

Green building reduces negative environmental effects. Between air pollution, water pollution and the ever decreasing capacity in our landfills, traditional building materials, their byproducts and human lifestyles are creating an unhealthy environment.

There are three points I would like to make which will explain why its important to consider sustainable building.

#### 1. Air pollution.

Residential, commercial and industrial buildings use about 45% of the nations energy including 75% of the nations electricity. Air pollution from these fuels impose considerable health, environmental and property damage costs. When we reduce our use of conventional energy in buildings we lower emissions of pollutants. These pollutants consist of particulate matter, smog, acid rain, co2 and voc's (volatile organic compounds) all of which are the root cause of global warming. Not only do our energy sources contribute to the reduction in the ozone, our use of paints, finishes, flooring and furniture all have an impact based on their off-gassing effects on the environment. Many building and cleaning maintenance products also emit toxic gasses which negatively impact the environment. The pollution produced not only contributes to global warming, but the acid rain produced is reintroduced into our rivers, streams and oceans and eventually back to us through the water we use and the fish and plants we eat.

#### 2. Water pollution and water conservation

Water run-off effects so many branches of living organisms on earth. We need to be careful what we put into the air, what we put into the water and what we put on the ground because it all returns to our drinking supply. Even during construction of buildings, the building materials that are used have the potential to contaminate. It is very important to be selective of building materials. When building materials are dispersed about the construction site the rainwater can wash their contaminants into the local sewer and produce toxic results.

Sustainable buildings are able to re-use water already in the buildings systems or through rain water collection thus reducing our reliance on Town water. In Hingham there is worry about our ability to maintain an abundant water supply. Wouldn't it be logical to address this issued early on in development of new construction rather than an afterthought.

### 3. Landfill waste

25% of Solid waste disgarded nationally is construction and demolition waste. 130 million tons per year, 5 million tons in Massachusetts alone. In a study of 21 green buildings, 81% reduced construction waste by 50% and 38% reduced it by 75%. I think it is safe to say that building with thoughtful products will alleviate stress on our overburdened landfills and will also reduce the amount of new materials used thus reducing

A change in Hingham's development philosophy is not going to save the world but there needs to be a ripple of change that promotes a wave. Its hard to change old habits, and most people don't change until something directly, negatively affects their own life. It is up to us, the motivated ones to think globally by acting locally.