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WALTER B. SULLIVAN
ANITA J. COMERFORD

KAYLA A. SEPULVEDA
KATHLEEN H. HEFFERNAN

April 25, 2022

Duxbury Board of Health
878 Tremont Street
Duxbury, MA 02331

RE: 3 Dogwood Drive, Lot I, Variance Approval Request for a new Private Well location pursuant to Private Well Regulations Town of Duxbury, Section 2.16
Applicants: Graham and Stephanie Chevy (Wisniewski)

Dear Chairwoman Karen Tepper and Board of Health Members:

This office, along with Rob Carlezon, Grady Consulting, LLC, represents the Applicants, Graham and Stephanie Chevy, who reside at 3 Dogwood Drive, Duxbury, also known as Lot I (Property) The Applicants seek a variance pursuant to Private Well Regulations Town of Duxbury (PWRTD), Section 2.16.

The Applicants seek a waiver specifically from PWRTD, Section 2.06.3 (g) which states:

2.06.3 The placement of all private wells shall meet the following criteria for offsets, unless exceptions are noted for agricultural wells:

...

(g) A minimum of one hundred fifty (150) feet from a leaching facility, except a private well for irrigation use only may be a minimum of one hundred (100) feet.

The Applicants seek to place their new private well location a minimum of one hundred and one point eight (101.8) feet from their neighbor's, 5 Dogwood Drive leaching facility. The proposed setback is needed in order to find a location on the Property where a private well will produce potable water in sufficient quantity for the Chevy family's household and land use.

History of Property and Search for Potable Water

On May 27, 2020, the Builder/Vendor of the Property had a private well drilled by their well subcontractor pursuant to Grady Consulting, LLC. Site Plan. *See Exhibit A, attached and incorporated herein by reference, Grady Consulting, LLC. Site Plan dated April 20, 2018 and Exhibit B, attached incorporated by reference herein, Grady Consulting, LLC. As-Built Plan dated September 9, 2020 rev. January 6, 2021.*

The Builder/Vendor's well subcontractor hired Envirotech Laboratories, Inc. (Envirotech) to perform the required water quality test pursuant to PWRTD, Section 2.08.



Envirotech sent an employee to collect the water sample on and around **June 5, 2020**. This well sample was taken before the Property was developed and there was no water filtration system installed. Please see *Exhibit C, attached and incorporated by reference herein, Envirotech Laboratories, Inc.'s Well Quality Report dated June 5, 2020*.

Upon information and belief, the Builder/Vendor's well subcontractor based on Envirotech's Well Quality Report dated June 5, 2020 and his years of experience advised the Builder/Vendor to have another well drilled, in a different location on the property, in order to find potable water. Thereafter, the Builder/Vendor, no longer employed this well subcontractor to drill other wells on its subdivision property and hired, on information and belief, another well subcontractor (approximately 6-8 wells were to be drilled at this time for the Dogwood Subdivision). The Builder/Vendor did not drill another well on the Chevrys' Property.

The Builder/Vendor most likely did not comply with Massachusetts General Laws Chapter 40, Section 54 and the PWRTD, Section 2.08.4 requiring a Water Quality Report, which includes a copy of the certified laboratory test results, the name of the individual who performed the sampling and where in the system the water sample was obtained, to be submitted to the Duxbury Board of Health prior to a building permit for the Property being issued.

On **June 23, 2020**, a building permit was issued to the Builder/Vendor for 3 Dogwood Drive, BPO 20-22. A four bedroom home, 2.5 baths with an attached two car garage was built on the Property. On or around September, 2020, the Property was listed for sale.

In order for the Builder/Vendor to sell the Property, he was required by PWRTD, Section 2.08.7, as Seller of the Property to perform another water quality test of the Property's private well and present the Buyer with the results. The Builder/Vendor submitted to the Duxbury Board of Health a Water Quality Report from Nashoba Analytical LLC, dated **December 14, 2020**. Please see *Exhibit D, attached and incorporated by reference herein, Nashoba Analytical LLC's Certificate of Analysis dated December 14, 2020*.

This December 14, 2020, water quality test report states the water sample was collected at the outside faucet by Terry Spellman from Aquatek Filtration & Pump Service, Inc. ("Aquatek") from Boylston, MA on **December 4, 2020**. The report also states the name of the Builder/Vendor's construction entity and the address of the Property. Terry Spellman from Aquatek, sold and installed the filtration and softener system for 3 Dogwood Drive.

The Chevrys entered into a Purchase and Sale Agreement to purchase 3 Dogwood Drive from the Builder/Vendor on **December 30, 2020**. On **January 25, 2021**, the Chevrys purchased the Property from the Builder/Vendor and occupied the property shortly thereafter.

On about **March 22, 2021**, the Chevrys ran out of water. Regrettably, the Chevrys were not provided with any manufacturer warranties or other documents relating to the running or maintenance of their filtration system but were given a letter from the Builder/Vendor, with a telephone number, to contact Terry from Aquatek for maintenance of the filtration system. The Chevrys called Terry Spellman from Aquatek and he came to the house to inspect and describe what needed to be done to the filtration system in order to replenish the water supply. He

instructed the Chevrys to replace the filters more often and to call him if the water service was interrupted again. He did not present to the Chevrys a maintenance proposal or contract for care of the filtration system.

When trying to find who else to contact about their home not having water, the Chevrys mistakenly also contacted the first well subcontractor who provided the Chevrys with a copy of Envirotech Laboratories, Inc.'s Well Quality Report dated June 5, 2020. This was the first time the Chevrys found out their private well did not produce potable water for their family.

Over the next five months, the Chevrys spent many hours and money trying to keep their filtration system and softener equipment running properly and interviewing landscape and irrigation companies about planting grass, shrubs and trees and installing an irrigation system on the Property. The landscape professionals told the Chevrys that their untreated water would not allow the normal growth of native shrubs, trees and grass and that the high salt content would interfere with the irrigation system equipment.

On or about September 16, 2021, the Chevrys, in accordance with Duxbury's regulations paid to have another private well drilled pursuant to *Exhibit E, attached and incorporated by reference herein, Grady Consulting's Site Plan dated April 7, 2021*. This second private well's water quality test was better than the first well's water quality test dated May 27, 2020 but it still did not produce potable water. See *Exhibit F, attached and incorporated by reference herein, Envirotech Laboratories, Inc.'s Water Quality Report dated September 16, 2021*.

Comparison of Well Water Reports

	Recommended Limits	Enviro #1	Enviro #2	Nashoba
Sodium	20.0	220	230	27.7
Chloride	250	1,100	760	37.2
Total Hardness	50-200	814	623	53
Specific Conductance	500	3,220	2,520	261

The Enviro #1 refers to the Water Quality Report on the first well drilled for Builder/Vendor on May 27, 2020. The Enviro #2 refers to the Water Quality Report on the second well drilled for Chevrys on September 16, 2021. Nashoba refers to the Well Quality Report done on the first well drilled for the Builder/Vendor after the filtration system was installed.

On or about **October 4, 2021**, the Chevrys met with Tracy Mayo, Duxbury Health Agent, to discuss with the Board of Health representative their private well, non-potable water quality results and their lack of outside water fit for irrigation. The Chevrys provided Ms. Mayo with a copy of Envirotech's Well Quality Report dated June 5, 2020.

The Chevrys consulted with various well companies and were told that a shallow well/dug well may be an option if drilled wells did not produce potable water. The Chevrys

understood that drilled or bored wells are more desirable than shallow wells/dug wells (because they provide the greatest protection from contamination when properly constructed and tested) but the two prior drilled wells produced non-potable water. On or about **March 15, 2022**, the Chevrys requested John McCue, Well Drilling, Test Boring, to test their Property's soil to determine if a shallow well/dug well could be installed. The results of the testing showed the soil was very poor and a shallow well/dug well could not be constructed. *See Exhibit G, attached and incorporated by reference herein, J.A. McCue, Well Drilling, Test Boring Report dated March 15, 2022.*

A Variance May Be Granted Without Nullifying the Intent or Purpose of Private Well Regulations Town of Duxbury, Section 2.06.3 (g)

PWRTD, Section 2.16.1 states:

The Board may, after a public hearing, grant a variance to the application of these regulations, when, in its opinion, the enforcement thereof would do manifest injustice, and the applicant has demonstrated that the equivalent degree of protection will still be provided to the private water supply without strict application to particular provisions of these regulations.

The location of the proposed third, drilled private well complies with all of the Commonwealth of Massachusetts Private Well Setback Requirements and all of the Town of Duxbury's private well location setbacks from property lines, roadways and wetlands except for Private Well Regulations Town of Duxbury, Section 2.06.3 (g). *See Exhibit H, Grady Consulting Site Plan dated April 7, 2021, rev. April 7, 2022, Private Well Set Back Requirements Table, Variance.*

Chapter 21A, section 3, of the MGL, Mass DEP promulgated 310 CMR 15.00, "Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, State Environmental Code, Title 5." (Title 5) requires, among other things, that a potable private well be located a minimum of 100 feet from a leaching field. Exhibit A, Grady Consulting Site Plan dated April 7, 2021, revised April 7, 2022, which the Chevrys are requesting the BOH to allow them to use to locate their third well location to find potable water from a private well on their property complies with Title 5.

In accordance with Title 5, Town Boards of Health, like Duxbury, have the authority to increase the amount of feet from a leaching field where private wells can be located. The Town of Duxbury requires a private well to be located 150 feet from a leaching field. Town Boards of Health, like Duxbury, are also allowed, pursuant to their discretion to grant variances from their regulations without getting prior approval by the MassDEP, as long as the Title 5 setback requirements are met. The setback requirements pursuant to this variance request meet Title 5 requirements including the location of the private well 100 feet from a leaching field.

PWRTD, Section 2.01, Purpose:

These regulations are intended to protect the public health and general welfare by ensuring that private wells are constructed in a manner, which will protect the quality of the groundwater, derived from private wells.

The grant of this variance will allow the Chevrys to drill a well on their Property which may produce potable water. Potable water will protect the health and general welfare of the Chevy Family consisting of a mother, father, baby and a family dog. The Title 5 regulations pertaining to the well location distance from a leaching field is meant to protect the private well water from contamination from the leaching field. Title 5 will be met by the variance setback the Chevrys are requesting herein. The Chevy's variance request which conforms to Title 5 will not have any adverse effect on their neighbors or the Duxbury community but may cause the Chevrys to obtain potable water for their household.

Conclusion

Accordingly, the Applicants respectfully request that the Board of Health grant them a variance from the Private Well Regulations Town of Duxbury, Section 2.06.3 (g) set back regulation requiring their private well location to be located 150 feet from a leaching field in order to allow the Chevrys to locate their third well location attempt to be located 100 feet from a leaching field but still in compliance with Tite 5 in order to find potable water on their Property.

The Chevrys through their attorney, will provide their neighbors, Quinn and Meghan B. Conor at 1 Dogwood Drive and Michael J. and Brittnee Tucciarone at 5 Dogwood Drive with sufficient notice that a hearing on this variance request will be conducted at the next meeting of the Duxbury Board of Health on May 19, 2022, via zoom at 7:00 P.M.

Date: April 25, 2022

Graham and Stephanie Chevy
By their Attorney,



Kathleen H. Heffernan, Esq.
Sullivan & Comerford P.C.
80 Washington Street
Building B, Suite 7
Norwell, MA 02061
781-871-6500
kheffernan@sulsul.com

EXHIBIT C

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive Unit 12
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Client Name : Jim Watt Arisian Well LLC
Address : 569 Center St
 Pembroke, MA
 02333
Collected By : Envirotech/ME
Sample Type : Lot 1

Location : 1065 Summer St
 Duxbury, MA
Lab Number : DW-201523
Date Received : 06/05/20
Well Specs : New Well

Location Source A	Date Collected	Time Collected	Comments			
	06/05/20	10:00	Analysis Result	Method	Date Analyzed	Analyzed By
Analysis Requested	Units	Recommended Limits				
pH	pH units	6.5-8.5	6.30	SM 4500-H-B	06/05/2020	LL
Nitrite-N	mg/L	1.00	<0.006	EPA 300.0	06/05/2020	LL
Nitrate-N	mg/L	10.0	1.65	EPA 300.0	06/05/2020	LL
Sodium	mg/L	20.0	220	EPA 200.7	06/15/2020	KB
Total Iron	mg/L	0.3	0.05	EPA 200.7	06/15/2020	KB
Manganese	mg/L	0.05	0.014	EPA 200.7	06/15/2020	KB
Potassium [□]	mg/L	20.0	11	EPA 200.7	06/15/2020	KB
Calcium	mg/L	N/A	260	EPA 200.7	06/15/2020	KB
Magnesium [□]	mg/L	N/A	40	EPA 200.7	06/15/2020	KB
Total Hardness [□]	mg/L	50-200	814	SM 2340 B	06/16/2020	KB
Alkalinity	mg/L	200	78	SM 2320B	06/05/2020	LL
Sulfate	mg/L	250	25	EPA 300.0	06/05/2020	LL
Chloride	mg/L	250	1,100	EPA 300.0	06/07/2020	LL
Turbidity	NTU	5.0	2.0	SM 2130B	06/05/2020	LL
Color [□]	APC units	15	<5	SM 2120B	06/05/2020	LL
Odor [□]	TON	3.0	ND	SM 2150B	06/05/2020	LL
Tannins	mg/L	N/A	<0.1	SM5550B	06/05/2020	TM
Volatile Organic Compounds*	ug/L	See comment.	**4.24	EPA 524.2	06/10/2020	NEC*
Free CO2	mg/L	50	110	Calculation	06/10/2020	LL
TDS	mg/L	500	2,060	SM2540C	06/08/2020	LL
Sediment	ml./Hour	N/A	<0.1	SM2540 F	06/05/2020	KB
Total Coliform (Presence/Absence)	Present/Absent	Absent	Absent	SM9223B	06/05/2020	RL @ 14:30
Specific Conductance	umhos/cm	500	3,220	EPA 120.1	06/08/2020	LL
Ammonia-N	mg/L	1.0	<0.50	EPA 350.2	06/18/2020	KB


 Ronald J. Saari
 Laboratory Director

Date 10/5/2021

ENVIROTECH LABORATORIES, INC.
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive Unit 12
 Sandwich, MA 02563
 (508)888-6460 1-800-339-6460
 FAX (508)888-6446

Client Name : Jim Watt Arisian Well LLC
Address : 569 Center St
 Pembroke, MA
 02333
Collected By : Envirotech/ME
Sample Type : Lot I

Location : 1065 Summer St
 Duxbury, MA
Lab Number : DW-201523
Date Received : 06/05/20
Well Specs : New Well

Location Source	Date Collected	Time Collected	Comments			
A	06/05/20	10:00				
Analysis Requested	Units	Recommended Limits	Analysis Result	Method	Date Analyzed	Analyzed By

Comments:

pH is below recommended limit and may have corrosive characteristics.
 Sodium indicates possible salt water intrusion or road salt run off.
 Total Hardness results indicate water is very hard to calcium carbonate concentration.
 ** Toluene 4.24 ug/L, see attached
 Toluene is used as a solvent, especially for paints, coatings, gums, oils and resins, and as raw material in the production of benzene, phenol and other organic solvents and in the production of polymers and rubbers.
 All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results.
 We certify that the following results are true and accurate to the best of our knowledge.


 Date 10/5/2021
 Ronald J. Saari
 Laboratory Director

EXHIBIT D

Nashoba Analytical, LLC

31A Willow Road, Ayer MA 01432

Tel: (978)-391-4428 Fax: (978)-391-4643

Web Site <http://www.nashobaanalytical.com>

Date: 12/14/20

Property address: 3 Dogwood Road

City/Town: State Duxbury, MA

Laboratory report number: 222451

The water analyzed as submitted to the lab from the above referenced property

(check one)

MEETS FHA/EPA requirements for Potable water

DOES NOT MEET FHA/EPA requirements for Potable water.


David L. Knowlton
Laboratory Director

Client:

Aquatek Filtration & Pump Service, Inc
 240 Shrewsbury St
 Boylston, MA 01505-1403

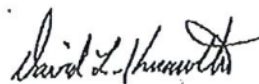
ReportDate: 12/14/2020

Certificate of Analysis

CRL-Inc., 3 Dogwood Rd., Duxbury MA

Parameter	Method	Result	MCL	MRL	Date of Analysis	Analyst
- Outside faucet						
<i>Sampled: 12/4/2020 3:00:00 PM by T. Spellman</i>						
Total Coliform Bacteria, /100ml	ENZ. SUB. SM9223	Absent	Absent	Absent	12/4/2020 4:50:00 PM	M-MA1118
Arsenic, MG/L	EPA 200.9	ND	0.01	0.001	12/7/2020	M-MA1118
Calcium, MG/L	EPA 200.7	20.8	Not Spec	0.2	12/7/2020	M-MA1118
Copper, MG/L	EPA 200.7	ND	1.3	0.004	12/7/2020	M-MA1118
Iron, MG/L	EPA 200.7	ND	0.3	0.004	12/7/2020	M-MA1118
Lead, MG/L	EPA 200.9	ND	0.015	0.001	12/7/2020	M-MA1118
Magnesium, MG/L	EPA 200.7	0.3	Not Spec	0.1	12/7/2020	M-MA1118
Manganese, MG/L	EPA 200.7	ND	0.05	0.004	12/7/2020	M-MA1118
Potassium, MG/L	EPA 200.7	1.1	Not Spec	0.1	12/7/2020	M-MA1118
Selenium, MG/L	EPA 200.5	ND	0.05	0.001	12/10/2020	M-MA1118
Sodium, MG/L	EPA 200.7	27.7	See Note	0.2	12/7/2020	M-MA1118
Alkalinity, MG/L	SM 2320B	54	Not Spec	1	12/4/2020	M-MA1118
Ammonia as N, MG/L	SM 4500-NH3	ND	Not Spec	0.1	12/7/2020	M-MA1118
Chloride, MG/L	EPA 300.0	37.2	250	1	12/4/2020	M-MA1118
Chlorine, Free Residual, MG/L	SM 4500-CL-G	ND	4.0	0.02	12/4/2020	M-MA1118
Color Apparent, CU	SM 2120B	0	16	0	12/4/2020	M-MA1118
Conductivity, UMHOS/CM	SM 2510B	261	Not Spec	1	12/4/2020	M-MA1118
Fluoride, MG/L	EPA 300.0	ND	4	0.1	12/4/2020	M-MA1118
Hardness, Total, MG/L	SM 2340B	63	Not Spec	1	12/7/2020	M-MA1118
Nitrate as N, MG/L	EPA 300.0	0.11	10	0.05	12/4/2020	M-MA1118
Nitrite as N, MG/L	EPA 300.0	ND	1	0.02	12/4/2020	M-MA1118
Odor, TON	SM 2150B	0	3	0	12/4/2020	PN
pH, PH AT 25C	SM 4500-H-B	8.4	6.5 - 8.5	NA	12/4/2020	M-MA1118
Sediment, pos/neg	-----	NEG	----	NEG	12/4/2020	PN
Sulfate, MG/L	EPA 300.0	10.6	250	1	12/4/2020	M-MA1118
Total Dissolved Solids, MG/L	SM 2540C	152	500	1	12/11/2020	M-MA1118
Turbidity, NTU	EPA 180.1	0.45	Not Spec	0.1	12/4/2020	M-MA1118
Radon, PCI/L	EPA 913.0	ND	10000	100	12/8/2020	M-MA072

MCL=Maximum Contaminant Level (EPA Limit), MRL = Minimum Reporting Level
 Sodium Gulda lines- Mass 20, EPA 250, # = Result Exceeds Limit or Guideline
 ND = None Detected (<MRL), * = Background Bacteria Noted, J=Estimated Value
 Analysis performed according to 310CMR42.00
 Massachusetts Certified
 Laboratory #M-MA1118



David L. Knowlton
 Laboratory Director

Client:

Aquatek Filtration & Pump Service, Inc
 240 Shrewsbury St
 Boylston, MA 01505-1403

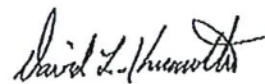
ReportDate: 12/14/2020

Certificate of Analysis

CRL-Inc., 3 Dogwood Rd., Duxbury MA

Parameter	Method	Result	MCL	MRL	Date of Analysis	Analyst
1,1,1,2-TETRACHLOROETHANE, UG/L	EPA 524.2	ND	--	0.6	12/8/2020	M-MA072
1,1,1-TRICHLOROETHANE, UG/L	EPA 524.2	ND	200	0.5	12/8/2020	M-MA072
1,1,2,2-TETRACHLOROETHANE, UG/L	EPA 524.2	ND	--	0.6	12/8/2020	M-MA072
1,1,2-TRICHLOROETHANE, UG/L	EPA 524.2	ND	5	0.5	12/8/2020	M-MA072
1,1-DICHLOROETHANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
1,1-DICHLOROETHYLENE, UG/L	EPA 524.2	ND	7	0.5	12/8/2020	M-MA072
1,1-DICHLOROPROPENE, UG/L	EPA 524.2	ND	--	0.6	12/8/2020	M-MA072
1,2,3-TRICHLOROBENZENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
1,2,3-TRICHLOROPROPANE, UG/L	EPA 524.2	ND	--	0.6	12/8/2020	M-MA072
1,2,4-TRICHLOROBENZENE, UG/L	EPA 524.2	ND	70	0.5	12/8/2020	M-MA072
1,2,4-TRIMETHYLBENZENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
1,2-DICHLOROETHANE, UG/L	EPA 524.2	ND	6	0.5	12/8/2020	M-MA072
1,2-DICHLOROPROPANE, UG/L	EPA 524.2	ND	5	0.5	12/8/2020	M-MA072
1,3,5-TRIMETHYLBENZENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
1,3-DICHLOROPROPANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
1,3-DICHLOROPROPENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
2,2-DICHLOROPROPANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
ACETONE, UG/L	EPA 524.2	28.2	--	10	12/8/2020	M-MA072
BENZENE, UG/L	EPA 524.2	ND	5	0.5	12/8/2020	M-MA072
BROMOBENZENE, UG/L	EPA 524.2	ND	--	0.6	12/8/2020	M-MA072
BROMOCHLOROMETHANE, UG/L	EPA 524.2	ND	--	0.6	12/8/2020	M-MA072
BROMODICHLOROMETHANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
BROMOFORM, UG/L	EPA 524.2	ND	--	0.6	12/8/2020	M-MA072
BROMOMETHANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
CARBON TETRACHLORIDE, UG/L	EPA 524.2	ND	5	0.5	12/8/2020	M-MA072
CHLORODIBROMOMETHANE, UG/L	EPA 524.2	ND	--	0.6	12/8/2020	M-MA072
CHLOROETHANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
CHLOROFORM, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
CHLOROMETHANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
CIS-1,2-DICHLOROETHYLENE, UG/L	EPA 524.2	ND	70	0.5	12/8/2020	M-MA072

MCL=Maximum Contaminant Level (EPA Limit), MRL = Minimum Reporting Level
 Sodium Guidelines- Mass 20, EPA 250, # = Result Exceeds Limit or Guideline
 ND = None Detected (<MRL), * = Background Bacteria Noted, J=Estimated Value
 Analysis performed according to 310CMR42.00
 Massachusetts Certified
 Laboratory #M-MA1118



David L. Knowlton
 Laboratory Director

Client:

Aquatek Filtration & Pump Service, Inc
 240 Shrewsbury St
 Boylston, MA 01505-1403

ReportDate: 12/14/2020

Certificate of Analysis

CRL-Inc., 3 Dogwood Rd., Duxbury MA

Parameter	Method	Result	MCL	MRL	Date of Analysis	Analyst
DIBROMOMETHANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
DICHLORODIFLUOROMETHANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
DICHLOROMETHANE, UG/L	EPA 524.2	ND	5	0.5	12/8/2020	M-MA072
ETHYLBENZENE, UG/L	EPA 524.2	ND	700	0.5	12/8/2020	M-MA072
FLUOROTRICHLOROMETHANE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
HEXACHLOROBUTADIENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
ISOPROPYLBENZENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
M-DICHLOROBENZENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
METHYL ETHYL KETONE (MEK), UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
METHYL TERTIARY BUTYL ETHER, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
MONOCHLOROBENZENE, UG/L	EPA 524.2	ND	100	0.5	12/8/2020	M-MA072
NAPHTHALENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
N-BUTYLBENZENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
N-PROPYLBENZENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
O-CHLOROTOLUENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
O-DICHLOROBENZENE, UG/L	EPA 524.2	ND	600	0.5	12/8/2020	M-MA072
PARA-DICHLOROBENZENE, UG/L	EPA 524.2	ND	5	0.5	12/8/2020	M-MA072
P-CHLOROTOLUENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
P-ISOPROPYLTOLUENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
SEC-BUTYLBENZENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
STYRENE, UG/L	EPA 524.2	ND	100	0.5	12/8/2020	M-MA072
TERT-BUTYLBENZENE, UG/L	EPA 524.2	ND	--	0.5	12/8/2020	M-MA072
TETRACHLOROETHYLENE, UG/L	EPA 524.2	ND	5	0.5	12/8/2020	M-MA072
TOLUENE, UG/L	EPA 524.2	ND	1000	0.5	12/8/2020	M-MA072
TRANS-1,2-DICHLOROETHYLENE, UG/L	EPA 524.2	ND	100	0.5	12/8/2020	M-MA072
TRICHLOROETHYLENE, UG/L	EPA 524.2	ND	5	0.5	12/8/2020	M-MA072
VINYL CHLORIDE, UG/L	EPA 524.2	ND	2	0.5	12/8/2020	M-MA072
XYLENES (TOTAL), UG/L	EPA 524.2	ND	10000	0.5	12/8/2020	M-MA072

MCL=Maximum Contaminant Level (EPA Limit), MRL = Minimum Reporting Level
 Sodium Guidelines- Mass 20, EPA 250, # = Result Exceeds Limit or Guideline
 ND = None Detected (<MRL), * = Background Bacteria Noted, J=Estimated Value
 Analysis performed according to 310CMR42.00
 Massachusetts Certified
 Laboratory #M-MA1118



David L. Knowlton
 Laboratory Director

EXHIBIT F

ENVIROTECH LABORATORIES, INC.

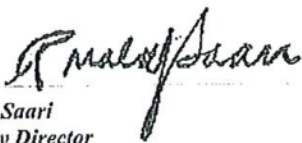
MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive Unit 12
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Client Name : Jim Watt Arisian Well LLC
Address : 569 Center St
Pembroke, MA
02333
Collected By : Tyler
Sample Type : new well

Location : 3 Dogwood Lane
Duxbury
Lab Number : DW-214532
Date Received : 09/16/21
Well Specs :

Location Source	Date Collected	Time Collected	Comments			
A	09/15/21	13:15				
Analysis Requested	Units	Recommended Limits	Analysis Result	Method	Date Analyzed	Analyzed By
Total Coliform	CFU/100mL	0	0, BG 0	SM9222B	09/16/2021	KF @ 1545
pH	pH units	6.5-8.5	6.70	SM 4500-H-B	09/16/2021	SD
Specific Conductance [□]	umhos/cm	500	2520	EPA 120.1	09/16/2021	SD
Nitrite-N	mg/L	1.00	<0.006	EPA 300.0	09/17/2021	SD
Nitrate-N	mg/L	10.0	1.30	EPA 300.0	09/16/2021	SD
Sodium	mg/L	20.0	230	EPA 200.7	09/17/2021	KB
Total Iron	mg/L	0.3	0.33	EPA 200.7	09/17/2021	KB
Manganese	mg/L	0.05	0.013	EPA 200.7	09/17/2021	KB
Potassium [□]	mg/L	20.0	11	EPA 200.7	09/17/2021	KB
Calcium	mg/L	N/A	200	EPA 200.7	09/17/2021	KB
Magnesium [□]	mg/L	N/A	30	EPA 200.7	09/17/2021	KB
Total Hardness [□]	mg/L	50-200	623	SM 2340 B	09/17/2021	KB
Alkalinity	mg/L	200	78.9	SM 2320B	09/16/2021	SD
Sulfate	mg/L	250	20	EPA 300.0	09/16/2021	SD
Chloride	mg/L	250	760	EPA 300.0	09/17/2021	SD
Turbidity	NTU	5.0	3.59	SM 2130B	09/16/2021	SD
Color [□]	APC units	15	<5	SM 2120B	09/16/2021	SD
Tannins	mg/L	N/A	1.7	SM5550B	09/20/2021	CLM
Free CO2	mg/L	50	76	Calculation	09/17/2021	SD


Ronald J. Saari
Laboratory Director

Date 9/20/2021

ENVIROTECH LABORATORIES, INC.

MA CERT. NO.: M-MA 063

8 Jan Sebastian Drive Unit 12
Sandwich, MA 02563
(508)888-6460 1-800-339-6460
FAX (508)888-6446

Client Name : Jim Watt Arisian Well LLC

Address : 569 Center St
Pembroke, MA
02333

Collected By : Tyler

Sample Type : new well

Location :

3 Dogwood Lane
Duxbury

Lab Number : DW-214532

Date Received : 09/16/21

Well Specs :

Location Source	Date Collected	Time Collected	Comments			
A	09/15/21	13:15				
Analysis Requested	Units	Recommended Limits	Analysis Result	Method	Date Analyzed	Analyzed By

Comments:

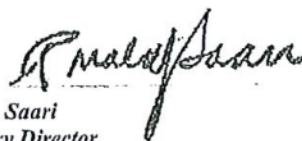
Sodium indicates possible salt water intrusion or road salt run off.

Iron level is not a health hazard.

Total Hardness results indicate water is very hard to calcium carbonate concentration.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results.

We certify that the following results are true and accurate to the best of our knowledge.



Ronald J. Saari
Laboratory Director

Date 9/20/2021

EXHIBIT G

J. A. McCue WELL DRILLING, TEST BORING 71 Water Street, Pembroke MA (781)826-9235 Commonwealth of Massachusetts Reg. #392	Page 1 of 1 HOLE NO. B-1 LINE & STATION OFFSET SURFACE LEVEL WATER LEVEL 3' at completion BORING FOREMAN J. McCue INSPECTOR
JOB LOCATION 3 Dogwood Drive, Duxbury MA	
PROJECT NAME Proposed water well	
DATE STARTED 3/15/2022	
DATE FINISHED 3/15/2022	

SCALE IN FEET	SAMPLE DEPTH		30" BLOWS PER 12" ON AN OPEN END AW ROD	STRATA CHANGE	FIELD CLASSIFICATION AND REMARKS	SAMPLE NO.
	FROM	TO				
5'	0'	11'			Dense, brown silt and fine sand, trace of gravel, some large boulders at first 5'	S-1
10'						
15'				11'	Very dense brown silt and fine sand, trace of gravel, soil became progressively denser with depth (hardpan)	S-2
				16'	Refusal is 16'	

REMARKS: Used a Mobile drill B-61HD drill rig with 24,000 lb max down force, 6" solid stem augers

PROPORTIONS USED: TRACE = 0 to 10% SOME = 10 to 35% AND = 35 to 50%

SULLIVAN & COMERFORD, P.C.

ATTORNEYS AT LAW
80 WASHINGTON STREET
BUILDING B, SUITE NO. 7
NORWELL, MA 02061
(781) 871-6500
Fax (781) 792-3993

WALTER B. SULLIVAN
ANITA J. COMERFORD

KAYLA A. SEPULVEDA
KATHLEEN H. HEFFERNAN

April 28, 2022

Mr. Conor & Mrs. Meghan Quinn
1 Dogwood Drive
Duxbury, MA 01568

Re: Variance Request to waive requirements of Private Well Regulations Town of Duxbury (PWRTD), Section 2.06.3 (g) by Owners of 3 Dogwood Drive to locate Private Well 100 ft. instead of 150 ft from Leaching Facility

Dear Mr. & Mrs. Quinn:

Your neighbors, Graham and Stephanie Chevry, 3 Dogwood Dr., are requesting from Duxbury Board of Health a variance or waiver from Duxbury Drinking Water Town of Duxbury Section 2.06.3 (g). They are requesting to locate a private well 100 ft. and not 150 feet from a leaching facility but still in accordance with Title 5 Regulations.

The Duxbury Board of Health will hold a hearing on this matter on May 19, 2022, by Zoom at 7:00 PM. You are welcome and encouraged to join the hearing.

Pursuant to Governor Baker's Chapter 20 of the Acts of 2021 dated June 16, 2021, An Act Extending Certain COVID-19 Measures Adopted During the State of Emergency regarding suspending certain provisions of the Open Meeting Law, G.L. c. 30A Section 18, this meeting will be conducted via remote participation. A link will be made available by the May 19, 2022, Agenda for the meeting found on the Board of Health website a few days before. You may also use the same link found in the attached 4/27/22 Agenda since they are the same.

Sincerely Yours,



Kathleen H. Heffernan
Attorney for Graham and Stephanie Chevry
3 Dogwood Drive
Duxbury, MA



SULLIVAN & COMERFORD, P.C.

ATTORNEYS AT LAW
80 WASHINGTON STREET
BUILDING B, SUITE NO. 7
NORWELL, MA 02061
(781) 871-6500
Fax (781) 792-3993

WALTER B. SULLIVAN
ANITA J. COMERFORD

KAYLA A. SEPULVEDA
KATHLEEN H. HEFFERNAN

April 28, 2022

Mr. Michael & Mrs. Brittnee Tucciarone
5 Dogwood Drive
Duxbury, MA 01568

Re: Variance Request to waive requirements of Private Well Regulations Town of Duxbury (PWRTD), Section 2.06.3 (g) by Owners of 3 Dogwood Drive to locate Private Well 100 ft. instead of 150 ft from Leaching Facility

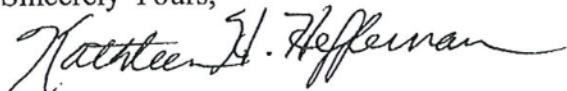
Dear Mr. and Mrs. Tucciarone:

Your neighbors, Graham and Stephanie Chevy, 3 Dogwood Dr., are requesting from Duxbury Board of Health a variance or waiver from Duxbury Drinking Water Town of Duxbury Section 2.06.3 (g). They are requesting to locate a private well 100 ft. and not 150 feet from a leaching facility but still in accordance with Title 5 Regulations.

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Sincerely Yours,



Kathleen H. Heffernan
Attorney for Graham and Stephanie Chevy
3 Dogwood Drive
Duxbury, MA



April 19, 2022

Duxbury Board of Health
878 Tremont Street
Duxbury, MA 02331

3 Dogwood

RE: Dogwood Drive – Lot-I – Proposed well location
Applicant: Stephanie Chevry (Wisniewski)

Dear Board Members:

On behalf of the owner we hereby submit this application for a new well location. The existing well is currently producing water with high sodium levels and is not potable. Enclosed please find 3 sets of the Site Plan, dated April 7, 2022.

We hereby request the following Local Variance Approval Request:

Local Variance

2.0 Rules and Regulations For Private Wells

2.06.3(g) Reduction in potable well setback to leaching facility (S.A.S.) from the locally required 150-feet to 101.8-feet.

Due to the proximities of the Soil Absorption Systems of 1, 3, and 5 Dogwood Drive and the constraints of the rear property lines, It is our professional opinion that this Local Variance Approval request can be granted without compromising the degree of environmental protection, as the new well location still meets the minimum state setback from a well to a soil absorption system of 100-feet. The existing well is currently producing water with high sodium levels and is not potable. A second well location was attempted in 2021 which did not produce potable water, exhausting the available area on the locus property to place a well beyond the 150-ft setbacks to the locus and abutting septic systems.

If you have any questions please do not hesitate to call.

Sincerely,

GRADY CONSULTING, L.L.C.

Robert Carlezon

Robert Carlezon
Project Designer

Enc.

Cc: Stephanie Chevry (Wisniewski)
3 Dogwood Drive
Duxbury, MA 02332

J:\2018\18-057\BOH\BOH Letter.Doc

[EXTERNAL] 2nd email 3 Dogwood Dr Variance Request

Kathleen Heffernan <kheffernan@sulsul.com>

Mon 4/25/2022 1:23 PM

To: Danielle M. Brandon <brandon@duxbury-ma.gov>

Dear Duxbury Board of Health:

Please find attached a letter to the BOH Members requesting a variance for the May 19, 2022, hearing date. Also attached are Exhibits A-H.

If you need anything else, please contact me at 781 871-6500.

Rob Carlezon from Grady Consulting, will also be sending in a letter for the same client: Graham and Stephanie Chevy, 3 Dogwood Drive.

Thank you,
Kathleen H. Heffernan
781 871-6500

Email Confidentiality Notice

The information contained in this e-mail message is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivery to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify the undersigned and destroy the original message. Thank you.

IRS CIRCULAR 230 DISCLOSURE:

To ensure compliance with IRS regulations, we inform you that any U.S. federal tax advice contained in this transmittal (including any attachments) is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding any federal tax penalties or (ii) in connection with any marketing or promotional materials.

Kathleen H. Heffernan
Sullivan & Comerford, P.C.
80 Washington Street, Ste. 7
Norwell, MA 02061
Tel: (781) 871-6500
Fax: (781) 792-3993
email: kheffernan@sulsul.com

LEAP Email Reference [F:6712927d-d557-430f-a7ba-0fc7261b3508|M:7b84e60b-13a8-964b-a24e-d77f646c12d7] (Please do not delete)

SEPTIC SYSTEM AS-BUILT

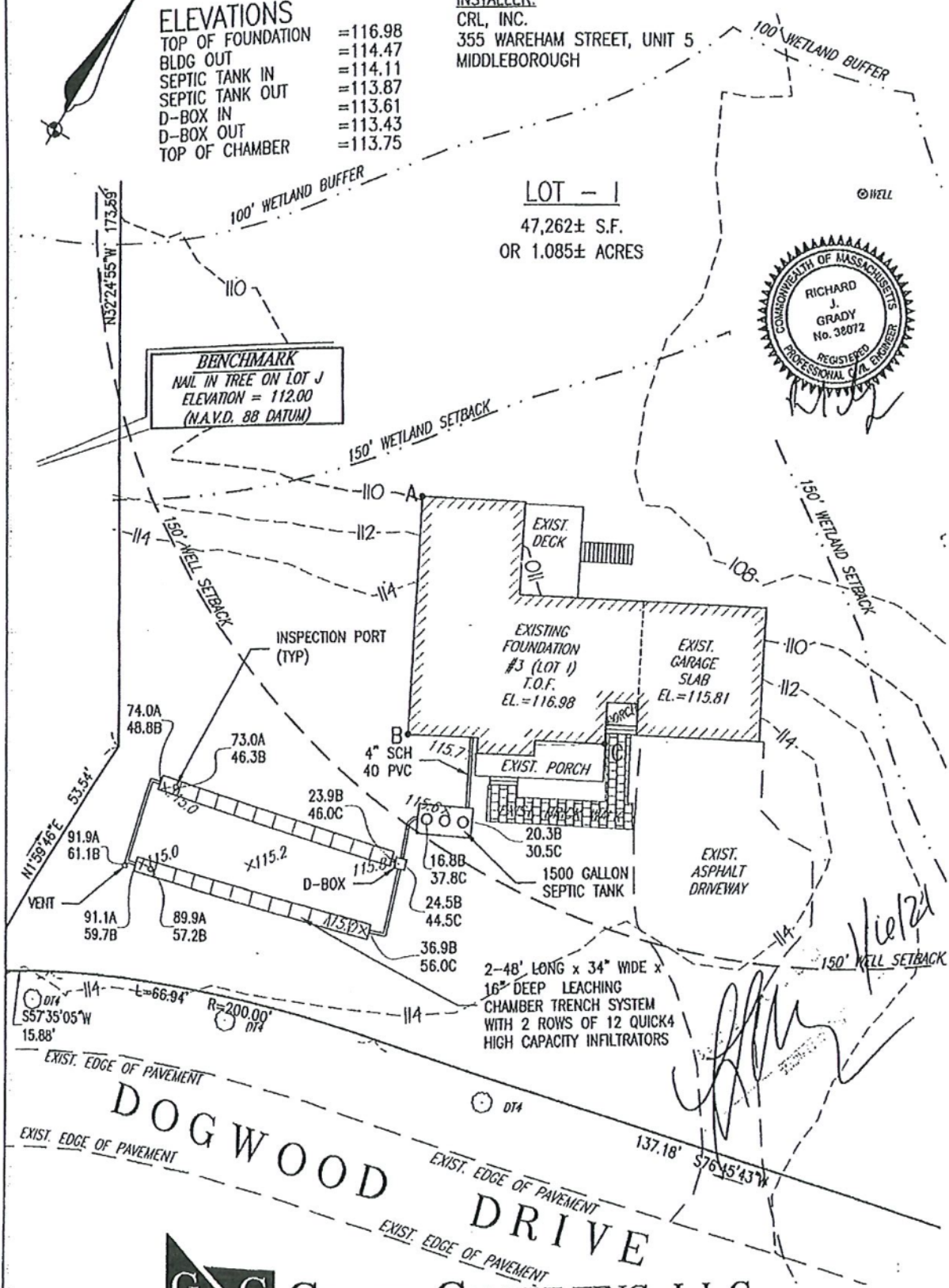
ASSESSORS MAP 004 BLOCK 013 LOT 013
 #3 (LOT I) DOGWOOD DRIVE
 DUXBURY, MASSACHUSETTS

JAN 11 2021

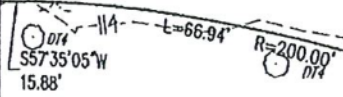
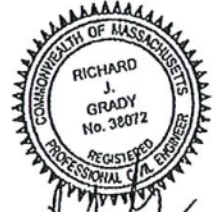
ELEVATIONS

TOP OF FOUNDATION	=116.98
BLDG OUT	=114.47
SEPTIC TANK IN	=114.11
SEPTIC TANK OUT	=113.87
D-BOX IN	=113.61
D-BOX OUT	=113.43
TOP OF CHAMBER	=113.75

INSTALLER:
 CRL, INC.
 355 WAREHAM STREET, UNIT 5
 MIDDLEBOROUGH



BENCHMARK
 NAIL IN TREE ON LOT J
 ELEVATION = 112.00
 (N.A.V.D. 88 DATUM)



G C GRADY CONSULTING, L.L.C.

OWNER/APPLICANT:
 USC LLC
 355 WAREHAM STREET, UNIT 5
 MIDDLEBOROUGH, MA 02346

◆ **Civil Engineers and Land Surveyors**
 71 EVERGREEN STREET, SUITE 1 - KINGSTON, MA 02364
 Tel. (781)585-2300 - Fax. (781) 585-2378

◆ **REVISED JANUARY 6, 202**
SEPTEMBER 9, 2020
 SCALE: 1" = 20'
 JOB No. 18-057