

Article 23: Resolution to create an Athletic Field Surface Task Force
Article 24: Amend the Town’s General Bylaws pertaining to Artificial Turf Surfaces

Recommendation:

By a vote of 6-0-0, the Capital Subcommittee votes Favorable Action on Article 23, as amended.
 By a vote of 6-0-0, the Capital Subcommittee recommends Referral of Article 24.

<p>Executive Summary:</p>	<p>Article 23, as filed, calls for the Park and Recreation Commission to appoint an Athletic Field Surface Task Force consisting of individuals with diverse backgrounds in such areas as athletics, recreation, risk assessment, public health, toxicology, children’s socio-emotional development, etc. and to charge the Task Force with drafting a policy identifying the circumstances under which athletic fields in the town should be synthetic turf or natural grass, with the policy finalized by the Commission.</p> <p>Article 24 was filed to impose a moratorium on the installation of synthetic turf on any Town property for three years, while still allowing for the replacement of the existing synthetic turf fields at Skyline Park and Soule Recreation. As amended by the petitioner, after June 1, 2025 any new synthetic turf field would have to be free of organic fluorine, and after June 1, 2030, any replacement synthetic turf field would have to be free of organic fluorine.</p> <p>By a vote of 6-0, the Capital Subcommittee recommends Favorable Action on an amended motion under Article 23, and by a vote of 6-0, it recommends referral of Article 24 to the Task Force identified in Article 23.</p>
<p>Voting Yes will...</p>	<p>Voting Yes on Article 23, as amended, will result in the Select Board, in consultation with the Park and Recreation Commission and the Advisory Council on Public Health (ACPH), appointing a Task Force to develop decision guidelines relative to installing artificial turf or natural grass in the town’s athletic fields.</p> <p>Voting Yes on Article 24, as amended, would refer the subject matter of Article 24 to the Athletic Field Surface Task Force while still permitting the replacement of existing artificial turf fields with new artificial turf.</p>
<p>Voting No will...</p>	<p>Voting No on Article 23 would result in the Park and Recreation Commission having no guidelines generated by an expert panel to assist them in developing a policy by Fall 2022 regarding the use of artificial turf versus natural grass for athletic fields.</p> <p>Voting No on Article 24 would result in no restrictions on installing artificial turf on Town-owned properties.</p>
<p>Financial impact [if any]</p>	<p>Dollar impact – Artificial turf is more expensive than natural grass sod to purchase but less expensive to maintain. Because artificial turf allows use for a longer period during the year and during more conditions (i.e. after a rain storm), revenue from renting artificial turf fields is enhanced. The season for renting out grass fields is shorter and the weather conditions during which the grass fields can be rented are more limited.</p> <p>Staff impact – Grass fields require more maintenance by Park Department</p>

	<p>crews.</p> <p>Subsequent to the Capital Subcommittee hearing, the following information was received. An analysis done for Harry Downes Field comparing the per-hour-of-use capital and maintenance costs for a natural grass field against the those of an artificial field over a 20-year cycle concluded that: (a) the costs of the grass field (\$73/hour) would be slightly higher than those of the artificial field (\$64/hr) if the grass field were not closed for rest periods; and (b) would be about three times higher for the grass field (\$198/hr) than those of the artificial field (\$64/hr) if the grass field were closed for the recommended rest periods.</p>
Enforcement impact	Not Significant
Legal implications	Waiting for reply from Town Counsel regarding potential liability issue

Introduction

Article 23, as proposed by the petitioner, seeks to have the Park and Recreation Commission form an Athletic Field Surface Task Force, composed of individuals who offer expertise in and perspective on such matters as athletics, recreation, education, environment/climate, toxicology, risk assessment, capital planning, public health, and the socio-emotional and physical development of children. The purpose of this group would be draft a policy regarding the uses of artificial turf and natural grass for athletic fields, after which the Park and Recreation Commission would hold a public hearing and finalize the policy.

Article 24, as amended by the petitioners, proposes the following:

- 1) Brookline shall not install artificial turf on any town-owned property for three years except to maintain or replace existing artificial turf fields.
- 2) Beginning June 1, 2025, any new artificial turf field installed on town property must be free of organic fluorine
- 3) Beginning June 1, 2030, any replacement artificial turf field installed on town property must be free of organic fluorine

Evaluation Methodology/Research

- Memorandum from Alexandra Vecchio, Director of Parks and Open Space and Erin Gallentine, DPW Commissioner relative to Articles 23 and 24
<https://www.brooklinema.gov/DocumentCenter/View/30426/Article-23-and-24-Memorandum-03-30-2022?bidId=>
- Brookline’s Athletic Field Deficit Challenge and FAQs
<https://www.brooklinema.gov/DocumentCenter/View/30427/Athletic-Playing-Field-Deficit--Solution-Summary-and-FAQs-03-30-2022>
- “Intense Summer Heat Fluxes in Artificial Turf Harm People and Environment”. C.Y. Jim, *Landscape and Urban Planning*, 157 (2017) 561-576.
- Park School Flyer on Turf
<https://www.brooklinema.gov/DocumentCenter/View/30475/Park-School-Flyer-on-Turf>

- MAPC Brookline Vulnerability Assessment (https://www.brooklinema.gov/DocumentCenter/View/30744/MAPC_Brookline_Vulnerability_Assess_2017-12_p24-25)
- October 19, 2021 Solid Waste Advisory Committee memo on Artificial Turf Field (<https://www.brooklinema.gov/DocumentCenter/View/30688/SWAC-Memo-on-Artificial-Turf-10-19-21>)
- April 6, 2022 Letter from Kayla Bennett, Director, Science Policy, Public Employees for Environmental Responsibility (<https://www.brooklinema.gov/DocumentCenter/View/30530/BrooklineTurfLtrFinal>)
- Letter from the co-chairs of the Select Board’s Climate Action Committee re Cypress Playground Improvements/Synthetic Turf, October 23, 2017 <https://www.brooklinema.gov/DocumentCenter/View/30748/Ltr-P-R-Cypress-Field-SCAC-2017-10-23>
- Multiple emails from members of the public
- Town Meeting’s Vote on Special Appropriation 71 under Article 7 of the 2018 Town Meeting prohibited installing “plastic turf” on Cypress Field.

Discussion

Recording of the April 7th hearing:

<https://brooklinema.zoomgov.com/rec/share/Rw8c6LFdh96y4km3-W9o0OG0Ik9yY34wwlMmzIaaycwwWxhWszNL4uqUKOYleUJi.ryFBwBI4E5NZc1ZB>

Access Passcode: @6LTAx79

Recording of the April 11th meeting (continuation): https://brooklinema.zoomgov.com/rec/share/wxfSQiY6-z1UP1cUOF0DQ_9o4kz-nP9FKYEObYxBTgeALauBknXVSfSHEfcrUGyp.ycVgM9Nsj0XIsNmL

Access Passcode: 0G+c+A\$4

The Capital Subcommittee held a public hearing via Zoom on Thursday, April 7th beginning at 5:00 pm to take public comment and to discuss, deliberate, and possibly vote on Articles 23 and 24. The hearing was continued to Monday, April 11th at 5:00 pm. Attending were Subcommittee members Harry Friedman, Pam Lodish, John Doggett, Alok Somani, Carol Levin, and Carla Benka; DPW Commissioner Erin Gallentine; Director of Parks and Open Space Alexandra Vecchio; Director of Recreation Leigh Jackson; Article 23 petitioner Mike Toffel; Article 24 petitioners Clint Richmond, Andrew Fischer, Susan Helms Daley and Claire Stampfer; Park and Recreation Commissioners John Bain, Clara Batchelor, Wendy Sheridan Ames, and Antonia Ballata; Director of Health and Human Services Sigalle Reiss; Senior Landscape Architect with the Division of Parks and Open Space Scott Landgren; Assistant Director of Recreation Jon Lewitus; School Committee member Helen Charlupski; Driscoll School Principal David Youkilis; Town Meeting members Dennis Doughty, David Pollak, Nicole McClelland, Scott Ananian, Regina Frawley, Casey Hatchett, Janice Kahn, and Len Wholey, and many members of the public.

Article 23, filed in response to Article 24, recognizes that deciding whether to install artificial turf or natural grass at athletics fields requires technical expertise from across a variety of disciplines and the balancing of the demand for outdoor athletic opportunities against the potential health risks resulting from exposure to certain chemicals and the potential

environmental impacts of an artificial surface. Therefore the article presents a resolution by which Town Meeting would urge the Park and Recreation Commission to appoint a Task Force on Athletic Field Surfaces, comprising individuals with specified expertise and experience, that would produce an Athletic Field Surface Policy identifying the circumstances under which synthetic turf or natural grass should be utilized for athletic fields.

The Capital Subcommittee unanimously supports the formation of such a group, but recommends substituting the Select Board, in consultation with the Park and Recreation Commission and the Advisory Council on Public Health, as the appointing authority. It further recommends that the Task Force be charged with developing decision guidelines (a “decision-making tree” or rubric of pros and cons for synthetic turf versus natural grass) to help inform any policy developed by the Park and Recreation Commission that addresses materials to be used for athletic field surfaces. The Subcommittee believes that the appointing authority should have a Town-wide perspective and access to a wide range of networks, including those with expertise relating to the concerns relevant to this issue, but that the responsibility for developing a policy for athletic fields should rest with the Park and Recreation Commission.

Article 24 was filed to amend the general by-laws, thereby imposing a moratorium on the creation of additional artificial turf fields until such time as the materials used in manufacturing artificial turf meet specific standards. The petitioners note that the presence of toxic chemicals in materials that are used to manufacture synthetic turf are of concern and that the relatively recent identification of PFAS in artificial turf makes that concern even greater. In addition, once artificial turf can no longer be played upon, its disposal becomes problematic because there are currently few ways that it can be recycled or repurposed. Furthermore, the Green House Gas emissions associated with the manufacture and installation of synthetic turf contribute to climate change, as do the documented urban heat islands that synthetic turf fields create in the summer months.

There are currently four artificial turf fields in the town: Skyline Park, Soule Recreation, Ridley School, and Harry Downes Field. Article 24, as amended by the petitioner, would permit new artificial turf to replace existing artificial turf at Skyline Park (a project scheduled for FY 23) and at Soule Recreation (a project scheduled for FY 27). It would prohibit the use of artificial turf at the new Driscoll School as currently designed and scheduled to open in June of 2024. The cost of a potential change to a grass field is not fully known as this time; initial indications show a neutral budget impact but a one-year delay in the opening of the field.

The Subcommittee recognizes the validity of the issues raised by Article 24’s petitioners and supporters. It also recognizes the legitimacy of the arguments made by its opponents who note the scarcity of playing fields in general, the restricted use of grass fields due to weather, the inability of grass to withstand constant use, and the very real need of people - and children in particular - to have access to outdoor recreational activities, exercise, and social interaction with their peers through informal and formal athletic opportunities. Therefore the Subcommittee recommends referral of Article 24 to the Task Force identified in Article 23 with the belief that this panel, with its diverse perspectives and expertise, will be helpful in pinpointing the critical factors that should be considered in developing a policy that seeks to strike a balance between the current conflicting goals expressed by supporters and opponents of Article 24

Recommendation

By a vote of 6-0, the Capital Subcommittee recommends Favorable Action on Article 23, as amended by the Subcommittee.

By a vote of 6-0, the Capital Subcommittee recommends Referral of Article 24 to the Task Force identified in Article 23, with the understanding that the maintenance and replacement of the artificial turf that exists on currently artificial turf fields, including Skyline Park and Soule Recreation, may proceed.

ARTICLE 23

Submitted by: Mike Toffel (TMM 8)

Motion of the Capital Subcommittee

~~To see if the Town will adopt the following Resolution:~~

VOTED

WHEREAS Town Meeting is responsible for funding capital and operating budgets to install and maintain Brookline's athletic fields; and

WHEREAS the Park and Recreation Commission recently oversaw the completion of the 2020 Athletic Fields Needs Assessment and Master and the Parks, Open Space and Recreation 2020 Strategic Master Plan Update, which concluded "The quantity and size of Brookline's athletic fields, especially multi-use turf fields, continue to not meet the current demand or the Level of Service standards for Brookline;" and

WHEREAS Brookline has recently installed a synthetic turf athletic field at the Ridley School, a grass turf athletic field at the Cypress Street Playground, and is planning to install a synthetic turf athletic field at the new Driscoll School where building construction has already begun; and

WHEREAS Brookline is implementing several best practices when procuring synthetic turf athletic field, including (a) procuring only organic infill for its synthetic turf athletic fields to avoid potential health risks associated with crumb rubber and to dramatically reduce "heat island" effects; (b) developing additional technical specifications in its Request for Proposals, such as requiring manufacturers to disclose whether their products contain certain chemicals of concern; and, requiring vendors to indicate whether and how they will recycle or repurpose turf components when Brookline uninstalls them; and

WHEREAS some concerns have been expressed about the environmental, safety, and health impacts of synthetic turf and of grass turf, and that installing grass turf in locations with high usage quickly transforms the surface to compacted dirt, reducing its safety, availability, and aesthetics; and

WHEREAS the decision between installing grass turf or synthetic turf at a particular athletic field entails many complicated tradeoffs, including: (1) how much time the field can be used

each week to prevent compaction that can impede safety, (2) how much time the field will be unavailable for use during and following wet weather, (3) how much time the field will be unavailable for use each spring and fall for “rest periods”, (4) how consistently and for how long the playing surface will retain its original desirable properties given anticipated usage intensity (e.g., soft grass versus compacted dirt), (5) equity concerns associated with accessing alternative field space—often beyond walking range, necessitating driving—when field closures occur due to wet weather or seasonal rest periods, or if program constraints are imposed to preserve field surface conditions; (6) risk of user injury, (7) risk of user safety associated with possible heat island effects, (8) possible health risks associated with chemical exposure, (9) end-of-life disposition, (10) installation costs; (11) maintenance costs, (12) replacement or revitalization frequency, and perhaps additional criteria; and

WHEREAS the Brookline Park and Recreation Commission lacks a formal policy guiding the circumstances under which it will recommend that athletic fields should be grass turf or synthetic turf; and

WHEREAS a nuanced understanding of the many factors involved should inform such a policy, diverse expertise should be brought to bear to consider their tradeoffs, consult with the wide array of ~~affected~~ **affected** stakeholders, and be developed through a public meeting process, and Town Meeting itself does not possess all the required expertise or the time to sufficiently consider the tradeoffs to develop an appropriate policy for Brookline.

NOW THEREFORE BE IT RESOLVED THAT:

Town Meeting ~~urges the Parks and Recreation Commission to~~ **requests the Select Board, in consultation with the Park and Recreation Commission and the Advisory Council on Public Health, to take the following actions:**

(1) **Understanding that time is of the essence, that by June 30, 2022,** ~~A~~ **appoint an Athletic Field Surface Task Force, consisting not only of a few Parks Park and Recreation Commission and Advisory Council on Public Health members, or their designees, but also other community members, individuals with professional expertise and Town and School staff members that bring diverse perspectives such as athletics, recreation, turf management, the Public Schools of Brookline, education, environment/climate, toxicology, risk assessment, public health, children’s socio-emotional and physical development, capital planning, and perhaps other domains;**

(2) Charge the Task Force to conduct its meetings in a manner that is consistent with the provisions and intent of the Open Meeting Law;

(3) Charge the Task Force with proposing a ~~draft~~ Athletic Field Surface **Policy Decision Guidelines** to the Parks and Recreation Commission **and to the Select Board** by September 1, 2022;

(4) **Charge the Task Force to h**Hold at least one Public Hearing to receive feedback on the ~~draft policy~~ **Decision Guidelines**, notifying **the public and** Town Meeting Members of the Public Hearing;

(5) **Charge the Task Force to report out** ~~Finalize and adopt~~ the **final** Athletic Field Surface Policy **Decision Guidelines**, and notify Town Meeting Members **and the public** of ~~its~~ **their** completion, by October 15, 2022.

ARTICLE 24

Submitted by: Clint Richmond TMM6, Claire Stampfer, Susan Helms Daley TMM1, Andrew Fischer TMM13 [with incorporation of amendments by the petitioner to paragraphs (b) and (c)]

To see if the Town will amend the General Bylaws by adding the following Article:

ARTICLE 8.X ARTIFICIAL TURF SURFACES

ARTICLE 8.X.1 DEFINITIONS

"Synthetic/artificial turf" means any of various artificial, synthetic or partially synthetic carpet-like materials made to resemble natural grass used as a surface for athletics, sports or other recreational activities.

"Targeted PFAS testing" uses EPA approved Methods such as 533, 537.1 and others that are appropriate to solid materials to detect specific PFAS (Per- and polyfluoroalkyl substances).

"Total organic fluorine test" refers to any test that measures total fluorine such as Total Organic Fluorine (TOF) Assay.

ARTICLE 8.X.2 RESTRICTIONS

(a) The Town of Brookline shall neither install nor authorize or allow the installation of synthetic/artificial turf on any property owned by the Town, for a period of three years from the effective date of this moratorium. This moratorium shall not apply to the maintenance or replacement of any synthetic/artificial turf field that has been installed and is existing prior to the adoption of this bylaw amendment.

(b) Beginning June 1, 2025, any new ~~or replacement~~ artificial turf field on Town property must be free of organic fluorine as attested by the supplier, and determined by total organic fluorine test and targeted PFAS testing conducted by an independent laboratory acceptable to the Town of Brookline.

(c) Beginning June 1, 2030, any replacement artificial turf field on Town property must be free of organic fluorine as attested by the supplier, and determined by total organic fluorine test and targeted PFAS testing conducted by an independent laboratory acceptable to the Town of Brookline.

ARTICLE 8.X.3

SEVERABILITY

If any provision(s) of this article is held to be invalid, such provision(s) shall be severable and the remaining sections shall be valid.

or act on anything relative thereto.

Motion of the Capital Subcommittee

VOTED:

To refer the subject matter of Article 24 to the Athletic Field Surface Task Force, appointed pursuant to Article 23 at the 2022 Annual Town Meeting, with the understanding that maintenance or replacement of synthetic/artificial turf that has been installed and is existing prior to the adoption of this resolution, including, but not limited to, the synthetic/artificial turf fields at Skyline Park and at Soule Recreation, is permitted.