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Building green - The quiet revolution that is hardly over

September 05, 2013 - Northern New England

You may not have noticed, but in many ways, the "building green" movement has undergone a quiet metamorphosis.

Not so long ago, the subject of green buildings was new, flashy, and gathered a lot of attention. It seemed every project meeting included lengthy discussions of how "green" the next project would be, and how to be recognized for it - Silver, Gold, Platinum, Energy Star, etc.

Not so much these days - in general, owners and developers seem to be moving away from formal point systems and certifications. What has changed? Is the "green building" movement over? Hardly.

The basics are still the same. Buildings still consume roughly 40% of all energy in the United States, and nearly 70% of all electricity. There are over 125 million occupied buildings in the U.S. today, and the "average" life of a building is approximately 50 years.

At one time, there was very little hard data available. But today, there are many examples of retrofits with modern, energy-efficient lighting and heating systems with documented savings of 25% to 50% or more in annual energy consumption. Today's owners understand that energy consumption is a major factor in the operations of any building, and true energy costs are best measured in terms of life cycle costs.

This has now all become conventional wisdom. In fact, one mechanical engineer recently said "Energy efficiency is no longer a design option to be considered - it is what we do all the time now." And energy codes are continually ratcheting up the standards too. So at least as far as energy consumption goes, what used to be done for "points" or to feel good about the environment has become mainstream.

From a site engineering perspective, the story is similar. For LEED certification purposes, some potential development sites score higher than others, depending on the following criteria:

- * Avoiding natural and agricultural areas
- * Reusing existing buildings or previously disturbed sites
- * Locating developments in existing community cores
- * Reducing demand for single-occupant automobiles

Nowadays, the key drivers for site selection - like energy costs - are economic - that is, lower land costs and easier permitting. As for permitting, after focusing for years on controlling development of green-field sites, many regulators had a hard time adapting their growth regulations to redevelopment sites. By now, however, most regulatory agencies and municipalities recognize that good planning and environmental stewardship means encouraging flexible and creative solutions if redevelopment of existing properties is to be economically feasible.

Redevelopment sites can also offer certain built-in permitting and economic advantages such as in-place utility infrastructure, mature roadway systems needing little or no improvement, remoteness

from high-value wetlands or sensitive natural habitats, and proximity to public transportation and other community services. So here too, the interests of regulators and the private development world are converging.

At the same time, many local land use ordinances have incorporated requirements for many factors that were once considered "leading edge":

- * Minimizing single-occupant vehicle parking spaces (rather than overly conservative parking ratios)
- * Including LED and low-impact site lighting
- * Providing bicycle parking and parking spaces for hybrid and carpool vehicles
- * Managing stormwater by infiltration, bio-retention, and rain gardens
- * Encouraging native and drought resistant plantings requiring no irrigation
- * Providing density bonuses for preferred site selection and site design practices

So with site design too, what was once done for "points" or to feel good has become mainstream.

Notwithstanding the above, or perhaps because of it, there is a palpable trend away from formal project registration and certification for green purposes. As one construction professional puts it "Why should we spend thousands of dollars to register a project, thousands more on consultants for documentation, and thousands more defending our design to the certification bodies, just to be recognized for doing what we intended to do in the first place? How does that benefit our clients?"

These are sentiments we hear expressed over and over in project planning sessions these days. Does it mean the end of "green building"? Actually, no - just the opposite. It means that the principles of green building have become internalized; the new normal.

So has the green building movement been simply a passing fad? No - rather it is a remarkable on-going success story. Perhaps that is the greatest tribute to the pioneers of the green building movement - what was once visionary has now become obvious and commonplace.

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