Dear Chair Clarke and the Richmond Planning Commission,

I am writing to submit comments and suggestions regarding the Planning Commission's draft Flood Hazard amendments to the Richmond Zoning Bylaws. Specifically, I am writing to address the proposed definitions of "Trail" and "Recreation Path" on page 34 (the final page) of the proposed amendments. As I understand, the amendments are set to be discussed at the Planning Commission meeting on December 4, 2024 and again in a public hearing on January 15th, 2025. Please include my comments in the public record if possible and distribute them to all board members and the public.

I am a Richmond resident, a former member of the Richmond Conservation Commission, and a current board member of the Richmond Mountain Trails (RMT), which is a Chapter of the Vermont Mountain Bike Association. RMT represents over 1,000 active members of hikers, runners, mountain bikers, and general trail users that recreate in the Richmond area. RMT collaborates with the Richmond Trails Committee and the Conservation Commission to maintain trails in and around Richmond, and to ensure they are developed and used responsibly and sustainably. I have over 10 years of personal experience in building and maintaining trails and have overseen the construction of trails built by professional trail builders hired by RMT.

I have a bachelor's degree in environmental studies with a concentration in conservation from the University of Vermont, and a law degree from Vermont Law. My current practice encompasses the field of land use law. As a caveat, I am not acting as an attorney in this instance and cannot offer the Town of Richmond legal advice. I am reaching out solely as a concerned and informed Richmond resident.

In short, the proposed definitions will have a wide range of unintended impacts upon the people of Richmond and I believe there needs to be wider input from the trail steward community including the Richmond Trails Committee (RTC), Richmond Mountain Trails (RMT) and the Vermont Mountain Bike Association (VMBA), the Green Mountain Club (GMC), and other trail organizations that operate in and around Richmond.

As written, the proposed definition of "recreation path" and "trail" would require a permit for someone creating a small path down to their pond from their backyard, or for a basic woods path to and from the neighbor's. It could even be construed to require a permit for a path that is walked enough that it disturbs the soil. Ultimately, the language as-drafted is unnecessarily strict and makes arbitrary (and potentially environmentally deleterious) limitations to trail construction, use, and width.

At the state level, the State of Vermont views non-motorized trails as de minimis development up until they meet certain thresholds. De minimis development is typically defined as development that is minor enough that it is exempt from (most) regulation and does not require a permit. At the state level, for public access trails in the Vermont Trail System, Act 250 is triggered when a trail or trail system will disturb more than 10 acres of earth. For a 10-ft wide disturbance corridor, this equates to 8.25 miles of trail. Act 250 district coordinators assume a 10-ft disturbance, but many trails are evaluated to show a smaller corridor and corresponding increase in allowed length. Trails below that length are still subject to wetlands and other similar

regulations. In many other towns, trails only need to be permitted if the development of a parking lot is required to serve the trails, as it may impact traffic patterns.

I would highly suggest taking more time to invite key stakeholders to discuss the issue and invite specific feedback.

In the meantime, I would suggest something closer to the following definitions:

Recreation Path – a path designed for non-motorized traffic¹, such as pedestrians, cross-country skis, and bicycles. Recreational paths can be "natural trails" or "improved trails". Recreation paths shall be allowed in any district. Parcels of land which do not meet the lot area requirements for a Zoning District but which are suitable for recreation path use may be conveyed to the Town, a land trust, or similar group, to be utilized for such purposes.

"Natural Trail" – a non-paved path designed for non-motorized use and has been improved only by the removal of vegetation and surface organic soil, and use of materials in and around the pathway² or bridges and walkways less than 16 feet in length. Natural trails must have a construction impact corridor narrower than 10 feet and a surface tread narrower than 5 feet.³
Natural trails are a de minimis use not requiring a permit except in flood hazard overlay districts.
Natural trails or trail networks on one contiguous property exceeding 8.25 miles in length are a permitted use.

"Improved Trail" – a non-paved path where alterations to the landscape of and around the path may involve significant addition or removal of fill, use of fill from offsite; use of heavy machinery resulting in an impact corridor wider than 10 feet, a surface tread wider than 5 feet, addition of gravel or pavement; addition of accessory structures such as, but not limited to, boardwalks and bridges exceeding 16 feet⁴. Improved trails are an allowed use. Improved Trails built on slopes exceeding 20% will require a professionally-prepared design to mitigate erosion and sedimentation by an insured trail builder or engineer⁵.

¹ Non-motorized encompasses pedestrians, cyclists, skiers, snowshoes and all other human-powered transportation. Pedestrian could be vague and may unintentionally exclude other users.

² Exposing the mineral soil is a key step in ensuring sustainability for any trail. Paths where only vegetation is removed are typically unsustainable for pedestrian and bicycle traffic. The surface soil (often referred to as organic soil) will churn up under consistent use and turn muddy. Trail users will avoid the mud and widen the trail. Removing the organic layer and exposing the mineral soil of the trail allows for a resilient trail surface that can drain effectively and will ensure trail users do not stray from the path. In most instances it is possible to remove organic soil with basic hand tools. Not allowing for this removal will incentivize unsustainable trail development.

³ The State of Vermont uses 10 feet as an average potential impact corridor during construction. Hand built trails typically have a smaller (3-5ft) impact. Adaptive cycles require a minimum width of 40-48" to operate in most cases, so 60" allows more room to operate.

⁴ Often a small footbridge is the most sustainable way to reduce impact to an area with poor drainage. Small bridges or boardwalks reduce impact on the trail surface while allowing the natural flow of water. Typical lumber available is 16 foot maximum. Bridges over 16 feet also may require engineering to ensure user safety.

⁵ Depending on the location and type of trail built, a professional trail builder likely has more experience than an engineer in mitigating erosion and sedimentation from water runoff on a trail. For example, an engineer may more readily suggest culverts (which require consistent maintenance) vs. surface hardening of drainage crossings, both of which accomplish the goal of mitigating erosion of the trail and sedimentation of runoff.

These definitions would regulate trails that result in a more significant impact to the construction area and/or would require significant infrastructure to put in place. Simultaneously, these definitions would allow natural trails to continue to be constructed (under certain limitations) as they have a de minimis development impact.

I am happy to attend meetings to explain any and all proposed changes. I can also provide additional educational materials on modern trail building standards and design if requested. As a conservationist and a trail steward I know the importance of both regulating trail development and encouraging individuals to enjoy the outdoors. I appreciate the Planning Commission's efforts.

Thank you for your time and attention,

Maxwell Krieger -Max Krieger

Max.krieger@gmail.com