

## MISSOURI · KANSAS CONCRETE PIPE ASSOCIATION



## **Repair Wichita Street Design-Build**

Wichita Concrete Pipe (WCP) / McPherson Concrete Products (MCP) provided the structural design for 4 cells of a 10-foot x 6-foot precast reinforced concrete box (RCB) culvert and a precast retaining wall design for drainage improvements and replacement of a small bridge structure at the McConnell Air Force Base (AFB). The mechanically stabilized earth (MSE) retaining wall blocks were produced by WCP / MCP. The MSE walls were designed to stabilize the creek banks 60 feet upstream and 90 feet downstream of the new culvert. The design – build project awarded to Ruggles & Bohm Engineering (now Garver Engineering) and Snodgrass & Sons Construction started in 2014 and finished in 2015.

The precast box and retaining wall solution worked so well for the AFB that the base awarded a second design – build project to Kaw Valley Engineering and Snodgrass & Sons Construction to build two additional precast RCB bridge structures on Parsons and Leavenworth Streets. Both creek crossings specified 10-foot x 6-foot precast RCBs and the MSE block retaining walls. The Parsons and Leavenworth Streets creek crossings were constructed in 2017.





