

2013 Hurrell Field Synthetic Turf Proposal

Presented by
the Mayor and Council

Introduction

Our town has made a strong effort to keep a natural grass surface on all of our playing fields.

Six years ago, a committee made up of town officials, pro-turf and pro-grass individuals, and outside consultants created an outline of how best to utilize and preserve our current field structure. Virtually all of their recommendations were carried out.

One recommendation that could not be implemented was to reduce field usage. Unless we were willing to eliminate entire sports programs from our town, we could not meet the suggested target. We felt that was not an acceptable option.

Introduction

(continued)

It is now just five playing seasons later, and we are faced with a much-needed reconstruction of Hurrell Field at the expected cost of at least \$400k. We would continue to require annual maintenance costs of over \$138k per year to keep the field playable.

Even with the benefits provided by the addition of Watsessing Field to our total field allocation, the wear and tear on Hurrell Field has been too great. After a vigorous and costly effort to maintain a grass surface, it has become evident that the best course of action we can take to preserve our infrastructure and meet the needs of our community is to add a synthetic playing surface to Hurrell Field.

History

New Sports Programs Introduced:

- 1995 – Lacrosse youth program
- 1996 – Girls soccer at High School
- 1997 – Youth football
- 2000 – Boys lacrosse at High School
- 2002 – Girls lacrosse at High School

- From 1995 to 2012 the student enrollment at all Glen Ridge schools has increased from 1241 students to 1968 students, a 58% increase.
- NJ Interscholastic Athletic Assoc. reports that participation in HS sports has increased by 6% in the last two years.

History

(continued)

- 2007 Referendum
- Rutgers Study
- Advisory Committee
- Turf Management
- Consultants
- Sod, Sod, and More Sod

University of Florida Field Use Recommendations

- To sustain **GOOD** field conditions, usage should equal 200 hours or less per year.
- To sustain **FAIR to GOOD** field conditions (with some localized areas of wear), usage should equal 400 – 600 hours per year.
- **Significant turf loss**, field surface damage, and an increased potential for injury results as usage exceeds 800 hours per year.
- Key to these recommendations is the ability to defer use of the fields during adverse conditions (heat, rain, etc.). Unfortunately, due to scheduling demands our games go forward in all weather (unless conditions are unsafe).
- Hurrell Field's 2008 usage exceeded 800 hours. Since then we have gradually reduced field usage by more than 200 hours by moving August football practices to George Washington Field and by moving spring soccer to Forest Avenue Field. This has had negative consequences on those two fields and has only delayed damage to Hurrell by a week or two each season.

Proposal From Council

- Having made every reasonable effort to maintain a natural grass playing surface, it is our belief that continued efforts to do so would be both ineffective and cost-prohibitive.
- In order to give our student athletes a more rewarding experience, we propose that the natural grass area inside the track at Hurrell Field be replaced with synthetic turf.
- The total area that would receive new synthetic turf is 128,500 sq. ft. and would include both the baseball and football fields.

Public Question #1

- Referendum question: Should the Borough of Glen Ridge install at Hurrell Field an artificial turf field regardless of its composition at an estimated cost of between \$900,00 and \$1,000,000 (with the possibility that actual costs may be more or may be less), funding a substantial portion of said costs from contributions, and paying the balance by using the Capital Improvement Fund or through the issuance of bonds or bond anticipation notes?

Public Question #2

- Should the Borough of Glen Ridge install at Hurrell Field an artificial turf field with other than historically conventional crumb or crushed rubber composition at an estimated cost of between \$900,000 and \$1,000,000 (with the possibility that actual costs may be more or may be less), funding a substantial portion of said costs from contributions, and paying the balance by using the Capital Improvement Fund or through the issuance of bonds or bond anticipation notes?

Board of Education

- “The BOE is supportive of the Borough’s efforts to install artificial turf at Hurrell field. Installing an artificial surface at Hurrell will benefit the district by increasing field access for our sports teams, improving overall field conditions, and reducing field maintenance costs.”

Project Cost

- Expected cost is approximately \$1,000,000.

Included in this number is the cost of hiring a project engineer specialist to monitor progress on a daily basis for Glen Ridge.

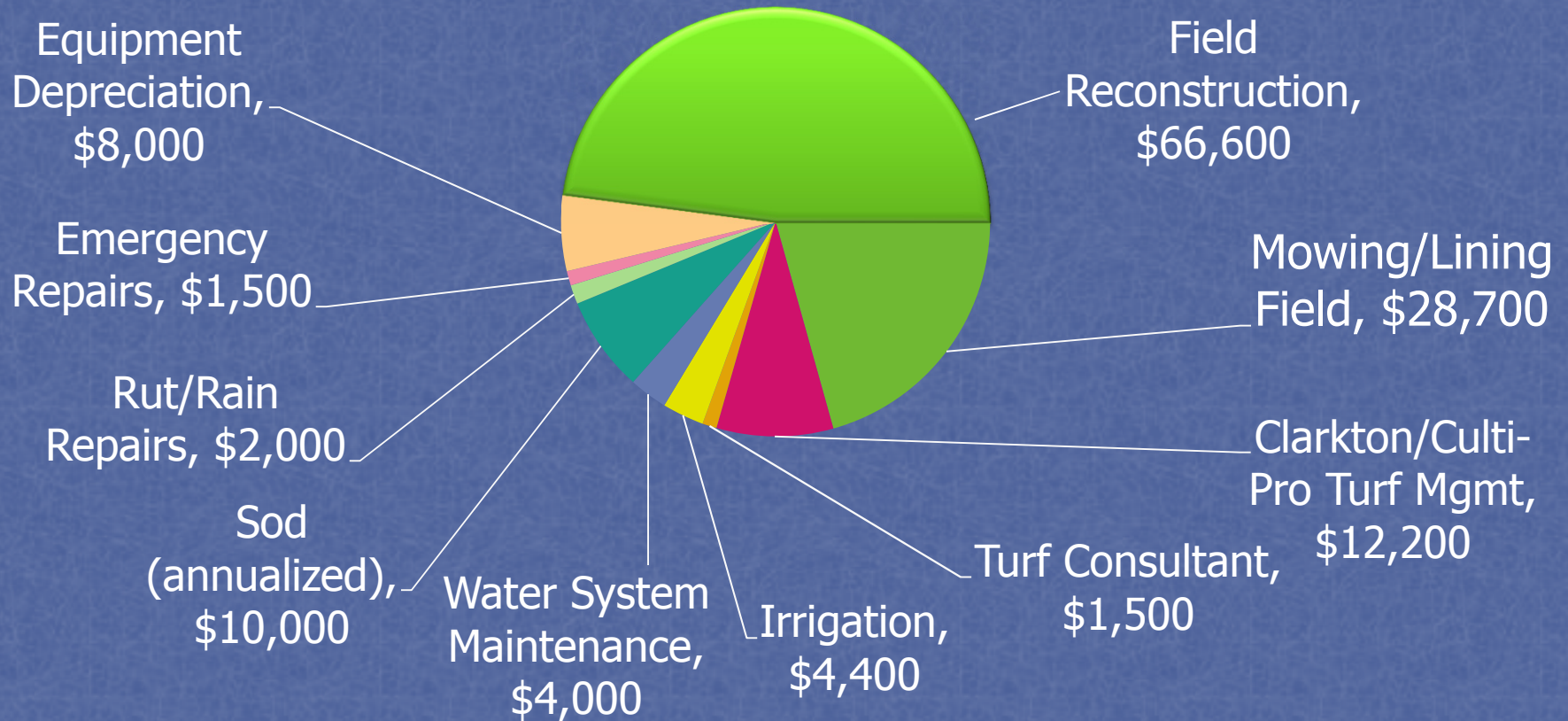
- Costs for proposed additions (included in total above):

- 1) Netting - \$26,000 (if lacrosse is added)
- 2) Traveling irrigation - \$10,000
- 3) Cameras for security - \$5,000

Source of Funds

- Private fundraising to raise a significant portion of the cost of the project; and
- Capital Improvement Funds from annual budget; or
- Issuance of Bonds or Bond Anticipation Notes; or
- Open Space Trust Fund.

Annual Cost of Maintaining Hurrell Field



Total Cost Per Year = \$138,900

Maintenance of Synthetic Turf

The maintenance items listed below are of minimal cost and will total less than \$10k per year.

- The field must be brushed on a regular basis (2 hours once per month)
- Irrigation will be needed to bring down surface temperature on 90+ degree days.
- Temporary striping and removal will be required periodically.
- Infill will be added to the playing surface as needed.
- Baseball pitcher's mound must be added and removed once per year.
- GMAX compression test administered annually.

10 Year Impact of Bond Financing For \$500,000

(assumes 3% borrowing rate + \$10k maintenance)

Annual Cost = \$67,696.48

Cost per household = \$29.52 per year

Cost per \$100,000 assessment = \$5.48

Cost vs. Savings

	Natural Grass Cost	Synthetic Turf Cost	Savings
Annualized	\$138,900.00	\$67,696.00	\$71,204.00
Per Household (2,293 residential units)	\$60.56	\$29.52	\$31.04
Per \$100K Assessment (\$539,048 avg.)	\$11.23	\$5.48	\$5.75

Synthetic Turf Life

Replacement of the synthetic turf surface in 12 – 14 years would cost an estimated \$500,000 in current dollars. This includes disposal of the old turf and installation of the new turf.

*Note: The Commonwealth of Pennsylvania (Keystone Purchasing Cooperative) has pre-approved Field Turf as a supplier of synthetic turf to interested buyers. Glen Ridge (as part of the bidding cooperative) would achieve the lowest price available for this product, reaping an expected savings of approximately \$70,000.

Benefits

- **Relieve pressure on other playing fields**
- Reliability
- Savings
- Practice time availability/scheduling
- Multi-use (side by side)
- Field permanently striped for up to 4 sports: Baseball/Football/Field Hockey/Soccer, with the option of temporary paint w/ticking for Lacrosse.
- Track and Field events, i.e., javelin/shot put, approved for synthetic turf
- Field Hockey

Benefits

(continued)

- Safety
- Water conservation
- Chemical-free maintenance
- Offset loss of field time at county parks

Field Relief

- Based on projections of usage from our Parks and Recreation Dept, the addition of a synthetic turf surface at Hurrell Field will provide the following benefits to our other town fields;
- Ability to rest Carteret and Forest 2 days per week
- The need to sod would become less frequent
- A reduction of DPW man-hours at each field
- Overall improvement of grass field conditions

Concerns

- **Health and safety** (see attached reports)
- Control of scheduling (remains with Parks and Rec. Dept.)
- Security/vandalism (addition of cameras)
- It's not grass
- Product life (8 year warranty)
- Lighting (will not be allowed)

Field Surface Options

- Natural grass \$138k/year
- Traditional synthetic turf \$68k/year
- Hybrid synthetic turf \$71k/year
- Geo-turf \$75k/year
- All cork infill \$82k/year

Health

An overwhelming percentage of research studies have stated that synthetic turf is safe. However, it is imperative that anyone with concerns do their own due diligence on this issue. Below is a listing of scientific studies from a variety of sources to use as a starting point.

Penn State Study: Human health issues on synthetic turf in the USA

<http://plantscience.psu.edu/research/centers/ssrc/documents/human-health-issues-on-synthetic-turf-in-the-usa.pdf>

Connecticut Department of Energy and Environmental Protection: Result of State Artificial Turf Fields Study: No Elevated Health Risk

http://www.ct.gov/deep/cwp/view.asp?a=3847&q=463832&depNav_GID=1511

Health

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U.S. Environmental Protection Agency: A Scoping-Level Field Monitoring Study of Synthetic Turf Fields and Playgrounds

http://www.epa.gov/nerl/download_files/documents/tire_crumbs.pdf

New York City Department of Health and Mental Hygiene: A review of the potential health and safety risks from synthetic turf fields containing crumb rubber infill

http://www.nyc.gov/html/doh/downloads/pdf/eode/turf_report_05-08.pdf

California Department of Resources Recycling and Recovery: Safety study of artificial turf containing crumb rubber infill made from recycled tires: measurements of chemicals and particulates in the air, bacteria in the turf, and skin abrasions caused by contact with the surface

<http://www.calrecycle.ca.gov/publications/Documents/Tires/2010009.pdf>

Health

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California Office of Environmental Health Hazard Assessment: Chemicals and particulates in the air above the new generation of artificial turf playing fields, and artificial turf as a risk factor for infection by methicillin-resistant Staphylococcus Aureus (MRSA). Literature review and data gap analysis

<http://www.calrecycle.ca.gov/Tires/Products/BizAssist/Health/TurfStudy/LitReview.htm>

New Jersey Department of Environmental Protection: Preliminary assessment of the toxicity from exposure to crumb rubber: its uses in playgrounds and artificial turf playing fields

<http://www.state.nj.us/dep/dsr/research/whitepaper%20-%20rubber.pdf>

Health

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Ridgewood Environmental Advisory Committee: Assessment of Environmental, Health and Human Safety Concerns Related to the Synthetic Turf Surface at Maple Park in Ridgewood, NJ

http://www.fieldturf.com/media/WJIs2TIsDIwMTIVMDgvMDEvMjIvMjcvNDEvNDA5L1JFQUJNTU3IiudGhidGjI1R1cmZlQXNzZXNkbWVudF9GSU58TF8yLnBkZjJkXQ/REAC_Synthetic_Turf_Assessment_FINAL-2.pdf

Human Performance Research Center: Incidence, Causes, and Severity of High School Football Injuries on FieldTurf Versus Natural Grass
A 5-Year Prospective Study

<http://ajs.sagepub.com/content/32/7/1626.abstract?sid=46b9198f-ead1-4ec9-ad17-8afd13ad75f9>

Health

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- CPSC Staff Finds Synthetic Turf Fields OK to Install, OK to Play On
- <http://www.cpsc.gov/en/Newsroom/News-Releases/2008/CPSC-Staff-Finds-Synthetic-Turf-Fields-OK-to-Install-OK-to-Play-On/>
- EPA Overview of Tire Crumb Fact Sheet
- http://www.epa.gov/nerl/features/tire_crumbs.html

Neighboring Towns

- Approaching 10,000 synthetic turf fields in the U.S.
- There exist over 500 in the state of New Jersey with 50 having been added by the end of 2013.
- Essex County Park System = 20 synthetic Fields
- Nearby towns :
 - Bloomfield = 5
 - Cedar Grove = 1 (2 more planned for 2014)
 - Montclair = 6 (1 more planned for 2014)
 - Nutley = 4
 - Verona = 1 (2 more planned for 2014)
 - West Caldwell = 1

Neighboring Towns

(continued)

- Notable universities with turf fields:
 - Rutgers – 9 fields
 - Princeton – 5 fields
 - Montclair State – 3 fields
- Notable private high schools with turf fields:
 - Montclair Kimberly Academy
 - Newark Academy
 - Seton Hall Prep
- Notable public high schools with turf fields:
 - Livingston
 - Millburn
 - Mountain Lakes

Timeline

- August 12th, 2013 -- Introduction of referendum
- October 15th, 2013 -- Turf presentation at Town Council meeting
- November 5th, 2013 -- Election day vote on non-binding referendum
- November 25th, 2013 -- Town Council Vote
- On-going -- Monitor Status of Private Donations
- Q1 2014 -- Commit to Vendors
- Summer 2014 -- Turf installation (completion time estimated to be 12 weeks)

Summary

The Town Council endorses the proposal for synthetic turf because we believe it is:

- Cost-effective
- Safe
- A more versatile and reliable surface for our student-athletes.

Thank you

- Questions? Email info@glenridgenj.org. Answers will be posted on the town's website.
- Please remember to vote!
 - Election Day is Tuesday, November 5, 2013.
 - Polling hours are 6:00 a.m. to 8:00 p.m.
- Mail-in ballots are available from the Borough Administrator's Office and must be requested no later than 7 days prior to the election.