

# **GWR Engineering, P.C. Consulting Engineers**

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April 19, 2014

Jennifer Chiodo  
Charlotte Energy Committee  
Charlotte, VT 05445

Re: **Charlotte Library Analysis**  
GWR # 1183AB

Dear Jennifer,

GWR Engineering is pleased to provide this UPDATE to our Professional Consulting Services proposal dated June 10, 2013 to the Town of Charlotte to provide an analysis, recommendations and report on the library concerning the following features and objectives. This proposal removes parts C & D and only addressed parts A & B as requested. All work in this scope is to be performed by GWR Engineering, PC.

## **A. Comfort & Control Issue Investigation & Recommendations**

It was reported that there have been some long term comfort and performance issues with the current HVAC system. GWR proposes that time be spent on site to interview staff and document as many of these as possible. In addition to this, any history of the HVAC system maintenance and service records would be collected and reviewed.

It is now understood that there are some serious concerns with the existing equipment and this will be included in the overview of the control & comfort issues as well as under Part B of this proposal.

GWR will perform a HVAC system equipment and control site review and sequence of operations tests where we will identify the state of condition of the systems and how the controls are operating and reacting to space control setpoints.

Based on the staff interviews and operations reviews GWR Engineering will determine if there were specific links between the performance issues and the system deficiencies observed.

GWR will provide recommendations to reduce or eliminate complaints based on continued use of the existing system or if future changes are to be made.

## **B. Equipment Performance & Upgrade Analysis**

As indicated above, a site survey and operational performance review will be performed and data on maintenance and current service reports collected. We will attempt to identify

the equipment's useful service life remaining and the system & control deficiencies. Based on this information a recommendation will then be made concerning the need to upgrade or replace the existing systems. It is understood that the existing service group for the furnaces have made recommendations on replacement, but the details if this have not been reviewed as of yet, but will be as part of this scope.

We will provide upgrade recommendations based on service life and performance and make considerations for HVAC system changes to improve comfort, efficiency and operating costs. There will be a focus on the future impact of all recommended replacement systems in regards to how they might fit into a potential Net Zero Program.

### **FEES:**

GWR Engineering proposes the following fixed fee for this scope of work:

- A. Total Project Fee = \$1,500.00

GWR Engineering appreciates your request for us to provide you with Professional Engineering Services. If you have any questions or need clarifications, please call.

We will consider this proposal acceptable to the town upon receipt of a signed copy of this letter or a purchase order. Our work will begin upon receipt of this signed agreement.

Respectfully,

*Bill Root*

Bill Root PE  
ASHRAE High-Performance Building Design Certified Professional



Proposal Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_