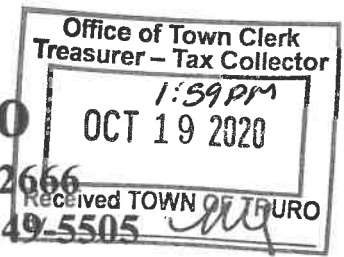




Town of Truro

P.O. Box 2030, Truro, MA 02666
Tel: 508-349-7004 Fax: 508-349-5505



ZONING BOARD OF APPEALS Agenda

DATE OF MEETING: Thursday, October 22, 2020
TIME OF MEETING: 5:30 pm
LOCATION OF MEETING: Remote Meeting
www.truro-ma.gov

Open Meeting

This will be a remote meeting. Citizens can view the meeting on Channel 18 in Truro and on the web on the "Truro TV Channel 18" button under "Helpful Links" on the homepage of the Town of Truro website (www.truro-ma.gov). Click on the green "Watch" button in the upper right corner of the page. Please note that there may be a slight delay (approx. 15-30 seconds) between the meeting and the television broadcast/live stream.

Citizens can join the meeting to listen and provide public comment via the link below, which can also be found on the calendar of the Board's webpage along with the meeting Agenda and Packet, or by calling in toll free at [1-877-309-2073](tel:1-877-309-2073) and entering the following access code when prompted: [170-846-045](tel:170-846-045). Citizens will be muted upon entering the meeting until the public comment portion of the hearing. If you are joining the meeting while watching the television broadcast/live stream, please lower or mute the volume on your computer or television during public comment so that you may be heard clearly. Citizens may also provide written comment via postal mail or by emailing the Town Planner at planner1@truro-ma.gov.

Meeting link: <https://global.gotomeeting.com/join/170846045>

Hearing materials can be found at the following web address:

www.truro-ma.gov/zoning-board-of-appeals/pages/cloverleaf-40b-application

Public Hearing – Continued

2019-008 ZBA – Community Housing Resource, Inc. seeks approval for a Comprehensive Permit pursuant to G.L. c. 40B, §§20-23 to create 40 residential rental units, of which not less than 25% or 10 units shall be restricted as affordable for low or moderate income persons or families, to be constructed on property located at 22 Highland Road, as shown on Assessor’s Map 36 and Parcel 238-0 containing 3.91 acres of land area.

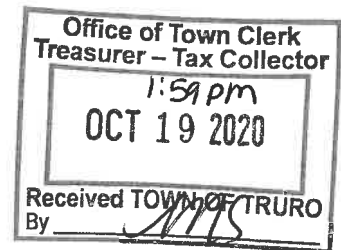
- Waivers

Public Comment

The Commonwealth’s Open Meeting Law limits any discussion by members of the Board of an issue raised to whether that issue should be placed on a future agenda. Speakers are limited to no more than 5 minutes.

- Public Comment Letter from Pamela Wolff
- Public Comment Letter from Residents of Pond Village
- Public Comment Letter from Sheila Coleman

Adjourn



STAFF MEMORANDUM

To: Truro Zoning Board of Appeals

From: Barbara Carboni, Interim Town Planner/Town Counsel, KP Law

Date: October 2, 2020

Re: Waivers under G.L. c. 40B and Applicant's Waiver Requests, **UPDATED**

Section I contains guidance on the principles and process under which the Board considers requests for waivers of local regulations. **Section II** contains the Applicant's waiver requests, somewhat rearranged and edited for efficiency, and with comment.

I. Waivers under G.L. c. 40B

Under G.L. c. 40B, ss. 20-23, the Zoning Board of Appeals *may*, but is *not required* to waive any Bylaw or other local regulation with which a proposed project does not comply. The Board may grant some waivers requested by the applicant, and deny others. With respect to each waiver requested, the Board must decide whether the waiver is "consistent with local needs." G.L. c. 40B, s. 20 defines "consistent with local needs" as:

"reasonable in view of the regional need for low and moderate income housing considered with the number of low income persons in the city or town affected and the need to protect the health or safety of the occupants of the proposed housing or of the residents of the city or town, to promote better site and building design in relation to the surroundings, or to preserve open spaces."¹

A shorthand version: reasonable when balancing (1) *regional and local affordable housing need* and (2) *public health and safety, contextual site and building design, and open space preservation*.

As a practical matter, certain waiver requests are central to the project, and if denied will effectively deny the project. For example, in this case, the Use Table in Zoning Bylaw Section 30 does not permit multifamily use, so if the project is to be approved, this Bylaw provision must necessarily be waived. But the Board must *first* determine whether waiver of this Bylaw to allow multifamily housing is "consistent with local needs." If the Board finds that multifamily use is reasonable when balancing (1) and (2) above, then the waiver is consistent with local needs.

The Board may grant a waiver in part, or to some lesser extent than requested. For example, in this case, the Applicant requests approval for thirty-nine units of multifamily housing on a site of 3.91 acres. This requires waiver of the Zoning Bylaw's Lot Area

¹In addition, "consistent with local needs" means "applied as equally as possible to both subsidized and unsubsidized housing."

requirement, which would limit development to five units (@33,750 square feet per dwelling unit. The Board may waive the Bylaws to allow a multifamily development of *fewer* than thirty-nine units – in effect, granting the waiver in part, and denying it in part.² It is within the Board’s authority to do so *only if* it finds that the project at the density requested (39 units) is not “consistent with local needs.”

Where a Board is inclined to deny a waiver, there is typically discussion with the applicant regarding the impact of such denial on the project. This is one reason why public hearing is left open, so that both the applicant and the public may comment on waivers. The applicant may make the case that the project would be rendered “uneconomic” by the waiver denial. In such case, the Board is entitled to ask the applicant for a project *pro forma*, which the Board may then consider in deciding whether to grant or deny the waiver.³ This process also applies to the Board’s consideration of any permit conditions. The Board need not request a *pro forma*, and many G.L. c. 40B projects are permitted and conditioned without this step.

Input on waivers

G.L. c. 40B, s. 21 states that the Board, “in making its decision on [the] application, shall take into consideration the recommendations of the local boards and shall have the authority to use the testimony of consultants.” Where Town boards or departments, or the Board’s peer reviewer have made recommendations regarding waiver requests, the Board must consider these recommendations. The Board may also consider recommendations expressed by members of the public. Ultimately, however, it is up to this Board whether to grant or deny any waivers.

Why discuss waivers now?

Finally, it is reasonable to ask whether the Board can, or should be considering waiver requests before it has voted on whether to grant a comprehensive permit. The answer is that waivers are such a significant part of a G.L. c. 40B permit that it makes sense to review them up front. This is especially true for waivers without which the project cannot be built. If the Board is inclined to deny a waiver, this gives the applicant the opportunity to address any issue raised by the Board and potentially modify the project – or to make a case that the denial would render the project uneconomic. In short, it allows for useful dialogue.

If the Board elects to discuss waivers prior to voting to grant or deny a permit, this does *not* mean that the Board has already determined that a permit should issue. The discussion may be seen as determining what waivers the Board could find as “consistent with local needs” if it elects to grant a permit.

² This may also be viewed as imposing a condition limiting the development to a specific density.

³ The *pro forma* may be subject to peer review if the Board so desires. Note that “uneconomic” is a G.L. 40B term of art, and it is up to the subsidizing agency to set profit limits. The Board cannot apply its own definition of what is an appropriate return.

II. Applicant's Waiver Requests

With the Applicant's cooperation I have edited and rearranged the waiver requests for the Board's discussion. Below are the waiver requests, in some cases with supporting argument from the Applicant and Staff comment. Additional waivers not requested by the Applicant but needed for the project are also identified.

Board of Health Regulations

Applicant's request: Relief from specific requirements of Article 14 of the Truro Board of Health regulations in excess of MA DEP Title 5 regulations.

Article 14: Nitrogen Loading Requirements

"The Truro Board of Health hereby requires that all properties within the Town of Truro meet the loading restrictions set forth in 310 CMR 15.214 and contain at least ten thousand (10,000) square feet of Buildable Upland (as defined in Article 1 hereunder) for every 110 gallons per day of design flow and that all systems designed to serve said facilities meet the same restrictions and requirements contained in Title 5 as the "Nitrogen Sensitive Areas" defined in 310 CMR 15.215 irrespective of whether the properties are located within Nitrogen Sensitive Areas as so defined."

Staff Comment: The Board's peer reviewer, Mark Nelson of Horsley Witten Group, has noted that this regulation limits wastewater flow to 440 gallons per day per acre. The Cloverleaf site contains a total of 3.91 acres or 170,320 square feet. Under Article 14, the maximum wastewater discharge would be 1,874 gallons per day. The proposed system for this project has a design flow of 7,480 gallons per day. Waiver of Article 14 would be required to allow this discharge in excess of the 1,874 gpd limit for a parcel of this size.

Mr. Nelson found that the Applicant's original wastewater disposal system did not comply with Title 5 or Article 14 of the Truro Board of Health regulations. The Applicant then submitted a revised proposal utilizing the BioMicrobics treatment system, an Innovative/Alternative technology system. Mr. Nelson's report dated July 6, 2020, reviews the system proposed and contains his discussion of this waiver request. Mr. Nelson concludes that waiver of Article 14 is appropriate, conditioned on an Operation and Maintenance Agreement; monthly sampling of wastewater effluent for one year (reduced to quarterly if warranted); a contingency plan; and groundwater monitoring downgradient of the leaching field.

Article 9: Innovative/Alternative Technology [additional waiver required]

The proposed BioMicrobics treatment system for the project is an Innovative/Alternative technology certified for enhanced nutrient removal by the Department of Environmental Protection. Article 9 limits the use of I/A Technology treatment systems to "Remedial Use Situations" arising from failed or nonconforming systems:

"(2) Standards. Innovative/alternative (hereinafter, "I/A") technologies, as defined herein, will only be permitted in Remedial Use situations, and as defined herein (see article 3). I/A technology will not be permitted in any other situations."

Use of the I/A BioMicrobics system for the project, which is not a Remedial Use Situation, requires a waiver from this Bylaw.

Zoning Bylaw

Section 30: Use Regulations

30.1(A): General Requirements

Allows “single-family dwelling or single-family dwelling with accessory apartment use” only. Waiver required to allow multi-family and two-family use.

30.2 Use Table. Does not allow two-family or multi-family use. Waiver required to allow these as principal uses.

30.2. Use Table. Does not allow on-site management office, community room or storage as accessory uses. Waiver required to allow these uses as accessory uses in conjunction with multi-family use.

Section 40.6: Growth Management

B. Residential Development Limitation

“1. There shall be no more than forty (40) building permits for new single family dwelling units authorized within any calendar year, beginning January 1 and ending December 31. . .”

Other portions of Section 40.6 limit the issuance of permits to any one applicant during a single month or year.

From Applicant: : This section limits residential building permits issued within any calendar year to 40, and further limits the total number to any one applicant to 4. Section 40.6.C.1 does provide for exemptions for “construction of affordable housing units provided such housing units have deed restrictions to ensure they remain affordable for the maximum period permitted under Massachusetts Law” however the definition of “Affordable Housing” in the bylaws refers only to housing certified as affordable by the Truro Housing Authority. The definitions in the Zoning Bylaw also defines “Affordable Households” as households earning no more than 80% of the AMI as determined by DHCD. These definitions are potentially contradictory with the mixed income nature of this rental housing development. Therefore, relief from this Growth Management section is requested to exempt all rental units in the development including the units that have deed restrictions up to 110% AMI and the unrestricted Market Rate units, so that building permits can be issued at once.

Staff Comment: Staff agrees that a waiver of Section 40.6 is required to allow the issuance to a single applicant of building permit(s) for the construction of 39 dwelling units. Staff believes that if a waiver is granted, the exemption in Section 40.6.C. 1 is not relevant.

Section 50: Area and Height Regulations

50.1 Regulations

A. Table (Dimensional Requirements)

The Applicant has submitted the following table based 50.1.A, requesting **side yard and building height waivers**, with more detail in the second table below.

<u>Dimensional Requirements</u>	<u>Required</u>	<u>Provided</u>
Minimum Lot Size:	33,750 sq. ft.	170,320 sq. ft.
Minimum Lot Frontage:	150 feet	209.61 feet
Minimum Frontyard Setback	25 feet	42 feet
Minimum Sideyard Setback	25 feet	see chart for buildings requiring waivers**
Minimum Backyard Setback	25 feet	42 feet provided [Building 23-25]
Maximum Building Height	2 stories; 30 feet	see chart for buildings requiring waivers**

Staff Comment: Minimum lot size is a limit on density; only five lots/dwelling units would be permitted on a parcel of 170,320 square feet. Staff believes that at 170,320 square feet, the does not satisfy the Bylaw minimum lot size for a project of thirty-nine dwelling units and that a waiver of 50.1.A is required to allow this density

<u>Dimensional Requirements</u>	<u>Required</u>	<u>Provided</u>
Minimum Sideyard Setback	25 feet	see chart for buildings requiring waivers**
Maximum Building Height	2 stories; 30'/23' flat	see chart for buildings requiring waivers**

Relief Required Building Number	Minimum Sideyard Setback – 25 feet Required	Maximum Building Height (definition of building height to ridge above existing grade) – 30' max	number of stories – two story maximum
1-3	conforming at 40.8 feet	conforming at 21.7 feet	conforming at two stories
5-7	**waiver required for setback at 12.3 feet	conforming at 24 feet	conforming at two stories
2-4	conforming at 91.2 feet	conforming at 28 feet	conforming at two stories
6-8	conforming at 34.2 feet	conforming at 28.5 feet	conforming at two stories

9-11	conforming at 33.3 feet	conforming at 25.25 feet	conforming at two stories
13-15	**waiver required at 24 feet to foundation excl. egress porch	conforming at 23.75 feet	conforming at two stories
10-12, 14-16, 18-20	**waiver required at 20' to foundation excl. egress porch	conforming at 27.25 feet conforming at 26.5 feet conforming at 28.5 feet	conforming at two stories conforming at two stories conforming at two stories
17-19	**waiver required at 14.8 feet to foundation excl. egress porch	conforming at 25.75 feet	conforming at two stories
22-24 23-25	conforming at 51.5' **waiver required at 14.6 feet to foundation	**waiver required at 36'11" **waiver required at 31'11" due to fill placed at rear of site above existing grade; appears 24'8" at roadway	**waiver required at three stories; definition of basement in terms of foundation exposure on more than one side will classify this basement as a third story; relief required
21	conforming at 61' west side and 40' east side	**waiver required at 31.5' that exceeds 23' limit for flat roof; based on def of building height above existing grade; visible height from road is 22.5' at front and 31.5' at rear	**waiver required at three stories; definition of basement in terms of foundation exposure on more than one side will classify this basement as a third story; relief required

Staff Comment: These tables should be reviewed and discussed in conjunction with site plans and elevations. The building heights and waivers requested for buildings 21, 22, 23, 24, 25 should be more fully described.

50.2: Building Gross Floor Area for the Residential District

“B. Applicability and Exceptions:

1. Total Gross Floor Area Allowed by Right: [B]uilding permits for new construction . . . shall be issued only where, on completion of the construction or project, the Total Gross

Floor Area of the new or expanded structure(s) does not exceed 3,600 sq.ft. for a Residential District Minimum Lot Size of 33,750 square ft. and prorated to 3,668 sq.ft. for one acre of land:

a. Plus 300 sq.ft. for each additional contiguous acre of land, or fraction thereof prorated.

..

2. Special Permit to exceed the Total Gross Floor Area limit: The Total Gross Floor Area limit for a dwelling and accessory buildings on a lot established in subsection 50.2.B.1 may be exceeded up to a maximum established by this subsection, by Special Permit. No Special Permit may be issued for any construction if the construction would result in the Total Gross Floor Area exceeding 4,600 sq.ft. for a Residential District Minimum Lot Size of 33,750 (or .775 acre) and prorated to 4,600 sq.ft for one acre of land:

a. plus 300 sq.ft. for each additional contiguous acre of land, or fraction thereof prorated.

...”

Staff comment: At 3.91 acres, the Total Gross Floor Area allowed as of right on the project site would be 4,568 sq. ft. (3,668 for the first acre + 300 sq ft. for each additional acre or fraction). The Total Gross Floor area allowed by Special Permit would be 5,568 sq ft (4,668 for the first acre + 300 sq. ft for each additional area or fraction). As calculated by the Applicant, the Total Gross Floor Area of the project is 46,172 sq.ft. A waiver is required for construction of all Floor Area in excess of 5,568 sq. ft.

Section 70: Site Plan Review

70.3. Commercial Development

A. Commercial Site Plan Review is required for:

1. Any construction, alteration, expansion, or modification of any properties, structures and uses other than that of single or two-family residences and their accessory uses and structures.

Applicant’s presentation (condensed): Applicant seeks relief from the requirements of Site Plan Review procedures and requirements; and, to allow the Comprehensive Permit to be issued in lieu thereof. Applicant is presenting a site plan, landscape planting plan and site lighting plan that incorporates many Site Plan Review requirements. The applicant has submitted the Commercial Site Plan Review Checklist and questionnaire as evidence of substantial conformance with the Procedures and Plan Requirements of Site Plan Review. Relief is requested from requirements, if any, to post a bond, cash, Letter of Credit, or impose Planning Board Covenants, related to site development.

Staff Comment: Under G.L. c. 40B, a separate Site Plan Review process cannot be required. This Board’s review of the comprehensive permit application substitutes for Site Plan Review under Section 70. The Applicant has submitted most of the information required under Section 70.3.D,⁴ and the Board has reviewed plans extensively - including with the benefit of peer review. The Board may conclude that its review has been consistent with Section 70.3, and that

⁴ Exception: lighting plan. I have asked Applicant to provide.

waiver of any remaining procedural or substantive requirements is warranted. Given the scale of this development and its impacts, the Board may wish to review the project's conformity with the Review Criteria/Design Guidelines of Section 70.3.F.

Subdivision Rules and Regulations

Staff Comment: Although the project is not a subdivision, it is residential development of a scale and impacts consistent with those of a subdivision. For this reason, many of the standards contained in the Rules and Regulations should be considered applicable to the project, and where noncompliant, waivers should be requested and considered by the Board. Section 3, Design Standards and Section 4, Specifications for Construction of Roads, and Appendix 2, Table 1 (Recommended Geometric Design Standards) are of particular importance.

Applicant's presentation: The applicant will comply with the intent of the Subdivision Control Regulations with the exception that the applicants requests the waiver of the Planning Board role and this review be made by the Zoning Board of Appeals as part of the Comprehensive Permit under MGL Chapter 40B. In addition, specific relief /waiver is requested:

Section 3. Design Standards

Section 3.6. Street Design

Section 3.6.6. Dead-end streets

a. "The length of dead-end streets should not exceed one thousand (1,000) feet."

Waiver is required: Loop roadway is 1,060 +/- feet long.

Section 3.6.7. Adjacent properties

"Proposed subdivision roads shall be separated from subdivision boundaries by a screening buffer of twenty-five (25) feet width or more. . . ."

Waiver is required: Access road is within 25 feet of side line, adjacent to Unit 21 (east), 13 feet provided.

Section 3.6.8. Design Standards: Table 1 in Appendix 2 – Type C

- Minimum Roadway width: 20 feet

Waiver is required: loop road has 14 foot travel way, with 1 foot berms provided (one-way traffic)

- Minimum Radius at street centerline: 290 feet

Waiver is required: 100 feet provided at Highland Road entrance; 50 feet provided within the site.

- Maximum Grade: 8%

Waiver is required: Main Access Road 10% proposed

- Minimum curb radius: 30 feet

30 feet required; 30 foot radius provided on main access road – exit lane

APPLICANT TO CLARIFY: Is waiver required and if so, where?

- Dead-end Street maximum length: 1000 feet
Waiver is required: loop roadway is 1,060 feet +/- long

Section 4: Specifications for Construction

4.1.8 Berms

“Berms shall be provided on both sides of all paved roads where the grade is 3% or greater. Bituminous concrete berms, eighteen (18) inches in width on rolled asphalt base or binder course, shall be constructed. . .”

Waiver is required: 12 inch berms proposed

4.1.10 Vegetation:

“Existing trees of over six (6) inches in diameter, measured at four and one-half (4-1/2) feet above existing grade, outside the travel surface of any proposed or existing roads and on proposed building lots should be preserved. . . .”

Waiver is required: Trees within the proposed limit of work line shall be removed as needed to allow for the construction of the development, beyond the edge of clearing for the roadway.

Additional waiver requested:

2.5.4(c) Performance Guarantee

Requires a performance guarantee in the form of a bond, deposit, or covenant to secure construction of ways and installation of municipal services.

The Applicant has requested waiver of “any requirement. . . to post a bond, cash, Letter of Credit, or impose Planning Board Covenants, related to site development,” which would include the above.

Staff Comment: To protect the Town’s interests and investment in this project, denial of this waiver is recommended.

General Bylaws

Chapter 1, Section 8: Soil Removal

1-8-1. “The removal of topsoil, loam, sand, gravel, clay, hardening, subsoil and earth from any parcel of land not in public use in the Town of Truro except as hereinafter provided, shall be allowed only after a written permit therefore is obtained from the Building Commissioner.

Applicant's presentation [condensed]: Applicant requests waiver of the requirement that the Permit for Soil Removal be obtained from the Building Commissioner, and that the Permit for Soil Removal, with any conditions imposed, be issued by the Zoning Board of Appeals as part of the Comprehensive Permit. Applicant requests waiver of any bond or other security.

Staff Comment: Under G.L. c. 40B, a separate permit cannot be required for the earth removal involved in this project, but the Board may secure, through a permit condition requiring administrative review, compliance with any reasonable standards and conditions that would be applied to a non-40B project. Through discussion with the Building Inspector and DPW Director, in lieu of a soil removal permit, the DPW director will have oversight of soil removal activity during the Town's part of the project, and this activity will be subject to review and approval by the Board's consultant during the Applicant's portion of the project.

Curb Cut Permit

Applicant's presentation: The Applicant requests that the Comprehensive Permit substitute for Curb Cut Permit from the Town of Truro. MA DOT Curb cut Permit is being sought by Truro DPW.

Staff Comment: Curb Cut Permits are issued by the Select Board following review by DPW and Chief of Police. The proposed project will have curb cuts on Highland Road (main entrance) and Route 6 (emergency access). The Highland Road curb cut has effectively been reviewed by DPW and the Police Chief as part of the comprehensive permit process. The DPW Director has confirmed that DPW will apply for the MassDOT curb cut approval. The Town's curb cut permit requirements may be waived.

Catch-all waivers

The Applicant seeks relief from the Truro General Bylaws and Other Regulations, as follows:

Relief is requested from any other zoning bylaw, general bylaw or regulations or procedures that may be identified in the review process if full compliance is not physically or economically feasible.

Relief is requested from the applicability of such other sections of the Zoning By-law, the Subdivision Control Regulations, or of such other local rules and regulations that would otherwise be deemed applicable to this development.

Staff Comment: Catch-all waivers are not recommended. Any relief sought should be specifically identified and considered by the Board.

Waiver of fees

Applicant's presentation: Relief is requested from any requirements for paying fees for any regulatory review or for any permits related to the development of this project, including but not limited to fees for building permits and septic system installation permits.

Staff Comment: The Board may:

- grant the relief as requested – relief from payment of *any* fees
 - waive some fees and not others
 - waive a percentage of fees (this is sometimes done in proportion to the percentage of affordable units in the project)
 - decline to waive any fees
-

Other

Section 30.9 Parking

Section 30.9 requires two parking spaces per dwelling unit. The development's 39 dwelling require 78 spaces; 81 spaces are provided.

Section 30.9.C. Off Street Parking Schedule, provides in part that “in determining the number of spaces required only delineated spaces which *are not obstructed* shall be calculated.” [emphasis added]. The Planning Board has suggested that there are “at least 10 obstructed spaces” on the proposed plans and therefore an insufficient number of spaces provided. See comment letter dated July 28, 2020 and September 4, 2020 (“at least 11”). The Planning Board also suggests that the Management Office and Community Room visitor uses require additional spaces.

Staff Comment: The Board may determine the meaning of the Bylaw language and implications for the applicant's proposed number of spaces. If the Board finds that the number of parking spaces does not meet the Bylaw requirement, it may consider a (partial) waiver of the requirement.

Jeffrey Ribeiro

From: Pamela Wolff <wolff.pamela@gmail.com> on behalf of Pamela Wolff
<pamela@angel.net>
Sent: Sunday, October 18, 2020 2:44 PM
To: Town Planner; Jeffrey Ribeiro
Subject: Cloverleaf revisited

Please see that the below letter is included in the ZBA packet in advance of Thursday's meeting. I would be grateful if you would send me the link for the meeting. (I am somewhat technologically challenged!)

Thanks,
Pamela

>> Before the Truro ZBA discusses and votes on approval or denial of the 15 or so waivers sought by the Cloverleaf developer at its Thursday meeting I would like the below questions to be considered.

>> Let us now address the elephant in the room: No, not the \$600,000. I refer to the apartment building.

>> This was an addition to the original plan made at the request of the Town, according to Ted Malone, the developer..

>> Let's go hypothetical:

>> What if that building was tossed, reducing the body count by 30 or so?

>> Would that change the calculations about nitrogen loading enough to make this thing viable?

>> Would that make it unnecessary to bring the municipal water line?

>> Would that change the calculus of affordable units?

>> Would that render the whole thing financially not viable for the for-profit developer?

>> It would allow space for a proper playground, and sensible parking.

>> Pamela Wolff

>> Truro

>>

>>

>

Zoning Board of Appeals

Town of Truro
Truro, MA 02666

Oct 19, 2020

via email

Dear Colleagues,

The residents of Pond Village, both as signatories to the prior letter and as participants/observers of the last ZBA meeting, thank you for the opportunity to express our concerns. We found it informative and hope the ZBA members learned from us as well. Yet important questions remain, and new concerns have arisen as a result of that discussion.

Our primary concern is safe water for our home use and for historic Pilgrim Pond. **The health and safety of 150 families in Pond Village is as important as the housing needs of 39 families** newly slated for the Cloverleaf. The Town apparently intends to guarantee the safety of drinking water for the occupants of the proposed Cloverleaf site but not for the residents of our community.

If the proposed sewage treatment system for the Cloverleaf Project is approved, **2.8 million gallons of contaminated water will be discharged each year into our down-gradient groundwater, into our wells and into our taps.** This is equivalent to the volume of 330 in-ground swimming pools¹ filled with contaminated water being dumped every year into our groundwater. Seen this way, close and careful attention to the public health impacts of the Cloverleaf project are not a distraction, but rather should be front and center. They must be thoroughly explored before the ZBA makes any additional decisions on waivers.

- **Public health and safety must come first.** This is not only a practical matter, but one of the primary responsibilities of the ZBA. In evaluating the myriad and extensive waivers associated with the Cloverleaf Project, the ZBA must consider, as clearly stated by the Town's Attorney, the **need to protect the health and safety** of the occupants of the proposed housing and of the residents of the Town.² We know, for the reasons set forth below, that our health and safety will be in jeopardy if Cloverleaf's sewage treatment plant is approved as proposed. Deceptive efforts have been made in front of the ZBA to re-cast the limited data presented to make it seem as if the pilot system will reliably achieve safe levels of nitrogen loading and nitrate levels down-gradient. They will not.
- **The proposed sewage treatment plant is untested and places us at serious risk.** The proposed sewage treatment plant and plan is designed around an unproven pilot system and therefore fails to afford adequate protections to ensure public health and safety of our community. According to MassDEP, pilot systems are "intended to provide field-testing and a technical demonstration to determine if a particular alternative technology can or cannot function effectively."³ To achieve even *provisional use* status,⁴ a minimum of 50 systems of the model type

¹ Based on each pool being 12' x 24'-foot swimming pools of average 5-foot depth.

² Furthermore, as we understand it, the ZBA consideration of the public health implications of the proposed project is particularly critical in 40B applications such as this, under which the ZBA functions as a "one-stop shop" (per Town Council) for the applicant. In such applications, the ZBA considers waivers of regulations usually heard by other boards (e.g., the BoH).

³ Technology is only approved when the Department has determined, based on relevant technical data, that the proposed alternative is likely to be capable of a level of environmental protection at least equivalent to that of a system designed in accordance with 310 CMR 15.100 through 15.293." (<https://www.mass.gov/guides/approved-title-5-innovativealternative-technologies#-piloting-use->

⁴ According to MassDEP, the *provisional use* designation is intended "to evaluate, under actual field conditions, alternative systems that appear technically capable of providing levels of protection at least equivalent to those of a standard on-site

proposed by the developer must be installed and evaluated at various locations for at least three years. The applicant has provided evidence of only a few such systems in operation. **If approved, we can only conclude that the ZBA considers the Pond Village community to be a guinea pig for this wastewater experiment.**

- **The monitoring and contingency plans presented by the applicant are incomplete and inadequate to protect our health and safety.** Many questions remain unanswered that the ZBA must consider before proceeding. At least two representatives of the project acknowledged on October 8 that this untested nature of this system will create unanticipated, potentially adverse outcomes. For example, Mr. Nelson suggested that the sewage discharge will have impacts on Pond Village wells and contamination levels that are difficult to know. That alone is deeply concerning. In addition, Mr. O'Reilly acknowledged that the untested equipment might fail and be "replaced" with some other equipment, also unknown. Questions about system reliability also arise because the proposed operational life of systems of this nature are short compared to the 99-year life of the project. Critical factors such as mean- and worst-case times to failure, to respond and then to repair; discharge control; and even parts availability cannot be established with confidence in face of likely system failure at some point. These are just a few of the serious, unaddressed concerns outlined in Addendum 1.
- **The "peer review" process is insufficient.** The Town has characterized Horsley and Whitten's study as a "peer review." In our view, this is misleading. The process the Town has followed falls far short of any standards or guidance for peer review we can find,⁵ particularly when the pressing issue is the need to consider safe water and our public health. A meaningful peer review includes project review by a panel of multiple experts with credentials in all relevant aspects of a project. Instead of pursuing a process of this nature, the Town-commissioned review was performed by one engineering firm only and focused almost exclusively on engineering up the hill at the project site rather than on safe water down in the Village. A more comprehensive multidisciplinary peer review process—with experts in public health, drinking water safety, health economics, environmental sampling and monitoring, and ecology—is essential to garner confidence in this complex process and merit consideration for ZBA approval.
- **The ZBA must apply current science in this process.** Two weeks ago, we provided the ZBA with an expert peer-reviewed analysis of the severe adverse impacts on human health of well water contaminated above 3 to 5 mg/L. We also demonstrated that a large percentage of our wells, for historical reasons described below, can sustain no additional such contamination without posing documented health risks for Pond Village residents. If the ZBA finds the science we presented convincing, then it cannot seriously consider permitting the excessive volume of sewage discharge planned by the applicant. If the ZBA does not respect the science, we ask that it explain why it does not and provide properly peer-reviewed evidence to the contrary. Absent any response from the ZBA in this regard, we can only conclude that ZBA members have not had the opportunity to read this expert peer-reviewed report in order to understand the unquestionable harm this project will cause for us and its implications for Truro overall.
- **Pond Village's current nitrate levels are a product of history, not irresponsibility. We cannot let the situation get worse.** The Pond Village area was the site where the Pilgrims found fresh water upon arriving in America 400 years ago. In the 18th and 19th centuries, a community grew up around Pilgrim Pond with the closely spaced homes and smaller lots characteristic of historic villages of this period. (See Addendum 2.) Today, Pilgrim Pond is suffering from nitrates and other contaminants caused by many factors, and many of our wells are also showing this stress. Some have suggested that we have not maintained our septic systems and that cesspools in the neighborhood are a significant cause for the baseline nitrate levels that our tests have revealed; however, only about 3% of houses in Pond Village have cesspools, compared to the Health Department's estimate of 8% town-wide. There is no evidence that Pond Villagers neglect their wells, either. Whatever causes current conditions—be it historical

disposal system. *Provisional Use Approval* typically occurs after a technology has been piloted successfully or has been proved satisfactory past performance over at least two years of general usage in one or more states outside Massachusetts."

⁵ For example, see the [Peer Review Handbook \(4th Edition\)](#) developed by the U.S. EPA's Science and Technology Policy Council.

density or low elevations downgradient in a watershed below a state highway interchange—the Cloverleaf project will superimpose new density upon historic density. ZBA approval of density waivers can only worsen our water quality, and consequently, the health and safety of Pond Village residents. This is unacceptable to us, and it should be unacceptable to the ZBA.

- **Other initiatives underway should inform the ZBA before it makes any decision to grant additional waivers to the Cloverleaf.** As the ZBA learned during its October 8 meeting, the BoH is currently seeking the advice of experts in revisiting its health regulations with respect to private well water safety. More specifically, with respect to Pond Village, Ms. Beebe also informed the ZBA the BoH was undertaking a four-step plan to better understand the water quality issues in Pond Village. We urge the ZBA to make no decisions with respect to health regulations until they can be fully informed of the results of these efforts once completed. Similarly, the well thought out, thoroughly vetted, and carefully balanced provisions set forth in the Town’s existing Zoning Bylaws and regulations must apply to this project rather than ad-hoc, extensively waived conditions.
- **Safe water and affordable housing are a false choice.** We reiterate without any ambiguity that the residents of Pond Village are uniformly in favor of affordable housing in Truro, including in the Pond Village area. We supported the vote approving Truro’s acquisition of the Cloverleaf parcel, which expressly stated the intention to build 12 to 16 units on it, as originally proposed. The need is real, and our response is unwaveringly supportive. As we said in our prior letter, **we believe that safe water and affordable housing are not “either/or” but “both/and.”**

We understand the complexity of the task in front of the ZBA and we are grateful for your diligence. The project that you are being asked to evaluate is more akin to city planning than to zoning review. The sheer volume of zoning and health regulations and by-laws that you are being asked to waive is a daunting task indeed.

Because this is a “40B” application, the ZBA has the unequivocal responsibility to consider and protect our public health. Many Pond Villagers are convinced that neither adequate time or expertise have been given to ensure our health is considered during this process and protected as a result of this process. **Yet it must become the greatest concern of all, given the number of Truro residents at risk.** The sheer magnitude of the health risks from the Cloverleaf that are at stake in Pond Village compels us to speak up.

In conclusion, for the reasons stated above and previously, we respectfully ask the ZBA to:

- **Address the issues raised** in our first letter that remain unaddressed, that is items 2 to 5 in whole or part.
- **Defer or deny granting any additional waivers** to the Cloverleaf project unless and until:
 - **The BoH concludes a thorough public process on new standards** for nitrate concentration in drinking water and for nitrogen loading in groundwater consistent with current science evaluations of health effects, that is, at or under 5 mg/L.
 - **The developer produces a new plan for ZBA approval,** verified by independent peer review of the planned modeling, that will achieve a 5 mg/L standard of both discharge and well water, either by reductions in numbers of bedrooms or by expanded wastewater treatment systems or a combination of both, with proven systems and documented backup systems.

Thank you for your continued consideration.

Sincerely,

Members of the Pond Village Community
(Signatories on next page)

LIST OF POND VILLAGE SIGNATORIES

<u>Name</u>	<u>Street</u>
Vicki Abrahamson	Twine Field Rd
Terry Abrahamson	Twine Field Rd
Claire Aniello	Bay View Dr
Mauro Aniello	Bay View Dr
Nancy Bean	Shore Road
Patricia Bellinger	Pond Road
Harry Bogdos	Pond Rd
Nancy Boyles	Bay View Rd
Ronald Boyles	Bay View Rd
Elisabeth Bradfield	Professional Heights Rd.
James Brown	Bay View Rd
Julie Brown	Bay View Rd
Will Bullard	Pond Rd
Luther Bumps	Bay View Dr
Lora Bumps	Bay View Dr
Barbara Cardinal	Pond Rd
Robert Cardinal	Pond Rd
Camille Cardinal	Twine Field Rd
JanIs Christensen	Twine Field Rd
Richard Christensen	Twine Field Rd
Raymond Clarke	Priest Rd
Jil Clark	Bay View Rd
Sophia-Grace Clark	Bay View Rd
Sheila Coleman	Pond Rd
Carolyn Collins	Highland Rd
Barbara Connolly	Bay View Rd
William Connoly	Bay View Rd
Steve Corkin	Merryfield Path
Barbara Coughlin	Pilgrims Path
Robert Coughlin	Pilgrims Path
Janine Cote*	Priest Rd
Bryan Cote*	Priest Rd
Theresa Daigle	Bay View Dr
Tom DeFranco	Pond Village Rd
Francine DeFranco	Pond Village Rd
Glenna Descy*	Bay View Drive
Don Descy*	Bay View Drive

POND VILLAGE SIGNATORIES (con't)

Damian DeWolf	Bay View Dr
Shelly DeWolf	Bay View Dr
Barry Donahoe	Paines Way
Denise Donohoe	Paines Way
Rob DuToit	Shore Rd
Ellen English	Pond Rd
Laura English	Pond Rd
Andy English	Pond Rd
Sam English	Pond Rd
Pamela Fichtner	Pilgrims Path
Ronald Fichtner	Pilgrims Path
Michael Gagne	Pond Rd
Kathy Gagne	Pond Rd
Jeanne Gaarder*	Hughes Rd
Joe Gareau	Pond Village Ave
Pauline Gareau	Pond Village Ave
Jim Gillman	Bay Village Rd
Sandy Gillman	Bay Village Rd
Nita Giordano	Twine Field Rd
Alan Giordano	Twine Field Rd
Jeff Goldenberg	Pilgrim Pond Road
Eric Goss	Pond Rd
Amy Graves	Francis Rd
Marne Hodgins	Pond Road
Tony Hodgins	Pond Road
Elizabeth Hulick	Shore Rd
Charles Hutchings	Sage Ridge Rd
Carolyn Hutchings	Sage Ridge Rd
Eric Johnson	Twine Field Rd
Gwen Kazlouskas-Noyes*	Pond Rd
Scott Kazlouskas-Noyes*	Pond Rd
Hank Keenan	Highland Rd
Mindy Kingston	Pilgrim Pond Road
David Kirchner	Twine Field Rd
Deborah Kmetz	Professional Heights Rd.
Mary Ann Larkin	Pond Rd
Mary Ellen Laughlin	South Highland Rd
William F Laughlin	South Highland Rd
Gail Lebowitz	Pond Village Ave.
Julia Bergmark Lester	Pilgrims Path
Dan Maddalena	Merryfield Path

POND VILLAGE SIGNATORIES (con't)

Jill Mays*	Priest Rd
Eric Mays*	Priest Rd
Matthew McCue	Bay View Rd
Paula Passi McCue	Bay View Rd
Jack McMahon	Professional Hts
Laureen McVay,	Amber Way
Brigid Moynahan	Priest Rd
Chris Nagle	Pond Rd
Christina O'Brien	Shore Road
Patric Pepper	Pond Rd
David Perry	Pond Rd
Louise Fournier Perry	Pond Rd
Gigi Porges*	Hughes Rd
Janice Redman	Shore Rd
James Rudd	Priest Road
Jane Rudd	Priest Rd
Karen M. Ruymann	Bay View Dr
Frederick W. Ruymann	Bay View Dr
Mallory A. Ruymann	Bay View Dr
Lisa Sette	Professional Heights Rd.
Kathy Sharpless	Bay View Path
Gary Sharpless	Bay View Path
Jake Sharpless	Bay View Path
Ellynn Skove	Bay View Dr
Santina Smith	Bay View Dr
Frank Smith	Bay View Dr
Barry Tendler	Pond Rd
Suzanne Tendler	Pond Rd
Scott Warner	Twine Field Rd
Lesley Weller*	Bay View Dr
Lynn Williamson	Priest Road
Lee Williamson	Priest Road
Barbara Wolhgemuth*	Twine Field Rd
Diana Worthington	Pond Rd
Peter Burgess	Friendship Way
Karen Feldman	Turnbuckle Way

*Signatories to Oct 5 submission to ZBA. Unavailable at time of submission. Confirmation pending.
Additional signatories will continue post-submission.

ADDENDUM 1

Deficiencies of the Monitoring and Contingency Plans

A range of deficiencies in the plans for ensuring safe and effective operation of the sewage treatment plant (“I/A” and backup systems) proposed for the Cloverleaf project have been identified and are explored more fully below.

1. If we understand Mr. O’Reilly, **after an exceedance, and if repairs are made, a resample will be taken within 30 days.** If monitoring were to become quarterly, that would also mean a problem could go undetected for up to another 90 days. Why allow 30 to 120 days of high-nitrogen content water at 8,000 gallons per day, namely 240,000 to 960,000 gallons, to discharge into Truro’s aquifer?
2. Horsley and Whitten’s March 3 report entitled *Peer Review/Cloverleaf Parcel* states:

“If the Board agrees to the waiver with the use of an appropriate treatment system, then it should be conditioned on requirements for regular monitoring of the treated effluent, monitoring of groundwater on the southeastern property boundary, and the development of a contingency plan that describes how the property owner will address issues with the performance of the system if effluent standards aren’t met in the future.”

In what way are the details of the applicant’s monitoring and repair plan as discussed on October 8 binding at this point? The applicant stated that such details would be part of MassDEP’s and the BoH’s permits for the pilot treatment system. If the ZBA were to even consider the requested waivers, at minimum, such requirements should first be made legally binding. Since the BoH has never permitted a system of this scale, it is imperative that independent and transparent expertise be brought into the process to inform the BoH in this phase of the permitting process. The same holds true for BoH oversight of the system, given the health risks involved.

3. According to Mr. O’Reilly, “The type of unit we’re specifying – the treatment processes are interchangeable so if they do get damaged, get clogged over time, which might be a possibility, they would be changed.” What if the manufacturer discontinues the model, no longer produces the parts needed, or if the manufacturer, for some reason, ceases operation as a business entity altogether? The manufacturer is a privately held, 25-person manufacturing firm located in Lexana, Kansas. **Has any due diligence been performed on the manufacturer to ascertain its financial viability or maintenance and support records? This is doubly concerning since this is a pilot system which may not be further developed or supported.**
4. If there are **failures of the sewage treatment plant for whatever reason, the time to repair depends on the availability of trained service technicians and spare parts.** These are most likely not in existence on Cape Cod, which adds an additional delay to the repair cycle. Assuming a malfunction of the treatment plant, there is not sufficient holding tank capacity to handle the volume of sewage that can accumulate during a delay of any significant duration. Will there be a standby agreement with a local licensed wastewater tank pumping company that has the capacity to pump and remove off-site 8,000 gallons per day of high-nitrate

concentration sewage? Will the contents of the numerous pump trucks required each day be dumped someplace in Truro, or elsewhere above the aquifer?

5. **The development of a contingency plan must be part of the application process**, and not left for future consideration. The reliability of the contingency plan must be evaluated now in order to assess the health risks attendant to its operation, should it be needed. Should that contingency plan ever need to be implemented, and should it turn out to be insufficient to protect the health of the residents in Pond Village below, it could, as the ZBA noted earlier, “have the potential to be quite detrimental to the neighborhood.” And then later on to be responsible for a health “disaster.”
6. What is the **estimated nitrogen concentration of the discharge from the backup leaching facility**? If that concentration exceeds 10 mg/L, will the volume be reduced to compensate for the increased concentration in the discharge?
7. In addition to design information about reserve locations, there are practical considerations of actually implementing a contingency plan.
 - a. **What plans are in place to implement the contingency plan in a timely manner?**
 - b. **What would be the lead time to implement the contingency plan?** How many days would elapse between when it is declared necessary to when the sewage could be re-routed to a fully operational and compliant backup facility? What construction on-site would be required to do so? For example, is there a large enough dose tank in place to accommodate any timed dose delivery of 8,000 gallons per day of wastewater to the leaching facility?
8. **With respect to reserve locations**, Horsley and Whitten’s March 6 peer review report also states :

“The applicant should provide additional design information to confirm that these [reserve] locations can function as reserve areas and meet all Title 5 requirements for construction of a leaching facility in an area that has a significant change in topography. The applicant should also document that the proposed effluent pumps will function properly in the event the reserve areas must be utilized.”

Have these requirements been satisfied? Are the reserve areas for the backup system adequate?

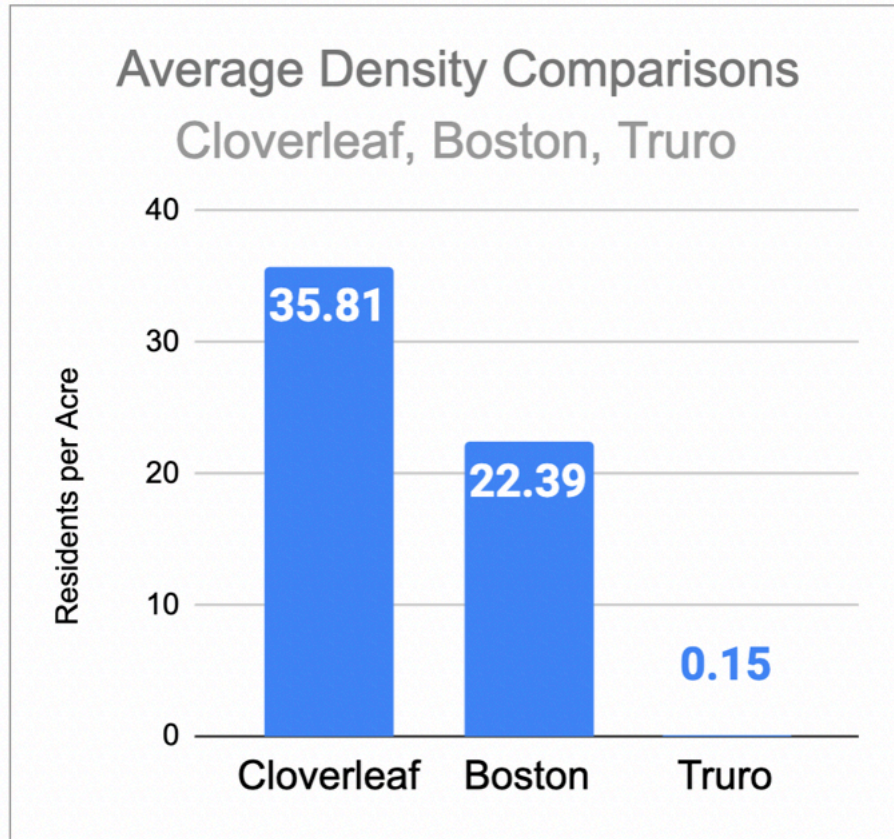
9. **With respect to grading and construction requirements**, on July 6 in follow-up to the March 6 statement above, Horsley and Whitten states:

“The applicant shows the proposed reserve areas on the revised plans that include the use of a drip dispersal technology... It should be noted that the drip dispersal technology requires different components (pumps, hydraulic units, etc.) than a traditional pressure dosed system so there will be a different configuration of components should this be required. Additionally, although the drip tubing can be installed along trees, the tubing must be installed in zones of similar elevation and significant grading may be required for this to be constructed.”

How significant is the grading required, and does that construction or the result of the construction pose any other requirements, including but not limited to additional waivers required? Is it possible to support plantings required by the BoH on the reserve leaching area should it become operational at some time?

10. **With respect to influence (water intake into the system)**, according to the manufacturer, sewage treatment results assume there is sufficient alkalinity in the influent wastewater for nitrification and there are no issues with pH, temperature, or toxicity. What is the plan to maintain these parameters within manufacturer's tolerance, and what are the implications should they not be maintained, especially to groundwater discharge concentrations?
11. No matter what the cause, **if discharge exceeds a concentration of 10 mg/L, how long will it take the owner to detect such an exceedance, and then to notify the Health Department and Board of Health?** How long will it then take to implement corrections? Is there a service level agreement in place to guarantee time to repair, which is especially important given the serious health consequences that could ensue from such a discharge?
12. What are the **credentials of the Certified Wastewater Operator** and do they have documented experience operating a sewage treatment plant with the components specified in the applicant's plan?
13. **With respect to monitoring of the down-gradient groundwater**, it is paramount to guaranteeing the health of the many residents in the watershed including Pond Village. Recent and past test results of private wells in the area show that existing levels of contamination leave no room for additional nitrogen loading. In fact, 20 wells were tested more than once during the town's 10-year testing program, a program which was halted in 2016, the same year the project in question was approved by the voters for 12 to 16 units. That testing revealed that a statistically significant **90% of the wells so tested exhibited an increasing trend in nitrate contamination**. Had that testing program not been discontinued by the Town, for whatever reason, an additional 4 years of data would now be available to further establish this trend, and increase the sample size. **Given the health risks at stake, and in light of the report by Weston & Sampson only two years earlier that established the Pond Village area as one of concern for nitrogen loading, it is disconcerting that the Town apparently ignored the obvious need for continued data collection and monitoring.**
14. This upward trend in contamination levels, observed up to 2016, most likely due to up-gradient nitrogen loading, could very well be due to increased growth in vehicular traffic on the state highway and the cloverleaf on/off ramp interchange that is just up-gradient from these residents' private wells. If that is indeed the case, then **any margin of health safety that exists today, if at all, for the residents' wells could very possibly erode with time as such growth trend continues.**
15. The Town decided to create a dense project up-gradient from the Pond Village area of concern, and Town management, subsequent to voter approval for 12 to 16 units, tripled the size of the project to 40 units. Such a decision, without consulting the voters, **increased the density of the project to greater than the density of the City of Boston** (see Figure 1 below) -- without any continued monitoring or data collection whatsoever. **This ill-conceived approach to monitoring of a critical area in the planning phase of this project speaks strongly to our concerns about the monitoring that will be performed post-construction, without which the magnitude of the inevitable impact on our health and safety cannot be ascertained.**

Figure 1



	Cloverleaf	Boston	Truro
Acres per Sq Mile		640	640
Residents per Sq Mile		14327.68	99.1
Acres	3.91		
Residents	140		
Residents/Acre	35.81	22.39	0.15

Residents assume 2 per bedroom; 70 bedrooms;
per HUD Keating Memo 1991

<https://en.wikipedia.org/wiki/Boston>

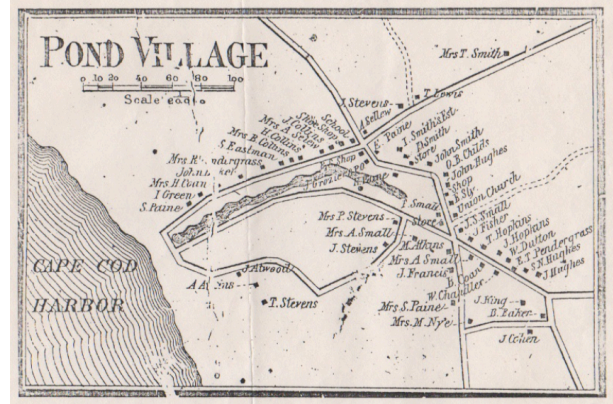
https://en.wikipedia.org/wiki/Truro,_Massachusetts

ADDENDUM 2

Pond Village Historical Images



Pilgrim Pond Plaque - 1920



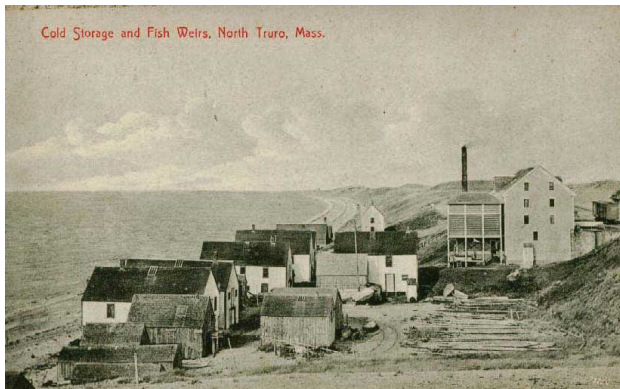
1858 Map



Main St, N Truro



Train Station, N Truro



Fish Weirs



Cottages at N Truro

Sheila Coleman
18 Pond Road
North Truro, MA
sheilac0002000@yahoo.com

Oct 19, 2020
via email

Dear Truro Zoning Board of Appeals (ZBA),

In the October 8th ZBA meeting, the ZBA chair referenced a letter from Clint Kershaw that implied the number of signatures on the "Members of the Pond Village Community" letter was inconsequential, or anemic. I want to challenge that perspective, and the math.

The Water Resources Oversight Committee went through every street and lot in North Truro and compiled a list of 150 lots as being in the Pond Village watershed, with the lots being on the same groundwater flow from the Rt 6 cloverleaf interchange. Only about 130 of those lots have a structure or a well, so no signature should be expected from 20 of those 150 lots.

As per the transcript of the Oct 8th meeting, there were 77 signatures on the October 8th letter from the Pond Village Community. This week's letter will have around 100 signatures. I think that this is a very high level of civic engagement in any year, and I want to also identify just a few unique aspects of this specific 2020 year:

- the residents of Pond Village, like the nation and the world, are struggling with the pandemic and all its impacts,
- the signatures were gathered, because of the pandemic distraction, in a short period of time, and gathered against the challenges of social distancing.

In light of above, I assert that this is an **extraordinarily** high level of concern from the Pond Village residents. The Zoning Board of Appeals cannot grant a waiver if it harms the health of the community. I appeal to the ZBA to not grant any waivers until the BoH has completed the discussion of "Private Wells in Truro, Safe Water;" and taken action on the Cape Cod Commission study on "Pilgrim Pond Stormwater and Watershed."

Sincerely,

Sheila Coleman
18 Pond Road,
North Truro, MA