

CITY OF NEWTON

IN BOARD OF ALDERMEN

SPECIAL MEETING

JOINT PUBLIC FACILITIES & FINANCE COMMITTEES REPORT

WEDNESDAY, DECEMBER 1, 2014

Public Facilities Committee Present: Ald. Crossley (Chairman), Lennon, Albright, Brousal-Glaser, Gentile, Danberg, Laredo and Lappin

Finance Committee Present: Ald. Gentile (Chairman), Norton, Brousal-Glaser, Rice, Blazar, Fuller and Lappin; Absent Ald. Ciccone

Also present: Ald. Leary, Johnson, Cote, Hess-Mahan, Sangiolo, Harney, Yates, Schwartz, Baker, Lipof, and Kalis

School Committee members: Diana Fisher Gomberg, Steven Siegel, and Margie Ross Decter

City staff present: Alex Valcarce (Program Manager; Public Buildings Department), Bill Paille (Transportation Director), Ouida Young (Associate City Solicitor), Carol Chafetz (Director of Operations and Environmental Affairs; School Department), Sandra Guryan (Deputy Superintendent of Schools), Dori Zaleznik (Chief Administrative Officer), and Maureen Lemieux (Chief Financial Officer/Chief of Staff)

#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.

ACTION: **APPROVED 7-0-1 (Brousal-Glaser abstaining)**

NOTE: The Public Facilities Committee held a public hearing on November 12, 2014 on the above request for schematic design and site plan approval for a new Zervas Elementary School. The public hearing was closed at that meeting but the Committee held the item for further discussion. For the continued discussion this evening, the Committee was joined by the full Board of Aldermen.

Alex Valcarce of the Public Buildings Department stated that the design team, of which he is a member, and Director of Transportation Bill Paille will review the site plan and transportation improvements and answer any questions the Aldermen might have related to the Zervas School Project. Mr. Valcarce introduced Jeff Luxenberg of Josslin Lesser Project Management, David Finney of Design Partnership of Cambridge, and Bob Bell of Design Partnership of Cambridge, who are part of the Zervas Project design team. Jeff Luxenberg began the discussion with the attached PowerPoint presentation. The presentation includes the design team's primary goals when they developed the site plan for the new Zervas School, which is to achieve the best use of the site's limited acreage, the optimum placement of the new school, student safety and the minimization of the neighborhood and wetland impact.

The site plan creates three separate play areas for different grade levels that are as far away from vehicles as possible. The on-site parking lot for 71 cars and the bus drop-off are accessed along Beacon Street and the parking lot and bus drop-off are located along Beacon Street in order to avoid lengthy driveways and to reduce vehicle circulation on the site. A lane that runs the length of the site for dedicated parent pick-up and drop-off is planned along Beethoven Avenue. The walking pathways through the site to the main entrance and gathering area do not cross any driveways and are separated from all vehicle circulation areas.

The proposed building is an L-shaped with the cafetorium and gym located closest to the parking lot as those areas are expected to be used by the community when school is not in session. The L-shaped provides the added benefit of creating a separate area for the larger gathering areas like the cafetorium and gym. The cafetorium and gym are located in a proposed one-story wing and the classrooms and administration spaces are located in a three-story wing. All of the classrooms have a north-south orientation to provide optimal daylight to those rooms. The shortest side of the three-story wing would be located along Beethoven Avenue 45' from the property line or a distance of 111' ± from the house directly across Beethoven Avenue. All of the services entrances to the school are located at the rear of the one-story wing.

Transportation Director Bill Paille provided a PowerPoint presentation (attached) on the proposed traffic off-site traffic improvements around the school. Mr. Paille recently met with abutters and the project team to discuss traffic concerns and issues. Mr. Paille has gone to most of the public meetings on the project and has been involved with the process since the beginning. Currently there are issues with the blue zone, busses, staff access to the site and some issues with signalization. People are also double parking on neighborhood streets to walk their child to school. The plan for on-site is to separate the staff parking and busses from the parent pick-up and drop-off, which will result in improvements along Beethoven Avenue.

The new intersection controls at Evelyn Road, Beethoven Road and Beacon Street will create gaps in traffic to allow vehicles entering Beacon Street from side streets to get out. The new equipment will provide flexibility to allow the city to get the timing of the signals perfect. There will also be increased enforcement in the neighborhood to address the double parking issue. Mr. Paille is confident that the traffic around the site can be managed and create a safe area for pedestrians and vehicles.

The Committees discussed whether the Conservation Commission would request that the proposed school be moved further back from the wetlands. The Conservation Commission members seem to have two schools of thought. Several members felt that the architects did a good job of balancing the building, parking lots and wetlands in their design. The Conservation Commission's goal is to keep everything as far from wetlands as possible. The design team will work with the Conservation Commission to address any and all concerns. The Conservation Commission has not stated what mitigation will be required.

The Committee discussed proposed amendments to the site plan Board Order. The Committee unanimously supported the two proposed amendments below:

If the Conservation Commission requires the building to be moved closer to Beethoven Avenue, the revised site plan must be brought back to the Public Facilities Committee for a determination of whether the shift requires the Board of Aldermen to amend the site plan.
Sustainability condition

Pursue an integrated design approach to all aspects of the building including, but not limited to, comparison of the life-cycle costs of different mechanical systems and construction methods, to promote the building's efficient use and conservation of natural resources and energy and further the City's sustainability goals for its municipal facilities.

Ald. Laredo moved approval of the site plan for the Zervas Elementary School with the additional conditions, which carried by a vote of seven in favor and one abstention.

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]

ACTION: **PUBLIC FACILITIES APPROVED 7-0-1 (Brousal-Glaser abstaining)**
FINANCE COMMITTEE APPROVED 4-0-3 (Blazar, Brousal-Glaser, Norton abstaining)

NOTE: The Public Facilities Committee and Finance Committee met jointly to discuss the request for authorization to borrow up to 36,585,000 to finance the replacement of the Zervas Elementary School. The Committees reviewed the budget for the project. The expenditure budget provides the Board a level of control over the funds including the money in the Board of Aldermen contingency line item. Motions for approval were made in both Committees. The Public Facilities Committee approved the request by a vote of seven in favor with one abstention. The item was approved in Finance by a vote of four in favor and three abstentions.

Respectfully submitted,

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

Board of Aldermen 5-58 Site Plan Approval – December 1, 2014



Zervas Elementary School – Newton, MA



Schematic Design: Site Plan Goals



Goals:

- Maximize use of site
- Optimize building placement
- Provide student safety:
 - Bus
 - Pedestrian
 - Vehicular
- Minimize neighborhood impact
- Minimize wetland impact



Zervas Elementary School – Newton, MA

BOA 5-58 Site Plan Approval – December 1, 2014



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Schematic Design: Site Plan



- 60k SF Play Areas
+ Outdoor Classroom
+ Outdoor Gardens
- 8k SF Plaza/Gathering
36+ Bike Storage
Dumpsters/Service
- 71 Parking Spaces
4 Bus Drop-Off
20 Car Drop-Off
(added drop-off lane)

LEGEND

- S** School Entry
- C** Community Entry
- K-1** Play Access
- F** Field Access

Zervas Elementary School – Newton, MA
BOA 5-58 Site Plan Approval – December 1, 2014



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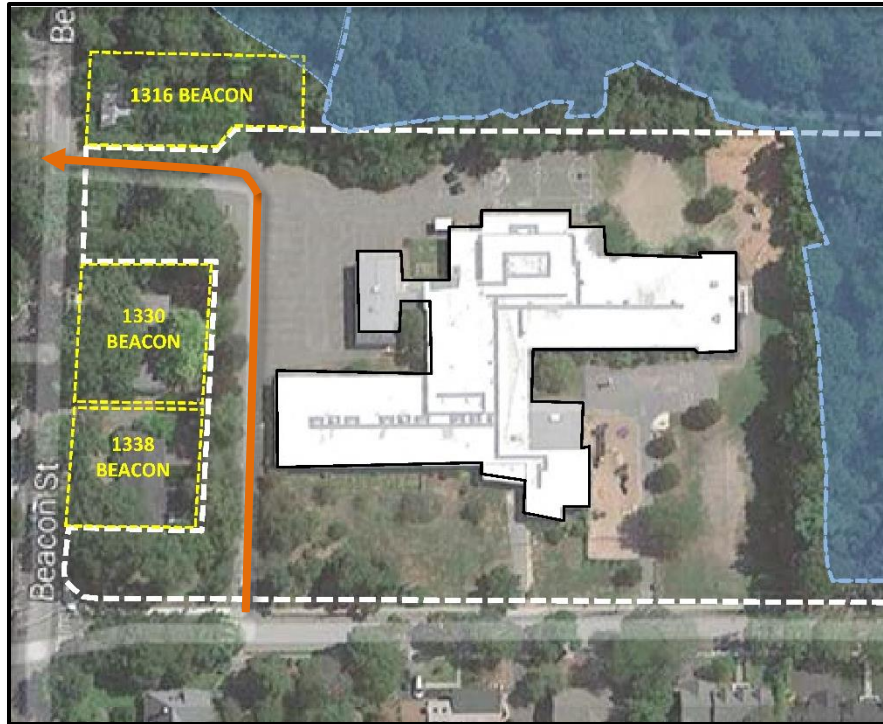


Current vs. Future: Bus Traffic

Current



Future



LEGEND

 Buses



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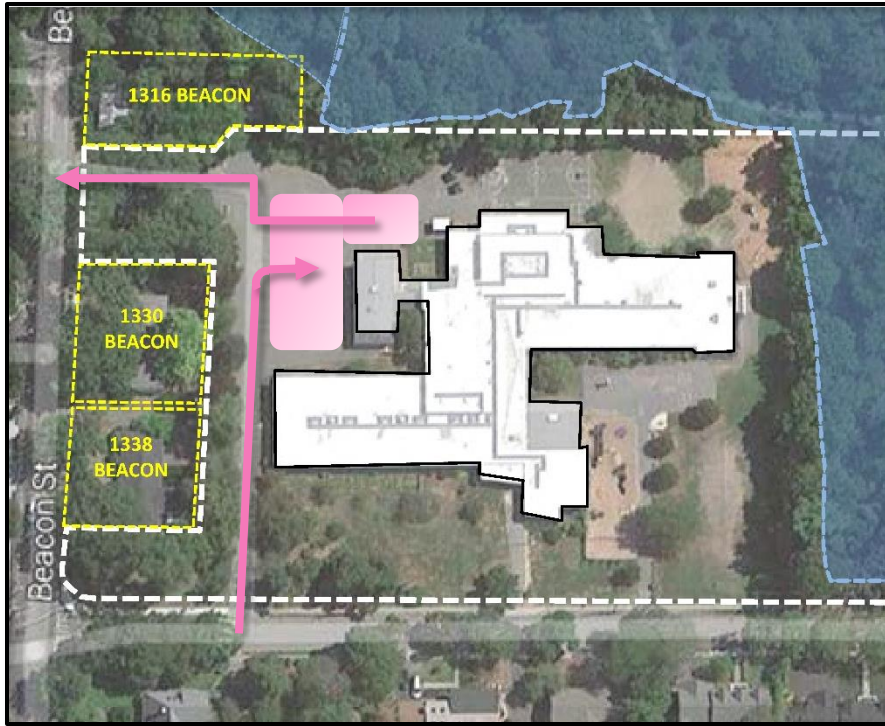
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Current vs. Future: Faculty / Staff Traffic


Current



Future



LEGEND

 Faculty/Staff



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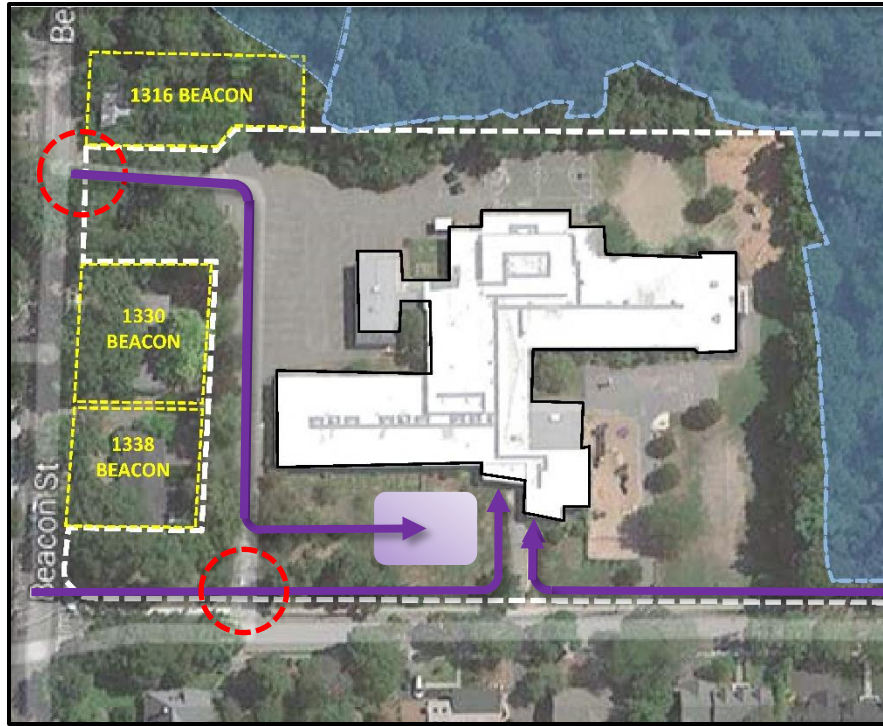


Current vs. Future: Pedestrian Drop-Off and Pick-Up

Current



Future



LEGEND

 Pedestrians

 Pedestrian crossing at curb cuts



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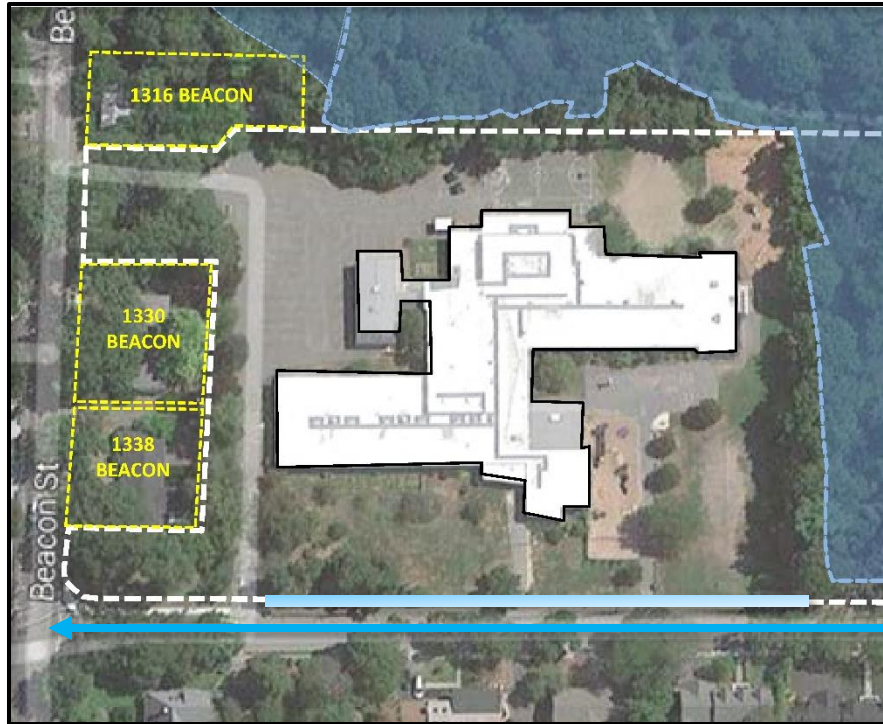
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Current vs. Future: Vehicular Drop-Off and Pick-Up

Current



Future



LEGEND

 Vehicular Drop-off/Pick-up



Zervas Elementary School – Newton, MA

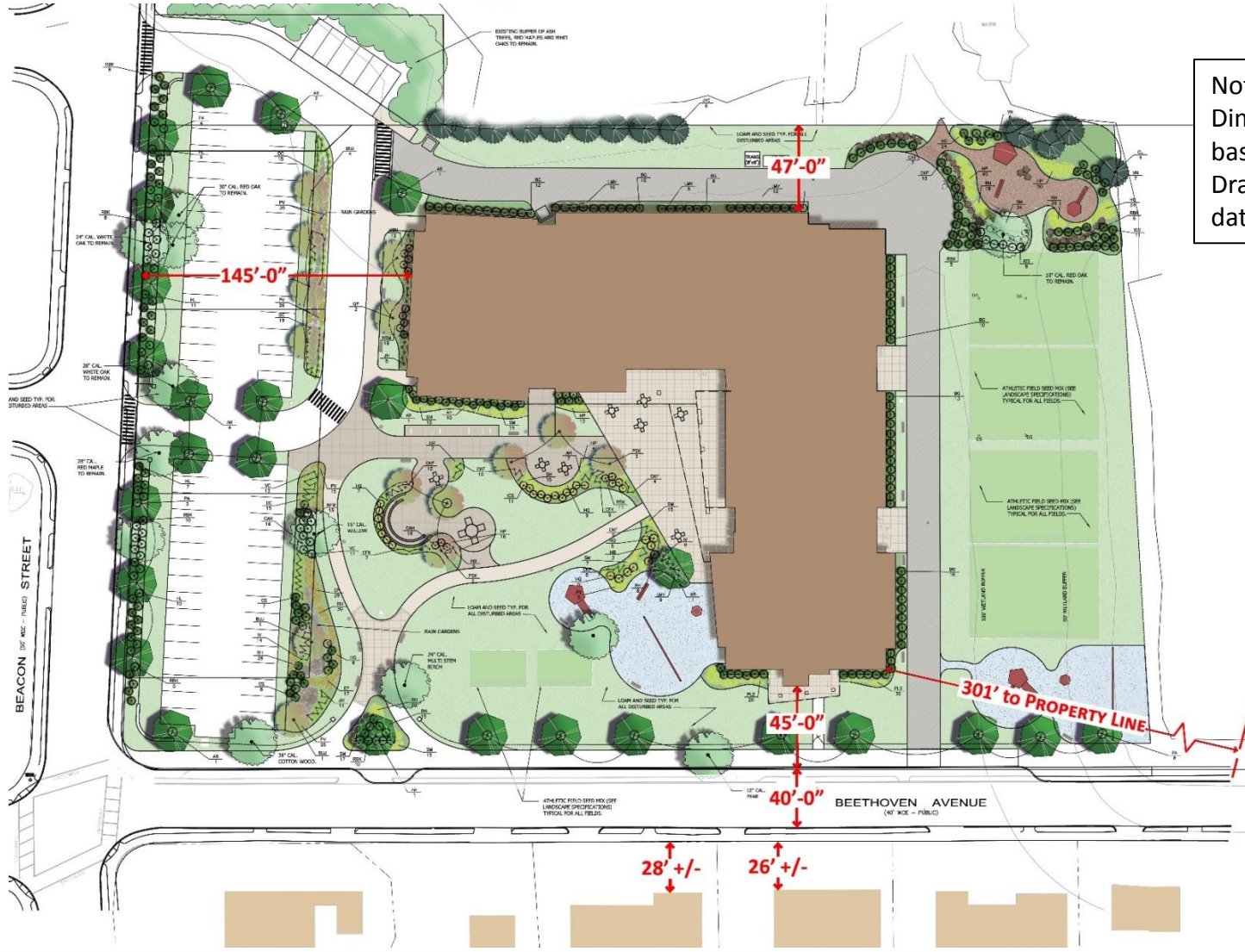
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Schematic Design Site Plan: Setback Dimensions



Note:
Dimensions are based on Drawing C1.1, dated 11/14/14

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BOA 5-58 Site Plan Approval – December 1, 2014



Next Steps / Project Milestones

- **Dec 2014** **Board of Aldermen Full Project Funding Approval**
- **Dec 2014** **Proceed with Design Development**
- **Apr 2015** **Begin Construction Documents**
- **Oct 2015** **Bidding Early Packages**
- **Nov 2015** **Execute Early GMP Construction Contract**
- **Dec 2015** **Zervas Faculty and Students Move to Swing Space**
- **Dec 2015** **Bidding Main Package**
- **Jan 2016** **Construction Begins on Early Package at Zervas**
- **Jan 2016** **Execute Main GMP Construction Contract**
- **Sep 2017** **New Zervas School Opens for Students**

Zervas Elementary School – Newton, MA

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Questions & Answers



Zervas Elementary School – Newton, MA
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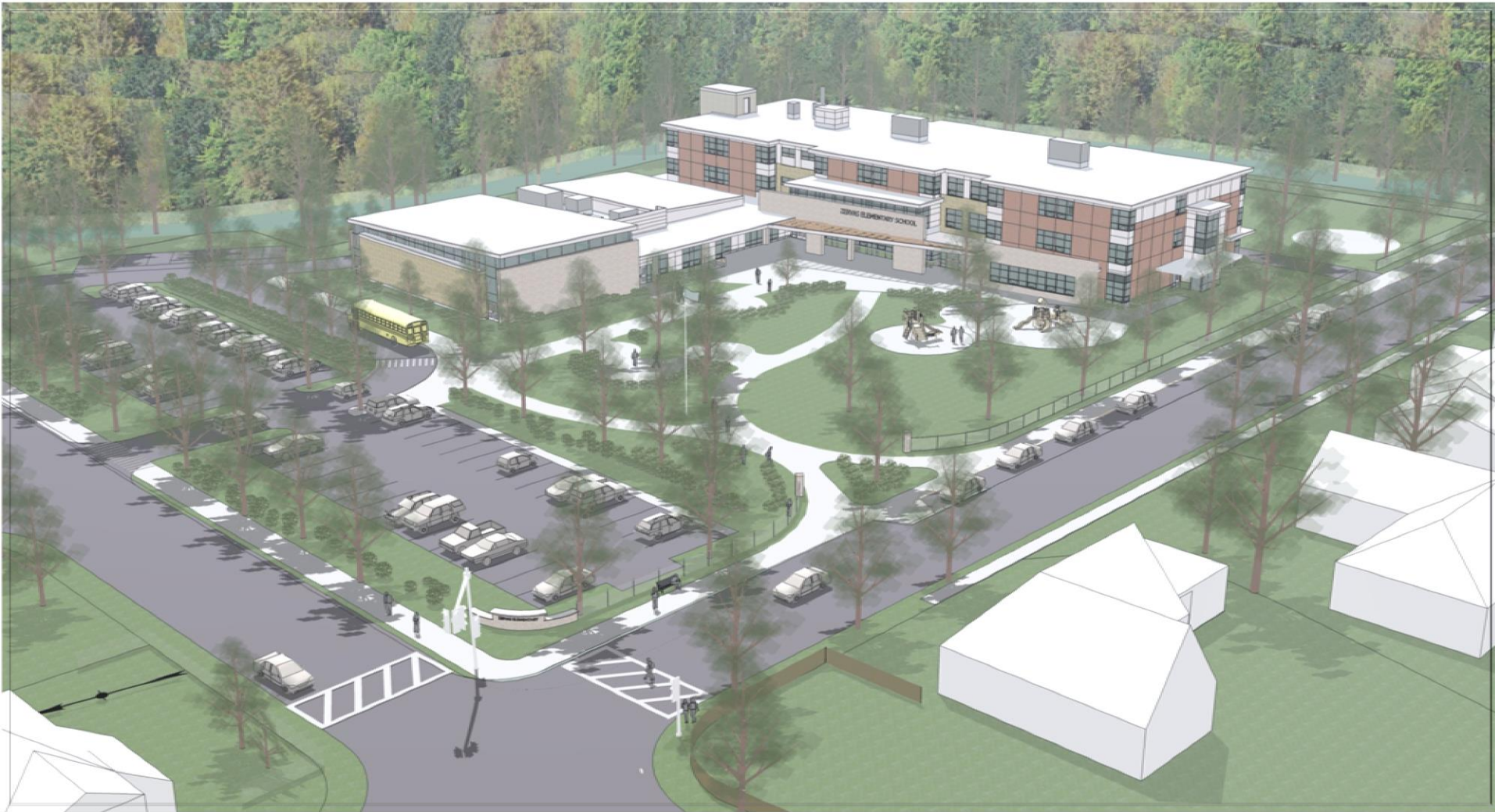


Questions & Answers



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BOARD OF ALDERMEN 5-58 Site Plan Approval Hearing

Zervas Elementary School – Newton, MA

November 12, 2014



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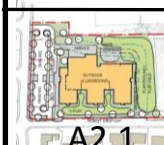
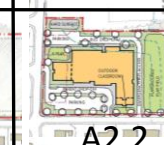










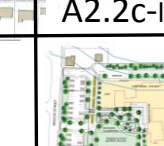


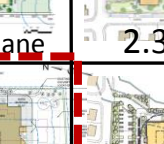


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Overview of Design Studies

Existing Site Studies					Expanded Site Studies				
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Multi-Wing	Elbow 2-Story	Elbow 3-Story	Pinwheel	Add/Reno
 A1.1	 A1.2	 A1.2b	 A1.3	 A1.4
 A1.1b	 A1.2b	 A1.2c	 A1.3b	 A1.4b

Multi-Wing	Elbow 2-Story	Elbow 3-Story South	Elbow 3-Story North	Box
 A2.1	 A2.2	 A2.2b	 A2.3b	
 A2.1b	 A2.3	 A2.2c-drive	 A2.3b-1	
	 A2.3c	 A2.2c-loop	 2.3b-2	
		 A2.2c-lane	 2.3b-3	
		 Refined Plan	 2.3b-4	



Preferred Schematic Option



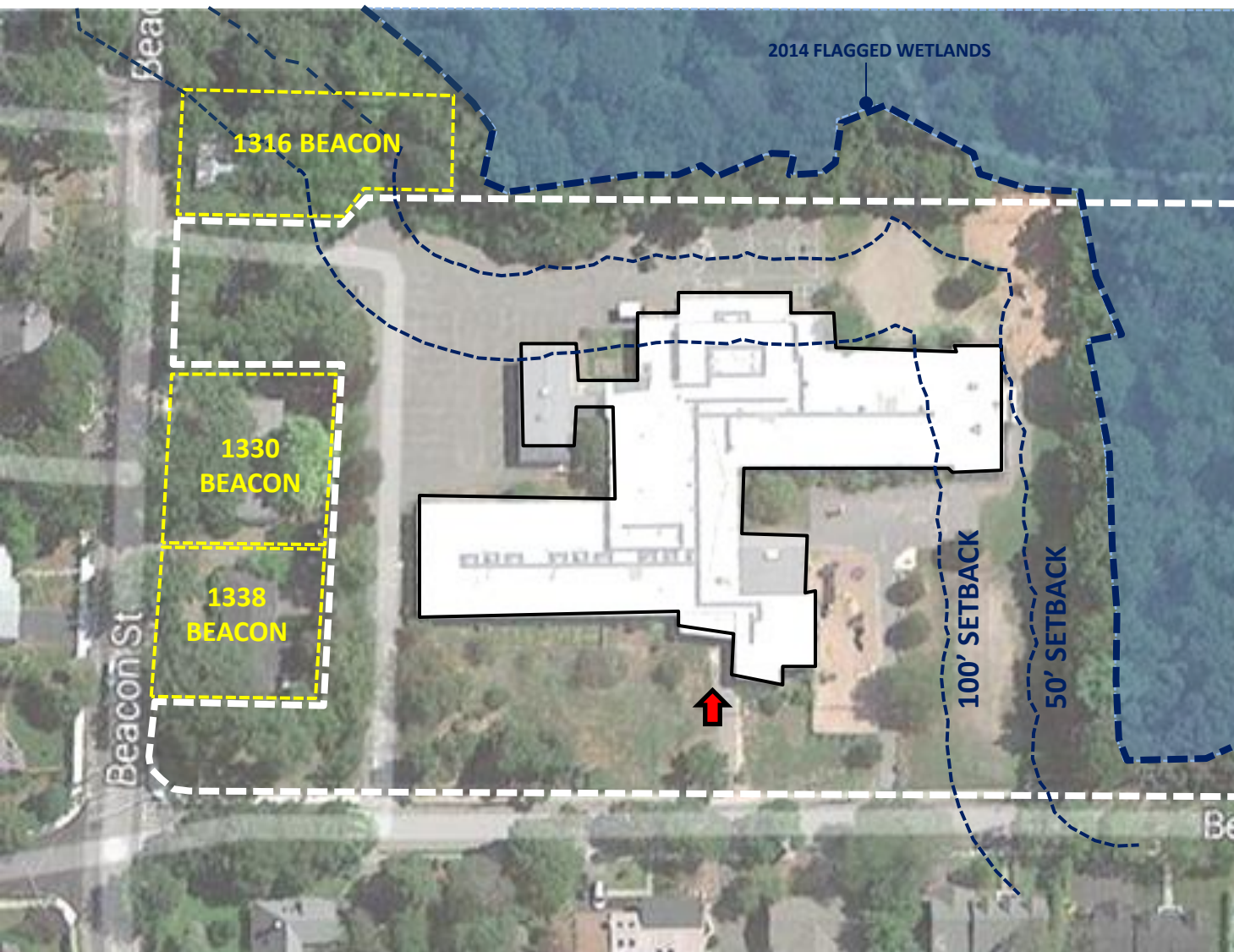
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5.3 Acres (**3.5 Useable**)
35k SF Building

43k SF Play Areas
+ Outdoor Classroom
+ Outdoor Gardens

Plaza/Gathering on Lawn
8+ Bike Storage
Dumpsters/Service

44 Parking Spaces (lined)
1 Bus Drop-Off (lined)
0 Car Drop-Off
(on-site totals listed)

SF Over 100' Setback*
(including 3 Beacon properties)
4.9k Building
20.4k Impervious Paving
25.3k Total in Setbacks
School is Outside of 50' Buffer
Paving is Within 25' Buffer
*Per 2014 Flagged Wetlands

EXISTING SITE + EXPANSION PROPERTIES

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1316 BEACON STREET



1330 BEACON STREET



1338 BEACON STREET

HISTORICAL COMMISSION:

30 Beethoven (listed 1954)
Preferably Preserved, Delay of Demolition Expires 11/26/14

1338 Beacon (listed 1953)
Not Preferably Preserved

1130 Beacon (listed 1952)
Not Preferably Preserved

1316 Beacon (listed 1780)
Preferably Preserved

Records Indicate it was Built in 1840, relocated on site in 1897



30 BEEETHOVEN AVENUE

EXISTING SITE + EXPANSION PROPERTIES

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Maintains 25' wetland buffer

- 6.0 Acres (4.2 Useable)
- 78.8k SF Building
- 60k SF Play Areas
- + Outdoor Classroom
- + Outdoor Gardens
- 8k SF Plaza/Gathering
- 36+ Bike Storage
- Dumpsters/Service
- 72 Parking Spaces
- 4 Bus Drop-Off
- 20 Car Drop-Off (added drop-off lane)
- SF Over 100' Setback*
- 10.9k Building (vs. 4.9k)
- +7.9k Imperv. (vs. 20.4k)
- +8.0k Porous Pavement
- 26.8k Total
- +4.1k Porous Playground
- Building is Out side 50' Buffer
- All Paving is Outside 25' Buffer
- *Per 2014 Flagged Wetlands

SCHEMATIC DESIGN – SITE PLAN

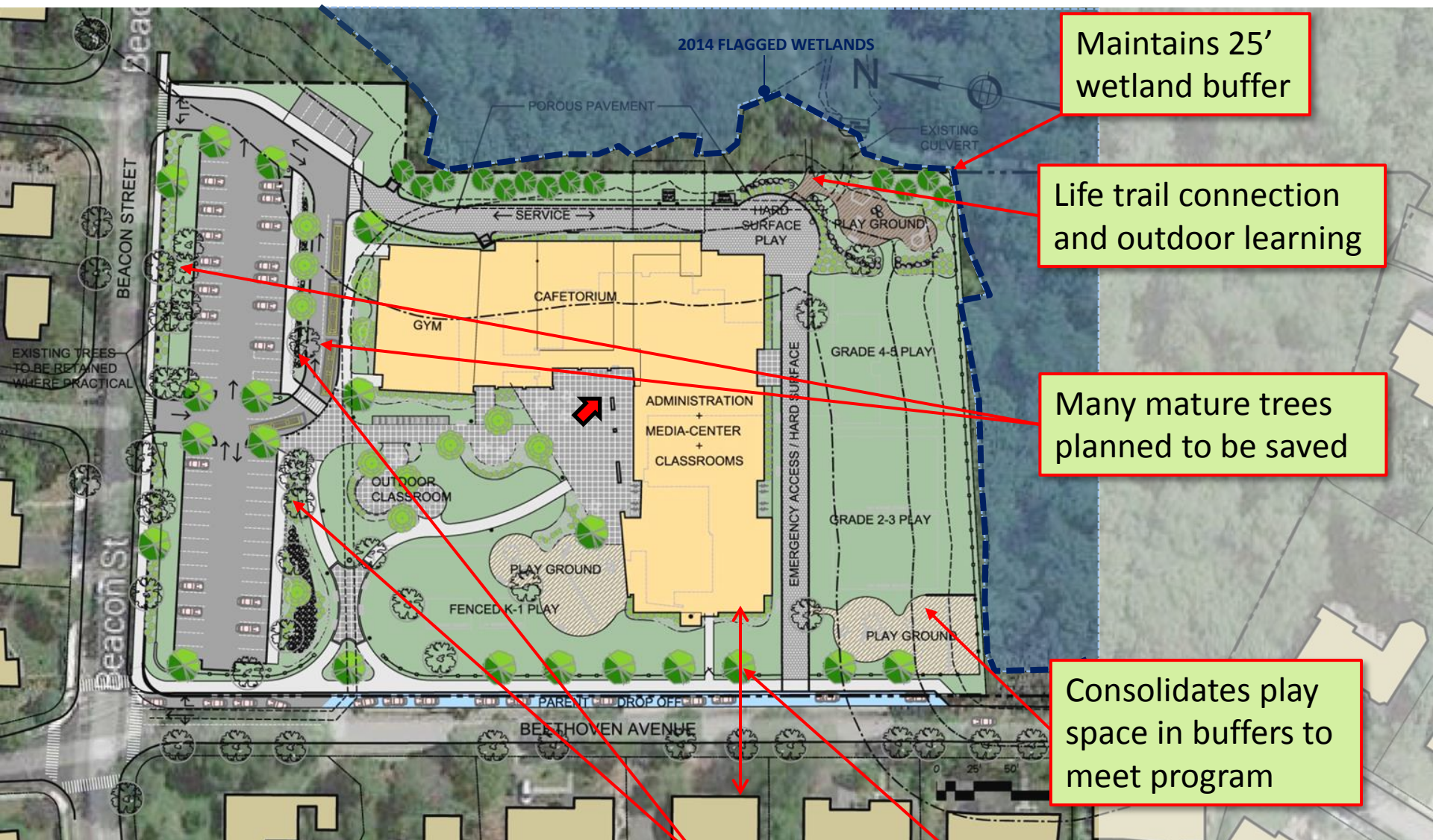
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Maintains 25' wetland buffer

Life trail connection and outdoor learning

Many mature trees planned to be saved

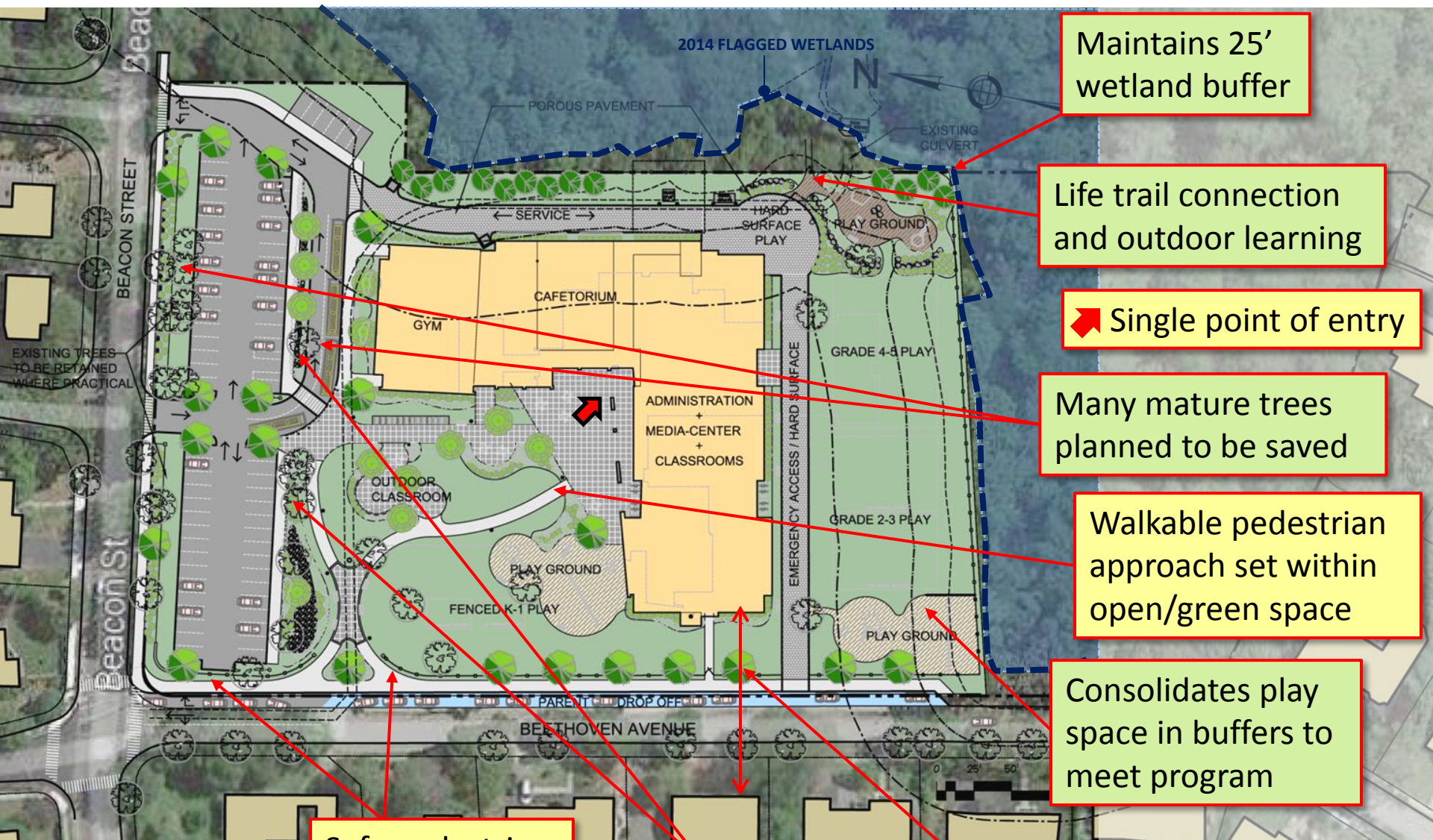
Consolidates play space in buffers to meet program

SCHEMATIC DESIGN – SITE PLAN

**Zervas Elementary School – Newton,
5-58 Site Plan Approval Hearing – Nov**

Bioswales/
rain garden
drainage

Main façade
is 110' from
homes



Maintains 25' wetland buffer

Life trail connection and outdoor learning

➔ Single point of entry

Many mature trees planned to be saved

Walkable pedestrian approach set within open/green space

Consolidates play space in buffers to meet program

Safe pedestrian approaches with no traffic crossings

Bioswales/ rain garden drainage

Main façade is 110' from homes

SCHEMATIC DESIGN
Zervas Elementary
5-58 Site Plan App

Roads aligned for safety

Consolidates parking; reduces site circulation

Bus traffic separate from cars w/access to/from Beacon

Maintains 25' wetland buffer

Life trail connection and outdoor learning

➔ Single point of entry

Many mature trees planned to be saved

Walkable pedestrian approach set within open/green space

Consolidates play space in buffers to meet program

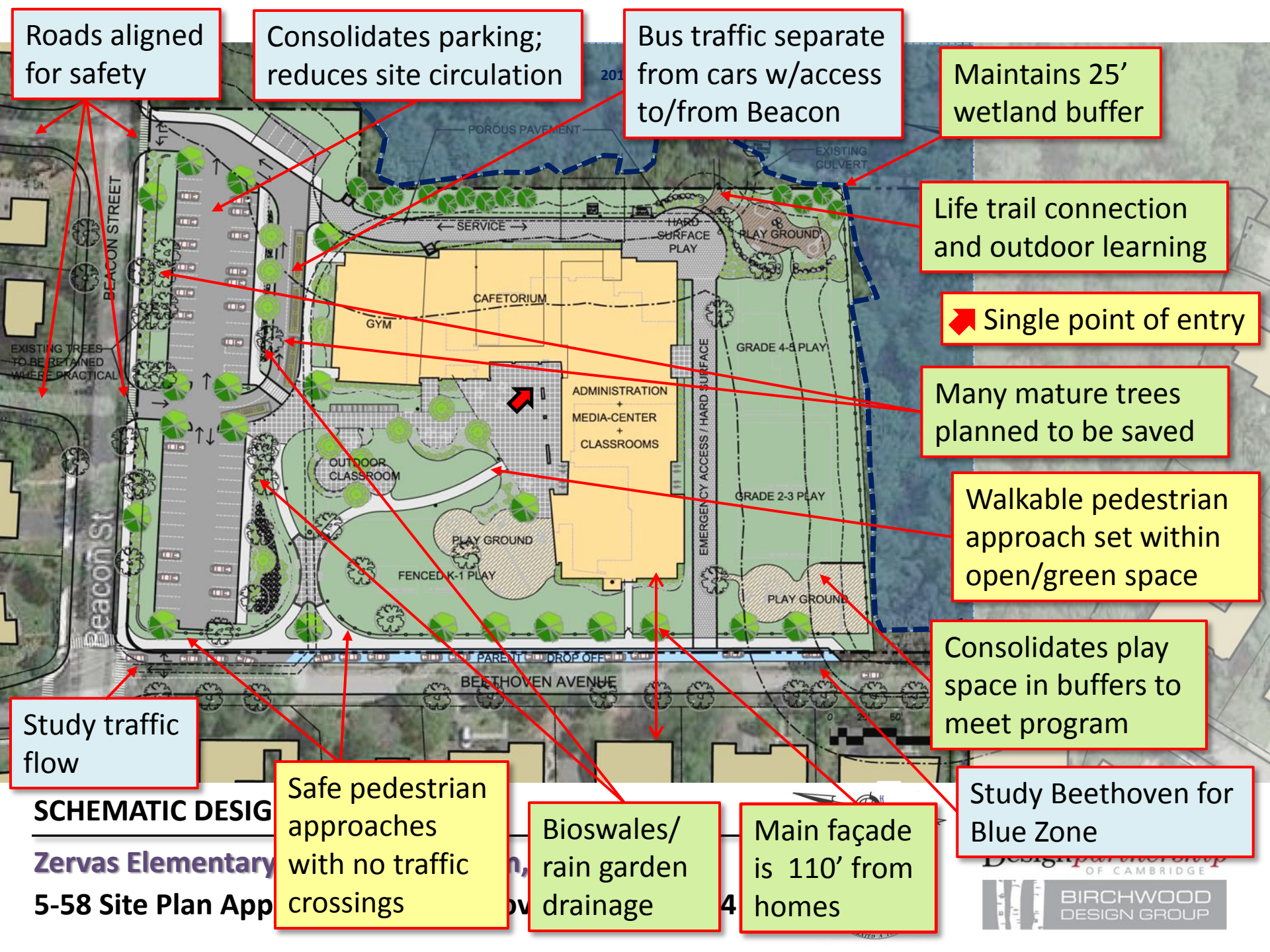
Study Beethoven for Blue Zone

Study traffic flow

Safe pedestrian approaches with no traffic crossings

Bioswales/ rain garden drainage

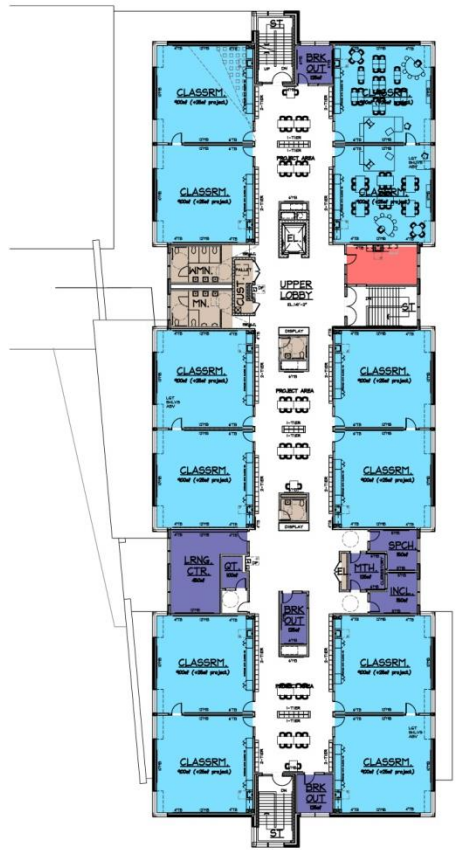
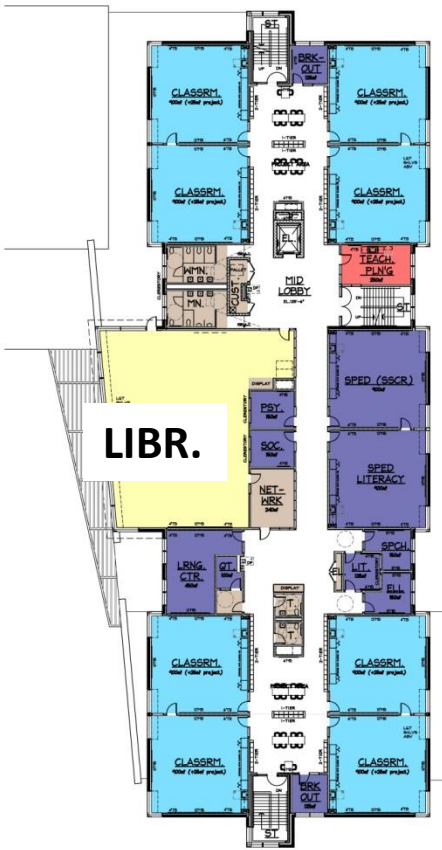
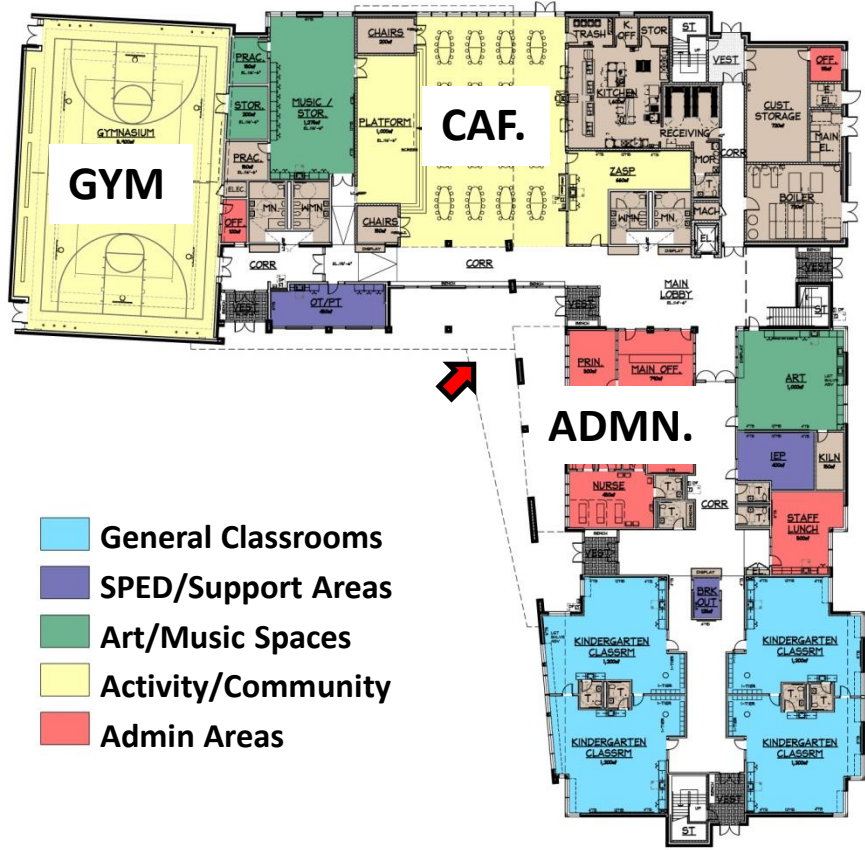
Main façade is 110' from homes



SCHEMATIC DESIGN

Zervas Elementary

5-58 Site Plan App



- General Classrooms
- SPED/Support Areas
- Art/Music Spaces
- Activity/Community
- Admin Areas



SCHEMATIC DESIGN – FLOOR PLANS

Zervas Elementary School – Newton, MA

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PERSPECTIVES and ELEVATION STUDIES



SCHEMATIC DESIGN – AERIAL VIEW

Zervas Elementary School – Newton, MA

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SCHEMATIC DESIGN – VIEW FROM BEACON/BEETHOVEN CORNER

Zervas Elementary School – Newton, MA

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SUMMER



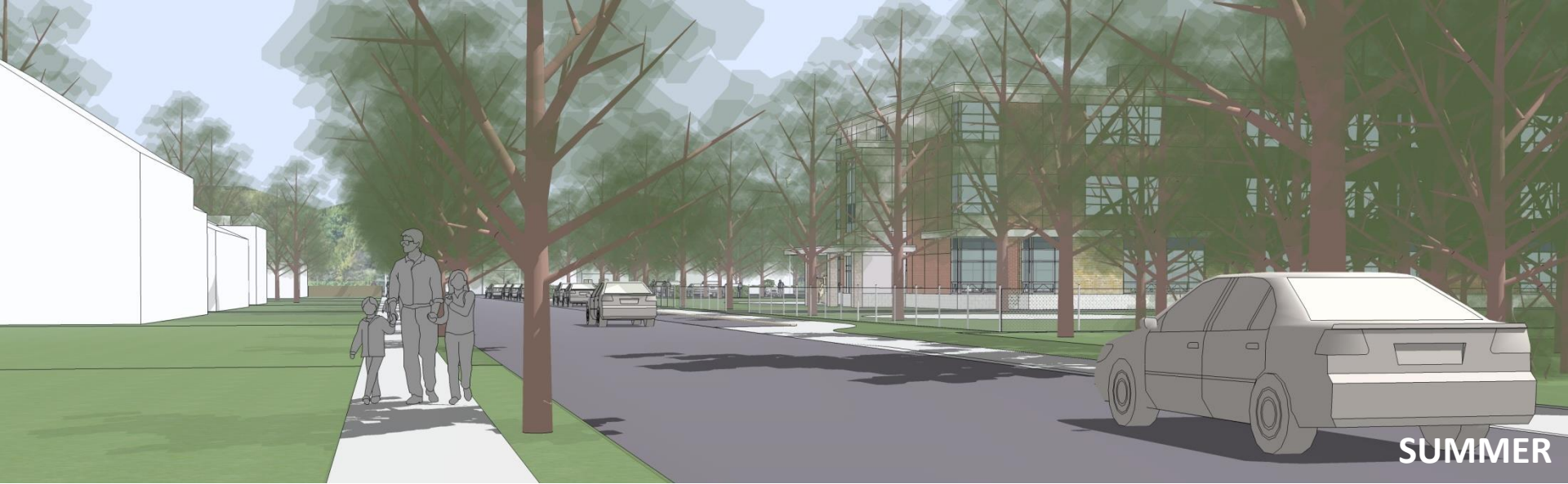
WINTER

SCHEMATIC DESIGN – VIEW FROM BEACON EXIT (EAST)

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SCHEMATIC DESIGN – VIEW FROM BEETHOVEN TOWARD BEACON

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Lower Veneer + Colonnade

SCHEMATIC DESIGN – END ELEVATION STUDY

Zervas Elementary School – Newton, MA

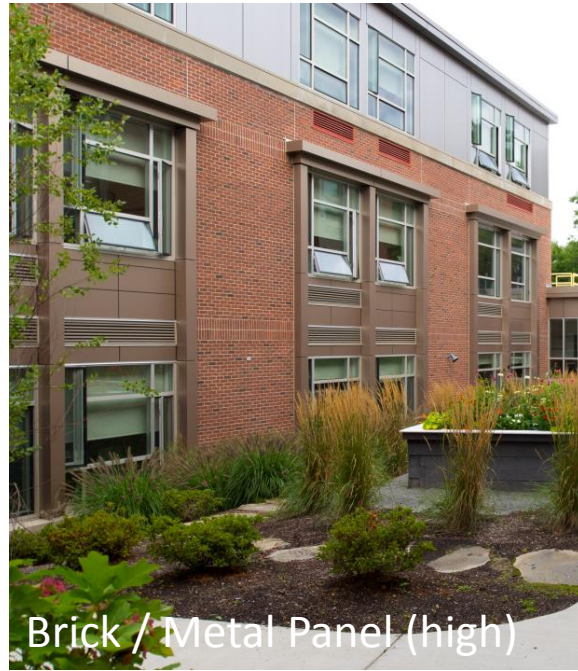
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EXISTING ZERVAS SCHOOL



Beige/Red Brick



Brick / Metal Panel (high)



Solar Trellis



Stone & Split-face
Masonry

SCHEMATIC DESIGN – MATERIALS/PRECEDENT

Zervas Elementary School – Newton, MA

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Budget: Construction Cost Estimate Update

Construction costs for the Zervas ES project are on budget per current estimates

- Two full independent cost estimates were developed based on the detailed Schematic Design documents: one by the Designer's Cost Consultant and one by the Construction Manager
- The Construction Manager, WT Rich, is also working on the Angier project so their cost and scope data is informed by the most current relevant precedent
- The two estimates were reconciled to a variance of less than 0.25% (\$74 K) indicating a consistent understanding of design intent and scope
- The higher of the two estimates was within 0.6% (\$170 K) of the \$29 M construction budget, which is negligible at this phase because the estimates include \$2.75 M in contingencies



Budget: Construction Cost Estimate Update (cont.)

The estimates include the full scope of work on the expanded Zervas site

- The estimates include all work on the three adjacent residential properties (which will be incorporated into the Zervas site)
- The potential work to develop and improve the Blue Zone (or any related Traffic work) will be covered in the \$3 M Off-Site Improvements line item within the \$40 M Total Project Budget
- No Value Engineering adjustments were required at this phase to align the project design with the construction budget, all program elements are included

Additional Cost Estimates will be developed at 3 key future project milestones

- Two sets of estimates will be reconciled to budget at the end of the Design Development, 60% Construction Documents and 90% Construction Documents phases
- The project team will deliver the Zervas school on schedule and on budget

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Budget & Categories of Expenses for the New Zervas School Project

CATEGORIES OF THE BUDGET	BUDGET	CURRENT EXPENDITURES	TOTAL EXPENDITURES	TOTAL ENCUMBRANCES	UNOBLIGATED BUDGET
FEASIBILITY STUDY (Includes A/E, OPM & CM PreCon)	\$ 800,000	\$ 98,498	\$ 705,218	\$ 787,194	\$ 12,806
PROJECT ADMINISTRATION (Includes OPM)	\$ 1,025,000	\$ -	\$ -	\$ -	\$ 1,025,000
CONSTRUCTION CLERK OF THE WORKS	INCLUDED IN OPM SERVICES UNDER PROJECT ADMINISTRATION				
BUILDING SYSTEM COMMISSIONING	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000
ARCHITECTURE & ENGINEERING	\$ 2,800,000	\$ -	\$ -	\$ -	\$ 2,800,000
PRE CONSTRUCTION SERVICES	\$ 140,000	\$ -	\$ -	\$ -	\$ 140,000
CONSTRUCTION	\$ 29,000,000	\$ -	\$ -	\$ -	\$ 29,000,000
OFF SITE IMPROVEMENTS (Acquisition/Blue Zone)	\$ 3,000,000	\$ -	\$ -	\$ 522,000	\$ 2,478,000
FURNITURE/FIXTURES/COMPUTER EQUIPMENT	\$ 1,200,000	\$ -	\$ -	\$ -	\$ 1,200,000
OTHER PROJECT COSTS	\$ 270,000	\$ -	\$ -	\$ -	\$ 270,000
CONSTRUCTION CONTINGENCY	\$ 1,365,000	\$ -	\$ -	\$ -	\$ 1,365,000
OWNER'S CONTINGENCY (SOFT COSTS)	\$ 300,000	\$ -	\$ -	\$ -	\$ 300,000
TOTAL PROJECT EXPENDITURE BUDGET	\$ 40,000,000	\$ 98,498	\$ 705,218	\$ 1,309,194	\$ 38,690,806

Total Value of CM Change Orders Submitted to Date	\$ -
Total Number of CM Change Orders Submitted to Date	0

Construction Completion Rate (%)	NA
Projected Construction Start Date	January 2016
Substantial Completion Date	July 2017
Final Project Completion Date	Fall 2017

NOTES:

Current approved project funding is \$1 M for FSSD plus \$2.7 M for Property Acquisition

Expenditures are listed "as submitted" to the City, some expenditures may not yet be processed by the City of Newton

Expenditures and Encumbrances are rounded to the nearest whole dollar

The potential cost of concrete slab moisture mitigation will be covered under Construction Contingency

Construction budget include demolition of 3 existing adjacent residences and development of those sites

Off Site improvements include potential acquisition of adjacent residential properties and reconstruction of the Blue Zone on Beethoven Street

Zervas Elementary School – Newton, MA

5-58 Site Plan Approval Hearing – November 12, 2014



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Project Milestone Schedule

Start	Finish	Activity
August-13	October-13	OPM Selection
October-13	January-14	Designer Selection
January-14	June-14	Feasibility Study/Options Analysis
July-14	September-14	Schematic Design
	September-14	SD Cost Estimates and Reconciliation
October-14	November-14	Site Plan Approval and 5-58 Funding Approval
November-14	March-15	Design Development
February-15	March-15	DD Cost Estimates & Reconciliation
	March-15	DD Local Approval
March-15	September-15	Construction Documents
	July-15	60% CD Cost Estimates and Local Review
	September-15	90% CD Cost Estimates and Local Review
	October-15	Bidding
	November-15	Develop Guaranteed Maximum Price Construction Contract
November-15	December-15	Construction Mobilization and Procurement
	December-15	Zervas Faculty and Students relocate to Carr Facility
January-16	July-17	Construction of new Zervas School
July-17	August-17	Fit out, furnishing, and NPS occupancy of New Zervas School
	September-17	New Zervas School opens for students

Zervas Elementary School – Newton, MA

5-58 Site Plan Approval Hearing – November 12, 2014



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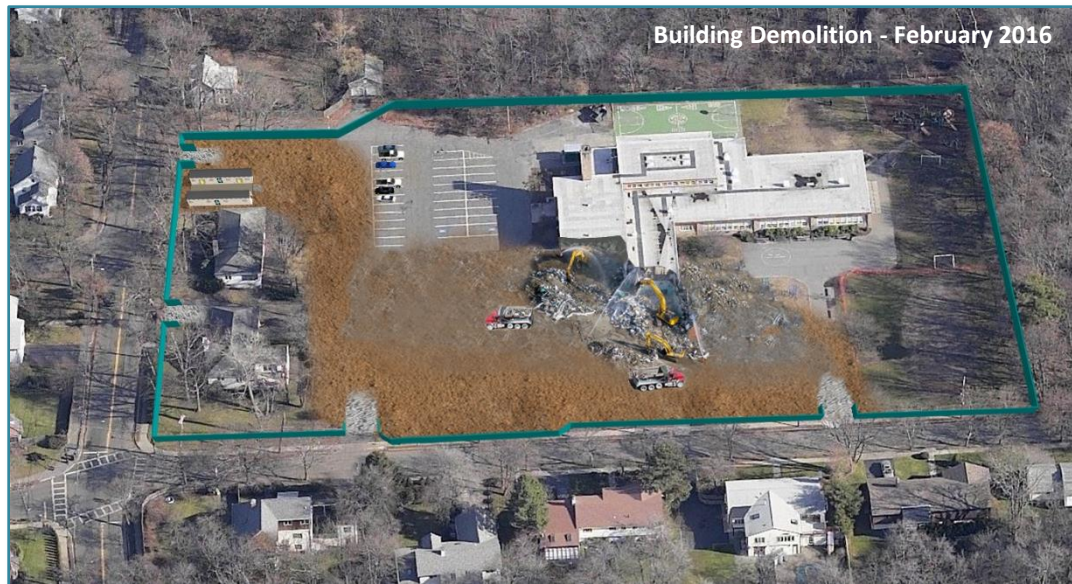


**JOSLIN
LESSER**
Project Management

Community, Safety and Logisitcs

OUR COMMITMENT

To assure the health and safety of the general public while minimizing disruption to the local community and enabling cost-effective progression of the work



- ✓ Site-specific safety plan
- ✓ Erosion control plan / order of conditions
- ✓ SWPPP plan
- ✓ Dewatering plan
- ✓ Worksite egress and access
- ✓ Barricades and signage
- ✓ Dust control
- ✓ Noise control
- ✓ Delivery blackout periods
- ✓ Parking and traffic management
- ✓ Neighborhood Management plan

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5-58 Site Plan Approval Hearing – November 12, 2014



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Project Management

Zervas Elementary School Reconstruction Project Transportation Division Presentation

City of Newton

December 1, 2014

Existing Conditions

Issues

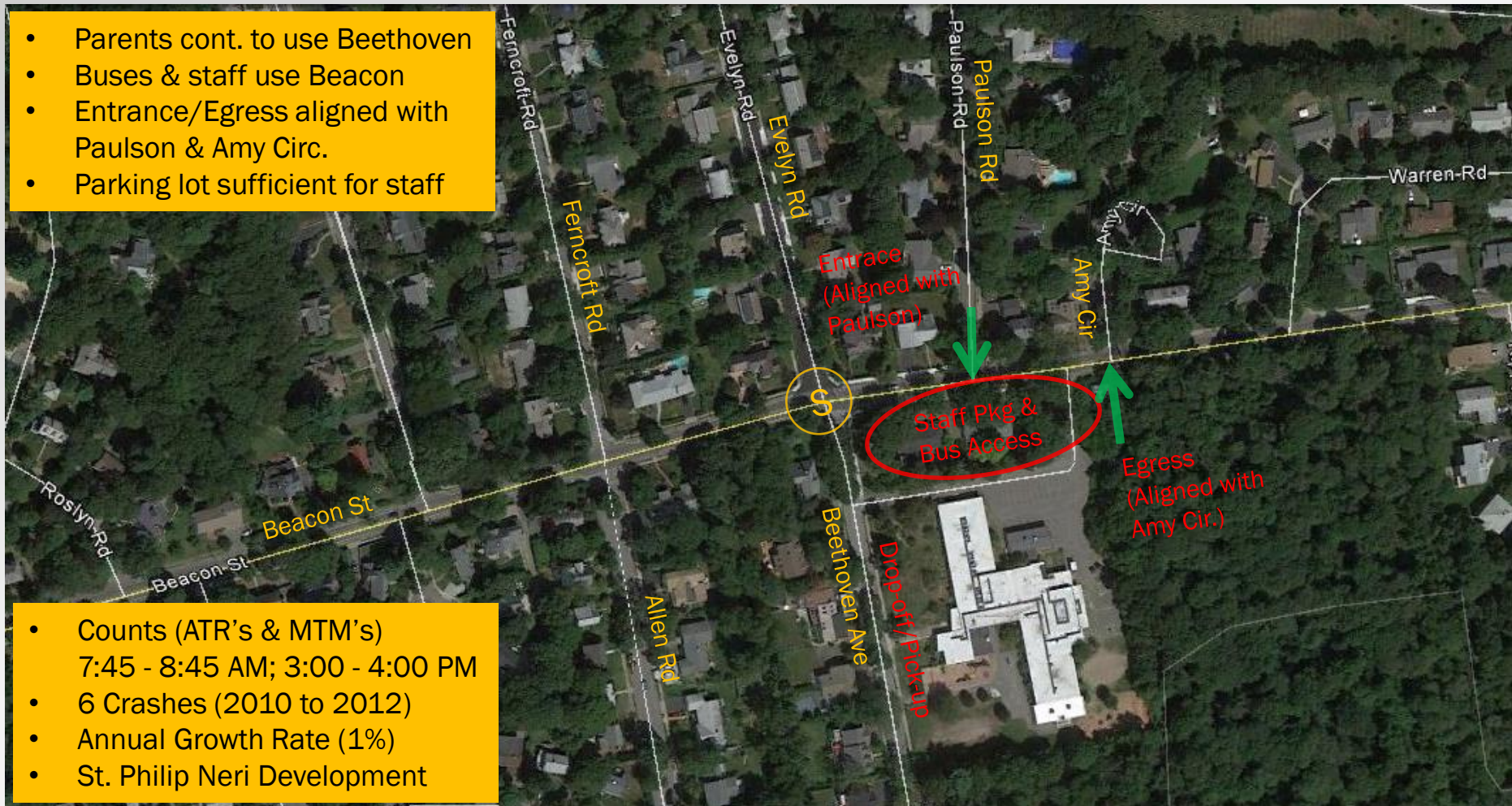
- Parents/buses/staff must use Beethoven to access school
- 'Blue Zone' & signal deficiencies contributing to poor circ. along Beethoven
- Double parking on Beethoven
- Pkg on adj streets & walking across Beacon
- Parking insufficient for staff



Proposed Site Improvements

- Parents cont. to use Beethoven
- Buses & staff use Beacon
- Entrance/Egress aligned with Paulson & Amy Circ.
- Parking lot sufficient for staff

- Counts (ATR's & MTM's)
7:45 - 8:45 AM; 3:00 - 4:00 PM
- 6 Crashes (2010 to 2012)
- Annual Growth Rate (1%)
- St. Philip Neri Development



Future Traffic Conditions

Future Vehicle Trips (Design year 2014)

- Increase in enrollment from 320 to 490 (+170 students)
- TIS assumes 1 veh trip/student (+170 trips)
- Using TIS volume of 174 veh currently exiting Beethoven, by extrapolation:
 $\frac{174 \text{ veh}}{320 \text{ stud}} = \frac{\text{Future}}{490 \text{ stud}}$ or **266 veh/hr**, 266-174 (+92 trips)
- JLA provided following:

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, 27% vehicles transporting at least 2 students.

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

This results in a projected volume of 179 - 105 (+74 trips)

Traffic Analysis — Future AM Level of Service

Beacon Street

- LOS C (EX LOS B) for both EB & WB
- 95% Queue = 400', Delay = 30-40s

Beethoven Ave

- LOS D (Ex LOS F) for Left/Thru
- LOS C (Ex LOS F) for Right
- 95% Queue = 200', Delay = 25-40s

Paulson Rd

- LOS A for Beacon WB turns

Amy Circle

- LOS E for Exiting Left Turns
- Delay = 40s



Future Traffic Accommodation

- Push 'Blue Zone' east into site
- Create Left/Thru & Right Lane
- Implement video detection & supermax 'smart' controller
- Provide detection at site exit
- Advanced warning along Beacon



Conclusions & Next Steps

Conclusions

- Site layout provides best configuration to ensure both vehicular/pedestrian safety
- TIS is reasonable and sound. Approach to future traffic volumes conservative yet results in overall improved (and acceptable) LOS. Believe circulation will operate better than projected
- Reconfiguration of Beacon/Beethoven access is major improvement to site
- Parking lot accommodates future staff and extra-curricular events

Next Steps

- City will continue to coordinate with Design Team and begin preliminary design of off-site improvements, cost estimates and schedule
- Finalize traffic signal analysis & develop specific improvements/upgrades
- Engage in public outreach program to obtain community input
- Coordinate with various City Committees for necessary approvals
- Finalize design and implement construction

End of Presentation