

Pittsford Central School District

Athletic Field Options

Board Work Session #3

August 8, 2011

Synthetic Infill Turf Systems

- Turf System & Associated Drainage

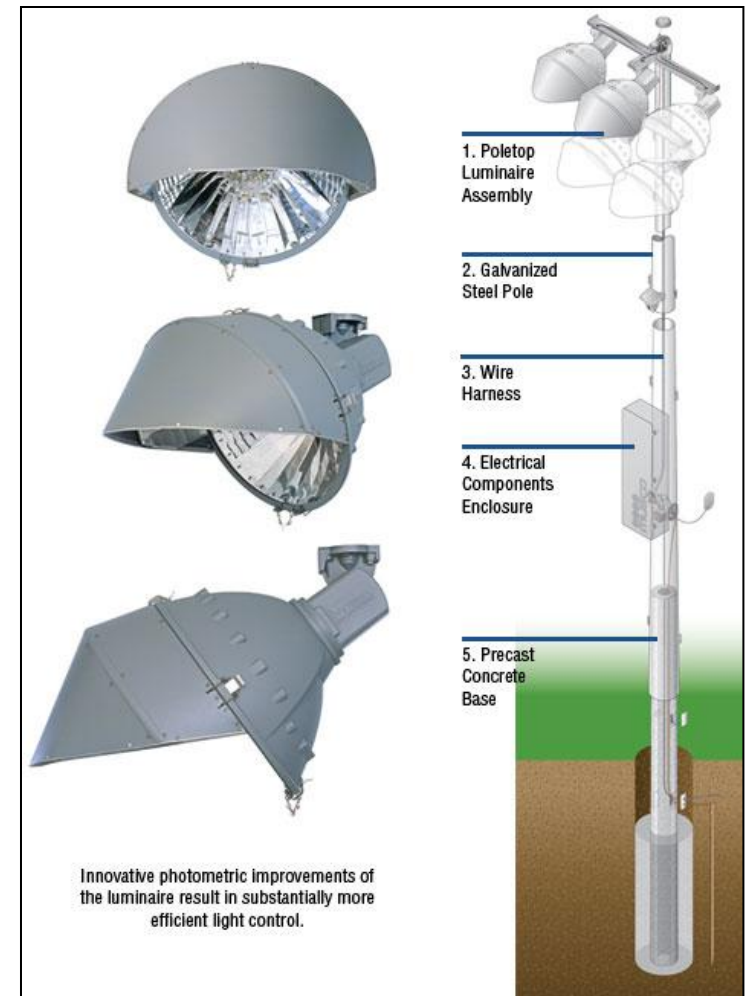


Synthetic Infill Turf Systems

- Warranties from Manufacturers Range from 8-12 Years with Third Party Extensions Available
- Warranties are Contingent on Stipulated Standard Use and Maintenance
- Maintenance Ranges from Weekly to Monthly Activities (Brushing / Raking, Aerating and Sweeping)

Athletic Field Lighting Systems

- MUSCO Light Structure Green System
- 25 Year Warranty (Parts, Labor and Group Lamp Replacement)
- All Maintenance Covered Under Warranty
- Operational Cost = \$15/Hour Per Field



Athletic Field Lighting Systems

- Controlling Light Spill



Health & Safety Considerations - Overview

- Some risks exist with the use of any and all types of athletic fields and participation in sports activities
- In general, the risks associated with synthetic infill turf fields have been found to be similar to that of natural grass fields
- NYS imposed a moratorium in 2008 on the installation of synthetic turf fields due to health and safety concerns raised at that time
- NYS lifted the moratorium later that same year based on a lack of evidence supporting risks that were claimed

References: “Fact Sheet: Crumb-Rubber Infilled Synthetic Turf Athletic Fields.” State of New York Department of Health. July 2008.

Health & Safety Considerations - Injuries

- The rate of injuries on natural turf and synthetic infill turf has been found to be almost equal
- The injuries on the grass fields took more recovery time and were typically more serious

References: Meyers MC, Barnhill BS. "Incidence, causes, and severity of high school football injuries on FieldTurf versus natural grass: a 5 year prospective study." American Journal of Sports Medicine. Oct-Nov 2004; 32(7):1626-38.

Health & Safety Considerations – Staph Infections

- Synthetic turf systems are not a hospitable environment for the growth of microbes
- Staph is far more likely to be encountered in locker rooms and using shared equipment

References: McNitt AS, Petrunak D. “Survival of Staphylococcus aureus on Synthetic Turf.” The Pennsylvania State University.

This slide offers the presenter's interpretation of the full report. To view the report and a response by one of the study's authors, William Crain, Professor of Psychology, The City College of New York, please click on the links below.

<http://www.pittsfordschools.org/files/38382/william%20crain%2C%20phd.pdf>

Health & Safety Considerations – Hazardous Materials

- The ingestion of the synthetic turf material is uncommon on the athletic field and when it occurs, it is in very small quantities
- It takes a substance much stronger than stomach acid to break down the crumb rubber and other materials in the synthetic turf, and therefore it passes through the human body without releasing hazardous material

<http://www.eastharlempreservation.org/docs/jes200855a.pdf>

*References: Zhang J, Han I, Zhang L, Crain W. "Hazardous chemicals in synthetic turf materials and their bioaccessibility in digestive fluids." *Journal of Exposure Science and Environmental Epidemiology*. 2008, 1-8.*

Health & Safety Considerations – Cleaning / Disinfecting

- Similar to natural grass fields, synthetic turf is subject to exposure from humans and animals which requires cleaning and/or disinfecting
- Water can be used to dilute and flush away most materials that cannot be removed by sweeping
- Natural cleaning and disinfecting products are available (enzymes and citrus based)



Health & Safety Considerations – Extreme Temperatures

- Synthetic turf fields can reach temperatures significantly higher than natural grass fields
- Common sense must be used to avoid any athletic activities during extreme outdoor temperatures
- Water can be used to significantly reduce the surface temperature of synthetic turf



SED Approval & Building Aid

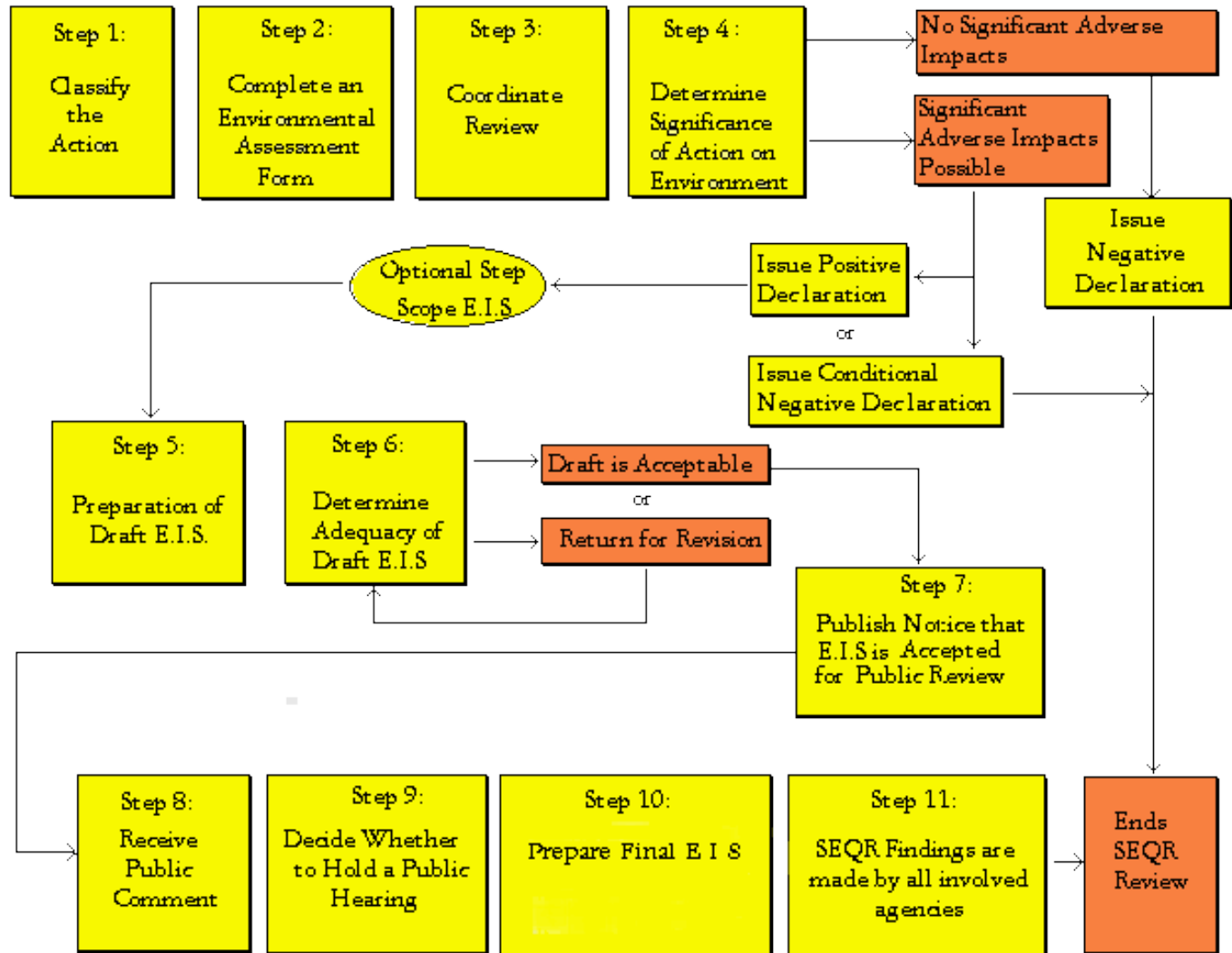
- SED is currently giving top priority for review and approval to “critical” projects
- The Regents 2011-12 Conceptual Proposal on State Aid to School Districts recommended “Eliminate Building Aid for projects with a useful life of less than 15 years”
- NYS budget language proposed by the Governor for 2011 included a competitive building aid process, elimination of select aid ratio (+10%), and limiting Incidental Costs to a percentage of actual construction costs (athletic fields are categorized as an incidental cost)
- Building aid in general is uncertain as we move into the coming year’s state budget and more so for projects not deemed essential to daily educational operations

State Environmental Quality Review Act (SEQRA) - Intent

- Described by the NYSDEC as “New York's State Environmental Quality Review Act (SEQR) requires all state and local government agencies to consider environmental impacts equally with social and economic factors during discretionary decision-making.”
- The primary intent is to balance the potential impacts with the potential benefits of the project for the overall good of the environment and community

State Environmental Quality Review Act (SEQRA) - Process

- Project Specific



State Environmental Quality Review Act (SEQRA) - Considerations

- Sampling of Potential Impacts to be Considered:
 - Intrusion of Light on Neighboring Properties
 - Storm Water Runoff
 - Intrusion of Sound on Neighboring Properties
 - Vehicular Traffic / Parking Impacts
 - Pedestrian / Spectator Impacts
 - Replacement of Synthetic Turf at End of Useful Life
 - Increased Energy Use Associated with Athletic Field Lighting

Project Timeline

(Darrin to Provide Based on Conversation with MA)

				2011-2012 School Year											
Item	Start	Finish	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	
1.0 Project Development															
1.1 Board Worksessions	7/13/2011	9/1/2011													
1.2 Feasibility Study	9/20/2011	12/30/2011													
1.3 Environ. Quality Rev (SEQRA)	10/1/2011	5/30/2012													
2.0 Referendum Work - State 2															
2.1 Community Hearings & Input	10/1/2011	3/30/2012													
2.2 Board Refine & Adopt a Plan	6/1/2012	6/30/2012													
2.3 Pre-vote information	4/1/2012	7/31/2012													
2.4 Public Hearing & Vote	8/1/2012	8/31/2012													
3.0 Preconstruction Phase															
3.1 Develop Plans & Specs for SED	6/1/2012	12/31/2012													
3.2 SED Review & Approval	1/1/2013	7/30/2013													
3.3 Prepare & Conduct Bidding	8/1/2013	9/30/2013													
3.4 Board Award Bids	11/1/2013	11/30/2013													
4.0 Construction - dependent on Option(s) selected															
4.1 Let Contracts and Staging	12/1/2013	6/30/2014													
4.2 Construction Phase I (one school)	4/1/2014	10/1/2014													
4.3 Construction Phase II (one school)	4/1/2015	10/1/2015													

assumes for athletic scheduling purposes could not have all the fields offline at the same time

Project Timeline (Continued)

				2012-2013 School Year											
Item	Start	Finish	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	
1.0	Project Development														
1.1	Board Worksessions	7/13/2011	9/1/2011												
1.2	Feasibility Study	9/20/2011	12/30/2011												
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Project Timeline (Continued)

				2013-2014 School Year											
Item	Start	Finish		Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14
1.0 Project Development															
1.1 Board Worksessions	7/13/2011	9/1/2011													
1.2 Feasibility Study	9/20/2011	12/30/2011													
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Project Timeline (Continued)

				2014-2015 School Year								
	Item	Start	Finish	Jul-14	Aug-14	Sep-14	Oct-14	Nov/Dec	Jan/Mar	Apr-15	May-15	Jun-15
1.0	Project Development											
1.1	Board Worksessions	7/13/2011	9/1/2011									
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Project Timeline (Continued)

				2015-2016 School Year			
	Item	Start	Finish	Jul-15	Aug-15	Sep-15	Oct-15
1.0	<u>Project Development</u>						
1.1	Board Worksessions	7/13/2011	9/1/2011				
1.2	Feasibility Study	9/20/2011	12/30/2011				
1.3	Environ. Quality Rev (SEQRA)	10/1/2011	5/30/2012				
2.0	Referendum Work - State 2						
2.1	Community Hearings & Input	10/1/2011	3/30/2012				
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End of Presentation