

To: Sherborn Zoning Board of Appeals, ZBA

Date: January 17, 2025

From: Thomas Trainor, Sherborn resident


Subject: Comments for ZBA on the proposed 40B project 41 North Main Street – Confirmations from MassDEP on a) existence of Public Water Supply well ID # 3269024 and b) associated Zone 1, and the Interim Wellhead Protection Area (IWPA).

Chair McBride,

I would like to bring to your Board's attention some basic facts about the public water supply well that exists on the parcel adjacent to the proposed 41 North Main Street 40B project. Unfortunately, both at your hearing earlier this week (1-15-25) and at the previous hearing (11-26-24) the applicants' team made multiple confusing statements about this MassDEP regulated public well that need clarifications.

1. Existence at 33 North Main Street of public water supply (PWS) well (ID # 3269024).

At the 11/26 hearing the applicants engineer made some statements questioning the very existence of a MassDEP regulated public well at 33 North Main Street, and indicated he was unable to receive any confirmation from MassDEP that this well "still existed". At this hearing you recognized me to speak twice, at which time I first provided to the engineer the PWS ID number (3269024) for this well, and later near the end of the hearing when I had a chance to bring up on my computer the state's on-line PWS drinking water database (<https://eeaonline.eea.state.ma.us/portal#!/search/drinking-water>), I reported to the board the well indeed still "existed" and it had been last sampled for water quality as recently as Oct 16 2024, and that testing data had been already transmitted to the MassDEP, hence of course it must have existed. I copy/paste here from a similar search today of this public well testing database, showing what I was looking at during that meeting (shows 10/16/24 nitrate results):

 **Energy & Environmental Affairs
Data Portal**

HOME DASHBOARDS SEARCH DATA ▼ HELP ▼

Search for Drinking Water Results

Search Criteria PWS ID: 3269024 Collected Date: from Dec 1, 2023 through Jan 16, 2025

1 - 10 of 10 items

ACTION	PWS ID	PWS NAME	TOWN	CLAS...	CONTAMINANT GR...	CHEMICAL NAME ...	COLLECTE...	LOCA...	LOCATION NAME ...	RAW ...	RESULT
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	SODIUM	SODIUM	07/08/2024	10000	INN ROCK WELL #1	F	89.8
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	SECCON	MANGANESE	07/08/2024	10000	INN ROCK WELL #1	F	ND
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	NITRAT	NITRATE	05/28/2024	10000	INN ROCK WELL #1	F	3.03
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	SECCON	MANGANESE	10/16/2024	10000	INN ROCK WELL #1	F	0.023
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	NITRAT	NITRATE	01/03/2024	10000	INN ROCK WELL #1	F	3.02
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	SECCON	MANGANESE	05/28/2024	10000	INN ROCK WELL #1	F	ND
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	NITRAT	NITRATE	07/08/2024	10000	INN ROCK WELL #1	F	2.73
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	NITRIT	NITRITE	07/08/2024	10000	INN ROCK WELL #1	F	ND
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	SECCON	MANGANESE	01/03/2024	10000	INN ROCK WELL #1	F	0.076
DETAILS	3269024	FIRESIDE TAVERN ...	SHERBORN	NC	NITRAT	NITRATE	10/16/2024	10000	INN ROCK WELL #1	F	3.55

1 - 10 of 10 items

◀ PREVIOUS EXPORT TO EXCEL ▶

2. Existence at 33 North Main Street of a public water supply (PWS) well (MassDEP ID # 3269024) protective Zone 1 (198 ft) and IWPA (Interim Wellhead Protection Area, 500 ft).

At the 1/15/25 hearing, the applicants engineer made statements questioning the existence of an IWPA zone extending into the 41 North Main Street parcel. This protective zone has been mentioned previously by several of us, including the peer reviewers Tetra Tech (stormwater plan review letter of 1/6/25). And again, mention was made of challenges with communicating with MassDEP on this specific question.

Please know that on the morning after the last ZBA meeting I sent a short email to the main contact email address published for the MassDEP Drinking Water Program, that oversees all PWS wells, asking for confirmations on this simple topic. I copy/paste here first my original email, and second the MassDEP response I received a few hours later that same day:

tmptrainor@gmail.com

From: tmptrainor@gmail.com
Sent: Thursday, January 16, 2025 10:17 AM
To: 'Director-DWP, Program (DEP)'
Subject: question on MassDEP PWS well # 3269024 located in Sherborn MA - please confirm

To: MassDEP Drinking Water Program
Subject: MassDEP Public Water Supply Well (PWS) # 3269024 in Sherborn MA

Could someone on your staff please respond to my email here and confirm the basic information I state below are correct? This data came from current and available on-line MassGIS PWS data layers.

1. PWS # 3269024 is located at 33 North Main Street, Sherborn MA 01770
2. This PWS well, as shown currently on the MassGIS MassMapper online viewer, has a Zone 1 radius of 198 feet, and Interim Wellhead Protective Area (IWPA) radius of 500 feet.

Please provide any corrections if I have made any errors. Thank you in advance for your assistance here.

Best regards,
Tom Trainor

tmptrainor@gmail.com

From: McLean, Michael (DEP) <Michael.McLean@mass.gov>
Sent: Thursday, January 16, 2025 2:59 PM
To: tmptrainor@gmail.com
Cc: Director-DWP, Program (DEP)
Subject: 3269024 Fireside Inn Zone I

Good afternoon Tom,

MassDEP staff have reviewed your inquiry and can confirm Well 3269024-01G has a Zone I radius of 198 feet and an interim Wellhead Protective Area radius of 500 feet. The address of 33 North Main Street, Sherborn also matches our records. Please let me know if you have any additional questions.

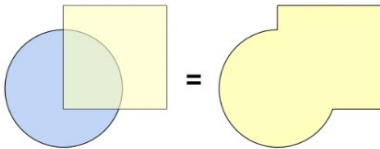
Thank you,

Michael McLean
Environmental Analyst
MassDEP-Drinking Water Program
Northeast Region
781-759-3420

3. “Dissolving” of the IWPA (Interim Wellhead Protection Area) buffer zone for 33 North Main Street public water supply (PWS) well (MassDEP ID # 3269024).

At the last ZBA hearing the applicants engineer made an additional confusing statement, to the effect that the IWPA may have been “dissolved” by the MassDEP (near the 46:50 and 54:50 min marks on DSCTV recording). This statement honestly baffled me at first, but I took another look at the MassGIS MassMapper on-line viewer and discovered perhaps one possible origin of this “dissolved” term in the context of IWPA’s and the discussion at the hearing. However, I could be wrong as to the applicants’ exact meaning and intentions on this topic, so if I am guessing wrong, I apologize to all in advance.

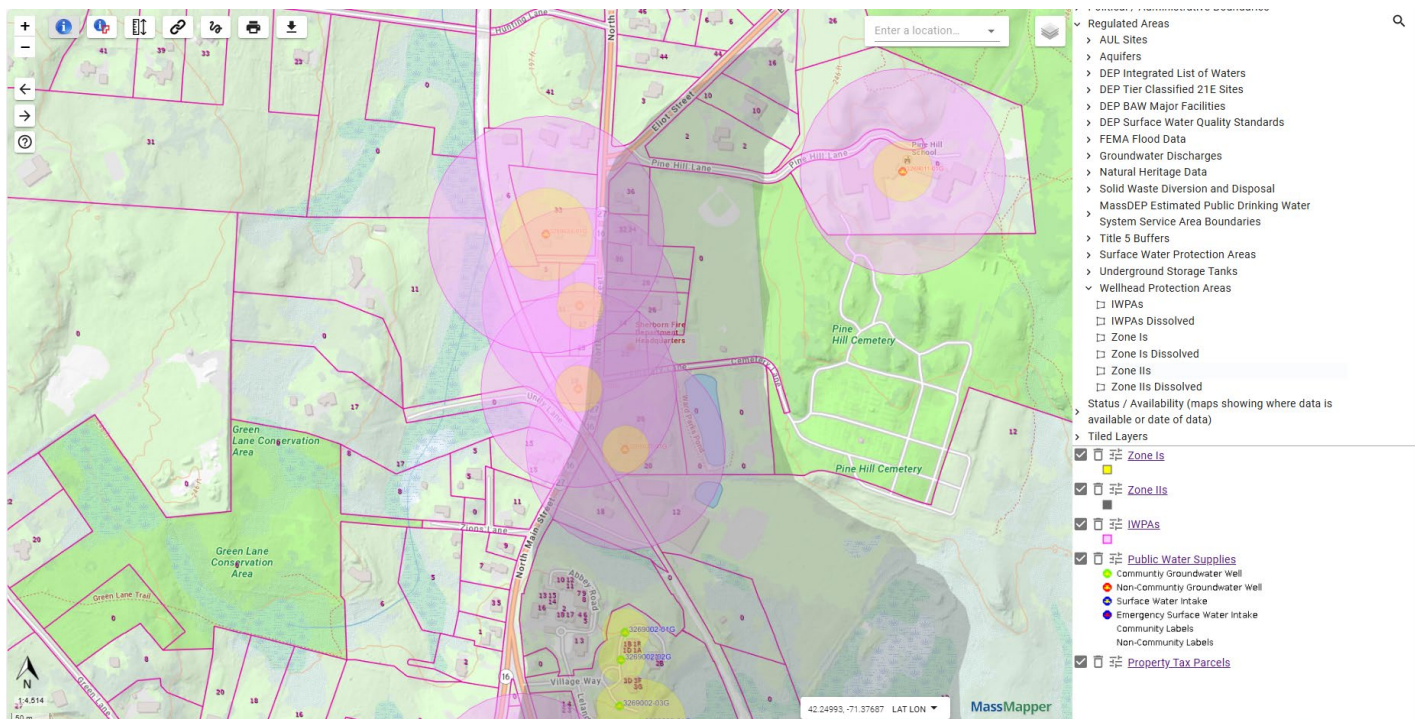
The term “dissolved” I learned is used frequently in the GIS mapping world to describe a computer mapping step whereby overlapping regions on a map are merged into one shape, to eliminate the overlapping sections and borders. A simple graphic example is pasted here to illustrate:



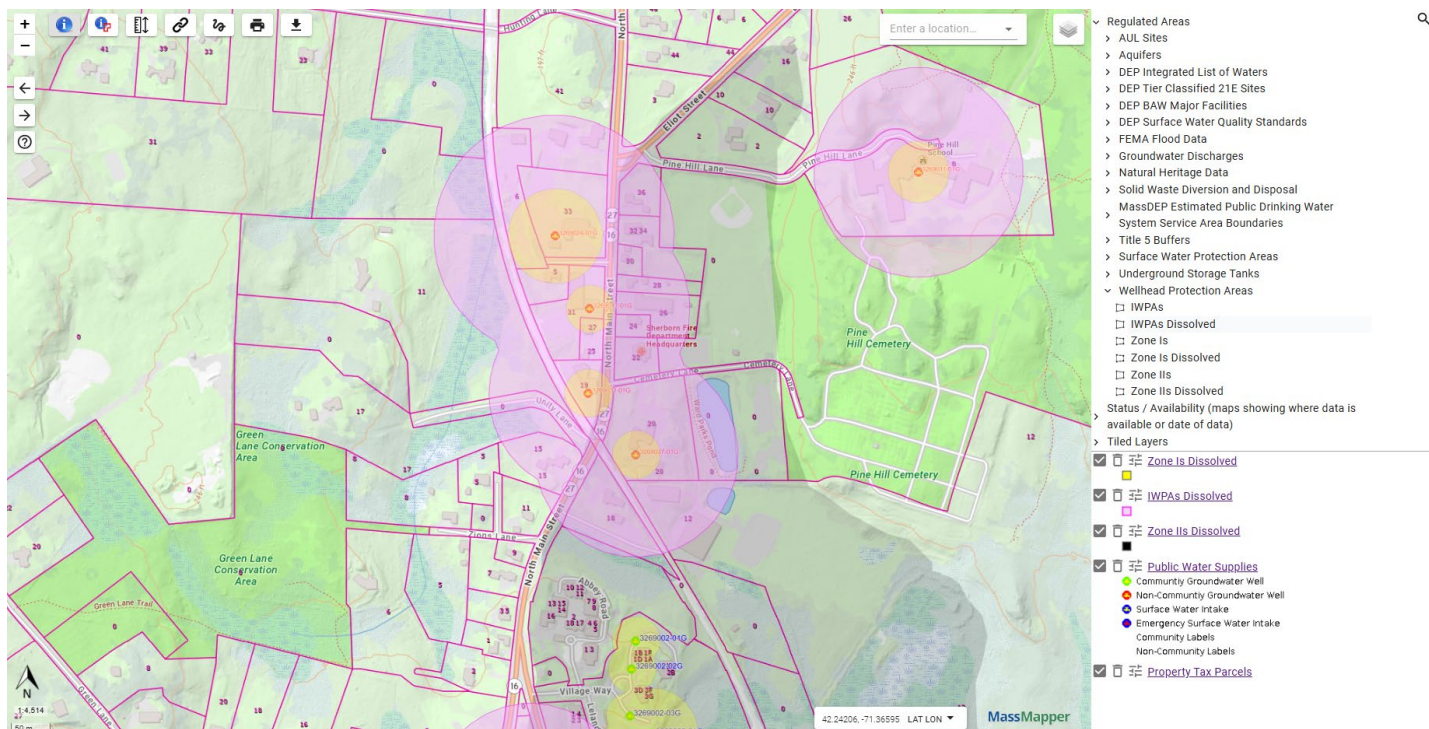
Moreover, within the state’s MassGIS MassMapper I found the ability to use this process when mapping the location of PWS wells, Zone I/Zone II/IWPA’s by choosing as mapping choices both standard mapping layers and dissolved mapping layers.

For the area in Sherborn surrounding 33 North Main Street there exist four closely located PWS wells, and the use of this “dissolve” mapping feature is shown here:

First is a map created with the standard MassGIS layer choices for PWS well locations, Zone I (yellow circles), IWPA’s (larger pink circles), and one Zone II (gray area east of N Main St). Only the PWS wells serving the homes and apartments (Leland, Woodhaven) have a designated Zone II.



Second, a map of the same area created instead with the “Dissolved” MassGIS layer choices for PWS well locations, Zone I (yellow circles), IWPA’s (larger pink circles), and Zone II (gray area east of N Main St):



Note that for the 33 N Main St PWS well, this use of the dissolved mapping layers has no effect on the IWPA radius (500 ft), which extends far into the adjacent 41 N Main Street property, and into the area of the proposed 6,160 gpd septic leach field. The only change to the second map is the absence of the overlapping borders of the multiple IWPA’s (now merged or “dissolved” into one large pink polygon). At the bottom right corner of each map figure is shown the specific MassGIS data layers used to create each map.

Note also that during the last hearing the applicants engineer shared on Zoom a MassMapper view of the area with only the Zone 1 layer selected, and did not add/show the known MassGIS IWPA mapping layer, as has been done here.

I trust this information provided now will clarify the 33 N Main Street PWS well existence and the two associated protective zones that will be impacted by a large septic leach field located within the IWPA zone. I do not understand how the applicant’s team, with years of their design work now invested into a series of proposed 41 North Main Street 40B projects, can question such basic and easily researched facts on state regulated public wells. Both the IWPA portion on the 41 N Main Street property, and the proximity of numerous private drinking water wells in this area of Sherborn, dictate close attention to nitrogen sensitive area considerations per Title V and Sherborn BOH. The entire “downtown” area of Sherborn has historically been known to be quite constrained in terms of septic siting, plus the water quality of the multiple co-located public wells is already known to be compromised (see GPC comments of 10/10/24 already submitted to the ZBA for this project).

Thanks for your and your fellow ZBA members’ volunteer time and efforts.