

EXHIBIT A

**RIBA recommendations to the Legislative Task Force on Wetland and OWTS
Buffers and Setbacks
October 31, 2014**

- 1. The buffer width for swamps, ponds, and marshes that are smaller than the size thresholds in the current law should be 25 feet since it was previously zero. Special aquatic sites and vernal pools, which we believe are the same thing, are not excluded from this recommendation but must be further defined/refined.**
- 2. A size threshold for vernal pools should be established. Vernal pools less than the size threshold should not be assigned a buffer.**
- 3. DEM and CRMC should consider the treatment offered by I/A systems in support of a reduction of OWTS setbacks. A key focus should be to reduce instances when variances must be obtained to site an OWTS on an existing lot of record.**
- 4. We believe the current setbacks to be effective with the possible exception of Category 1 Soils; which should add 25' to setback unless an I/A Treatment system is utilized.**
- 5. Consideration should be given to allow a reduction in the buffer width in instances where the updated Stormwater Regulation BMP's have been followed and implemented.**
- 6. DEM and CRMC regulations should include, where possible, suitable mitigation provisions that may be used in certain project proposals that are not able to achieve the dimensional standard contained in the regulations, which, if incorporated into a project design, would allow approval of the project or activity without application under a variance process.**
- 7. While we don't necessarily disagree with the suggested increase in DEM jurisdiction it adds another level of permitting where in many cases, just as present will be considered an insignificant alteration, thereby resulting in additional cost and time delays to the consumer. The reason for the formation of this legislation we believe was to lessen that additional burden.**
- 8. Finally, speaking from a Realtor's viewpoint, an increase in jurisdiction will put numerous existing homes within those limits which must then be disclosed at time of sale, impeding the sale and financing process and again possibly adding unnecessary costs to the consumer.**



December 3, 2014

Kevin Flynn
Associate Director of Planning
R.I. Division of Planning
Once Capitol Hill – 3rd Floor
Providence, RI 02908

Dear Kevin,

First and foremost RIBA would like to thank you for your stewardship of the LTF working group. Your role allowed for many diversified opinions and concerns to be heard in a constructive manner.

We are taking this opportunity to make final comments on the last meeting results of 11.18.14. After reviewing the editing changes made post meeting we do have concerns:

Mainly, as you may recall there was some debate whether we had a full consensus on the issue of 300 foot jurisdiction. There was a vote called for and not all members agreed. Further discussion led by Director Janet Coit was that the 300 foot dimensional jurisdiction was not a foregone conclusion by the group. The Director then led the discussion of eliminating the 300 foot and while many agreed a subsequent vote was not taken. This observation was also ratified by the prior Chief of Water Resources and others. In fact, at a previous meeting Mr. Gary Ezovski stated that if 300 feet is on the table it is "DOA legislatively". As written, to leave the local communities to petition DEM to establish "critical resource areas" and a jurisdictional area of 300' that may need added protection is far beyond their ability and would continue their existing practice of zoning by setback mentality. As presented at the meeting the 300' additional jurisdiction was to be considered by DEM for certain "Critical Resource Areas" i.e.; drinking water reservoirs and not to be petitioned by municipalities.

Under regulatory changes, although there was a brief mention of "taking into account existing land use" we believe that statement does not go far enough to enforce the importance of how much the property owners of existing structures and lots of record would be affected. The DEM staff, itself has acknowledged the amount of permit reviews would skyrocket, not only by the increase in jurisdictional area in general, but by the number of existing uses it would further capture, many of which are now deemed insignificant alterations because of their pre-existence, to zoning, wetlands and OWTS regulations. In fact other states exempt these particular existing uses for just that reason.

There is no recognition of Alternative Technologies. Rhode Island is one of the leaders in the use these environmentally friendly tools, however no credit seems to be considered for its use. We do recognize that this is a framework document but there are valid considerations that should be addressed so that Legislature knows the full scope of their task.

It is for the reasons/concerns above that RIBA cannot support the Conclusions and Recommendations as presented in this document. RIBA stands squarely behind environmental protection, as shown by our willingness to come to consensus with the entire group. But, that has to be tempered with economically sound policy as well.

On behalf of the officers of the Rhode Island Builders Association,

John Marcantonio
Executive Director

450 Veterans Memorial Pkwy. #301
East Providence, RI 02914-5380
401.438.7400
Fax- 401.438.7446
www.ribuilders.org

EXHIBIT B

WETLAND REGULATION REVISIONS AS DRAFTED AS OF June/2016

After attending meetings for several years now, having discussions with the current authors of this proposal, in-house consultations and discussions, review of existing and proposed Regulations and review of the Legislative Task Force Final Report we would like to comment on many of the issues and latest proposals.

When the “*jurisdiction*” for freshwater wetlands permitting was increased by Legislation we were concerned that it would be taken to the extreme but were also under the impression that it was a mechanism to allow better review for environmental reasons and not an excuse to hinder development in the State, particularly rural areas of Western RI.

While jurisdiction increased from existing 0’ and 50’ distances to 100’ and existing 100’ distances to 200’ it should not have meant that existing buffers (presently referred to as perimeter or riverbank wetlands) and setbacks would necessarily increase at lightning speed, doubling or more in many scenarios. In fact during the legislation task force meetings it was stated by the former Chief of Water Resources and further stated in the LTF Final Report recommendations and findings that “2. In general, setbacks for OWTS established in the State OWTS regulations are sufficiently protective of the State’s water resources”.

During the year of those LTF meetings there was never any scientific proof presented that environmental harm has resulted due to the existing regulated setback distances, only that Literature Reviews read and summarized by a selected few:

(Task Force Members:

- James Boyd, Coastal Resources Management Council
- Russell Chateaufneuf, Civil Engineering Representative
- Lorraine Joubert, Environmental Entity – URI NEMO
- Thomas Kutcher, Wetlands Biologist, Save the Bay)

and regulations from other States were the basis for the suggested recommendations.

It was also never understood that certain large lot zoning areas of the State, mainly the western majority, would have much more stringent requirements just because of locale, forest growth, habitat and blue line rivers. The increase in jurisdiction alone adds to the number of additional permitting along with associated costs, delays, unpredictability and land taking.

The complete Western portion of the State is proposed to be much more restricted to future development than other areas that are more developed presently. The problem with this is that portion is the area of the State that remains to be developed due to land availability. Present zoning in those areas, at least in the Northwest towns, presently range from 3 to 5 acres with frontage from 300’ to 450’ which already precludes those areas from overdevelopment. Under buffer zones as proposed, “*Table 2. Special Conditions for Freshwater Wetland Buffer Zones for Public Drinking Water Supply*

Reservoir” proposes special buffer zones for those identified areas and should be the only areas necessary for this added protection in Watersheds listed in Table 3.

To put all of this in further perspective, Region “A”, once again the Western portion of the State, reportedly has 811 miles of rivers. Using that mileage a 200’ buffer and only using a 400’ total width would confiscate 39,321 Acres or 61.44 SQ MILES of land. This same area also contains 52% of the total state area of which roughly 28% is presently conserved, not including buffers or perimeters, the way we read it. Once again, this is the only remaining area for substantial growth. One could make a similar but not as drastic an appraisal of Region “B”.

To list the real concerns as proposed please see below.

- The increase to 200’ buffer on all “blue line” streams in “Zone A” regardless of width or disposition. This is presently addressed in drinking water watersheds and not necessary outside of those areas. Also, if farms can still use the 10’+- river width to define setbacks, why can’t the regulations be consistent with that criteria as farms can be even more detrimental;
- The increase from previously 0’ to 50’ or 100’ on vernal pools, depending on confusing criteria, this could result in confiscation of 38,000 S/F, just under .9 Acres on a 20’ diameter vernal pool, there is no need for a complete circumference around a vernal pool and size should matter. In fact, we could not even get a consensus of vernal pool qualifications or the quantity or presence of them Statewide;
- Distances from ponds should all be 50’ on any that are larger than ¼ Acre for consistency, why do larger ponds need twice the buffer?;
- Highly developed shoreline is not yet defined and there are some not listed that should be, Waterman Lake as one example;
- Buffers to be established by different types of swamp vegetation and size is confusing and vague. They would need to be identified by a Wetland Biologist with State Confirmation and surveyed before accurately defining a property’s potential land use;
- It is hard to define buffers without including setbacks simultaneously. After presentations on the importance of separating buffers and setbacks, it is now assumed all setbacks to be beyond buffers;
- There is no consideration for I/A OWTS’ or for properties addressing present Stormwater Regs, which would both greatly affect the needs;
- In some instances it has been suggested to add 25’ outside of buffers for setback, if it is at the maximum, it is now out of new jurisdictions so buffers should be decreased;
- Municipalities participation and their ability to add buffers impedes the reason for this enacted legislation;
- Notification to municipalities on all permits slows down the so called “Streamlined Permit Process” and only need notification for Formal Permits:

The variables on “Buffer Zones” under “Other Freshwater Wetlands” depending on some of the proposed criteria is confusing and in some cases seasonal.

There is no consideration given for projects, existing or proposed, that have followed the extremely intense Stormwater Regs. nor is any allowance given for type of soils or approved I/A Septic Systems.

As an example of land taking, a fictional but not impractical circumstance was presented for a property with an 8’ wide brook in the back half of the property in Gloucester. At present, 16 Acres with 1400’ and 1.5 Acres upland per Zoning would potentially be subdivided into 4 – 4 Acre buildable lots. The rules as proposed would limit this to 1 buildable lot without any variances while also taking the property owners’ rights away on 13 + acres rather than 6.7 Acres, which should be more than environmentally adequate.

More explanation and *expansion* is needed regarding existing vacant lots of record and already developed properties and their exemptions.

Many of these distances are simply the “more is better” attitude and mentality while in certain situations it is more a case of creating a point of *diminishing return*. Wetlands naturally help in the nitrogen process and groundwater needs to be recharged as so stated upon questions to Chris Mason, an original presenter at the LTF meetings, some of these distances may alter the desired effect.

Obviously we have just touched on some highlights but the rules as proposed present a land taking of property and value and would or should cut property tax values in all those Towns. This also hurts property owners who have kept their large tracts of land vacant for years while paying higher taxes so they could eventually give buildable lots to their family or sell and move out of RI to a more affordable place to retire.

Rhode Island is continually among the top in the worst and at the bottom of the best in many categories of growth and development continually at or near the top in “*Most Regulated States*”. Being the smallest should enable us to be rated towards the tops of these lists instead.

Construction is the backbone of a strong economy and these proposed changes will not only limit new development, it adds to costs incurred, slows down the already extremely excessive permitting process and adds delays which are contrary to the desired and promised “*Permit Streamlining*” and “*Less Government*” agendas.

These regulations as proposed have not met the requirements of economic impact nor are they now “*Clear, Precise and Predictable*” as required by “*Rule of Law*”.



WETLAND REGULATION REVISIONS AS DRAFTED AS OF June/2016

8/1/16

**To: Alicia Good - DEM
From: RI Builders Association
RE: Proposed New Wetland Rules**

Dear Alicia,

On behalf of the Environmental Committee and Officers, we wish to submit to you the following for your consideration:

First, we want to thank you for the openness and opportunity to provide input into the regulatory writing process. The professional manner in which you have handled this difficult undertaking is much appreciated and it is most certainly our goal to continue to work collaboratively in achieving a fair and economically sound environmental policy that allows for growth, land owners rights, and protection for critical resources.

That said, after attending meetings for several years now, having discussions with the current authors of this proposal, in-house consultations and discussions, review of existing and proposed Regulations and review of the Legislative Task Force Final Report we would like to comment on many of the issues in the latest proposal.

When the "jurisdiction" for freshwater wetlands permitting was increased by Legislation, we were concerned that it would be taken to the extreme but were also under the impression that it was a mechanism to allow better review for environmental reasons and not an excuse to hinder development in the State, particularly in suburban and more rural areas of RI where local overregulation of land is already rampant.

While jurisdiction increased from existing 0' and 50' distances to 100', and existing 100' distances to 200', it should not have meant that existing buffers (presently referred to as perimeter or riverbank wetlands) and setbacks would necessarily double in many scenarios. In fact, during the legislation task force meetings, it was stated by the former Chief of Water Resources and further stated in the LTF Final Report recommendations and findings that: "2 In general, setbacks for OWTS established in the State OWTS regulations are sufficiently protective of the State's water resources".

Just for the record, during the year of those LTF meetings, there was never any scientific proof presented that environmental harm has resulted due to the existing regulated buffer & setback distances. The only evidence for increased regulation came from Literary Reviews that were read and summarized by select committee members and from comparative regulations from other States.

It was also never understood why certain large lot, low density zoning areas of the State, mainly the western majority, a.k.a. your region A, would have much more stringent requirements. When and if enacted, this “zone” alone will cause the need for additional permitting, greater associated costs, delays, unpredictability and the potential for land taking lawsuits.

Obviously, the intent of the regulations could be viewed as one that helps restrict future development in the western areas in favor of areas that are presently more developed. The problem with this is, that portion of the State is mostly zoned, at least in the Northwest towns, from 3 to 5 acres with frontage from 300’ to 450’ – this already precludes those areas from over-development. In short, combining aggressive wetland rules with overly large local zoning rules will make development even harder forcing larger house lots to be created and with that, more expensive housing.

To put all of this in further perspective, Region “A”, once again the Western portion of the State, reportedly has 811 miles of rivers. Using that number, a 200’ buffer with a 400’ total width, would confiscate 39,321 Acres or 61.44 SQ MILES of land. This same area also contains 52% of the total state area of which roughly 28% is presently conserved and that doesn't count buffers or perimeters. Once again, this is the only remaining area for substantial growth. One could make a similar but not as drastic an appraisal of Region “B”.

Given the context and frustration we feel from our points noted above, to get more detailed on the proposed rules, here are our specific concerns:

- **The increase to a 200’ buffer on all “blue line” streams in “Zone A” regardless of width or disposition is problematic. This is presently addressed in drinking water watersheds and not necessary outside of those areas. Also, if farms can still use the 10’+- river width to define setbacks, why can’t the regulations for other landowners be consistent with that criteria?**
- **The increase from the previous 0’ buffer on vernal pools to 50’ or 100’, depends on confusing criteria and could easily result in confiscation of 38,000 S/F, just under .9 Acres on a 20’ diameter vernal pool. In our opinion, there is no need for a complete circumference around a vernal pool and size should matter. In fact, we could not even get a consensus of vernal pool qualifications or the quantity or presence of them Statewide; this needs to be rethought.**
- **Distances from ponds should all be 50’ on any that are larger than ¼ Acre for consistency, why do larger ponds need twice the buffer?;**

- **Highly developed shoreline is not yet defined and there are some that are not listed that should be, Waterman Lake as one example;**
- **Buffers to be established by different types of swamp vegetation and size is confusing and vague. They would need to be identified by a Wetland Biologist with State Confirmation and surveyed before accurately defining a property's potential land use - this is an expensive and time consuming burden;**
- **It is hard to define buffers without including setbacks simultaneously. After presentations on the importance of separating buffers and setbacks, it is now assumed all setbacks to be beyond or equal to buffers.**
- **There is no consideration for I/A OWTS' or for properties addressing present Stormwater Regs, which would both greatly affect the needs;**
- **In some instances, it has been suggested to add 25' outside of buffers for setbacks. It is our opinion that any setback added to a buffer that then exceeds the total jurisdictional area is not within DEM's legal authority. Setbacks need to be included within the total jurisdiction and when combined can't surpass the maximum regulatory area.**
- **Municipality's participation and their ability to petition for added buffer distance impedes the reason for this enacted legislation. However, if a town solicits DEM for additional buffers, a specific notice to the affected landowners must be part of the process. If towns are to be notified on permits pulled, the landowners subject to additional state regulation should also be notified directly. We feel so strongly about this notice issue that we plan to submit legislation jointly with landowners every year until such a law is passed. DEM isn't proposing to notify towns about permit applications by putting oddly written print ads in newspapers or buried on websites, so why should the landowner subject to additional DEM rules be treated that way?**
- **Notification to municipalities on all permits slows down the so called "Streamlined Permit Process"- they should only need notification for Formal Permits:**

Additionally

- **The variables on "Buffer Zones" under "Other Freshwater Wetlands", depending on some of the proposed criteria, is confusing and in some cases seasonal.**
- **There is no consideration given for projects, existing or proposed, that have followed the extremely intense Storm-water Regs, nor is any allowance given for type of soils or approved I/A Septic Systems. The lack of taking into account storm-water rules when determining the size of the buffer is unfair as buffers are generally used to deal with storm-water issues. We feel that buffers should get reduced when storm-water regs are followed.**
- **We also have land taking concerns. As an example, a fictional but not impractical circumstance was presented for a property with an 8' wide brook in the back half of the property in Glocester. At present, 16 Acres with 1400' and 1.5 Acres upland per**
- **Zoning would potentially be subdivided into 4 – 4 Acre buildable lots. Hardly an endangerment to the environment. However, the rules as proposed would limit this**

450 Veterans Memorial Pkwy. #301
 East Providence, RI 02914-5380
 401.438.7400
 Fax- 401.438.7446
www.ribuilders.org

to 1 buildable lot without any variances while also taking the property owners' rights away on 13 + acres rather than 6.7 Acres. These are the effects on land use that we feel must be more properly studied.

- More explanation and *expansion* is needed regarding existing vacant lots of record and already developed properties and their exemptions. Concerns about the sale of a home that would now be in a buffer, disclosures, property values, and financing issues are all real.
- We feel many of these distances are simply the “more is better” philosophy. Wetlands naturally help in the nitrogen process and groundwater needs to be recharged as so stated upon questions to Chris Mason, an original presenter at the LTF meetings, some of these distances may alter the desired effect.

In closing, although we strongly disagree on some of the regulations as proposed, and will challenge their implementation, we do again appreciate the ability to provide constructive feedback and will continue to do so in the months ahead. Realize our goal is not to hinder a regulatory solution but instead it's to work toward a reasonable one. For too long, RI has over-regulated its land uses and for too long our residents and land owners have struggled with burdens to home ownership and use of property. Our goal is to find balance between environmental protection and the solutions to our housing & economic growth – we know you share and appreciate these same objectives.

Lastly, we all know that Rhode Island is continually among the top in the worst, and at the bottom of the best, in many economic categories and ratings. We feel it also has much to do with RI being known as one of the most land regulated states – we ask you not to make this worse. It is with that in mind that we share these issues as having a system that is streamlined, one that is also Clear, Predictable and Reliable, and a system that is fair to landowners should be our joint goal.

Thanks again for allowing us the opportunity to point out these important concerns and we hope you take them into account when finalizing the new rules. To continue this discussion and to perhaps understand your perspective a bit better, or even to help clarify issues, we invite you and others from DEM to our September 6th Board meeting where we would ask you to present the current regulatory thoughts and answer some questions.

Most respectfully,

John Marcantonio
Executive Director

CC: Officers of RIBA, ORR

450 Veterans Memorial Pkwy. #301
East Providence, RI 02914-5380
401.438.7400
Fax- 401.438.7446
www.ribuilders.org

450 Veterans Memorial Pkwy. #301
East Providence, RI 02914-5380
401.438.7400
Fax- 401.438.7446
www.ribuilders.org



October 26, 2016

To: Office of Regulatory Reform – Attention Erik Godwin

From: John Marcantonio – Executive Director, RIBA

Topic: New Wetland Regulations

Dear Erik,

Attached is a memo from RIBA's Environmental Committee regarding the wetland regulations that DEM is proposing. I wanted to forward this to you to provide some perspective on what many in the development community, landowners, and potentially homeowners, will find problematic with the proposed regulations. By forwarding you this information, we hope to offer what many here feel would be a more balanced and practical approach to the regulation of wetlands.

Please use the enclosed information as a point of reference, as it is our desire to work with DEM, ORR and all parties to come up with a practical and environmentally solid regulatory structure that protects sensitive areas, provides growth, and maintains property rights.

In the coming weeks, the Board of Directors of the RI Builders Association will meet to discuss this overall issue and, with the appropriate review, develop an official position. Till then, and as part of that process, we welcome your input, and that of DEM, as we strive to find a solution that works for all parties and serves the best interests of the State of Rhode Island.

Most respectfully,

John Marcantonio
Executive Director
RI Builders Association

CC: Janet Coit, Dave Caldwell, Alicia Good, Tom D'Angelo, Tim Stasiunas

450 Veterans Memorial Pkwy. #301
East Providence, RI 02914-5380
401.438.7400
Fax- 401.438.7446
www.ribuilders.org

The Rhode Island Builders Association has been involved in the Wetlands working group process from the beginning. Many differing viewpoints have been put forward in an attempt to bring continuity to the states existing wetland setbacks/buffers and ones that many municipalities have established through planning and zoning ordinances. These requirements that have been put into place by the individual communities were often arbitrary and without solid reasoning other than to limit or stop development. By implementing a statewide standard the idea was to make the regulations clear and predictable for property owners as well as environmental professionals trying to navigate the system of property development and enhancement – the goal was also to provide a more uniform standard to environmental protection.

Regarding the need for this more uniform protection, from our prospective, the initial base line was the existing regulatory structure of setbacks/buffers with some reasonable additional protections offered to mitigate concerns for areas that lacked any substantive environmental protections. Communities that were interested would come forward at the beginning of the process and introduce their concern for additional protection of wetlands. At that point they would substantiate their concern by introduction of data to support the increased distance they were seeking up to the regulated jurisdiction allowed. The idea of the town being notified and having the opportunity to respond to every application makes the goal of clear and predictable unattainable and defies the logic of streamlining the process and therefore negates the need to change the existing regulatory structure at all. We believe the additional burden that would be put on the applicant as well as the Department of Environmental Management staff would be staggering. This would cause severe staffing problems and review issues as the proposed draft regulations are so complex that neither the applicant, environmental professional nor the DEM staff could effectively discern the meaning and intent of the rules as proposed.

Therefore we have developed a matrix that is simplified and follows our current regulatory structure, while adding additional protections and giving credit for property owners who employ enhanced treatment of storm water and of wastewater treatment practices to protect the environment while still maintaining a clear and predictable process in a state that is limited not only by its size but also by substantial open space and protected parcels of land throughout the state. Additionally we believe by virtue of large lot zoning in regions A and B, substantial environmental protections are already built into the system.

We see a substantial divide in the current regulations and the proposed draft regulations and therefore between the regulators and the regulated. It is our goal that by providing a reasonable alternative that we can bridge the divide in the proposal and come into agreement on how to proceed without causing economic hardship for the property owners and economic peril for our state.

All watershed resources 100' jurisdiction

Rivers 200' jurisdiction

Regions "A" & "B"

Recommended buffers;

High Value Watersheds:

Rivers- 200'*- any named river in a PDWSR watershed

Rivers -all other named 150'*

Streams-perennial /intermittent 100'*

Ponds- ≥ 1 ac. 75' *

Ponds- ≤ 1 ac and highway 25

Bogs and marshes 75' *

Swamps /wetlands ≥ 3 ac.

All other freshwater wetlands 25'

Not listed above and highway wetlands**

Vernal pools 25/50 +

+ $\leq \frac{1}{4}$ ac. $\geq \frac{1}{4}$ ac.

Options should be allowed to provide wetland pathways for vernal pools in cases where a full buffer is not practical.

*In the event storm water management practices are employed or the use of enhanced wastewater treatment is employed a reduction of 25 ft. shall be allowed.

**Highway wetlands for repairs and maintenance exempt

Setbacks-15' for construction only, OWTS's should mirror current rules with no setback unless buffer is wooded and requires a 10' strip of trees and brush, then a 10' setback would apply.

All watershed resources 100' jurisdiction

Rivers 200' jurisdiction

Region "C"

Recommended buffers;

High Value Watersheds:

| | |
|--|--------------|
| Rivers- listed | 100'* |
| Streams and rivers | 50' |
| Ponds- large named | 50' |
| All other Ponds- | 25 |
| Bogs and marshes | 75' * |
| Swamps ≥ 5ac. | 50'* |
| Wetlands ≤ 5ac. | 75'* |
| All other wetlands | 25' |
| Not listed above and highway wetlands** | |
| Vernal pools | 25/50 |

≤ ¼ ac. ≥ ¼ ac.

Options should be allowed to provide wetland pathways for vernal pools in cases where a full buffer is not practical.

***In the event storm water management practices are employed or the use of enhanced wastewater treatment is employed a reduction of 25 ft. shall be allowed.**

****Highway wetlands for repairs and maintenance exempt**

Setbacks-15' for construction only, OWTS's should mirror current rules with no setback unless buffer is wooded and requires a 10' strip of trees and brush, then a 10' setback would apply.

Existing uses;

Single family and accessory structures and legal lots of record

Exemptions per rule 6.01 provided that (1) no vegetated wetlands are altered or artificially illuminated; (2) all construction activity is located within existing or approved cleared areas, such as parking, lawns, or cultivated fields and (3) all construction activity is located outside of flood plains and at least 25' from any pond, marsh, swamp or wetland complex and 50 feet from any flowing body of water or bog.

- A. Horizontal addition no larger than 600 sq. ft. (footprint)
- B. Vertical no more than two stories
- C. Attached deck, enclosed porch, exterior ramp or patio no larger than 600 sq. ft. (footprint)
- D. Stand-alone garage, shed or greenhouse no larger than 600 sq. ft. (footprint)
- E. Pervious driveway no more than 600 sq. ft.
- F. Alteration to an OWTS approved by RIDEM
- G. Other accessory structures except as limited in Rule 6.05 (A-F)

Existing uses, structures and lots of record (grandfathered) should be exempt from new updated buffers/setbacks. If the use can maintain increased setbacks it should be recommended.

In no case shall the buffer and/or the setback dimension become further non-conforming.

If the change in buffer/setback would make the property non-conforming the owner shall be allowed to follow the buffer/setback rule from when the property use was established.

Regulatory considerations;

The buffer width for swamps, ponds or marshes that are smaller than the size thresholds in the current law should be 25' since it was previously 0'. Special aquatic sites and vernal pools are not excluded from this recommendation but must be further defined.

A size threshold must be established as recommended in the buffer matrix.

Treatment of storm water and waste water need to be include when considering buffer /setback rules, current buffers for OWTS's are sufficient and additional credit needs to be established when provided enhanced treatment for both storm and waste waters.

Areas where Category 1 soils exist may need additional buffer/ setback unless alternative treatments are employed.

DEM and CRMC regulations should include, where possible, suitable mitigation provisions that may be used in certain project proposals that are not able to achieve the dimensional standard contained in the regulations, which if incorporated into a project design, would allow the approval of the project or activity without application under the variance process.

The 100/200 foot jurisdictions which were established in the legislation were not meant to be exploited by virtue of the regulatory process. It was meant to give DEM flexibility in the event a community had substantive concern for a water body type. It is our contention, which had been stated openly the existing buffers are sufficiently protective for OWTS's so we are unclear how a dwelling may pose more risk than a septic system.

Further we are in disagreement that the municipality be notified each time an application is put forth. The Municipality should come forth upfront and provide their technical data that substantiates their claim to increase buffer/setback up to the maximum of the state's jurisdictional area. To have a continual notification process is contrary to having a clear and predictable application process. In many cases it would be better to leave the regulations as they are.

Increased buffers/setbacks will put numerous properties and homes within these limits which must be disclosed at time of sale, impeding not only the sale but the financing as well, adding additional cost to the consumer.

The scope and breath of the potential property confiscation by regulation is undeniably an economic disaster, causing countless property value losses as well as the inability to the reasonable use of one's property. We believe this will exacerbate the already fragile economic environment in our state and that not enough if any consideration has been studied with respect to the state's economic impact.

Final thought and considerations;

Regions A, B and C, consistency and map borders are indefinable

All areas in all regions that are highly developed should be addressed by exemptions and site based.

Blue Line Rivers of any width should be addressed in Reservoir watersheds only

Buffers should remain relative to the widths of blue line rivers only, same as farmers

All existing setbacks should remain as present adding a 15' construction setback

Add 25' to all swamps less than 3 acres

The identification of other freshwater wetlands is confusing, seasonally and inventorially identified arbitrarily.

Buffers should not increase for ponds and lakes over 5 acres; same 25' should be employed

The identification of vernal pool buffers by vegetation is arbitrary, check forestry setback.

EXHIBIT C



**RI BUILDERS
ASSOCIATION**
BUILDING PROFESSIONALS | SINCE 1945

March 27, 2019

R.I.D.E.M.

Alicia M. Good

Assistant Director

Office of Water Resources

235 Promenade Street

Providence, RI. 02908

Re: Proposed Statewide Freshwater Wetland Regulation Revisions

Ms. Good,

Thank you for the opportunity to represent the building industry in general and the Rhode Island Builders Association in particular, at the presentation of the Proposed Statewide Freshwater Wetland Regulation Revisions held on March 6, 2019.

While we recognize that the department has made some changes from the original draft proposed regulations, such as specifically naming rivers and streams and some minor setback revisions, we still feel that they still go beyond the original intent of making the process streamlined, clear and predictable. Keeping in mind the initial base line was the existing regulatory structure of setbacks/buffers with some reasonable additional protections offered to mitigate concerns for areas that lacked any substantive environmental protections. As stated before we believe by virtue of large lot zoning in regions A and B, substantial environmental protections are already built into the system.

Also, the idea of the town being notified and having the opportunity to respond to every application makes the goal of clear and predictable unattainable and defies the logic of streamlining the process and therefore negates the need to change the existing regulatory structure at all. Our position has always been communities that were interested would come forward at the beginning of the process and introduce their concern for additional protection of wetlands. At that point they would substantiate their concern by introduction of data to support the increased distance they were seeking up to the regulated jurisdiction allowed.

Further, no acknowledgement has been given to additional protections employed by property owners that enhance treatment of storm water and of wastewater treatment practices to protect the environment while still maintaining a clear and predictable process in a state that is limited not only by its size but also by substantial open space and protected parcels of land throughout the state. We also understand that the department is trying to implement a general permit system to move the permitting process along but there still remains existing uses that are subject to regulatory burdens that undermine the "grandfathering" status of parcels that were developed prior to wetlands regulations or that will put existing uses at risk of diminishing property rights and making them non-conforming.

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East Providence, RI 02914-5380
401.438.7400
Fax- 401.438.7446
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In Summary, we feel the implementation of regulations as presented would be a significant negative impact on the state's economy. Although there has been improvement in the economy it remains fragile given the many outside influences bearing down on it through regulatory, affordability and others such burdens. Given the substantial proposed change to the regulations, we still believe the additional burden that would be put on the applicant as well as the Department of Environmental Management staff would be staggering. This would cause severe staffing problems and review issues as the proposed draft regulations are at a complexity that neither the applicant, environmental professional nor the DEM staff could effectively discern the meaning and intent of the rules as proposed.

Respectfully,


Timothy A. Stasiunas, President
Rhode Island Builders Association

Respectfully,


Thomas D. Angelo
Rhode Island Builders Association
Environmental Committee, Chair

EXHIBIT D

December 14, 2020

To: Rhode Island Department of Environmental Management
Attn: Janet Coit, Director
Referent: Considerations of the report titled *Cost-Benefit Analysis of Proposed Changes to the Freshwater Wetlands Regulations*

Director Coit,

As per the request of the Rhode Island Builders Association, we are writing to provide a technical assessment regarding the robustness of the findings presented in *Cost-Benefit Analysis of the Proposed Changes to the Freshwater Wetlands Regulations* (hereafter referred to as the *CB Report*), which was submitted to your office and dated *October 2020*. We provide below our credentials, our detailed assessment of the *CB Report*, recommendations and opinion summary.

About the Authors

Dr. Edinaldo Tebaldi is a Professor of Economics at Bryant University. He holds a Ph.D. in Economic Growth and Development and International Economics from the University of New Hampshire. He has extensive experience in economic modeling and applied economic research. His publication records include articles in refereed journals, many economic impact assessment reports, and a number of studies and reports analyzing economic conditions across New England states. He has served as an expert witness and provided testimony in cases considering the economic impact of development projects, including several projects in Rhode Island. His work has allowed him to provide briefings about economic conditions to the Rhode Island House of Representatives, Rhode Island Senate, and to Governors Lincoln Chafee and Gina Raimondo. He has conducted several economic impact assessments including studies for the Quonset Development Corporation (2019, 2016, 2012), Rhode Island National Guard (2016), Rhode Island Builders Association (2014, 2012), Rhode Island Defense Economy Planning Commission (2013), and the Newport County Chamber of Commerce (2014/2013).

Dr. Laura Beaudin is an Associate Professor of Economics at Bryant University. She holds a Ph.D. in Environmental and International Economics from the University of New Hampshire. She is an applied microeconomist with expertise in environmental issues. She has published a number of papers on this subject in refereed journals and has presented her findings at national and international conferences. She has served as a consultant and conducted impact analysis for wind farm projects.

Method

We reviewed the findings of the *CB Report* and examined the literature related to environmental cost-benefit analysis and wetlands protection to supplement our recommendations. We assume that the estimates of the affected area under different scenarios [*Table 3-4. Wetland Acreage in RI (excludes lakes and rivers)* and *Table 5-11 New Buffer Acreage for All Resource Types by Region (acres)*] is the best possible characterization of the extent of wetland resources as well as the impact of the proposed changes to wetland regulations in the state. We focus our analysis and

considerations on the methods and assumptions used to determine the benefits and costs to society discussed in sections 4 and 5 of the *CB Report*.

Findings

Our overall assessment is that the cost-benefits analysis presented in the *CB Report* is fundamentally deficient and not sufficient to guide policy and decision-making. More specifically, we believe that the poor use of the transfer-benefit methodology to calculate the benefits to society, the extremely narrow approach used to determine economic costs, and missing analysis of important economic concepts in economic impact assessment produced biased and unreliable cost-benefit estimates of the proposed changes to the freshwater wetlands regulations in Rhode Island. The analysis requires a more detailed and robust cost-benefit analysis to guide and support policy changes to the freshwater wetlands regulations in Rhode Island. The following section provides an overview of our analysis and suggestions for improving the cost-benefit impact assessment.

1. Transfer Benefits

There is a large literature on the validity of transfer benefits in cost benefit analysis. Several studies highlight the importance of similarities among the primary analysis site and the comparative site in terms of population demographics, resource availability and management, market attributes, and site characteristics and features (Loomis and Rosenberger, 2006; Johnston, 2007; Rosenberger and Phipps, 2007; Columbo and Hanley, 2008; Kaul et al. 2013; Carolus et al. 2018). However, the best methods for which benefits can be transferred from one site to the next including statistical modeling techniques and transfer benefit functions remain highly contested (Loomis, 1992; Schmidt et al. 2016; Newbold et al., 2018). You will find references to the articles cited above in Annex A.

CB Report Limitation

The benefits in the *CB Report* are estimated using the transfer value method. The *CB-Report* use estimates from three previous studies in Massachusetts, Delaware, and New Jersey (see Table 5-1 Ecosystem Values of Freshwater Wetlands). Benefits included in these studies are related to ecosystem services such as “climate regulation, freshwater regulation and supply, waste assimilation, nutrient regulation, habitat refugium, soil retention and formation, disturbance prevention (flood prevention), pollination and recreation and aesthetics.” (*CB Report*, page 24). The *CB-Report* takes the average value of these estimated ecosystem benefits and applies them to the potential protected areas in Rhode Island.

It is unclear why these three studies were used to conduct the transfer value analysis. There is minimal explanation of the methods used in these three studies. There is no attempt to make connections between the attributes of Rhode Island and the other three studies. Finally, to transfer the values, the *CB-Report* simply multiplies the average benefits from the three previous studies to the total land which could be protected under this new policy in Rhode Island.

Recommendation

Should the *CB Report* continue to rely on the transfer value method for benefit calculations in future versions of the analysis, we suggest that it adds a discussion of the validity of this method along with the validity of the comparison studies. At the beginning of the benefits section, the *CB Report* indicates that there is a large literature supporting the transfer value method, however, this literature is never discussed in the document. Our experience and the literature suggest that it is imperative that the comparison groups *have similar attributes*. A revised version of the *CB Report* (or new analysis) is required to address the issues and clearly support that the values from others referenced studies would apply to Rhode Island given the characteristics of the proposed protected area.

2. Analysis of Costs

A vast literature identifies the different forms of economic costs associated with land preservation including, but not limited to, loss of property value that is associated with housing availability and affordability (Quigley and Raphael, 2005), loss of commercial real estate and commerce (Fuller, 2016), loss of population (Quigley, 1998; Rodriguez-Pose and Berlepsch, 2018), loss of jobs and income (Bartik, 2011; Greenhalgh et al., 2017), and loss of tax revenue (Goulder, Parry, and Burtraw, 1997, EPA 2020).

Housing affordability and availability is of particular concern in Rhode Island. The state has experienced both housing shortages and a lack of affordable housing. Construction of new homes has also been at historically low levels since the 2008-09 Great Recession. Data from multiple sources including from the U.S. Census and the Rhode Island Association of Realtors indicate that housing supply will be insufficient to meet the demand for new homes across the state. Additional restrictions on land development without further considerations on housing density will only exacerbate the housing crisis in Rhode Island.

CB Report Limitation

The costs in this analysis are assumed to be only the loss of property value (Tables 5-12 to 5-16). Thus, the *CB report* ignores the impact of the changes to the freshwater wetland regulations on population, jobs, income, as well as on tax revenues to cities and to the state of Rhode Island. The *CB Report* also fails to discuss how the proposed changes to wetland regulations might affect housing supply and its potential spillover effects throughout the economy. There is also no discussion of alternative mechanisms and regulations that might alleviate the eventual negative impacts on housing supply, including changes to housing development density in Rhode Island. These relevant omissions produce cost estimates that are significantly lower than the true economic cost to the Rhode Island economy.

Recommendation

The cost analysis in the *CB Report* is limited in scope and underestimates the true economic cost of the proposed regulation. Additional costs should be considered when restricting development, even if that restriction only comes in the form of increased permit requirements. As noted in the report, the permit requirements may deter some development due to restrictive costs. Therefore, impact on housing supply, job creation, tax revenues, and population should all be included to determine the costs of the proposed changes to the freshwater wetland regulations in Rhode Island.

3. Important Economic Concepts not considered in the *CB Report*

- *Dynamic changes and the multiplier effect.*

Whenever new resources are injected into (or removed from) the economy through spending, investment, or policy changes, the final impact in the economy will be larger than the static initial change due to dynamic adjustments and interindustry linkages. For example, when development occurs, jobs and income are created which in turn attracts new people and businesses to the region, which in turn generates more spending and income to the local economy. These are usually referred to as indirect and induced effects that are triggered via a *multiplier effect* in the economy.

CB Report Limitation

The cost analysis in the *CB Report* fails to consider interindustry linkages and multiplier effects. Hence, it underestimates the economic costs due to constrained land development in the state.

Recommendation

The report must consider the interindustry linkages and multiplier effects on the economy due to constrained land development that will result from the proposed changes to the freshwater wetland regulations in Rhode Island.

- *Time horizon*

Time horizons are vital components of cost-benefit analyses. Determining the correct time horizon for an analysis is often difficult. When the time horizon is incorrectly specified – it is either assumed to be too long or too short -- the calculated costs and benefits may be incorrect.

CB Report Limitation

The *CB Report* uses a time horizon of twenty years. However, there is no rationale or explanation of why twenty years is used in the analysis.

Recommendations:

The *CB Report* must clearly explain the rationale for the 20-year time horizon and provide robustness checks with alternative horizon estimates.

- *Discount rates*
The discount rate is also a challenging component in cost-benefit analysis. It is difficult to know exactly how individuals value costs and benefits over time. Once again, the analysis can vary greatly with small changes to the discount rate.

CB Report Limitation

The *CB Report* uses a 3 percent discount rate for the benefits to place more weight on current values and a 7 percent discount rate for the costs to reflect the return to investment. However, there is minimal discussion as to why these values were chosen.


Recommendations:


The *CB Report* must provide a clear discussion and justification of the chosen discount rates. It could also use other discount rates as robustness checks to show how the estimates differ under alternative assumptions.

Conclusion

It is our opinion that the economic analysis presented in the *CB Report (Benefit Analysis of the Proposed Changes to the Freshwater Wetlands Regulations)* is fundamentally flawed and should not be used to guide policy and decision-making. The poor use of the transfer-benefit methodology makes us believe that the estimates of benefits to society are likely incorrect, even though we cannot determine if the *CB Report* under or overestimates the true benefits to society. In addition, the extremely narrow approach used to determine economic costs together with poor robustness checks caused us to conclude that the *CB Report* significantly *underestimates* the true cost of the proposed changes to the freshwater wetland regulations to the Rhode Island economy. It is also our opinion that the current version of the *CB Report* should be disregarded and that the Rhode Island Department of Environmental Regulation should request a more detailed and robust cost-benefit analysis to guide and support the changes to the freshwater wetlands regulations in Rhode Island.

Respectfully,


Edinaldo Tebaldi, Ph.D.
Professor of Economics
Bryant University
etebaldi@bryant.edu


Laura Beaudin, Ph.D.
Associate Professor of Economics
Bryant University
lbeaudin@bryant.edu

Annex A – References

- Bartik, T. J. (2012). Including jobs in benefit-cost analysis. *Annual Review of Resources Economics*, 4(1), 55-73.
- Carolus, J. F., Hanley, N., Olsen, S. B., & Pedersen, S. M. (2018). A bottom-up approach to environmental cost-benefit analysis. *Ecological Economics*, 152, 282-295.
- Colombo, S., & Hanley, N. (2008). How can we reduce the errors from benefits transfer? An investigation using the choice experiment method. *Land Economics*, 84(1), 128-147.
- EPA (Environmental Protection Agency) (2020). Environmental Economics: Economic Incentives. Available at <https://www.epa.gov/environmental-economics/economic-incentives>
- Goulder, L. H., Parry, I. W., & Burtraw, D. (1997). Revenue-raising vs. other approaches to environmental protection: the critical significance of pre-existing tax distortions, *RAND Journal of Economics*, 28(4), 708-731.
- Greenhalgh, S., Samarasinghe, O., Curran-Cournane, F., Wright, W., & Brown, P. (2017). Using ecosystem services to underpin cost-benefit analysis: Is it a way to protect finite soil resources?. *Ecosystem services*, 27, 1-14.
- Johnston, R. J. (2007). Choice experiments, site similarity and benefits transfer. *Environmental and Resource Economics*, 38(3), 331-351.
- Kaul, S., Boyle, K. J., Kuminoff, N. V., Parmeter, C. F., & Pope, J. C. (2013). What can we learn from benefit transfer errors? Evidence from 20 years of research on convergent validity. *Journal of Environmental Economics and Management*, 66(1), 90-104.
- Loomis, J. B. (1992). The evolution of a more rigorous approach to benefit transfer: benefit function transfer. *Water Resources Research*, 28(3), 701-705.
- Loomis, J. B., & Rosenberger, R. S. (2006). Reducing barriers in future benefit transfers: Needed improvements in primary study design and reporting. *Ecological Economics*, 60(2), 343-350.
- Newbold, S., Simpson, R. D., Massey, D. M., Heberling, M. T., Wheeler, W., Corona, J., & Hewitt, J. (2018). Benefit transfer challenges: perspectives from US practitioners. *Environmental and Resource Economics*, 69(3), 467-481.
- Quigley, J. M. (1998). Urban diversity and economic growth. *Journal of economic perspectives*, 12(2), 127-138.
- Quigley, J. M., & Raphael, S. (2005). Regulation and the high cost of housing in California. *American Economic Review*, 95(2), 323-328.
- Rodríguez-Pose, A., & von Berlepsch, V. (2019). Does population diversity matter for economic development in the very long term? Historic migration, diversity and county wealth in the US. *European Journal of Population*, 35(5), 873-911.
- Rosenberger, R., & Phipps, T. (2007). Correspondence and convergence in benefit transfer accuracy: meta-analytic review of the literature. In *Environmental value transfer: Issues and methods* (pp. 23-43). Springer, Dordrecht.
- Schmidt, S., Manceur, A. M., & Seppelt, R. (2016). Uncertainty of monetary valued ecosystem services-value transfer functions for global mapping. *PloS one*, 11(3), e0148524.

Review of: Cost – Benefit of Proposed Changes to the Freshwater Wetlands Regulations 10/20
By Elliot Eisenberg, Ph.D.
12/16/20

After carefully reviewing Cost – Benefit Analysis of Proposed Changes to the Freshwater Wetlands Regulations dated 10/2020, (hereafter the Report), it becomes clear that this document is not just an economic analysis, but in large measure a political document. As such, the cost-benefit analysis performed while possibly reasonably accurately estimating the benefits of the proposed regulations, most definitely and dramatically underestimates the costs of the proposed regulations. As such, the results shown in the Report not only significantly overestimate the net benefits of the proposed regulations, but it is certain that the net benefits of the proposed regulations are substantially smaller than the Report suggests, and these results should not be the basis on which these proposed changes become regulations.

The rest of this paper is organized as follows. The next section discusses the shortcomings in the benefits portion of the Report, the section that follows discusses weaknesses in cost side of the report and the concluding section offers a brief conclusion and recommendations.

BENEFITS

The Report utilizes an approach defined as ecosystem service science (ESS) to evaluate the benefits of the proposed new regulatory environment. While fancy sounding, the approach is little more than simply adding up the benefits of the relevant ecosystem to, in this case, the State of Rhode Island and its inhabitants. Additionally, the report readily acknowledges that ESS has large gaps in its understanding of the financial value of certain aspects wetlands and buffers.

Moreover, the report (on page 7) is quick to acknowledge that there were limited resources available to conduct this analysis. Rather than increasing the budget for the study and rather than widening the literature review beyond an unnecessarily small number of papers to better familiarize themselves with this area of research, the authors simply wave away these significant shortcomings by providing ranges of estimated benefits rather than point estimates. This is nonsense. Any good analysis of a complex problem should provide a range of estimated outcomes, as even under ideal conditions, numerous questions and uncertainty are likely. However, with such glaring weaknesses offering a range of estimates in no way improves the quality of the conclusions.

Later (on page 10), the authors applaud themselves for having the foresight to reduce buffer sizes in Urban Regions to better address Rhode Island's affordable housing problem. This is because The Report suggests that the solution to the affordability crisis is a vast increase in multifamily units, even though in 2018 of the 1,294 housing units built in the State, just 199 were in structures of five units or more. Here again, the authors just wave away the affordability problem by paying lip service to the problem and offering a valid but utterly unrealistic solution.

At a philosophical level suggesting that an increase in multifamily structures is the solution to the current housing affordability crisis is rich. The main culprit is restrictive land use policy. To now restrict it further and justify it by suggesting that the solution is more multifamily when precious little is being produced, stretches credulity.

Regarding the eventual solution recommended in the Report, namely Option 3: Limited Additional Protection, the Report soft-pedals it as the third of four options. They could have just as easily provided three options but by creating four, it appears to the casual reader that the proposal is less invasive and intrusive than it is.

Another failing of the Report is that because there exist no studies that estimated the benefits of wetlands and buffers in Rhode Island, the Report elected to use results from reports done in other states including (Page 23) Massachusetts, Delaware and New Jersey. This approach is titled the Value Transfer Method but is literally nothing more than directly using the results obtained from other studies in other states, and directly applying them in this situation. This approach is troubling. While there are inevitably similarities across states, this approach introduces yet another layer of error into the analysis and results.

Lastly, the range of societal benefits obtained by implementing Option 3, is between \$817,250,000 and \$1,589,682,400. This range is troublingly large. If so-called experts have this much difficulty pinning down the benefits of a program, it should give policy makers and regulators pause for thought.

Lastly, it is important to note that I am not an environmental engineer and am thus not qualified to render a meaningful opinion on the net benefit results obtained in this Report. That said, and in a preview of coming attractions, if the net benefits are as biased upwards as the net costs are biased downwards, the results obtained should be regarded as nothing more than quick-and-dirty initial effort.

COSTS

This section begins by saying several things that while possibly true, are at best highly misleading. For example, on (page 36) the Report states, "In current practice it is very infrequent for the agencies to deny a permit for construction on any property that has adequate buildable area." While undoubtedly true, the entire thrust of this new policy is to reduce such area! A few sentences later the Report states, "However, any impacts are likely to partially or wholly mitigated by the application of conservation development principles which allow for the same or higher density level..." With enough time and money many obstacles can be overcome, however, money is not endless and higher costs necessarily mean less construction activity.

This same section of the Report (page 36) concludes with "The results indicated most projects would have been able to be permitted with minimal or no site plan changes." While I am not a developer or builder, this remark seems stunning. The quantity of construction will necessarily be reduced, and the type of residential building is likely to be meaningfully altered. To suggest otherwise is disingenuous. Moreover, if households prefer single-family units but must make do with multifamily units, benefits are reduced. And, nowhere in the Report is this issue even given lip service.

Worse, earlier, the Report (page 20) states that "...the benefits of enhanced buffer protection primarily accrue to the public, rather than the individual property owner..." However, in the next sentence the Report reads "In contrast, the costs resulting from enhanced buffer protection are assumed to be primarily associated with affected property owners..." While the first quote is accurate, the second is not! The costs, in reduced construction activity, impact the entire state. To be precise, there will be few construction jobs, fewer permanent jobs that result from providing goods and services to the new

households, and with reduced levels of construction, reduced affordability and housing affordability is already a serious problem. Ignoring all these impacts is a big oversight.

The other problem Rhode Island faces is stagnant population growth. The population of Rhode Island peaked in 2004 at 1.074 million persons. Today the population is 1.059 million. Over that same period, the population of the US rose by 12%. Had Rhode Island grown by 12%, its population would now be 1.2 million, or 128,000 more.

A profound shortcoming of the report is the assumption (found at the bottom of page 36) that costs borne by landowners due to these new land use regulations are linear. This is probably not the case. If a parcel of land is slightly affected, the ultimate impact might be manageable and thus relatively small. But, if enough of a small parcel becomes impacted, it is entirely possible that the economic value of the parcel becomes worthless or suffers a substantial decline on value. Thus, the assumption of linearity might reasonably apply under certain situations, but a multiplicative or exponential cost function might be more appropriate as a higher percentage of the parcel becomes unusable.

Along with the assumption of all costs being borne by the private sector the other gigantic error in the report is the discount rates used. In the benefits section, the discount rate used for present valuation purposes is 3%. This is a reasonable assumption. And the Report defends the rate chosen on the bottom of page 35 stating "...calculated using a 3% social discount rate that places more weight on future benefits and is appropriate to the analysis." However, late on page 43 when determining the present value of costs, a discount rate of 7% is used! The justification found on page 43 is "the 7% rate equates to a return of investment which is appropriate to apply in this situation; e.g. property values that area (sic) affected by the (sic) market conditions." While there might be some justification for using a higher discount rate for purely private activities, with 10-year treasuries at less than 1%, a discount rate of 7% is criminal. Moreover, as mentioned above, the costs are also borne by the public. As such I see no justification for using a different, and much higher rate, to present value the 20-year stream of costs.

Something else important to point out, this Report focuses on construction activity in Rhode Island during the years 2016, 2017, and 2018. While those years are recent, construction activity in those years was less than half its historical norm. As such, these years are not a fair representation of reality.

Before concluding this section, it is important to point out that when talking about the potential loss of lots resulting from the recommendations in the Report on page 41 it is written "the 10% represents the highest reduction in lots (in parcels greater than 10 acres) that the DEM identified in its review of the subdivisions relative to the agency option." If only half of all new homes built in Rhode Island are on large parcels, that means a permanent one-time loss of 120 houses. Over a 20-year time horizon the net loss to the State from that lack of construction and ongoing impact easily approaches \$200 million, a huge sum when the net benefits according to the authors of the Report may be as small as \$545 million (page 54).

CONCLUSION

Cost-benefit analysis is difficult, and no analysis outside the classroom is comprehensive or without error. In addition, shortcuts and simplifying assumptions are almost always implemented to make the analysis tractable and faster. So long as each assumption is made without any bias, it is reasonably likely that the errors introduced by each assumption cancel each other out with the result being hopefully an

unbiased report. Regrettably, that is not the case here. In the cost analysis, where my expertise resides, each assumption made in the Report, is systematically designed to reduce costs and thus make the net benefits bigger than deserve to be. If a similarly biased approach has been undertaken on the benefits side, and it would not surprise me if that is the case, then the results obtained are little more than a feeble and biased first effort from which little can be definitively deduced.

About Dr. Elliot Eisenberg, Ph.D.

Elliot Eisenberg, Ph.D. is an internationally acclaimed economist and public speaker specializing in making economics fun, relevant and educational. Dr. Eisenberg earned a B.A. in economics with first class honors from McGill University in Montreal, as well as a Master and Ph.D. in public administration from Syracuse University. Eisenberg is the Chief Economist for GraphsandLaughs, LLC, a Miami-based economic consultancy that serves a variety of clients across the United States. He writes a syndicated column and authors a daily 70-word commentary on the economy that is available at www.econ70.com.

Dr. Eisenberg has spoken hundreds of business groups and associations, serving as keynote speaker on topics including economic forecasts, economic impact of industries such as homebuilding, consequences of government regulation, and other current economic issues. Dr. Eisenberg has been invited to testify before lawmakers and is often asked to comment on proposed legislation. His research and opinions have been featured in Bloomberg Businessweek, Bureau of National Affairs, Forbes, Fortune, and many other publications. He is a regularly featured guest on talk, and public radio.

Dr. Eisenberg was formerly a Senior Economist with the National Association of Home Builders in Washington, D.C. He is the creator of the multifamily stock index (the first nationally recognized index to track the total return of public firms principally involved in the ownership and management of apartments), the author of more than 100 articles, serves on the Expert Advisory Board of Mortgage Market Guide and is a regular consultant to several large real estate professional associations, financial institutions and investment advisory groups.



RI BUILDERS
ASSOCIATION
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January 7, 2021

To: Erik Godwin – Director, Office of Regulatory Reform

CC: Speaker Shekarchi, President Ruggerio, Gov. Gina Raimondo, Lt Gov Mckee, Janet Coit – DEM

From: John Marcantonio – Executive Officer RI Builders Association

Topic: Cost/Benefit Analysis – New Wetland Regulations

Dear Eric,

I am writing to you regarding the newly proposed Wetland Regulations and the required Cost/Benefit analysis that is part of that disclosure and process. As you know, the reg reform law requires this internal / public review and it was created so that a full understanding of the costs and benefits could be weighed before any significant negative effects were realized to either small businesses or to the greater RI economy.

Hence, this document is a critical part of the integrity and promulgation of new regulations and the information within it should be trusted and based on reliable assumptions that are capable of scrutiny and stakeholder due diligence.

That said, to confirm the findings of this report, RIBA hired three independent economists to conduct a professional review and what was revealed was alarming enough that we felt obligated to bring it to your attention and the attention of other policy makers. Attached are the letters from Dr. Edi Tebaldi, Dr. Laura Beaudin, & Dr. Elliot Eisenberg – their resumes speak for themselves.

In short, based on this information, we feel confident in stating that the current cost/benefit analysis is fatally flawed and cannot be used to guide the proposed rules. Any document that mistakenly overestimates benefits and severely underestimates costs, and that uses unreliable assumptions to draw inaccurate conclusions cannot, and should not, be allowed as part of the process. With that, we are requesting that the Office of Regulatory Reform conduct a proper and accurate cost/benefit analysis, remove the current analysis from consideration, and stop the regulatory approval process from moving forward until this issue is rectified and the true “costs” from these proposed regs are known.

At this point, from our perspective, it is no longer a discussion about the specific regs and their buffers, it's about the fundamental purpose of the law and the integrity of the rule making process that needs to be upheld. Additionally, to be of assistance, I believe Dr. Tebaldi is available to discuss his findings with any interested party. I look forward to your guidance on this issue.

Most Sincerely

John Marcantonio
Executive Officer
RI Builders Association

450 Veterans Memorial Pkwy. #301
East Providence, RI 02914-5380
401.438.7400
Fax: 401.438.7446
www.ribuilders.org

EXHIBIT E



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15 Research Drive
Amherst, Massachusetts 01002
Tel 413.258.0202 Fax 413.258.1092

2/36

January 22, 2021

Mr. John Marcantonio
Rhode Island Builders Association
450 Veterans Memorial Parkway #301
East Providence, RI 02914
Via email: jmarcantonio@ribuilders.org

Re: Review Comments on Rhode Island DRAFT wetland regulations
Title 250 Chapter 150 (Water Resources); subchapter 16 (wetlands)
SWCA file: 64628

Dear John:

SWCA Environmental Consultants (SWCA) is pleased to provide the Rhode Island Builders Association with comments and recommendations for the Rhode Island draft wetland regulations dated November 23, 2020. For this review, I have evaluated the proposed language and criteria in the draft regulations and have evaluated these as a professional wetland scientist with more than 35 years of experience working in New England. I hope that my comments are constructive to your group and to the DEM. Overall, I believe that these regulations are not ready for implementation. There are too many instances of insufficient regulatory detail which I believe will create conflicts and confusion for environmental professionals, the public, and regulators. I have provided wetland regulatory comparisons with the other New England States, and context for buffer zone and other protective measures. I am attaching a copy of my resume.

I am available to discuss these findings in additional detail with you, or with DEM. I may be reached at 413-531-7156 or mmarcus@swca.com.

Sincerely,
SWCA Environmental Consultants

A handwritten signature in black ink, appearing to be "Mickey Marcus", written over a horizontal line.

Mickey Marcus
Professional Wetland Scientist #1635

Cc: M. Marcus Resume

INTRODUCTION

SWCA Environmental Consultants (SWCA) is providing comments on the DEM draft wetland regulations for the purpose of improving the regulatory clarity for environmental professionals, Applicants, the public, and minimizing future appeals. As a professional wetland scientist, and former Board Member of the Massachusetts Association of Conservation Commissions, I have previously served on committees with the Massachusetts Department of Environmental Protection for the review and adoption of revised wetland regulations, new riverfront regulations, wildlife habitat regulations, and other related environmental regulatory modifications for the Commonwealth of Massachusetts. I have been a practicing wetland scientist for the past 35 years, including project work in Rhode Island, and I understand the significance of clear and concise environmental regulations to ensure compliance, and fair review of proposed project work in and adjacent to Freshwater Wetlands. I believe that without revisions in several sections of the draft wetland regulations, we can expect many appeals and Administrative Adjudication of future permits. I have included comments for several the sections of the draft regulations, and at the end of this letter I have summarized the wetland regulations for the other New England states.

There are several factors I believe need regulatory reconsideration including jurisdictional buffer setbacks and the lack of clear metrics.

Jurisdictional Buffers: The land adjacent to freshwater wetlands is non-wetland but this land is being regulated as if it is a jurisdiction wetland. DEM estimates that the draft regulations will result in approximately 23,900 additional acres of jurisdiction. Comparing approved projects with the new regulations, many currently approved projects would not be able to be constructed. These are projects in non-wetland (buffers zones) showing that these regulations are more of a land-use planning regulation than a wetland protection regulation. As shown in Figure 1, all the New England state wetland regulations regulate lands adjacent to wetlands, but in a state such as Massachusetts, which had one of the first wetland protection regulations in the country, these buffers are not treated as "jurisdictional wetlands". Instead, these buffers zones are "regulated" areas to ensure that any new work proposed within the buffer is sufficiently regulated so that there is no alteration to the wetlands. This protection is usually in the form of stormwater management and sediment and erosion controls. The Draft RI wetland regulations proposes buffers of variable widths based on lot size, size of the wetlands, the type of wetland, adjacent development, farming, and other factors which are not based on scientific data. I believe these variable regulatory setbacks will lead to difficulties for Applicants, and in ensuring compliance. Many municipalities, particularly in Connecticut and Massachusetts have clear metrics for work in the buffer to freshwater wetlands. For instance, no work within 25 feet of wetlands, or no new buildings within 50 feet of wetlands. There are also clear Variance provisions if the setbacks cannot be met, with requirements for restoration or enhancement to the buffer or wetlands. These regulations and buffer setback distances vary considerably, but the point is that there are clear known metrics that Applicants may plan with, and wetland regulators may review from. My recommendation to the DEM is to adopt state-wide buffer limits for all wetlands.

Buffer Zone. The new terminology of land contiguous to a freshwater wetland fails to provide clear definitions and places a burden on homeowners, and property owners who own structures or property adjacent to freshwater wetlands. The regulations need better clarity, defined setbacks, and clear and predictable numerical values so that applicants may design project work with an understanding of what work may be permitted. The current buffer zone is in effect a land use regulatory tool which will result in reduced upland areas for public or private use and which will vary depending on the existing land use and adjacent property development, all of which will change over time.

The rules for river buffers do not define important characteristics such as "high value" habitat, water quality and other functions. As written, there is an increased buffer, but no defining way to quantify the value of the buffer.

Buffer. An undeveloped buffer to freshwater wetlands is desirable, but DEM should provide a clear numerical value to the buffer, and provide appropriate exemptions (e.g., stormwater management facilities, wetland mitigation), and a clear variance when work in the buffer must take place.

Exempt Activities. The regulations (section 2.6) should be revisited to expand and/or clarify the exempt activities. Water dependent uses (e.g., bridges, ports), recreational facilities (e.g. boardwalks, hiking and bike trails); airport expansion, highways expansion; stormwater and water quality structures, wetland restoration/mitigation, forestry, or public projects are likely to require exemption from sections of the Regulations.

Metrics. The draft wetland regulations avoids describing what is a significant wetland impact, which leaves designers and Applicants subject to the discretion of the individual DEM project reviewer. As written, it is not possible for a project engineer or Applicant to design a project ensuring approval, except that they need to avoid or minimize direct wetland impacts. As a comparison, Massachusetts wetland permitting has set a standard of up to 5,000 square feet of freshwater wetland alteration, if there is at least a 1:1 mitigation. Projects which alter more than the thresholds require additional permitting review (e.g., highways, ports, airports, or large private projects). Since the current Massachusetts standards were adopted in 1983, project designers have worked to ensure that any proposed work in freshwater wetlands or waterways are less than the stated thresholds. The terms used throughout the regulations of random, unnecessary, or undesirable wetland alteration is problematic as it is not based on clear metrics. My recommendation to DEM is to develop and adopt state-wide numerical wetland impact thresholds so that there is better clarity of what may be permitted.

Vernal Pool Setbacks. The buffer zone to vernal pools has been increased to 100 feet depending on the percent of undeveloped land within 100 feet of the pool, which may, and likely will change over time. Since vernal pools are often within freshwater waters, for many pools there is already a proposed buffer, and these distances are not clearly articulated in the regulations. Also not discussed is the Vernal Pool Habitat within the proposed 100 foot setback. In many cases there is unsuitable habitat (lawn, pavement, maintained Right-of Ways). The definition of the vernal pool should be better defined to document the method to identify the boundary of the pool or depression (e.g., breeding area), vernal pool habitat, and to also define the number of egg masses or species presence to confirm a pool, and how the undeveloped vegetated land will be calculated. Distinctions may need to be made for areas which contain egg masses, but which are not suitable vernal pools. For instance, *Ambystoma* salamanders and Wood Frogs may in some years lay their eggs in tire ruts, a depression in power line access roads, or other unsuitable breeding locations. The lack of fish is one of the primary identifiers of a functioning vernal pools, which the draft wetland regulations does not address. Most vernal pools do not have an inlet and outlet. The States of Maine and Massachusetts have well defined definitions of vernal pools, and a certification process to map and identify vernal pools. The proposed draft wetland regulations definition, proposed setbacks, and language for vernal pool protection needs additional refinement and consideration.

Municipal Review. The proposed regulations are designed to have a single set of wetland regulations, administered at the State level, which in theory should result in better wetland edge verification, better wetland protection, and the standardization of project reviews; however, the regulations expand the review by municipalities in wetland review which will be likely to lead to conflicts between the State, municipalities, and Applicants. DEM also is expanding the jurisdiction of wetlands in to land use planning which should be left to the municipalities. For example, using building height, building density, and outdoor lighting should not be part of freshwater wetland regulations, but should be regulated by the local land use planning and zoning regulations.

Tiered Protection. Outlined below are comments related to the proposed tiered protection for rivers and urban areas. I do not support these tiers as they will be difficult for property owners, Applicants, municipalities, and the Public to work with projects through different areas of protection, and do not provide a unified set of regulations. Urban areas will change with time, and a standard, clearly articulated set of statewide regulations will be more effective than breaking the state into different tiers and regions.

Figure 1. Comparison of New England State Wetland Regulations*

| | Rhode Island (proposed) | Massachusetts | Connecticut | Maine | Vermont | New Hampshire |
|------------------------------------|------------------------------------|----------------------|--------------------|--------------|----------------|----------------------|
| Perennial River Setback | 150'-200' | 25'-200' | 100' | 75'-100' | 50'-100' | 0-250' |
| Intermittent Stream Setback | 100' | 0'-100' | 50' | 75' | 50'-100' | 0' |
| Vegetated wetland setback | 25'-200' | 0'-100' | 50'-100' | 75' | 0'-100' | 25'-100' |
| Vernal Pool Setback | 50'-100' | | 0'-100' | 200' | 0' | 0'-75' |
| Reservoir Setback | 200' | 0'-100' | 100' | 75' | 100' | 250' |
| Lakes and Ponds | 100' | 0'-100' | 100' | 75' | 100' | 250' |

*comments for each State are summarized at the end of this document.

COMMENTS ON DRAFT WETLAND REGULATIONS

SECTION 2.2 ADMINISTRATIVE FINDINGS

A(B)(2). The finding that the upland buffer zone to freshwater wetlands is performing functions that directly benefit the health, welfare and general well-being of people and the environment is not scientifically sound. It has been well documented that freshwater wetlands provide important functions, and that regulating work in upland buffer zones adjacent to freshwater wetlands is important for the protection of wetlands (e.g., from sediment). The upland buffer to freshwater wetlands has very different functions from freshwater wetlands, and a finding that the buffer has the same importance as the freshwater wetlands, floodplains, and waterways and waterbodies is not correct. The definition of protected wetland interests which are well defined (such as developed in Massachusetts) has been upheld by numerous court cases. The draft RI freshwater regulations have not fully articulated the importance of freshwater wetlands and the interests they serve the public.

A (B)(3). This section is problematic as it equates the freshwater wetland buffer as if it was a wetland, which it is not. This is clear when discussing "obligate" species, which is normally referenced to those plants or animals found primarily in wetlands, not upland buffers. The text in this section is problematic as it leaves a regulatory opening that may include any finding by DEM reviewers, and not a clear and predicible regulatory framework for use by Applicants. The terminology that Freshwater wetlands, buffers, and floodplains perform specific functions and support specific values needs additional clarification of the specific wetland functions and values.

A(B)3 (b). Recreation and Aesthetics. This function should be deleted. Wetlands do serve recreational opportunities, and may have aesthetic values to some, but not all people, but this section adds rare species, geomorphology, archeology, historic and cultural values, which are not and should not be part of wetland protection

but better protected by local land use planning. This section may be appropriate for public lands, but private property is not necessarily open for public use.

A(B) 4. The cumulative impact finding is problematic as it creates a first come, first-permitted standard. The goal for all wetland alteration should be appropriate mitigation or restoration so that there is no net loss of wetland functions and values from any project large or small, thus avoiding the regulatory decision of when cumulative impacts have been reached.

A(B) 5. The State can deny a project not in compliance with the Regulations, but the language of “random, unnecessary or undesirable alteration” of freshwater wetlands, buffer or floodplain leaves the DEM in a position to determine what work is necessary. For instance, if a homeowner wishes to build a swimming pool or build a shed in their backyard, which is also in the wetland buffer could this be determined to be unnecessary? A project that meets the regulatory guidelines and standards, should be permitted.

A(B)6. The removal of defunct dams to restore natural river functions and restore fisheries has become an accepted way of restoring wetlands and waterways and has gained National acceptance (and funding!). The language in this section should be revised to encourage the removal of defunct dams to restore wetlands, which would also be in accordance with section B (2) to restore the purity and integrity of all freshwater wetlands.

Definitions:

6. Area subject to Flooding. This definition will be difficult to identify and quantify on project sites. There is a section in the regulations requiring use of the FEMA floodplain mapping. My recommendation is to link the Area Subject to flooding with the 100 Year floodplain or use Definition number 29 for Floodplain.

7. Area subject to Storm Flowage. This definition will be difficult to identify and quantify on project sites. Surface water on a lawn or field following a large rainstorm event may qualify as “storm flowage”.

10. Buffer. This definition includes only “undeveloped vegetated” land adjacent to freshwater wetlands. I have already commented that I believe this definition needs additional clarity, and ideally, a State-wide fixed distance.

67. Consider defining a stream as shown on a USGS map as an intermittent watercourse (see definition #60 for River)

Section 2.5.4. Projects that Lie on or Cross the jurisdiction boundary. DEM and CRMC have different wetland rules, and the merging of these regulations would provide clarity and streamlined permitting process, particularly for those roadway, utility, or other infrastructure projects that cross these jurisdictions.

2.5.7 Applicability to Farming and Ranching Activities

Normal farming and ranching should clearly note if maintenance of drainage ditches, subsurface drainage, irrigation ponds, and livestock ponds, and existing agriculture within freshwater wetlands (e.g., wet meadows) is permitted. This may be addressed later in the regulations, but not in this section. Forestry practices need clarification.

2.6 Exempt Activities. The existing list of exempt activities should be re-evaluated to be certain that the list encompasses all necessary exemptions. It is possible that the Determination process is a suitable mechanism to determine whether a project is Exempt.

#20. It is not clear why parking lot repaving of more than 10,000 square feet should fall under the wetland regulations. These are not regulated as freshwater wetlands, and this type of maintenance activity should be regulated by towns, not the wetland regulations.

2.6.5 Single Family Residences and Accessory Structures. These regulations are preventing outdoor lighting (“no freshwater wetlands or buffers are altered or artificially illuminated”) on private properties. It is not clear how this is

protecting freshwater wetlands, or how this will be enforced. This is also repeated in section 2.6.6 for non-residential buildings.

2. It is not clear how or why the regulation of vertical additions “no more than (2) stories” should be regulated to protect freshwater wetlands. Should this be left as a town zoning regulation?

Section 2.6.23 Control of Invasive Plants. This is a well-written section. Consider also adding control of invasive and exotic plants from freshwater wetlands and buffers. For cutting and hand removal of invasive plant species (e.g., water chestnut), add that disposal should be outside of freshwater wetlands and buffers.

Section 2.6.24 Pedestrian Trails. This section excludes the use of footbridges/boardwalks through freshwater wetlands. This should be re-evaluated so that land trusts and conservation lands may provide public access to and through freshwater wetlands, especially for educational purposes.

Section 2.7.1 Freshwater Buffer Standard. This standard is based on treating the upland buffer to a freshwater wetland or waterway as a jurisdictional area. The definition of a freshwater wetland as defined is markedly different than an upland buffer. Most wetland protection laws (see Figure 1) treat the upland buffer as an area of regulation, not jurisdiction. The reasoning is that any work near a wetland, should be regulated since it may alter the wetlands. For instance, the Massachusetts Wetlands Protection Act has a 100 foot buffer zone requiring review of any new work within the upland buffer. With proper sediment and erosion controls and construction BMP’s, work may be conducted within the entire buffer. There is no restriction on work which may be conducted in an upland buffer to wetlands if approved wetland protections are in place. In Connecticut and Massachusetts many municipalities have adopted more stringent buffer zone standards with fixed distances. For instance, a Town may have a restriction of no work within 25 feet of freshwater wetlands, or no building within 50 feet of a freshwater wetland. These clear regulatory buffer setbacks, regardless of the project, provide protection of freshwater wetlands, and the necessary regulatory clarity for project designers and Applicants.

As written, the buffer zone work in the Draft wetland regulations are variable and over-complicated which I believe will result in increases in lot sizes (resulting in higher costs for real estate), engineering and design difficulties in the real-life interpretation of the regulations, and inevitably more enforcement and appeal cases.

The regulations as proposed provide over-complicated building restrictions in non-wetland areas, variable buffer widths depending on lot size and land use and penalizes owners of residential lots who have not yet built houses. Based on the existing regulations, I would expect that land-owners will clear land prior to the effective date of the wetland regulations to preserve their right to build houses and to avoid the residential infill lot buffer standard.

Recommendation: Create a no-build state-wide buffer setback to freshwater wetlands. Consider the 25 foot set back as described in section 2.7.1(B) 4b 2 (AA).

Section 2.7.1 B 4c. Recommendation: add “planting native vegetation” to the permitted buffer revegetation.

5. Residential infill Lot Buffer Standard. This section penalizes lot owners who have not already built. And I do not believe this section belongs in the draft wetland regulations. Instead, a fixed distance buffer setback for all new project work should be developed. My view is that as written, the infill standard will encourage land-owners to clear their land prior to the effective date of the new wetland regulations.

Section 2.7.2 Review Criteria. B 1-26. The word “significant” as defined in these regulations should add metrics. The term “significant alteration” will have different meanings to different people and will invariably lead to project appeals and adjudication. Recommendation: consider adding an area of work below which the proposed work would be considered minimal. For instance, in Massachusetts, work in freshwater wetlands or in waterways or waterbodies less than 5,000 square feet, is not considered a major project, and the altered wetlands may be replicated; additionally, projects altering less than 50 linear feet of riverbank are deemed not to impact significant wildlife habitat. These known and clear metrics provide both regulators and the public with unambiguous guidelines of how to design or how to review proposed work affecting freshwater wetlands.

Section 2.7.3 Variances. The draft regulations will likely result in many requests for variances due to the expansion of jurisdictional buffers (over 29,000 acres according to DEM), and reduced work areas. This is a generally a well-written section; however, variances for stormwater, erosion control, and water quality should always be an option. There may be reasons why future projects (e.g., roadways, utility, or major infrastructure reconstruction) may not be able to meet the current standards.

C Alternative configuration of vernal pool buffer zone. Recommendation: delete the words “on the subject property”. It is possible that alternative configurations may be possible on lands not part of the subject property, but still within the vernal pool buffer. The definition of vernal pools should be revised to protect successful breeding pools, not ditches or other opportunistic breeding sites.

Section 2.8. Application Types and General Application requirements. 2.8.1 A 6. In the Application for a Significant Alteration, there is no definition of “Significant”. The Department should clarify what would be considered a significant alteration of a freshwater wetlands, buffer, or floodplain. **Recommendation:** provide an area, length, or volume, that would be considered significant.

Application for Permit Renewal. It is not clear if all previously granted wetland permits remain valid following the effective date of the new regulations.

Section 2.8.5 Freshwater Wetland Edge Delineation and Related Requirements. Section 2.8.5 A 1. **Recommendations:** To comply with the definition of freshwater wetlands (2.4 A 32a) one or more data forms, such as used by the New England Army Corps of Engineers, should be used to document the vegetation, soils, and hydrology identified for the establishment of the wetland edge. Without such documentation neither the Applicant nor the Department cannot reasonably make accurate wetland determinations. Also see Section 2.9.3.(E). Section 2.9.3 E 3 should specify the forms or documentation to be provided to the Department. The regulations already cite the 1987 Corps manual for delineations. My recommendation is to require the use the New England Army Corps of Engineers wetland data form to substantiate wetland delineations.

Section 2.8.5 A 2T. The delineation of the top of Bank, Bankfull Elevation, or the establishment of the Ordinary High Water elevation should also be delineated to establish the edge of rivers and streams. **Recommendation:** Add Bankfull elevation to establish Ordinary High Water for delineating the edge of rivers and streams. This is a well-defined geomorphic feature which may be field verified.

Section 2.8.7. Requirements regarding use of professionals. For section D, consider naming Certified Wetland Scientists, Civil Engineers, Professional Wetland Scientists, Certified Wildlife Biologists, Certified Ecological Restoration Practitioners, and Professional Ecologists, Certified Erosion and Sediment Control Professionals (and other similarly certified professionals) in addition to “qualified professionals”.

Section 2.11.4 Permit Requirements, Conditions, and Renewals. This section should include a provision for projects implemented during the valid period of permit issuance, but not yet completed. This requirement may be included in 2.14.2 (D) which requires that renewals should be submitted no later than 60 days before the permit expiration date, but clarify for whether work in construction but not completed requires permit renewal.

Section 2.12 Application for a Significant Alteration. Define or quantify “significant alteration”. Having clear definitions will improve engineering design and planning, and the project work will not be subject to opinions of individual regulatory reviewers.

Section 12.2 Application Submittal Requirements. For the Recreation and Aesthetics section I believe this should be provided for public and not private lands. A private property owner may choose not to allow public recreational use of their lands.

For Functions and Values evaluation, is there a methodology the Department prefers Applicants use? There is a significant investment of time and money to produce a wetland function and values assessment, and a preferred methodology approved by the Department would be useful.

Section 2.21 Specific Criteria for Identifying Freshwater Wetlands. I agree with the suggested use of 1987 U.S. Army Corps of Engineers wetland delineation manual for delineating wetlands. I also recommend requiring New England Corps wetland data forms to document wetland boundaries.

Section 2.21.2 (A) 1. Flowing and Standing Freshwater Wetlands. This section requires identifying the Ordinary High Water Mark as the edge of these wetlands, which is consistent with the U.S. Army Corps of Engineers usage and definition. The listed field indicators are not always apparent in the field (e.g., locations of eroded banks) and elevations may need to be identified from the opposite bank, nearby locations, or from hydrological calculations. The use of geomorphic features such as bankfull elevations may also be used to identify Ordinary High Water.

(A)2. Beaver ponds create difficulties in establishing the edge of flowing water and ponds, as these are ephemeral and subject to change. I recommend adding language to address how the Department will identify and determine wetlands (and rivers) adjacent to areas inundated due to beaver activity.

2.23 Statewide Buffer Zone Designations. It is my opinion that the varying buffer zone designations will prove difficult for design engineers, Applicants, and for the Department to administer. Instead of different river protection regions and buffers as shown in Section 2.24 Freshwater Wetlands Buffer Regions Map, consider creating one state-wide standard. Recommendation: 100 foot regulated buffer for all rivers, streams, ponds, and freshwater wetlands within which all work will require a Permit. This buffer is consistent with the wetland regulations for the other New England States.

The buffer zone requirements in E 1-9 will also be problematic since a proposed project may cross several different wetland types in a relatively short distance, or even within the different regions. A fixed distance for a wetland buffer is a more realistic way to protect all types of freshwater wetlands.

Section F(2) creates varying buffer zones based on the type of freshwater wetlands, the size of the wetland, rare species habitat, invasive species, previously developed, and other factors which may be difficult to identify and substantiate. The rules as written provide a significant burden to an Applicant and could be simplified by establishing a consistent fixed state-wide buffer distance.

For River Protection 200' buffers, consider referencing USGS maps indicating perennial rivers or streams, and/or named rivers. The multipage Table with river names could instead be referenced from the USGS mapping. The Table showing the 150 foot buffer zone shows inconsistency in the regulations as many of these cross urban and non-urban regions. A single known river buffer is preferable. Perennial rivers and intermittent streams are indicated on the USGS maps and may be referenced for large or small rivers. A 100 foot buffer is recommended for all rivers.

New England Wetland Regulation Comparisons.

MASSACHUSETTS:

Massachusetts was one of the first states to adopt wetland regulations. These include coastal and freshwater wetlands. The current version of the regulations was adopted in 1983 and has gone through numerous revisions to include river protection, adding wildlife habitat as a wetland interest, and stormwater quality rules, among other changes. The regulations are generally well-written and have withstood numerous adjudications and court cases. In part because the interests of the wetland protection act (there are eight) are clearly defined, and the performance standards for work within each wetland is clearly outlined. An Applicant who follows these regulations is confident

they will be issued a permit. For large and complicated projects there are variances (called Limited Projects) to provide a clear regulatory pathway for permitting and approval.

The 100 foot buffer zone for all wetlands is an area in which work is regulated, but it is not an area of jurisdictional wetlands. The purpose of the buffer zone is to ensure that the adjacent wetlands are protected. Approximately half of Massachusetts municipalities have wetland bylaws which may create additional buffer zone protections, or fixed setbacks (e.g. no work within 25 feet of wetlands). The Rivers Protection Act places a 200 foot regulated area adjacent to perennial waterways. Work is permitted within the 200 foot zone and there is clear guidance on the permitted area and required mitigation. Intermittent streams are afforded the same 100 foot buffer as freshwater wetlands. There is no buffer zone to isolated wetlands, whose primary function (interest) is flood storage.

Vernal Pool habitat is not additionally projected, beyond the 100 foot buffer, and work may take place within this buffer if the proposed work protects the actual vernal pool habitat. There is a process to certify and map known vernal pools.

CONNECTICUT:

The state does not have a buffer statute or regulation requirements for inland wetlands. Each town's municipal inland wetlands agency regulates activities that affect inland wetlands and watercourses within their municipal boundaries pursuant to the Connecticut Inland Wetlands and Watercourses Act. Most communities that have adopted buffer protections require buffers in the range of 50-100 feet. The power to regulate vernal pools also belongs to each municipality.

Useful References:

- 1) Vernal Pool Conservation in Connecticut: An Assessment and Recommendations.

https://web.uri.edu/preisserlab/files/Vernal_Pools_Article.pdf

MAINE:

All projects in or adjacent to (within 75 feet of) wetlands of special significance and rivers, streams, and brooks require a permit. Alterations in freshwater wetlands may need a permit, depending on the size and location of the project. Cold water habitat perennial stream has an extended buffer of 100 ft.

Vernal Pools are considered significant wildlife habitats and are therefore assigned a larger buffer zone. There are clearly stated calendar dates for vernal pool surveys, forms, and affidavit requirements of the wildlife biologist as to an area is a vernal pool.

NEW HAMPSHIRE:

Hampshire regulates impacts to wetlands primarily under the Fill and Dredge in Wetlands Act (The Wetlands Act) RSA 482-A, which authorizes the state's permitting program to protect wetlands and surface waters. The state's wetland permitting program is the primary means of wetlands regulation in New Hampshire. The New Hampshire Department of Environmental Services, Water Division, Wetlands Bureau administers the state's wetland regulatory program. Municipalities can designate wetlands as "prime wetlands" which receive higher level protection under the Act and have a buffer zone of 100 ft.

Municipalities are free to designate their own buffer zones around wetlands that are not identified as prime wetlands. This can range between 50 ft to 100 ft depending on the municipality.

The Shoreland Water Quality Protection Act (RSA 483-B) establishes buffers known as “protected shoreland”, located along public waters. Within the protected shoreland, the Shoreland Water Quality Protection Act (SWQPA) regulates certain activities such as subdivisions, land development, and vegetation management, among other things. (<https://www.des.nh.gov/protected-shoreland-faq>)

The protected shoreland is a 250 buffer zone surrounding public waters. This includes:

- Lakes, ponds and impoundments greater than 10 acres
- Year-round flowing waters (streams and rivers) of fourth order or higher.
- Designated river and river segments: a river that is protected for its outstanding natural and cultural resources in accordance with RSA 483, The Rivers Management & Protection Act. It includes some lakes and ponds that are dammed rivers.
- Coastal waters

There are no State-imposed buffers on vernal pools but a small fraction of municipalities requires a buffer zone between 20 ft-75 ft.

VERMONT

For Class II wetlands, which include most of the wetlands protected under the Wetland Rules, a standard buffer zone of 50-feet is regulated along with the wetland. For Class I wetlands, the standard buffer zone is 100 feet wide with some as wide as 300 feet.

All Class I and II wetlands are mapped on the Vermont Significant Wetland Inventory maps (<https://anrmaps.vermont.gov/websites/WetlandProjects/default.html>)

Vernal pools are not protected in Vermont.

The Shoreland Protection Act does have a 250 buffer zone where some activity related to clearing vegetation or creating impervious surfaces are limited.

https://dec.vermont.gov/sites/dec/files/wsm/lakes/docs/Shoreland/lp_ShorelandHandbook.pdf

Some municipalities have more stringent buffer zones for streams and lakes.

Other useful references:

The Scientific Basis for Wetland and Watercourse Buffer Zones:

<https://carvaecological.com/wp-content/uploads/2012/01/Scientific-Basis-for-Wetland-Watercourse-Buffer-Zones-2008-revised-2011.pdf>

MICKEY MARCUS, M.S., PWS, CPESC, CPSWQ, DIRECTOR

Mr. Marcus has over three decades of experience as an environmental scientist and project manager and has worked on over 5000 specific environmental projects. Mr. Marcus' expertise includes wetland delineation and assessment, vernal pool surveys, and environmental permitting. Mr. Marcus regularly serves as an expert witness in wetland and wildlife cases and has testified in Superior Court, Land Court, Federal Court, Grand Jury, and in adjudicatory hearings. He is a Professional Wetland Scientist, Certified Professional in Erosion & Sediment Control, Certified Professional in Storm Water Quality, Certified Ecological Restoration Professional, and Massachusetts licensed aquatic herbicide applicator.

YEARS OF EXPERIENCE

35

EXPERTISE

- Wetland delineation and assessment
- State, Federal and Local environmental permitting
- Ecological restoration design and implementation
- Stormwater quality and management design
- Development and implementation of sediment and erosion control plans
- Upland and wetland invasive species control
- Fluvial geomorphology
- Pond creation and management
- Stream and river restoration/bioengineering
- Salt marsh and dune restoration
- Stream and river restoration/bioengineering

EDUCATION

- M.S., Zoology/Wildlife; University of Maine-Orono; 1984
- B.S., Biology; Marlboro College; 1978

REGISTRATIONS / CERTIFICATIONS

- No. 1504; CPESC EnviroCert International, Inc.
- No. 0001; CERP. Society for Ecological Restoration
- No. 1635; Professional Wetland Scientist. Society of Wetland Scientists.

SELECTED PROJECT EXPERIENCE (* denotes project experience prior to SWCA)

- Kingston, RI URI Kingston Campus Landscape Master Plan; Kyle Zick Landscape Architecture, Inc.; Kingston, County, Rhode Island.** SWCA responsible for providing ecological services as part of the URI Kingston Landscape Master Plan. Initial assessments included evaluating the stream corridor and its ecological value and provide recommendations for Master Plan. *Role: Evaluation of wetlands on campus, and restoration opportunities.*
- Expert Witness Testimony; Rhode Island Superior Court; Rhode Island.** SWCA provided forensic evaluation of wetland alterations in Cumberland and provided testimony in Rhode Island Superior Court regarding historic wetland encroachment and alterations. *Role: Wetland Expert Witness.*
- *Coastal Bank Restoration; Private Residences; Little Compton, Rhode Island.** Provided design and implementation of multiple coastal bank restoration projects using coir rolls and native vegetation. Projects have weathered multiple storm events. *Role: Project Manager and Lead Designer.*
- *Wetland Restoration; Private Residences; Johnston, Rhode Island.** Five-acre wetland design plan and planting implementation. *Role: Ecological Design.*
- *Rare Dragonfly assessment and documentation; Diprete Engineering; North Smithfield, Rhode Island.** Survey of rare dragonfly habitat and breeding location. *Role: Biologist.*
- *Wetland and Wildlife Permitting Support; Dowling Village; North Smithfield, Rhode Island.** Provided wetland, wildlife, and stormwater water quality management plans for permitting. *Role: Wetland Scientist*
- *Blackmoor Pond; Private Residence; Cranston, Rhode Island.** Implementation of bank stabilization plan. *Role: Wetland Scientist.*
- *Invasive Species Control; Rhode Island Natural History Survey West; Greenwich, Rhode Island.** Provided invasive species control to promote native species. *Role: Manager.*
- *Erosion and Sediment Control Training; Dominion Power; Providence, Rhode Island.** Provided staff with sediment and erosion control training, and compliance with State regulations. *Role: Manager.*
- *Pond Restoration; Private residence; West Warwick, Rhode Island.** Implementation of bank stabilization plan. *Role: Wetland Scientist.*
- *Connecticut Light & Power; Manchester, Connecticut.** Performed environmental assessments for the Meekville Junction energy project. *Role: Manager.*

TRAINING

Natural Channel Design and River Restoration, Rosgen; 2001

Habitat Evaluation Procedures (HEP), U.S. Fish and Wildlife Service; 1985

River Morphology and Application, Rosgen; 2001

River Assessment and Monitoring, Rosgen; 2001

Use of Wetland Evaluation Techniques (WET), U.S. Army Corps of Engineers; 1985

Natural Rivers: Mechanisms, Morphology & Management, Hey; 2003

River Restoration Design Implementation, Rosgen; 2005

SER E-Learning Course - Overview of the Practice of Ecological Restoration, SER; 2017

Applied Fluvial Geomorphology, Rosgen; 2001

MEMBERSHIPS

Past President, Association of Massachusetts Wetland Scientists

Member, Aquatic Plant Management Society, Inc.

Past Board Member, Society for Ecological Restoration

Member, Aquatic Ecosystem Restoration Foundation

Charter Member, New Hampshire Association of Natural Resource Scientists

Past Member Board of Directors, Massachusetts Association of Conservation Commissions

Past President, Soil and Water Conservation Society

Past President, International Erosion Control Association

Past Chair, Society of Wetland Scientists

Member, The Wildlife Society

Concord Way Vernal Pool Assessment; Confidential Client; Amherst, Massachusetts. SWCA provided an assessment of vernal pools and habitat mapping. *Role: Biologist and Project Manager.*

Oxbow National Wildlife Refuge Environmental Assessment & Permitting; Confidential Client; Massachusetts. Design and permitting of a wetland boardwalk on a national wildlife refuge. *Role: Wetland Scientist.*

Holmes Bogs Wetland Restoration Project; Massachusetts Division of Ecological Restoration; Massachusetts. Design plan to restore former cranberry bog to natural stream and wetland complex. *Role: Ecological Designer.*

Vernal Pools Assessments; Confidential Client; Granville and Charlton, Hampden, County, Massachusetts. SWCA provided an assessment of vernal pools and adjacent habitats. *Role: Biologist and Project Manager.*

Peabody Environmental Services; Dawood Engineering Inc. Multiple culvert replacements. SWCA provided a fluvial assessment & wetland delineation at culvert replacement over Proctor Brook on Warren Street in Peabody, MA. *Role: Supervisor. Lead Fluvial Morphologist, Wetland Scientist.*

Peer Review of Solar Wetland and Erosion Control Plan. Town of Upton MA; Town of Upton; Upton, Worcester County, Massachusetts. SWCA provided the Town of Upton Conservation Commission with a peer review for a new solar project. In addition, provided a review of their stormwater management, wetlands, sediment, and erosion control plan. *Role: Wetland Scientist and Peer Reviewer.*

Connecticut River Farmland Protections Riverbank Restoration; Nourse Farms, Inc; Montague, Franklin County, Massachusetts. SWCA developed strategies to stabilize the eroding bank of the Connecticut River to protect adjacent farmland. *Role: Restoration Scientist.*

Silvio O. Conte National Refuge; Federal Highway Administration; Northeast Kingdom, Multiple Counties, Vermont. SWCA delineate wetlands for the Federal Highway Administration within the Silvio O. Conte National Fish and Wildlife Refuge. *Role: Wetland Scientist.*

South Fork Wind Farm Project Environmental Impact Statement; Multiple States. SWCA is the 3rd party NEPA consultant preparing an EIS for an offshore wind farm. The EIS is being developed to conform with the page limit and timeline guidance of Executive Order (EO) 13807 and DOI Secretarial Order (SO) 3355. To date, SWCA has led pre-planning and impact analysis efforts, assisted BOEM with public scoping meetings and comment management, assisted BOEM in conducting consultation pursuant to Section 106 of the National Historic Preservation Act, and prepared the preliminary draft EIS and preliminary draft Biological Assessments. SWCA analyzed and processed all public comments and produced a scoping report. SWCA facilitated alternatives development, which involves identification of a range of alternatives in collaboration with BOEM and cooperating agencies. SWCA is currently preparing the Draft EIS. *Role: Environmental Scientist.*

University of Massachusetts Amherst Pond Dredging Design and Permitting; University of Massachusetts at Amherst; Massachusetts. SWCA provided plans and permits for the dredging and restoration of a 4-acre pond on the UMASS Amherst Campus. *Role: Project Manager.*

***Northeast Utilities/ Greater Springfield Reliability Project; Massachusetts & Connecticut.** Performed environmental assessments for the reconstruction of electric substations and right of ways. *Role: Wetland Scientist.*

EXHIBIT F



WETLAND REGULATION COMMENTS AS DRAFTED AS OF JANUARY 2021

After attending meetings for numerous years now, having discussions with the current authors of this proposal, in-house consultations and discussions, a review of existing and proposed Regulations and the Legislative Task Force Final Report, we would like to comment on many of the issues with this latest proposal.

When the “*jurisdiction*” for freshwater wetlands permitting was increased by Legislation, we were concerned that it would be taken to the extreme but were also under the impression that it was a mechanism to allow better review for environmental reasons and not an excuse to hinder development in the State - particularly the rural areas of Western RI.

While jurisdiction increased from existing 0’ and 50’ distances to 100’ and existing 100’ distances to 200’ it should not have meant that existing buffers (presently referred to as perimeter or riverbank wetlands) and setbacks would necessarily increase at lightning speed, doubling or more in many scenarios. In fact, during the legislation task force meetings it was stated by the former Chief of Water Resources and further stated in the LTF Final Report recommendations and findings that “2. In general, setbacks for OWTS established in the State OWTS regulations are sufficiently protective of the State’s water resources”. While we are continuously advised at DEM presentations and conferences that OWTS setbacks have not changed it is obvious that if wetlands have changed so have setbacks, or are we now allowed to put OWTS within buffer zones?

During the year of those LTF meetings there was never any scientific proof presented that environmental harm has resulted due to the existing regulated setback distances, only that Literature Reviews read and summarized by a selected few:

(Task Force Members:

- James Boyd, Coastal Resources Management Council
- Russell Chateauneuf, Civil Engineering Representative
- Lorraine Joubert, Environmental Entity – URI NEMO
- Thomas Kutcher, Wetlands Biologist, Save the Bay)

and regulations from other States were the basis for the suggested recommendations.

There were no Task Force members from private practice invited to take part in this rulemaking process.

It was also never understood that certain large lot zoning areas of the State, mainly the western majority, would have much more stringent requirements just because of locale, forest growth, habitat and blue line rivers. The increase in jurisdiction alone adds to the number of additional permitting along with associated costs, delays, unpredictability and land taking.

The complete Western portion of the State is proposed to be much more restricted to future development than other areas that are more developed presently. The problem with this is that portion is the area of the State that remains to be developed due to land availability. Present zoning in those areas, at least in the Northwest towns, presently range from 3 to 5 acres with frontage from 300’ to 450’ which already precludes those areas from overdevelopment.

To put all of this in further perspective, *River Protection Region 1*, once again the Western portion of the State, reportedly has 811 miles of rivers. Using that mileage a 200' buffer and using a 400' total width (200' parallel) from rivers only would confiscate a total 39,000+- Acres or 61 SQ MILES of land, more or less. This same area also contains 52% of the total state area of which roughly 28% is presently conserved, not including buffers or perimeters, the way we read it. Once again, this is the only remaining area for substantial growth. One could make a similar but not as drastic an appraisal of *River Protection Region 2*.

To list the real concerns as proposed please see below.

- The increase to 200' buffer on all "blue line" streams in "Region 1" regardless of width or disposition. This is presently addressed in drinking water watersheds and not necessary outside of those areas. Also, if farms can still use the 10'+- river width to define setbacks, why can't the regulations be consistent with that criteria as farms can be even more detrimental;
- The increase from previously 0' to 50' or 100' on vernal pools, depending on confusing criteria, this could result in confiscation of 38,000 S/F, just under .9 Acres on a 20' diameter vernal pool, there is no need for a complete circumference around a vernal pool and size and importance should matter. In fact, we could not even get a consensus of vernal pool qualifications or the quantity or presence of them Statewide;
- Distances from ponds should all be 50' on any that are larger than ¼ Acre for consistency, why do larger ponds need twice the buffer?;
- "Highly developed shoreline" is not defined except by naming them with no criteria and there are some not listed that should be, Waterman Lake as one example;
- Buffers to be established by different types of swamp vegetation and size is confusing and vague. They would need to be identified by a Wetland Biologist with State Confirmation and surveyed before accurately defining a property's potential land use, adding time delays, costs and adding a burden to DEM staff;
- There is no consideration for I/A OWTS' or for properties addressing present Stormwater Regs, which would both greatly affect the needs;
- The legislation to initiate new regulations was for the purpose of making regulations the same Statewide and to stop arbitrary and varying distances set by Towns/Municipalities. The proposed regulations now include the Municipalities several chances for possibly unproven agendas, initially to petition the regulations for changes to be enforced Statewide, not by community only, the State requesting a Master plan approval prior to DEM review and notification of permits with additional time to review by possibly unqualified individuals. RIDEM should not be involved with Local Zoning and promotion of Low Impact Development, people do not go into those rural areas looking for 1+- Acres, that option should be up to the Owner and/or Developer. This participation impedes the purpose of this enacted legislation. Municipality's participation and their ability to petition for added buffer distance impedes the reason for this enacted legislation. However, if a town solicits DEM for additional buffers, a specific notice to the affected landowners must be part of the process. If towns are to be notified on permits pulled, the landowners subject to additional state regulation should also be notified directly. We feel so strongly about this notice issue that we plan to submit legislation jointly with landowners every year until such a law is passed. DEM isn't proposing to notify

450 Veterans Memorial Pkwy. #301
East Providence, RI 02914-5380
401.438.7400
Fax- 401.438.7446
www.ribuilders.org

towns about permit applications by putting oddly written print ads in newspapers or buried on websites, so why should the landowner subject to additional DEM rules be treated that way?

- **Notification to municipalities on all permits slows down the so called “Streamlined Permit Process” and only need notification for Formal Permits:**

The variables on “Buffer Zones” vs “Buffers” under “Other Freshwater Wetlands” depending on some of the proposed criteria is confusing and, in some cases, seasonal.

There is no consideration given for projects, existing or proposed, that have followed the extremely intense Stormwater Regulations nor is any allowance given for types of soils or approved I/A Septic Systems.

As an example of land taking, a fictional but not impractical circumstance was presented for a property with an 8’ wide brook in the back half of the property in Glocester. At present, 16 Acres with 1400’ and 1.5 Acres upland per Zoning would potentially be subdivided into 4 – 4 Acre buildable lots. The rules as proposed would limit this to 1 buildable lot without any variances while also taking the property owners’ rights away on 13 + acres rather than 6.7 acres, which should be more than environmentally adequate.

There were also 4 recent plans presented to our Attorney that are approved or pending that would not be acceptable under this proposal.

More explanation and *expansion* is needed regarding existing vacant lots of record and already developed properties and their exemptions.

Many of these distances are simply the “more is better” attitude and mentality while in certain situations it is more a case of creating a point of *diminishing return*. Wetlands naturally help in the nitrogen process and groundwater needs to be recharged as so stated upon questions to Chris Mason, an original presenter at the LTF meetings, some of these distances may alter the desired effect.

While we don’t disagree with the increase in DEM jurisdiction, it adds another level of permitting where in many cases, just as present will be considered an insignificant alteration, thereby resulting in additional cost and time delays to the consumer. The reason for the formation of this legislation was to lessen that additional burden.

It was initially believed that although jurisdiction, which was a recommendation by the Engineer/Members of the task force was increased, all setbacks would remain unchanged, the same as became ultimately allowed for Farmers.

Talking to many design practitioners, we all feel that these proposed regulations are confusing with many unknowns and we are at the mercy of a DEM review. Although we have many years experience it is no longer possible to meet a property owner, walk his land and advise him properly of his land’s potential.

Finally, from the viewpoint of Realtors, an increase in jurisdiction and setbacks will put numerous existing homes within those limits, which must then be disclosed at time of sale, impeding the sale and financing process and again possibly adding unnecessary costs to the consumer.

Obviously, we have just touched on some highlights but the rules as proposed present a land taking of property and value and would or should cut property tax values in all those Towns. This also hurts property owners who have kept their large tracts of land vacant for years while paying higher taxes so they could eventually give buildable lots to their family or sell and move out of RI to a more affordable place to retire. All statewide property owners that will be affected by these rules should receive notice.

Other than some identification name changes, there have been virtually no changes since the last proposal in September 2019. All setback distances have not changed. Per L 42-64 13.10 Legislation the Task Force Final Report was completed and Submitted in December 2014. These regulations were to be completed and submitted to the identified authorities no later than January 31, 2015. Now that it is January 2021 have they lost their validity? Why is this being rushed now after some 6-7 years? During those years we have sent in numerous correspondence, questions and recommendations, all of which were never answered or discussed.

We feel that the increase in jurisdiction should allow for a thorough review of all related applications and that existing setbacks are sufficient and should remain as present, same as farmers, through the State. The Region maps are difficult to interpret, and it makes no sense to change distances when the same wetland is adjacent to a differing region/area.

Rhode Island is continually among the top in the worst and at the bottom of the best in many categories of growth and development - continually at or near the top in *"Most Regulated States"*. These regulations will only make things worse and will prevent RI from finding a better, more balanced path forward.

Construction is the backbone of a strong economy and these proposed changes will not only limit new development, they will add to costs incurred, slow down the already extremely excessive permitting process and add delays which are contrary to the desired and promised *"Permit Streamlining"* and *"Less Government"* intent of this law. In closing, these regulations as proposed, have not met the requirements of economic impact nor are they now *"Clear, Predictable and Reliable"* as was required by this reform, and the rule/intent of the law that was passed.

**Respectfully,
Tom D'Angelo
Tim Stasiunas**

RI Builders Association Environmental Committee Co-Chairmen

450 Veterans Memorial Pkwy. #301
East Providence, RI 02914-5380
401.438.7400
Fax- 401.438.7446
www.ribuilders.org

Joelle C. Rocha

From: John Marcantonio <jmarcantonio@ribuilders.org>
Sent: Monday, January 18, 2021 4:04 PM
To: Mickey Marcus
Cc: Joelle C. Rocha; Dennis DiPrete; Len Bradley; Carol Odonnell; Timothy Stasiunas
Subject: Fwd: Consultant Review

Mickey / joelle

Please see Toms feedback below...

Best

John Marcantonio
Chief Executive Officer
RI Builders Association
Builders Insurance Group
Cell - 401-617-1566
Sent from my iPhone

Begin forwarded message:

From: Tom D'Angelo <owtsri@gmail.com>
Date: January 18, 2021 at 12:37:34 PM EST
To: John Marcantonio <jmarcantonio@ribuilders.org>, Tim Stasiunas <stasiunas@verizon.net>, Carol Odonnell <CRMModularhomes@aol.com>
Subject: Consultant Review

All,

Mickey's report has brought up some good points but not all of them are addressing changes related to this proposal. His points on many items, ie: significant impact or alteration are correct but not being changed by this proposal. Items not being changed by proposal will not be considered at this time in my opinion.

The items of major concern are the increased setbacks and addition of Vernal Pool. **SECTION 2.23** Are increases a benefit or can we also meet the point of diminishing return as these numbers were arbitrarily chosen once they received additional jurisdiction. After doubling or more most setbacks, they want to add a 25' construction setback. If that's the case then all setbacks should be reduced 25'. Currently they accept 10' - 12' although not in writing..

The other major issues of concern are the involvement of Municipalities, which contradicts the reason for this legislation. Those sections are **2.8.11 Coordination with Municipalities, A thru D** and that RIDEM is getting involved with local zoning. Also of interest is **2.16 Municipal Petition Process**, this Section probably must remain.

Would also be good the fact that Farming setbacks remain unchanged and how proper new development would be less detrimental. Also address how setback reduction should be acceptable when proper stormwater techniques and I/A OWTS systems are employed.

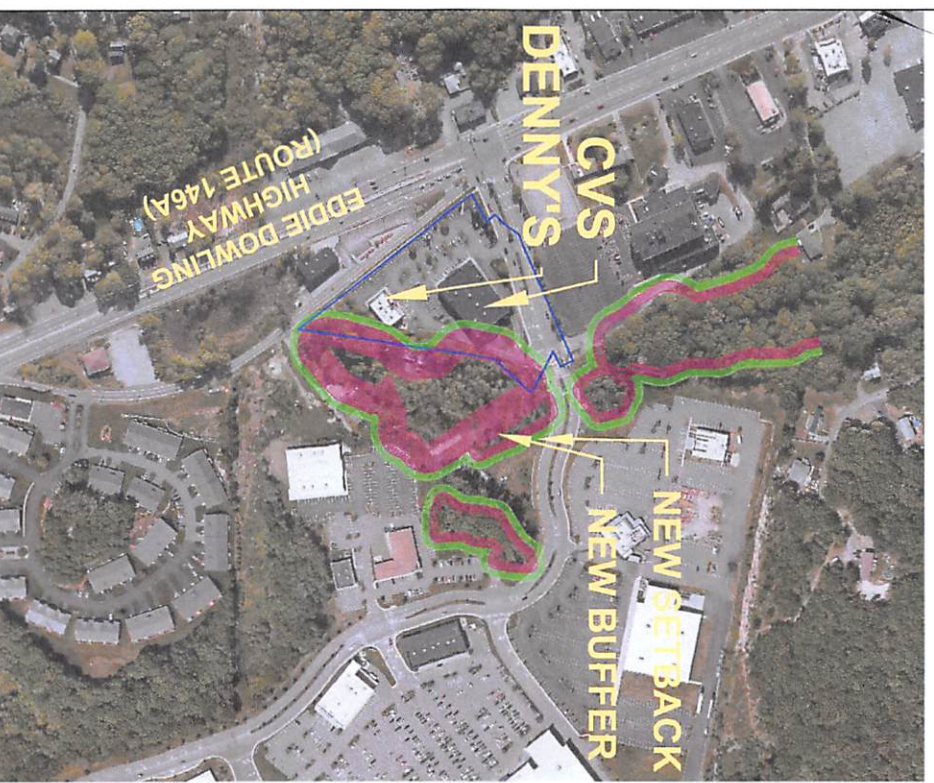
Tom D'Angelo
Terry Lane Co.
15A Terry Lane
Chepachet, RI 02814
Office: 568-8006
Fax: 568-7909
OWTSRI@gmail.com

EXHIBIT G

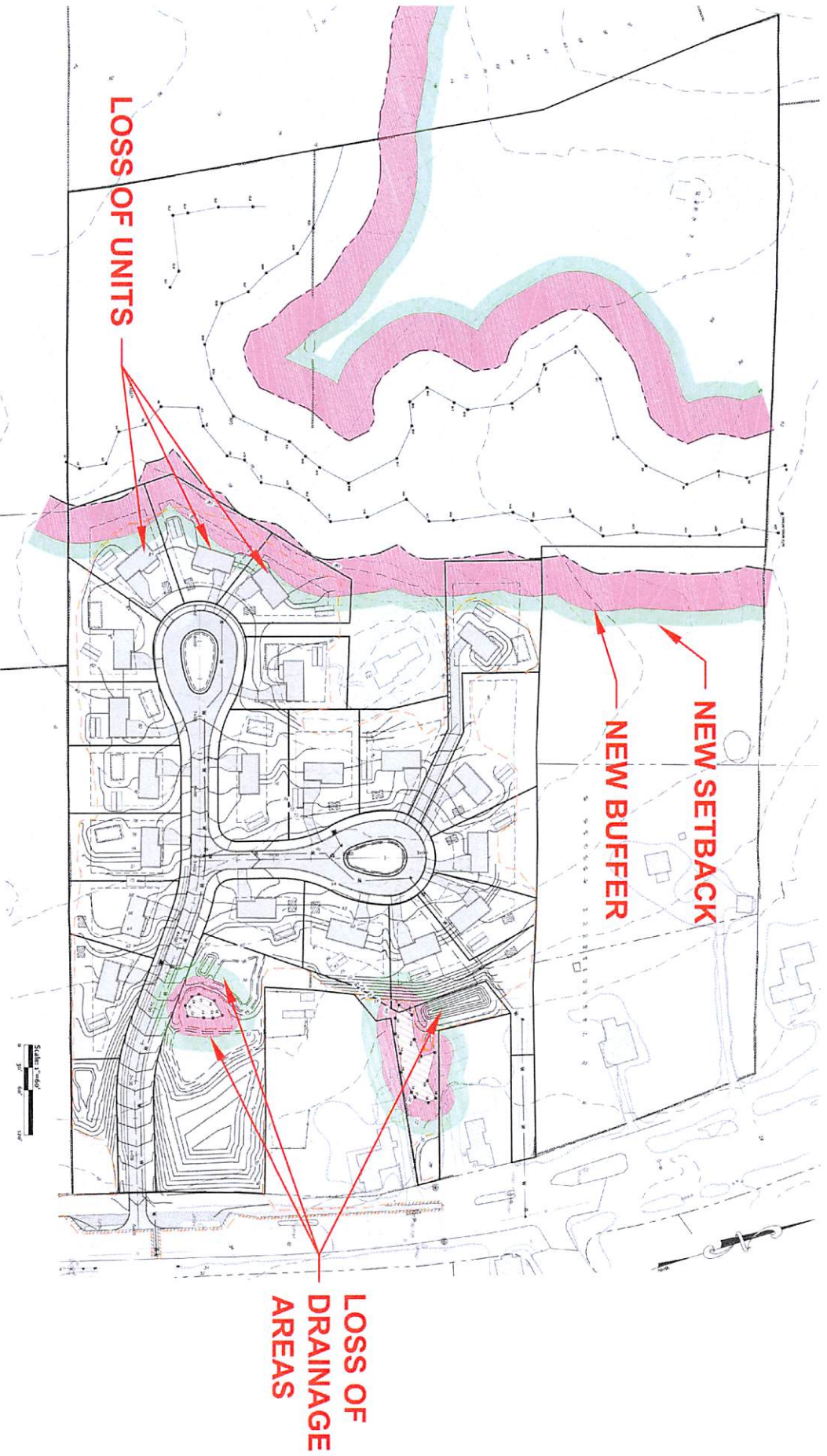
CVS and Denny's Restaurant - North Smithfield



Impact - Likely Loss of 1 of the 2 Buildings

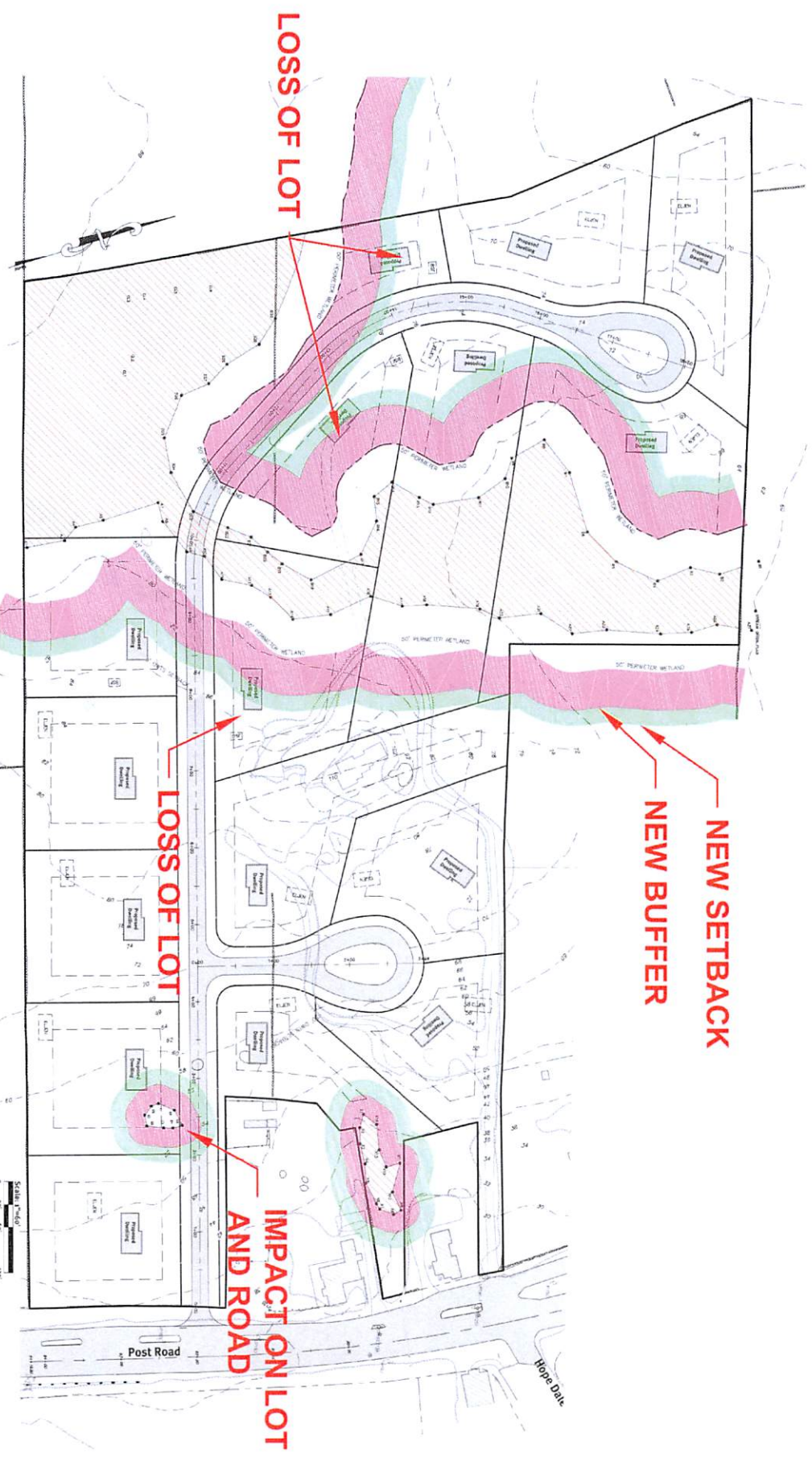


Wickford Harbor Estates - Conservation Design Post Road - North Kingstown



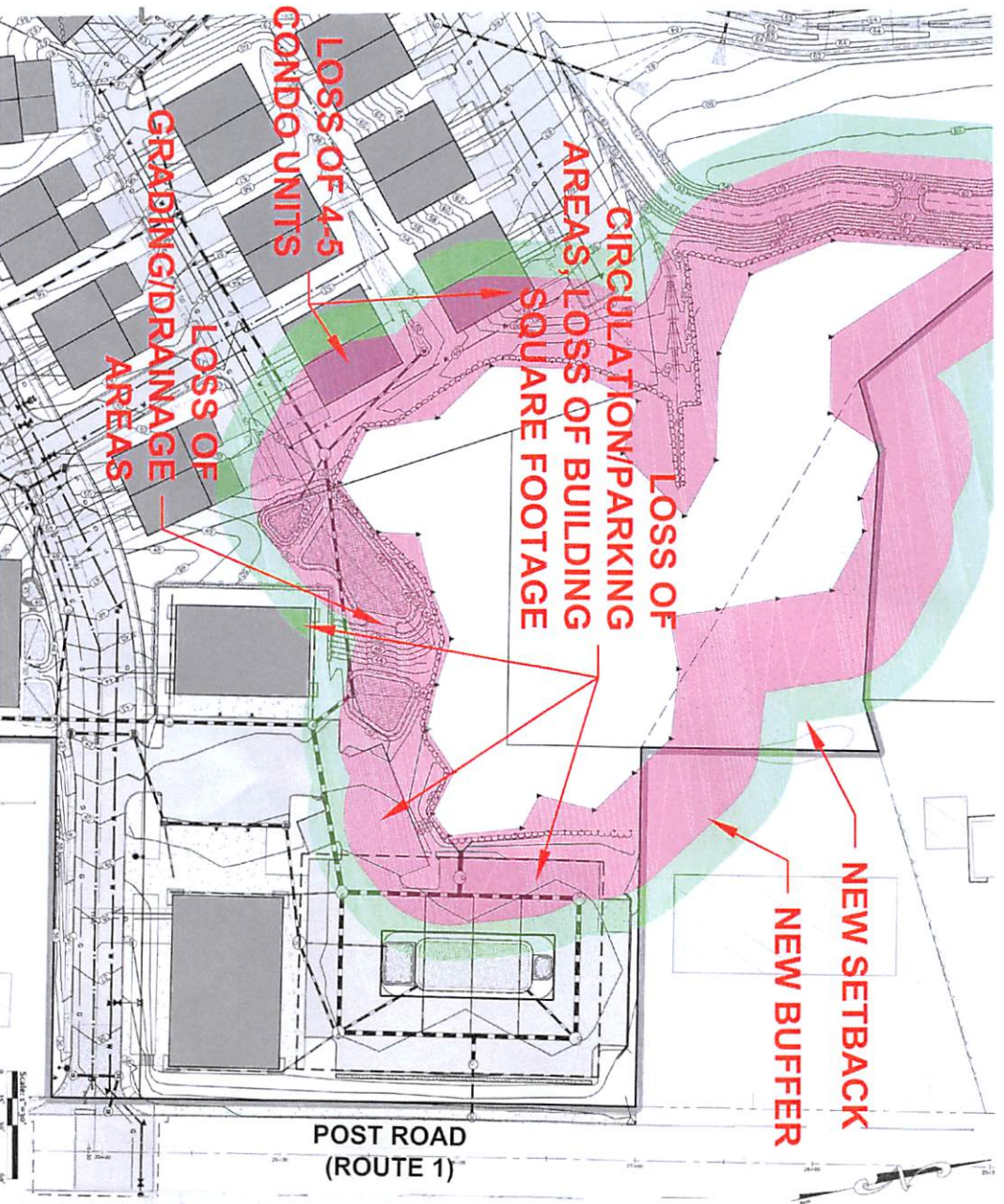
Impact - Loss of 3 Market Rate Lots and 1 Affordable Lot

Wickford Harbor Estates - Yield Plan Post Road - North Kingstown



Impact - Loss of 3 Market Rate Lots and 1 Affordable Lot

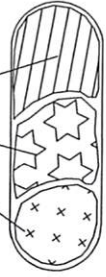
Reynolds Farm - Commercial Area Post Road - North Kingstown



Impact - Loss of 4-5 Residential Units and at Least 1 of 2 Commercial Buildings

RAIN G.

- (5) IRIS
- (4) RUC
- (4) PAN
- (30)



- ROOF
- RAIN
- BOTT
- RG1 =
- RG2 =
- RG3 =
- RG4 =

SEE ATTACHED NOTES, TITLES & DETAILS

A.P. 17 LOT 124
N/F MELODY HILL COUNTRY CLUB
No Known Potable Wells, OWTS or Buildings Within 100' of Property line

12' x 16'
BSF
(SEE DETAILS)

30" Pump Chamber
w/AX 20 Advantex
1500 Gal Oranco
(SEE DETAILS)

Proposed Well
w/Pressure Line

WETLAND
50'
400'
398'-
710'-43'-00"
100'
101'
100'
102'
103'
104'
105'
106'
107'
108'

SWAMP > 3 Acs.
No Known Potable Wells, OWTS or Buildings Within 100' of Property line

100' PROPOSED SETBACK
100' PROPOSED SETBACK
357'-33"
398'
400'
402'
404'

A.P. 17 LOT 129
190,648 S.F.
4.3774 ACRES
100' PROPOSED SETBACK
408'
406'
404'
402'
400'

FORESTED WETLAND < 3 Acs.

A.P. 17 LOT 130
N/F JOSEPH VACCOLA TRUSTEE
No Known Potable Wells, OWTS or Buildings Within 100' of Property line
625.45'
200'
201'
202'
203'
204'
205'
206'
207'
208'
209'
210'
211'
212'
213'
214'
215'
216'
217'
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220'
221'
222'
223'
224'
225'
226'
227'
228'
229'
230'
231'
232'
233'
234'

BENCHMARK
SPIKE SET FACE
UP #4 NVD '88
ELEV = +20.62 SGALED

SEE
DETAIL "A"

CL2A
ASSF
419.94'
INV. IN
12" ADS

CL3A
Existing
12" ADS
419.07'
INV. IN

CL5A
Proposed
Gravel Drive
415.97'
ELEV.

CL7A
CL7B
CL7C
CL7D
CL7E
CL7F
CL7G
CL7H
CL7I
CL7J
CL7K
CL7L
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CL9J
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CL9V
CL9W
CL9X
CL9Y
CL9Z

HILL
LANE
(ROW)

MELODY

346.23'

90'-00'-00"

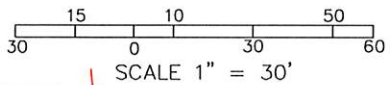
72'-03'-40"

PLAN DRILL HOLE TO CORNER 140.00'
137.21'
IRON PIPE (FOUND)
A.P. 17 LOT 131
FACE WALL (FOUND)
DRILL HOLE

172-03-40"

30'-00'-00"

SET D



Previous Approvals
 OWTS #0013-0878
 Wetlands #98-0381

Subject Property
 AP 13 / Lot 21
 43 Acs +-

LEGEND

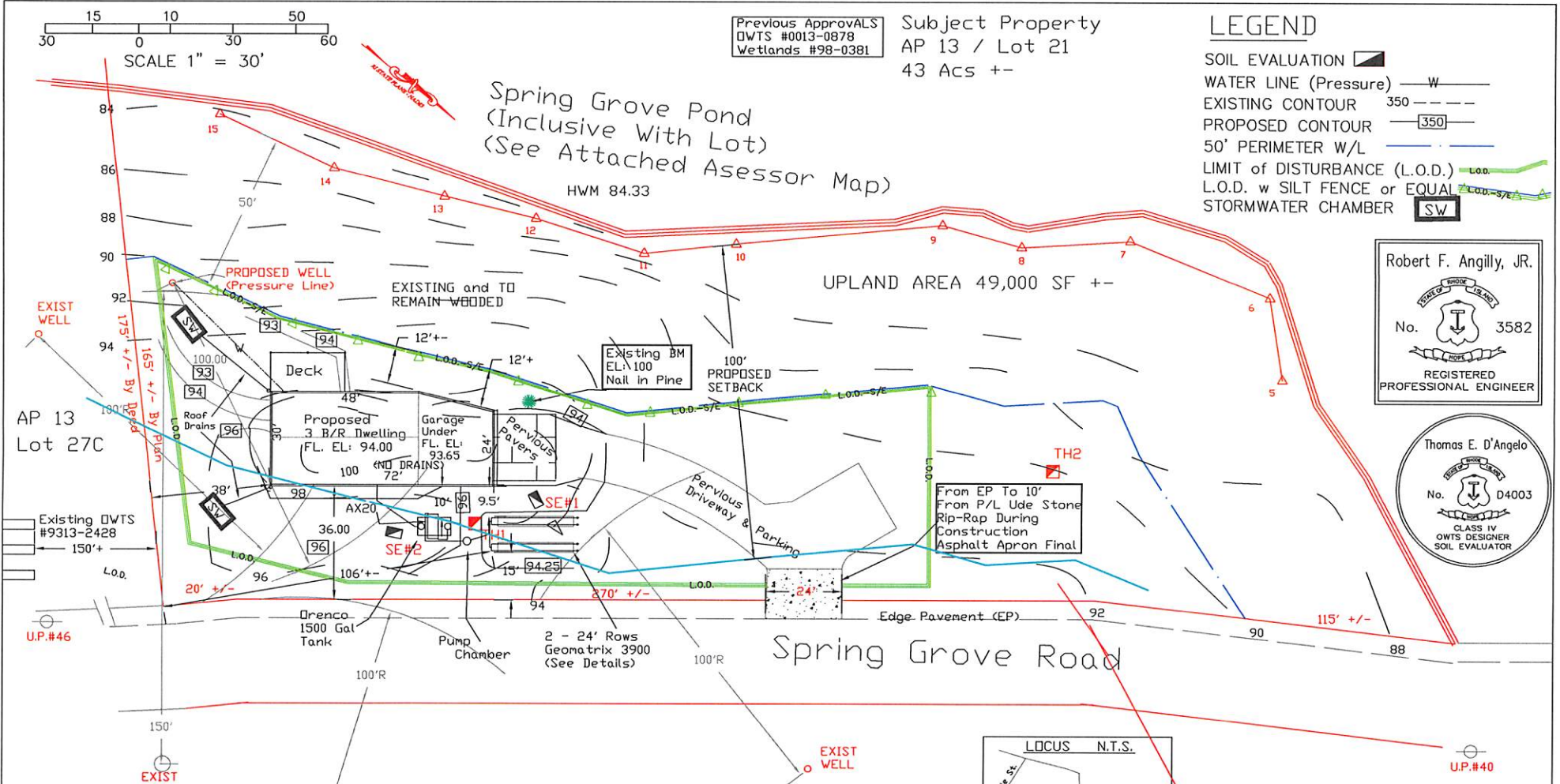
- SOIL EVALUATION
- WATER LINE (Pressure) — W —
- EXISTING CONTOUR 350 - - - -
- PROPOSED CONTOUR — 350 —
- 50' PERIMETER W/L — — — —
- LIMIT of DISTURBANCE (L.O.D.) L.O.D.
- L.O.D. w SILT FENCE or EQUAL L.O.D. S/F
- STORMWATER CHAMBER SW

Robert F. Angilly, JR.

 No. 3582
 REGISTERED
 PROFESSIONAL ENGINEER

Thomas E. D'Angelo

 No. D4003
 CLASS IV
 OWTS DESIGNER
 SOIL EVALUATOR



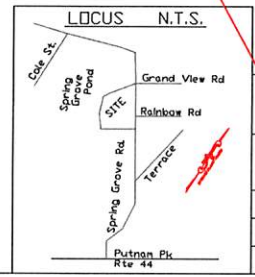
TH1 97.80/SHWT 89.80
 SE#1 98.02 SHWT 90.02
 SE#2 97.13 SHWT 89.13

EXIST CESSPOOL

EXIST WELL

DESIGN DATA

Proposed 3 B/R Dwelling / 345 Gals/Day
 Soil Cat #1m - I/A Loading Rate 2.3 Gal/SF/Day
 SHWT = 8' Design Depth
 Minimum Required Area = 150 S/F
 Area Provided = 156 S/F
 SEE ATTACHED TYPICALS & DESIGN CRITERIA



PROPOSED OWTS DESIGN
 for Kyle J. Boyle

AP 13 / Lot 21
 Spring Grove Road, Gloucester

| | | |
|----------|------------|--------|
| DRAWN BY | SCALE 1:30 | 1 OF 3 |
| CHK'D | DATE | |
| TRACED | APP'D | |

BENCHMARK #2
 NAIL SET 1.5' UP POLE #7
 ELEV = 539.00
 (NAVD89)

BENCHMARK #1
 NAIL SET 2' UP POLE #5
 ELEV = 538.00
 (NAVD89)

PARIS IRONS ROAD

(PUBLIC)

TO SNAKE HILL ROAD

EDGE OF PAVEMENT

POLE 8

POLE 7

POLE 6

POLE 5

POLE 4

POLE 3

POLE 2

POLE 1

POLE 0

POLE -1

POLE -2

POLE -3

POLE -4

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POLE -248

POLE -249

POLE -250

POLE -251

POLE -252

POLE -253

POLE -254

POLE -255

POLE -256

POLE -257

POLE -

Subject Property
 AP 10C / Lot 44
 Area = 44,553 SF
 Disturbance < 1 Acre
 Meets Village Zoning Setbacks

Existing DWTS
 #0913-1142

DWELLING

SUBJECT LOT = 48,255SF
 5% Lot Coverage 2,412SF
 Existing Building 1,008SF
 Available Footprint 1,404SF
 Proposed Footprint 1,404SF

AP 10C / Lot 18

Robert F. Angilly, JR.
 No. 3582
 REGISTERED PROFESSIONAL ENGINEER
 Engineering: Robert F. Angilly, Jr., #3047

Thomas E. D'Angelo
 No. D4003
 DWTS DESIGNER CLASS IV
 SOIL EVALUATOR

Soil Evaluation:
 Thomas E. D'Angelo #4003
 WETLANDS DELINEATED
 BY JOSEPH MCQUE, PWS,
 SCIENTIST
 FOR MASSIN & ASSOC.
 C:\McCue\kts.com-Assoc\tes.com

CHESTNUT HILL ROAD

AP 10D / Lot 12

BM EL: 94.27
 Top Sill

LEGEND

- SOIL EVALUATION
- WATER LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SOIL EROSION CONTROL

AP 10C / Lot 17

PUTNAM PIKE (Rte 44)

DWTS DESIGN DATA

Existing Office Building 8 Employees X 15 = 120 Gals/Day
 Soil Cat #4 / Loading Rate 61 Gal/SF/Day
 SHVT = >108" DR 9" DEPTH IMPERVIOUS >1'
 Minimum Required Area = 120/61 = 197 S/F/Proposed = 220 S/F
 Proposed Mixed Use 2 B/R & 7 Person Office = 335 Gals/Day
 Soil Cat #4 / Loading Rate 61 Gal/SF/Day
 SHVT = >96" DR 8" DEPTH >10"
 Minimum Required Area = 335/61 = 525 S/F/Proposed = 568 S/F

NOTES

Pump, Abandon and Fill Existing Cesspool
 Bring 1st & 3rd Chamber/D-Box to Grade on 'A' & 'B'
 Bring All Tank Covers To Grade
 Install Effluent Outlet Filter
 SEE ATTACHED TYPICALS & DESIGN CRITERIA

SCALE 1" = 30'

| NO. | DATE | BY | REVISIONS |
|-----|------|----|---|
| 1 | | | TERRY LANE COMPANY Land Use Facilitators 15A Terry Lane, Chepachet, RI 02814 (401) 568-8006 DVTSR@gmail.com |
| 2 | | | GREGORY & DENISE AGNINE 2-2A Chestnut Hill Road Glocester, RI AP 10C / Lot 44 |
| 3 | | | |

