

PHS Facilities Committee Meeting of 3-30-09

Attendees: Dr. Bass, Kathleen Sergeant, Dr. Mohr, Sean Minuti, Brian Cartin, Rob Hardy, Chris Marion, Eleanor Burton, Brenda Hobbs

Brian Mahoney, Hal Lynde,

Guests: Residents, Debbie Ryan, Lorraine Dube, Bob Sherman, Frank & Paul Marinace

Absent: Bob Sherman

- 1) Brian Cartin opened the meeting on behalf of Sean Minute.
- 2) Copies of response handed out from pre-submitted.
- 3) Committee began discussed the Marinance responses.
 - a) Question 1 Discussion (Note refer to hard copy of response for questions and written responses)
 - i) To complete a preliminary site design to make sure the site is suitable and to get bids is estimated at 80K, this is the design and approvals to build. Takes approximately 9 months, standard time for a site for wetlands.
 - ii) Brenda Hobbs questioned if the design for a new high school for the Windham Road site could be moved to another piece of land.
 - (1) Marinace- they would have to see the property. It depends on the site.
 - (a) Chris M stated there would need to be some modifications.
 - (i) Marinace said modifications using the previous design would help. Building would have to be tweaked.
 - (2) Marinace if the site is fairly square, the orientation would be based on traffic, there would be subtle differences.
 - (3) Eleanor stated if the site were with a hill the design would change,
 - (a) Marinace stated that would be correct
 - b) Question 2 Discussion
 - i) Requirements for engineering services and site investigations would cost about the same if the site were comparable to the Windham Road site.
 - ii) New site would need some building design work.
 - iii) Marinace: Site design can't be finished without knowing something about the building. To get to bidding for construction, it would cost about 300K. To get to site design and approval, it would be about 450K total.
 - iv) If a vote is passed in March, the build could start the next March.
 - v) Question 3 Discussion regarding lower levels of renovation on an addition/renovation project.
 - (1) Marinace, it is easier to scale back on the number of classrooms. Classrooms could be added later.
 - (2) 28 Million renovation would leave the current mechanical systems in place in the existing high school. Some walls could be moved. Basically the work would be similar to what was done over the summer.
 - (3) The Full renovation, 38 million, would add more durable walls, clean out all the way to the room, and install new mechanical systems. Until the building was laid out, the implication of spaces couldn't be determined. At this time, Marinace can't say if the library and other similar spaces would be the same.
 - (4) Dr. Bass asked if would take one year to get the vote, and one year to site design, how long till there's a building.
 - (a) Marinace stated for a school project, it would be about 2 ½ years from when the project was approved.

- (b) Marinace stated that the voters could approve to begin a site design and work could get started while waiting for the vote for a project.
 - (i) Chris M asked how long to finish a renovation/addition project.
 - 1. Marinace stated it would take longer to get it done, at least 2 summers and into two school academic years. Renovation takes more time.
 - (c) Eleanor stated the 29 million project would only be the minimum on a renovation/addition project.
 - (d) Brian M asked if the two options (reno/addition & new high school) were comparable. Does the 39 million option include an auditorium?
 - (i) Marinace stated the 39 Million does not include an auditorium it was taken out of the project.
 - (ii) Marinace stated the new high school was 178K square feet.
 - (e) Brian M asked if the core spaces would be renovated.
 - (i) Marinace responded not necessarily, it depends on what needs to be bigger and what needs to be moved.
- c) Question 4 Discussion on Staging
- (1) If staging did as whole separate projects, more expensive and you lose the economy of scale. A staged plan over years is more expensive. It is more expensive if contractors are coming and going and not doing all the work at once.
 - (a) Brian M stated staging in his definition was that we did not build for the 1200.
 - (i) Marinace responded stating that in building, building in the extra room is cheaper. It will never be cheaper to add in later. The utilization of space needs to be looked at in a project.
 - (2) Brian M stated he was concerned with selling a project.
 - (a) Marinace stated construction phasing and capacity phasing are different.
 - (b) Marinace stated planning to cut the student population close isn't good planning. Utilization can be used to calculate spaces.
- d) Question 5 Land Acquisition
- i) Marinace stated acquiring land is always a good thing. In general, Marinace recommends buying land if you can.
 - ii) 17 acres is a good size but it helps if you know what you are buying the land for.
 - iii) School Requirement sizes:
 - (1) High school- 15 acres plus 1 for every 100 students.
 - (2) Middle school-10 acres plus 1 for every 100 students.
 - (3) Elementary School- 5 acres plus 1 for every 100 students.
 - iv) Brian M stated there are no land requirements for kindergarten.
 - v) Marinace stated Goffstown just built a kindergarten on 5-7 acres.
 - (1) To build a kindergarten in Pelham on the current high school site would take about 4 acres.
- e) Question 6: Value per dollar spent
- (1) Marinace stated renovation is more difficult for contractors with kids present.
 - (2) It could cost 20% more to do the same amount of work.
 - (3) The more complicated the project the less efficient the cost will be.

- (4) Renovations make more concessions in design because current building locks you in. You can't get as efficient. The addition could make up for some.
- (5) Costs increase because you have inefficient spaces.
 - (a) Working in a building with kid's means you have to phase it.
 - (b) Contractor needs about 10K square feet to work on at a time, that equals 10-12 classrooms of space at a time.
 - (c) Brian M asked how many classrooms we had in the academic rooms, 36?
 - (i) Dr. Mohr stated that was not correct, there are 36 teaching areas (not all classrooms)
 - (ii) Brian M asked if you could build an academic wing and then move the students out of the other spaces for renovation.
 - 1. Brian M stated he thought the area renovated over the summer was about 10K square feet.
 - a. Marinace stated not a lot was done in that renovation.
 - b. Marinace stated you have to know what is in an addition to know how to phase it.
 - c. If contractor working on an addition, usually better cost for the renovation of a project.
- f) Question 7-Mechanical Systems with Renovation
 - i) An addition may require temporary renovation to old building and do major renovations.
 - ii) Renovation 1/3 of the building, probably will partition systems.
 - iii) Mechanicals are more of a part of phasing than engineering of project.
- g) Question 8- core spaces as a middle school in current high school.
 - i) Marinace stated the square footage of the gym and cafeteria is ok for middle school.
 - ii) The issues with those areas are the mechanical systems.
 - iii) Usually spaces are fixed up during a project because it isn't expensive to do so.
- h) Question 9: Comparison of the two previous options
 - (1) Can't really get as efficient in a renovation project.
 - (2) Goal was to be as comparable as possible with spaces.
- i) Question 10- Staging in other communities
 - i) Jaffrey is trying to phase schools. Jaffrey doesn't know if they will get approval for 2nd and 3rd phases.
 - (1) Jaffrey was 20 votes from a new school high school and renovation of their high school to a middle school.
 - (2) The town switched plans.
 - (a) Currently Jaffrey added 10/12 classrooms for 10 Million with the classrooms as a connector between the two existing schools.
 - (b) Parts of the old school were renovated and upgraded to current standards.
 - (c) Future is to build a gym, locker rooms and build a new middle school.
 - (i) Eleanor asked what the enrollment was?
 - 1. Marinace stated about 250 in Jaffrey middle school, 400 in the high school.
 - ii) Londonderry could have built a new high school and solved all their problems. They spent a whole lot more in the end with phasing.
 - (1) Kathleen stated Londonderry has a huge campus to work with.

- (2) Late 1980's Londonderry put in trailers. There was an 8 million dollar proposal that didn't pass due to a taxpayers' association fighting it.
 - (3) Roughly 27 trailers were installed to meet the school needs.
 - (4) 14 years later, Londonderry has spent 39 million on fixes and now Londonderry has the highest taxes.
 - (5) Marinace stated Londonderry had portables so long they started to collapse and required shoring up for use.
 - (6) In two years Londonderry spent 17 million on the high school and are looking at another 10 million dollar addition.
- j) Question 11- Most expensive building spaces
- i) Kitchen is very expensive in equipment and services needed.
 - ii) Locker rooms are expensive because you need mold resistance.
 - iii) Auditoriums due to soundproofing sound systems and lighting systems. You can do an auditorium part way but you should do it right.
 - iv) Brian M asked if all the cooking was done at PES? Would we need a full kitchen at the high school?
 - (1) Dr. Mohr stated only cold sandwich and salads are made at the high school.
 - v) Brian M stated Windham currently gets food service from Pelham if that goes away, we may not need a full kitchen in the high school.
 - (1) Kathleen stated we would want to be able to give high school student's food that they want and not foods for the elementary school.
 - (2) Marinace stated high school is usually "a la carte" lunches; it's hard to bring that in from another school. Hard to serve "a la carte" from a serving only kitchen.
 - (a) Part of renovation plan was for a full kitchen.
- k) Question 12- Covered in previous discussions.
- l) Question 13-Buildable land
- i) The aerial survey may show different floodplain, which would change buildable acres.
 - ii) Current assessment is 83 buildable acres for the 3 schools as one site.
 - iii) Hal-Photo provided last week wasn't blown up as far as it could be.
 - iv) Dr. Bass asked the board for the aerial survey. The board approved it. Kathleen is setting it up.
 - (1) Brenda Hobbs stated up to 10K could be spent on the survey.
 - v) Hal asked if it was possible to estimate the difference in operating costs between a renovation/addition, new high school or small renovation with no mechanicals.
 - (1) Hal thought the heat could be substantial if the current mechanicals can move the air that's needed.
 - (2) Insulation and controls won't be as good.
 - vi) Marinace stated you won't reach the high performance standards in renovation. If payback is less than 10 years in an old building that would be good.
 - vii) Marinace stated you need to weigh the payback. If the payback is longer than the life of equipment, it is not a good project.
 - viii) Marinace- for example if you cut short on insulation, you may save a little but in the long run the insulation is worth it.
 - ix) Eleanor asked about the difference in aid between a new building and a renovation/addition.
 - (1) Marinace stated it is more difficult to get 3% high performance aid with renovation.
 - (2) If project doesn't meet the requisites, you can't get 3%.

- (3) Low renovation probably will not meet the requisites.
- (4) High end renovation, maybe.
- x) Brian M asked about the cost of a new elementary school.
 - (1) Marinace stated 12-15 million for a 500-student elementary school on a good piece of land.
 - (2) You must look at the total #of acres on a site to calculate needed acres.
 - (3) Brenda asked how many useable acres were left on the current site?
 - (4) Marinace went over the populations
 - (a) Current school requirements
 - (i) High School currently with 700 - 22 acres
 - (ii) PES - 1000 students- 15 acres
 - (iii) Middle school- 600 students- 16 acres
 - (iv) Total acres 83, allocated 53 currently.
 - (b) Marinace stated there are a lot of acres on the current site but it is a bad configuration. All the site work with an addition wouldn't leave much. Other land you can't get to it, the land around the buildings is useful.
 - (i) You can only pursue a limited amount with the wetland before it takes longer to get permitted.
 - (ii) The farther away from the current the building, the value of the land drops.
- m) Other discussion:
 - i) Hal asked if the schools would have to comply with the wildlife corridor?
 - (1) Marinace stated the school doesn't have to comply with zoning. In almost every case, schools try to work with them.
 - (2) Brian M stated useable acres are more of a guideline; need to have the land to offer the program of the school.
 - (3) Marinace stated roads and parking would probably not be allowed in a WCD.
 - ii) Hal asked if there were any estimates on operating costs for a new high school compared to the current? Can we estimate?
 - (1) Marinace stated electricity not as variable as heating. New high school proposal would recommend wood chip or geothermal which would cut operating costs in half.
 - (2) Marinace stated some districts are building a central wood chip heating plant and feeding multiple schools.
 - iii) Audience questions:
 - (1) Are there any school related projects close to high-tension wires?
 - (a) Marinace response: Yes
 - (b) Chris M stated more specifics are needed for the residents. Are there any solid concrete studies about electrical lines?
 - (c) Brian M stated some states have set back requirements such as California, Colorado and Connecticut.
 - (i) Dr. Mohr asked what the rational was for supporting the electrical setbacks.
 - (d) Brian Mahoney stated the world health organization has regulations and some stated have adopted them.
 - (i) Hal stated it depend son if it is AC or DC wires.
 - (ii) Brenda Hobbs stated the US has done some studies on it.
 - (e) Dr. Bass brought the group back to the discussion with Marinace specifics.
 - (2) Are the wetlands mapped and available?

- (3) Hypothetical question to Marinace, if you were a Pelham taxpayer, what would you recommend?
 - (a) Marinace stated: They put out the facts and it is a value decision by the town.
 - (b) There is less overall cost of a new high school than a smaller addition/reno?
- n) 29 Million addition Discussion
 - i) Brian C stated at the 29 million renovation, there is no significant improvement in traffic flow of students or soundproofing.
 - ii) Marinace stated that was correct, the current building would stay like is with maybe some classroom renovation.
 - iii) Brian M stated there isn't currently enough data to correlate a comparison to a new high school.
 - iv) Marinace said we know the minimum and maximums for a project at the current school.
 - v) Rob Hardy asked if Marinace had heard of tilt up construction?
 - (1) Marinace responded they had but were not real familiar. Their knowledge was it didn't hold up the capacity wall they normally build.
 - (2) Marinace also stated most schools want the concrete block for support as load bearing walls. Marinace usually uses a different building system.
 - (a) Rob stated in Alberta, Canada 26 of the last 28 schools were built using tilt up construction.
 - (i) Marinace felt the short building season in Canada probably had something to do with using that method where construction is faster.
- o) Audience question by Tom Gellar
 - i) Any projects for very clean energy schools. Is there any stimulus funding for it?
 - (1) Marinace stated wood chip is the most economical to go for heating.
 - (2) Electricity with photovoltaic is very expensive.
 - (3) Wind is controversial for schools.
 - (4) Dr. Bass stated there is a small demonstration project in Massachusetts.
 - (5) Marinace stated for heat geothermal or woodchip are used the most.
 - (6) Brian M asked if the current site is conducive to geothermal.
 - (7) Marinace stated probably, there is plenty of ground water for cheap cooling. Geothermal provides the heat but its best benefit is the cooling it can provide.
 - (8) Audience statement was that geothermal is a 3 to 1 payback and cheapest to run. It is the most efficient in this part of the country based on his professional experience it HVAC.
 - (a) Marinace stated Geothermal is higher up front cost because of the volume of water that must be used. Woodchip heats higher and has a faster payback. Geothermal does have a lower operating cost.
- p) Brian C asked Marinace if there were any questions we haven't asked and should be asking?
 - i) Marinace stated there are a lot of unknowns with renovation because it wasn't looked at as much.
 - ii) Brian M stated costs of other options are as defined.
 - iii) Eleanor thanked Marinace for coming to help us. Marinace left at 8:30 PM.

g) Additional Discussions

i) Rob Hardy discussed his research into Tilt Up construction.

(1) Salesman from Norwood is willing to come to talk with the committee.

(2) Rob passed around his presentation on Tilt Up construction for other people to review.

(3) Rob stated he had also called some of the schools using Tilt up to get their opinions.

(4) Brian M. stated each architect has their style of construction/

r) Dr. Bass updated the committee on some items from the recent school board meeting.

i) The PSB gave him permission to talk with Tyngsboro.

ii) The PSB gave permission to proceed with the aerial photo survey.

iii) Dr. Bass was given permission to talk with landowners regarding interest in selling property for schools.

(1) There is interest, however, price cannot be discussed at this time.

(2) Dr. Bass stated he had talked with one landowner and there is a ballpark number. He is looking at some other pieces. There is also a range of acres available. The one he talked to already would need some site work but not a lot.

(3) New land would be contingent on a vote in March.

(4) Brenda stated she had talked with someone who had walked both parcels and the Webster Ave one seemed the better of the two.

iv) Dr. Bass informed the PSB that the Committee was looking to finalize a recommendation by the end of April or Early May.

(1) Chris M stated choosing a building design would not be in our scope. We would state what the costs are based on for our recommendations.

(2) Dr. B stated we should base the recommendations on what we have looked at. The board would decide design issues.

(3) Eleanor stated our charge was to point out a recommendation.

(4) Chris M stated we can't get stuck on analysis.

(5) Rob stated his thought was that with plans we have, tilt up construction might be an option.

(6) Brian M stated it could be an option to invite bidders to come in with a design similar to the Bedford, NH process.

(7) Brian C stated he felt that would cause delays in starting a whole new project.

(8) Chris M stated this group is to recommend on a high school. We are down to a time frame where we want to achieve it.

v) Brian C stated he felt edits for minutes could be agreed upon via email and asked people to look at the 3/23 minutes for approval.

(1) Brian C stated he and Chris started working on a presentation. It is approximately 40% complete.

(2) Draft to be sent out via email, and members were asked to review it.

(3) Brian C requested a final copy of the matrix for the presentation.

(4) Brian C stated we should complete a SWAT analysis on the final options.

(5) Sean stated there are 3 options

(a) New High School on New site

(b) Renovation/Addition

(c) Staged Renovation

- (6) Brian C stated there isn't a lot on a staged renovation and we may have to record that in the presentation.
- (a) Chris asked if the staged meant staged for capacity or staged for construction.
 - (b) Brian C stated from the meetings, staged for construction was not good. How much do you save on staged capacity? Core systems need to be built for full build out.
 - (c) Brian M stated it should be staged for bond term.
 - (d) Chris M stated she felt we needed to be working in evaluating the same for a renovation/addition and a new high school.
 - (e) Dr. Bass stated ultimately the PSB decides.
 - (f) Brian Mahoney felt we should discuss it.
 - (g) Chris stated it was brought up, do we get the same thing with each options.
 - (h) Dr. Bass stated there are certain consequences with each options.
 - (i) The committee should lay out the consequences.
 - (ii) The committee should identify other steps that may be needed.
- (7) Chris M asked if anyone had thought about the process for selecting an option.
- (8) Dr. Bass stated the committee could try for a consensus or go with a majority vote.
- (a) The report should as best we can reflect the committee's position and how we got to that point.
 - (b) Hal stated it might be helpful if we can layout the costs over 10 to 15 years for the taxpayer.
 - (c) Sean stated we have numbers but need to decide which ones need to be used.
 - (d) Brian M stated data doesn't have to be exact but does have to be comparative.
 - (e) He suggested possibly using the construction management report to get numbers instead of Marinace.
- (9) Brian C asked what we wanted to do at the next meeting.
- (a) Hal asked if the presentation would be ready?
 - (b) Discussion was to work on a SWAT analysis and the process for the decision.
 - (c) Chris M asked how the options would be presented. We need to define what we consider each option to be.
 - (d) Brian M stated we need to explain how we got there.
 - (e) Chris M asked for clarification on the point of the criteria matrix.
 - (f) Brian M stated will options taken off the table be explained?
 - (g) Brian C stated we would tell the number considered and a sampling of why we discarded some.
 - (h) Dr. Bass stated the committee could explain it was a vote with X to Y votes but unanimous on certain issues and varied on other issues.
 - (i) Next Meeting, Monday 4/6/09.
 - (i) Eleanor stated she would not be able to be at the meeting.
 - (ii) Meeting adjourned at 9PM.

Respectfully Submitted,

Daryle Hillsgrove