

MULTIPLE PLUMBING SYSTEM FAILURES AFTER COMPLETION OF \$180 MILLION PROJECT

Value Engineering Case Study



SITUATION

In March 2011, almost two years after Oklahoma State University (OSU) completed one of the largest building projects in recent NCAA history, a break in a plastic drain pipe was found. Upon further inspection, 15 separate breaks were found in the piping system, as well as a blockage caused by gravel in the pipe.

Cast Iron or Plastic?

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SOLUTION

The players' locker room along with the strength-and-conditioning center and other equipment had to be moved to an alternate facility while contractors fixed the problems. These fixes included digging up concrete flooring, removing the plastic drain pipe and replacing it with a cast iron piping system. According to an OSU official, "a large portion of the main sanitary sewer system serving the field level of the stadium" was undergoing an upgrade because of the plumbing problem.

The building was closed for about five months while the system was repaired.

LITIGATION

OSU and its insurers asked for unspecified damages. Defendants in the case included the general contractor, a construction company, the architectural firm and product manufacturers. According to the court filing, charges included negligence and breach of contract.

OSU alleged the breaks were caused by flaws in the design, manufacture and installation of equipment that allowed hot water to be discharged directly into a piping system that wasn't properly equipped to handle the resulting expansion and contraction.

SETTLEMENT

Representatives for companies on the project agreed to pay \$700,000.00 to settle the lawsuit. \$400,000.00 is being paid by representatives of Crafton, Tull & Associates, which did the architectural, engineering and design work on the renovations. The remainder will be paid by contractors and a manufacturer.

Please note: Information for this case study was found in published media reports and public records.

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