

March 3, 2016

Jeff Girard  
VTDEC Drinking Water and Groundwater Protection Division  
One National Life Drive – Main 2  
Montpelier, VT 05620

RE: WSID 21390, Charlotte Town Office and Library, Ferry Road, Charlotte, VT, RTRC  
Sampling Plan

Dear Mr. Girard:

Enclosed is the RTRC Sampling Plan for the Charlotte Town Offices and Library.

If you have any questions or concerns please contact me at (802) 453 4384.

Very truly yours,  
**Lincoln Applied Geology, Inc.**

Jeremy Revell  
Class III Water Operator #2526

JR/SR/ih

Enclosure

CC: Dean Bloch, Town of Charlotte (electronically)

F:\CLIENTS\2014\14078\Report\2016\Charlotte Town Office and Library Sampling Plan.docx



	Routine Location Address	Justification	5 Connections Upstream For repeat locations Numbers 2 – 5 are optional	5 Connections Downstream For repeat locations Numbers 2 – 5 are optional
1	Routine Location 1 (Base): Mens Bathroom	Central in system with upstream and downstream locations available	1 Treated water sampling tap	1 Womens Bathroom
			2	2
			3	3
			4	4
			5	5
2	Routine Location 2: Kitchen Sink	Few available sampling locations need another routine	1 Treated water sampling tap	1 Mens bathroom
			2	2
			3	3
			4	4
			5	5
3	Routine Location 3: _____		1	1
			2	2
			3	3
			4	4
			5	5
4	Routine Location 4: _____		1	1
			2	2
			3	3
			4	4
			5	5
5	Routine Location 5: _____		1	1
			2	2
			3	3
			4	4
			5	5
6	Routine Location 6: _____		1	1
			2	2
			3	3
			4	4
			5	5
7	Routine Location 7: _____		1	1
			2	2
			3	3
			4	4
			5	5

Table 1 – Sampling Locations

**Instructions:** The locations for all routine samples taken for compliance purposes must be identified in this table. 1) List up to 7 routine monitoring locations. These are the locations where the required routine compliance samples (monthly or quarterly) are collected. If possible, list the 911 addresses for each location. If those addresses are not available, list where the samples are taken. 2) Explain why the system chooses to sample at each location under the “Justification” column. 3) List at least 1 and up to 5 repeat samples within 5 connections upstream and 5 connections downstream for each Routine sampling location listed.

**Table 2 – Quarterly Monitoring**

To be completed only by **year-round NTNC and TNC systems using groundwater**. Systems must alternate between the Routine 1 (Base) location and at least one other Routine location as identified on the previous page, depending on system complexity. Identify in what quarter each Routine sample location will be sampled.

<b>Quarter</b>	<b>Routine Sampling Location</b>
1 <sup>st</sup> : January 1 through March 31	Mens Bathroom
2 <sup>nd</sup> : April 1 through June 30	Kitchen Sink
3 <sup>rd</sup> : July 1 through September 30	Mens Bathroom
4 <sup>th</sup> : October 1 through December 31	Kitchen Sink

**Table 3 – Monthly Monitoring**

To be completed by any **public water system serving 1,000 people or less**. Systems must alternate between the Routine 1 (Base) location and at least one other Routine location as identified on the previous page, depending on system complexity. Identify in what month each Routine sample location will be sampled.

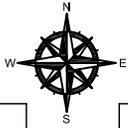
<b>Month</b>	<b>Routine Sampling Location</b>
January	Mens Bathroom
February	Kitchen Sink
March	Mens Bathroom
April	Kitchen Sink
May	Mens Bathroom
June	Kitchen Sink
July	Mens Bathroom
August	Kitchen Sink
September	Mens Bathroom
October	Kitchen Sink
November	Mens Bathroom
December	Kitchen Sink

**Table 4 – Source Information**

Provide the names/numbers of groundwater sources (wells, springs, etc.) and the source sample tap location where each source may be sampled **prior to any treatment**. If a raw water sampling tap is not available prior to the first user, identify the first tap/faucet closest to where the water enters the system.

Attach additional sheets if necessary

<b>Source Name/Number</b>	<b>Source Sample Tap Location</b>	<b>Is this a combined source sample location?</b>
Source 1: Well 1	Prior to flow meter in the utility room	No
Source 2 (if applicable): Well 1		
Source 3 (if applicable): Well 1		
Source 4 (if applicable): Well 1		



FERRY ROAD

GRASSY AREA

LIBRARY

TREATMENT SYSTEM

UNTREATED HOSE BIB (LABELED "NON POTABLE WATER")

TREATMENT SYSTEM

TOWN OFFICE

UNTREATED HOSE BIB (LABELED "NON POTABLE WATER")

PARKING LOT

WELL



NOT TO SCALE

Town of Charlotte  
Ferry Road  
Charlotte, Vermont

Site Sketch

WSID: VT0021390

LAG PROJECT #

14078

DATE:

March 2016

SURVEYORS:

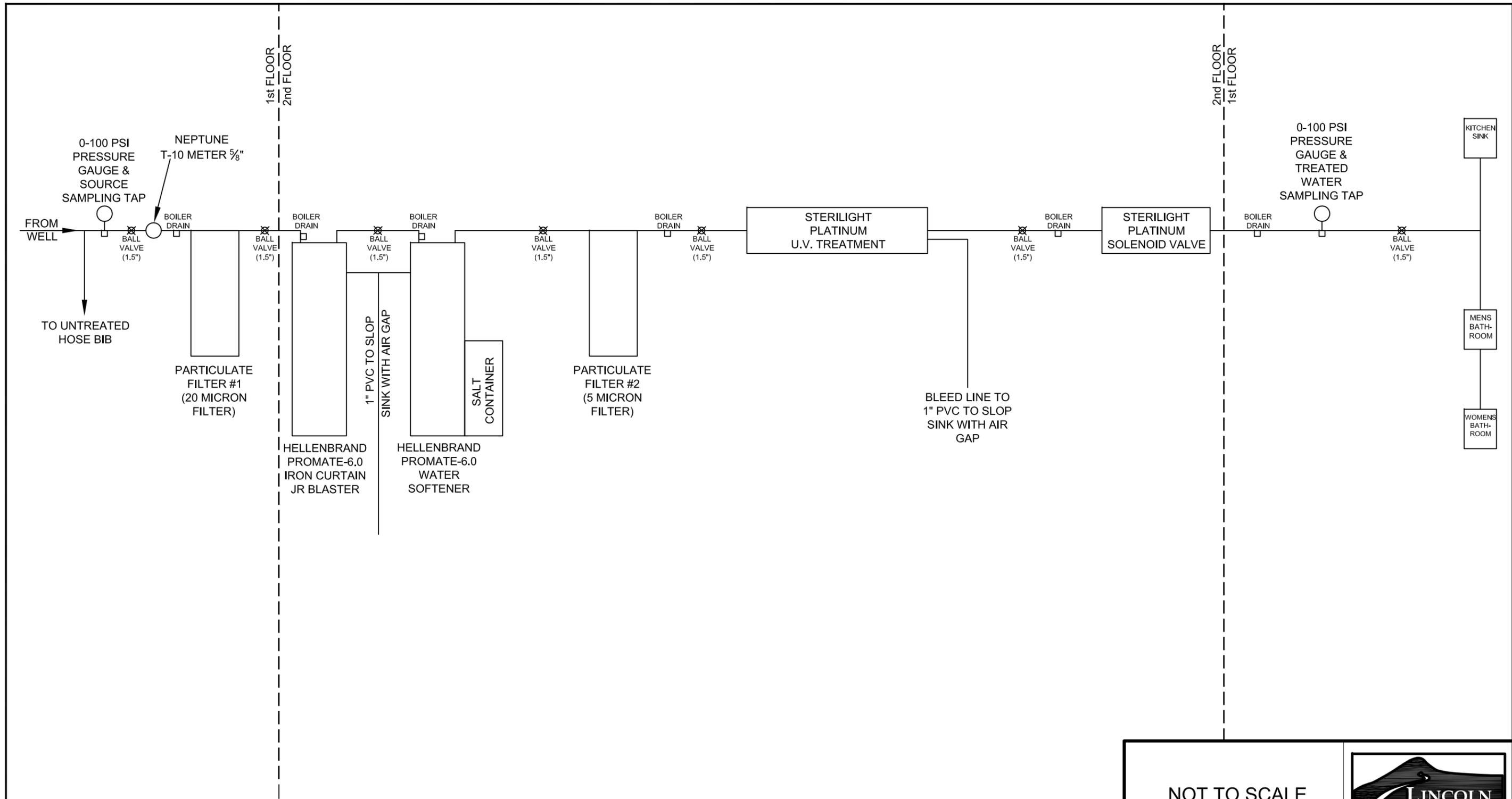
JR

DRAWN BY:

TAM

FIGURE #:

1



NOT TO SCALE			
Town of Charlotte Ferry Road Charlotte, Vermont		LAG PROJECT #: 14078	DATE: March 2016
		SURVEYORS: JR	DRAWN BY: TAM
Charlotte Library Water System		FIGURE:	<b>3</b>
WSID: VT0021390			

**REVISED TOTAL COLIFORM RULE (RTCR)**  
**COLIFORM SAMPLING PLAN FOR ALL PUBLIC WATER SYSTEMS**  
**SERVING A POPULATION OF 1,000 OR LESS**

System Information		
<b>System Name:</b> Charlotte Town Office and Library	<b>WSID Number:</b> 21390	<b>System Type</b> (check one): <input checked="" type="checkbox"/> TNC <input type="checkbox"/> NTNC <input type="checkbox"/> Community
<b># of Service Connections</b> (if there are only a few connections, <u>also</u> write in the total number of available sampling taps): 2,10	<b>Source Water Type</b> (check one): <input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water/GWUDI <input type="checkbox"/> Consecutive	
<b>System Population:</b> 81	<b># of Pressure Zones</b> (if the system relies on a well pump, gravity storage, or single pump station to deliver water to all users in the distribution system, enter "1"): 1	
<b>Dates of Operation (SEASONAL SYSTEMS ONLY):</b> Open: _____ Close: _____		
<b>Number of Distribution Systems (check one):</b> <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> more than 3.		
If the system has more than one distribution system, identify the distribution system to which this form pertains: DS00 <sup>2</sup> Town Office		

**Instructions for completion:** This form is designed to be completed by all public drinking water systems serving a population of 1,000 or less. For systems with multiple distribution systems, a separate sampling plan for each distribution system is required. Attach a map to this plan. The map must include the water system name and identification (WSID) number, clearly labeled coliform sampling locations that are included in this plan, clearly labeled groundwater source sample tap locations (if the system uses groundwater), locations served by the system, directional flow of the system and major water system infrastructure such as: all sources, treatment facilities, storage tanks, pump stations, pressure zones and major distribution lines. If the system consists of a single or few buildings, a sketch of the layout of the rooms, sampling locations, and/or connections will suffice. If the system has only one or a few service connections, identify the number of connections and the number of available sample taps available in the "#of Service Connections" box above.

**For Community Systems, any system served by surface water or Groundwater Under the Direct Influence of Surface Water, or seasonal TNC systems:** Fill out **Table 1 and Table 3**. These types of systems are required to sample monthly. If the system uses groundwater or a combination of groundwater and surface water, also fill out **Table 4**.

**For year-round NTNC and TNC systems served by only groundwater:** fill out **Table 1, Table 2, Table 3, and Table 4**. Filling out Table 3 is required because while these systems are allowed to sample quarterly, if certain events happen, the system will be required to sample monthly. See the attached guidance for more information.

**For all systems:** If the system has a total coliform or E. coli presence in a routine compliance sample, collection of 3 repeat samples is required for each routine positive sample. Repeat sampling locations include: Repeat Sample #1 at the location where the original positive sample was taken; Repeat Sample location #2 within 5 connections upstream (toward from the well/source of water) of the original positive; and Repeat Sample location #3 within 5 connections downstream (away from the well/source of water). This form allows a system to list all 5 connections upstream and downstream although only one location is required. **All sample locations used for compliance purposes under the Revised Total Coliform Rule must be identified on this form.**

	Routine Location Address	Justification	5 Connections Upstream For repeat locations Numbers 2 – 5 are optional	5 Connections Downstream For repeat locations Numbers 2 – 5 are optional
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**Table 2 – Quarterly Monitoring**

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**Table 3 – Monthly Monitoring**

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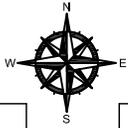
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**Table 4 – Source Information**

Provide the names/numbers of groundwater sources (wells, springs, etc.) and the source sample tap location where each source may be sampled **prior to any treatment**. If a raw water sampling tap is not available prior to the first user, identify the first tap/faucet closest to where the water enters the system.

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NOT TO SCALE

Town of Charlotte  
Ferry Road  
Charlotte, Vermont

Site Sketch

WSID: VT0021390

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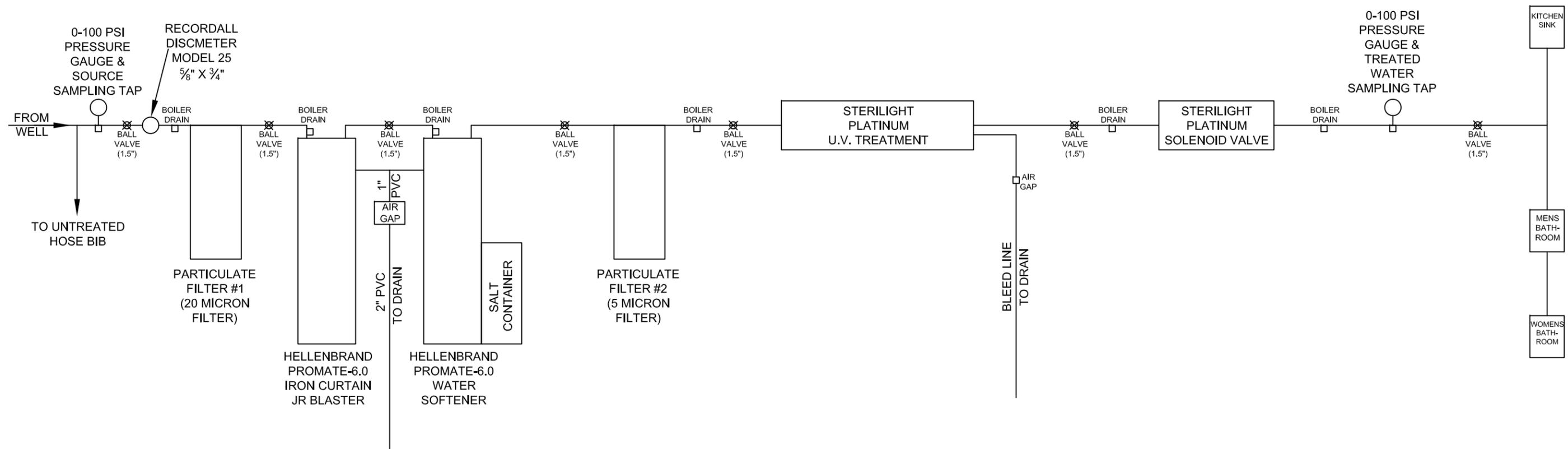
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DRAWN BY:

TAM

FIGURE #:

1



NOT TO SCALE			
Town of Charlotte Ferry Road Charlotte, Vermont		LAG PROJECT #: 14078	DATE: March 2016
		SURVEYORS: JR	DRAWN BY: TAM
Charlotte Town Office Water System		FIGURE:	2
WSID: VT0021390			

**Checklist Prior to Form Submission:**

- A map, including the following information:
  - Water system name and identification (WSID) number,
  - Clearly labeled coliform sampling locations that are included in this plan,
  - Clearly labeled groundwater source sample tap locations for systems that utilize groundwater in any portion of the system,
  - Locations served by the system,
  - Directional flow of the system and
  - All major water system infrastructure such as:
    - Sources,
    - Treatment facilities,
    - Storage tanks,
    - Pump stations,
    - Pressure zones, and
    - Major distribution lines.
  
- All required tables are complete, including:
  - Complete basic system information on page 1,
  - Justification for each routine sampling location,
  - At least 1 repeat location within 5 connections upstream and 5 connections downstream of each routine location,
  - Monthly and/or quarterly locations identified as required in Tables 2 and 3,
  - All ground water sources and source sample tap locations identified in Table 4.
  
- Make and retain a copy of this plan for Water System records.

Signature of System Owner or Administrative Contact	
I have read the Coliform Sampling Plan Guidance document and certify that the above information is true and accurate to the best of my knowledge.	
Signature:	Date:
Printed Name:	Title:

Return this form to:

TNC Systems	Community and NTNC Systems
Jeff Girard Drinking Water and Groundwater Protection Division 1 National Life Drive, 2 Main Montpelier, VT 05620-3521 Phone: 802-585-0314 Fax: 802-828-1541	David Love Drinking Water and Groundwater Protection Division 1 National Life Drive, 2 Main Montpelier, VT 05620-3521 Phone: 802-585-4902 Fax: 802-828-1541