

July 9, 2001

Middlesex's Bridge to Nowhere

by an architect who is also a Middlesex School graduate and parent

I've been asked by several alumni to summarize briefly my argument against Middlesex building the bridge into Estabrook woods, or failing that, to at least repeat the statement I made on the walk (led by Jim Saltonstall) into the woods on Saturday morning of the Centennial weekend. Being brief will not be easy; the issue is complex, and the information at hand necessarily incomplete, but I shall try.

First, to make the task manageable, let's begin by accepting, for the time being, the assurances of the Board that their intention is not to expand the school. I also accept, though only for the purposes of this commentary, the rationale of the Board that the bridge must be built now because the environmental laws of the future might never again allow it to be built. Thus, the only actual stated need being met by the bridge is for more playing fields, i.e., one set of four tennis courts, two soccer fields, and one small "sports shelter". Thus framed, does this project make sense or not; is it a good idea or a bad one?

Before we begin, I perhaps should say that I believe I can be a fair judge of this design project. As a professor of architecture for the past 35 years, I have evaluated hundreds of student architectural schemes, almost all of which were designed for a specific site with a complex set of environmental considerations to be met. As Head of a department of architecture at one university and Associate Dean of a graduate school of architecture and planning at another, I have also been asked occasionally over the years to sit on panels to judge or review professional design work, so I am not a stranger to the task. Most recently, I was appointed one of seven citizen planning commissioners for the city of Eugene, Oregon, where again, the task is reviewing the efficacy of a variety of planning ideas and projects. In short, I think I can tell a good scheme from a bad one.

Now let's look at this scheme. First, the land in question, Middlesex's portion of Estabrook woods, is mostly a rather steep slope covered with trees. To get to an area in this part of the woods which is level enough to even think about constructing playing fields, one must go about 2000 feet into the woods. It is proposed that this area be reached by first crossing the wetlands with a 300 foot bridge, which is to be bracketed by a pair of 100 foot earthworks ramps. Next, a 1500 foot roadway must be built up the slope to reach the area of the proposed fields. When we got to that point on our walk, there were neither fields nor meadow to be seen, only a gentler slope covered with trees. So the next task would be to cut down at least a hundred trees, pull out or grind up the stumps, and begin grading the land to get it level. In the best of soils this is not an easy task, and this soil is famous for its rocks. The plans show 14 feet of fill needed on the corner of one soccer field to make it nearly level. Deep cuts will certainly encounter many rocks of all sizes, and may reach granite bedrock. If so, and assuming the decision would be not to dynamite, the level of the field would have to be raised with even more fill.

Once leveled, the new fields will need proper drainage and stabilizing to prevent them from washing back into the slope, then topsoil trucked in to grow the grass, and perhaps irrigation lines run and buried to guaranty the grass a regular source of water. To irrigate

or not, and from what source, has apparently not yet been determined, but at the least, the water pipes for people and/or grass would have to run nearly 2000 feet, from pond or main campus, with the water being pumped up the hill, about a 70 foot vertical rise. The fields would also have to be fertilized and extra precautions taken to make sure none of the fertilizer seeps back down into the lake or wetlands.

How much will all of this cost? No one seems to know. Jim Saltonstall said that just the bridge has been estimated at between \$250,000 and \$300,000. The rest of the road and the earthworks has either not been estimated or the figure is not being released. On our walk, I guessed a million dollar total cost, and Jim did not flinch or demure. Later I mentioned that figure to another architect, after he reviewed the plans, and he scoffed, saying that there is no way that much construction could be done for a million dollars. The bridge itself will be not only as long as a football field, but because rescue vehicles must have access to the fields and must be able to pass anything on the bridge, the various agencies involved are requiring that it be 32 feet wide including two lanes and a pedestrian walkway. Add to that the earthen ramps at each end, the 1500 foot of roadway, all the tree work and earthwork for the fields, the drainage, the water lines, the topsoil, and it all adds up. This is a big project and it is going to cost a large sum of money. What do the alumni get for their money? Two soccer fields, four tennis courts, and the possibility of more construction at the whim of a future Board.

That, believe it or not, is the good news. What's the downside? Besides their costs, what are we giving up for those playing fields? First, remember that these are the woods through which the first colonial troop movement of the Revolutionary War passed. The Minutemen marched down its lanes and assembled under its protection before setting out to take the North Bridge back from the British soldiers. Seventy some years later, Thoreau and Emerson walked these woods. Thoreau wrote something like 60,000 words just about his experiences and observations in Estabrook Woods. Wouldn't it be amazing if Middlesex students and countless others could visit the same undisturbed woods, preserved in time, and test their observations and experiences against his? By introducing sports contests into the heart of the woods we are intruding on that history. By building this project we are covering over and confusing, with the noise of the present, our access to a very special part of our past. And won't there need to be equipment sheds and toilets somewhere, perhaps a field house? If these are to be more than practice fields will there not occasionally be crowds, and litter, and noise that will carry throughout the rest of the Estabrook area? The quiet sanctuary will be no more.

Second, at a time when ecological issues are in the headlines every day, we are also giving up a wonderful opportunity to have the most advanced environmental science curriculum in the nation. Pond, woods, and wetlands, which most schools would love to have, are already ours, waiting to be studied. Exeter has announced that it is spending \$1.5 million to build a one acre (!) wetland for instructional purposes, something we have in abundance. With Middlesex's natural bounty, the school could build the most advanced environmental science curriculum in the nation. This project seriously erodes our ability to do that, to provide our students with a world-class understanding of the ecological issues that they, as future leaders, will one day face. Schools compete in more than athletics. By building in the woods, Middlesex is giving up perhaps its most promising edge.

Third, it also damages our relations with the townspeople, and seriously divides the once tight Middlesex community. But the most painful fact is that it is all unnecessary — there are good alternatives. I have reviewed many of them over the last five years in my series of long letters to Deirdre Ling and the Board. Hundreds of volunteers, both alumni and townspeople, have been working tirelessly to make those alternatives real. In the most dramatic example, volunteers raised \$400,000 to buy three acres of land across Lowell Road to see if it would jump-start the school into an acquisition policy on the western edge. The purchase was made some time ago, but the Board has not accepted it in exchange for any change of policy. In another example, Tom Kirvan of the landscape firm, Carol R. Johnson Associates, which was hired by the Thoreau Country Conservation Alliance, showed how by realigning the present fields, space could be provided on current Middlesex land for the needed soccer fields. The Board did tighten up its fields somewhat, but was unmoved from its bridge building position. Similar alternatives have been suggested to relocate the tennis courts on campus. If a shortage of fields is truly the issue, then it would appear that building them in the woods is just not necessary.

Time for judgment. In my professional opinion, this is not just a bad idea, this is a spectacularly bad idea. Every step proposed, from bridging the wetlands, to paving a road up the hill, to clearing, leveling, irrigating, and draining the fields, to the enormous expense of it all, begs the question of whether the project makes sense. The Board's assurances to the contrary, the only reason to go through such costly construction for such a meager return in the face of more reasonable alternatives has to be to lock in future construction. But expanding the School physically into the woods in any manner, now or in the future, is a mistake. We should not be providing for it. In my opinion, the School does not need to get bigger at all, although that decision is certainly the Board's responsibility, not mine. If it must expand, then let it be across Lowell Road. The School should always be striving to get better, and the Board has done an excellent job of facilitating a whole host of improvements to the present campus. The campus and its buildings have never looked or worked better. This bridge project is a rare but serious mistake on the part of the Board. We all make mistakes. I can only hope that the Board members will be big enough to acknowledge this one before construction begins.

To read my earlier letters plus the opinions of a whole host of others opposed to the bridge project, or to just get a wider sense of the facts of the case, I suggest you visit the following two internet sites: <<http://www.estabrookwoods.org>> and <http://www.walden.org/scholarship/e/ells_steve/estabrook>.

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