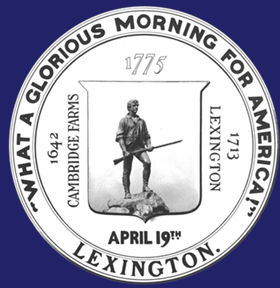


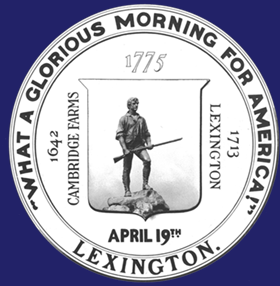
# Article 10i: Lincoln Park Field Improvements including Lighting



# Article 10i: Lincoln Field Project



The Recreation Committee, in collaboration with the Recreation and Community Programs Department, requests an appropriation of \$3,391,500 (\$2,475,000 from CPA funds and \$916,500 from cash capital and tax levy) to complete a project at Lincoln Park comprising the end-of-life renovation of the synthetic turf field at Lincoln Field #1 and the concomitant installation of athletic lighting at Field #1 and Field #3.

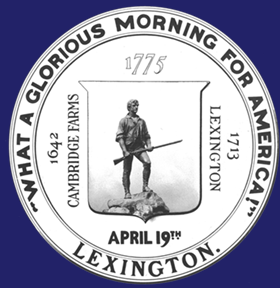


# Article 10i: Lincoln Field Project



On the advice of the Community Preservation Committee, Town Counsel, the Town Manager and the Finance Dept, the “carpet” of an artificial turf system is not eligible for CPA funding, which is why the funding request for this project is split between CPA funds and non-CPA funds (free cash and tax levy).

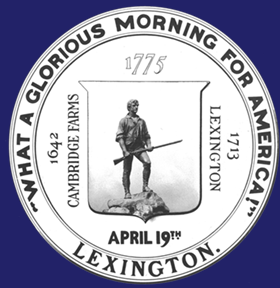
This type of split funding approach has been used for similar athletic field projects including Center Track Field (2020), Lincoln Field #3 renovation (2016), Lincoln Field #2 renovation (2015), and Lincoln Field #1 renovation (2015).



# Article 10i: Lincoln Field Project



Estimated Project Costs		
Design and Engineering		\$45,000
Project Management		\$51,500
Construction		\$652,500
Mobilization and Site Preparation	\$277,500	
Synthetic Turf System Base	\$350,000	
Site Repair/Landscaping	<u>\$ 25,000</u>	
	\$652,500	
Equipment (athletic lighting for two fields)		\$1,226,000
<u>Contingency (~14 %)</u>		<u>\$500,000</u>
<b>Subtotal – CPA</b>		<b>\$2,475,000</b>
<u>Equipment (turf “carpet”) – CPA ineligible</u>		<u>\$916,500</u>
<b>Subtotal – nonCPA</b>		<b>\$916,500</b>
Free Cash (per Town Manager/Finance)	\$216,500	
Tax Levy (per Town Manager/Finance)	<u>\$700,000</u>	
	\$916,500	
<b>Total</b>		<b>\$3,391,500</b>



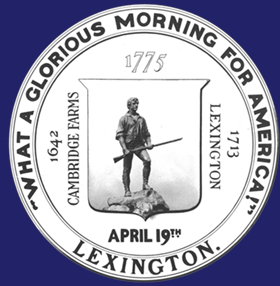
# Article 10i: Lincoln Field Project



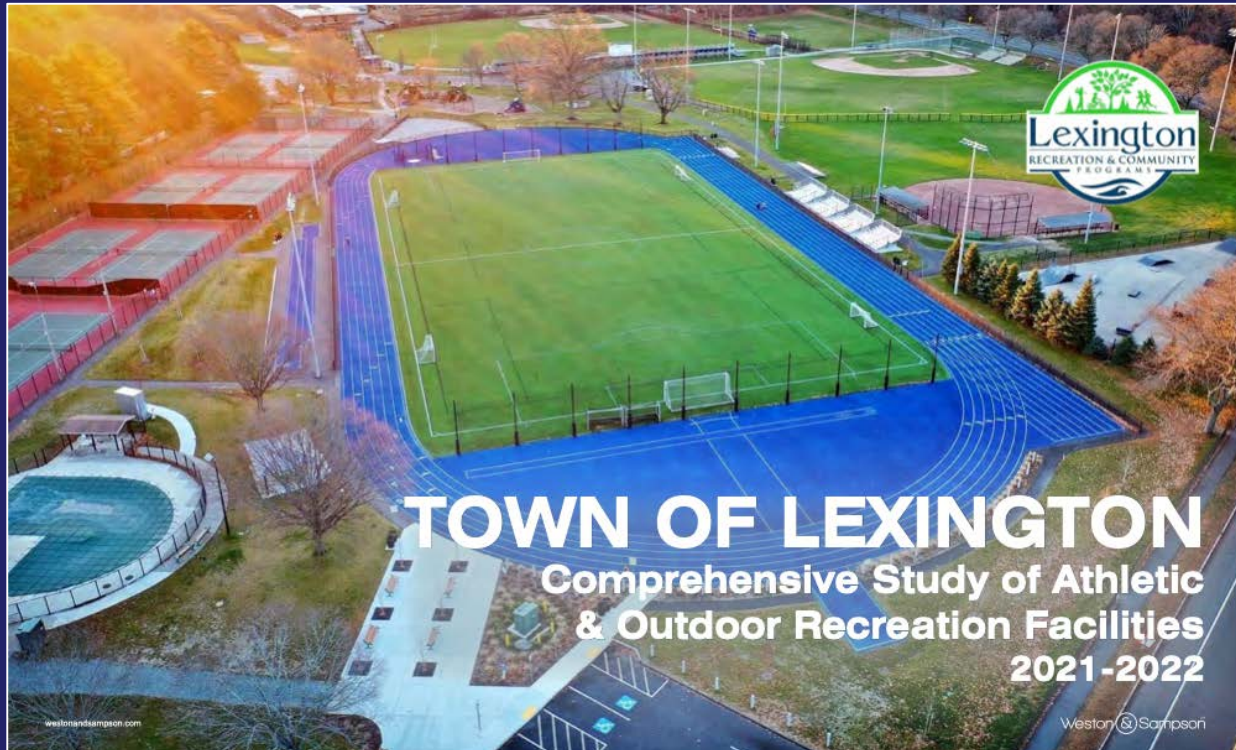
The rationale for this project:

First, Lincoln Field #1 was renovated in 2015 with an expected lifespan of 8-10 years indicating end-of-life between 2023-2025. Annual safety testing indicates that the field is due for replacement in 2024.

Second, Lexington currently operates at a substantial deficiency in available rectangle field hours relative to the demand in the community, and the anticipated Lexington High School building project is projected to make the problem acutely worse from approximately 2026-2030. This project is part of the proactive steps we're taking now to partially mitigate this impending loss of fields.



# Comprehensive Study of Lexington Fields



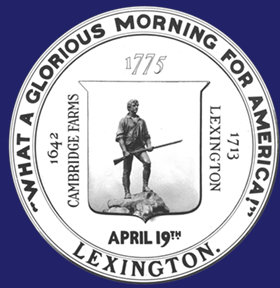
Complete report is available under the “Master Planning & Assessment” tab at:

<https://www.lexingtonma.gov/527/Capital-Projects>

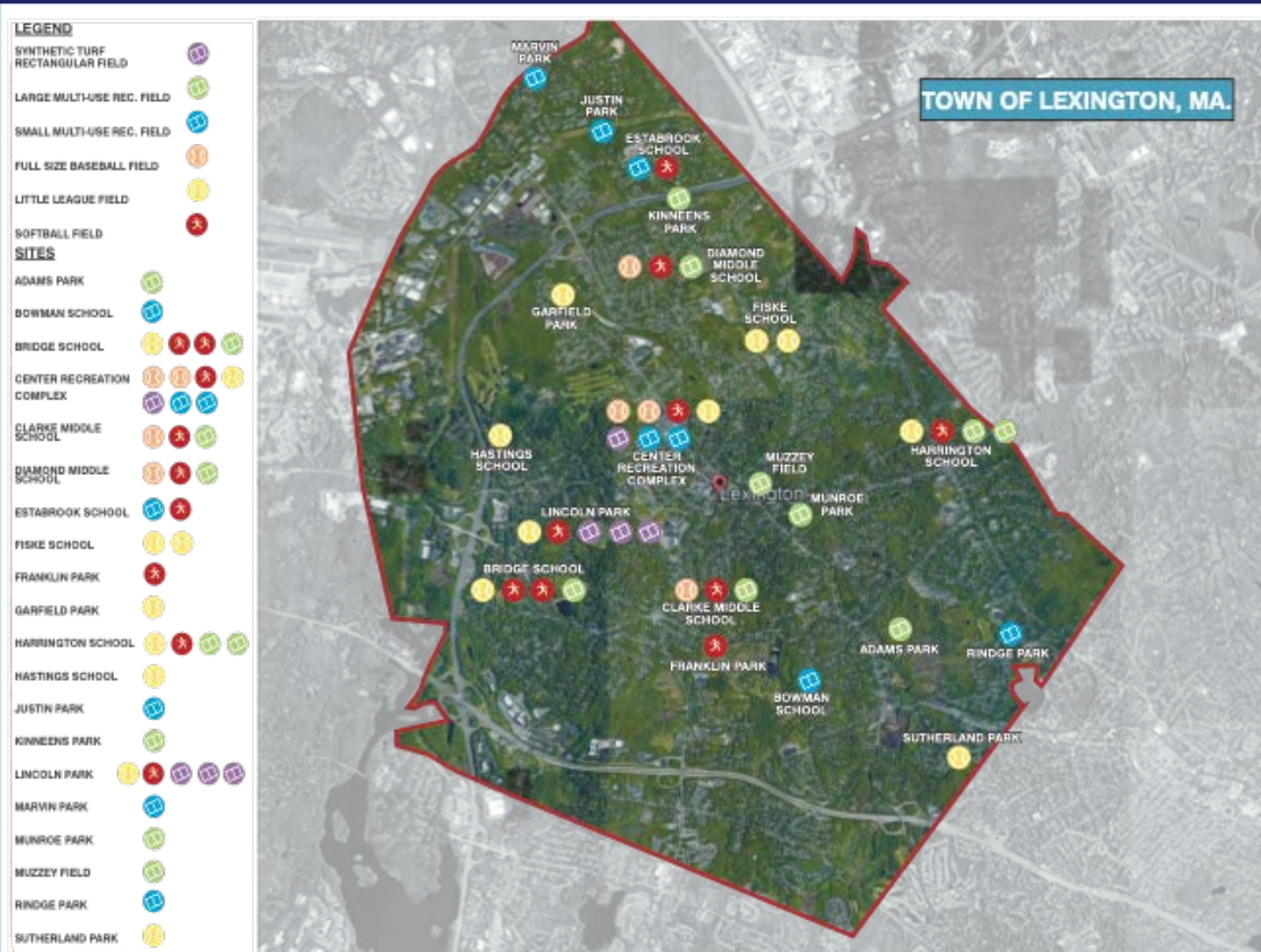
In 2019, Recreation was asked to formally quantify athletic field needs in Lexington and funding was approved at 2020 Annual Town Meeting to hire an external consultant to conduct a comprehensive analysis of field supply and demand.

In 2022, Weston and Sampson, LLC provided the results of their comprehensive analysis, including documentation of field demand, field supply, and options to address the supply deficiencies they identified.

Annual Town Meeting 2023

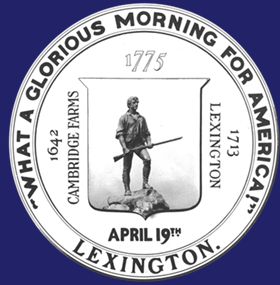


# Rectangle Field Deficit in Lexington



- Study evaluated all athletic sites in Lexington including an effective rectangle field inventory of 15 natural grass rectangle fields and 4 synthetic turf rectangle fields.
- According to the study, this field inventory can *optimally* support 21,600 hours of use per year but is currently used for 27,700 hours per year due to the overwhelming demand for field space.

**Conclusion: Lexington operates at a field deficit equivalent to 8 large rectangle fields.**



# Significant LHS-associated Field Closures



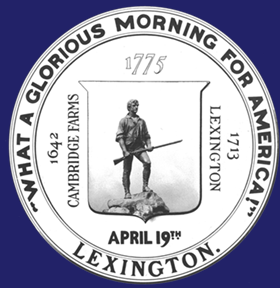
LHS building project lay down area is currently anticipated to impact most fields at the Center Recreation Complex ~ 2026-2030.

## Anticipated Center Rec Field Closures:

- varsity softball field
- varsity baseball field
- Harold Crumb football field
- junior varsity baseball field
- Worthen Road practice field
- Fitzgerald little league baseball field







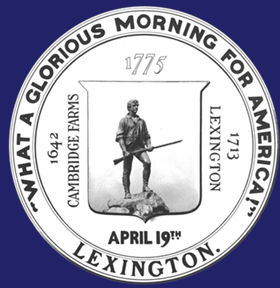
# Significant LHS-associated Field Closures



Center Rec Complex field closures will make the existing rectangle field deficit worse by eliminating a large number of rectangle field hours and will *profoundly impact the operations of all field users.*

*We must ensure the optimal use of the fields at Lincoln Park to at least partially mitigate this addition to the existing rectangle field deficit.*





# Lincoln Field Capital Projects Plan



To optimize the use of Lincoln Field and partially mitigate the additional field deficit during the anticipated LHS project we propose:

## FY2024 – Article 10i

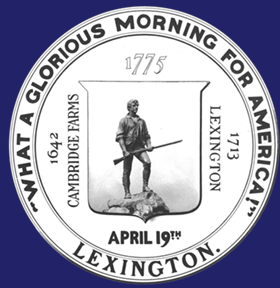
- Lincoln Field #1 synthetic turf renovation (last renovated 2015)
- Lincoln Field #1 and Field #3 installation of athletic lighting

## FY2025

- Lincoln Field #2 synthetic turf renovation (last renovated 2015)

## FY2026

- Lincoln Field #3 synthetic turf renovation (last renovated 2016)

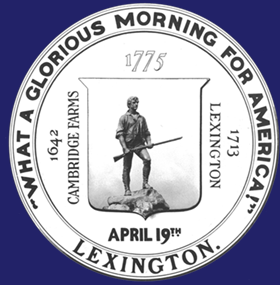


# Article 10i: Lincoln Field Project



In considering athletic field renovations, the Rec Committee and Department seek to find a balance between multiple factors, and to that end we've been collaborating with a working group comprising Town staff from Conservation, Health, DPW, and Sustainability and representatives from the Sustainable Lexington Committee and the Board of Health. The core parameters we consider include:

- **Athletic Operations:** ex. weather resistance, surface stability/"footing", durability... => hours of use
- **Environmental Health:** ex. impact on waste stream, wetlands, sustainability
- **Human Health:** ex. heavy metals, PFAS, allergens, local fitness options
- **Fiscal Impact:** ex. installation, maintenance, staffing, equipment... => cost per hour of use
- **Site-specific Factors:** ex. Lincoln Park landfill cap, surrounding environment
- **Town Field Inventory:** ex. reduce field deficiency, balance grass and turf

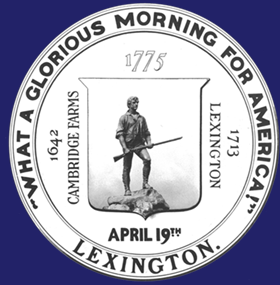


# Article 10i: Lincoln Field Project



After evaluating these considerations, we believe that replacement “in kind” of the synthetic turf field system at Lincoln Park provides the best balance across the various parameters:

- **Athletic Operations:** maximizes hours of use in New England weather conditions
- **Environmental Health:** PFAS-free & meets all US EPA/MA DEP standards; recyclability improving
- **Human Health:** PFAS-free & meets all US EPA/MA DEP standards
- **Fiscal Impact:** minimizes cost per hour of use and maintenance fits within existing DPW budget
- **Site-specific Factors:** only feasible field system over landfill cap
- **Town Field Inventory:** maintains grass/turf field balance and supports grass field usability

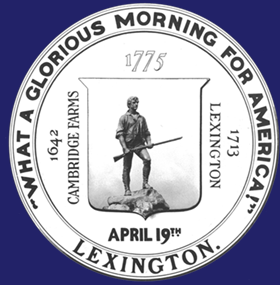


# Article 10i: Lincoln Field Project



The project bid will require the bidder to certify and document by independent laboratory testing that the synthetic turf system materials are:

- PFAS-free per the US EPA Method 537 and California Proposition 65 definition of PFAS and per defined analytical test maxima that will be specifically enumerated
- under heavy metals safety maximums as defined by US EPA/MA DEP and including lead content falling under the most stringent US CPSC threshold for lead in children's toys
- under PAH (polycyclic aromatic hydrocarbon) safety maxima as defined by US EPA/MA DEP
- meet criteria for athletics safety and playability including industry standard measurements of GMAX shock load, Head Injury Criteria (HIC), and vertical deformation
- re-used onsite to the greatest extent possible and documented chain of custody is provided for disposition of all materials that cannot be reused onsite



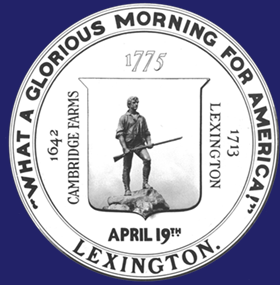
# Article 10i: Lincoln Field Project



The installation of athletic lighting at Lincoln Fields #1 and #3 is a top recommendation of the 2022 Weston and Sampson Athletic Fields Feasibility Study\* to most efficiently increase available rectangle field hours, and we believe it is also critical to at least partially offset the impact of the potential LHS-associated closures.

Temporary athletic lighting has been used at Lincoln Field #2 since 2014, and permanent athletic lighting was installed on Field #2 through private philanthropy in 2017. The Field #1 and #3 lights will be installed following the same MA DEP permitting process to ensure compliant installation in the context of the capped landfill.

The installation of athletic lighting at Fields #1 and #3 is the most efficient option for increasing available field hours and offsetting field closures at Center Rec Complex.



# Article 10i: Lincoln Field Project

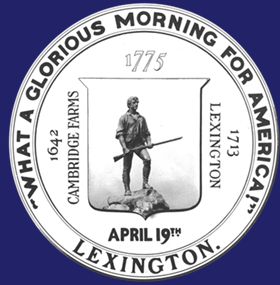


The athletic lighting installation at Field #1 and #3 will consist of 4 light poles per field (*approximate* locations shown by yellow dots) similar to, and at a height consistent with, Field #2.

The high-efficiency LED lighting system will be designed to meet the International Dark-Sky Association (IDA) requirements for athletic lighting.

The system operations will include multiple power settings to tailor light use to the activity and will be controlled (incl. remote) by the Recreation Department.





# Article 10i: Lincoln Field Project



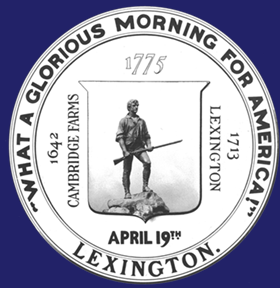
The LED lighting system will be designed to minimize light spillover beyond the athletic fields.

The design is anticipated to minimize spillover light to 0.7 footcandles (less than a streetlight) at 20 feet from the field and 0 spill by 100 feet from the field.

The photo at right is of the Lexington Center 1 and Center 2 fields, which use a similar LED athletic lighting system.







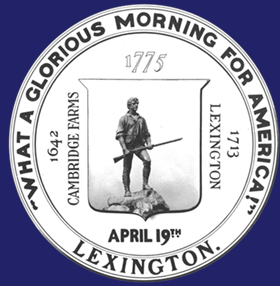
# Article 10i: Lincoln Field Project



This overall project is consistent with the findings of the 2020 Community Needs Assessment, the 2022 Comprehensive Study of Athletic and Outdoor Recreation Facilities, and the feedback of the Lexington Sports Advisory Council.

The anticipated renovation of Field #1 has appeared annually in the Recreation 5-year Capital Plan for the past 4 years, and as such has been included and discussed for multiple years in the annual Town budget review process with the Town Manager/Finance, Capital Expenditures Committee, Appropriation Committee, and Select Board and in this funding request year with the Community Preservation Committee.

This project has been the subject of two special Recreation Committee meetings on February 1, 2023, and March 1, 2023. These meetings were advertised by direct US Mail to all addresses within 500 feet of the project, by Town electronic communications, by advertisement to the electronic TMMA list serv, and by placement of an advertising sandwich board at Lincoln Park.



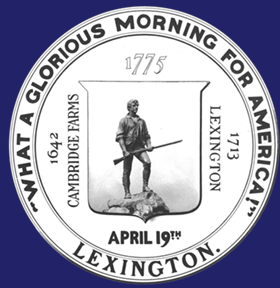
# Article 10i: Lincoln Field Project



The existing deficit in available field hours *and* the anticipated exacerbation of that deficit during a LHS building project highlight the need to optimize management of the synthetic turf athletic fields at Lincoln Park.

The timely renovation of the synthetic turf at the fields (Field #1 in FY2024) and the addition of athletic lighting will help reduce the existing field availability deficit and will at least partially mitigate the effect of the LHS building-associated closures.

The replacement of the current synthetic turf system with a synthetic turf system that is certified PFAS-free and meets all federal and state regulations represents a reasonable balance of the many compelling factors involved in the renovation of athletic fields at Lincoln Park.



# Article 10i: Lincoln Field Project



The completion of this project alone won't solve the field deficit in Lexington, but it will help reduce the deficit and it will also be a proactive step to reducing the impact of LHS-associated closures.

Further, we believe that this project is critical to optimize the use of this incredible recreational resource that has been reclaimed from a former dump site through long-standing effort and investment and to continue to support the thousands of Lexington athletes that depend on rectangle fields to play their sports.

***We ask for your continued support of these core athletic facilities at Lincoln Park and hope you will vote in favor of Article 10i.***