

Annie Hayes 52 Farmer's Lane
Friday a.m.

Doors Locked Thursday at 11:30 when I arrived. THUS I had to take all physical documents to quote and link them into this one pdf. That is my tardy excuse. Please accept.

Dear Planning Board-

This morning I spoke with Scott Kraihanzel, the new Director of Water Pollution Control, asking about the PFAS data Guy Campinha had submitted to the state before his departure. After the multi-departmental meeting held by the Sewer Commission on August 11, Mr. Campinha said he had been reluctant to submit the data or even look at the test results because the data indicating PFAS presence he knew was there would shut down his sludge removal. I asked Scott about that data report and the response from the state. What is the amount of PFAS, concentrations relative to state mandates and how do we know its source? These questions weren't spoken of at Town Meeting by the treatment remediation engineers and Scott hadn't heard of the report or the data. He was willing to look for them and email once found. I mentioned this article- <https://www.wateronline.com/search?keyword=more+pfas+after+wastewater+treatment> "Study Finds PFAS at Higher Levels After Wastewater Treatment" April 2022. Water Online is an invaluable science source for current water pollution evidence and remediation technology. These topics need to be part of the conversation.

Mike King said departments should work together on the issues of water, referencing the moratorium on building permits until more capacity for sewage was established. Engineers at Town Meeting said there would still be no new capacity extending for two years of construction(?) Other avenues were being looked into(?).

In sum, increased population demanding development, no more permitting until more sewage capacity, PFAS in the wastewater tested from somewhere alongside forest superfilters being torn down, more industrial mining and utilities in increasingly severe predictions of weather change and consequence as sea level rise increases salt water intrusion as the forested hills buffers are flattened.

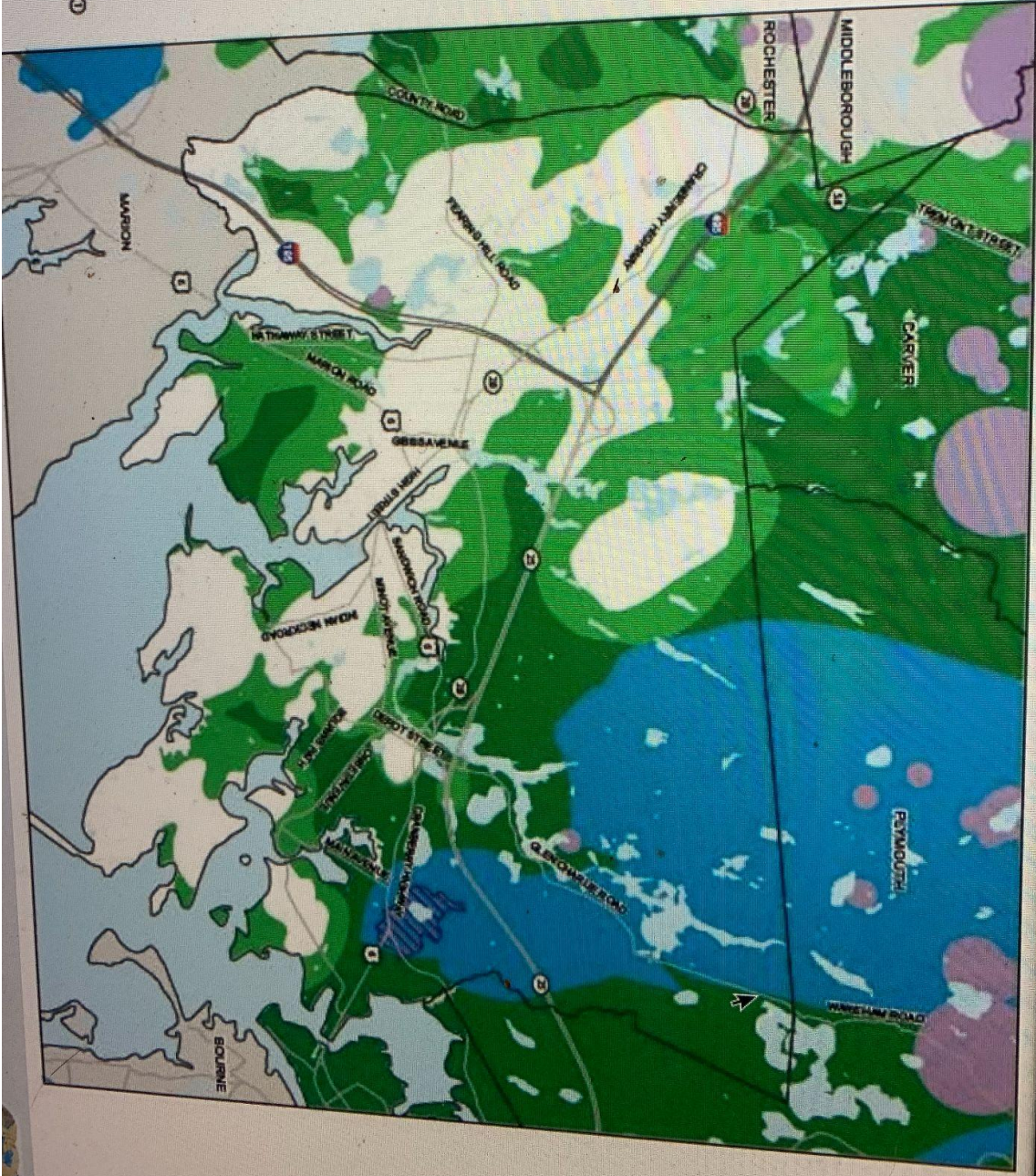
This and what we don't know we don't know on top of our only water source which is the last stop for pollution from the whole Plymouth Carver Sole Source Aquifer. If you haven't read the U Mass. Boston study recently https://scholarworks.umb.edu/uhi_pubs/9/ take another look and note this map. Page 6," Large sand deposits as distinguished from sand and gravel deposits."

How much more of this land will be deforested given the ADM trajectory? And note this Water Online Article from Jan. 2023-
<https://www.wateronline.com/doc/researchers-find-u-s-freshwater-fish-are-highly-contaminated-with-pfas-0001>

Freshwater fish nationwide with high levels of PFAS. What is rinsing into all the waterbodies adjacent to large scale solar utilities? The waterbodies are the face of the aquifer. Who is testing these waters and fish? This is larger than the Planning Board and deserves even more attention than the moratorium on permitting because of capacity.

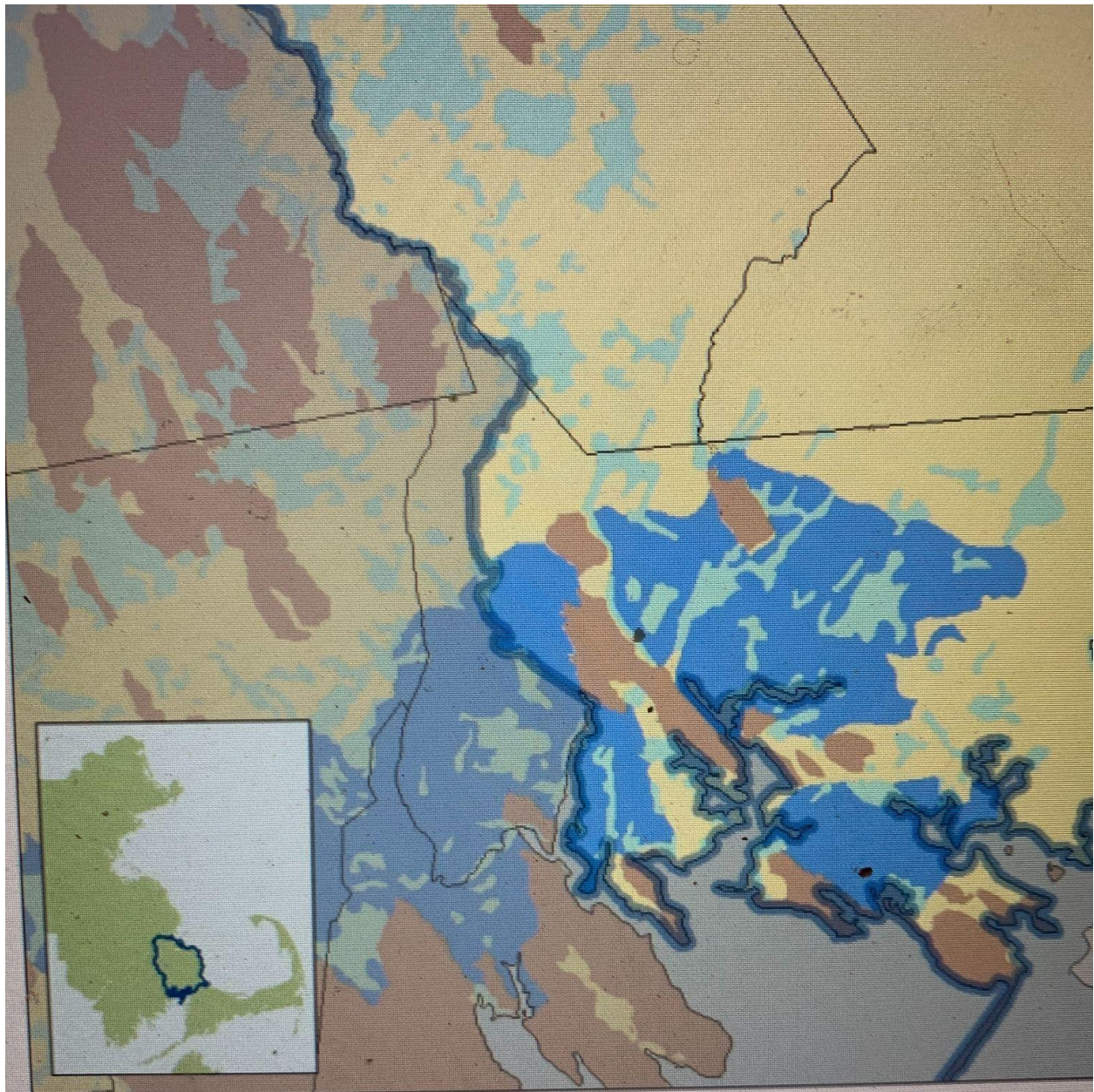
Town of Wareham Water Resources

- Mauder Zone 3 Aquifers
- Mauder High-Yield Aquifers
- Mauder Medium-Yield Aquifers
- Mauder Instream Wetland Protection Area
- Public Water Supply Watershed



This map is for the sole purpose of adding regional planning decisions and is not intended for any other use.
April 2017












-  Aquifer Boundary
- Surficial Geology**
-  Sand and gravel deposits
-  Till or bedrock
-  Sandy till over sand
-  End moraines
-  Large sand deposits where distinguished from sand and gravel deposits
-  Floodplain alluvium

Figure 2—Surficial Geology

Yet, when I asked to learn of the materials used for hydrophobic coating and anti reflective coating on the panels in both projects currently wanting extensions -27 Charge Pond and 150 Tihonet,-I was told my questions might not be answered. So how is a citizen to know that our water is safe? That our aquifer is protected? Other concerns that led me to seek an alternate check list of identified materials in and on solar panels - the washing of panels that is necessary. What washing substance is used, where is the water source , what is the electrical hazard presented as serious! In the literature? Are non-functioning panels being replaced or, as First Solar said in their annual report, is there a reduction in the production efficiency to account for duds? When New Leaf has repeatedly said they won't know what panels will be used until construction begins, we don't even have a certain make and model to research. Originally, LG was to be used. I mentioned they'd stop manufacturing. We don't know what we don't know. Who has researched the effects of PolyVinylFluoride if that's the coating as it degrades into nanoparticles and mixes with all the other plastics in which our environment is awash?

<https://www.nytimes.com/2023/04/20/opinion/microplastics-health-environment.html> **By Mark O'Connell**

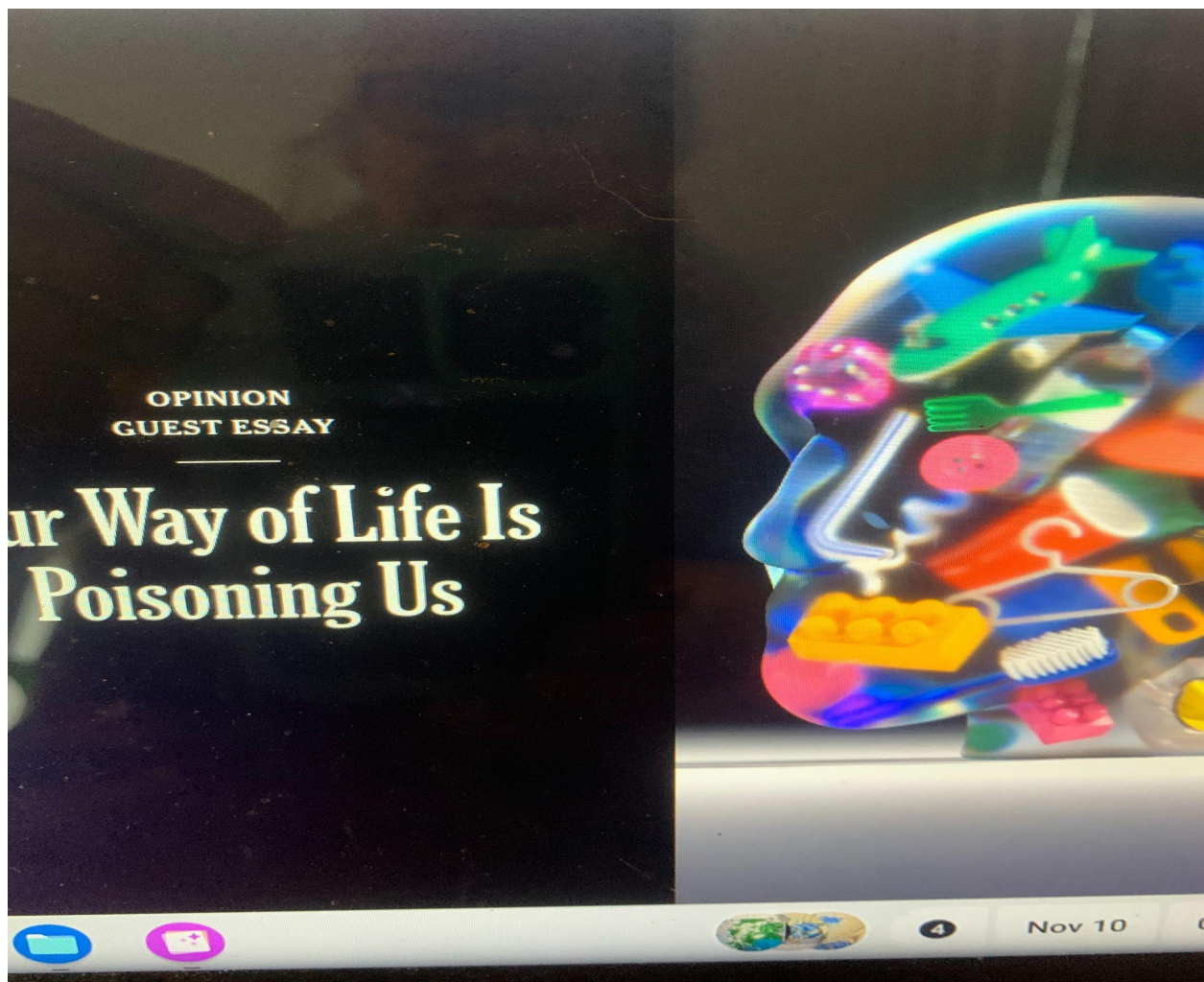
Mr. O'Connell is the author, most recently, of "Notes From an Apocalypse: A Personal Journey to the End of the World and Back."

April 20, 2023

[Leer en español](#)

There is plastic in our bodies; it's in our [lungs](#) and in our [bowels](#) and in the [blood](#) that pulses through us. We can't see it, and we

can't feel it, but it is there. It is there in the [water we drink](#) and the [food we eat](#), and even in the [air that we breathe](#). We don't know, yet, what it's doing to us, because we have only quite recently become aware of its presence; but since we have learned of it, it has become a source of profound and multifarious cultural anxiety.



For us not to re-examine what we don't know we don't know. Is so wrong when we depend on the Aquifer to LIVE To be SAFE. That's why these other chemicals components must be transparent for the public as well as for the Board to look into. There is far more to the science of panel contributions to the

environment after the decades they will be submitted to increasingly severe effects. We don't know what the loss of the forest ecosystem means in compounding effects such as PFAS in our sewer sludge.

Fortunately Scott's background is in environmental testing. He said that the testing for PFAS is so particular, in every sense, the protocol prohibits the tester from wearing deodorant and drinking coffee prior. Why? Because PFAS is in these substances. Read the headings of the unending articles from Water

Online.

<https://www.wateronline.com/hub/bucket/pfas-resources?page=2>

<https://wareham.theweektoday.com/article/town-officials-look-ahead-future-sewer/65237>

Planning Board Chair Michael King said an issue the commission should be aware of are properties that once had sewer hookups to single-family homes are being replaced by multi-family units- "We're seeing more and more high density plans come before us where there was once one home and now they're proposing 10," King said.

He said a solution to the strain this could cause is to incorporate the commission in the planning process.

There is more than sewage volume strain on our system. More weather pollution issues are arising nationwide with changing weather impacts. Deforestation, removing the only best filter for our aquifer becomes more outrageous during drought, extreme rain, greater

population, more industrial waste- which includes solar if we would examine it.

I urge you read the volumes of Water Online issues. I read these regularly as they are a bellwether of what put a “strain” on the system.

“If we don't know what we don't know, then it's hard for us to understand how we're going to properly permit the projects,” King added.

Among a few reasons Kane gave Butler, Kane emphasized the “most important” reason being sewer.

Butler said, “[Kane] claimed to me that until we solve the sewage problem – until we resolve the issue in terms of sewage, liability, resiliency, capacity – his firm at least, saw no future in investing further in development within Wareham.”

He added, “I asked him if he thought that would be the case for other developers, and I mentioned that we were working on the Urban Renewal Plan for Wareham village – he said, ‘Good luck.’”

Director of the Water Pollution Control Facility Guy Campinha said, “We have a time crunch. Groundwater gives us that ability to meet that time crunch, and so it may be a good beginning.”

At the conclusion of the meeting, Campinha said if the growth of the town economically is dependent on the function of the sewer system, then solving these wastewater problems should be a goal for everyone.

“The bottom line is: As a town, we have a major issue and we've got to solve it,” he said.

Pigeon said, “You're right – it is a town problem – and they have given us the responsibility of trying to solve it and advising them as such.”

All this about quantity and nitrogen content to qualify for release. What about the quality? What about hundreds and hundreds of acres of an electrical utility on destroyed forestland and flattened sand hills- the once perfect filter to have sustained our pristine Aquifer that we now permit for elimination-extinction.

He (Pigeon) added, “Through his workshop, I think we gain an awareness of how everything affects other departments and what their needs are, and it all comes down to us as far as sewerage is concerned.”

If anything needs interdepartmental assessment it is the preservation of the purity of our aquifer. That is the mandate of the Master Plan, the U Mass.Boston Plymouth Carver Aquifer report, the information of the tainted quality of municipal water across the country and the ease with which the polluters have evaded

even a fraction of the amount of money to clean our water. Ours is still pure- we think- because there is no testing of solar sites that could have been leaching for decades. There is instead a refusal from developers to answer questions. There ARE PFAS in our wastewater and the new Director of Water Pollution Control is looking for the data/report he didn't know existed.

It would be wise to have an Aquifer Protection forum that is inter-town and inter-departmental to prevent what is entirely possible.

Do not permit extensions until the primacy of the Aquifer is acted upon to the fullest degree.

Lithium Ion Battery Fires LIB

I urge you to watch this recent video presented by the HAZMAT Roadshow which answers the need of firefighters for whom the 1% of possible LIBattery fires is "where we live." It is they whose work site is that 1%. This is an extremely helpful ground level workshop attended standing room only across the country, this one in Sacramento, by firefighters who know the extreme dangers of the growing prevalence of LIBatteries everywhere from cell phone size to huge BESS facilities, and who do not know exactly how to attend those fires and get back home unscathed... both internally and externally.

A New York City firefighter with a sense of humor is the constant insert of his eye opening experiences.

Info example-

“That single cell you have in your computer, an EV has 7,000 of those cells, exactly the same, just packed differently”

“You flip a vertical BESS battery cell down horizontally, put some wheels on it and add a styrofoam cup on top and you’ve got an EV. It’s no different- only the configuration.”

<https://www.youtube.com/watch?v=Ze5fXg0HUho>

969 views Oct 2, 2023 [SACRAMENTO](#)

Presentation "Building The Plane While We Fly It" Lithium-Ion Batteries - In Practice. During our week of filming at The Continuing Challenge in Sacramento, the Lithium-Ion Battery presentation was a standing-room only event. It's a long video for sure, but every part of the presentation gets you thinking and taking notes to discuss responses with your team.”

I would compare this video with the minimal testimony of the toxicologist brought by New Leaf proponents to allay fears of potential harm.

<https://www.youtube.com/watch?app=desktop&v=6hG06EX9fMohopes> to

questions that you guys had asked right um well I'm Marie rudeman I'm uh

1:11:26

human health and environmental risk assessor and toxicologist I've been with

1:11:32

Westin and Sampson since 2013 and I've been doing risk assessment and

1:11:38

toxicology for almost 30 years now so I reviewed the data that's out there

1:11:47

there wasn't a lot of risk assessment data there was only one that I could that I could just review a summary of

1:11:54

and then but I reviewed the laboratory data on

1:12:00

lithium battery fires and that's how I was able to answer some of the questions

In light of the considerations brought to light in the video, which asserts all systems are different, new evidence is daily, unknown changes occur daily and the proliferation of LIB and their fires has dramatic everyday consequences requiring constant expanded knowledge and adaptation.

Consequence of fire- Wendy O'Brian spoke to me of a fire that happened a while back that burned vast acreage in Myles Standish Forest. A fire on these solar projected properties because of the prevailing winds, would also cause the surrounding forests to burn. At a Zoning Board meeting, member Rick Semple also spoke of his grave concern for the prevailing winds of that geography.

Yet on page 16 of the site/plan review for 27 Charge Pond, the proponents designate N/A as their response. Not applicable is their determination for having an environmental impact assessment including consequence to the surrounding area.

Do NOT extend these two OLD projects that demand greater scrutiny in an ever dynamic technological response to extreme Climate Change happening NOW.

• Dumpster (trash collection facilities);	N/A
• New contour lines resulting from earth movement (2' intervals) and indications of types of ground cover and other precautions to stabilize slopes;	N/A
• Vehicle parking, loading, and circulation areas showing dimensions and layout of parking spaces, travel lanes, aisles, and driveways;	Yes
• Proposed new plantings by size and location or construction of other devices to comply with screening and shading requirements.	N/A
	Yes

IMPACT STATEMENT

Part One: Description of neighborhood and impact of proposed development on all applicable town services including but not limited to schools, sewer service, water system, parks, fire, and police protection;	X
Traffic report of existing and future traffic within and adjacent to proposed development. (Include estimate of both peak and average daily traffic count);	N/A
Analysis of site in regards to wetlands, coastal wetlands, slopes, soil conditions, 100 year flood plain, and other natural features as Planning Board may request;	X
Environmental Impact Assessment Report relating to proposed plan and copy of environmental impact report if otherwise required in order to illustrate the ecology of the area within the site and any significant off-site impacts;	N/A
Evaluation of open land proposed within cluster, with respect to size, shape, location, natural resource value, and accessibility by residents of the Town or of the cluster;	N/A