

PROTECTING MCLANE STADIUM AT BAYLOR UNIVERSITY

Location: Waco, Texas, USA
Customer: Baylor University

PROBLEM:

Baylor University is a pillar of higher education in central Texas. The sprawling campus covers over 1,000 acres in Waco. Baylor's scholarly focus has produced many notable alumnae from Pulitzer Prize winners to CEOs and politicians. Another huge tradition is sports and the Baylor Bears are a powerhouse of the Big 12 Conference. Texans take Football seriously!

Finished in 2014, Baylor's state-of-the-art McLane Stadium is a \$250 million dollar investment that sits on the banks of the majestic Brazos River. The stadium will be the largest project in Central Texas history and has the potential to transform the city. New hotels, restaurants, and shops will all provide entertainment for game-day crowds. This engine for economic growth is poised to bring 6,000 new jobs to the area in its first year of operation.

With so much at stake, designers required a highly reliable and robust flood protection system for the complex. Safeguarding the field from heavy downpours and the flood-prone Brazos River are three 75 horsepower pumps discharging water that would otherwise severely damage the stadium. The pumps operate individually depending on demand. In the situation where one or more pumps are turned off there is a risk of water flowing back through the pumps potentially causing damage to the pumps, as well as causing the functioning pumps to pump more which would increase energy consumption.

Another issue facing Baylor was that when the river rose above the level of the stormwater outfall and backflow occurred up the pipe, the field could be severely damaged and unplayable causing major disruptions to the season and costly repairs. The nearby athletics arena was also prone to flood damage during periods of high river levels.



Baylor University, Waco, Texas protected with WaStop



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SOLUTION:

To prevent backflow into the pumps a WaStop inline check valve was installed on each pump. At a football stadium the stormwater is seldom debris-free. Cups, hotdogs, containers and other debris finds it was into the stormwater system. The designers were impressed with WaStop's pulsating flow function. This ensures that there is no debris stuck in the valve as well as keeping the upstream and downstream pipes clear of sedimentation.

Apart from the three valves protecting the pumps, there is a fourth WaStop preventing river water from entering the stadium drainage system during periods of high river levels. Two more WaStops are installed in the nearby Athletics arena for the same reason

The WaStop's patented memory membrane and pulsing flow gives Baylor University and the fan's peace of mind knowing the Bears will play rain or shine.