City Hits Home Run With Organic Infill Synthetic Turf

by Karen O'Keefe • November 6, 2014 • Comments Off

Photo | Phil Fabrizio
On Oct. 29, members of the County Council toured the new Lakelands Park organic infill synthetic turf field with Gaithersburg staff and Domenic Carapella, president of Limonta Sport USA/Geo Turf.

Fifteen months ago, after the mayor and council of Gaithersburg opted to construct the city's first synthetic turf field using a little-known organic infill made of coconut husk fiber, rice husk and cork, then-Mayor Sidney Katz made a prediction.
“In the future, this field will be the one everyone turns to (for answers about synthetic turf). … They will say, 'In Gaithersburg, they did it the way it should be done.'"

In the days since the field opened, it appears Katz’s prophecy has already come true.

Before settling on the organic infill, the Gaithersburg City Council examined the findings of city staff research, presented by Michele Potter, director of parks, recreation and culture, on three different infill or foundation materials available for synthetic turf fields.

One was “traditional” crumb rubber and sand, the material Montgomery County Public Schools has on new and renovated fields used for interscholastic football and other games. Crumb rubber also comprises the backing of seven county municipal park fields.

The staff also examined attributes and performance of “Nike Grind,” used in one county park field. Nike Grind is a mix of the rubber from recycled athletic shoes of any brand and sand.

At the direction of the mayor and council, staff also looked for a natural alternative to rubber infill. At St. Timothy’s School in Stevensville, Maryland, they found a one-year-old field with an organic infill mixture of coconut husk fiber, rice husk and cork, manufactured by Limonta Sport, a company that has built synthetic turf playing fields in the U.S. since 2007.

Only two weeks have passed since the Gaithersburg field’s grand opening in Lakelands Park. However, on Oct. 8, an NBC News report linked synthetic turf fields that
contain rubber—and not organic infill—to cancer in young athletes. Against a backdrop of skyrocketing worry—and given the new field’s demonstrated environmental, health, safety and economic attributes—it is looking very much like the City of Gaithersburg has hit a home run with their new soccer field.

Prior to opting for the organic infill, as the Gaithersburg mayor and council moved forward with long-range plans to bring artificial turf to the city in order the increase the amount of time playing surfaces could be used, they held hearings to get public input.

Concerns were raised.

Environmentalists, parents and other citizens talked about the health risks of exorbitant heat, and the risks from chemicals and particulates in the air above the field.

People testified that rubber infill was harmful to the environment in several ways. The crumb rubber could “migrate” out of the field to places it did not belong, including local waterways. It stuck to the athletes who played in it.

They heard testimony about fields that had to be “refilled” with large amounts of rubber.

Once a field had been used with the rubber, they were told, it could never be used for anything else. It would be beyond rehabilitation, unable even to support plants—dead.

There were concerns expressed about the hardness and shock absorption properties of synthetic turf fields, as measured by “G-max,” a measurement of acceleration that relates to the
maximum force of a collision—concussion concerns.

According to the information provided by the Lakelands Park field manufacturer, the Limonta Geo Turf field will always have a G-max rating on a par with a well-maintained natural grass surface. Also, unlike natural grass fields, it will never require pesticides, herbicides, fertilizers or lime.

Roger Berliner was one of three Montgomery County Council members who visited the field Oct. 29 for a briefing by Michele Potter, other Gaithersburg staffers and Domenic Carapella, president of Limonta Sport USA/Geo Turf.

Berliner was impressed. “They do good work in Gaithersburg, and here they clearly did their due diligence. I say ‘hats off to them.’ They are ahead of our county in this.

“Once you get rid of the health issues, the environmental issues, the concussion issue, and the heat issue (as they appear to have done at Lakelands Park), then you are just left with the question of artificial turf versus real grass.

“I understand there will be people who think we should be playing on real turf. I understand that. But, given the demands for playability, we have not gotten to a place where real turf holds up. It’s a close call as to which is better,” Berliner said.

Phil Andrews, who until the recent election represented the county council district that includes Lakelands Park, was also impressed by the field. “It feels much less spongy than
artificial fields that use crumb rubber as the infill, and thus, I'm told, plays, more like grass."

Andrews also cited the reports that the field will stay cooler as "big advantage." And, he said, despite being somewhat more expensive, advantages included fewer environmental and health concerns.

"The challenge with grass fields, especially in our area, is that they quickly become unplayable in wet conditions or if played on while wet are quickly torn up. Even in ideal weather conditions, grass fields cannot be used nearly as (much) as non-grass fields.

"Assuming that Gaithersburg's new field holds up well and maintenance costs are reasonable, the county and MCPS should certainly consider switching from crumb rubber to the organic infill Gaithersburg is using," Andrews said.

**Will the Field Hold Up?**

In California, the City of San Carlos installed a Limonta Sport organic infill field at Highland Park in 2011. According to the city's website, Highlands Field is the first municipal athletic field in the United States constructed using this organic infill.

In an email, San Carlos City Manager Jeff Maltbie told the Courier the city is pleased with the performance of the now three-year-old field.

"The only two issues we have had with the field is a few of the sewn seams opened up slightly, not too long after installation."
“The installer stood by (the agreement) and repaired them free of charge and (the field has been good) since.

“We also had to add infill material (more coconut husk). This was the result of city maintenance crews not watering the field enough. The field doesn’t need anywhere near as much water as a grass field but it does need a little to help keep the husk from completely drying out and blowing away.

“The field gets a ton of use, looks great, and has helped meet the growing community demand for athletic use. We haven’t had any complaints about the field material, etc.—and we would make the same recommendation to install this field today,” he concluded.

In 2012, after using the Limonta Sport field for a season, Martin Lotz, facility manager at St. Timothy’s School offered this assessment in a letter to Domenic Carapella: “At St. Timothy’s School we have … a synthetic sports field that is unmatched by any other educational institution or sporting organization in our region. I would insist on using (Limonta) services for all future projects at our facility and recommend with highest confidence Limonta Sport … products and workmanship.”