

CITY OF NEWTON

IN BOARD OF ALDERMEN

PUBLIC FACILITIES COMMITTEE REPORT

WEDNESDAY, JUNE 22, 2011

Present: Ald. Schnipper (Chairman), Lennon, Albright, Salvucci, Gentile, Crossley, and Lappin
Absent: Ald. Danberg

Also present: Ald. Sangiolo, Merrill, Linsky, Hess-Mahan, Blazar, Harney, and Johnson
City personnel present: Lou Taverna (City Engineer), Stephanie Kane Gilman (Public Building Commissioner), Sandra Guryan (Assistant Superintendent for Business and Finance, School Department), Joseph Russo (Assistant Superintendent for Elementary Education, School Department), Michael Cronin (Chief Operations, School Department), Kurt Kusiak (School Committee), Margie Ross Decter (School Committee), Claire Sokoloff (School Committee), Susan Rosenbaum (School Committee), Arthur Cabral (Budget and Project Specialists, Public Buildings Department), David Turocy (Commissioner of Public Works), and Clint Schuckel (Traffic Engineer),

#171-11 NATIONAL GRID petitioning for a grant of location to install and maintain 70' ± of 6" gas main in CYNTHIA ROAD from the existing 6" gas main at 49 Cynthia Road southerly to 51 Cynthia Road. (Ward 8) [05/24/11 @ 12:01]

ACTION: **APPROVED 7-0**

NOTE: Dennis Regan, National Grid Permit Representative, presented the request for a grant of location to install a new gas main in Cynthia Road to service a new home on Cynthia Road. The Department of Public Works has signed off on the project with the usual conditions. All properties abutting the proposed gas line were noticed by National Grid that they had the option of switching to gas service. The Committee asked that in the future National Grid notice each property on the street, as other property owners further down the street may be interested in gas service. The public hearing was opened and no one spoke for or against the project. The Committee voted unanimously in favor of a motion for approval.

#367-10(2) DESIGN REVIEW COMMITTEE in accordance with §5-58 of the City of Newton Ordinances petitioning for site plan approval for the installation of two (2) modular classrooms with associated connectors at Zervas Elementary School, one (1) modular classroom with associated connectors at Burr Elementary School and one (1) modular classroom with associated connectors at Horace Mann Elementary School. [06/02/11 @ 5:16 PM]

ACTION: **APPROVED 7-0**

NOTE: Lori Cowles of HMFH Architects reviewed the proposed modular classrooms for three schools. The modular classrooms are needed to address space needs at the Burr Elementary School, Horace Mann Elementary School, and Zervas Elementary School. The School Committee has reviewed and approved the modular classrooms. Proposed site plans

were submitted to the City's Design Review Committee for review and approval. The Design Review Committee voted seven in favor with none opposed to approve the Burr and Horace-Mann Elementary School site plans and voted six in favor and one opposed to approve Option 2, which sited two modular classrooms on the south side of the Zervas Elementary School. The Planning Department provided a review of the siting of the modular classrooms and connectors, which was attached.

Ms. Cowles began review of the site plans with the proposed modular classrooms for Burr Elementary School. The siting of the modular classroom was previously approved by the Board of Aldermen in 2008 but was never installed. The modular classroom is to be sited at the northeast corner of the building, where it will not have any significant impact to school operations, vehicle, or pedestrian movements. There will be a loss of one window in the existing classroom but there are several windows on the other side of the classroom. The modular classroom will use a small amount of space from an existing classroom to provide access to the modular classroom. There will also be an operational sink within the modular classroom, as it is likely to be used as a primary classroom.

There are three existing modular classrooms along the east side of the building and the proposed modular classroom would be sited in line and to the north of the other modular classrooms. The modular classroom will not require that any plumbing be added. The new modular classroom will be connected to the school by a new corridor to provide safe access and egress. The new classroom will not have any significant impact to school operations, vehicle, or pedestrian movements. The school is located in a riverfront area due to the close proximity of Cheesecake Brook and the Conservation Commission may require mitigation plantings. The Conservation Commission is expected to make a determination on the mitigation on June 23, 2011.

The Design Review Committee considered five locations for the modular classrooms at the Zervas Elementary School and approved Option 2, which sited the two modular classrooms on the south side of the school adjacent to existing classrooms. There were pros and cons to each option but the educators preferred Option 2, as they preferred the siting in relationship to the other classrooms. Option 2 is also the most cost effective option and has the least impact on school operations.

The classrooms will be connected to the school, and each other, by a corridor between the two classrooms. The classrooms are against the existing building and require no plumbing connections. The modular classrooms are being placed in the 100' wetland buffer. The Public Buildings Department plans to require removal of existing blacktop at the site of the classrooms and installation of the classrooms on piers with a 6" gravel base to provide water drainage. The proposed location of the two classrooms on this site will require a Request for Determination of Applicability from the Conservation Commission. The Conservation Commission will review the site plan on June 23, 2011. The location of the modular classrooms needs to be evaluated by the Engineering Division of the Department of Public Works to ensure that it meets the City's criteria for on-site storm water drainage.

The public hearing was opened and Lynn Slobodin, 61 Washburn Avenue, spoke on the proposed modular classroom at Burr Elementary School. Ms. Slobodin is in favor of the addition of the modular classroom but had a number of questions. She asked if the existing classroom window would be usable when the modular classroom is removed. Public Building Commissioner Stephanie Kane Gilman responded that the window would be operational. Ms. Slobodin inquired if there was any plan to relocate a tree in a planter, which is currently located where the modular classroom is sited. Ms. Gilman intends to consult with Marc Welch, the Tree Warden for the City and the principal of Burr, regarding relocation of the tree. Ms. Slobodin is also concerned that by adding the modular classrooms the school will no longer be handicapped accessible. Ms. Gilman explained that the school is currently not compliant in terms of accessibility but she will look at different options to keep the school as accessible as it is now. Ms. Slobodin requested that the architect review the plan for the entryway into the modular classroom because it seemed like the door to the classroom and the restroom door were almost on top of each other. The architect will review the plans to make sure that there is plenty of clearance for both doors.

Tracy Carter, 25 Scribner Park, voiced her support of the modular classroom at Burr Elementary School. She hopes that the Board of Aldermen approves the site plan. The area around the school continues to be developed and the number of children in the neighborhood continues to grow. Diana Fisher Gomberg, 290 Islington Road, is thrilled that the project is moving along and hopes it stays on track, as the school cannot provide a full art program until the modular classroom is installed.

Bill Connell, 367 Albemarle Road, is not against the addition of a modular classroom at the Horace-Mann Elementary School but is concerned with the traffic in the area. He is disturbed that no one has looked at improving the traffic conditions in the area. There are three schools located around Albemarle Road, which create a large volume of traffic in the morning and afternoons. Drivers are rushing to drop children off a school, which creates a dangerous situation for both students and residents of the area. The area cannot handle additional traffic and Mr. Connell would like the City to perform a traffic study and address the problems. Chairman Schnipper assured Mr. Connell that the Committee would ask the Traffic Engineer to look at the area.

Bruce Henderson, 52 Vaughn Avenue, is in favor of expanding the space at Zervas Elementary School with the addition of two modular classrooms. His one concern is related to the siting of the classrooms, which lessens the available green space at the school. Green space for playing fields and playgrounds is precious, as the school has less playing space than any other elementary school. In addition, there are two play areas at the school used during school and after school by neighborhood children. The modular classrooms would block teacher and parent views from one play area to the other and children would be able to hide from view in the back of the school.

Mr. Henderson would suggest moving the two existing modular classrooms located in the parking lot forward and placing the new modular directly behind the existing ones. There is reclaimable space in the parking lot that would provide enough space to make up for the loss of

parking spaces. It was explained that putting the modular classrooms in the parking lot would create a delay in the installation of the new modular classrooms. In addition, there is no space within the school to house the 45 students that use the existing modular classrooms while they are moved. Mr. Henderson understood that due to the impact on the timeline the modular classrooms would not be placed in the parking lot.

Tracey Hyams, 34 Upland Road, stated that there is very little outdoor space at Zervas and the addition of the classrooms results in the loss of a little bit more open space. However, she understands the need for more classroom space at the school and supports doing the installation correctly and as soon as possible. Caroline Wilson, 39 Beethoven Avenue, would like to see the modular classrooms installed as quickly as possible to begin to address the growing space needs at the school. The public hearing was closed, as there were no other citizens that wished to offer comment.

There was some concern among Committee members that the installation of the modular classrooms would not be required to meet the same storm-water retention requirements as projects that are not being done by the City. It was explained that the project would need to meet all requirements and the retention plans will be reviewed by the City's Engineering Division.

Commissioner Gilman informed the Committee that the City applied for an extension from the State on installing the sprinklers in the three elementary schools. The Commissioner hopes to install the sprinkler systems next summer to avoid any disruption to the students during the school year. With that, Ald. Albright moved approval of the site plan for each of the schools. The Committee took separate votes on each of the site plans. All votes were seven in favor and none opposed on the motion for approval.

REFERRED TO PROG & SERV, PUBLIC FACIL. AND FINANCE COMMITTEES

#367-10 **HIS HONOR THE MAYOR** requesting authorization to appropriate an amount not to exceed five million dollars (\$5,000,000) from bonded indebtedness for the following:

(B) installation of up to six modular classrooms at five elementary schools as well as the addition of permanent classrooms and renovations to the core of F.A. Day Middle School. [11/29/10 @ 3:23 PM]

Note: Seventy-five thousand dollars (\$75,000) of the \$5 million was approved on December 20, 2010 for site plan design work for modular classrooms at Horace Mann, Zervas, and Burr Elementary Schools.

367-10(B) WAS SPLIT INTO B1 AND B2

367-10(B2) – \$4,001,625 for renovations to the core of F.A. Day Middle School and sprinkler systems

PROGRAMS & SERVICES HELD 6-0 on 06/22/11

ACTION: **HELD 7-0**

367-10(B1) - **\$923,375** for installation of one modular classroom at Burr Elementary School, one modular classroom at Horace-Mann Elementary School, and two modular classrooms at Zervas Elementary School

PROGRAMS & SERVICES APPROVED 4-0-2 (Linsky and Sangiolo abstaining) on 06/22/11

ACTION: APPROVED 7-0

NOTE: The Programs and Services Committee met jointly with the Committee to discuss the financing for the modular classrooms. A letter (attached) from the Commissioner of Public Buildings, Stephanie Kane Gilman, was received on June 22, 2011 requesting that the sum of \$923,375 be appropriated for the installation and other associated costs related to the installation of the modular classrooms. The appropriation would also include design money for the sprinkler systems for the three schools

The Public Buildings Department is considering a number of options such as purchasing used modular classrooms. The used modular classrooms would need to be under three years old and meet all building codes. The bid language for Burr and Horace Mann Elementary Schools will include bid alternates for “green” features like raised ceilings, larger windows, pendulum lights, improved mechanicals, energy reuse, and recycled flooring materials. There are no green bid alternates for the two modular classrooms at Zervas Elementary School. It is expected that Zervas will be renovated or replaced within the next decade.

The Committees were very concerned that the proposed modular classrooms are not expected to be of the same quality as the recently installed Oak Hill modular classrooms especially the two at Zervas. The Committee felt that the Oak Hill modular classrooms should be the standard for all modular classrooms. Ms. Gilman responded that the request for funds is trying to balance green features with the budget and the sprinkler requirements. The base modular classrooms for the proposed modular classrooms and the Oak Hill modular classrooms are the same. The two classrooms for Burr and Horace-Mann with the alternates are going to be very similar to the Oak Hill modular classrooms. Members of the School Committee added that it is difficult to make a decision regarding the use of funds for the modular classrooms without knowing the cost of the F.A. Day Middle School renovations. There is only \$5 million dollars for the modular classrooms and the Day renovations. The School Committee members would like the best modular classrooms possible but need to have funding for the Day renovations.

Although members of both Committees understood the need for the modular, they were not comfortable with the disparity between the alternates for the Zervas Elementary School modular classrooms and the two modular classrooms for the Burr and Horace-Mann Elementary School. The Committees agreed that it would make sense to request additional funding to create equity between all the modular classrooms. A resolution to increase the modular classroom funding by \$87,500 was offered and both Committees supported approval of the resolution.

Members of both Committees requested the following from the Public Buildings Department: specifications for the proposed base modular classrooms and the Oak Hill modular classrooms, the life-cycle costs for green modular classrooms versus standard modular classrooms, the Conservation Commission’s feedback regarding the siting of the modular classrooms at Horace-Mann and Zervas Elementary Schools and a more detailed breakdown of the proposed budget. The Committees also requested a response from the Executive Department

regarding the proposed resolution. The Committees would like the information submitted before the next Finance Committee meeting at which the item is scheduled to be discussed. The Commissioner responded that she would provide the information.

The Committees split the item into B1 and B2 and held #367-10 (B2) for \$4,001,625 to be used for renovations to the core of F.A. Day middle school and sprinkler systems. A motion to approve #367-10(B1) for \$923,375 to install one modular classroom at Burr Elementary School, one modular classroom at Horace-Mann Elementary School, and two modular classrooms at Zervas Elementary School was approved by a vote of four in favor and two abstentions in the Programs and Services Committee. Ald. Sangiolo and Linsky abstained in order to review the requested information before taking an action on the #367-10 (B1). The Public Facilities Committee voted in favor of the motion unanimously.

#367-10(3) PROGRAMS & SERVICES AND PUBLIC FACILITIES COMMITTEE proposing a RESOLUTION to His Honor the Mayor requesting that the funding for the modular classrooms at Burr, Horace-Mann and Zervas Elementary Schools be increased by \$87,500 to include green features in all four modular classrooms. [06/22/11 @ 9:30 PM]

PROGRAMS & SERVICES APPROVED 5-0-1 (Linsky) on 06/22/11

ACTION: APPROVED 7-0

NOTE: See the above note for further information on the item.

#138-11 ALD. CROSSELY AND SCHNIPPER requesting a report from the Department of Public Works regarding the energy use and maintenance costs for the City's streetlights and gaslights and costs/payback associated with recommended energy efficiency measures. [04-21-11 9:08 AM]

ACTION: HELD 6-0 (Salvucci not voting)

NOTE: Traffic Engineer Clint Schuckel provided the attached PowerPoint presentation on the City's streetlights to the Committee. The presentation was related to the energy costs associated with different types of streetlights and possible improvements to energy efficiency. The presentation highlighted a number of options to reduce energy use and generate further cost savings related to streetlights. However, by purchasing the streetlights and changing the lights from mercury vapor to high-pressure sodium the City has already found its largest source of savings.

The Committee was very interested in converting the City's 75 gaslights to electric lights. The costs of energy use and maintenance and the carbon emissions for a gaslight are substantially higher than a 50-watt electric streetlight. The cost to operate a gaslight per year is \$731 and the cost of an electric streetlight is \$43. The Committee urged the Commissioner of Public Works to put together a plan to address changing the gaslights over time. Commissioner of Public Works David Turocy responded that the replacement of the gaslights would be incorporated into street reconstruction projects.

Eric Olson and Lawrence Kaufman of the City's Energy Commission offered their support of improving on the efficiency of the City streetlights. The Energy Commission supports the removal of gaslights. The Commission would like to see the City remove streetlights throughout the City that do not provide much of a benefit to drivers or pedestrians.

Ald. Lappin moved hold on the item until further information on a timeline or long-range plan to address the removal of the gaslights in the City is available, which carried unanimously.

#385-07 ALD. SCHNIPPER AND GENTILE updating the Public Facilities Committee on the progress of the Newton North High School Project. [11/21/07 @ 10:23 AM]

ACTION: **HELD 6-0 (Salvucci not voting)**

NOTE: Ald. Gentile and Schnipper informed the Committee that the construction team discovered contaminated soil around three tanks. Two of the tanks were empty and one tank still contained product. It does not appear that the contamination is widespread and should not be difficult to contain. Ald. Gentile and Schnipper will provided further information on the issue at the next Public Facilities Committee meeting. Ald. Lappin moved hold, which carried unanimously.

Respectfully submitted,

Sydra Schnipper, Chairman




City of Newton, Massachusetts
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

Telephone
(617) 796-1120
Telefax
(617) 796-1142
TDD/TTY
(617) 796-1089
www.newtonma.gov

Setti D. Warren
Mayor

DATE: June 17, 2011

TO: Board of Aldermen

FROM: Candace Havens, Director of Planning and Development 
Derek Valentine, Senior Planner

SUBJECT: Petition #367-10(2): §5-58 of the City of Newton Ordinances, request petitioning for site plan approval for the installation of four modular classrooms with associated connectors at Burr, Horace Mann, and Zervas Elementary Schools.

CC: Mayor Setti Warren
Newton School Committee
Design Review Committee

EXECUTIVE SUMMARY

In order to address a need for additional classroom space at three elementary schools, the Board of Aldermen is asked to consider approval of plans for installation of four modular units at three schools. City Code §5-58 also requires review and approval by the Director of Planning and Development, the Mayor, and the Design Review Committee of plans for their placement prior to installation. The Public Buildings Department has submitted plans for review so that the modular classrooms can be installed for use by the fall 2011.

Plans were submitted to the Director of Planning and Development for one modular classroom at Burr Elementary School. This modular was previously approved, but was not installed. Plans were resubmitted as part of a package of four classrooms as a courtesy to the Planning Department. Horace Mann currently has three existing modular classrooms and proposes a fourth unit behind the other units. Two modular classrooms are being proposed at Zervas School, which is not adding more students, but simply needs more capacity for its growing special education program. Zervas currently has three other modular classrooms.

After considering the conditions of each site, the Director of Planning and Development has determined that the Public Buildings Department has given serious consideration to finding the best location for each of these modular units.

I. **BACKGROUND/SITE PLAN APPROVAL PROCESS**

On behalf of the Newton Public Schools, the Public Buildings Department has recommended the addition of four modular classrooms at three school sites.

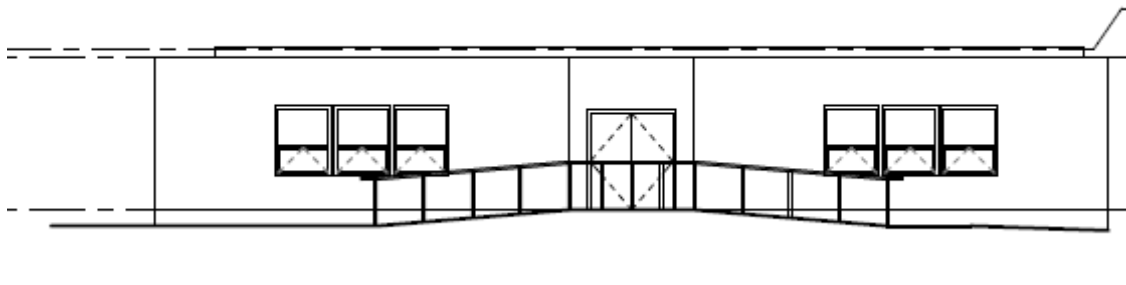
Prior to their installation, the City Code requires reviews of associated plans by the following:

- The Director of Planning and Development for consistency and compatibility with the *Newton Comprehensive Plan* and other applicable planning and analytical studies.
- The Design Review Committee for layout, construction, and relationship to surroundings.
- The Public Facilities Committee to provide a forum for public comments and discussion about proposed buildings and their locations, followed by Board of Aldermen action.

Once the site plans are formally approved by these bodies, they become part of the final set of project plans and construction drawings and cannot be changed or altered without being resubmitted to the Design Review Committee and to the Board of Aldermen. After the requirements of §5-58(a)(1) through (a)(6) have been satisfied, the Board of Aldermen can appropriate funds for preparation of detailed construction drawings. If approved, the Public Buildings Department will order and install the modulares so they are ready for occupancy before the 2011-2012 school year begins.

Plans submitted by the Public Buildings Department were prepared by HMFH Architects, dated June 1, 2011. These are the plans that have been reviewed by staff.

II. **PROPOSED MODULAR UNITS**



Typical Modular Classroom

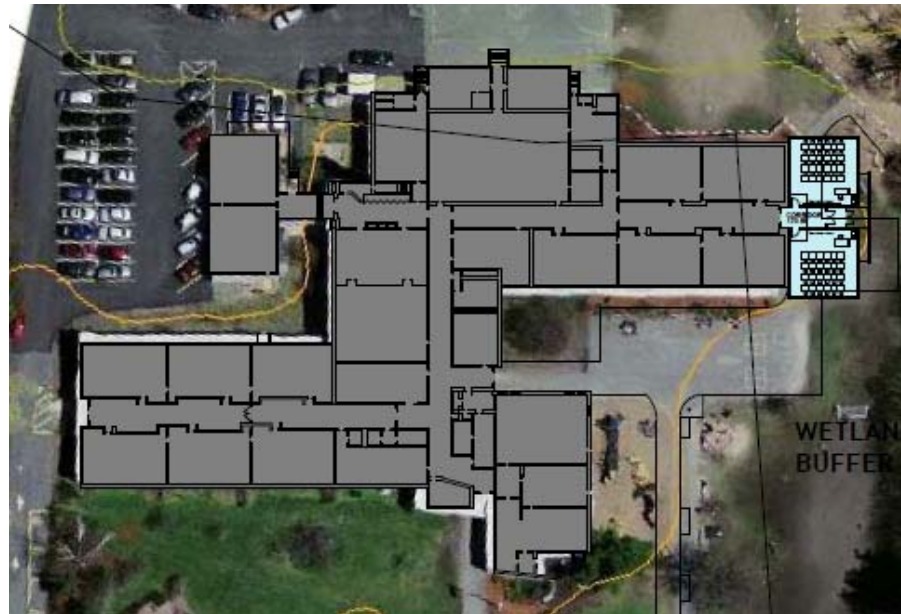
Based on plans submitted and the information received from the Public Buildings Department, the modular classroom units will be generally square, approximately 30'x30' with flat roofs. The units will be approximately eleven (11) feet in height. The actual dimensions may vary, depending on which vendor is selected.

The units will be connected to the schools with covered corridors so children do not need to walk through the open air to access the larger school buildings.

The Public Buildings Department has selected locations where the modular units can be connected to an existing corridor and all units will be handicap accessible.

III. TECHNICAL REVIEW OF SITE PLANS UNDER SECTION 5-58

A. Zervas Elementary School



Zervas Modular Location

1. Location and Existing Site Conditions

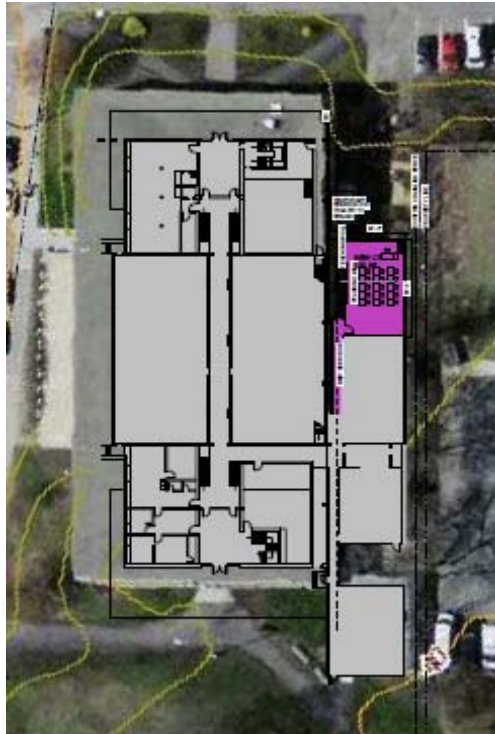
Zervas Elementary School is located at 30 Beethoven Avenue on 229,865 square feet of land. It is bounded by Beethoven Avenue, Beacon Street and Cold Spring Park. It is in a mainly residential neighborhood. The school site is almost entirely within the wetland buffer area and as a result, any activity on site is subject to Conservation Commission review.

2. Proposed Modular Classrooms

Two modular classrooms are proposed at the south end of the school building, on the site of an existing paved pad. They will be connected to each other and the main school building by a 170 square-foot corridor. The proposed site of the modular units is located just above the playing fields for the school. Given the site's close proximity to wetland resources, this site plan should be reviewed by the Conservation Commission and will likely require the installation of mitigation plantings on site. The Planning Department acknowledges that the site of the modulars is already paved, but that this pavement was not installed with prior approval by necessary city departments. The current proposal should also be evaluated by the City's Engineering Division, as it will result in an increase in

impervious surface, leading to increased storm water runoff which needs to be accommodated. No additional students or staff are being added to the site.

B. Horace-Mann Elementary School



Horace-Mann Modular Location

1. Location and Existing Site Conditions

The Horace-Mann School is located at 687 Watertown Street near the intersection with Albermarle Road. It is on a site of 69,433 square feet adjacent to the Boys and Girls Club and Linwood Park. It is in a neighborhood of many public use properties. The school is located partially in the river front area and is across Albermarle Road from a perennial stream and is subject to Conservation Commission review. The site currently has three modular classrooms on the east side of the building, adjacent to the property line with the Boys and Girls Club.

2. Proposed Modular Classroom

One modular classroom is proposed to the north of the existing three modular classrooms within the lot setbacks adjacent to the chain link fence that separates the school site from property of the Boys and Girls Club. The classroom will be connected to the existing building by a new corridor. Since the site is located in the riverfront area, mitigation plantings will likely have to be provided, subject to Conservation Commission review.

C. Burr Elementary School



Burr Modular Location

1. Location and Existing Site Conditions

Burr Elementary School is located at 171 Pine Street in Auburndale. The site consists of a 376,730 square feet of land. The surrounding neighborhood consists mainly of single- and two-family houses and there is a residential condominium complex that faces the site to the south.

2. Proposed Modular Classrooms

The proposed classroom is to be located behind the northeast corner of the existing school building where it should not have any impact on vehicular or pedestrian movement. It has already been approved by the DCR and it being resubmitted as part of the larger package for modular classrooms at Newton's elementary schools.

IV. OTHER REVIEWS

- **Senior Environmental Planner.** Horace-Mann School is located within the riverfront area of a perennial stream. The Public Buildings Department should coordinate with the Senior Environmental Planner to determine what mitigation is required in order to locate a modular classroom here. The Zervas site is located within a wetland buffer and should also be reviewed by the Senior Environmental Planner. The Burr site does not require such review.
- **Associate City Engineer.** Work on all three sites will result in an increase in the amount of impervious surface. As a result, the surface water drainage will be altered and should be reviewed by the Engineering Department to ensure that the modular units are located and constructed according to City standards.
- **City Traffic Engineer.** No parking is being removed as a result of the addition of mobile classrooms. The Planning Department acknowledges that most City properties, including

the school properties do not meet parking requirements of the *Newton Zoning Ordinance*. Most of these facilities were constructed prior to modern parking requirements and meeting current requirements is often impossible on site. However, there will be no reduction in the amount of parking provided at all three schools as a result of the modular installations. Since the schools are all elementary schools, the addition of modular classrooms will not result in a large net increase in parking demand since the students do not drive to the site. Any additional parking demand will be as a result of a small number of teachers which may be added in the new classrooms. The Planning Department does not see any issues with the vehicular circulation on any of the three sites and, as a result, does not recommend review by the City Traffic Engineer.

- **Fire Department.** Fire detection systems in the modular classrooms must be compatible with the alarm system in each of the respective schools and the modular units will have to be sprinkled for fire suppression. The Assistant Fire Chief has discussed the modifications that will be required with the Public Buildings Department. The Public Buildings Department should continue to coordinate with the Assistant Fire Chief.

V. **CONSISTENCY WITH NEWTON COMPREHENSIVE PLAN AND OTHER PLANS/STUDIES**

The *Newton Comprehensive Plan* notes that Newton residents have made education a strong social value and a community priority. More than 11,000 pupils are currently served through 21 public schools including 15 elementary schools. The Land Use Section of the *Newton Comprehensive Plan* acknowledges that in many ways, the City's institutions contribute to the City's vitality and quality of life.

It also acknowledges change over time is inevitable and spatial needs must respond to them. Population projections prepared by the Metropolitan Planning Area Council (MAPC) show an eventual decline in the City's school age by population by 2030. For the long term, the *Newton Comprehensive Plan* advocates for "creative consideration of future activity and facility configurations." However, the recent surge in school-age children at these three schools is evidence that shorter-term fluctuations may be much harder to predict. When addressing such changes, the *Newton Comprehensive Plan* encourages a shared understanding of community interests and exchange of information and a "the focus should be on the quality of institutional development that occurs, not on its quantity."

In consideration of the *Newton Comprehensive Plan* and its elements and intentions, the Director of Planning and Development believes that the placement of the modular classrooms within the neighborhood contexts, are appropriate and consistent with the *Newton Comprehensive Plan*.

VI. **SITE PLAN REVIEW CRITERIA**

In accordance with Section, 5-58, the Design Review Committee has filed plans for Site Plan Approval. These are to be reviewed in accordance with the procedure outlined in Section 30-23 of the Revised Ordinances. The following is a review of the submitted plans against the relevant criteria established in Section 30-23.

A. Convenience and safety of vehicular and pedestrian movement within the site and in relation to the adjacent streets, properties or improvements

The proposed siting of all of the modular additions places the classrooms well away from the parking lots and, as such, they should pose no significant impact on vehicular and pedestrian movement. The installation of modular units will likely result in a minimal increase in the number of staff at each school, therefore Planning Department staff is not concerned about additional parking demand.

B. Adequacy of the methods for regulating surface water drainage

All of the sites will result in an increase in impervious coverage and should be reviewed by the Engineering Department to ensure proper treatment of any increase in surface water runoff. Although the Zervas modular classrooms will be placed on an existing paved pad, review is recommended because review was not completed prior to the addition of that paved pad. The Zervas site may also have impacts on local wetland resources which reinforces the necessity for proper storm water treatment.

C. Screening of parking areas and structures from adjoining premises. Location of parking between the street and existing or proposed structures shall be discouraged.

The site at Zervas is located away from streets and residences and abuts conservation land. As a result, the building will have little impact on the surrounding neighborhood and no additional screening is required. The location at Horace-Mann is adjacent to existing modular classrooms and is located behind the main school building. It will be visible from the Boys and Girls Club, but will have very little overall impact on the neighborhood. The Burr site is on the rear of the main school building and will not have an adverse impact on the surrounding area. The Planning Department does not recommend any additional landscaping for any of these sites. No additional parking is proposed on any of the sites, so the amount of parking located between the structures and the street will not change.

D. Avoidance of topographic changes; tree and soil removal shall be minimized.

No significant topographic changes or tree and soil removal are proposed as part of the modular additions. Tree removal should be avoided, if possible, or trees should be replaced on site. This should be coordinated with the Senior Environmental Planner as part of the mitigation process.

E. Consideration of site design including relationship to nearby structures

The plans submitted do not include enough details to allow for an evaluation of the site design in relation to surrounding structures and such specifications of materials, colors, and landscaping should be submitted to Planning Department for final approval prior to issuance of any building permit.

VII. **CONSTRUCTION MANAGEMENT**

Since there will be minimal site disturbance and the modular units are manufactured off-site, the construction impact on the surrounding neighborhoods at all three sites is expected to be minimal. The construction period is also expected to be brief. However, to ensure that this is the case, the contractor should submit a Construction Management Plan (“CMP”) to the Director of Planning and Development, the City Engineer, the City Traffic Engineer, and the Commissioner of Inspectional Services for review and approval before any construction activities related to this project are commenced on the site.

This plan should identify hours of construction, expected length of construction, location of proposed on-site contractor parking, and material storage and staging areas. In addition, the plan should provide evidence that there will be sufficient area for on-site school activities during construction, if necessary. If there are classes during construction the CMP should identify measures to be used to avoid conflicts between the schools functions (pickup/drop-off, outdoor activities, etc.) and construction activities. The CMP should also include the telephone number for the contractor contact person. Copies of the final approved CMP should be submitted to the Mayor and each of the Aldermen from the Ward for each of the respective schools.

VIII. **CONCLUSION AND RECOMMENDATIONS**

The Director of Planning and Development has determined that the site plans for modular classrooms are consistent with the *Newton Comprehensive Plan* and any other relevant plans/studies, including the site plan review criteria listed in Section 30-23. It appears that the Public Buildings Department has given serious consideration to finding the best location for each of these modular units.

If the Board, Mayor and School Committee choose to approve these plans, prior to the filing of Building Permits the Public Buildings Department should submit:

- to the Planning, Engineering and Fire Departments, revised plans showing:
 - grade changes, if proposed;
 - alternations to existing driveways, pick-up and drop-off areas, if proposed;
 - drainage systems;
- to the Planning Department, landscape plan and building color and materials samples;
- to the Commissioner of Inspectional Services, plans for handicap accessibility;
- to the Senior Environmental Planner and Engineering Department, final plans for all schools including any topographical changes required to site the proposed modular units, any additional impervious surface(s), and any required mitigation measures; and
- to the Planning, Engineering, Fire and Inspectional Serviced Department, a Construction Management Plan.

ATTACHMENTS:

ATTACHMENT A: *Letter from HMFH Architects Dated May 24, 2011 and updated June 1, 2011*

Memorandum

To: Design Review Committee

From: HMFH Architects

Date: May 24, 2011 updated June 1, 2011

Re: Modular Additions at Burr, Horace-Mann, and Zervas Elementary Schools

Burr Elementary School:
 One modular classroom addition
 Location previously reviewed and approved by DRC

Horace-Mann Elementary School:
 One modular classroom addition
 Location: adjacent to existing modular classrooms at the east side of the school building.

Other locations reviewed:

1. the north side of school; **concerns:** steep slope and monitoring well locations
2. the west side of school; **concern:** poor access point through school's basement Art classroom
3. the south side of school; main entrance – location not considered

Zervas Elementary School:
 Two modular classrooms addition
 Locations under consideration:

1. the south side of the school, adjacent to the existing library modular; **concerns:** need to partition off existing space to make access corridor, would require relocating play structure, location would block access road to this area of the site (cost est. \$560k)
2. the south side of the school, adjacent to the existing classroom wing; **concerns:** in the wetlands 100' buffer zone, will require a Request for Determination of Applicability, relocate a portion of the play structures in south-east corner of site (cost est. \$498k)
3. the south side of the school, in the "courtyard" area; **concerns:** close adjacency to existing classroom windows, removal of a significant tree (cost est. \$510k)
4. one modular in the parking lot to the north of the school and the second modular to the south of the school in the "courtyard" area; **concerns:** close adjacency to existing classroom windows, removal of significant tree, loss of parking lot area, costly to have two separate construction areas (cost est. \$600k)
5. two modulares in the parking lot (a la Bruce Henderson's suggestion); **concerns:** proposed parking is in the wetlands 100' buffer zone or, alternatively, relocated to the front green space, high cost, inability to temporarily relocate 45 students (cost est. \$671k)

Note: Preferred – Option 2
Alternative – Option 5

City of Newton



Setti D. Warren
Mayor

PUBLIC BUILDINGS DEPARTMENT

Stephanie Kane Gilman, Commissioner

Telephone (617) 796-1600

FAX (617) 796-1601

TTY: (617) 796-1089

52 ELLIOT STREET

NEWTON HIGHLANDS, MA 02461-1605

June 22, 2011

The Honorable Setti D. Warren
Mayor, City of Newton
1000 Commonwealth Avenue
Newton Centre, MA 02459

AMENDED REQUEST

RE: Funding Request for (4) Modular Classrooms for Three Elementary Schools,
Docket Item # 367-10(B)

Dear Mayor Warren:

The Public Buildings Department on behalf of the School Department, is requesting the sum of \$923,375 to cover the cost of the remaining design, construction and installation of four modular classrooms at three elementary schools. The estimate is based upon an average of \$214,595 per classroom. The elementary schools to receive modular classrooms are Burr (1), Horace-Mann (1) and Zervas (2). These modular classrooms are planned to be in place for Fall 2011.

The breakdown of the estimate is as follows:

Construction and Installation	\$695,000
Green Features	87,500
To Address Storm Water Issues	35,000
5% Contingency	40,875
Design (includes sprinkler design)	<u>140,000</u>
Sub Total:	\$998,375
Less Original Schematic Design Funding	<u>- \$ 75,000</u>
Funding Request	\$923,375

Please do not hesitate to contact me should you have any questions regarding this request.

Sincerely,

Stephanie Kane Gilman
Commissioner of Public Buildings

SKG:dla

CC: David Fleishman, Superintendent of Schools
Sandy Guryan, Assistant Superintendent Business/Finance
Maureen Lemieux, Chief Financial Officer
Robert Rooney, Chief Operating Officer

Newton's Streetlights: Energy & Maintenance Costs + Proposed Efficiency Improvements

Clint Schuckel, PE, PTOE
Associate City Engineer
Newton DPW-Engineering Division

Options (choose 1 or more)

1. **Remove selected streetlights**
 - Closely spaced lights
 - Keep them at pedestrian/school crossings, intersections, high crash locations, commercial areas?
2. **Reduce energy use**
 - Develop a city/town-wide plan
3. **Purchase and maintain cheaper than the local utility**



Streets will have dim view Cost-cutting effort to switch off lights

Jennifer Fenn Lefferts, Boston Globe Correspondent
August 31, 2008

"In a cost-saving measure... (Belmont)... will shut off two-thirds of its 2,400 street lights - most of them along side streets. Lights will remain on along main roads, and at the town's 10 most dangerous intersections, crosswalks, parking lots, business districts, and bus stops..."

Streets will have dim view Cost-cutting effort to switch off lights

Jennifer Fenn Lefferts, Boston Globe Correspondent
August 31, 2008

“Northbridge, Barre, and Winchendon are among the communities that have turned off lights...”

“Dartmouth has turned off some of its lights, while Freetown and Yarmouth are considering the option...”

**Streetlights, crossing guards, library services cut in
Mass. Budget pinch**

Kathy McCabe, Boston Globe Staff
October 4, 2009

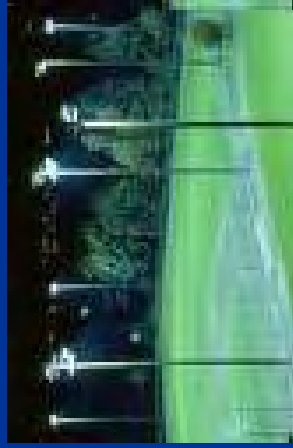
“...Andover soon will switch off more than 600 street lights.”

Is darker better?

- Lighting levels offer a cue to motorists
- Eyes adjust to changes in light levels, but slowly
- Consistency is critical
- Improvements in vehicle headlights
- Lighting for public ways & grounds only! (dark skies)

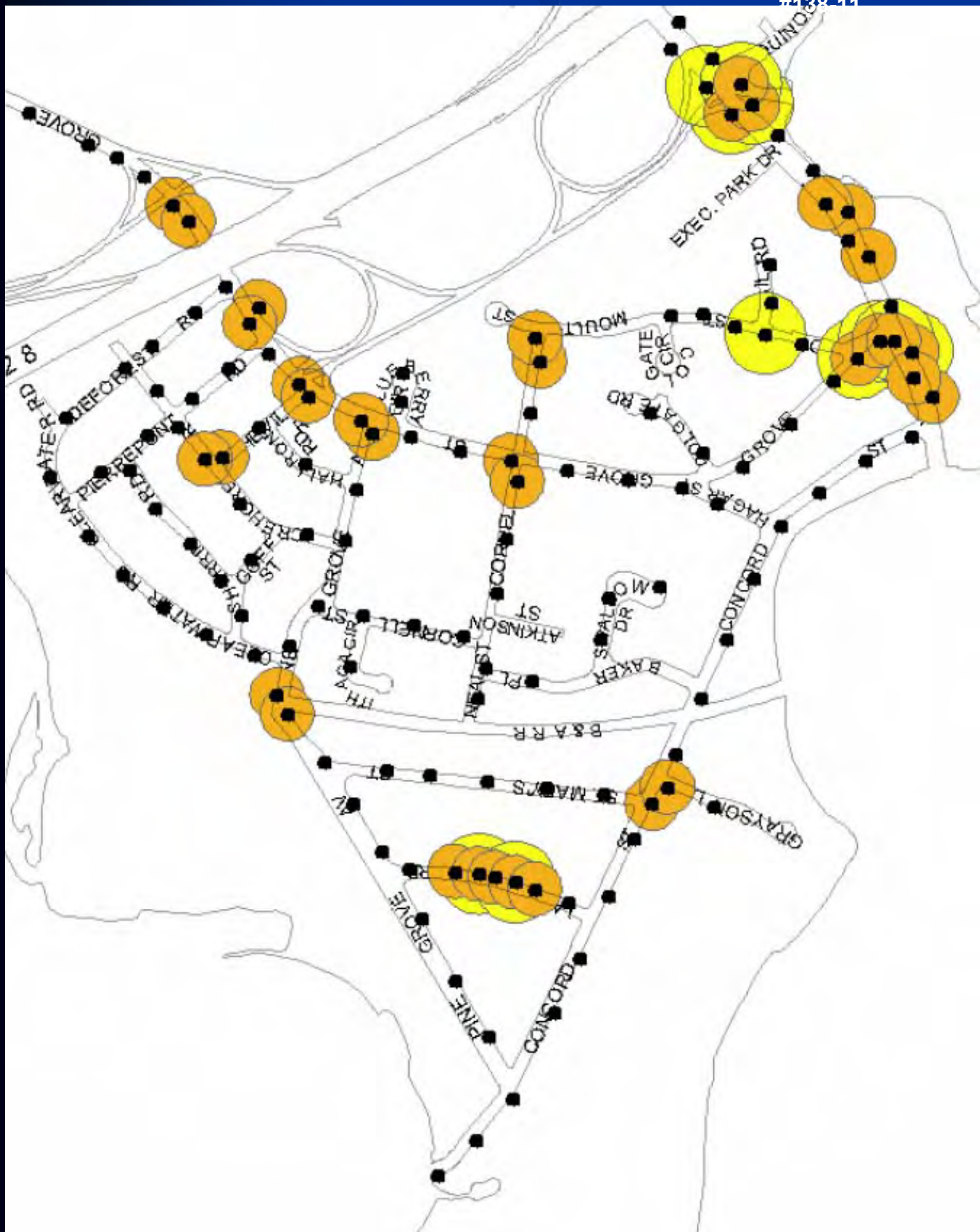
Newton Lighting Inventory

- ~ 8,400 Streetlights (cobra heads)
- ~ 300 "Specialty" lights
 - Shoebox, Acorn, Historic
- 75 Gaslights
- # ? Floodlights/Spotlights
- # ? Athletic Field Lighting



Where's the 'bang for the buck?'

1. Streetlight removals (just labor cost)
2. High wattage fixtures (250 watts or more)
3. Gaslights
4. Lower wattage fixtures (200 watts or less)



Savings from Streetlight Removals

- Annual energy cost of:
 - 50 Watt light (6,026) = \$28.00
 - 70 Watt light (371) = \$38.00
 - 100 watt light (740) = \$56.00
 - 150 watt light (1,143) = \$84.00
 - 250 watt light (124) = \$141.00

Newton Streetlight Conversion Project Summary

- Project schedule: May – Nov. 2007
- Prior to conversion
 - 2/3 of lights mercury vapor
 - 1/3 of lights high pressure sodium (HPS)

■ Wattage distribution

- 50 watt lights (71%)- local streets (6,025 lights)
- 70 watt lights (5%)- minor collectors (390)
- 100 watt lights (9%)- major collectors (760)
- 150 watt lights (13%)- minor arterials (1,125)
- 250 watt lights (2%)- major arterial (140)

8,440 lights

Newton Streetlight Conversion

Financial Summary

- Cost \$ 1.5 million (appropriated Jan. 2007)
 - \$ 800,000 from “free cash”
 - \$ 700,000 from a 3-year bond
- NSTAR rebate: \$ 338,000
- Payback time: 2.1 years
- Annual savings
 - FY 2008: \$500,000
 - FY 2009: \$624,000
 - FY 2010: \$564,000
 - FY 2011: \$560,000
 - **TOTAL: \$2.25 million**

STREETS BY WATTAGE

Legend

Streets

Wattage

50

70

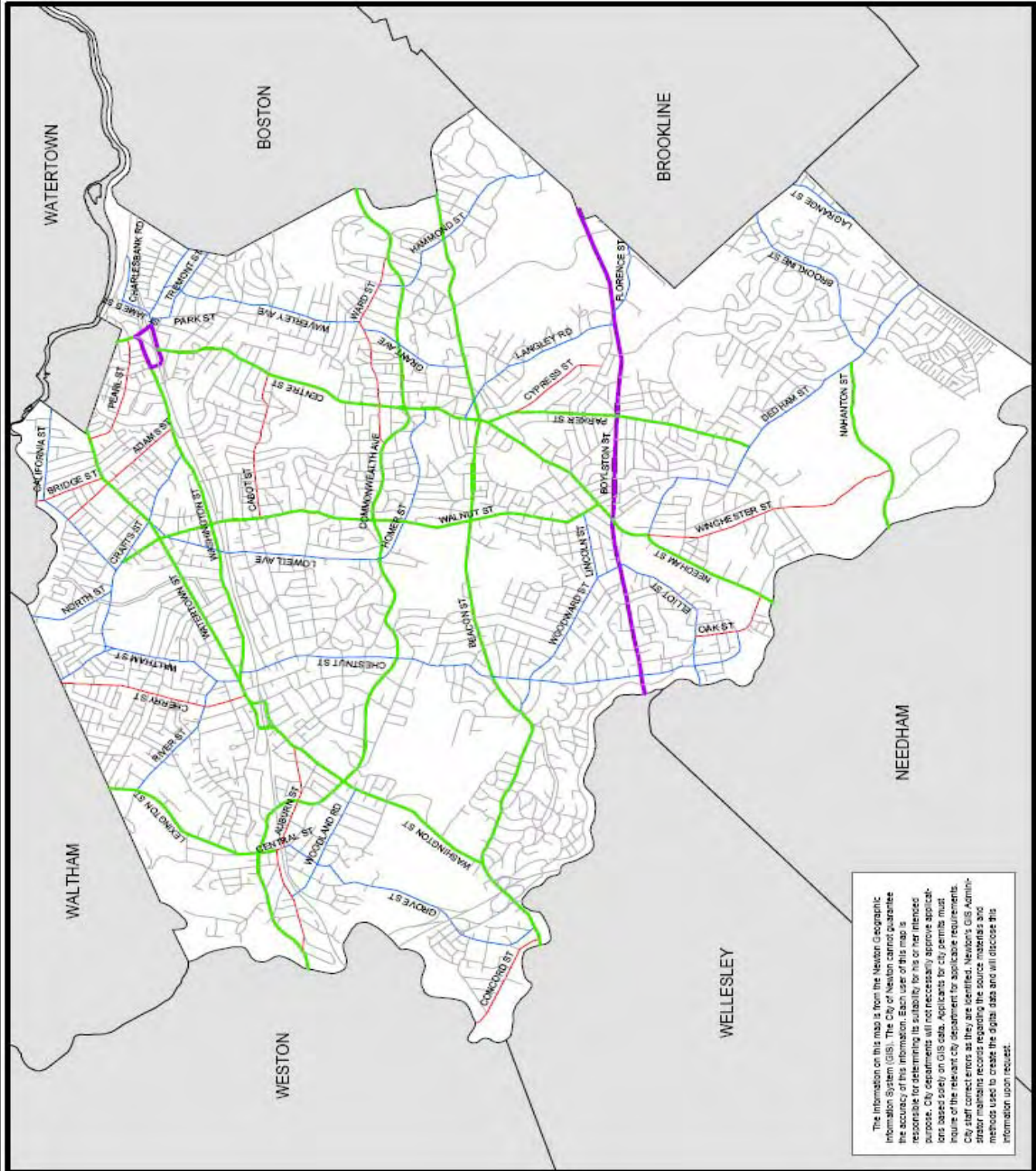
100

150

250



MAP DATE: May 16, 2007



The information on this map is from the Newton Geographic Information System (GIS). The City of Newton cannot guarantee the accuracy of this information. Each user of this map is responsible for determining its suitability for his or her intended purpose. City departments will not necessarily approve applications based solely on GIS data. Applicants for city permits must inquire of the relevant city department for applicable requirements. City staff corrects errors as they are identified. Newton's GIS Administrator maintains records regarding the source materials and methods used to create the digital data and will disclose this information upon request.

Route 9 Conversion Calculation

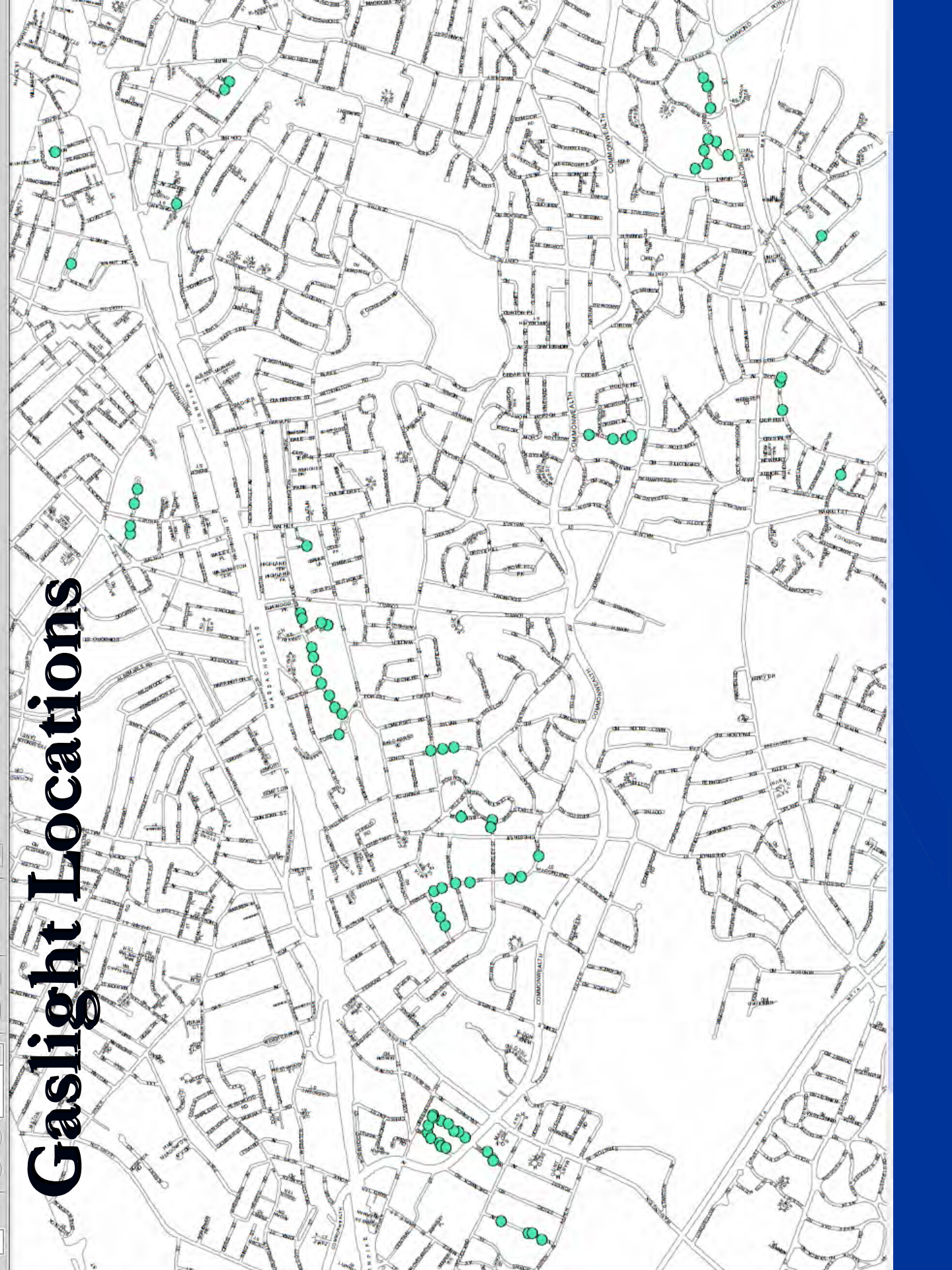
- Existing light: 295 watt HPS= \$141.00 per year
- Proposed light: 100 watt LED= \$56.00 per year
- Annual cost savings (per light): \$85.00
- Cost of installed light : \$500.00
- Payback period: \$500/\$85 = 5.9 years +/-

Gaslights vs. Streetlights

Street Name	Highland Ave	Otis St
Type of lights	Gaslight	50 watt streetlight
Initial Lumens	1,360	4,000
Annual Energy Use	337 therms	244 kilowatt hrs
Annual Energy Cost	\$ 464.00/light	\$ 28.00/light
Annual Carbon Emissions	4,040 pounds	366 pounds
Annual Maint. Cost	\$ 267.00/light	\$ 15.00/light
TOTAL Annual Cost	\$ 731.00/light	\$ 43.00/light

#138-11

Gaslight Locations



Converting Gaslights to Electric

- About 56 of the 75 gaslights have underground power lines or power poles run along rear of properties, not at street frontage
- Converting to electric means installing conduit, electric meters, new foundations, new poles and light fixtures
- About 19 could be eliminated or converted to standard streetlights by using existing utility poles

Farlow Hill Gaslight Conversion

- Scope of work:
 - convert 18 gaslights to electric lights
 - Run electric conduit, install 2 new electric meters
 - Install new foundations, posts, fixtures, & wires
 - Remove gaslights
- Completed: June 2008 at a cost of about \$80k
- Cost per light~ \$4,000
- Natural Gas Savings: FY09, 10, 11= \$25,000
- Estimated payback time ~ 9 years



Conclusions:

Gaslight vs. 50 watt streetlight

- Gaslights are 1/3 as bright as 50 watt streetlights
- Gaslights have greater carbon emissions by a factor of 11
- Gaslights are 17 times more expensive to operate/maintain
- It is difficult to justify continued use of gaslights in the City of Newton

Technologies in the works

- Solar/wind-powered lights
- Remote access/control
- Time delay photocells
- Streetlight dimming by time of day
- Wireless metering (pay for actual use)
- Price reductions in “white light” alternatives
- **Need utilities to agree on tariffs!**

