



“We raise awareness, educate and motivate residents, town government, and business owners to reduce waste of all forms and to create a healthy, vibrant future for all.”

Sustainable Milton, Inc.
11 Standish Road
Milton MA 20186

Mr. John Kiernan, Chair
Milton Conservation Commission
629 Randolph St.
Milton, MA 02186

November 21, 2023

Dear Mr Kiernan and the Members of the Conservation Commission,

On behalf of Sustainable Milton, I am writing to express our concern over the proposal to replace the natural grass field with a plastic artificial turf field. While we understand there is a need for improved and more consistent athletic fields in Milton, our view is that a natural grass field poses significantly less risk to public and environmental health when compared with artificial turf, and therefore is a safer option.

Sustainable Milton is a volunteer-based, 501c3, non-profit organization whose mission is to educate and ensure that our community and its leaders are keeping it vibrant and healthy for now and in future. After [learning](#) about the carcinogenic effects of PFAS exposure and environmental impacts of replacing natural grass with artificial turf



material, we conclude that replacing grass fields with artificial turf would be a decision we will come to regret.

PFAS

Per- and polyfluororoalkyl substances (PFAS) are a large group of ‘forever chemicals’ found in cleansers, textiles, leather, paper and paints, fire-fighting foams, and wire insulation. Clinical research has demonstrated that certain PFAS can accumulate and stay in the human body for a long period of time and there is also evidence that exposure to PFAS can lead to adverse health outcomes ([EPA](#)).

The argument can be made that PFAS substances are everywhere. However, this does not change the fact that we are just beginning to [understand](#) their negative effects on our bodies, our children’s developing bodies, as well as the broader impacts at an ecosystem level. [Boston recently banned new artificial turf fields](#) due to the risks of adding more PFAS to the environment. [Portsmouth, NH](#) recently voted to install an artificial turf field that was “PFAS-free ” and that was not actually the case. And historically, numerous chemicals introduced in commercial applications ended up having deleterious impacts.

There are currently at least two bills in the State Senate and House of Representatives regarding Banning Artificial Turf projects statewide, Bill [H.3945](#) and [S.2057](#).

Plastic Waste

We, as a global community, are fighting to combat the millions of tons of [plastic waste](#) that is produced and accumulating on our planet.



Removing a large swath of natural grass and replacing it with plastic materials will directly contribute to this problem. For years to come, these materials will leak microplastics and other chemicals into the surrounding environment, including Pine Tree Brook. And, when the lifespan of the plastic turf is up, within a decade or so, it can't be recycled. Instead, it will need to be incinerated or transported to a landfill and replaced.

Climate impacts

Extreme [heat waves](#) will likely be occurring more frequently in the upcoming years as we have seen in trends over the past decades.

The heat on the plastic turf fields have been documented to be [significantly higher](#) than on natural grass fields. *One study conducted at Brigham Young University found that “The surface temperature of the synthetic turf was 37° F higher than asphalt and 86.5° F hotter than natural turf.”* Not only does the extreme heat impact our kids during playing time but the warming of the runoff into Pine Tree Brook poses increased risk to fish populations.

The Neponset River Watershed Association documented their concerns in a letter to the Conservation Commission (dated April 11, 2023) in regards to the Lower Gile Field project's proximity to Pine Tree Brook and the associated Neponset River Estuary. There are significant threats of negative environmental impacts of the artificial turf field described in the letter: heat being one of them, but also included was increased solid pollutants, and chemical pollutants. We echo the concerns of this trusted community organization when considering the health of the ecosystem.



Injury risks

Lastly, many published [reports](#) document increased rates of injury to players on artificial turf when compared to grass. The [NFL](#) has debated this issue for many years, and despite improvements in technology of shock absorption to lessen injuries, an overwhelming majority of players prefer natural grass due to the high risk of non-contact injuries to the knees and ankles. [FIFA](#) has banned artificial turf in the world cups matches for 2026. These arguments are not intended to compare our level of play with professional athletes, but serve as clear examples that are worth considering when deciding what is best for our sports teams. Safer surfaces should be considered to minimize injury of our players.

Conclusion

Artificial turf fields will allow for more consistent playing time for Milton's sports teams, but is it worth taking all of these risks? SM is concerned that the negative effects on public and environmental health by replacing natural grass fields with artificial turf outweigh the benefits. We strongly suggest choosing the alternative, a safer natural grass field, with proper maintenance using natural inputs and field-management practices.

Sincerely,

Lauren K. Borofsky

Lauren K Borofsky DVM

President of Sustainable Milton, On behalf of the Board.