

Response to Q/A

Review of community and board questions generated at 4/25 meeting.

Follow up questions

1. Pros and Cons of turf and grass.
2. Cost comparison of turf vs. grass maintenance.
3. Leaks and any findings related to mold.
4. Costs of roofs and options. Cost of extending 25 year warranty. To be detailed at the May 23rd meeting.
5. Field lights and sense of electrical costs.
6. Fiscal concerns related to debt consumption. What is a safe level of debt service? *To be discussed at May 23rd meeting*
7. Revenue possibilities from field rental.
8. Storm water remediation projected costs. *To be detailed at the May 23rd meeting.*
9. Total cost of Ownership. *To be detailed at the May 23rd meeting.*

Pros and Cons of Grass

Pro

At the professional level, players and spectators still seem to prefer natural grass fields. A recent survey of the National Football League Players Association (NFLPA) found that a majority of players preferred natural grass.

- ☐ Natural turf does not hold heat the way synthetic surfaces do
- ☐ While easily damaged by heavy use or poor weather conditions, natural grass fields are inexpensive and easy to repair; if they are vandalized with spray paint or other materials, the damage will repair itself as the grass grows out.
- ☐ Since they are not permanently lined, it is easy to convert natural fields from one sport to another by relining them.

Con

In parts of the country with a severe winter, grass goes dormant by the middle of October, and any problems with the field must wait until spring to be repaired. If the field is seeded in the late summer or early fall (depending upon the geographic area), it will require the field to be closed so that the grass can establish itself.

- ☐ At a minimum, fields require mowing and marking and if the weather is not conducive, regular irrigation in order to remain usable; occasionally, they also need fertilization, topdressing, weed and pest control and more.
- ☐ In heavy rain, fields can flood and become muddy, necessitating cancellation and rescheduling of games.
- ☐ It may be necessary for a grass field to 'rest' between heavy uses, in order to allow the grass to recover. If a field is overused, it will be skinned and bare of grass, particularly in areas that see heavy use.

Natural Grass or Synthetic Turf?

by Mary Helen Sprecher

Pros and Cons of Turf

Advantages

Synthetic turf does not grow; therefore it does not need mowing, nor does it need to be relined constantly. (It can be permanently marked for multiple sports). Aesthetically, these fields are attractive, with a deep, uniform green color that shows up well on television cameras as well as in still photography.

☐ In areas where there is frequent and/or heavy rain, a well-built synthetic turf field will drain quickly and be usable sooner than a natural grass field.

A field made of synthetic turf can handle more play, and not have to be 'rested' between uses.

☐ During winter months, synthetic turf fields can allow regular snow removal (with manufacturer-approved equipment). The field's ability to heat up in the sun will also help melt snow, allowing it to be playable before a natural turf field.

Disadvantages

☐ As mentioned before, heat builds up quickly on synthetic fields, which may create a safety concern for athletes in warm climates.

☐ In a world where contaminants are the enemy, synthetic turf is sometimes seen as a health concern. A grass field contains natural organisms that break down contaminants found in bird droppings, or in bodily fluids like sweat, blood or vomit. A synthetic field does not have these naturally occurring bacteria, and owners may need to keep the field clean and disinfected.

☐ In most cases, a synthetic field has a high initial installation cost; however, it is essential to consider that regular mowing, fertilization, etc. will not be necessary.

Mr. Lanzoni's List

Pros for Turf

Will help prepare our teams for sectional and state tournament play which are all played on turf fields (we rent turf fields for FH, football, and soccer teams prior to sectionals so they can practice on that surface)

Coaches and players feel it is safer than playing on our current grass fields

Less game cancellations

Average game cancellations for all levels per year below

Soccer – 12 (the past 2 years we had to move sectional contests to the opposing team's turf field)

Field hockey – 6

Football – 1

Larger field dimensions for soccer – current grass field just meets the required dimensions. Larger field would be beneficial to soccer program and help prepare them for sectional play which would be played on a similar size field.

Softball, baseball, track – can begin practice on the turf field when the ground is still covered with snow (snow generally melts quicker on the turf surface)

Indoor track can practice on the turf surface during the winter season

Cons for Grass

Overuse – practice and game fields

Local community groups have not been allowed to use our grass fields because of overuse

Poor drainage/crown

Needs time to rest and rejuvenate their root system after heavy use or rain storms

Compacted dirt, poor surface for competition and contributes to a high possibility of injury

Rental Information on Fields

- Millbrook – only Millbrook community groups have used the field and the district doesn't charge them
- Lourdes – charge \$150 - \$300 per hour depending on the day of the week and if lights are needed.
- Arlington – used primarily by their school teams. They do not rent the field very often.
- Marlboro - \$100 per hour or \$150 if lights are needed. They have a large number of groups that rent the field on weekends and nights. They bring in \$27,000 in revenue a year. Booster club runs concessions for these events and makes a great deal of money which goes back into their athletics program.

Footnote: We do not expect rentals any where near Marlboro's revenues, but clearly there is a potential revenue source and should be applied to a maintenance reserve fund.

Maintenance Information: grass vs. turf

	FIFA Quality Turf	Natural Grass
Playing time	3,000 hours play per year, no rest required	680 – 816 hours per year, rest required between heavy play
Maintenance required	Clearing debris, brushing the surface, topping infill levels	Mowing, watering, fertilizing, pesticides, aeration
Revenue generation	Can be used 24/7/365 for sports, community events or other revenue generating activities	Less opportunities for events due to rest time needed between play time or inclement weather
Environment	Water savings, less pollution, no pesticides	Maintaining the natural environment, foliage and soil conditions
ROI	Payback is 3 to 4 years, 3x less expensive than natural grass over a 20 year period	Less upfront cost, slower ROI due to higher maintenance costs and fewer revenue generating events
Community use	Enhanced accessibility due to increased playtime and all weather surface	Use can be limited due to necessary rest time
Land utilization	Can achieve more use with same amount of space	Use can be limited due to necessary rest time
Sport performance	Same as natural grass	Better than low quality artificial turf
Safety	Same as natural grass	Better than low quality artificial turf

Lighting costs

Marlboro Central School District

Football Field Lighting - Estimated Operational Costs

Location: **Football/Soccer Field/Track**

Lighting:

Pole Type	Pole Qty.	Fixt./Pole	Watts/Lamp	Tot. Fixt.	Tot. Watts
F1	1	15	1,500	15	22,500
F2	1	15	1,500	15	22,500
F3	1	15	1,500	15	22,500
F4	1	15	1,500	15	22,500
				60	90,000

Power Consumption:

(Includes additional ballast power consumption)

Wattage		Number	Total
Lamp	Fixture	Fixtures	Input Watts
1500	1620	60	97,200

System Voltage	Operating Amperage
120	810
208	270
240	234
277	351
480	117

Operational Costs:

	Cents per Kilowatt-Hour			
	9.0	11.0	13.0	15.0
Per Hour:	\$8.75	\$10.69	\$12.64	\$14.58
Annual:				
200 Hrs.	\$1,750	\$2,138	\$2,527	\$2,916
250 Hrs.	\$2,187	\$2,673	\$3,159	\$3,645
300 Hrs.	\$2,624	\$3,208	\$3,791	\$4,374
400 Hrs.	\$3,499	\$4,277	\$5,054	\$5,832
500 Hrs.	\$4,374	\$5,346	\$6,318	\$7,290
1000Hrs.	\$8,748	\$10,692	\$12,636	\$14,580

Lighting Projects

- Estimate: Four home games under lights for each team – football, boys' and girls' soccer and girls' field hockey.
- Lights on only when a game is played except for security lighting.
- Estimated Total: 16 games times 4 hours = 64 lighting hours.
- Additional practices: 3 hrs. day for 50 days = 150 hours

New York State Labor Law: Mold Assessment and Remediation Requirements (effective January 1, 2016)

On January 29, 2015, a bill addressing mold assessment and remediation was signed into law by Governor Cuomo. **The new mold assessment and remediation requirements take effect on January 1, 2016.**

(http://labor.ny.gov/workerprotection/safetyhealth/mold/Chapter_Amendment.pdf)

Mold 101: Thousands of species of mold spores may be found naturally both indoors and outdoors. As an example, when you step outside and smell decomposing leaves—you may be inhaling tiny mold spores. According to the State Department of Labor, mold requires three basic conditions in order to grow: water/moisture (typically more than 55% indoor humidity levels); an organic food source (paper, fabric, sheetrock, etc.); and proper temperature (typically 40 to 99F).

Mold can begin to develop and grow on damp surfaces within 24 to 48 hours. While it is impossible to 'mold-proof' a school or a house; mold growth can be reduced by controlling indoor humidity levels and eliminating water leakage/problems.

Also, according to the U.S. Centers for Disease Control and Prevention (CDC), "some people are sensitive to molds. For these people, exposure to molds can cause symptoms such as nasal stuffiness, eye irritation, wheezing, or skin irritation. Some people, such as those with serious allergies to molds, may have more severe reactions.

Severe reactions may occur among workers exposed to large amounts of molds in occupational settings, such as farmers working around moldy hay." www.cdc.gov/mold/faqs.htm#mold



Remember—the key to mold control is moisture control. Therefore, in a school, the quickest way to control moisture is to eliminate and repair water leaks, clean up standing water, and insulate cold surfaces to prevent water condensation. If there are water stains on ceiling tiles, you must determine the cause and make

the repair. Is there a broken pipe? Is there a problem with the roof? Switching out the ceiling tile won't resolve the underlying problem.

State Labor Law—Article 32: The new Article 32 of Labor Law defines a mold "project" as one which includes mold remediation, mold assessment, or mold abatement of areas greater than 10 sq feet, **but does not include:** routine cleaning or construction, maintenance, repair or demolition of buildings, structures or fixtures undertaken for purposes other than mold remediation or abatement.

The law requires all assessors, contractors, and workers in the mold remediation industry be at least 18-years old, trained, and licensed. Licenses shall be valid for two years from the date of issuance.

There are provisions which exempt specific circumstances from certain licensing rules. These include, but are not limited to:

- residential property owners performing work on their own property;
- design professionals licensed pursuant to Title 8 of Education Law (architects, engineers, etc.) provided they are acting within the scope of the practice; and
- Federal/State/Local/Public Authority and employees doing work in any property owned or managed by such governmental unit/authority.

A written mold remediation plan must be prepared by a New York State licensed mold assessment contractor based on the conditions discovered during the assessment. **No person may own an interest in the licensee who performs the mold assessment and the licensee who performs the mold remediation on the same property. Additionally, no licensee shall perform both mold assessment and mold remediation on the same property.**

The State Department of Labor has developed descriptions of each mold-related title, as well as course outlines and course hours. Courses will include mandatory lecture and hands-on instruction, as well as written exams.

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