

Turf Advisory Committee

Bringing a Synthetic Turf Field to Mattituck High School

March 21, 2019



Turf Advisory Committee (TAC)

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Mission of the Turf Advisory Committee

- To plan, research, prepare and present specific information about constructing a turf field at Mattituck High School to the School Board.
 - To Educate the Board of Education and Community on whether to move forward with the installation of a state-of-the-art synthetic turf field at the Mattituck High School.
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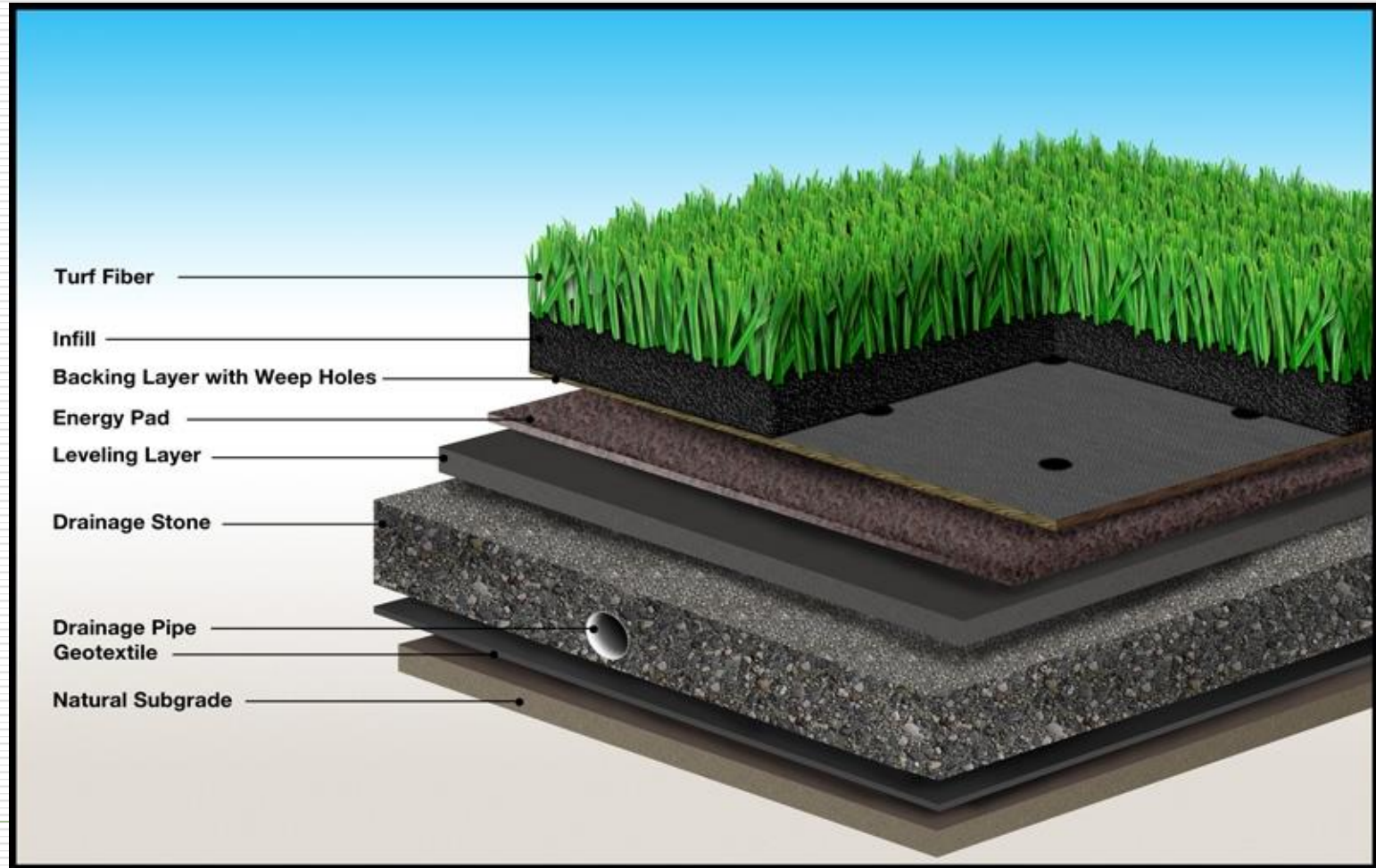
What Makes A Sports Facility Great at Mattituck High School?

- Safe, high-performance playing surface.
 - A facility that inspires pride among students, staff and community.
 - Multi-purpose playing field that can be used extensively.
 - Environmentally-friendly fields.
 - Mindful of maintenance costs.
 - Close proximity to school's main campus.
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What is Synthetic Turf?

- ❑ Synthetic or artificial turf is a grass-like surface that replicates lush natural grass in appearance and function.
 - ❑ When used on playing athletic fields, it provides a consistent year-round, all-weather playing surface built to withstand extended use without downtime for recovery.
 - ❑ Most synthetic turf systems installed today include a drainage layer, a multi-layered backing system, and resilient grass blades that are infilled with a resilient granular filler to resemble natural turf.
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What is Synthetic Turf? (*cont.*)



Synthetic Turf:

What You Should Know

- ❑ Synthetic turf can be utilized around 3,000 hours per year with no “rest” required, more than three times that of natural grass.
 - ❑ All synthetic turf fields are *not* the same. There are a variety of synthetic turf systems and infill materials.
 - ❑ Currently, between 12,000-13,000 synthetic turf fields are being used in North America for football, soccer, hockey, baseball, rugby, lacrosse and many other sports and between 1200-1500 new being built annually.
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Greater Peace of Mind

Made with resilient materials for safety, synthetic turf sports fields provide a uniform and consistent playing surface. Traction, rotation and slip resistance, surface abrasion and stability meet the rigorous requirements of the most respected sports leagues and federations.

During the past few years, more than 75 independent, credible research and studies have validated the safety of synthetic turf from groups including:

- ❑ U.S. Consumer Product Safety Commission
 - ❑ U.S Environmental Protection Agency
 - ❑ New York State Department of Environmental Conservation
 - ❑ New York State Department of Health
 - ❑ California Environmental Protection Agency
 - ❑ Connecticut Department of Public Health
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Positive Environmental Impact

- Depending on the region of the country, one full-size synthetic turf sports field saves 500,000 to 1,000,000 gallons of water each year. During 2011, about six billion gallons of water were conserved through its use.
 - Most of the current synthetic turf sports fields feature crumb rubber infill recycled from used tires, keeping more than 105 million used tires out of landfills.
 - The estimated amount of synthetic turf currently installed has also eliminated the need for nearly a millions of pounds of harmful pesticides and fertilizers, which has significant health and environmental implications.
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Is synthetic turf safe?



Department
of Health

SUMMARY OF INFORMATION FOR CRUMB-RUBBER INFILLED SYNTHETIC TURF ATHLETIC FIELDS: September 2018

Heat stress

Surface temperatures on crumb-rubber infilled synthetic turf fields can reach levels of discomfort and may contribute to heat stress. This warrants consideration when making decisions about installing and using a synthetic turf field. While watering synthetic turf may briefly reduce surface temperatures, a number of factors may influence its effectiveness. People using these fields should be advised to remain hydrated and to seek relief from the heat in shaded areas.

Injury

Overall, studies have found no consistent differences in injury rates between natural and crumb-rubber infilled synthetic turf.

Latex allergy

NYSDOH is not aware of cases of latex allergy resulting from contact with crumb rubber or synthetic turf fields.

Infection

Skin cuts and abrasions that may result from contact with athletic fields (natural and synthetic turf) are susceptible to infection. Athletes and others developing skin abrasions should clean the wounds and seek prompt medical attention. Athletes should avoid sharing equipment, razors, towels, soap and other objects with others, because these items can spread germs.

Chemical exposures

Results from numerous studies suggest that the potential for chemical exposures from crumb rubber in synthetic turf is low; further studies by the federal government and California are underway to fill data gaps and decrease uncertainties.

Cancer

Analyses in California and Washington State have not found support for cancer associations with artificial turf field use; various exposure and risk assessments do not support a cancer risk.

Summary of Section XI High School Turf Fields 3/15/19

By the Numbers:

53 High Schools in Section XI

43 With Turf Fields or 81%

Total of 60 Turf Fields

10 Currently being built

10 Do not have or are not currently building

Which Local Schools Have Synthetic Turf?

District	Turf fields	
		PENDING
Amityville	0	
Babylon	3	
Bay Shore	2	
Bayport Bluepoint	2	
Bellport	1	2 to be built
Brentwood	0	
Bridgehampton	0	
Central Islip	1	
Center Moriches	1	
Copiague	1	
Deer Park	1	
Commack	1	
Connetquot	2	
Comsewogue	1	
East Islip	0	3 being built
East Hampton	2	
Eastport South Manor	1	
Ellwood	0	
Greenport	0	
Hampton Bays	1	
Harborfields	0	1
Half hollow Hills	2	
Hauppauge	1	
Huntington	1	
Islip	2	
Kings Park	1	
Lindenhurst	1	
Longwood	1	
Mattituck	0	
Middle Country	2	2 to be built
Mill Neck	2	
North Babylon	1	
Northport	1	1 being built
Patuxent	1	
Port Jeff	0	
Riverhead	1	
Rocky Point	3	
Sachem	2	
Saville	1	
Sag Harbor	0	
Shelter Island	0	
Shoreham Wading River	1	
Smithtown	2	
Southampton	1	
Southold	1	
Walt Whitman	1	
Ward Melville	2	
West Babylon	3	
Westhampton	1	
West Islip	3	
William Floyd	0	2 out to bid
Wyandanch	0	
Total:	53	10 new to be built 2019-20

Northport	1	1 being built
North Babylon	1	
Pat Med	1	
Port Jeff	0	
Riverhead	1	
Rocky Point	3	
Sachem	2	
Saville	1	
Sag Harbor	0	
Shelter Island	0	
Shoreham Wading River	1	
Smithtown	2	
Southampton	1	
Southold	1	
Walt Whitman	1	
Ward Melville	2	
West Babylon	3	
Westhampton	1	
West Islip	3	
William Floyd	0	2 out to bid
Wyandanch	0	
Total:	53	10 new to be built 2019-20

Why Mattituck?

□ **Best Use of Space:**

- Provides athletic teams game and practice space
- Students will remain on a Safe and Secure Campus
- Physical education classes utilize daily
- Recess Space

□ **Cost-Effective:**

- Decreases transportation costs
- Upkeep of a synthetic turf field costs two to three times less than natural turf
- Do not need to maintain Cutchogue East or West at a game playable level
- Only need to paint one lacrosse field instead of 5, 2 soccer fields instead of 3 and maintain 1 Softball field instead of 2

□ **Community Use and Involvement:**

- Community sports leagues can rent the field; fees will bring additional revenue
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- Allows for a multi-use facility that we can showcase. It's a facility our community and students will take pride in.

Current Realities

NOW

- Boys Lacrosse at Cutchogue East**
 - Shuttle required
 - Poor playing surface
 - Use Southold Turf due to weather/Transportation cost

- Girls Lacrosse at Cutchogue West**
 - Shuttle required
 - No Security
 - No facilities
 - Use Southold Turf due to weather/Transportation Cost

Transportation Cost for Practice Only

August: \$3723 Mattituck Hourly
September: \$2700 Sunrise \$180. Per Day (15)
October: \$3600 Sunrise \$180. Per Day (20)

TOTAL \$10,023

With Turf

- No transportation cost
- No shuttle required
- Consistent playing surface
- Security
- Facilities
- Stay on Campus

Current Field: 3/12/19

Cutchogue West



Cutchogue East





PROPOSED SITE CONSTRUCTION



PROPOSED SITE CONSTRUCTION PLAN
 MATTITUCK-CUTCHOGUE JR. SR HIGH SCHOOL- MATTITUCK U.F.S.D
 MATTITUCK, NEW YORK 11952



Annual Costs, Current VS Turf

Current Annual Costs

Based on 2 Acres

- Hard Cost- \$13,400**
 - \$2400 annual fertilizer, weed control, grub control, flea and tick
 - \$2600 Grass seed
 - \$3500 paint
 - \$1300 Irrigation est.
 - \$3600 Shuttle to other districts

- Soft Cost**
 - Mowing
 - Dropping paint for new field 4hrs (3 employees) 5 fields, 60hrs.
 - Repaint 2x per week times 5 fields, 1hr per field

Costs with Turf

Hard Cost- \$8000

- \$7500 Maintenance Contract
- \$500 additional crumb rubber

Soft Cost

- Biweekly Grooming (1hr)
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What Else Would This Allow Us To Do?



- Currently: there are 8 soccer teams practicing on 3 fields, boys and girls lacrosse are off campus, Baseball and Softball are dictated by weather, outdoor PE classes are subject to mud and wet grass, JH recess is limited due to weather
- *Security measures have been taken at Mattituck High School to provide a safe place for our students, can we say the same thing about offsite locations?*

Examples:

- Currently, we cannot afford to practice on game fields and keep fields in playable condition for games.
 - For the past 10 years boys lacrosse has never had a home, girls lacrosse is off campus, boys and girls lacrosse and girls soccer are being sent to Southold to practice when weather is poor.
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How Do the Coaches Feel?

□ *For Mattituck Soccer, the lack of a turf field puts our boys at a significant competitive disadvantage. 90% of class B schools on Long Island have turf, the surface which all sectional and regional playoff games are played on. Turf also gives us the opportunity to safely play outside year round as long as there is no snow on the ground. This allows us to largely circumvent the need for gym time, which is at a premium in our district. ~Coach Hayes*

□ *A turf field would give our program an incredible resource to help us be successful. It will give us a strong sense of pride in our school community. It would allow us to have the youth program use the field without concern of them tearing it up and ruining it over a six week season. We would have the benefit of being able to play year round and give our athletes more opportunities to get better. ~Coach Amato*

How Do the Coaches Feel?

- ❑ *I would have to say a turf field would generate the possibility of using the field in all weather conditions. Our varsity field the last couple of years has been sub-par. A turf field would allow our successful varsity programs to be able to continue to compete with the upper level programs throughout Long Island. Our championship games are all often played on turf fields which puts our programs at a dis-advantage. This would help foster long term success with our programs.
~Coach Barbante*
- ❑ *I believe that the addition of a turf field would aide the entire athletic program at Mattituck. Athletes would be able to have a quality workout in virtually any weather (practice or competition), any time of year, and field conditions would be consistent. Many coaches would be able to use this field for camps and workouts to grow their youth programs. ~Coach Golden*
- ❑ *From a girls lacrosse perspective, our program would love to play games at the high school on a turf field and feel a little more as part of the main campus. Playing at the high school may attract more students/community members to watch our games and potentially get more students to participate in our sport.
~Coach Maloney*

Questions?



Further Information from Various Research Studies (slides 24-28)

Is Synthetic Turf Safe?

- More than 50 independent and credible studies from groups such as the U.S. Consumer Product Safety Commission, and statewide governmental agencies such as the New York State Department of Environmental Conservation, New York State Department of Health and the California Environmental Protection Agency, have validated the safety of synthetic turf.

Recent highlights include:

- In October 2010, the California Office of Environmental Assessment completed its multi-year study of air quality above crumb rubber infilled synthetic turf, and bacteria in the turf, and reported that there were no public health concerns.
- In July 2010, the Connecticut Department of Public Health announced that a new study of the risks to children and adults playing on synthetic turf fields containing crumb rubber infill shows "no elevated health risks."
- The California EPA released a report dated July 2009 which indicated there is a negligible human health risk from inhaling the air above synthetic turf.
- Independent tests conducted by the New York State Department of Environmental Conservation and New York State Department of Health, released in May 2009, proved there were no significant health concerns at synthetic turf fields.
- In July 2008, a U.S. Consumer Product Safety Commission staff report approved the use of synthetic turf by children and people of all ages.

Is Crumb Rubber Safe?

- Yes. Crumb rubber infill, made from reclaimed tires, is a popular infill option for many synthetic turf fields. It has been safely utilized since being introduced in 1997, and in playgrounds and tracks for much longer. This resilient material provides enhanced durability and safety. Its use in synthetic turf sports fields and landscape has also kept more than 105 million used tires out of landfills. Crumb rubber has been critically examined and studied since the late 1980's. Science has proven it to be safe for children and people of all ages.
 - Crumb rubber has been critically examined and studied since the late 1980's. More than 90 independent and credible studies have validated the safety of synthetic turf with crumb rubber infill, including those conducted by the U.S. Consumer Product Safety Commission, U.S. Environmental Protection Agency; departments of health and the environment in New York, New York City, Connecticut, and California; and private universities, such as the University of California-Berkeley. Here is what some of those studies say:
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Is Crumb Rubber Safe?

- “Based on the available literature on exposure to rubber crumb by swallowing, inhalation and skin contact and our experimental investigations on skin contact we conclude, that there is not a significant health risk due to the presence of rubber infill for football players on an artificial turf pitch with rubber infill from used car tires.” (Hofstra University-Environmental and Health Risks of Rubber Infill, 2007)
- A comprehensive study was conducted to examine what could be extracted in bio fluids from infill and turf products...and the associated risk ... to children and adult athletes. Concentrations of PAHs were generally below the LOD [level of detection] for all targeted compounds.... Similarly, the metal concentrations measured in field samples indicate that the risk would be de minimus among all populations expected to use artificial turf fields. (Brian T. Pavilonis, et al, Environmental and Occupational Health Sciences Institute, Robert Wood Johnson Medical School, 2013 Society of Risk Analysis)
- For more independent research on synthetic turf and crumb rubber infill, please visit the STC website:

<http://www.syntheticurfCouncil.org/?page=Research#cri>

Is Crumb Rubber Safe?

- There is no research that directly links crumb rubber exposure to cancer. In fact, a 2010 review conducted by the University of California, Berkeley is among the most comprehensive reports to date, reviewing the existing studies from the past 12 years, as well as containing independent analysis. Here are some of their findings:
 - “Ingestion of a significant quantity of tire shred did not elevate a child’s risk of developing cancer, relative to the overall cancer rate of the population.” (*Rachel Simon, University of California, Berkeley, Review of the Impacts of Crumb Rubber in Artificial Turf Applications, February 2010*)
 - Furthermore, “regular exposure (e.g. regular play on ground rubber filled athletic fields) to ground rubber for the length of one’s childhood does not increase risk of cancer above levels considered by the state of California to be *de minimus* (i.e., a lifetime excess cancer risk of 1 in 1 million).” (*Prepared for Rubber Manufacturers Association by Cardno ChemRisk, Inc., a global independent scientific consulting firm, August 1, 2013*)
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How Does Synthetic Turf Compare to Natural Grass on Player Injury Rates?

- ❑ Made with resilient materials for safety, synthetic turf sports fields are always ready to play on. Traction, rotation and slip resistance, surface abrasion and stability meet the rigorous requirements of the most respected sports leagues and federations.
- ❑ So it's no surprise that recent studies indicate that the injury risk of playing on synthetic turf is no greater than natural grass:
- ❑ Three 2010 long-term studies published by researchers from Norway and Sweden compared acute injuries on synthetic turf and natural grass. The studies examined the type, location and severity of injuries sustained by hundreds of players during thousands of hours of matches and training over a four to five year period. Many types of acute injuries to men and women soccer players, particularly knee injury, ankle sprain, muscle strains, concussions, MCL tears, and fractures were evaluated. The researchers concluded that the injury risk of playing on artificial turf is no greater than playing on natural grass;
- ❑ An analysis by FIFA's Medical Assessment and Research Centre of the incidence and severity of injuries sustained on grass and synthetic turf during two FIFA U-17 World Championships. According to FIFA, "The research showed that there was very little difference in the incidence, nature and causes of injuries observed during games played on artificial turf compared with those played on grass."
- ❑ A 2004 NCAA study among schools nationwide comparing injury rates between natural and synthetic turf found that the injury rate during practice was 4.4% on natural turf, and 3.5% on synthetic turf.

Proposed Timeframe

- **February-March 2019:** Gather a committee to develop an overall goal and objective. Include engagement from businesses and community members. Educate community on the possibility of this project and how it will affect the school district and community.

 - **March 21st:** Presentation to BOE

 - **May 16th:** Vote to Public

 - **May 17th:** Bid the Project

 - **November 2019 or June 2020:** Install synthetic turf at **Mattituck High School**

 - **Spring 2019 or Fall 2020:** Hold opening game/ribbon cutting ceremony to thank the community and highlight the new field.
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The Bottom Line

- Installation of a synthetic turf field will provide a first class multi-purpose facility to maximize the use of the **Mattituck High School** in a way that will benefit both the student athletes, sports teams, parents and the entire community.



In furtherance of the mission of the MCUFSD the Athletic Department strives to create well-rounded students who are intellectually and physically fit. A synthetic turf field creates more opportunities for students to participate in team sports, build leadership skills and confidence, improve physical education course offerings and stay on our campus
