

# Smithville Lake Marina Electrical Panel Upgrades

#### **CLIENT**

Camp Branch Marina

#### **LOCATION**

Smithville, Missouri

### PROJECT DESCRIPTION

Smithville Lake is a 7,200 acre lake with more than 175 miles of shoreline. Located just 20 miles from downtown Kansas City, there are many recreational opportunities available for outdoor enthusiasts, including beaches, campsites, shelters, marinas including boat rentals, restaurants, golf courses, fishing, walking/biking trails and an aggressive 2,300 acre native grassland revitalization project.

## **B&M SCOPE OF WORK**

Black & McDonald (B&M) was contracted by Camp Branch Marina to make repairs to a dock electrical system that was destroyed during a violent storm. The dock and Main Electrical Service was ripped away, damaging the main feeder panel and secondary distribution conductors. The main feeder, which was previously installed by B&M technicians, was underwater rated marine cable and ran to the docks. The main feeder, interior bus and breaker components were all that were left and electrically salvageable.

Due to new code changes for marine applications, B&M technicians installed a new primary 600 amp GFCI panel that would feed the entire dock system. Once all the physical docks were re-installed the B&M team was able to install the main feeder cable back into a new junction point located on the main dock structure which was connected to a new 600 amp distribution panel. B&M then installed new cabling, which was marine rated cable, through the removable panel under floor system located on the various docks. The team was required to supply and install new panel tubs strategically located throughout the dock system. These secondary panels ranged from 60 to 200 amps. The salvaged interior bus and breaker components were then installed and all cabling was terminated. Prior to energizing B&M tested all cable systems. The power supply system was re-energized and put back into service.

## BENEFITS TO CLIENT AND PROBLEMS SOLVED

This project was unique in that it fell under the Marine Section of the National Electrical Code which is not commonly used by most contractors. B&M completed this project on time and to the customer's satisfaction.