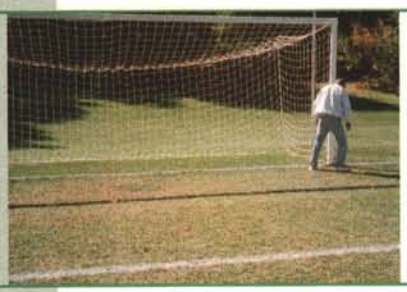


Perserverance Earns College Soccer Field of the Year Honors for Boston College

by Bob Tracinski

Boston College's Championship Soccer Facility is perhaps the most stunning setting for college soccer in the Northeast, according to the feedback from visiting coaches. "Nestled in the lower corner of Boston College's Law School Campus between a residential neighborhood and Edmund's Park in Newton Centre, Mass., the field is surrounded by a cathedral of mature oaks, maples and locusts," reports Patrick Maguire, director of Geller Sport, Boston.

The company spearheaded the development of the soccer game and practice facility, including the permitting, design and construction administration.

Maguire notes the soccer field development was first conceived by the Boston College administration in 1997 and project development began then. The intent was to provide premium facilities for the program, alleviate overuse of existing facilities and eliminate the need for the men's and women's soccer teams to travel up to 35 miles to various off campus sites for its "home" games when the existing facilities were scheduled for other use.

Alumni Stadium, an artificial turf field, was the original playing field for the Boston College soccer programs. Play was later moved to the native soil Shea Field, which serves the school's baseball and softball programs in the spring and doubles as the practice field for football in the spring and fall. It's also the site of Saturday tailgating by prior to football games in the fall. At times, one of these Saturday afternoon tailgating sessions would be followed by a Sunday soccer game on the same site.

Patrick Maguire (left) accepts the STMA College Field of the Year award from former STMA President Steve Guise. Photo courtesy: STMA

Boston College's last undeveloped property was at the Law School Campus. Maguire says, "The site was near wetlands and a stream encompassed by the city-owned Edmund's Park. It was necessary for the field to be permitted under the Commonwealth of Massachusetts Wetland and River Protection Acts. There also were issues expressed by the neighborhood, city and a local advocacy group that needed to be addressed. In June of 1999, the college reached an agreement with the City of Newton and the advocacy group to allow construction to begin.

"With the soccer season starting in early September, just 12 weeks were left for demolition, construction, sodding and grow in. The facility's first game was played on Sept. 12, just 5-1/2 weeks after the installation of the sod. Remarkably, the field was playable despite enduring one of Boston's worst rainstorms in almost a decade the night prior to the game. Remnants of Hurricane Floyd dumped over 5 inches of rain on the field less than 24 hours before kickoff. At game time, the field surface was dry, the footing was stable and the game proceeded without any problems."

Construction details

The 360-by-225-foot game field was developed within the wooded area next to the park. The smaller practice field is within 200 feet of the game field and directly adjacent to it, but is separated from it by the wooded area.

Preliminary work had taken place prior to June with the clearing and stockpiling of trees in areas outside the site where construction agreements and protection permits had been needed. Following some additional tree clearing, approximately 1,000 yards of the existing sandy loam were stripped from the game field site and moved to the practice field area to be mixed with the existing native soil.

Maguire says, "On the game field, a 6-inch gravel base was installed. Embedded in it are three subdrain pipes running across the field and draining away from the park into a dry well on college property. This was topped with an 8-inch layer of 70 percent sand, 15 percent native soil and 15 percent All Gro compost mix tested to meet the particle size and physical performance criteria of the USGA rootzone mix. Each load was tested at the pit and again on site to insure specifications were met. The field is crowned from the center to .085 percent. Around the top of the penalty areas it becomes converse to drain toward the goal area. The field was sodded with big roll washed bluegrass sod.

"The field is fully irrigated with a low flow, low pressure

system consisting of a Weathermatic LMC Series controller, Weathermatic valves and Hunter I-25 full and part circle heads with rubber covers. Four quick couplers are located half way down each half of the field and off the field surface."

Maintenance details

The soccer game field is the first, and the only, sand-based field in Boston College's athletic program. As part of the construction contract, Maguire developed the initial maintenance program for the field working in conjunction with Bob LeBlanc, superintendent of grounds at Boston College (now retired). Shortly after construction was completed, Scott McCoy was hired by Boston College as assistant supervisor of athletic facilities to focus on the development and maintenance of the new facilities and the maintenance programs of the other facilities.

McCoy was prepared for the monitoring and program flexibility necessary for the establishment and maintenance of sand-based fields. He spoon feeds a soluble fertilizer package every two weeks, supplemented by monthly applications of a granular fertilizer. He switched to an organic granular fertilizer following the mid-July aeration. He's also using a growth regulator to improve overall thickening and turf quality.

He says, "Being able to keep the field out of play from the end of the fall 1999 soccer season to the start of the fall 2000 season has proven very beneficial. Rooting depth has reached 6 to 8 inches with good root mass. We're using the combination of biostimulents and organics to increase the root mass even more. With the deeper rooting, the field stability also has improved as anticipated. Drainage remains excellent. If we get a pouring rain in the morning, the field will be ready for play by the afternoon. We've been mowing at 1-1/2 inches and may drop that to 1-1/4 inches or even 1 inch for play.

"Temperatures in the sand-based field have been consistently 10 to 15 degrees higher than the native soil fields, so we've been running an 8- or 9-minute irrigation cycle on the extremely hot days to cool it. That's in addition to the regular irrigation program.

"Where the sand profile ends, the modified native soil base around the field was sodded with non-washed sod. Our maintenance program is increasing the percolation rates in that area."

Spring did bring one surprise. According to state regulations, a sod producer can only cut and wash a limited amount of sod each day, approximately enough for one-third of the field area. Thus the field's sod was installed over a three-day period. McCoy says, "The field was tarped

Maintenance Program

Fertilization:
Based on soil test results
pH monitored to 5.8 to 7.5 range
Slow release polyon-constructed fertilizer with N:P:K ratio of approximately 4:1:4 (21-5-20)
First application when field tarp removed and growth initiated
Additional applications at four-week intervals (or more frequently if indicated) along with micronutrient needs as indicated by soil tests
Final granular application made in late September or early October
Liquid fertilizer package applied every two weeks according to test results

Irrigation:
As needed based on evapotranspiration

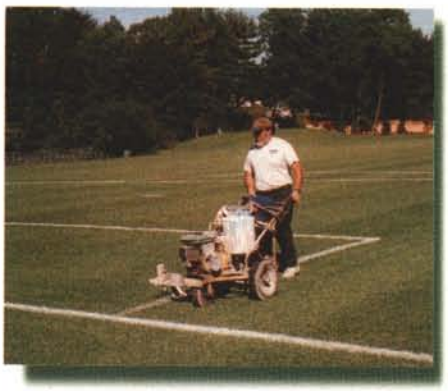
Mowing:
Mowed two to three times per week as growth dictates with ride-on triplex reel mower
Off season height-of-cut 1-1/2-inches
In season height-of-cut 1-1/4-inches to 1-inch

Aeration:
Spring aeration—two passes in different directions with ⅝-inch hollow tine cores penetrating 3 to 5 inches
Fall aeration—three passes in different directions with ⅝-inch hollow tine cores penetrating 3 to 5 inches
Aeration of goalmouths, sidelines and other high traffic areas as needed
All cores shattered in place and dragged back into field

Overseeding:
Early May and mid-September with slice seeder at the rate of 2 to 3 pounds per thousand square feet followed by a broadcast application at the same rate and a light topdressing with a sand based medium matched to the soil profile
Goalmouths, sidelines and other high traffic areas overseeded as necessary
A blend of dwarf bluegrass varieties used for all overseeding

Pest Control:
Weed, disease and insect control as needed following integrated pest management practices with manual and cultural solutions preferred
Chemical controls used only as necessary

Painting:
Twice per week during playing season, depending on game schedules



A crew member prepares the field for an upcoming game.
Photo courtesy: Boston College

from late November until mid-April. When the tarp was removed and the turfgrasses began active growth, it became apparent this had resulted in some variation within the turfgrass species in the three different loads of sod as related to the area on the sod farm from which each was harvested. The three to four dwarf bluegrasses had variations in dominance, there was some poa annua in the center field section and some perennial ryegrass in the end lines. It's more a visual issue than a quality issue. Aggressive overseeding this past spring and again this fall, combined with the fertilization, aeration and topdressing program, should give us greater uniformity."

There's also a logistical challenge. The Law School campus is approximately 3 miles from the main campus in Chestnut Hill, where all the maintenance equipment except the ride-on triplex reel mower is stored. McCoy is on the field site daily; the rest of the crew is onsite two or three times a week. A pickup truck and trailer are used to transport the smaller equipment. Larger equipment, such as the tractor and topdresser, must be driven over city streets to the fields.

McCoy anticipates maintenance levels will increase for fall play. Between the men's and women's soccer schedules, 17 to 18 games will be played on the game field from early September to late October. If field conditions remain good and weather cooperates, he'd also like to allow the teams to use the game field for practice once or twice a week to sharpen their strategy on the bigger field.

John Kane, senior associate athletic director for Boston College, notes, "The field was a long time coming and we're pleased with the end result and with the professionalism demonstrated by Patrick Maguire and Geller Sport."

Vaughn Williams, assistant athletic director of facilities and operations, reinforced the statement made by both Maguire and McCoy: "The best part of the whole process is the reaction of the student athletes. It's great to see how happy they are to have such a tremendous playing surface."

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