

PETITIONED ARTICLE 21 - SPRING 2017 TOWN MEETING

Proposed Amendments voted 4-0 by Schools Subcommittee of the Advisory Committee 4/18/17

A RESOLUTION REGARDING A NET ZERO ENERGY NINTH ELEMENTARY SCHOOL
AND THE EXPANSION OF BROOKLINE HIGH SCHOOL

To see if the Town will vote to adopt the following resolution:

Whereas our town, the nation, and the world are increasingly aware of the need to address climate change and of the importance of better protection of the environment in general, and

Whereas an international standard known as LEED (Leadership in Energy and Environmental Design of the United States Green Building Council) allows for a building's environmental and energy performance to be accurately measured and provides a benchmark to assist in designing a net zero energy building, and

Whereas net zero energy LEED Platinum schools create an environment that supports student learning and health through improvements in daylighting, indoor air quality, thermal comfort, acoustics, and classroom design, all of which have an impact on a child's ability to learn and a teacher's ability to teach, while saving energy, resources, and money, and

Whereas net zero energy LEED Platinum schools increase energy efficiency, thereby reducing greenhouse gas emissions, cost less to operate, utilize durable materials, reduce water and energy use, and provide other benefits; while providing an educational experience that transcends the classroom by creating opportunities for curriculum innovation and hands-on, project-based learning in which the building itself becomes an interactive teaching tool, and

Whereas decisions made now about the design of the Ninth Elementary School ~~at Baldwin~~ and the expansion of Brookline High School will determine each school's environmental footprint, particularly greenhouse gas emissions, for decades to come, and

Whereas the technical ability to create energy-efficient, high performing buildings has increased significantly by incorporating systems thinking into design processes, and

Whereas construction of new schools in Massachusetts and around the nation during the past five years has shown the feasibility and desirability of net zero energy schools, that is, schools in which the amount of energy **delivered** on an annual basis is **less than or** equal to the amount of renewable energy **exported from** the site, and

~~*Whereas* an international standard known as LEED (Leadership in Energy and Environmental Design of the United States Green Building Council) allows for a building's environmental and energy performance to be accurately measured and provides a benchmark to assist in designing a net zero energy building, and~~

Whereas the most accurate measure of energy efficiency for a building is EUI (Energy Use Intensity), calculated by dividing total energy consumed annually by the gross floor area of the building,

Now therefore be it Resolved that in order for the Ninth Elementary School ~~at Baldwin~~ to be a **significant advance toward** a net zero energy school **and consistent with the projected energy efficiency results at the new Devotion School, the Ninth Elementary School at Baldwin** shall be ~~designed~~ **seek to obtain a minimum of LEED v4 certification at the Gold Silver rating level, with a goal of achieving the Platinum rating level; and in addition it shall be designed to prioritize achieving points in the Optimize Energy Performance category and shall seek to achieve a minimum of 14 13** of the possible 16 points available in that category, **with the goal of achieving 16 of the possible 16 points available in that category; and, finally, it shall be designed seek to achieve a minimum EUI of 30 kBtu/sq.ft./yr., with the goal of achieving an EUI of 25** kBtu/sq.ft./yr.,

And, be it further Resolved that while overall net zero energy is unlikely to be achieved for Brookline High School and even the degree to which the as-of-yet-undefined, expanded portion of the school can approach net zero energy **design** is currently uncertain, nevertheless, net zero energy principles shall be **appropriately** applied, to the extent feasible, during all design phases of Brookline High School,

or act upon anything relative thereto.