ITEM

CITY COUNCIL COMMUNICATION:

OFFICE OF THE CITY MANAGER CITY OF DES MOINES, IOWA

SYNOPSIS -

02-338

JUNE 17, 2002

SUBJECT:

WASTEWATER RECLAMATION FACILITY POWER **GENERATION** SYSTEM DESIGN

An agreement has been negotiated with the engineering firm of Black & Veatch Corporation, a Delaware corporation (Leonard C. Rodman, C.E.O., 8400 Ward Parkway, P.O. Box 8405, Kansas City, MO 64114) to provide design phase services for the Wastewater Reclamation Facility (WRF) Power Generation System Improvements. The proposed project is on a lump sum arrangement for \$199,750. The proposed fee includes construction phase services which will have a separate notice to proceed. The proposed fee for design services is \$117,000 and the proposed fee for construction phase services is \$82,750.

FISCAL IMPACT -

Black & Veatch.

TYPE:

RESOLUTION ORDINANCE

RECEIVE/FILE

Funding for this project is provided on page WRA-20, Wastewater Reclamation Authority (WRA) Repair and Replacement Fund: Fund EN267, Organization ENG990000, Project WRA077.

Approval of the proposed professional services agreement with

RECOMMENDATION -

SUBMITTED BY:

JEB E. BREWER, P.E. **CITY ENGINEER**

WILLIAM STOWE PUBLIC WORKS DIRECTOR

BACKGROUND -

On July 10, 2000, by Roll Call No. 00-1990, the City Council approved a professional services agreement with the engineering firm of Black & Veatch to study the sludge and power generation facilities at the Des Moines Wastewater Reclamation Facility. Black & Veatch was selected by a Consultant Selection Committee that reviewed proposals from six consultants. The study's final report was completed on August 29, 2001, and recommended improvements to the Solids Dewatering System and the Power Generation System at the WRF.

AGENDA:

Black & Veatch completed the initial study in a timely manner and is intimately and uniquely familiar with the WRF Power Generation System. On December 3, 2001, by Roll Call No. 01-3526, the City Council approved a preliminary design agreement for improvements to the Solids Dewatering System. Because of their past performance and knowledge of the WRF, Black & Veatch is a logical choice to provide services on the next phase of the project.

This proposed agreement with Black & Veatch will address improvements to the Power Generation System to enhance electrical production at the facility. These improvements will allow more efficient use of methane gas produced at the facility and reduce operating costs. The total construction cost of the project is currently estimated at \$2,697,000; however, it is estimated that increased electrical production at the facility will save up to \$500,000 per year.