

**COUNCIL ACTION FORM**

**SUBJECT:    RESOURCE RECOVERY PROCESS AREA SPRINKLER SYSTEM  
REPLACEMENT**

**BACKGROUND:**

The A. O. Chantland Resource Recovery Plant annually receives more than 55,000 tons of Municipal Solid Waste (MSW) from Ames and other Story County jurisdictions. This MSW is processed into refuse derived fuel (RDF) that is used at the City's Power Plant to generate electricity.

**The 2010 annual loss prevention report prepared by FM Global Insurance, the City's previous provider of property and boiler & machinery insurance coverages, recommended that the Resource Recovery Plant's fire system be upgraded. This upgrade is a Capital Improvement Project that will be completed in two phases.**

Phase I consists of a new 11' x 20' valve room to house backflow prevention and new system valves for domestic water and the fire control system. This valve room will be constructed to meet all current codes and engineered so that emergency services personnel can access the fire system and valves without having to enter the main building. The room will consist of a new, larger incoming water supply line, backflow preventers, fire system riser, and poured concrete walls to match the existing structure. The new water supply valves will be tied into the current fire system and building water line. The larger size of the incoming water line will allow for the required increase in water flow for Phase II of the project, which will be completed FY 2014/15. Phase II will involve complete replacement of the original, deteriorating fire system piping and sprinkler heads. The design plan and layout of the sprinkler heads, cross main, and branch line piping will be determined taking into account the structural elements of the building and updates to fire codes.

Brown Engineering is providing design services for this project, including structural, mechanical, and electrical engineering. The Minor Site Development Plan for the building addition and associated site improvements has been approved. Brown Engineering has estimated construction costs at \$186,000, which also includes an alternate to extend the roof line of the addition to the north over the existing main entrance.

With engineering costs of approximately \$24,700, this brings total estimated costs for Phase I to \$210,700. Funding for Phase I is programmed in the Capital Improvement Plan in the amount of \$65,000 from the Resource Recovery Fund and \$205,370 in revenue abated GO Bonds. Phase I construction will be scheduled during the summer

and fall of 2013. Phase II is programmed in the 2014/15 CIP with funding of \$300,000 in revenue abated GO Bonds.

**ALTERNATIVES:**

1. Approve the 2013/14 Resource Recovery Process Area Sprinkler System Replacement (Phase I) by establishing May 22, 2013, as the date of letting and May 28, 2013, as the date for report of bids.
2. Direct staff to seek new plans and bid documents for the project.

**MANAGER'S RECOMMENDED ACTION:**

This project will improve the water flow to the Resource Recovery Plant's fire sprinklering system and allow emergency services personnel to access the fire system and valves without having to enter the main building. These steps will help provide greater overall security and safety for this facility.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.