

CITY OF NEWTON

IN BOARD OF ALDERMEN

SPECIAL MEETING

JOINT PUBLIC FACILITIES & FINANCE COMMITTEES AGENDA

WEDNESDAY, DECEMBER 1, 2014

7:45 PM

Aldermanic Chamber

ITEMS SCHEDULED FOR DISCUSSION:

Public hearing closed November 12, 2014:

#255-14(2) DESIGN REVIEW COMMITTEE petitioning, pursuant to Sec 5-58, for schematic design and site plan approval of a new elementary school to be located on the existing Zervas Elementary School site at 30 Beethoven Avenue and the city's three newly acquired properties at 1316 Beacon Street, 1330 Beacon Street, and 1338 Beacon Street.

REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#255-14(4) HIS HONOR THE MAYOR requesting authorization to appropriate the sum of thirty-six million five hundred eighty-five thousand dollars (\$36,585,000) from bonded indebtedness for the purpose of funding the replacement of the Zervas Elementary School. [09/09/13 @ 2:03 PM]

Respectfully submitted,

Deborah Crossley, Public Facilities Chairman
Leonard J. Gentile, Finance Chairman

The location of this meeting is handicap accessible and reasonable accommodations will be provided to persons requiring assistance. If you need a special accommodation, please contact John Lojek, at least two days in advance of the meeting: jlojek@newtonma.gov, or 617-796-1064. For Telecommunications Relay Service dial 711.

CITY OF NEWTON

IN BOARD OF ALDERMEN

December 1, 2014

ORDERED:

That the Board of Aldermen finding that the public interest and convenience would be served by its action hereby grants **SITE PLAN APPROVAL** to the City of Newton for the Zervas Elementary School Project to construct a new 78,800 square foot elementary school at the site of the existing Zervas Elementary School and site improvements that include modifications to parking, vehicular and pedestrian access, and landscaping, as well as construction of playground structures, pursuant to the provisions of Sec. 5-58 of the Revised Ordinances of the City of Newton, 2012, in accordance with the recommendations of the Public Facilities Committee as follows:

Docket Number: 255-15(2)

Petitioner: The Design Review Committee of the City of Newton

Location: Zervas Elementary School at 30 Beethoven Avenue, specifically described as Section 54 Block 13 Lot 3, containing approximately 229,865 square feet of land, together with the additional properties at 1316 Beacon Street, Section 54 Block 22 Lot 68, containing approximately 10,958 square feet of land, 1330 Beacon Street, Section 54, Block 13 Lot 2, containing approximately 10,000 square feet of land, and 1338 Beacon Street, Section 54 Block 13 Lot 1, containing approximately 10,000 square feet of land, all in Ward 5

Owner: City of Newton

Owner's Address: 1000 Commonwealth Avenue
Newton Centre, MA 02459

To be used for: Construction of a new brick and metal structure with a one-story wing containing common and community areas such as gym and cafetorium and a three-story wing containing administrative and academic areas to be used for the Zervas Elementary School with site improvements that include modifications to parking; vehicular and pedestrian access; landscaping; and construction of playground structures (hereinafter referred to as the "Project").

Explanatory note: All new construction of a municipal building requires Site Plan Approval pursuant to the provisions of Sec. 5-58 of the Revised Ordinances of the City of Newton, 2012.

The land referred to is zoned Public Use.

1. The building, driveways, walkways, landscaping and other site improvements associated with the Project granted through this Site Plan Approval shall be consistent with the following approved plans:

a. Zervas Elementary School, Site Plan Review Submission, dated September 18, 2014, revised November 14, 2014, Prepared by *Designpartnership* of Cambridge, Inc., and more specifically, the following plans in such submission, all revised November 14, 2014, except for the Schematic Design floor plans and elevations, which are dated September 18, 2014:

- i. Ex0.01-Ex0.02 Existing Conditions Plan;
- ii. C0.0 Civil Notes and Legend;
- iii. C1.0 Site Utility Plan;
- iv. C1.1 Site Layout, Grading, and Utilities Plan
- v. C2.0 Erosion and Sediment Control Plan;
- vi. C3.0 Erosion and Sediment Control Details;
- vii. C3.1 Erosion and Sediment Control Details;
- viii. C3.2 Site Details;
- ix. C3.3 Site Details;
- x. L-1.1-L1.5 landscape Drawings;
- xi. A1.1A Main Level, Plan Part A;
- xii. A1.1B Main Level, Plan Part B;
- xiii. A1.2 Second Level Plan;
- xiv. A1.3 Third Level Plan;
- xv. A3.1 Exterior Elevations; and
- xvi. A3.2 Exterior Elevations.

2. The approved plans, including building floor plans and elevations, are subject to modification as the plans are refined during Design Development and Construction Document Phases of the Project. Pursuant to Sec. 5-54(c) of the Revised Ordinances of the City of Newton, 2012, the Design Review Committee shall make periodic reviews of the Project's plans as the Project moves through the various design phases. The Zervas School Building Committee and Working Group shall also make periodic reviews of the Project's plans as the Project moves through the various design phases.

3. The Board of Aldermen acting through its Public Facilities Committee will receive regular updates on the status of the Project.

4. An Existing Conditions Survey plan will be prepared for the structure at 1316 Beacon Street at the time the City takes physical possession of the house and an Architectural Salvage Plan prepared with attention paid to any timber framing that may reasonably be salvaged.
5. The City shall use best efforts to retain and protect the existing trees on the site including along the east side of the site and on the residential properties which are being added to the existing Zervas school site.
6. During the Design Development phase, the Project Design Team shall analyze ways of addressing the following concerns:
 - i. Provide a landscape buffer between the parking lots and Beacon Street to enhance the residential character of this edge of the site;
 - ii. Study fencing along the eastern side of the site and the blue zone to determine if a fence or a landscape barrier is needed, and if so, what type of fencing or landscaping should be installed;
 - iii. Study pedestrian circulation through the site to enhance safe walkable routes to the new school entrance;
 - iv. Consider additional ways of mitigating the appearance of mass of the three story administrative and academic wing facing Beethoven Avenue; and
 - v. Consider additional materials and/or ways to add interest to the gym wall facing Beacon Street as it presents to the street, school entrance and neighborhood across Beacon Street.
7. The Public Works Commission shall recommend to the Board of Aldermen possible street improvements to address the following concerns:
 - i. Promote overall safety and operation at the intersection of Beacon Street and Beethoven Avenue including all approaches that may include but not be limited to upgrade of existing traffic signal equipment, vehicle detection systems, ADA compliance, pavement markings/treatments, advanced warning systems, signage, etc.;
 - ii. Maintain and/or improve vehicular circulation during morning drop-off and afternoon pick-up activity along Beethoven Avenue that may include but not be limited to a modified 'blue' zone and lane configuration along Beethoven Avenue; and
 - iii. Improve pedestrian safety along Beacon Street, Beethoven Avenue all adjacent walk routes to the Zervas School as deemed appropriate by the Transportation

Division that may include but not be limited to sidewalk improvements, pedestrian activated traffic signals, ADA compliance, street lighting, etc..

8. The Project Design Team shall evaluate entrance/egress movements at the driveways to the school along Beacon Street and the effect on traffic circulation and implement the appropriate systems/devices that will provide the safest and most efficient operation.

City of Newton



DEPARTMENT OF PUBLIC WORKS

TRANSPORTATION DIVISION

110 Crafts Street
Newton, MA 02460Setti D. Warren
Mayor

DATE: November 28, 2014
TO: Alejandro Valcarce, Project Manager, Department of Public Buildings
FROM: William G. Paille, P.E., Director of Transportation
RE: **Zervas Elementary School Reconstruction Project – Traffic Impact Study**

The Transportation Division has completed its initial review of the Traffic Impact Study (TIS) for the referenced project prepared by Nitsch Engineering (dated October 2014) and respectfully provides the following:

Site Development

Coordination with representatives from Design Partnership of Cambridge & Nitsch Engineering (Design Team) began over a year ago with an initial meeting in my office to discuss the project with respect to site constraints, existing conditions, and its impact on future traffic/pedestrian circulation. Concerns were raised with respect to site access, pedestrian safety, intersection capacity, drop off/pickup zone, off-site and on-site parking, etc. The Design Team clearly understood the significance of this project and the impact to the adjacent properties, the environment and the community and appreciated the input. It was decided to schedule a meeting with the Transportation Team shortly thereafter.

The Transportation Team is an ad-hoc group of city employees represented by the Department of Public Works (Commissioner, Engineering & Transportation), Police Department, School Department, Planning Department, the Mayor's Office and the Director of Sustainability. The Design Team attended a weekly meeting of the Transportation Team and the discussion became an important first step in the design process as it identified issues/concerns related to how parents would enter/exit the site, school bus circulation, parking, pedestrian access/circulation, vehicle/bicycle/pedestrian safety, traffic flow, and the impact to Beethoven Ave./Beacon St. as well as several adjacent streets. This initial input allowed the Design Team to move forward and begin the process of narrowing alternatives and to coordinate with various City committees and engage the general public. Even after the preferred site layout alternative was presented to the community, it went through several iterations resulting in the configuration that was recently presented to Public Facilities. The preferred site layout addresses several issues as follows:

First, by allowing both bus and parking lot access/egress from Beacon Street where currently there is only egress is a major improvement. Removing this activity from Beethoven not only simplifies the morning drop off and afternoon pick up, it provides for a safer operation by eliminating the need for vehicles to be in an area where there are many pedestrians moving about, exiting vehicles, crossing the street, etc. and;

Second, the site provides for approximately 71 parking spaces that are necessary to accommodate a majority of staff who do not live in Newton and cannot walk or take public transit to the school. In addition, the parking lot will keep vehicles off of Beethoven Avenue during non-school day operation such as parent/teacher conferences, public meetings and other evening activities the school will likely host.

Finally, the Transportation Division staff have been part of the development process for this project from the beginning, witnessed several changes and redesigns as a result of not only internal city reviews and discussions but also input from the community. Although the preferred site layout is not set in stone and will likely need

minor revisions during the design phase, we believe the overall configuration of the site layout is sound, and will result in a facility that is safe for vehicle/pedestrian circulation, full/part-time school staff accommodation, fire/rescue access and best accommodates traffic into/out of the site, specifically along Beacon Street and Beethoven Avenue.

Traffic Accommodation

In general, we concur with the limit of the study area with respect to traffic, the means to which the existing traffic data was obtained, the crash analysis, annual growth rate of 1% and the decision not to apply a seasonal adjustment. Although the TIS report states there are no planned projects in the vicinity of the school that would add additional trips to the study area in the near future, it should be noted the former St. Phillip Neri property is expected to be developed and may have an impact to traffic along Beacon. However, we believe the 1% growth factor utilized in the TIS report is sufficient and would likely account for any increase in traffic from this development.

The TIS report does not account for the number of off-site parking and drop off/pickup that is occurring along streets other than Beethoven Avenue and Evelyn Road where this activity has been observed on several occasions by Transportation Division staff. We recommend that the TIS report be amended to include a discussion of Ferncroft Rd/Allen Ave, Paulson Road and Amy Circle in order to develop a better understanding of this activity and impact upon the neighborhood and Beacon Street. In addition, although we believe the assumptions with respect to trip generation and the existing, no build and future traffic analysis to be reasonable and sound, we do believe these assumptions are very conservative, meaning the projected vehicle trips used in the TIS report have not been reduced and expected counts are likely to be substantially less. It should be noted that the OPM, Joslin Lesser Associates (JLA), coordinated with the Newton Public Schools and Zervas School Administrators to obtain existing metric data and to develop projections for planning and budgeting purposes for this project. This information is summarized as follows:

| Mode | Current (230 Families) | | Future (360 Families) | |
|-----------|------------------------|--------------|-----------------------|--------------|
| | Percentage (%) | No. Students | Percentage (%) | No. Students |
| Walk/Bike | 43 | 134 | 35 | 171 |
| Bus | 11 | 34 | 15 | 74 |
| Vehicle | 46 | 144* | 50 | 245** |
| Total | 100 | 312 | 100 | 490 |

*Equates to 105 vehicles with 25% families with more than one student enrolled, 2% car pool, and 27% vehicles transporting at least 2 students.

** Equates to 179 vehicles with 25% families with more than one student enrolled, 2% car pool, and 27% vehicles transporting at least 2 students.

The TIS report indicates the student enrollment is expected to increase from 320 to 490, or 170 students. The TIS report took a very conservative approach by assuming the additional 170 students will be driven to school, hence an increase in vehicle trips to the school of 170 during the morning peak hour. Using this assumption, the TIS report states that the future build (Year 2024) scenario results in a decrease in Level of Service (LOS) along Beacon Street (LOS B to C) in either direction with a queue length over 400 feet (approximately 18 vehicles) and an average delay of 30 to 40 seconds. Alternatively, Beethoven Avenue experiences an improvement in LOS from F to D (Left Turn Lane) and C (Right Turn Lane) respectively with a queue length over 200 feet (approximately 8 vehicles) and an average delay of 25 to 40 seconds. Even with this conservative approach, we concur with the TIS analysis that the signalized and non-signalized intersections experience an acceptable Level of Service in both the morning and afternoon peak hour.

Based on the TIS report, there are approximately 174 vehicles currently exiting Beethoven Avenue during the morning peak hour. By extrapolation using 320 existing students/174 vehicles per hour, an increase of 170 students should result in approximately 266 vehicles once the school is at full capacity (an increase of 266-174, or 92 vehicles) exiting Beethoven Avenue during the morning peak hour. Using the data developed by JLA, the projected increase is estimated at 179-105, or 74 vehicles. Therefore, it is reasonable to assume the projected increase in vehicle trips to the school will be substantially less than the 170 stated in the TIS and as such, the

intersection will operate better than predicted in the TIS report.

Beethoven Avenue & The 'Blue' Zone

The reconfiguration of Beethoven Avenue to push the 'blue' zone into the site and define each end of the zone using curb extensions is a tremendous improvement as it creates a drop off/pickup area that is both safe and reduces traffic congestion. In addition, the creation of a right turn only and left/thru lane at the approach to Beacon Street will be more efficient by processing more vehicles thru the intersection. The key component is the curb extension that basically separates the 'blue' zone operation from the vehicles that need to exit Beethoven. This configuration also presents the opportunity to eliminate the need to make Beethoven one-way during drop off/pickup times. The details of this configuration will have to be studied more closely during the design development phase.

Beacon Street Access/Egress

Although there is some concern regarding left-turning vehicles entering/exiting the site along Beacon Street, the TIS report clearly demonstrates these movements will operate safely and efficiently. There is also concern for left-turning vehicles at the non-signalized intersections including Ferncroft Rd/Allen Ave, Paulson Rd and Amy Circle. Recent loop detection upgrades at the signalized intersection of Beacon/Evelyn/Beethoven have resulted in more efficient operation over the short term. It is believed additional upgrades to this intersection as part of the school reconstruction project will create more gaps along Beacon Street for vehicles exiting the site as well as for side streets.

In conclusion, the Transportation Division believes the layout of the site and the reconfiguration of Beethoven Avenue and Beacon Street presents a thoughtful and sound design. In addition, specific upgrades to the existing traffic signals at the intersection of Beacon Street with Beethoven Ave/Evelyn Rd will improve the overall operation and safety at this location as well as adjacent side streets and provide the ability to adjust for future growth and/or changing conditions.

ZERVAS MATERIALS PROVIDED TO THE BOARD OF ALDERMEN

11/28/14 Draft 5-58 Board Order
11/28/14 Conservation Commission Minutes from 11/20/14
11/28/14 Updated Transportation Division Memo on Zervas Traffic Study
11/24/14 Transportation Division Memo
11-17-14 Angier Board Order
11-17-14 Site Plans and Schematics filed for 5-58 – Design Partnership –On your desk since 11/17
11-14-14 Newton North Board Order
11-12-14 Public Facilities Report
11-12-14 Zervas 5-58 Presentation
11-12-14 NHAC Plan C Presentation
11-12-14 Public Facilities Agenda
11-12-14 Zervas School Traffic Study Report
11-12-14 Zervas Traffic Study Appendix
11-07-14 Salvage Plan Letter for 1316 Beacon Street
11-07-14 Site Plan Review Planning Memo
11-07-14 NHC Demo Review Information Packet
10-10-14 Design Review Letter
10-17-14 Zervas Working Group Update
09-26-14 Zervas Information Packet
09-15-14 Zervas Presentation
09-05-14 Zervas Information Packet with Plans - Design Partnership
09-02-14 NHAC Zervas Survey
09-02-14 Information Packet for Acquisitions
09-02-14 Zervas Information Packet
09-01-14 NHAC E-Mail with Tree Commission Letter
09-01-14 NHAC Plan B for Zervas
08-01-14 Zervas Project Update
06-23-14 Finance Report
06-16-14 Docket Request for Acquisition & Funding for Beacon St Properties
06-11-14 School Building Project Update
05-30-14 Zervas Working Group Update
04-16-14 Programs & Services and Finance School Department Budget Report
04-16-14 Board of Aldermen/School Committee Presentation
04-09-14 Public Facilities Report
04-09-12 Facilities Planning Presentation
02-27-14 Zervas Category of Expenses Report
02-24-14 Zervas Update School Department
01-31-14 Zervas Working Group Update
01-31-14 Rate Structure & Angier Zervas Update
01-31-14 News-Notes-Reminders
01-16-14 Zervas & Angier Working Group Update
12-20-13 Zervas Category of Expense Report
12-20-13 News-Notes-Reminders

12-09-13 Finance Report
12-04-13 Zervas Update for the Committee of the Whole
11-01-13 News-Notes-Reminders
10-11-13 News-Notes-Reminders
09-25-13 News-Notes-Reminders
07-10-13 Finance Report
07-01-13 Docket Request for Zervas Feasibility
11-14-12 Committee of the Whole Report
11-29-12 Committee of the Whole Report

DRAFT

11/25/2014

#255-14(4)

Budget & Categories of Expenses for the Zervas School Project

| Account # | Category | Budget |
|-----------|--|--|
| 530220 | OPM (includes Pre-Construction & Construction Services) | \$ 1,117,000 |
| 530202 | Architect & Consultants (includes Pre-Construction Services) | \$ 3,415,042 |
| 530225 | CM-At-Risk (includes Pre-Construction & Construction) | \$ 29,160,000 |
| 530205 | Clerk of the Works | |
| 530219 | Building Commissioning | \$ 100,000 |
| 5301 | Consultants | \$ 150,000 (includes tank removal LSP costs) |
| 585FFE | Furniture, Fixtures & Equipment | \$ 600,000 |
| 585ITE | Computer & Related Equipment | \$ 600,000 |
| 585OSITE | Off Site Road Improvements | \$ 500,000 |
| 5727 | Moving | \$ 60,000 |
| 5343 | Advertising | \$ 1,500 |
| 5342 | Plans and Specification Printing Services | \$ 37,500 |
| 5793 | Project Contingency | \$ 318,958 |
| 5795 | BOA Contingency | \$ 1,365,000 |
| 5825 | Other Construction Related Costs (not part of CM) | \$ 100,000 (includes tank removal cost) |
| 5810 | Land (acquisitions) | \$ 2,415,000 |
| 585DEMO | Demo/Salvage of Acquired properties | \$ 60,000.00 |
| | | \$ 40,000,000.00 |
| | | \$ 40,000,000.00 |