Wolfeboro Board of Selectmen Public Meeting Minutes-Unapproved June 7, 2017

Members present: Chairman Luke Freudenberg, Linda Murray, Brad Harriman, Dave

Bowers and Dave Senecal

Staff present: Town Manager David W. Owen, Chief Police Dean Rondeau, Fire

Chief James Pineo, Public Works Director Dave Ford, Libby Museum Director Alana Albee, Planning and Development Director Matt Sullivan and Recording Secretary Michele

Chamberlain

Chairman Freudenberg opened the meeting at 6:30 PM.

Non-Public Session RSA 91-A:3, II

Mr. Owen stated a non-public session is needed to discuss real estate and a personnel issue.

Consideration of Minutes

Chairman Freudenberg asked for approval from the Board of the May 17, 2017 Regular Meeting Minutes.

It was moved by Linda Murray and seconded by Dave Senecal to have the motion on page 16 of the May 17, 2017 meeting be moved to page 10. Members voted and being none opposed, the motion passed.

It was moved by Dave Senecal and seconded by Brad Harriman to accept the minutes of May 17, 2017 with amendments to pages 10, 12, 14 and 18. Members voted and being none opposed, the motion passed.

Public Hearings

A. Temporary Outdoor Event Permits

i. Calvary Wolfeboro to hold an outdoor concert/family event on July 3, 2017 from 2:00 PM—10:00 PM at 43 Mill Street.

Chairman Freudenberg opened the public hearing.

Cristopher Seeley, Assistant Pastor, addressed the Board. He stated it is the same outdoor event we had last year. The event is free to the public and will have family & children friendly games, food to give away and outdoor music.

Chairman Freudenberg closed the public hearing.

Linda Murray asked if this was their second year.

Mr. Seeley stated yes.

Linda Murray asked if it was well attended last year.

Mr. Seeley stated yes, we had about 400-500 people show up.

It was moved by Linda Murray and seconded by Dave Senecal to approve the issuance of a Temporary Outdoor Event Permit to the Calvary Wolfeboro to hold an outdoor concert/family event on July 3, 2017 from 2:00 – 10:00 PM at 43 Mill Street. Members voted and being none opposed, the motion passed.

Bulk Vote

A. Weekly Manifests

May 26, 2017 June 2, 2017 June 9, 2017

B. Property Tax Credits/Exemptions Approvals:

i.	Abatement/Refund #1(2017)	Tax Map 102, Lot 8-P8
ii.	Abatement/Refund #4(2016)	Tax Map 249, Lot-1-3
iii.	Abatement/Refund #6(2016)	Tax Map 93, Lot 4
iv.	Abatement/Refund #10(2016)	Tax Map 190, Lot 102
v.	Abatement/Refund #11(2016)	Tax Map 277, Lot 39
vi.	Abatement/Refund #13(2016)	Tax Map 126, Lot 49
vii.	Abatement/Refund #15(2016)	Tax Map 259, Lot 30
viii.	Abatement/Refund #16(2016)	Tax Map 218, Lot 85

ix. Abatement/Refund #17(2016) (part 1)

Tax Map 244, Lot 18

(part 2) Tax Map 244, Lot 20

x. Abatement/Refund #19(2016)

Tax Map 261, Lot 4

xi. Abatement/Refund #28(2016)

Tax Map 228, Lot 41

Denials:

i. Abatement/Refund#27(2016)

Tax Map 228, Lot 5

C. Notices of Intent to Cut Wood or Timber

i. Trask Mountain Road & Haines Hill 7

Tax Map 45, Lot 1

Tax Map 16, Lot 2

Tax Map 25, Lot 3

ii. Suncrest Drive

Tax Map 41, Lot 7

- D. Current Use Land Use Change Tax Warrant- \$2,830
- E. Yield Tax Levy Warrant \$1,870.94
- F. Vouchers to Trustees of Trust Funds
 - Transfer from Building Maintenance Capital Reserve Fund-\$51,274.74
 - ii. Transfer from DPW Vehicles/Equipment Capital Reserve Fund-\$152,596
 - iii. Transfer from Parks & Recreation Foss Field Building Capital Reserve-\$715.00
 - iv. Transfer from Wastewater Treatment Plant Capital Reserve Fund-\$69,585.96
 - v. Transfer from Abenaki Ski Area Capital Reserve Fund-\$3,345
 - vi. Transfer from Fire Trucks & Apparatus Capital Reserve Fund-\$17,355.40

G. Raffle Permit – Hospice House Tour- Annual Dine Around Raffle

It was moved by Linda Murray and seconded by Dave Senecal to approve the items listed on the agenda in the Bulk Vote A through G above. Members voted and being none opposed, the motion passed.

New Business

A. Set Public Hearing Date and Time for Town Docks Expansion Plan

Dave Owen stated the Ad-Hoc Committee has been meeting since last October and it now has a revised concept plan for the expansion of the Town Docks about which it would like to request the Board of Selectmen to hold a Public Hearing this summer.

Dave Senecal, Chairman of the Ad-Hoc Committee, addressed the Board. He stated we had one meeting with the State of NH and they are in favor of what we would like to do. He stated they met with Darlene Forst and Randy Pelletier from Shoreline Protection, the Mount Washington and Tom Woods from the Winnipesaukee Belle. He stated the Committee decided to have a public hearing during the summertime when we might get feedback from people with boats coming in and out of Wolfeboro. The Committee decided on Thursday, August 10th but a time was not decided and they were open to suggestions. The Committee thought early evening would be best around 6:30 – 7:00 PM.

Dave Owen stated it will be a Public Hearing with the Board of Selectmen.

Linda Murray suggested 7:00 PM so people could enjoy the weather if it is a nice day.

It was moved by Dave Senecal and seconded by Linda Murray to approve setting a public hearing on the proposed plan for the expansion of the Town Docks on Thursday, August 10th at 7:00 PM. Members voted and being none opposed, the motion passed.

B. Libby Museum Facilities Issues Update

Dave Ford, Public Works Director, addressed the Board. He stated we are going to be discussing the ventilation issue at the Libby Museum. He stated this project has been going on for a couple of years and it started with structural repairs. He stated we have been studying the environmental conditions inside the building because of condensation on the walls and windows. Mr. Ford stated Norman Larson of Christopher Williams Architects would be giving a report tonight and then they would discuss the recommendations. (See attached report)

Norman Larson, Architect from Christopher Williams Architects, addressed the Board. He stated originally the Libby Museum was only used in the summertime and it had some unique designs to help the building stay cool in the summer. He stated the museum has double walls in the perimeter of the building that vent crawlspace air that is drawn in from the lakeside and road through the cool crawlspace and then comes up back into the museum arriving at the windowsills. This was the primary source of moisture that we assumed was causing condensation and icing on the walls mostly in the fall and early winter. In order to test this theory we placed sensors that detect humidity levels and temperature levels around the inside of the building. He stated from testing this theory we found that primarily the source of this condensation problem came from actual weather events (storms). He stated a way to address this is to use air movement. He suggested recommendations of Automated Ventilation Controls, a Ducted Ventilation System or a Multiple Fan Ventilation System. The Automated Ventilation Controls would require weekly checking of the new CPU and controls systems creating hidden staff expense cost to the project which may not be the best use of limited resources for the Libby Museum. The Ducted Ventilation System would be the most effective in terms of cost and performance but would have the largest visual impact on the historical integrity of the museum space. He suggested using a system of low cost ceiling fans running seasonally from late October through mid-March. He stated they would install eight five foot fans around the perimeter of the building.

Dave Ford passed out the recommendation for the layout of the fans. (See attached sheet)

Linda Murray asked if these were the ceiling fans.

Dave Ford stated yes.

Linda Murray stated ok.

Mr. Larson stated the fans have a dual benefit by creating heat in the wintertime and cooling the museum in the summertime.

Mr. Larson stated they recommended installing a vapor barrier on the floor of the crawlspace to keep in the moisture and to construct seasonal enclosures on the four access points along the roadside.

Dave Ford stated \$100,000.00 was appropriated in the warrant article and we have \$35,000.00 left. The fans and installation was priced out and we think we can cover the cost at about \$25,000.00 to \$30,000.00 but we don't think we will have enough to do the vapor barrier around the whole basement. We will get an estimate to do this to see what the cost will be. The first step would be to install the fans in the fall. Then we need to discuss if we want to appropriate money in the budget for next year and/or the long term status of the building itself. He stated there has been talk about an expansion, the ceiling and the exhibits.

Linda Murray asked if the first solution was with the box fans or ceiling fans.

Dave Ford stated we are talking about the ceiling fans.

Linda Murray stated this is your recommendation.

Dave Ford stated yes.

Dave Senecal stated that it looks like we have 38 watts at high speed so do we have enough power up there.

Dave Senecal stated it will require eight circuits.

Mr. Larson stated he did not think so and the fans won't be operating at maximum speed.

Dave Ford stated they would double check to make sure they have enough power.

Linda Murray asked if the fans would be run at the smaller speed during the summer.

Dave Ford stated it would depend on the needs and there would be a trial and error period.

Linda Murray asked about the electrical.

Mr. Larson stated if there is a need for an electrical upgrade we would see that during the design part of the project.

Linda Murray stated if there was a 90 degree day during the summer then we should be able to run the fans.

Linda Murray stated she was comfortable with the plan and stated we have the funds. She stated it is one step in dealing with the moisture issue and she was fine with it.

Alan Harding asked if the fans would create a noise disturbance in the museum.

Mr. Larson stated since the museum is so quiet you might be able to hear them but it would not be a disturbance.

Dave Senecal stated it is less than 35 decibels so that is pretty quiet.

Alana Albee, Libby Museum Director, addressed the Board. She stated she has two questions. She stated she applaused the item of putting in the fans to reduce the moisture but past reports have also highlighted the issue of the ramp. The ramp is up against the back of the building and it holds moisture in the building. She stated there was mold in the office when she went into the building to open it this year and it has been happening year after year. She stated the disabled ramp needs to be built in a different way and it also is important to look at when addressing the moisture issue. She stated her second

question is about the impact of the fans on the suspended ceiling. She stated several of the tiles are coming loose on the suspended ceiling. She stated the suspended ceiling is in rough shape and asked if it was going to be repaired or removed. She stated there was talk about going back to the original ceiling.

Mr. Ford stated the ADA ramp was something that was addressed back in 2010 but he was not aware of the problem and stated it would have to be looked at a future phase. He stated in regards to the tiles he did not think there was any concern of danger at this time but in the long term range they would need to be replaced with a more robust dropped ceiling or to go back to the original ceiling. He stated it would cost about \$50,000.00 to bring back the original ceiling.

Linda Murray asked if we put the fans in and then we replace the ceiling would we have to take down the fans.

Mr. Larson stated the fans will actually be mounted to the original ceiling.

Linda Murray stated perfect and thanked Mr. Larson.

Brad Harriman asked Mr. Ford since there would be staging up to put in the fans if at that time they could look at or replace some of the tiles if needed.

Mr. Ford stated absolutely and if we had to replace a couple dozen it would not be an issue at all. He stated but we need to look at the long term project for the museum.

Linda Murray stated we are almost looking at an asset management plan for that building and she supports that idea. She would like to know who is going to do that and it makes sense that we get it going so we can make informed decisions as we move forward.

Mr. Ford stated at this time we do not have that scope to do that within our budget for an asset management program. He hopes to include that in the asset management plan for next year.

Linda Murray stated we did not appropriate any money last year but should this year.

Mr. Ford agreed.

Dave Senecal stated so you are going to move forward with the fans.

Mr. Ford stated yes unless there is a disagreement. He asked Mr. Harriman if he thought he should meet with the Friends of the Libby.

Mr. Harriman stated he did not think so because the Friends of the Libby were in favor of seeing some improvements.

Maria LaGuardia, Member of the Friends of the Libby Museum, addressed the Board. She stated they did not want a band-aid fix and would like to see a long term plan developed. She stated it is very important for the museum.

There has emerged a proposal to add another wing onto the Libby Museum to house a collection of North American animals which a private collector wishes to donate to the Libby Museum. The proponents of this proposal are suggesting undertaking a feasibility study to determine the design for this proposed museum expansion and its construction costs. This feasibility study has a price tag of \$75,000 of which the Town is being asked to contribute \$25,000 of that cost and a private foundation would pay the remaining \$50,000. The first opportunity the Town would have to consider funding its portion of this proposed feasibility study will be with the 2018 Town Warrant.

Alan Harding, Wolfeboro resident, addressed the Board. He stated he is here tonight to discuss the Libby Museum. He stated a friend of his would like to donate 200 Northern American animals to the Libby Museum. Mr. Harding stated he is representing a Massachusetts Foundation 501C3. It is a charitable foundation and it has done a lot of work in Wolfeboro. Mr. Harding stated the addition of these animals would be a giant asset to the Libby Museum and the other museums in Wolfeboro. He stated Wolfeboro is the oldest summer resort in America but questioned what they have to offer people in the wintertime. He stated the Town should emphasize the museums. He stated Wolfeboro has five museums. He stated Concord, NH has three museums and there are only two other towns in the state that have more than us. Portsmouth and Manchester. He stated this is a draw to the Town and if we had more housing and a conference center then we could handle tourism all year. He stated the conference center would draw more people to the Town and we would have an economic engine. He stated the Foundation would propose a 2/3^{rds} and 1/3rd split. The Foundation would put up 2/3rds of the money to house the collection of animals and the Town puts up 1/3. He stated first we need to figure out the cost of the project for which the feasibility study is expected to be around \$75,000. He stated the Foundation was willing to pay a maximum of \$50,000 and the rest would be up to the Town. Mr. Harding felt that an addition to the Libby Museum was necessary. Mr. Harding stated he would like to walk out of here tonight with an indicated show of interest that the Board of Selectmen would like to move forward with this project. He stated the Library is going up for some money next March and they did not want to conflict with them. Mr. Harding questioned whether it had been proposed to ask for a Town Warrant for \$25,000.

Linda Murray stated we have had conservation about it and that is what is floating around.

Mr. Harding stated so there is nothing official then. He asked if the Board could make a decision tonight because he would like to move forward on the project.

Linda Murray stated the first step is to have the Town put out a warrant article for \$25,000 unless we did some fundraising and then the Foundation needs to come up with the other \$50,000. She stated we need to get in touch with Chris Williams to see if the

project is feasible. Ms. Murray stated she agreed with Mr. Harding that it would be a real economic driver and she liked the fact that Wolfeboro would be a museum town. She stated it fits in with who we are and Libby Museum is important. She also supports doing an asset management plan for the museum.

It was moved by Linda Murray and seconded by Brad Harriman to put a possible warrant article for \$25,000 for the 2018 warrant. Members voted and being none opposed, the motion passed.

C. Barn Preservation Easement Deeds

- i. Nordbeck Barn
- ii. Cogean/Coache Barn

Mr. Owen stated at one of the last meetings the Board held the required public hearings on the proposed Discretionary Preservation Easements for some Historic Agricultural Structures, namely barns, and the Board voted to move forward to take the next step in this process. He stated Town Counsel has drafted the required Discretionary Preservation Easement Deed documents for each of the two properties. Mr. Owen stated the Board did not discuss or decide what the degree of relief to grant on the assessment of the barns would be. He stated the RSA 79-D: 7 provides a range of assessment abatement ranging from 25% to 75%. He stated most of the other barns that the Board has previously approved for Discretionary Preservation Easements were provided 50% assessment abatement but there is one at the 25% level. He stated the Board needs to decide the level of the relief to the two barns and vote to approve and sign the documents.

Dave Senecal stated the ones before were a 50% barn easement situation and he would like to make a motion.

It was moved by Dave Senecal and seconded by Linda Murray to grant a 50% barn easement to the two barns. Members voted and being none opposed, the motion passed.

It was moved by Dave Senecal and seconded by Linda Murray to approve and sign a Discretionary Preservation Easement Deed Pursuant to RSA 79-D with Elizabeth Nordeck of 332 North Main Street, Wolfeboro for an historic agricultural structure, including the land necessary for the function of the building, as shown as a portion Tax Map 187, Lot 14. Members voted and being none opposed, the motion passed.

It was moved by Dave Senecal and seconded by Linda Murray to approve and sign a Discretionary Preservation Easement Deed Pursuant to RSA 79-D with Heidi Von Gotz Cogean and Christopher D. Coache of 458 Center Street, Wolfeboro for an historic agricultural structure, including the land necessary for the function of the building, as shown as a portion of Tax Map 148, Lot 12. Members voted and being none opposed, the motion passed.

D. Goals for 2018-2027 CIP

Matt Sullivan, Director of Planning and Development, addressed the Board. He stated he was proposing the draft goals for the 2018 Capital Improvement Program. Mr. Sullivan read the memo he presented to the Board with his recommendations. (See attached sheet)

Linda Murray stated she would like to add to #7 with the Public Safety Building scheduled for 2022.

He stated in prior years these had been adopted by the Board and he was looking for the Board to adopt these.

It was moved by Linda Murray and seconded by Dave Senecal to accept these as the 2018-2027 CIP Goals 1 -12. Members voted and being none opposed, the motion passed.

E. Rural Roads Discussion Follow-up

Mr. Owen stated Mr. Ford presented his report and recommendations at the last Board meeting on May 17. However, the question of what follow-up action to take was left unanswered at that time. The two main options appear to be to schedule a follow-up public forum or set up a Committee to further study the rural and scenic roads issues.

Linda Murray stated she would like to see a Committee formed. She suggested two selectmen, Brad Harriman as Chairman and three or four different people from the community to be on the Committee. She stated she would like to see the Master Plan used and some of the material presented to the Board by Suzanne Ryan.

Chairman Freudenberg agreed with Ms. Murray.

Brad Harriman stated he would like to add that the people on the Committee be a spread of representation from around the Town, not just from one area of the Town. He stated we are not just looking at scenic roads but the entire Town road system.

Linda Murray agreed.

Dave Senecal asked if we could put something out asking for people to sign up. He felt there would be a lot of volunteers.

Chairman Freudenberg suggested forming the Committee with two selectmen and five citizens.

Mr. Owen stated we can do a public notice to solicit members and then have another meeting to discuss it further.

The Board agreed.

F. Ducks at Albee Beach Issue

Mike Spence and Dave Denby, Wolfeboro residents, addressed the Board. Mr. Spence stated they had success with the use of the firecrackers last year to scare off excess ducks and geese from their beaches and he wanted the Selectmen to approve the use of the firecrackers again this year. Mr. Denby stated the firecrackers were successful and would like to continue using them.

The Board agreed to allow them to continue.

G. Wolfeboro Farmers' Market Issue

Lawreen Strauch, Agricultural Commission Chairman, and Sarah Silk, Agricultural Commission Vice Chairman, addressed the Board. Ms. Strauch stated on May 4th a concern was brought to our attention by Ag Commission members that they were not allowed to sell at the Wolfeboro Area Farmers' Market. She stated on June 1st the Commission met again and after lengthy discussion about the license agreement between the Town and Wolfeboro Agricultural Area Farmers' Market we decided to take this concern to the Board of Selectmen. She stated Ms. Silk has done research on the discussion and is here to advice the Board of our concern.

Ms. Silk stated she looked online and found a list of the summer market vendors for the Wolfeboro Farmers' Market. She stated there are thirty vendors with 4 from Maine and twenty six from New Hampshire but only 8 of the vendors are from Wolfeboro. She stated there is a partial list of what the people sell (vegetables, fish, chicken, dog treats etc) and some of the people sell the same items. She stated there is a deadline for filing an application. She stated she looked at the Farmers' Market terms and it stated the definition of local was any product produced in New Hampshire or produced within fifty miles of Wolfeboro. She stated vendors may provide products supplied by others but most label the origin of all such products. She stated all produce most be grown and produced in the State of New Hampshire or within fifty miles of Wolfeboro and it is the State Department of Agriculture that states if it was made in New Hampshire you could call it local. Ms. Silk stated that they think the terms seem reasonable. The terms also states that the people that have been there must follow the permitting and licensing requirements as required by the Department of Agriculture, Health and Human Services and Division of Weights and Measures. Ms. Silk stated she then looked at the agreement the Town has with the Farmers' Market and the agreement also involves the Historical Society because they have a 99 year lease. She stated page four of the agreement states: Licensee desires to use a portion of Clark Park for its "Farmers' Market," a seasonal weekly event in which local growers offer their locally grown, raised, and/or processed food and farm products for sale to the public. The term of this License shall be from June 1 through October 30 each year. Ms. Silk stated the Agricultural Commission feels that local farmers should have a priority and be included in the Farmers' Market. She stated that they request that a change be made to the agreement that allow Wolfeboro Farmers

who pay taxes and employ local people have a preference for the Wolfeboro's Farmers' Market. She stated in the Town of Wolfeboro we have a Hawker and Peddlers license that we give out and preference is given to people who live within the Town. Ms. Silk stated the motion that was made at the June 1st meeting was that the Farmers' Market was to be required to include all Wolfeboro Farmers or vendors to sell their products as long as they obeyed by all the rules of the Farmers' Market. Ms. Silk stated because there is less than 26% of the farmers from Wolfeboro we felt that it is important that we have a safe guard so our local farmers who grow within the Town boundaries are able to sell their local products on the Town owned property. She stated they were not looking to change any of their regulations, the definition of local or the fifty mile radius but they are looking to have Wolfeboro Farmers have a level field by being able to sell their goods and produce at the Wolfeboro Farmers' Market. Ms. Silk stated as of June 1st the agreement between the Town and the Farmers' Market had not been signed even though the Farmers' Market has started. She stated there is ability within the license agreement to make changes and the Agricultural Commission hopes the Board of Selectmen would understand in honoring their request to give preference to Wolfeboro Farmers.

Dave Bowers questioned if Dennis DeVlyder had been denied and wanted to know the grounds as to why Mr. DeVlyder was denied. He felt that a Wolfeboro Farmer should not be denied.

Dennis DeVlyder stated the letter he received from the Board of the Farmers' Market stated there were already too many vendors selling the same products that he would sell.

Dave Bowers stated a preference should be given to Wolfeboro taxpayers. Mr. Bowers stated any Wolfeboro Farmer should be allowed to be at the market. He stated it is a Wolfeboro event, it is on Wolfeboro property and they pay property taxes.

Dave Senecal questioned the deadline to sign up to be at the Farmers' Market. He asked if the deadline to sign up was with the Farmers' Market Association.

Ms. Silk stated the application states it must be received prior to April 15, 2017 for the 2017 market.

Mr. DeVlyder stated he applied before that date.

Dave Senecal stated he thought it was a question for the Farmers' Market Association.

Linda Murray stated this is an issue for us. She stated the Wolfeboro Farmers' Market is a non-profit private entity and they have the right to decide who can sell and who cannot sell at the market. She stated but we have a right to decide whether we want them to be using our property for only the cost of a port-a-potty if they are not going to include all our local growers. Ms. Murray stated she felt that the agreement stated it was a seasonal weekly event in which local growers sold their products and local to her is Wolfeboro and our area. She felt this was very important and asked if someone in Concord, New Hampshire was local. Ms. Murray stated it seems like it is a regional market not a local

market and it is more of a food market. She stated it is very different from the picture that we all understood it was going to be when the Board approved them using the space. Ms. Murray stated in the contract it stated we can give them a ten days notice and we can terminate the agreement. She stated she hopes that we can come to some type of agreement tonight which they allow all Wolfeboro farmers to sell and be part of this farmers' market. She stated she understands they have the right to not agree but then we have the right to decide whether we allow them to still use the property. Ms. Murray stated she agreed with Mr. Bowers.

Dave Bowers stated time is of essence because it is already June 7th. He stated we should not allow Wolfeboro farmers to be denied the right to sell at the Wolfeboro Farmers' Market. Mr. Bowers felt this needed to be changed immediately.

Mr. Owen stated the license is revocable and it requires a ten day notice. Mr. Owen stated the process could begin tonight if the Board desires.

Fred Martin, Chairman of Wolfeboro Area Farmers' Market, addressed the Board. He read the following statement: The name of the market is the Wolfeboro Farmers' Market and it has been that since the conception of the market in 2002. The founding members of this market were not even residents of Wolfeboro but they knew that for a farmers' market to be a success diversification in the surrounding areas was needed. In the first years of the market vendors from Tuftonboro, Brookfield, Ossipee, Tamworth, Conway as well as Wolfeboro were all welcomed. The purpose of the Wolfeboro Area Farmers' Market is promote local agriculture by providing a market place with locally grown, raised, or prepared food and farm products are for sale to the public where educational exhibitions pertaining to agriculture may be given. The vendors and products sold needed to be within fifty mile radius of Wolfeboro because of Wolfeboro's location being close to the Maine border this encompassed portions of Maine. A few years ago the Board added to this by adopting the State of New Hampshire's definition of local which stated farm products grown or processed within the state exceptions to this rule would be for something unique which would not be covered by other vendors. We always encourage the people to talk to the farmers and ask questions about how their products are grown and produced. The Board of Wolfeboro Area's Farmers' Market strives to bring a unique and balanced fix of vendors and products to the market each year. The preference for approval is based on a returning vendor versus a new vendor. Prior to the selection of any vendors the Board develops a spreadsheet listing all applications, applicants and items that they will be presenting at the market. This is done so we are not over saturating the market with any type of product that would negatively impact the vendors of that product. The vendors that were approved for this year's market were ten vendors that have been participating for over ten years and several of those vendors have been participating in the market since the beginning. This is why preference is given to returning vendors over new applicants because they have an established customer base since they return year after year. Unfortunately, a market can only sustain a certain number of vendors with the same product type. Returning vendors have invested many hours of time and effort into building their presence at the market which has benefited the whole market. While the Board would like to include everyone to be a vendor at the

market the Board realizes that there is a limited customer base compared to larger Metropolitan areas such as the seacoast. For the 2017 season, the Wolfeboro Area Farmers' Market approved thirty vendors out of thirty eight applications and four farmers are from Wolfeboro. There are six bakers and two jams and jellies vendors. The Board will give preference to a Wolfeboro vendor if their product is new, not well represented or is unique to the market. The three new Wolfeboro farmers that applied this year were Haines Hill Farm, DeVlyder Farm and Three Creek Farm. Haines Hill Farm was approved because their produce is certified organic which the market customers have been asking for. The Three Creek Farm was approved because of their offering of duck eggs and live lobster. The application for DeVlyder Farm was not approved because in the judgment of the Wolfeboro Area Farmers' Market Board the products listed were sufficiently represented at the market. All applicants that were received by the Board were given much thought, consideration and discussion. The Board respectfully requests that the licensing agreement not contain a revision stating who the Board has to accept as a vendor.

Dave Bowers stated he would not renew this project next year and he suggested that Wolfeboro farmers start their own market. Mr. Bowers stated it is terrible that any Wolfeboro farmers cannot be part of this. He stated he does not agree with this at all.

Linda Murray stated you have the right to have your rules and procedures but you are using public land. We need to look at this and see that it meets the needs of Wolfeboro and whether we should give you the use of the land for just the price of the port-a-potty. She stated maybe if you are going to exclude Wolfeboro farmers then a fee needs to be included. She stated she agreed with Mr. Bowers. Ms. Murray stated they needed to agree to let in Wolfeboro farmers or the Board of Selectmen needed to redo their contract. She recognized that people from Wolfeboro and the surrounding areas come to the market and like it. She suggested maybe having it in a different space.

Mr. Martin stated people look forward to it every Thursday and we are providing a space for other non-profits to come as well. Last week we had the Police Department and the Fire Department is scheduled to come as well.

Linda Murray stated but it is a farmers' market.

Mr. Martin stated correct.

Linda Murray stated when she supported this it was to support the agriculture in our Town.

Brad Harriman stated he agreed with Dave Bowers and Linda Murray. He stated he ran a business in this Town for over 40 years. He described this is the same type of principle when a new business comes to Town. He stated the new business should be able to be established even if there is already a business that sells the same type of product. Mr. Harriman stated he felt this was the same type of situation and felt Mr. DeVlyder should be able to sell his product even if there were others selling the same product to the public.

Mr. Martin stated to clarify what the Board is saying; you are saying farms need to be included.

Chairman Freudenberg stated no, we are saying Wolfeboro.

Dave Senecal stated we are saying Wolfeboro farmers even though there may be selling duplicate products should be allowed to come to the market.

Mr. Martin stated a Wolfeboro farmer needs to be accepted.

Dave Senecal stated a Wolfeboro farmer should be allowed.

Mr. Martin stated he did not want the agreement to state that any taxpayer in Wolfeboro should be allowed into the market because some farmers' markets are now more like craft fairs.

Linda Murray stated a locally grown and raised product and it is an agricultural event.

Dave Bowers stated it is on Town land.

Mr. Martin stated he understood that it was on Town land.

Dave Senecal stated we as a Board are saying if someone from Wolfeboro asks to be part of the Wolfeboro Area Farmers' Market then they should be allowed a space at the market even if it is duplication.

Mr. Martin stated he understood.

Linda Murray stated while you are using Clark Park.

Dave Bowers stated he would like to recommend immediately that the market be opened to any Wolfeboro farmer that wants to be there. Mr. Bowers asked how many Wolfeboro farmers were rejected.

Mr. Martin stated just one.

Mr. Bowers stated well let that one person in this year. He stated he was trying to be fair. He stated Mr. DeVlyder is a taxpayer, hires local people and runs ads in the local newspaper. He stated when the Board gave out the Hawkers and Peddlers licenses this year we gave preference to a Wolfeboro business owner over a qualified Alton lady. He stated Wolfeboro residents should have a special consideration.

Chairman Freudenberg stated this needs to be added to the license agreement under Terms. It should read: Any Wolfeboro farmer or farm that has filed an application in a timely manner was to be accepted or given preference by the Wolfeboro Area Farmers'

Market to be able to sell their product on the Town property at the Wolfeboro Area Farmers' Market.

Linda Murray stated she supported the theory but Town Counsel should look at it.

Linda Murray stated she would second Chairman Freudenberg's motion.

Mr. Owen asked if it would be an amendment.

Linda Murray stated the license it is not valid, correct?

Mr. Owen stated it has not been signed by the Historical Society yet.

Linda Murray asked if Mr. Martin would be willing to sign the agreement if we added that line.

Mr. Martin stated yes.

Linda Murray stated then it would let the DeVlyders in.

It was moved by Chairman Freudenberg and seconded by Linda Murray to change the agreement to read: Any Wolfeboro farmer or farm that has filed an application in a timely manner was to be accepted or given preference by the Wolfeboro Area Farmers' Market to be able to sell their product on the Town property at the Wolfeboro Area Farmers' Market. Members voted and none being opposed, the motion passed.

Ms. Silk thanked the Board for the consideration.

Old Business

None

Any Other Business

Linda Murray stated she would like to inform the public that June 12th, this Monday the Town will be pulling milfoil out of Back Bay. They will be using the Joint Board Dash unit.

Brad Harriman stated a month or so ago he read an article in the paper about the Cable Company and it suggested that the Town should maybe become its own cable company. Mr. Harriman stated he was intrigued by the idea and wanted to have a discussion about it at some time. He stated he was not sure if they could even do something like that or not.

Mr. Owen stated it is an interesting idea and there are some models for municipalities that have done that in New England. He stated Shrewsberry, Massachusetts in the best

example that he can think of. They operate their own cable television system as well as internet access for all the residents of the Town. He stated they started with their own electric company and then they built it out to provide these other services. He stated it can be done but it would involve a lot of study and investment. Mr. Owen stated it would take years.

Linda Murray stated not that long ago we renegotiated with Metrocast and at that time we were trying to get away from them but she thought Mr. Owen had stated there would be too many regulations and it was very hard to do.

Mr. Owen stated breaking the franchise agreement with Metrocast is all federally regulated. He stated you must have an extremely strong cause to break the agreement. He stated Mr. Harriman is suggesting an alternative route for those types of services for the community.

Linda Murray stated Metrocast would still be here and we would compete with them.

Mr. Owen stated he did not know the answers to those things but it would require feasibility studies and extensive amount of funding.

Chairman Freudenberg stated we should discuss it further.

Linda Murray stated a lot of people are unhappy with Metrocast rates.

Dave Senecal stated we should discuss it at least.

Mr. Owen suggested taking at trip to Shrewsberry, Massachusetts to see the setup.

Dave Bowers stated his family is down there and the school system is amazing in what they do.

Mr. Owens stated Mr. Simms is here with the Lakes Region Model Railroad Museum and they have submitted a grant application to the LCHIP Program and they have been invited to submit a full application. Mr. Simms needs the Town to sign off on the governing body authorization and that it approved the submission of the grant application.

The Board agreed to sign the documents.

Mr. Simms thanked the Board.

Town Manager's Report

Mr. Owen stated the following:

It was discovered that Thursday morning that the Granite State News had closed its offices in Wolfeboro and has moved them and consolidated its operations to Meredith.

Tom Beeler stated the Salmon Press that owns Granite State News and nine other papers decided to consolidate all of its operations to Meredith. They closed the Littleton office and are considering closing the Lancaster office as well. He stated they still have freelancer reporters. He is not here tonight as the editor of the paper but as a freelance reporter. He stated they will be continuing coverage of Wolfeboro but it is not clear exactly of the format. He stated there has been some talk about Wolfeboro having its own paper but he is not sure where that is at this time. He stated it was quite a surprise and it was an abrupt decision on Wednesday to let him and two other employees go on Friday.

Dave Bowers stated Salmon Press is donating its old bound newspapers to the Town as well as the photographic pictures. He stated Wolfeboro Library will have access to these old issues.

Mr. Beeler stated the Salmon Press is willing to donate the old newspapers and the pictures are already at the library. They are trying to find a place for the bound volumes. Cindy Scott is trying to find a place but they do not have any space.

Linda Murray suggested the Historical Society barn.

Dave Bowers stated they asked them and they were not interested.

Mr. Beeler stated Ms. Scott suggested storing the newspapers in the Great Hall until she could take them at the library.

Mr. Owen stated we have talked about the electric building or maybe the basement.

Mr. Owen stated the Town is acquiring two new electronic message boards through the Center Street Reconstruction project. They were required for the project and since the cost of renting versus buying the message boards was so close we decided to purchase them. He stated the State is paying for 2/3rds of the cost.

The Concrete Containment Structure down by the Railroad Freight House has been demolished and there are parking lot spaces in its place.

A request was received from Carroll County asking us to pay our half of our annual assessment early. The amount is approximately 1.3 million dollars that they are asking us to pay early and it would help the county by reducing their borrowing cost. Although it would help the county, the Town of Wolfeboro would lose the interest that we gain on those funds.

Linda Murray stated we are better storers of that money.

The 2017 Consumer Confidence Report on the Water System was sent out to the water customers. It is an annually report and required by the EPA.

There are some invitations to some open house events. Sugar Hill Retirement Community is having their annual open house on Sunday, June 11^{th} from 1PM - 4 PM. Huggins Hospital is having a Heroes Gala which is a cruise on the Mount Washington on Thursday, July 13^{th} from 6 PM - 9 PM.

Linda Murray asked if Mr. Owen knew what the cost was for the event.

Mr. Owen would call to ask about the price.

The American Legion is accepting applications for the Fourth of July Parade. He stated in two years it will be the 100th anniversary of the parade in Wolfeboro.

The Fire Department will be eligible to recoup some of the related funds from the March blizzard. The relief is determined by county and Moultonborough received most of the damage but we are trying to get reimbursed for some of the electrical costs.

The Board received final copies of the Water System Asset Management Plan.

The ZBA case involving Brewster Academy has been settled.

Mr. Owen stated Pete Chamberlin wanted the Board to know that the New Hampshire Municipal Bond Bank had their bond sale with a result that our bond interest rate would be 2.67 percent.

Committee Reports

Brad Harriman attended a Planning Board Meeting. He stated there were a few public hearings and one was on the Depot Square. They came in for site elimination for the condominium units 5 -10. La Boca Bakery came in for a small site review because they are moving into the old Strawberry Patch building.

Dave Senecal stated last Saturday he spent the whole day at the NH Municipal Association with their attorneys discussing the Right to know law. He attended the ZBA Meeting on Monday and Tuesday he attended the collaborative meeting in Moultonborough.

Linda Murray stated at the collaborative meeting they were talking about electricity and if they purchased the electricity as a group of towns then they would get a better rate. It made us realize how lucky we are in Wolfeboro with our rates.

Linda Murray stated the Board all attended the Special Election.

Linda Murray attended a Chamber Social, the Dock Committee Meeting, the Chamber Quarterly Meeting, the Milfoil Joint Meeting and the collaborative meeting with Mr. Senecal.

Dave Bowers attended the Special Election and stated it was well attended.

Questions from the Press

Mr. Beeler asked if there was a decision by the US District Court about the Amatucci case.

Mr. Owen stated it was dismissed with prejudice.

Mr. Beeler asked Mr. Owen for a copy of the decision.

Mr. Owen gave the copy to Mr. Beeler.

Linda Murray asked for the copy to be emailed to the Board.

Public Input

Limited to 3 Minutes per resident, not to exceed 15 minutes in total

Sarah Silk, Hazardous Waste Coordinator, addressed the Board. She wanted to remind the public that Saturday, June 17th will be our first medicine collection day as well as hazardous waste collection.

Suzanne Ryan, Resident of Stoneham Road, addressed the Board. She stated she was pleased to hear that the Board was going to establish a road committee. She asked what the concept of what the committee would be and their goals.

Mr. Owen stated he is going to let the committee determine them.

Ms. Ryan asked how the Town was going to advertise for the committee.

Mr. Owen stated it will be the rural and scenic road committee that determines policies and procedures.

Ms. Ryan asked if there would be a blimp about it. She asked about setting up a capital reserve fund for major road work in addition to the warrant article.

Mr. Owen stated that would be a good topic for the CIP Committee.

Ms. Ryan asked what the procedures were for having a public hearing because sometimes they have one and sometimes they don't. She asked what the policy was.

Mr. Owen stated generally public hearings are required by statute. There are also Town Ordinances that require public hearings, for instance the permits for outdoor events and for alcoholic beverages.

Ms. Ryan thanked the Board.

It was moved by Dave Bowers and seconded by Brad Harriman to enter into non-public session under RSA 91:3 II (d) to discuss real estate and litigation. Roll call vote, Chairman Freudenberg – yes, Linda Murray – yes, Brad Harriman – yes, Dave Senecal – yes, and Dave Bowers – yes. Being none opposed, the motion passed.

The Board re-entered public session at 8:57 PM.

Linda Murray moved the Wolfeboro Board of Selectmen to seal the minutes of the June 7, 2017 non-public meeting. Brad Harriman seconded. Roll call vote, Chairman Freudenberg – yes, Linda Murray – yes, Brad Harriman – yes, Dave Senecal – yes, and Dave Bowers – yes. Being none opposed, the motion passed.

It was moved by Chairman Freudenberg and seconded by Dave Senecal to adjourn at 8:59 PM. Members voted and being none opposed, the motion passed.

Respectfully Submitted, Michele Chamberlain



Study on Moisture Management in an Unheated Building

Historic Libby Museum

Norman E. Larson, AIA, LEED AP Christopher P. Williams, Architects

Purpose and Background

This purpose of this report is to review the findings and conclusions related to problems with ice formation on the interior surfaces of exterior walls and windows of the Historic Libby Museum. The c.1912 timber framed museum measures approximately 120 feet wide by 40 feet deep in plan with a ribbon of single paned windows wrapping the full perimeter of the stucco clad building between the structural bays. A single large space is partitioned with ten foot high walls approximately half the height of the space beneath a 2x4 lay-in acoustic tile ceiling. The museum is open to the public only during the summer season and lacks any mechanical heating or cooling system. When closed for the season, the water is drained from the plumbing system which serves a small restroom and a portion of the museum's collection is moved out of the building to more secure and/or conditioned space for the protection of the museum's more fragile and valuable exhibits.

Ice and condensation has been forming seasonally on the inside faces of the plaster walls and the windows. Norman E. Larson, AIA, LEED AP of Christopher P. Williams, Architects and Doug Waite of Design Day Mechanicals, Inc. began an investigation targeting the elimination of this condition in 2013. As a result of early investigative work by the Architect and the town in 2014, a determination of a structural inadequacy in the roof structure was identified and successfully repairs engineered with the assistance of Ben Brungraber, PE of Fire Tower Engineering. A high tech monitoring system was installed in 2014 by Control Technologies, Inc. to record environmental conditions in and around the building. In 2015, the designed structural repairs were installed by Preservation Timber Framing.

The museum has a wood floor over a crawl space and a design feature of the original construction included double framed walls under the ribbon of windows. The wall cavity is open at its bottom to the crawl space and at the top of the double wall, which is also forms the window sill. The double wall effectively vents the crawl space into the museum space using a "chimney effect" to bring cool air from the space under the building into the museum space to provide summer cooling when the museum is open. The design team was tasked to determine why the winter ice was forming and, more importantly, how to eliminate it.

The Mechanical Engineer first coordinated monitoring of building conditions using data sensors in several locations that collected temperature, humidity, and dew point of air in the museum, in the crawlspace, outside, and at the inner surface of the window glass. Equipment to do this monitoring and data collection was installed by Control Technologies Inc. who regularly serviced the products, which unfortunately seemed prone to stop working without a clear cause, perhaps because of the cable internet or power flickers connecting the on-site CPU, the CPU operating in freezing conditions, or the CPU itself.

For this building, which is shut down eight months or so of each year, the goal was to make the solution a passive one. A conventional heating system that would be on all year round was determined to be cost-prohibitive, and would introduce additional threats to the collection including smoke or fire from an active but unmonitored system. High humidity levels were conjectured at the outset to be a likely part of the problem, and likely sources of

that humidity were seen as moisture in the soil of the crawlspace and/or the microclimate of the site which is immediately adjacent to the shore of Lake Winnipesaukee. With the assistance of the Town of Wolfeboro Public Works Department, the building's existing passive ventilation system was set up in different ways and then monitored over the cold seasons of several winters to try to identify the likely cause of the conditions that made the condensation and icing previously seen in the building so that a solution could be developed. Crawl space vents to the exterior on the lake side were left open or closed to check influence on interior humidity. Interior vents in the window sills that draw air from the crawl space into the museum were, at times, left open or closed with plastic covers. Small exterior vents from the museum space to the exterior on the back side of the building were left open for minimal ventilation. There are no vapor barriers anywhere in the building so airborne moisture, in all conditions, was able to migrate through building materials and the soil beneath the building.

Observations

The collected data shows that the primary source of high humidity within the Libby Museum is from outdoor humidity moving through the building enclosure. In every configuration, a pattern of conditions emerges in which a weather event that brings high humidity (ie something like multi-day rain showers), causes a spike in interior humidity levels within a day or so of the start of the weather event. Only later in the event do crawlspace humidity levels also rise. The extra humidity quickly lowers the dew point of the air and condensation, seen as water and then ice, begins to appear on what are already the coldest surfaces in the museum: the exterior walls and windows that have direct contact with the outside temperatures at their other sides. In calculating the thermodynamic performance of a wall assembly, it is common to consider that in still air, a film of air effectively forms at the surfaces of a the wall. In the fall and early winter in the Libby Museum, this film contains the coldest air in the building, just a little cooler perhaps than the rest of the air. When the temperature of the film falls below the dew point, condensation forms on the wall. Interior walls and objects see little or no such condensation because they are not as cold.

The crawl space of the Libby does maintain a high level of relative humidity and, although not necessarily a primary driver of the icing phenomenon, is likely contributing to an overall higher relative humidity in the museum. Relative humidity in the crawl space regularly exceeds 90% in the fall and early winter months. This moisture load is passed through the building materials of the floor system into the air of the museum all year round. In the fall and early winter, this moisture contribution likely extends both the duration of the wetting of exterior walls and glass during a weather event and to the volume of the contribution. Moisture in the crawl space comes from both the natural dampness of the soil that constitutes the crawl space floor, and from the inflow of outdoor summer air which cools upon entering and causes condensation on the coolest surfaces in the crawlspace. In later seasons, this water evaporates again, increasing crawlspace humidity.

Conclusions

There does not appear to be a fully passive solution to eliminating the condensation and ice problem in the Libby Museum. The Mechanical Engineer concluded in the fall of 2016 that air movement to disrupt the air film at the interior face of the exterior walls is the best way to prevent or substantially reduce the condensation problems in the building. It was theorized that a mechanical system that blew air across the interior face of the windows and exterior walls would help warm the wall's interior surface to a higher temperature and prevent the condensation from forming entirely. A copy of the Mechanical Engineer's report is included in the appendix to this report along with a couple of charts comparing dew points of inside, outside, and crawlspace air during two seasons of monitoring.

A strategic test of this approach to using moving air too disrupt the condensation process at the exterior walls appears to confirm that air movement at the walls will reduce or eliminate condensation. In the winter of 2016, a practical test used five floor standing box fans located around the museum and blowing air toward the exterior walls. These fans were set on low speed and set ten feet or so from the exterior walls. In areas where the fans were blowing on the exterior walls, condensation did not form. Conversely, in a limited area where fans were not blowing, condensation did form, verifying that the test was valid and not just a fluke of this season's weather conditions. This solution was tested for only one winter season, but showed the hoped-for results. Additional testing may reveal other challenges.

Recommendations

Automated Ventilation Controls: There are several ways to create air movement across the windows and inside face of the exterior walls. The most energy efficient system would use the sensor technology already in the building (with a new CPU) to monitor weather conditions and turn on fans or blowers only at those times when condensation was predicted within the building. Caution would need to be exercised with such a solution because of the previous challenges found with ongoing operation of monitoring equipment. Weekly checking of the new CPU and control systems would be recommended. This represents what may be otherwise hidden staff expense cost to the project. At this time, an automated control may not be the best use of limited resources for the Libby Museum.

Ducted Ventilation System: A ducted system of air distribution could do the most thorough job of washing the windows and walls of the museum. A large, high efficiency fan unit above the bathroom area or within the attic area could pressurize a single continuous duct wrapping around the open museum space, either above the original ceiling (now hidden), above the current lay-in tile ceiling, or "decoratively" within the museum space just above the tops of the windows. A ducted system would be most effective in terms of first-cost and performance if located exposed within the space, but would also have the largest visual impact on the historical integrity of the museum space. Locating ductwork within the historic attic would be quite a bit more expensive to install and maintain, and likely not as effective. A ducted system of air distribution of any kind is not recommended at this time.

Multiple Fan Ventilation System: What has worked and would likely continue to work is a system of low cost fans run seasonally from late October through mid-March. Inexpensive

box fans with heavy duty extension cords have worked in the past, and expanded to eight units, would likely protect the entire perimeter of the existing Museum. Alternatively, a system of ceiling fans could provide more complete disruption of the internal air for less operating expense and headache than the portable fans. Designs for a symmetrical placement of eight fan system, as well as an asymmetrical layout of three fans have been provided to the town for consideration. Ceiling fans have an additional advantage in that they may also be used in the summer months during operation of the museum to cool visitors and staff on hot days. A fan solution for moving air across the interior faces of the the windows and exterior walls is recommended. If the budget will allow, the ceiling mounted eight fan solution is preferred.

Crawlspace Vapor Management Improvements: Both the soil under the building and the introduction of outside air to the crawlspace have been identified as sources of additional moisture likely to be contributing to the condensation and resulting icing issues within the Libby Museum. The Mechanical Engineer has recommended the installation of a vapor barrier on the underside of the floor framing above the crawlspace to address both sources of moisture. The Architect and Structural Engineer, both very familiar with historic building renovation, believe introducing a vapor barrier at such a location to be shortsighted and perhaps dangerous to the building framing. Of primary concern is that a new vapor barrier attached to the framing, while reducing vapor transmission upward into the museum, will also reduce drying the drying potential of moisture introduced to the floor framing from above or through holes in the vapor barrier. Trapped moisture is the primary cause of building rot and creating new opportunities for such condition should be avoided.

For the safety of the building's construction materials, separate solutions should be installed to address moisture contributions from the crawlspace soil and from condensation contibutions from ventilation air, especially in the summer. A vapor barrier should be installed over the crawlspace floor and not on the underside of the floor frame. The reasoning for this is that if the vapor barrier on the floor is torn or otherwise fails, the result is that it may not work perfectly, but the crawl space will still be dryer than it has been historically. If a vapor barrier installed on the underside of the floor fails, components of the building which have been in place for generations could be newly exposed to conditions conducive to rot and decay, potentially requiring significant repairs or replacement in as little as fifteen years. A detail for the installation of a new vapor barrier has previously been provided to the town and is included in the appendix to this report. The wall vent closures should also be enhanced to maximize air tightness with new weather sealed frames and gasketed infill panels. Blocking all outdoor air from entering these vents while closed will prevent condensation on the top side of the new vapor barrier, especially in the summer season. This two-step approach to controlling moisture movement in the crawlspace is recommended.

Building Insulation: It may seem counterintuitive to suggest that a building that has no heating system should be insulated. In the case of the Libby Museum, the ground under the building is in fact the largest heat source for the building. The large area of exposed grade and the seasonally closed crawl space create conditions where temperatures in the space drop currently rarely drop below 40 degrees. When the crawl space is open to the museum and/or the exterior, temperatures inside the crawlspace do drop, though seldomly to below freezing. Insulating the crawlspace walls would increase the temperature of the

space and allow more heat from the ground to be transferred through the floor into the museum. Warmer air in the Libby Museum would decrease the duration of the condensation events that create condensation (if these events are not completely eliminated by the fan system). Installing insulation on the crawlspace walls will be expensive, however, and will require additional masonry work prior to application. A detail of how the crawlspace walls would be insulated with closed cell sprayfoam insulation has been provided by the town and is included in the appendix of this report.

Insulating the exterior walls of the Libby Museum would be effective for a different reason than for those in the crawl space. In the unheated museum, temperature swings are experienced as the sun warms the space in the daytime, and drops again at night. Insulation in the crawlspace would raise the building temperature slightly at ALL times of the condensation cycle. But the building loses most of its heat through its large roof, which would be extremely challenging to insulate at this time because of its current configuration and the hopes that the historic raised ceiling may one day be restored. Adding insulation in the exterior walls of the museum without insulating the roof is not likely to greatly improve the overall temperature of the unheated space. However, additional insulation in the walls will slow down the rate of heat loss in these walls where condensation is currently forming. This will make it easier for the recommended fan system to warm the interior surfaces of these walls, decreasing the amount of condensation that occurs and helping to keep any new water in a liquid state longer so that more of it can evaporate instead of freezing to form ice. Details of approaches to insulating the cavity walls of the museum have previously been provided to the town and are included in the appendix of this report.

The primary challenge to insulation in the existing walls of the Libby Museum is the financial burden. In a typical renovation project, these costs can most often be measurably offset with a reduction in heating costs. Since the Libby Museum has no heat, there is no available offset for the expense of installing the insulation and repairing the building's finishes, only the modest impact the altered construction would have on reducing condensation and icing in the building. This high cost of adding the insulation is compounded by the challenging construction of the building. The shallow depth of the crawlspace requires spray foam insulation in tight spaces with limited ventilation. The special construction of the Libby Museum into the adjacent hillside necessitates two different kinds of insulation in the museum cavity walls, including rigid insulation against the lower (retaining wall) portions of some walls which will require the removal and replacement of interior finishes to install. These conditions mean that the installation of the insulation will be more expensive than ordinary and common practice. It is recommended that crawlspace insulation be delayed until after a fan system has been installed and tested. The insulation should be installed only if the fan system is shown to be unable to eliminate the condensation problem or if a decision is ever made to install a full or a limited heating system. If the fan system works to eliminate all condensation and icing, it would be preferable not to insulate the building at all unless a heating system is installed.

Summary Order of Installations

Installation of crawlspace Vapor Barrier, Air-sealed foundation vents, and permanent closure of sill vents at vented wall cavities:

2017

Installation of an eight fan system to wash all exterior with moving air:

2017 or continue with walls more box fans

Installation of Foundation Insulation, including Required masonry work in crawl space:

no earlier than 2019, if ever

Installation of Cavity Wall Insulation, perhaps along with restoration of historic pan ceiling, insulation of roof, and installation of basic heating system. no earlier than 2020 unless part of a heating project.

Photographs



Interior of Museum showing ribbon window around building perimeter and half-height partition walls. A ducted system for air distribution could be above white (newest) ceiling, above the original ceiling (now paneled but originally plastered), or exposed above the tops of the windows.



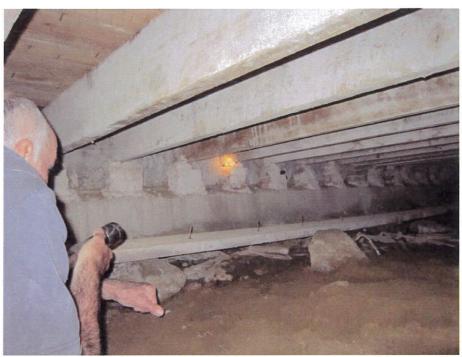
The space above the suspended lay-in ceiling (bottom) and the original ceiling (beyond with exposed lath and plaster removed). New fans for fan system would be mounted to original ceiling and hang below original ceiling.



Original attic space beneath roof. Fans in the three fan system would bear on a new timber laid across several collar ties. The collar tie closest to the fan would be structurally attached to the roof framing member above.



Crawlspace. Typical conditions require installation of loosly laid vapor barrier capable of resisting tearing when crawlspace is accessed by workers.



Previous ad-hoc repair of floor joists at rear wall should be removed and replaced with a continuous wall prior to application of any closed cell spray foam. Because of high expense, insulation of crawlspace should wait for final determination of efficacy of installed ventilation system.



Close-up of previous ad hoc floor joist repair. Do not let this poor work be buried in closed cell spray foam insulation system.

DESIGN DAY MECHANICALS INC

10/12/2016

Christopher P. Williams, Architects 4 Stevens Avenue PO Box 703 Meredith, NH 03253

Attention: Norman Larson

Re: Libby Museum, Wolfeboro, NH

Norman,

After reviewing the very useful temperature, humidity and dew point charts based on the data collected in the past two years. I have the following thoughts about what is happening during the times of the year when the museum is experiencing condensation on the exterior walls and windows.

After reviewing the evolving conditions outside, inside the museum, and inside the crawl space, utilizing the charts that you have developed with all those inputs, I do not believe that ground water moisture from the crawl space is adding any significant moisture load to the air that enters the museum. Therefore, that in and of itself would not be the reason to add a vapor barrier at the surface of the ground within the crawl space, which would have been problematic to install due to all the stones and rubble at that surface.

However, after reviewing and comparing the evolving conditions before the vents into the museum were covered, and after they were covered, and knowing that those vents are connected to the air in the crawl space. I believe that a significant portion of the outside air moisture load is being introduced to the inside of the museum from the crawl space when the vents were uncovered. That moisture load seems to be reduced when the crawl space vents are closed, but I don't believe that it is completely eliminating moisture from moving from the outside air into the crawl space and then into the museum space through the floor system, or at the edge of the floor system, even when the outside air and museum vents are closed. The driving force for this type of air and moisture movement is what is simplistically called a chimney effect within the museum. Yes, a portion of the outside air and the moisture load it contains is also moving from the outside into the museum through walls, windows and doors. But, further reducing the flow of outside air into the crawl space and then up into the museum would reduce the moisture flow during the times when condensation can occur.

Even after we reduce the flow of warm moisture outside air into the museum, I fully expect that we will still experience times when condensing may occur. By looking at the charts we see that there are cycles of evolving air conditions that happen over a given period of time before the conditions return to a balance point. During the time before these cycles, the mass of material, especially in the outside walls and windows, gives up energy and becomes cold, but the dew point temperature

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⁸⁴ Gilford Street, Manchester, NH 03102

DESIGN DAY MECHANICALS INC

of the air in the museum space is not above the temperature of the walls and windows. During the part of the cycle when condensation occurs, higher dew point temperature from the outside moves into the museum at a rate faster than the walls and window temperature can rise above that dew point. In our current situation the wall and window temperatures come back to a warmer balance point temperature by absorbing energy from the high dew point air by condensing the moisture in the air. This is the same type of energy transfer as goes on in an air conditioning system when humidity in the air being blown by and through a cooling coil is condensed on the coil and drains out of the system through the condensate drainage system. The difference between these two scenarios is that in the air conditioning system we are constantly moving the energy through and away from the coil by a flow of refrigerant being evaporated from a liquid to a gaseous state on its way back to the compressor, whereas with a wall and window we are not dealing with a continuous flow of energy through the wall and window. If we were to stop the flow of refrigerant through the cooling coil, the condensation would stop as soon as the surface of the copper warmed up to the temperature of the still humid air blowing on and through that coil.

As with the air conditioning system analogy, our goal should be to blow air across the cold surfaces inside the museum to raise the temperature of those surfaces above the dew point temperature of the air. Another example of this concept is my school bus windshield experience. The last time I rode a bus was in 1970 in Cicero, NY. Yes, it gets very cold there, and yes a bunch of high school student put out a lot of moist hot air, even in the winter, and the windshield was single pane glass (yes, I was still riding the bus at a time before all 17 year old seniors had cars). The defroster was a little fan blowing that moist air across the windshield, and it worked.

As you suggested we can consider these thoughts as a theory, and can test the theory by using low technology box fans to blow at the cold surfaces. These fans can be run all the time during the winter, or, their power could be activated by input from our control system. We would monitor the temperature of the glass surface that we are currently checking, and monitor the dew point of the air inside the museum. As those temperatures begin to approach each other, the fans would activate, as they diverge, they would deactivate. We can set and adjust differentials so that they are not continuously turning on and off.

If the theory proves to be correct (no, that does not mean it becomes a law) then a more permanent, more effective air handling and ductwork solution could be implemented.

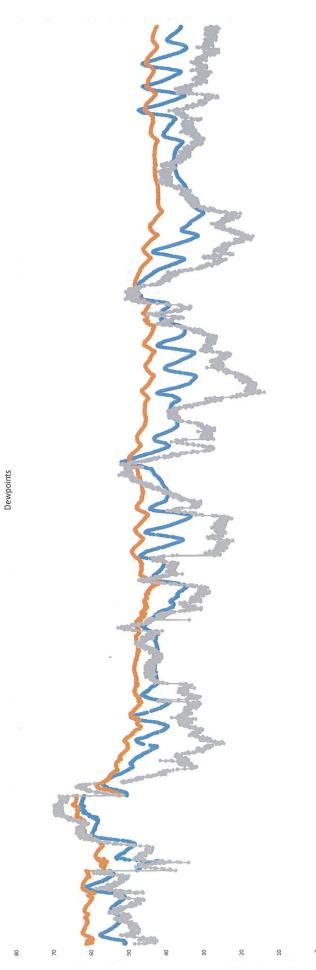
Sincerely,

Douglas Maire DESIGN DAY MECHANICALS, INC.

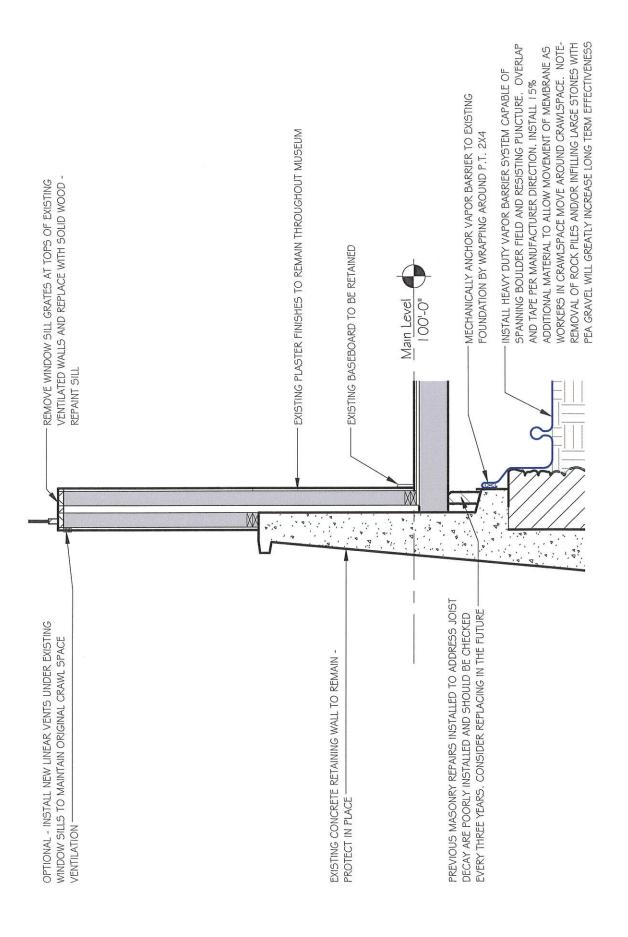
Douglas C. Waitt

Dewpoints

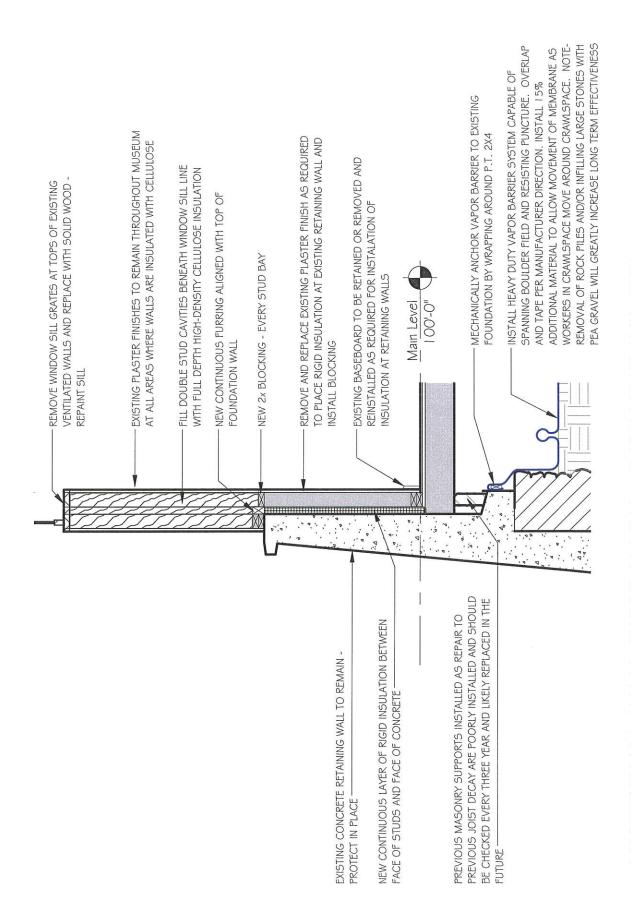
--- Museum Dew Point ---- Crawl Space Dew Point ----- Outside Dew Point



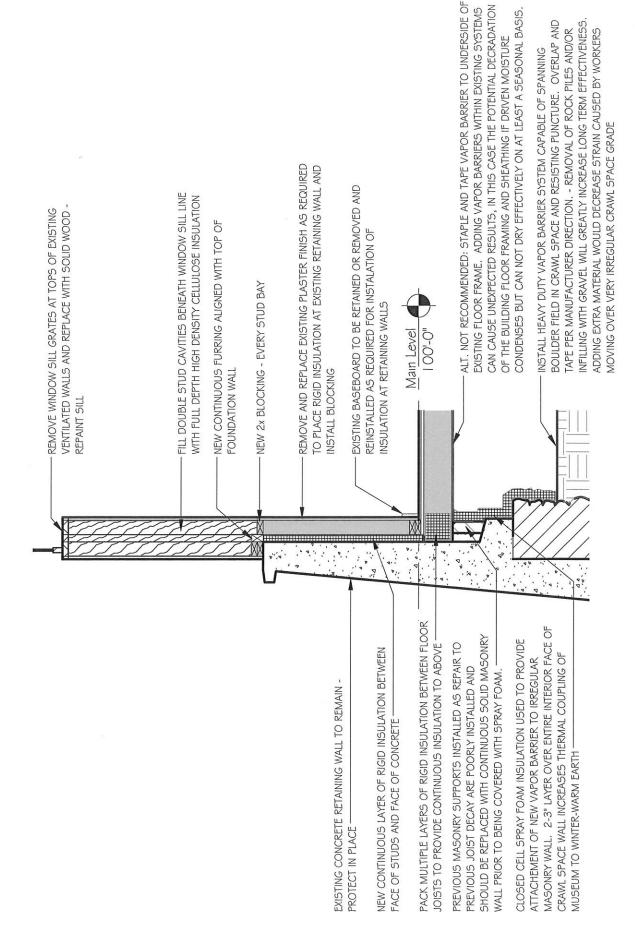
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RECOMMENDED MOISTURE MANAGEMENT - LOWEST COST - NO INSULATION



ADDITIONAL WALL INSULATION - REDUCES WINTER CONDENSATION AND SUMMER HEAT GAIN



BEST INSULATION - RECOMMENDED IF BUILDING IS HEATED



MEMORANDUM

DATE:

June 1, 2017

TO:

Board of Selectmen

FROM:

Matt Sullivan, Director of Planning and Development

SUBJECT:

2017 Capital Improvements Program (CIP) Goals

Please review and consider the draft goals of the 2017-2026 CIP shown below. These goals include minor amendments from the Town Manager and Director of Planning based on prior programs and warrant article progress over the past year.

- 1. To have all departments spread their projects over 10 years.
- 2. New capital project submissions should, whenever possible, be programmed into the out years of the CIP.
- 3. To continue to try to phase large projects into smaller, more digestible pieces and give consideration of natural division points in a project and cost differences between a phased project and un-phased projects.
- 4. To encourage the use of capital reserve accounts as a method to spread the cost of a project over a number of years so bonding would not be necessary.
- 5. To look at developing smaller projects into yearly appropriations instead of every other year, e.g. sidewalk projects.
- 6. To propose no more than one major building project per year.
- 7. To plan departmental projects based on the assumption that the Library project is scheduled for 2018.
- 8. To maintain focus on achieving and keeping ADA compliance at all Town facilities.
- 9. To maintain funding for Town road infrastructure upgrades.
- 10. To continue focus on building maintenance and repairs of Town facilities.
- 11. To utilize the alternative design to improve and expand the restrooms at Dockside.
- 12. To consider the future re-use of the electric generation building on Lehner Street. Evaluate the need for a new community center after the addition of Town Hall Great Room, Abenaki Four Seasons Lodge and new Library.

I look forward to a discussion of these goals at the 06/07/2017 meeting of the board.

Sincerely,

Matt Sullivan

Director of Planning and Development