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Tim's notes: July 18 2014 site visit with Rodney Bunker to Town Hall.
Attic and rea over the Meeting Room were 112+ degrees F.

Running the analysis of our cooling load basically said our second floor should have been designed for 6 tons of cooling and not 4 tons. 25% of the cooling load is in the computer room alone.

We have a 4 ton compressor and duct works servicing the 2nd floor. The Air Handler (heat exchanger) in the attic that services the 2nd floor is rated at 3 tons.

TE2 is recommending that we vent the hot air out of the attic spaces, install ceiling mount mini-splits in the Treasurer and Accountant's offices and a wall mounted mini-split in the computer room.

Since this summer hasn't presented any seriously hot days or string of days, the system was never under any stress. We cannot really say for sure if the system must be replaced or could be tweaked to get by.

Tim would like to replace the failing 4 ton compressor when that unit finally dies, enlarge the duct (or add another duct) to the computer room, install two solar roof vents and two intake vents (48 sq.inches of intake recommended by TE2) to cool the attic spaces. Postpone the mini splits as the Treasurer has not asked for more cooling and it is possible that the larger duct and venting will provide enough reduction in the sensible heat gain to improve the situation.

Hi Tim,

I had some time over the weekend due to the rain to put some submittals together. Please see attached documentation.

I included 2 roof fan selections, one solar powered, one hard-wired. Please be sure that if the solar powered fan is chosen that the solar panel must be facing solar south +/- 45 deg (Southeast to Southwest).

After reading through the submittals, let me know if you have any other questions. Also, if you need us to meet with an installing contractor prior to installation or commission the installation, please let us know. Thanks!

Ross Trethewey

Hi Tim,

We will be submitting the invoice to you either later today or tomorrow. I can also send along some of the other temp simulations.

A 6 ton air handler would probably not work in your application. I am out on a project at the moment but at first glance it would not be feasible because the ductwork is all sized for a 4 ton system. This means all the ductwork would need to be upsized, therefore replaced.

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