

Millis Fields Committee

Oct 14th, 2014

Millis After Dark

2014 Fields Committee

- Background/History:

- 2005 Larson Associates Study- by School Department
- 2012 Recreation Department and DPW study request
- 2012 Millis Fields Committee study
- February 2013 CDM preliminary report
- Nov 2013 Citizens Petition
- 2013/2014 Millis Fields Committees
- October 2014 CDM 25% design & cost estimate
- Nov 2014 Debt Exclusion Warrant Article (#18) Fall Town Meeting
- Note: a ballot question will also need to pass at a town election

Fields Committee-charge

- Selectman's charge:
 - Develop a use priority for Town Fields
 - Develop a financial policy
 - Determine if there are enough Fields
 - If not enough fields, recommendations for new fields in town
 - Determine maintenance costs and costs for existing and new fields

2012 Findings

- There has been explosive growth in all sports, at all levels in the last 10 years.
- Overuse/ over scheduling at all existing fields.
- Lack of rotation/ability to “rest” grass fields.
- Maintenance efforts/budgets are limited.
- The Track is non-regulation and unsafe.
- The over use of the HS grass field impacts our ability to host end of the season and/or Playoff Games, for all sports teams.
- Residents have asked the selectman to address field inventory and conditions.

Community Survey Results

Millis Fields Feasibility Study - Community Survey

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	No Opinion	Total
Condition of playing fields	6.09% 27	19.19% 85	18.28% 81	29.12% 129	23.70% 105	3.61% 16	443
Condition of facilities	5.63% 25	15.32% 68	18.92% 84	32.43% 144	23.87% 106	3.83% 17	444
Parking	6.55% 29	29.35% 130	28.67% 127	23.70% 105	10.61% 47	1.13% 5	443
Proximity of fields to your home and school	36.40% 162	47.42% 211	13.48% 60	1.12% 5	0.22% 1	1.35% 6	445
Availability of fields for use	10.00% 44	25.23% 111	23.86% 105	22.50% 99	11.82% 52	6.59% 29	440
Adequacy of facilities for your sport(s)	6.35% 28	17.23% 76	20.63% 91	26.53% 117	22.00% 97	7.26% 32	441

Increased Demand

- 94 Fall school athletes in 2003/194 school athletes in 2013
 - 4 girls soccer teams
 - 3 boys soccer teams
 - Football –three levels
 - Cross Country team
 - Golf Team
 - Request for a Lacrosse team

- plus, Spring Sports (Soccer, Track and Field, Tennis, Baseball/ Softball)

- plus, Millis Recreation Programs
 - Adult Soccer
 - Adult Softball
 - Summer Basketball
 - Tennis
 - Summer Sports camps

- plus, Millis Soccer Club program
(17 teams-average 225 players per season/2 seasons, per/yr.)

- plus, Millis Youth Baseball/Softball programs
(200 baseball players and 61 softball players)

- plus, Millis Flag Football club
(300+ users. Interested in expanding if fields were available for their program's use)

Rec Department field under repair 2013



Conditions at the High School “grass” Field

- Best Management Practices for the number of Varsity games, per season = 25/30.
- Total Soccer & Football “games” expected on the field this season = 80 games
- Current Field drainage is very poor, due to years of compaction
- No “crown” is left to the field to pitch water away to the side lines
- Drainage swales along the sidelines are also compacted
- The Field holds moisture after a rain event and water “pools” on the field
- There is no grass left at the “sidelines” where the two teams assemble during a Football game
- The Field was not designed for a Soccer layout
- The outer lines of a Soccer field layout, if painted today would have long sections painted onto “dirt.” The areas have no grass left due to football sideline activity
- Thursday night (10-16-2014) one to three inches of rain, are expected
- Friday night’s Varsity Football game in those conditions will cause significant damage and impact Millis’s ability to schedule end of the season, or Playoff games.
- Field “inspections” for play/safety are handled by Athletic Directors in the Tri-Valley league
- MIAA inspections are typically done at the “Playoff Game” stage.

CDM 25% Design

Track and Field

Town Park

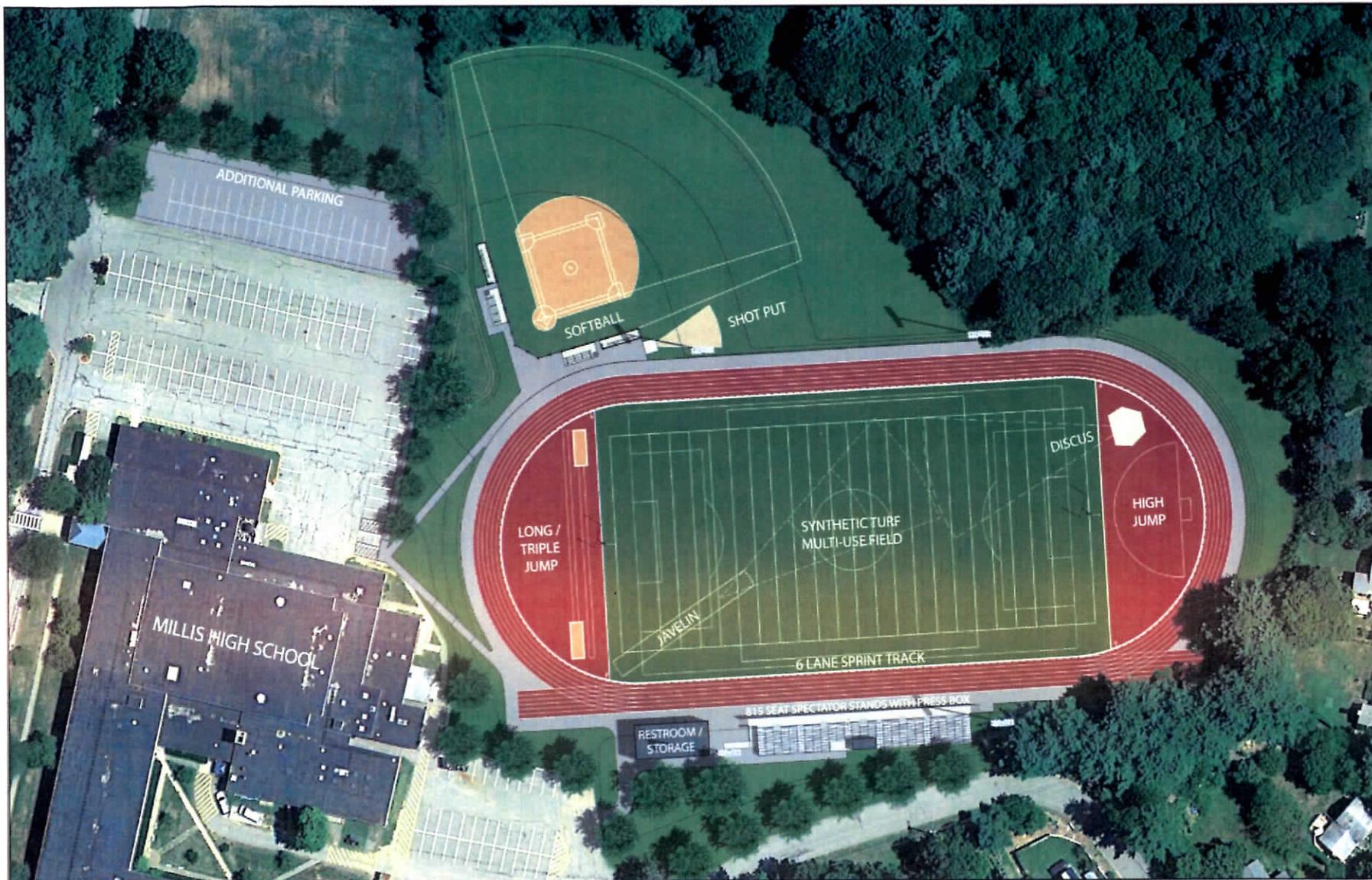
Recreation Department Field at CBS

Oak Grove Field

CDM Project Approach

- Wetlands Delineation-High School and Oak Grove Farm
- Site Survey and Base Plans
- Site Analysis for Athletic Facilities
- Athletic Field Facility Evaluation
- Geotechnical Evaluation
- Preliminary Design of Recommended Improvements
- Preliminary Opinion of Probable Project Costs
- Renderings of Concept Plans
- Meetings with Town Officials, Schools and Town Residents
- Fall Town Meeting

Track and Field and Softball Field



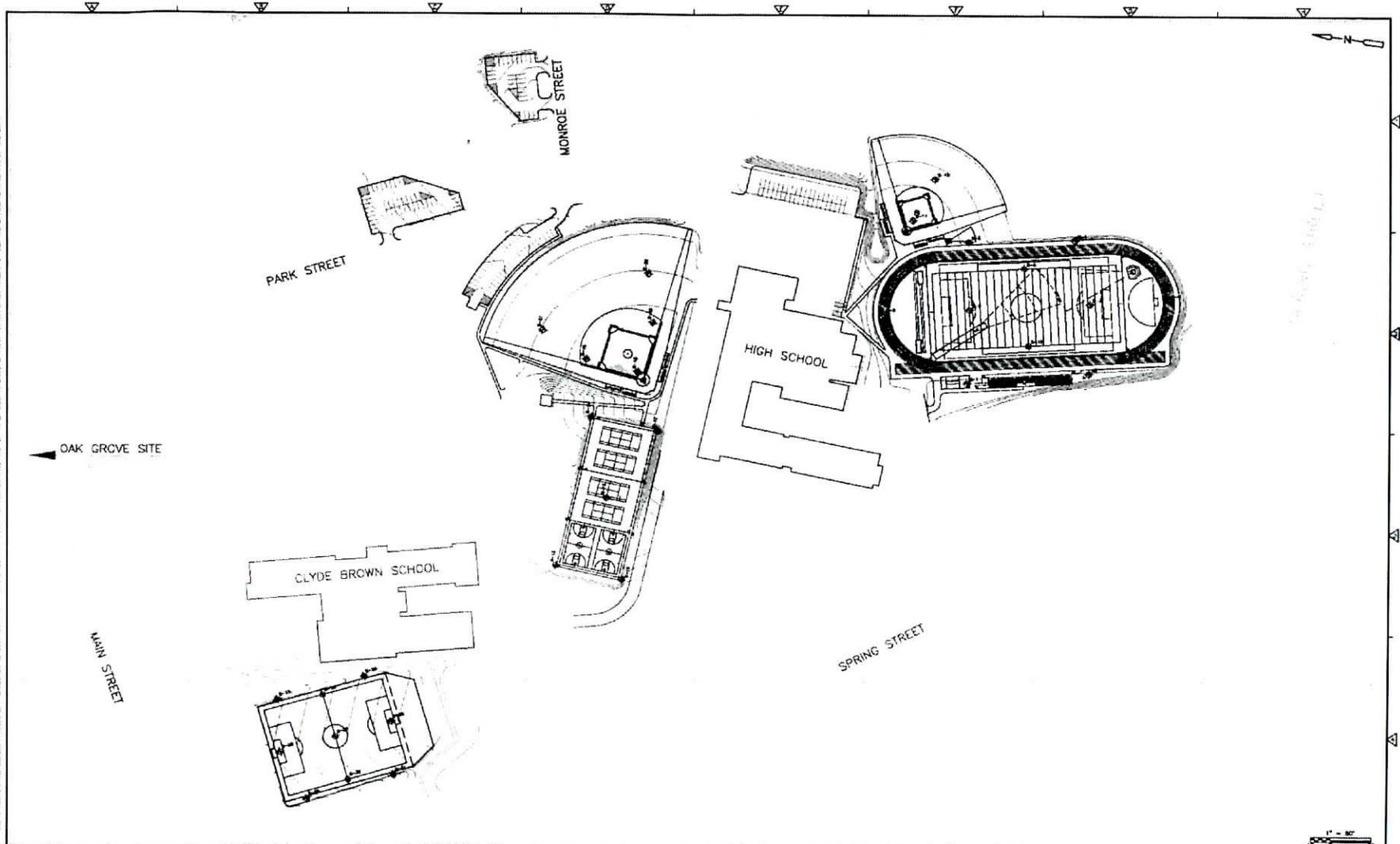
Tennis, Basketball and Baseball Field at Town Park



Recreation Dept. Field rear of Clyde Brown



Overview of High School Campus and Town Park with New Athletic Facilities and Parking Improvements



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REV.	DATE	BY	CHKD	REMARKS



TOWN OF MILLIS, MASSACHUSETTS
MILLIS ATHLETIC COMPLEX IMPROVEMENTS

SITE OVERVIEW

PROJECT NO. 0708-10275
 FILE NAME: 03711.DWG
 SHEET NO. 0-1

New Grass Field at Oak Grove Farm- Not included in Warrant #18



Debt Exclusion

Warrant Article #18

Fall Town Meeting

November 3, 2014

Warrant article # 18

\$5,500,000

- Track and Turf Field, and new Softball Field at the High School.
- Four Tennis Courts, Two Outdoor Basketball Courts, and a new Baseball Field at Town Park.
- Turf Field at Recreation Department field at rear of Clyde Brown.
- New Grass Field at Oak Grove Farm is **NOT** included in Warrant Article #18.

The process

- ❖ Warrant Article #18 needs to pass by a 2/3 vote at Town Meeting (a borrowing).
- ❖ A Special Election would be required within 90 days of a positive Town Meeting vote for the Fields borrowing article to pass on the Ballot.
- ❖ The estimated cost to hold a Special Election is \$4,500.

Debt Capacity

DEBT CAPACITY

FY16 BASE (YEAR POLICE STATION DEBT IS FULLY BORROWED)		
	MGL CH44 SECTION	
TAXATION	7	\$ 16,326,450.00
SEWER	8	\$ 1,980,560.00
WATER	8	\$ 1,754,219.00
DEWEY LAND/TOWN HALL (LAST YEAR OF BORROWING)	7	\$ 463,750.00
SUBTOTAL		\$ 20,524,979.00

FUTURE PROJECTS		
SEWER PUMP STATION	8	\$ 750,000.00
AREA C SEWER	8	\$ 3,571,590.00
FARM ST. TANK	8	\$ 960,000.00
		\$ 5,281,590.00

POSSIBLE PROJECTS		
CLYDE BROWN	7	\$ 10,000,000.00
FIELDS	7	\$ 5,500,000.00
		\$ 15,500,000.00

SINGLE DEBT LIMIT (5% OF VALUATION)	\$ 50,451,553.50
DOUBLE DEBT LIMIT (10% OF VALUATION)	\$ 100,903,107.00
WATER & SEWER DEBT IS OUTSIDE THE DEBT LIMIT (SECTION 8)	

SINGLE DEBT LIMIT	\$ 50,541,553.50
TOTAL EXIST AND POTENTIAL DEBT	\$ 41,306,569.00
AVAILABLE WITHIN SINGLE DEBT LIMIT	\$ 9,234,984.50

DEBT COMING OFF THE SCHEDULE	
FY17	1,651,021.00
FY18	1,386,430.00
FY19	1,437,490.00
FY20	1,368,558.00
FY21	1,286,500.00
5 YR TOTAL	7,129,999.00

Future Scheduling and Maintenance

- Fields Committee recommends a centralized model for scheduling and maintenance efforts:
- Re-purpose existing funding sources/resources:
 - Dedicated Enterprise Fund model
 - School Department funding
 - Publics Works Department funding
 - Recreation Department funding
 - User fees
 - Gate receipts from large events
 - Rental fees
 - Gifts and grants

Other Funding

State Grants secured by Senator Ross and Representative Linsky:

- \$125,000 FY 15/16 -Transportation Bond Bill
- \$ 50,000 FY 15 Chapter 165 – (Office of Travel and Tourism)
- \$ 75,000 FY 14 Chapter 286 – (Dept. of Conservation & Rec.)

- Small grants are possible in future state budget cycles to support operations.
- Large multi-million dollar state grants for the capital construction of athletic facilities, are very unlikely.

Other:

- Establish dedicated Enterprise Fund
- Everything goes through Enterprise Fund, including user and rental fees, advertising, donations.

Natural Turf vs Artificial Turf

Cost Comparison of Natural Turf Field and Artificial Turf Field (8 Year Cycle)

Construction Costs (for 80,000 sf field)				
Natural Turf Field	Seed	Sod	Artificial Turf Field	Range
Seed & mulch/sand based sod	\$20,000	\$80,000	2.5 inch carpet w/2" rubber-sand infill	\$325,000 – \$425,000
Grow-in maintenance and security	\$25,000	\$10,000	12 inch stone base	\$150,000 – \$200,000
6 inch sandy loam layer	\$55,000	\$55,000	Concrete edge restraint	\$45,000
6 inch sandy gravel drainage layer	\$40,000	\$40,000	Underdrain system	\$100,000 – \$125,000
Underdrain system	\$40,000	\$40,000	Subgrade preparation allowance	\$15,000
Subgrade preparation allowance	\$15,000	\$15,000	Existing soil removal and disposal	\$50,000
Irrigation system, service & controls	\$40,000	\$40,000	TOTAL	\$685,000 – \$860,000
TOTAL	\$235,000	\$280,000	Construction costs are for required infrastructure only and do not include site amenities, engineering fees and other implementation costs.	

Construction Cost (average)
 Natural Turf = \$257,500
 Artificial Turf = \$772,500

Annual Maintenance and Refurbishing Costs			
Natural Turf Field	Annual Cost	Artificial Turf Field	Annual Cost
Insect control (1x @ \$600)	\$600	Field grooming & GMMR testing (2x @ \$3000)	\$6,000
Crabgrass / weed control (1x @ \$600)	\$600	Seasonal field line painting (2x @ \$2,500)	\$5,000
Core aeration (2x @ \$650)	\$1,300	Miscellaneous repairs	\$1,500
Deep line aeration (1x @ \$1,500)	\$1,500	SUBTOTAL ANNUAL MAINTENANCE:	\$12,500
Top dress (2x @ \$1,500)	\$3,000		
Slack seed (2x @ \$1,000)	\$2,000		
Fertilizer (3x @ \$800)	\$2,400		
Lime (1x @ \$500)	\$500		
Irrigation maintenance	\$2,000		
Mowing (12x @ \$750)	\$9,000		
Field line painting	\$3,000		
Irrigation water allowance	\$3,000		
Miscellaneous	\$500		
SUBTOTAL ANNUAL MAINTENANCE:	\$25,200		
8 year cycle maintenance cost:	\$201,600		
Field renovation (sod) (year 6 @ \$100,000)	\$100,000		
TOTAL 8 YEAR COSTS	\$301,600		

Maintenance Costs 8 Year Cycle
 Natural Turf = \$301,600
 Artificial Turf = \$100,000

TOTAL 8 Year Cycle Costs
 Natural Turf = \$558,100
 Artificial Turf = \$872,500

Number of Plays (annual and per 8 year cycle)					
Natural Turf Field	Annual	8 years	Artificial Turf Field	Annual	8 years
7 min @ 30 days less 15% rain days @ 1 play per day	179	1432	9 min @ 30 days @ 2 plays per day	540	4320
2 year field loss for establishment & repairs	179	-358	Down time for establishment or repair	none	
Number of plays in 8 year cycle		1074			4320

TOTAL Costs per Play (2 hour game)
 Natural Turf = \$520
 Artificial Turf = \$202
 Artificial Turf with Lights = \$186
 Artificial Turf with Lights & Replacement = \$244

FINANCE COMMITTEE

- Meeting on Wed October 15, 2014 to review warrant article 18.

Fin Com Questions for 10/15 meeting

1. A brief overview of the need for the project: per season how many games are played per day on each field? Please break down between town, school and out of town groups. This could be a simple handout. If the project goes through, what projections does the committee have for increased usage? How much of this increased usage would be out of town, paying groups? What would the rental income be used for?
2. A discussion of the history of choices that the field committee made. What other major options were explored and why were they rejected?
3. A discussion of maintenance for the "new fields" both the artificial turf and natural turf. Under the plan handed out at the 9/22 Selectman's meeting maintenance was partially subsidized by additional town contributions. How would this be funded?
4. How would re-turfing of the artificial turf fields be funded?
5. Please discuss some of the issues regarding safety of artificial turf in light of recent news reports.

NBC News/Turf Safety

The screenshot shows the NBC News website interface. The main content area features a video player with a document titled "Human Health Risk Assessment of Artificial Turf Fields Based Upon Results from Five Fields in Connecticut" from the Department of Public Health. A red arrow points to the "CDM Smith" logo on the document. The right sidebar contains a "RELATED VIDEOS" section with a video titled "Stephen Collins' attorneys battle over abuse claims" (2:36), and a "TOP VIDEOS" section with three other videos: "Whales Put on Rare Show Off Southern California Coast" (0:33), "AT&T to Refund Customers \$80 Million for Bogus Charges" (1:38), and "First Ebola Patient Diagnosed in the U.S. Dies" (0:57). At the bottom, there is a "Watch 'Blood Moon' Manifestation" video. A footer banner encourages signing up for breaking news alerts with an email input field and a "Subscribe" button.

CDM Tabor Academy Memo-Executive Summary

Conclusion

Due to the wet weather and athletic turf sample results, stormwater runoff from the athletic field is not a source of pollutants/contaminants that would pose a threat to the harbor. Additionally, the comments provided in the peer review have become immaterial based on the planned drainage improvements on Ryder Lane and Front Street. Based on the results of the peer review and stormwater sampling, it was determined that no further action is required related to the athletic turf fields.



Synthetic Turf[™]

COUNCIL

DATE: October 9, 2014

MEDIA CONTACT: Terrie Ward
678-385-6720
terrie@syntheticturfcouncil.org

STC Response to NBC National News Story on Health Effects of Crumb Rubber in Synthetic Turf

Atlanta, GA – The Synthetic Turf Council (STC) and the synthetic turf industry take the health, safety, and welfare of synthetic turf users very seriously. We sympathize with those individuals who are battling a serious illness. As the industry's trade association, it is our responsibility to address the issues raised in the NBC story in an objective manner.

The STC believes that reliable scientific data should be the foundation of any discussion regarding the safety of synthetic turf with crumb rubber infill. During the past two decades, there have been more than [60 technical studies](#) and reports that review the health effects of crumb rubber as it pertains to toxicities from inhalation, ingestion and dermal contact, as well as cancer. These studies and reports were performed during the past 22 years by independent organizations such as: Connecticut Department of Health, Hofstra University, New York State Department of Environmental Conservation, The New York City Department of Health and Mental Hygiene and University of California Berkeley. The preponderance of evidence shows no negative health effects associated with crumb rubber in synthetic turf. As NBC factually reported, "there is no research directly linking crumb rubber to cancer."

According to an EPA report, *Child-Specific Exposure Factors Handbook*, "supplemental chronic risk estimates indicate 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*."

The STC supports the extensive scientific research already performed and any future opportunities for science-based research.

Crumb rubber used in synthetic turf systems should always meet or exceed the Synthetic Turf Council's [quality guidelines](#).

The STC website, www.syntheticturfcouncil.org, includes [many of the studies](#) on the human health and environmental safety of synthetic turf and crumb rubber.

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- The STC website includes [many of the studies](#) on the human health and environmental safety of synthetic turf and crumb rubber.
- A Summary of Critical Research
- Prepared by The InnovaNet Group for the Synthetic Turf Council, this document summarizes the critical research on the health effects of crumb rubber as it pertains to toxicities from inhalation, ingestion, and dermal contact, as well as cancer.
- [Overview of the Research on Crumb Rubber in Synthetic Turf \(PDF\)](#)
- STC Quality Guidelines for Crumb Rubber Infill
- The purpose of this document is to provide producers, customers, and the public with an understanding of what crumb rubber infill is and how the industry manages its safety, purity and quality.
- [STC Guidelines for Crumb Rubber Infill Used in Synthetic Turf Fields \(PDF\)](#)

Additional Information/websites

- www.fieldturf.com
- www.syntheticurfCouncil.org
- <http://www.syntheticurfCouncil.org/news/197235/STC-Response-to-NBC-National-News-Story-on-Health-Effects-of-Crumb-Rubber-in-Synthetic-Turf.htm>

Questions/Discussion

