

CHALKBOARD

TIPS FROM THE PROS

ATLANTA STADIUM TACKLES SAND WITH WATER FILTER

When 59,000 fans go to an Atlanta Falcons football game, water is one of the things they generally take for granted. They don't realize that up to 1,700 gallons of water per minute flow into Atlanta/Fulton County Stadium during a game to supply concessions, restroom facilities, locker rooms and field crew. The fact is no stadium can operate without a reliable supply of water for more than a few minutes.

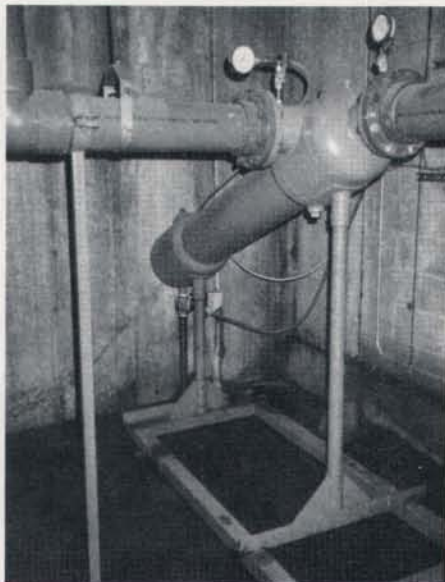
This became painfully clear to David Doane, plant superintendent at the stadium during the 1986 football season when, "It seemed like more sand was flowing out of the drinking fountains and faucets than water." The sand clogged faucets and soft drink dispensers in the concession areas, jammed flush valves in the restrooms, scared fans (who couldn't get a soft drink) from water fountains and made irrigation valves stick open. The problem was so serious that the Falcons were threatening to withhold their rent. Fans were up in arms. Local sportswriters made the stadium's plumbing a city-wide issue.

The stadium had operated for 21 years without any problem, explains Doane. It wasn't until construction began on a highway interchange next to the stadium during the summer that problems started to occur. "We didn't notice anything right away," Doane recalls, "even though construction crews were relocating water mains next to the stadium. Little things would happen, like stuck irrigation heads or toilets, but nothing seemed serious."

When more than 50,000 fans filled the stadium for a September Falcons game, the high volume of water being used in the concessions and restrooms flushed the sand in the water mains into the stadium. Within minutes the flush valves on more than 200 toilets froze open causing the water pressure in the top two stadium levels to drop to zero. "The water was also pouring into the sewer lines faster than the pipes could handle it," states Doane. "We had no water on the upper decks and six inches of water on the floor of the clubhouse level. We had to shut off the water to half the restrooms on the lower levels to get the water pressure up to the upper levels. It was a mess!"

After the game, Doane's crew repaired the valves, flushed out what sand they could and washed all the carpets in the clubhouse level. The problem reoccurred the next two games despite the extra precaution taken to prevent it. The Falcons and the fans were out of patience.

The stadium was planning to install a PAT



field with a new irrigation system after football season ended. It would have been the ideal time to make plumbing repairs, but Doane couldn't wait any longer. He had less than three weeks before the next Falcons

game to solve the problem.

"We worked on several different ways to protect the stadium from sand in the water," explained Doane, "and decided to install two separators and basket strainers in the mains." The separators were air shipped by Lakos in Fresno, CA, to Atlanta and installed. A second major main was installed to divide the restrooms from the rest of the stadium. All water entering the stadium is now filtered, including irrigation water used by the new PAT System.

The centrifugal-action separators have no moving parts to wear out nor screens or filters to clean or replace. They can be purged of silt and sand with an automatic valve. Routine maintenance or backwashing are not required. "They seem to remove at least 95 percent of the sand no matter what the flow rate happens to be," says Doane.

Construction continues today on the highway interchange but Atlanta/Fulton County Stadium has had no further problems. The fans, the stadium engineers and grounds crew can now concentrate on the game without worrying about the water.

TRUMAN SPORTS COMPLEX KEEPS OUTSIDE AS SHARP AS THE INSIDE

While the acre-and-a-half of turf inside most stadiums receives nearly all of the attention, grounds managers usually have another 30 or more acres of landscape to maintain outside the stands. These consist of parking islands, entryways and roadsides which take as much or more abuse than the field.

Truman Sports Complex in Kansas City, MO, is the site of two side-by-side stadiums surrounded by 65 acres of landscaping. To George Toma, director of fields and landscaping, the appearance of the landscaping outside Arrowhead and Royals Stadiums is just as important as the condition of the surfaces inside each stadium.

Keeping the surrounding landscape in condition has its challenges. "The wind blowing off the asphalt parking lots in the summer reaches triple figures," states George Toma, director of fields and landscaping. Nevertheless, Chiefs and Royals fans frequently pick shady spots on the parking islands for picnics and tailgate parties.

The 27 parking islands, designed to break up a sea of asphalt, vary in size from 2,500 to 10,000 square feet. The sloped mounds

were installed without irrigation and are difficult to mow or aerify. "My guys had to drag 300 feet of 1½ inch hose across the lot everyday during the summer to water the islands," Toma remembers. The water would run down the slopes leaving the top of the mounds dry and the bottom wet. The native clay soil would not absorb the water fast enough to prevent runoff.

Toma, who uses his inventiveness and experience every winter to help the National Football League prepare a stadium field for the Super Bowl, needed a way to increase the infiltration rate of the soil so he could reduce watering frequency. He tried a wetting agent (Aqua-Gro) on a few of the islands. The crew could tell which islands had been treated since those islands stayed green days longer than the others. "My crew pleaded with me to treat all the islands," said Toma. "We were able to cut down hand watering from daily to twice a week."

"I train my guys to be creative and to combine tried-and-true methods of sports turf management with new ones when they can," says Toma. "That way they'll be able to handle almost any challenge thrown at them."