/exit, and areas where patrons would be exiting alcohol consumption areas) which will be 24/7 monitored by hotel personnel. Furthermore, once a general manager is brought on board, the neighbors will have their direct phone number and email address in the effort to maintain relationships and alleviate any concerns in a timely manner.

Hours of Operation

All food and beverage serving facilities will close by 11pm, but private events (located **INSIDE** the event barn, restaurant/bar, or hotel) will be able to continue until 1AM (Monday, Tuesday, Wednesday, Thursday, and Friday) and 2AM (Saturday, Sunday, and the day after a holiday) per Connecticut Liquor Control Act (Ch 545) Sec. 30-91(a).

About Aradev

Aradev is a hospitality development firm based in NYC. Its principals Jonathan Marrale and Steven Cohen have over 30 years of combined hotel and hospitality experience. Both have family ties to New York, Connecticut and Rhode Island and are looking forward to becoming part of the Salisbury community through the approvals process, as well as during the future operation of the facility. Their experience is heavily weighted in the hospitality and hotel industry and includes several full life-cycle new build hospitality properties, several renovations of historic properties, as well the asset management of the properties. Aradev is committed to sustainability in both preservation of the site and its environs, as well as the architecture and building materials. Aradev has brought together a design team of international industry experts, all with significant experience in the greater Salisbury, Connecticut region.