



PO Box 364 Chester CT 06412

April 27, 2011

Peter J. Tavino Jr  
Litchfield Geothermal  
PO Box 277  
Litchfield, CT 06759

Dear Peter,

RE: Washington Library

Thank you for your request to conduct an energy audit of the Washington Library. This audit and possible remediation action will be used to support the Library's application for financial incentives to install a geothermal space conditioning system.

We understand the scope of our audit should be limited to a blower door test with an option for the client to also include a thermographic imaging survey.

#### **Blower Door Test**

Given the size and age of the Library building we anticipate that it will be necessary to use two blower door kits to obtain a good assessment of the air tightness of the building envelope. The audit procedure will be as follows:

- Install blower door test units in two suitable exterior doorways
- Use blower doors to depressurize building to -50 Pascals per test protocol
- Identify leakage areas through careful inspection of building envelope
- Determine volume and shell area of conditioned space through measurement or from plans (if available)
- Prepare report on findings including recommendations on measures to reduce energy losses through air sealing

If additional air sealing is required to qualify for the program incentives we will prepare a scope of work for the work to be completed by others.

#### **Infra-Red Thermographic Survey**

An infra-red thermographic survey utilizes an infra-red imaging camera to identify thermal anomalies in the building envelope. We will conduct two scans of the envelope:

- Base scan. This identifies thermal bridging and insulation defects. It is best conducted early in the morning when the inside/outside temperature difference is at a maximum and before solar radiation has started to warm the envelope.
- Blower door scan. This scan is conducted when the blower door is operating. It will help identify thermal bypasses where air is infiltrating into the building through gaps and also through pathways concealed by building finishes.

Our report will include photographs of identified defects to assist in remediation work to be performed by others.

#### **Fees**

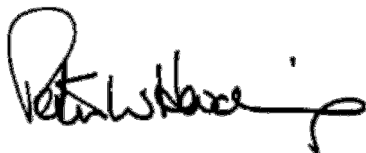
Our fee to conduct the Blower Door Test is \$960, inclusive of expenses. If conducted at the same time our fee for the Infra-Red Thermographic Survey is \$350.

A follow-up blower door test to determine the reduction in air infiltration achieved through any air sealing measures may be conducted at a later date. The fee for this test will be \$600.

Fees are payable at the time of inspection.

I trust this proposal meets your and your client's needs and look forward to hearing from you shortly.

Best regards

A handwritten signature in black ink, appearing to read "Peter W. Harding". The signature is fluid and cursive, with a large initial "P" and a long, sweeping underline.

Peter W Harding