From: <u>Carroll, John</u>
To: <u>Karen Edwards</u>

**Subject:** For the Planning Board and Conservation Commission

**Date:** Sunday, May 17, 2020 8:46:28 PM

## May 17, 2020

To the Durham Planning Board and Durham Conservation Commission,

The definition of the word "obliteration", according to the Merriam-Webster Dictionary, is "to remove from existence, to destroy utterly all trace, indication or significance".

If the Durham Conservation Commission and Durham Planning Board allow the construction of a road in the town-owned Gerrish Extension right-of-way, it is no exaggeration to say that this jurisdictional wetland will be obliterated. Wetlands on adjacent neighbors' private property, and on the developer's property, will be damaged if a conditional use permit were to be approved. Such a permit will, in fact, damage town-owned land whose stewardship the town has an obligation to protect. There are also likely downstream consequences in Madbury, given greater and more rapid run-off amidst steadily increasing precipitation (the latter as documented in the reports of the Strafford Regional Planning Commission, the State of New Hampshire, and the federal government).

Article XIII of the Durham Town Zoning Ordinance clearly states that the Wetland Conservation Overlay District, in which that wetland sits, is designed to protect the quality and functioning of wetlands throughout the town. Its provisions, as stated, are intended to:

- A. Protect the water quality of wetlands;
- B. Minimize flooding and flood damage by preserving the flood storage capacity of wetlands;
- C. Protect wildlife and fisheries habitats and wetlands vegetation;
- D. Maintain stream flow and ground water re-charge;
- E. Conserve natural beauty and scenic quality; and
- F. Limit use of the wetland and upland buffer to those uses that are consistent with these objectives.

There is no way that the planned obliteration of ALL of that wetland on the townowned land of the so-called "Gerrish Extension" can be seen to meet any of these provisions of the zoning ordinance. Any attempt to restore those wetlands after road construction does not restore any natural habitat, any wetlands. This is true for the 28' right-of-way (i.e., the 20' wide road, plus the additional 8' buffer strips and supporting guardrail placement on the roadside), nor the additional 22' for the operation of destructive construction equipment. All the developer can do is attempt to plant that small 22' wide remainder with wetland plant species, hardly an adequate replacement for the complete destruction of what nature has provided (and that is today functional).

New Hampshire State law clearly states (Title L - Watershed Management and Protection, RSA 482-A - Fill and Dredge in Wetlands) its identification of the application of this statute "to any bog or swamp subject to periodical flooding by freshwater".

Project engineer Sievert and project wetland scientist West, both highly experienced in their fields, likely know all there is to know about such town-level wetlands rules and, as well, state wetlands statutes.

Federal law has much to say additionally about nitrogen (N) loading into Great Bay, a subject of some controversy in our area, as the Town of Durham takes a more concerned position on this matter than do some of its neighboring cities in the region. And Durham needs to credibly defend its position before Dover, Rochester, and some other municipalities. This project, with its houses, roads and wetlands destruction, can represent additional N loadings into the bay, a federally protected body.

If these wetlands are obliterated in the "Gerrish Extension Right-of-Way", does not that action alone violate both Durham zoning ordinance and, as well, New Hampshire state law? And is this not the case even if the developer claims the ability to restore or regrow parts of the obliterated wetland with wetland plant species? These replacement plants do not constitute the fully functioning wetland that was destroyed.

Given that wetlands scientist Mark West has concluded that the town-owned jurisdictional wetlands of the Gerrish Extension are fully functioning wetlands (as he stated on the Conservation Commission site walk);

Given that it is not an exaggeration to say that the entirety of said wetlands will be obliterated on the town-owned land of the Gerrish Extension to make way for a road, pipeline and utilities;

Given that ALL of the tree cover in these wetlands will be removed (as also stated on the Conservation Commission site walk), thus removing the water absorption capacity of these trees (reference: US Forest Service Urban Forester John Parry of Durham);

Given that the naturally absorptive (i.e., pervious) surface of these wetland soils will be replaced with hard non-absorptive (i.e., impervious) surface which, when combined with the broader conversion of permeable to non-permeable surface to allow for roads, buildings and utilities in the proposed housing development, and given that these conversions from permeable to impermeable surfaces could very well result in downstream flooding in Gerrish Brook and Johnson Creek, flooding further exacerbated by increasing annual precipitation (reference: Strafford Regional Planning Commission flood maps which indicate that the Gerrish Brook/Rte.108 intersection is vulnerable to tidal flooding in the future driven by rising sea levels, a flooding which would be further exacerbated by rising freshwater flooding in Gerrish Brook); and

Given that, as a result of this wetland destruction and advent of new paving and housing, nitrogen (N) and other pollution loading would logically increase into Great Bay (via Johnson Creek and the Oyster River) (reference: Prof. Wil Wollheim of Durham, Associate Professor of Freshwater Resources, UNH Department of Natural Resources and Environment), a concern of the federal government (EPA), as well as other town and city governments in the watershed of the bay (and concomitantly weakening Durham's position in its dealings with EPA and with neighboring towns and cities);

Therefore, construction of a Gerrish Extension with its complete obliteration of functioning wetlands (functioning as agreed to by all parties) should not be permitted, and the remainder of this project should be carefully studied for downstream hydrological and perhaps water quality impacts. It is therefore fundamental that the town hire, at the expense of the applicant, an independent professional hydrologist to assess the downstream impacts of this project in the Gerrish Brook and Johnson Creek watersheds, and, for wetlands assessment, an independent wetlands scientist who is answerable directly to the town, not to the applicant. These questions need objective answers.

As the signs in our neighborhood so generously provided by our neighbor say, "Protect Our Wetlands". That goes for our town and our state as well as our neighborhood.

John E. Carroll

**Professor Emeritus** 

of Environmental Conservation

UNH

Member, Durham

Land Stewardship Subcommittee An Aside:

Chuck Marohn, a nationally known Town Planner and Town Engineer, founder of the Strong Towns movement and author of the new book, Strong Towns: A Bottom-Up Revolution to Rebuild American Prosperity (2019), writes in his new article, "Ten Tasks for Cities Responding to the Pandemic" this message to cities and towns: "Prioritize maintenance over new capacity. With such a massive backlog of basic maintenance needs, it's irresponsible to build additional capacity. If you can use assistance dollars to fix critical infrastructure, make that the priority."

This is an argument against building any new infrastructure, including new housing subdivisions, roads, sewer line extensions, etc., and focusing on RE-BUILDING existing infrastructure in our town.