

ENGINEERING EXCELLENCE AWARDS PRESENTED

The Engineering Excellence Awards are designed to recognize outstanding engineering achievement by engineering firms. The projects entered in the competition exhibit innovation, technical advancement to the engineering profession, complexity, social and economic considerations, and the ability to meet or exceed the needs of the client.

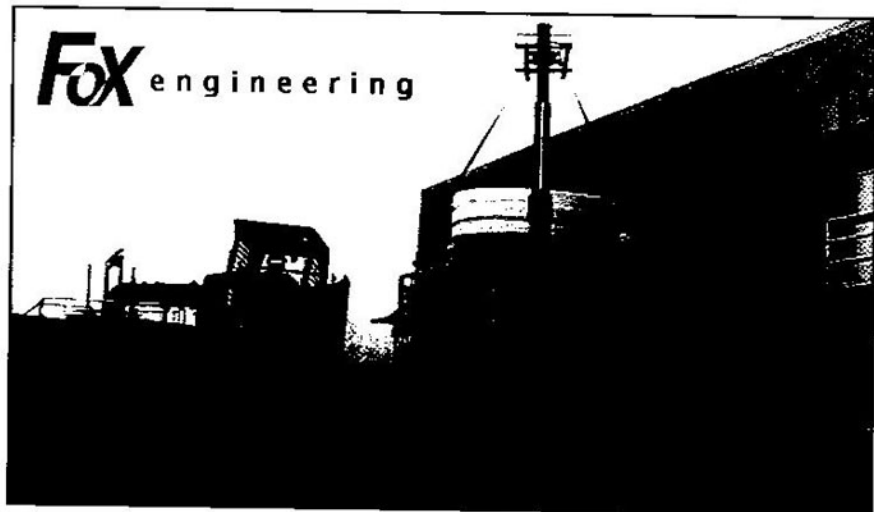
Awards were given in the categories of Large Budget (over \$500,000), Small Budget (under \$500,000), and Small Firm (fewer than 10 employees). The American Council of Engineering Companies of Iowa sponsors the competition, and presented the 2005 awards at ACEC/Iowa's 49th Annual Conference on March 31 in Des Moines.

In this issue of *The EXPONENT* we are featuring the Honor Award (Second Place) winners in this year's competition. The third place and recognition winners will be honored in an upcoming issue.

FOX ENGINEERING ASSOCIATES, INC., Ames, Iowa

Project: Screening and Grit Removal - Wastewater Treatment Plant - Large Budget Category
Client: City of Council Bluffs, Iowa

Honored are the innovative efforts for the design of the \$2.5 million Screening and Grit Removal facilities for preliminary treatment of the Council Bluff's wastewater at the



New 12-foot diameter headcells are currently the largest in operation in the world. The headcell tray units were installed in sections through a constructed opening in the building masonry. The headcells were reinstalled in the wastewater grit basins in the pretreatment building.

Water Pollution Control Plant (WPCP). These innovative improvements allow the WPCP to remove higher levels of screenings and grit and provide cleaning of the materials prior to disposal. The residents of Council Bluffs now have a better and more thorough processing facility.

The City of Council Bluffs contracted with FOX Engineering in February 2003 to evaluate and design the improvements to the WPCP's preliminary treatment facilities. Construction was started in October 2003 and improvements were operational in September 2004.

As the wastewater enters the WPCP, debris and grit particles such as sand,

gravel, and other inorganic material are removed with the new facilities. The material is then cleaned and transported for disposal. The new grit removal equipment provides more efficient removal and removal of smaller silt particles present in the Council Bluffs wastewater. This new headcell technology was developed in Oregon, and the Council Bluffs installation is currently the largest in the world, providing over 30 million gallons of treatment per day.

For more information on the project, contact Mike Wallner at the Council Bluffs Public Works Department (phone: 712-328-4634) or Keith Hobson at FOX Engineering (phone: 515-233-0000).