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TECHNOLOGY  
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GROUND IMPROVEMENT   AGGREGATE PIERS   VIBRO COMPACTION   DRILLED SHAFTS   EARTH RETENTION   DRIVEN PILE   **AUGERCAST PILE**   MICROPILE

## River City Casino

Lemay, MO

### PROJECT DESCRIPTION

#### 1,200 Continuous Flight Auger Piles and Load Tests

In the Summer of 2008, Pinnacle Entertainment was in the process of building its second St. Louis area casino on the Mississippi River bank. Due to the loose upper soil of this previously-developed site, and the dense sands below, augercast piles were chosen as the deep foundation on which to support the structure.

Subsurface Constructors installed approximately 1,200 augercast piles with diameters of 16-in and 18-in to support loads of 80 tons and 100 tons, respectively. Piles were 82 feet deep and required a 60-ft. long rebar cage with a full-depth center bar. Two load test were also successfully performed by Subsurface.

### PROJECT TEAM

**Owner:**

Pinnacle Entertainment

**Structural Engineer:**

M.A. Engineering, Inc. (Las Vegas)

**Geotechnical Engineer:**

Geotechnology, Inc.

**Deep Foundation Contractor:**

Subsurface Constructors, Inc.



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