



When the Olympics conclude, the City of Columbus will retain the beautiful eight-field softball complex, which includes championship lighting, PVC-coated chain-link fencing, and irrigation for all fields. Photos courtesy: Herb Cawthorne.



Preparing for Olympic Softball - Teamwork Counts

By Dr. Gil Landry

Perhaps the highest concentration of sports turf fields on public display occurs during the summer Olympics. This athletic extravaganza becomes a focus for sports enthusiasts and draws the attention of even the most casual sports observer among the general public.

Top athletes from across the globe converge to compete for their countries and themselves. In the spirit of international fairness and to provide the best possible opportunities for all players, it's essential that conditions among the multiple fields used for preliminary, as well as final, rounds be as close to identical as possible. The International Olympic Committee, the Olympic Committee of the designated site (this time of Atlanta [ACOG]) and committee representatives for each sport set precise standards to bring about "ideal" playing conditions for that sport.

Field preparation begins far in advance of the "official" Olympic opening. Consider the development of two sites for softball competition, both in Columbus, GA.

Aaron McWhorter, vice president of Sports Turf Company, Inc., of Whitesburg, GA, says, "Ours was one of three pre-qualified companies invited by the City of Columbus to bid on the first project. Don Campbell of French & Associates Landscape Architects, Columbus, GA, was the landscape architect and project manager for both projects. Richard Bishop, assistant director of Parks and Recreation for the City of Columbus, is overseeing all Olympic venues for the city, including the planning and construction stages."

The first project consisted of removing an existing nine-hole golf course and

developing eight Olympic-quality softball practice fields on that site. Campbell says, "The city was already planning this eight-field complex as part of the recreational projects funded by a recent tax referendum. It's a case of build it and they will come. The city submitted a proposal for the Olympic venue, and it was accepted."

Sports Turf, Inc. handled all stages of the project following the rough grade. The scope of their work included final grading, rootzone construction, surface field engineering, irrigation installation, sprigging, grass grow-in, and fencing. McWhorter's company began construction in June of 1994 and had the fields sprigged and mostly grown-in by that October.

Campbell describes himself as a "dirt" landscape architect. Starting with a horticulture degree, he spent time "in the field" doing hands-on construction before getting his LA degree. McWhorter and Campbell brought to the Olympic projects the same concept they bring to all sports field construction - safety and the efficacy of long-term maintenance come first.

Any construction project proceeds most efficiently if the owner, landscape architect and contractor are on the same wave length. In these projects, the owner (the city, represented by Bishop) also was looking to long-term capital improvement. So, say both McWhorter and Campbell, "We built the best fields possible with the available funds - and these are world-class fields. Our budget was no different than that of most typical community construction projects of this scope. We just re-allocated funds to prioritize our fields."

Campbell says, "Our budget was \$2.5 million, and we were able to put the bulk

of the funds into field construction and make special arrangements with material vendors for other parks to help get the cost of materials down to reduce the deficit.

"For \$2.5 million, we were able to construct eight sand-profile, 300-foot softball fields; install championship lighting on all fields; put up black, PVC-coated, chain-link fencing in all areas; install irrigation for all fields and outlying areas; develop a 600-car parking lot with access roads; put in landscaping; and construct a two-story concession and administration building with rest rooms."

In 1995, the City of Columbus handled all the bidding for the second Olympic project, Golden Park. This home of the Cleveland Indians' A baseball team, the Redstixx, was to be converted to a softball game site, then re-converted to a baseball field. Again, a pre-qualified list of companies was asked to bid. Sports Turf, Inc. was awarded the construction bid; French & Associates the design and engineering bids.

McWhorter says, "Campbell, Bishop and I became a team again. We planned the design and regrading, always considering the second field conversion as well as the first."

Campbell says, "Primarily, throughout the process, I was designing a baseball field that would just happen to have a softball field on top of it temporarily."

McWhorter says, "The existing field was flat, and pockets of standing water had been a repeating problem. Dugouts were flush with the ground and had a six-inch lip. The brick outfield wall is two-feet thick and eight-feet high, limiting the depth and width of excavation. We had no

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way of removing water since surrounding ground was higher than the field. And, even if underground drainage had been budgeted, there was no surrounding storm drainage system with which to connect.

"We wanted the radial grade to produce a baseball field with matched outfield height – the 300-foot mark at the same level on the fence throughout the outfield. The infield was elevated 18 inches, and steps were added down into the dugouts."

The entire field was laser-graded a total of four times. This method was chosen for its precision and the lessened compaction it produces in the rootzone as compared to other grading methods. This was especially important because the field has no underground drainage.

Campbell says, "Raising the infield not only allowed the field to surface drain through the outfield wall, but also brought the playing field closer to the spectators, which gets them more physically and visually involved in the game."

"We get an afternoon rain nearly every day in Georgia. The fields need to be playable within 15 to 20 minutes after the rain. To achieve that without underground drainage, a higher percentage of sand was needed in the soil profile. The fact that a standard baseball infield tarp would almost cover the entire softball field allowed us to minimize re-grading during construction."

McWhorter says, "The outfield was toppedressed with four inches of sand over the existing sandy loam soil and the sand lightly blended in."

With an eye to player safety, all of French & Associates' baseball field designs begin the outfield slope 20 feet back into the outfield, lessening the transition from infield to outfield. The infield slope was established at 0.5 percent, the outfield slope at 1.3 percent all the way around to further speed drainage.



Because it has no underground drainage, the Golden Park field was laser-graded four times, and a high percentage of sand was added to the soil profile.

The irrigation system was designed primarily for the baseball field, with adequate coverage for the softball field.

Following this, the construction team laid out a softball field on the baseball field.

McWhorter says, "The seating for the baseball field was 60 feet behind home plate. The Olympic Committee wanted the softball field seating positioned 20 feet behind home plate. This moved the entire softball field layout 40 feet closer to the seating, putting all the bases on the same elevation and allowing the majority of the softball field to fit on what will be the infield of the baseball field."

"The softball field was sodded with Tifway II Bermudagrass out to the 225-foot mark, the distance designated by the International Softball Federation (ISF). This includes 200 feet to the outfield fence and a 25-foot 'safety zone' between the fence and the outfield bleachers. The infield area is skinned baseline-to-baseline on a 60-foot arc off the pitcher's mound. Three inches of a pre-mixed 80 percent sand, 20 percent clay material were used for the skinned area. To add color for TV coverage, the area behind home plate and on the sidelines is grassed."

"Outside the 12- to 14-foot strip of grass, a ten-foot warning track runs in front

of the dugouts on both sides of the field. The foundation for the entire warning track, three inches of fine crushed (M-10) granite stone, was placed all around the wall. It will take two inches of topping material to complete the warning track during the conversion back to baseball."

As part of the Olympic Committee's emphasis on security and the safety of the athletes, a separate security fence is placed 15 feet beyond the outfield fence. Temporary bleachers will be placed in a radial pattern around this security fence, adding seating for approximately 6,000 people. Three inches of M-10 granite were placed beneath this bleacher area and also beneath the spots where the rest rooms, concessions and souvenir tents for the Olympics will be placed. Pathways of M-10 granite lead out from the bleacher area to these three sites. Between these pathways are 75-foot by 75-foot islands of turf that can be used by spectators for picnicking or relaxing.

The sod was specifically grown for these fields by McWhorter's independent division, North Georgia Turf, a 500-acre sod farm. Certified Tifway II Bermudagrass was chosen primarily for its cold tolerance, providing quick, even, green-up in the spring and staying power in the fall. The sod was grown on a 90 percent sand base. Golden Park's sod was overseeded in October of 1995 with 300 pounds of perennial ryegrass per acre.

The sod was laid in 30-inch-wide "big rolls," cut approximately two inches thick. This not only trimmed labor costs, but also created a measuring line for installing outfield material. The big roll sod provided stability during the NCAA Division I "Lead-off Classic" Women's Fast-Pitch Softball Tournament held ten days after the work was completed in early March.

Despite all the pre-planning, the construction team found it necessary to make modifications as work proceeded. Storm drainage was added to a portion of the field to catch excess water washing off the bleachers. The whole concept of elevating the infield by 18 inches was a problem-solving alternative. Faced with hauling away multiple truckloads of the existing field material to achieve proper height, they opted instead to raise the infield and make use of that dirt on-site.

The Redstixx will move all "home" games to an outside facility during 1996. The construction team will then have 30 days following the end of Olympic play to complete Phase II, the conversion back to baseball.

McWhorter says, "During the conversion to baseball, all of the M-10 granite beneath the temporary bleachers and in the

Landry's Keys to Successful Sports Field Construction

1. Have good construction specifications.
2. Have good communications between all parties throughout the project.
3. Be able to compromise and solve problems as they develop.
4. Use sound agronomics such as:
 - Planning surface and subsurface drainage;
 - Doing a good job of soil preparation;
 - Planting a turfgrass adapted to the conditions and intended use.
5. Follow a good fertilization, irrigation and mowing program during establishment.



The Golden Park softball field features pathways leading from the outfield bleachers to rest rooms, concessions and souvenir tents. Between the paths are islands of turf where spectators can picnic or relax.

pathways to the satellite sites will be removed. The city will truck the material to various park sites where it will be spread on the walking trails.

"Neither the grade nor the slope will need to be changed in the conversion. Only the area where the granite is removed will be laser-graded again. We'll place sod in several areas and infield mix in others, remove the softball infield mix, build the baseball mound, and install the remainder of the warning track."

Campbell says, "Our goal on the complex and Golden Park was to make every field exactly alike in the structural components, infield mix and skinned area mix. The practice fields constructed in 1994 are of the same quality as the Olympic game field. The Olympic Committee stressed the necessity of giving each top athlete an equal and fair chance, and that same concept holds for any tournament at any level of play."

The City of Columbus will retain the eight-field softball complex and has already used this beautiful park to host many softball tournaments, including the 1995 state high school tournament and the inaugural ISF "Superball" International Women's Fast-Pitch Tournament, which will continue to be an annual event in Columbus.

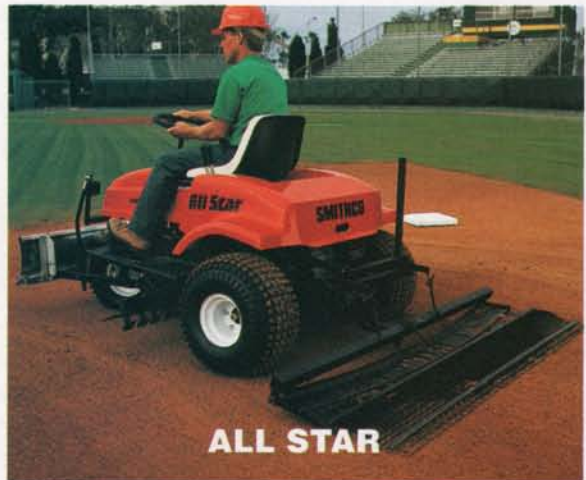
The Golden Park facility is getting its own workout before the Olympics begin. It's already hosted a 24-college women's fast-pitch tournament and will host the NCAA softball finals in May.

McWhorter says, "With the Olympics so close to our headquarters, we wanted to be 'players,' but in reality these construction projects were no different than any other field construction. Establishing precise specifications to develop the best possible fields within available funding and making sure those specifications are adhered to will produce quality, maintainable athletic fields."

Campbell says, "French & Associates stresses that in building any sports turf facilities you'll always need to give up something on the dream list to get good quality fields. Allocate up-front the proper funding for the playing field. When you have a top-quality, safe and highly playable field, you will attract athletes who want to play on it. That will generate the income to help fill in the amenities." □

As extension turfgrass specialist with the University of Georgia, Dr. Gil Landry provides leadership in the development of statewide educational programs in turfgrass management. He's a past president of the national Sports Turf Managers Association, co-chair of the Public Relations Committee, and recipient of STMA's highest award, the Harry C. Gill Memorial Award: STMA Groundskeeper of the Year.

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