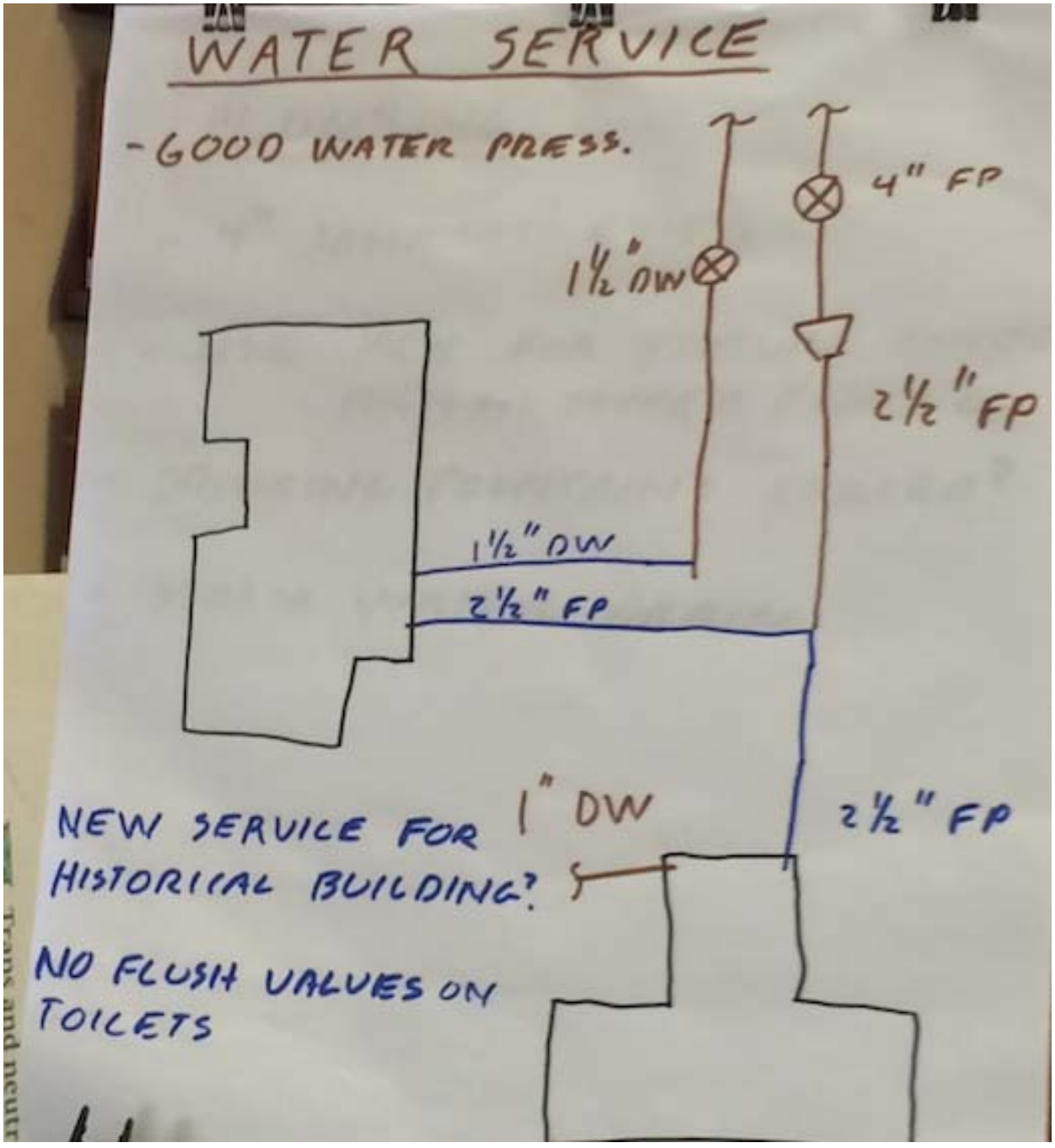
Thomas Memorial Library Building Committee
Minutes April 18, 2014

In Attendance: Molly MacAuslan, Kathy Ray, Cynthia Loebenstein, Dick Reed, Jay Scherma, Frank Governali, Derek Converse, Martha Palmer, Kate Williams-Hewitt, NADINE COLE – INTERIOR DESIGNER, ANDREW HOLBROOK-MECHANICAL ENGINEER; LARRY BARTLETT-LIGHTING & ELECTRICAL ENGINEER

1) **Approval of Meeting Minutes**: March 20, 2014, April 1, 2014 & April 7, 2014. – Unanimously approved.
2) **LBC Housekeeping**: New meeting set for Friday, April 25th, 12:30PM
3) **Input & Outreach** (Molly) – 10 minutes
   a) Email Address – will be addressed by town/school tech staff
   b) Video – have had discussions with 2 CEHS students who are willing & able to produce short videos for our outreach work.
   c) Focus Group – will be meeting as planned on April 30.
   d) CE Farm Alliance Strawberry Festival (June 28th, 8AM-4:30PM) – invitation was received to participate. LBC will look to have a presence at the festival along with materials that can be distributed highlighting design progress to date.
4) **Review of Revised SD Cost Estimate (Derek)** – Are currently within 5% of the original planned budget and believe that through the design and planning process we'll be able to get within the original budget. No change in plans is required at this point in order to achieve the original budget number.
5) **Discussion of revised sq. ft. computations (Derek)** Dick & Derek reviewed the square foot calculations and identified the discrepancies that caused an overstatement of the square footage. Adjusting for these, the correct square footage calculation is 16,438.
6) **Planning Board Submission (Dick)** – Meeting on Tuesday April 22 with Mike McGovern & Maureen O'Meara to review requirements for the meeting.
7) **Andrew Holbrook (Mechanical Engineer):** Preliminary review of HVAC plans (Will come back for an update on HVAC around late May.) Has worked on 3 different libraries with Dick before. Will do HVAC Design & Engineering, Sprinkler Protection (specification), Plumbing Design & Engineering, Water Design & Engineering.

   Water – good water pressure, no pumps necessary. Can leave the current 1 1/2" pipes. Flush valve toilets require 2", so will use tanks.

With fire protection some valves will have to be added so water can be shut off where necessary.
Spurwink building will need separate valve and meter from PWD. If we utilize second floor may need to add 2nd bathroom.
Fire dept will have to certify that the water pressure is adequate and will not affect school buildings on campus.



PLUMBING: will tie into existing storm drains with roof drains. Will try to re-use existing electric water heater. We have 4" sanitary exits already; Use PEX for fixtures (will have some copper for larger lines; but PEX is

much cheaper with equal life.) Drinking Fountains – decided we don't need chillers at drinking fountains.
Will investigate whether we want to reuse roof rainwater in "grey" fashion or tie directly to town storm water drain.

Probably will not use gutters.

HVAC – Characteristics we're looking for: Reliable, Efficient, Quiet, Comfort, Longevity.

Comparisons of cost differentials among various energy sources, using published prices (does not include contract prices negotiated by town or school departments):

Delivered Heat		
TYPE	**$/100,000 BTU**	**LBS CO^2/100,000 BTU**
Electric	$4.36	25.0
Oil	$3.44	20.0
Propane	$4.18	15.4
A/S Heat Pump	$1.89	10.9
G/S Heat Pump	$1.56	9.03
Wood Pellet	$2.02	24.4

HVAC Constraints – Budget is too low for geothermal (closed loop system $90 to $100K premium to any system we'd be doing.) If everything works right you might have a 10 to 15 year payback. Additional concerns with geothermal is the uncertainty of the availability and suitability of the well-water supply, which could add to cost increases.

Discussed the possibility of cost saves and "green" options using operable windows in program space. Could benefit from avoiding ductwork in some rooms that have space constraints by having operable windows.

CEILING SPACE: very limited, will have to work around the constraints.
ENERGY ALTERNATIVES:
GAS: assume that we will get it to town center within a few years. This timing needs to be further investigated.

Propane will be cheaper to convert to gas in the future than oil. Right now propane is probably cheaper for the town, given our contract costs, than oil. Plus propane and gas have lower maintenance expense. Heat

pump system has features that make it cost efficient when combined with a propane system.

Oil has negative environmental impacts as well as higher current and probably long term costs. In addition, it would include a need for construction of a chimney.

High Efficiency Propane – low initial cost (95% efficient), simple, low maintenance, currently highest fuel costs, but low conversion cost to natural cost. Contract purchase price achieved by the town/school makes it more attractive than the table implies.

Air Source Heat Pump – could use for air conditioning and heating up to a certain point. Negatives – need back up, high initial cost, high maintenance costs.
Conclusion: Air Source Heat Pump + Propane + radiant where we can put it, may be best solution immediately, with conversion to gas in near future.

Wood pellet wouldn't be allowed by TC planning because of storage requirements.

8) Larry Bartlett (Electrical Engineer):
ELECTRICAL: We now have a single phase feed from CMP that comes in from the street. Question is do we need 3-phase power. If we do, then we'll need a new feed from the street with a new transformer. We need to consider the technology infrastructure needs.
Laying new power source from street would be billed from CMP and cost $15,000 to $20,000.

LIGHTING: Start with concept of lighting and once this is determined, we move to the kinds of fixtures that meet our concept of the lighting. With low ceiling in the lower level program space we'd use a very shallow fixture using LED lamps that are dimmable. Lower corridor would have single lighting concept with walls being lit, not the ceilings. Will do up-lighting to make corridor less closed-in. Further consideration: 1) should we avoid floor lamps where proposed; 2) can we avoid fluorescent any where it is proposed; 3) is there sufficient light for those with vision issues.

9) INTERIOR DESIGN (Nadine Cole): Looking to use high quality, "permanent" durable materials – granite sets the tone. The terra cotta panels at the exterior entrances helps also to set the tone for the interior. Entrance lobby, vestibule, and stairs will be granite. Carpet (classic & elegant & low maintenance). Maple Wood paneled wall in entryway lower level & upper level & gallery space. The paneled wood is roughly the same cost as sheetrock.

   Did not discuss paint colors interior or exterior. Need to discuss this further with LBC, as well as how colors will blend with terra cotta & granite.

10) Discussion of renderings (Dick) – Will produce renderings discussed in previous meetings.

11) Next Meeting Date(s): Friday April 25th 12:30PM & Thursday, May 1, 2014 @ 4:00 pm (Maine Room)

12) Adjournment: 11:10AM