Soccer, the sandlot sport of the '60s, is becoming the preferred sport of well-rounded college students. At least this was the conclusion reached by Emory University's trustees when they decided how to spend 20 million donated dollars for physical education.

Emory, a 150-year-old university tucked into an older residential neighborhood in Atlanta, GA, was out of space. It had 18 acres to serve its popular intramural and intercollegiate sports programs. The student population had swollen to 4,400 undergraduates and 3,800 graduate students since the sports facilities had been constructed in 1948. Students were voicing their dissatisfaction with the gym and fields and trustees anticipated this was having an effect on recruitment of students.

As colleges and universities compete for students, athletic facilities are being recognized as an increasingly important part of the campus physical plant. Colleges are responding with impressive new physical education centers. Such investments can spill over into athletic fields.

The Emory philosophy has traditionally been "athletics for all." Since becoming president of the university in 1977, J.T. Laney has strengthened this position in an effort to make Emory a place "where an outstanding student would go in order to develop a full range of abilities, intellectual as well as personal." Laney found Emory trustee George Woodruff a strong believer in this philosophy and in 1979 Woodruff made a large gift to the school to launch a $20 million investment in physical education.

The Woodruff Physical Education Center was an opportunity to attract the kind of students the school sought, bright and athletic. As John Palms, vice president for academic affairs told the trustees, "This facility is going to be a significant addition to the life of the campus. It's going to be an important factor in our recruiting of outstanding students. I think it will pay off.

With this gift in hand, the trustees pondered the choices. The school lacked intercollegiate football, basketball and baseball programs. Should they use the funds to attract athletes for these highly publicized sports since they did not provide athletic scholarships? Or should they follow tradition and invest in the intramural program and the NCAA Division III soccer, golf, tennis, cross country, swimming and track and field teams? Like more urban colleges today the trustees voted to spend the money on sports the students could play, not just watch.

The architects went to work on an athletic complex devoted to the recreational needs of the students. At the same time, Clyde Partin, chairman of the Department of Health and Physical Education, started
to lobby for improving the 18 acres of fields on campus as part of the overall improvement program. Partin was responsible for the more than 1,000 scheduled activities on the fields each year. No one knew better than Partin the punishment the fields were subjected to. He initiated a plan to reconstruct all the existing fields and to build a new soccer field adjacent to the planned Physical Education Center.

Partin believed an all-season field and state-of-the-art track would provide the students with quality, reliable facilities and attract special events to the Emory campus. He convinced the trustees, the fields were added to the budget and the campus now hosts an invitational NCAA soccer tournament, the Martin Luther King Freedom Games and many regional soccer championships.

To take charge of building and maintaining the fields, Partin hired Charles Scott, a veteran landscape contractor familiar with athletic fields. Scott, who had helped construct the Atlanta/Fulton County Stadium, consulted Turner Gibson, vice president and agronomist for Southern Turf Nurseries, Tifton, GA.

Partin told Scott he needed a field that had excellent footing, could withstand the wear and tear of 1,040 games and practices a year, could be played on rain or shine, would survive from year to year and could be maintained before daylight or after dark without conflicting with field activities.

Scott concentrated on one main point—percolation. His 28 years of experience had taught him drainage was the most important factor in turf survival under heavy use. The field had to be able to hold together under heavy spring rains to meet Partin’s goals.

“We dug down 24 inches and sloped the subgrade,” Scott explained. “Then we installed four-inch laterals connected to six-inch drain lines on each side of the field. The drain field was covered with six inches of washed stone between 1/2 and 3/4 inches in size.

The next step was finding the perfect soil. We had soils from all types of sites analyzed, testing each one for percolation. The soil we chose came from the banks of the Chattahoochee River. Turner Gibson calls this sandy soil the perfect soil mix, the best he has seen since he built his first golf course in 1939.”

When tested, this soil was 93 percent sand, three percent silt and four percent clay. Ninety-five percent of the sand was larger than 0.1 mm with more than half 0.25 to 0.5 mm. Nearly ten inches of water per hour flowed through the mix. One percent of the mix was organic matter.

Sixteen inches of this mix was spread over the field and graded with a slope from the center of the field to the sidelines. Meanwhile, Southern Turf Nurseries had been custom-growing Tifway (419) on sand to prevent any problems with compatibility between the sod and the soil mix. After a Rain Bird automatic irrigation system was installed, the field was sprigged in the summer of 1983.

Emory University’s timing couldn’t have been better. A track made of specially designed rubberized asphalt was installed around the new soccer field. Top track and field athletes from across the U.S. competed on the Emory track during the Martin Luther King Freedom Games to qualify for the Olympics to be held in Los Angeles the following year.

That fall more than 14 special dedication events utilized the new field and physical education center. Highlighting these events was the Emory University Invitational Soccer Tournament featuring the University of North Carolina at Greensboro (NCAA Division III 1982 National Champions) and Florida International University (NCAA Division II 1982 National Champions).

When the students arrived for the fall semester they were greeted by the sparkling new Physical Education Center, soccer field and track. Immediately student use of the facilities jumped. The soccer field schedule was packed solid seven days per week.

The impact of the new facility on Emory’s intercollegiate teams was felt almost immediately. The 1984 Eagles coached by Tom Johnson was the best soccer team Emory ever fielded with 16 wins, three losses and two ties. The same year student Tony Lewis became Emory’s first cross country All-American. Both men’s and women’s tennis teams were ranked in the NCAA Division III top ten in 1984. The greatest impact was felt in track and field with 35 school records broken the first year.

After nearly three years the main soccer field still stands up to the daily assault of soccer, lacrosse, rugby and touch football players. Scott does not overseed the field with ryegrass despite year-round use. Instead he starts gradually raising the cutting height of the bermudagrass in August from 3/4 inch to 1 1/2 inch by November. “We leave as much fluff on in the winter as possible,” says Scott. The Tifway survived record cold
temperatures this winter of 1983-84. He is exploring the idea of burning off the thatch and topdressing to eliminate thatch built up over three years.

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The field is mowed nightly with a tractor-drawn gang of Roseman reels during the spring and fall. Twice a year Scott aerifies the field, drags it, fertilizes and irrigates heavily. During the year he fertilizes heavily. He applies 90 lbs./acre of ammonium nitrate more than twice a month alternating every three weeks with a complete fertilizer. He limes the field four times per year. When the bermudagrass is actively growing Scott irrigates at night for an hour. So far he reports no problems with diseases.

Infestations of annual bluegrass and winter chickweed have been stopped with applications of Poast says Scott.

Immediately following graduation ceremonies in May Scott leases a sprig planter and sprigs any thin areas around the goals. He has kept his eye on percolation by having the soil tested each year. “After three years it still takes the field less than 20 minutes to drain off after a three-inch rain.” boasts Scott.

In the spring he lowers the cutting height and vacuums the field with a Giant Vac that he uses for other campus cleanup. This year Scott may topdress the field for extra smoothness.

Plans for the Woodruff Physical Education Center also included renovation of seven softball fields, seven soccer and/or touch football fields and one field used for rugby and lacrosse. These are located in three different areas on campus.

The largest is ten acres and has four softball fields, four soccer fields, a rugby/lacrosse field and a baseball field. Used mainly for intramurals, last fall there were approximately 60 intramural soccer and football teams as well as 130 softball teams using these fields. This translated into roughly 80 games per week for intramural teams.

A six-acre field is dominated by fraternities and team practices. A third two-acre field is used for women’s sports and teaching classes. A band shell and outdoor stage are planned for this field in the future.

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These fields were renovated since 1983. Four inches of stone and perforated drain tile under 14 inches of soil mix keep the fields playable. Older Nelson irrigation systems are used to water the fields when needed.

Maybe no student ever picked a college to attend because it had a great soccer field. But Emory trustees believe soccer is an important part of its Physical Education Center. Partin and Scott have shown the university community that natural fields can meet the needs of urban colleges with limited acreage. The key is in the soil.