PUBLIC DOCUMENT INDEX No.

#90510

CITY CLERK'S OFFICE MUSCATINE, IOWA

Donelson, Fran

From: Hill, Randy

Sent: Tuesday, June 17, 2008 9:50 AM

To: Johnson, AJ

Cc: Donelson, Fran; McKenzie, Jerry

Subject: Geo-Thermal Testing

AJ –

We are requesting that the City issue a Purchase Order not too exceed \$12,000 to A & J Associates for the purpose of determining whether or not a Geothermal Heating & Cooling system would be an option for the Public Safety Building. The funds would be used to perform soil borings and a conductivity test which would help in determining the feasibility of this option. This testing would have to be done on County property (parking lot at 5th and Walnut) so our request is subject to County approval. The reason for performing the test on County property is because the Self-contained Loop system which is being proposed requires a 200 foot loop with a minimal depth compared to deeper vertical drilling which is much more expensive even though the space needed for the vertical loop system is not as extensive. The County has only considered the Pump & Dump system in the past, and we do not recommend this because of maintenance costs and complications with dumping the water into the city's sewer system.

If this testing is not done then the geothermal option is no longer available to us and we should move forward with the conventional replacement of the HVAC system at the Public Safety Building. If you have any questions, please contact me.