High School Facilities Committee
2-16-09

Attendees: Sean Minuti, Brian Cartin, Bob Sherman, Dr. Mohr, Kathleen Sergeant, Daryle Hillsgrove, Eleanor Burton, Brian Mahoney, Brenda Hobbs, Rob Hardy, Kevin Steele, Hal Lynde

Absent: Chris Marion, Dr. Bass
Guests: Paul and Frank Marinace, Marinace Architects, citizens

1. Sean opened the meeting at 7:10.
   a) The committee introduced themselves to Marinace
   b) Sean reviewed the purpose of the meeting with Marinace was to review information available on the current high school site as the committee compares options with information known to date.
   c) Marinace asked for a summary of what the committee had been working on.
   d) Brian Mahoney gave a brief update about the results of the vote from last year. He also explained we were looking at the impact of kindergarten on the district which is a change since the vote last year.
   e) Brian Cartin explained the committee had evaluated various options and rated a number of options based on a set of criteria. He also explained the committee wanted a better understanding of constraints on the high school site.

2. Marinace Discussion
   a) Paul explained that since last year there are new wetlands regulations regarding drainage and the shoreland protection act.
   b) These changes do make permitting slightly more complicated but still possible.
   c) Kevin Steele asked what the dollar impact would be due to the changes. Marinace could not provide an answer based on information to date.
   d) Paul Marinace explained that using the plan developed as an option last year, mitigation would be required.
   e) Floodplains would be affected. This would require cut and fill to balance out the impact.
   f) Permits would be required from DES.
      i) A detailed plan would be required to apply for permits.
      ii) There are 80 buildable acres. Negotiations would have to occur with the state to determine what would and wouldn't be allowed. Marinace consulted their engineers and believe the plan could be done but cannot say definitively without negotiations with the state agencies.
      iii) The state did approve alternate drainage solutions for Marlboro NH to address drainage close to wells. Marlboro also got a waiver for fields, as there are town fields adjacent to the elementary school that can be used by the school.
      iv) Marinace explained when you can meet all the criteria required; the state is more apt to negotiate solutions. If you can't meet the criteria, negotiations are more difficult.

v) Marinace stated that with mitigation requirements, if it can't be on the site, the state would want to evaluate possibilities at other school district owned properties.

3. Review of site information as presented in one of the options presented to the School Board in 2007.
   a) The drawing showed an addition to the back of the existing high school.
   b) Approximately 80 acres available, many of the available land areas other than the front are surrounded by wetlands. The drawing showed playing fields and some parking on useable areas in the middle and at the back edges of the property. The ball fields would be approximately ¼ mile from the school building. The fields would be needed for Physical Education classes.
   c) Separate access would be required from Willow Street to get to the fields.
   d) The septic field would have to be moved and re-located to the rear of the buildings.
   e) The existing water well would have to be abandoned because it would be too close to the septic.
   f) Approximately 2000 feet of water line would have to be brought from the Elementary school to feed the building water.
   g) Hydrants would be needed, as the sprinkler system would have to be upgraded.
   h) Rob Hardy asked about prime wetlands on the site. Marinace said currently there aren't any prime wetlands however, the shore land protection act does apply but on their initial review they thought the site could meet the required percentages.
   i) The back baseball field will impact wetlands and require mitigation. Depending on the size and orientation, it could range from 1000 feet to 10,000 feet impacted. Final amount would be based on an actual design and permit applications.
   j) Rob Hardy asked about fertilizer limitations. Dr. Mohr clarified we currently have fertilizer limitations on only a small portion of the current site.
   k) Marinace confirmed there would be some restrictions.
   l) Bob Sherman asked about power, water and sewer for the ball field area, as it would be ¼ mile from the school. Marinace responded saying power would have to come in from the street. A separate well and septic would probably be needed for bathrooms in that area.
4. Comparison of the New on New High School Option and the Renovation/Addition option as presented last year.
   a) The total space would be 190,000 feet with and auditorium.
   b) The buildings would have two floors for classrooms.
   c) The site could fit the square footage of an addition.
   d) The number of spaces would be the same but the configurations were not part of the project at that time.
   e) Brenda Hobbs asked about the possibility of a Campus Style high school on the existing site and/or building in front of the existing building. Marinace stated that there isn't much room to work with in front of the building. Also, the more stand along buildings you have the more it costs. Each building would need it's own HVAC and other utilities. It would also be harder to work on a good academic flow for the students and other compromises would be needed.

f) Brian Mahoney asked about staging a series of additions over a number of years. Marinace's response was that with that type of development it costs a lot more to the taxpayer, the curriculum offering would be harder to plan and the community would have to make compromises. It's also more inefficient because you either install over sized mechanical systems costing you more or you continue to add systems and it's more inefficient when working with the multiple layouts. Another concern is that the existing steel beam structure is not as strong. Attaching in multiple places would lead to additional concerns of snow loads on the roofs and the building may not have adequate strength to meet the snow load requirements. Multiple connections would probably require reinforcing the structure of the existing building. Drainage on the roofs could also lead to issues with connecting buildings also.

g) Eleanor asked about parking for 900 students. Marinace said the proposal last year allowed for 1200 students and faculty and would have required 600 parking spaces. The plan last year had about 450 in at the front of the site and about 150 spaces by the ball fields. For a smaller school the number of spaces needed could be reduced. However, if the plan is for 1200, somewhere on the site would have to be space allocated for future parking. Dr. Mohr stated there are currently about 220 parking spaces on the site.

h) Eleanor asked if building at the high school would prohibit building at other schools.

i) Marinace stated the size of the schools would be very big if you tried to expand. He added the memorial school is very constrained and the only option would be to lose fields and playgrounds and there wouldn't be anywhere to put them. These are items required of the schools.

ii) Memorial is also lacking already in core space and parking would be an issue. Marinace stated you couldn't fit a 4th school on the current district property due to land constrictions.

iii) Rob Hardy clarified that an addition would pretty much max out the existing property for any other uses.

5. Brian C asked about any insecticide restrictions. With the amount of wetlands he expressed concern about West Nile Virus and other insect exposure. Dr. Mohr stated that they have at times had to shut off the back of the property to science classes due to insect borne disease concerns.
6. Brian C asked about how you would build with 700 students attending school at the same time.
   a) Marinace indicated it would take about 18 months for this type of project. The area would have to be fenced off.
      i) The bus drop off and parent drop off would probably have to be changed. Fields would probably be lost to contractor parking, machinery and supplies.
      ii) The portables would have to be relocated.

7. Brian C asked if a renovation/addition provided more fields.
   a) Dr. Mohr stated we are currently short of playing fields.
   b) We have 3 teams using one field.
   c) Marinace stated fields could be used off site if the town planned.

d) If the town made new fields in the back, turf could be used which would be ready faster.

8. Marinace stated there were a couple of septic designs that could be used.
   a) Neither was evaluated for cost or efficiency for the site.
   b) One design required a mini wastewater treatment plant.
      i) Brian C asked if special training would be required to maintain such a system.
      ii) This system would have increased costs for maintenance.
      iii) In addition Brian clarified that water costs would go up if water was purchased from Pennichuck.
      iv) There would also be increased costs to transport kids out to the fields.
9. Dr. Mohr asked about Green possibilities.
   a) Marinace did not look at the existing site for woodchip heating or geothermal. Geothermal would provide Air Conditioning benefits as well as heat.
   b) High performance equipment could gain another 3%.
   c) On a renovation project it is more work to renovate for greener technology due to the constraints in layout.
10. Discussion on renovating the existing high school for a middle school.
   a) Limited renovation would be required as the building met the size needed for a middle school of 500 students.
   b) Walls are easy to move so some reconfiguring could occur to make classrooms the required sizes.
   c) Life safety and ADA compliance would be required.
   d) Bare minimum renovation-addressing all the ADA/ Life Safety codes, and minimal wall moving would be about 3 million dollars.
   e) Improving the mechanical systems and lighting to more efficient modern systems with better controls as well as the bare minimum requirements could be done for about 9 million.
   f) Marinace stated the renovation would need to be either the minimal level or the 9 million. Improving only some of the systems and leaving half of them with the old system does not gain efficiencies. It is more efficient to layout an entire system.
   g) Eleanor asked about the structures ability to support sprinklers.
      i) Marinace stated based on the engineers reviews, they believed the structure could handle sprinklers.
      ii) The major lines, larger diameter would need some reinforcement.
      iii) The current snow load capacity is close to it's limit but Marinace believes they would be able to install sprinklers as needed.
11. Marinace was asked if the current building costs for a new configuration for a high school had been looked at.
   a) That had not been looked at yet.
   b) A full renovation would be required to do any addition/renovation at the current site to make it equal to the curriculum in a new building on a new site.
   c) Marinace stated minimal renovation would not meet curriculum needs.
   d) Marinace also stated the renovation of areas to meet the size discussed would be a lot more expensive than renovating the building for a middle school.

i) One example was that the gym would require renovation as it meets the needs for a 500-student middle school but not for a 1200 student highschool

e) Sean M pointed out that to resolve the accreditation issues, more than a minimal renovation would be needed.
f) Brian C stated there are major issues to address with curriculum issues.
g) Marinace stated the state requirements would allow for smaller class sizes due to small rooms but that would limit the number of classes that could be provided and may require additional teachers.
    i) Marinace recommends sizing classrooms the same when possible to adapt to curriculum needs.
    ii) With the existing building, it is easier to move the classroom walls than the gym walls.
    iii) If you had multiple additions you would also have issues with having to build exterior walls at the end of each addition and then that would be come an internal wall later if added on.
    iv) External walls are more expensive and this would drive up costs.
    v) Marinace stated the more expensive areas are the gym, cafeteria, and locker rooms, which are harder to adjust in a renovation.

12. Kevin Steele asked about building a new school out back and then tearing down the old school and building more space.
    a) Marinace stated it would be difficult because you wouldn't have enough space in the first building for all the students.
    b) Marinace indicated there would be a lot of compromises to try to make it work temporarily.
    c) In addition you sacrifice efficiency of layout and would make compromises in the long run for the project.
    d) It would probably not save any money in the long run.
    e) Frank Marinace stated the most efficiency project is a new building on a new site.
    f) Marinace stated that a new high school on the existing site would probably require some wetland filling which would be as expensive as buying a new piece of land.
    g) The school would have to probably give up the fields. Mayer wetland impact, generally over 20,000 square feet require the Army Corps of Engineers approval.
    h) On smaller pieces they may see it but it may not stop a small project.
13. Brian C asked how much money would have to be spent just to get answers on the wetland mitigations and impact.
    a) Marinace stated a wetlands survey and topographic survey would be required. The previous surveys would not be enough.
    b) Marinace stated an aerial survey for about 7500$ would give an idea and may be enough to submit with designs for a permit.
    c) It would take 6-8 months to have a site design and drainage to apply for a permit. The aerial would not be enough for a final construction design.
    d) Marinace estimated 100K-150K to be able to get to the point of getting permits from the state just to say we could proceed with the project.`

e) Marinace said the site could probably get permits but it will not be easy. If there were Red flags that would stop the project, they would probably be discovered within the first 30K-50K of studies and work.
f) Hal asked if an aerial survey would give us a good idea for the athletic field impacts. Marinace stated the fields would have some wetland impact.
g) Bob S asked if there was an addition where would the athletics go and what would the costs be to transport kids to other fields.
h) Brenda Hobbs asked if the wetlands could be made into fields or a building area. Marinace stated you may be able to get permitted to convert wetlands to fields but not very likely to be allowed to build a building in any wetland area (filled).
i) Marinace stated that to design a building would take about one year. Site permits would take about one year. He said if the town went with an addition option, his recommendation would be to build the fields first so they can be ready earlier. Permitting and site design would need to be done for that to start.

14. Brian Cartin asked how confident Marinace was with being able to put a septic under a playing field in the middle of the property. Marinace said they were fairly confident it would be allowed.
15. Marinace stated that if the fields couldn't be built, there would not be an option, as the high school requires fields.
16. Daryle confirmed that a renovation of the existing school to a middle school would not have any issues with fields or wetlands.
    a) Marinace confirmed because the middle school doesn't require the fields as part of the educational standards.
17. Marinace was asked about the best time for a survey.
    a) Their engineers indicated in 1 to 2 months would be the best time for an aerial survey because the leaves would not have grown yet. Marinace stated that the aerial survey is not all that is needed and won't give all the answers. Engineering work will have to be required.
    b) Dave Hennessey, a member of the public and member of the conservation committee confirmed that there are 9 prime wetlands in the town but there aren't any on the existing property. Marinace noted that it is the town's decision on if it is going to apply town wetland regulations to the school site. In some areas, the fields would be within 50 foot buffer zones and in some areas as close as 10 feet to the wetlands.

18. Brian Mahoney asked about staging an addition in phases.
    a) Frank Marinace stated something like that could be done but it will cost the town a lot more money.
    b) Marinace further stated they would not recommend an addition/renovation project be done this way.
    c) Phases cause a loss of connectivity between areas of the building.
    d) It would also limit the schools ability to locate common areas (gym, café, etc) in a way that allows the school to close off publicly used areas from the rest of the building.
    e) Marinace also stated that the town would be building an exterior wall, more expensive, only to add space to the other side and make another exterior wall.

Exterior walls add structural support to the overall building and cost more to install.

f) Mechanical system efficiency would also be compromised.

19. Discussion on impact to students during renovation.
    a) An addition would not be big enough to handle all the students while additional renovations are done to the existing building.
    b) Students would have to be in both areas.
    c) It will cost more for contractors because they will have to keep coming back to the site, as areas are ready for them.
    d) It will also take longer to complete the project.
    e) Contractors will charge more for the inefficiencies in trying to complete their work.
    f) Marinace stated that renovations are more expensive for what you get compared to what a new building would provide to the town.
    g) Sean Minuti asked what it would take to do a renovation of the high school.
    h) It would be at least one full year and probably closer to 18 months.

20. Rob Hardy asked about the impact to water.
    a) Marinace stated the Army Corps would get involved if over 20,000 square feet of impact.
    b) May not be involved in less but could not state it definitively.

21. Rob Hardy questioned set backs for septic.
    a) Frank Marinace stated there may be requirements for monitoring wells and testing.
    b) Brenda Hobbs asked if there was any information available from the town or Walgreens who purchased the adjacent property.
    c) Dave Hennessey confirmed a flow analysis was done on Beaver Brook.

22. Kevin Steele asked what the wetland impact would be in square feet.
    a) Marinace stated they could not provide more than a general estimate based on initial information.
    b) The largest impact would be from the baseball field. Regulation size field requires 350 feet to the fence.
        i) Other specifics on the baseball requirements were not readily available at the meeting.

23. Dr. Mohr asked if there would be access to the septic at the back of the property. There would need to be.
24. The committee asked about existing paths on the property. They would need to be upgraded.
25. Hal Lynde asked if an addition went here would a middle school have to be on another site.
    a) Marinace confirmed the site could not have a 4th building and meet requirements.

26. The committee asked for rough estimates based on available information. Marinace stated costs to build have stayed fairly level in this economy. They had slightly revised estimates:

Renovation/ Addition	**New High School Convert Existing**
Renovation 39.7	School 42.6 Million
Comparable space to new with renovation as listed last year codes and system upgrades (9 million)	Geothermal and more efficient systems, reducing operating costs.
Site work about 5% of cost	
New school for middle school somewhere else 28 Million	Renovate existing high school for middle school 3 million (basic, some walls moved, all codes compliant) to 9 million including improved mechanical systems for lower operating costs
No Auditorium	Same
To reduce either would mean a very scaled back curriculum program for middle school and high school.	
Total 178K square feet	Same
Total Estimated Project: 57.7	Total Estimated project 45.6-51.6 Million

27. Brian C asked what the cost would be if we lost the sports fields during construction. Students would need to be transported to other fields.
    a) Concerns about impact to park and recs programs if fields were needed by high school.
    b) Kevin Steele stated the schools should get first priority for town owned fields.
    c) Daryle Hillsgrove noted that there are over 600 kids involved in Little League alone.
    d) Dr. Mohr stated that the field sizes at Muldoon were smaller and they couldn't all be used because they would not meet regulation size for school teams.
28. Hal asked for confirmation on summing up a renovation/addition project with cost from 28-39 million to meet ADA, life safety and space configuration.
    a) Hal noted another school would be needed at 20million or more to get an equivalent plan for the district, which would be around 59 million on the high side.
    b) Brian Mahoney noted that a 28 million renovation/addition would be very low end and would compromise the academics.
29. Hal asked for clarification on snow load.
    a) Marinace stated it is calculated by lbs of water per square inch on a square foot.
    b) Marinace further stated that any new buildings would need to meet current regulations.
    c) Many buildings were built very cheaply in the 1970's but met code.

30. Bob S asked what characteristics made a good school site.
    a) The issues to look at on property would be wetlands, ledge, access to utilities, if initial soil tests are available, slope and road access.
    b) Marinace stated you are better off spending a little more for a good piece of land because it will cost less for site work.
31. Sean asked what the costs for a site work up would be.
    a) Marinace stated the amount for work done on the Windham road property would be good.
32. Public member asked for a confirmation of the numbers for options:
    a) 46.8 for new high school on new land with renovation of current school to a middle school and possibly another 3.5 for land.
        i) Cost was 50-57 million for all of it.
    b) Compared to renovation/addition of current school and build a middle school for 500 if it was done within 2 years (accounting for minimal inflation).
        i) Costs reviewed were 28-39.7 for renovation/addition-39.7 needed to be equivalent to a new high school on a new site plus 21 million or more for a middle school on another site, plus 2-3 million for land, not including site work.
        ii) Total came to 51.-63.7, however low end does not meet same standard as new high school.
33. Marinace noted that with a new school 2.5 million was just in efficiency systems.
    a) On the low end, there are no "green" efforts and no high efficiency systems.
    b) 28 million on a renovation does not meet curriculum or high performances.
        i) The state has 3% reimbursement if green and high efficiency in the project.
34. Marinace stated the town needs to look at the financial aspect and educational aspect to optimize any project.
    a) Marinace stated that if the high school was moved off the current site, there would be more flexibility on the current site.
    b) If the current high school was a middle school, pre-K and kindergarten could fit on the existing site.
    c) The more acres available, the more flexible the project.
    d) Marinace advised districts to buy land available near other district lands.
35. Sean asked for clarification that if the high school was renovated for a middle school, the septic would be fine. Marinace confirmed.
36. Public member stated that a number of sites in town were previously reviewed for suitability and the information should be at the SAU.
    a) Another member of the public stated that a few years ago there were 35 15+ acre sites in the town. Three or 4 of those had been brought before the planning committee for subdivisions however, it is unknown if development occurred.
37. Marinace stated that any additional questions should be sent through Kathleen and she will forward to Marinace.
38. Paul Marinace stated that most districts are doing capital appreciation bonds on large projects.
    a) This gets the state money up front.
    b) The bond starts low and goes up following inflation.

i) Keene recently did this and it went from 1.30 per 1000 in first year to 0.66 (1/2) for the first year with the capital appreciation bond.
ii) It spreads the money over more of the people moving into the area and using the resources. Kathleen stated that paperwork for that kind of project does need to be submitted earlier.

c) Hal indicated that the tax base increases each year and this would help the taxpayer.

39. Meeting ended approximately 9PM. Next meeting schedule for March 2nd, 7PM at the high school.

Respectfully Submitted by Daryle Hillsgrove