To: Alderman Leonard Gentile, Chairman, Finance Committee

Cc: Members, Honorable Board of Aldermen

From: Maureen Lemieux, Chief of Staff/Chief Financial Officer

Subject: Responses to Questions regarding the Acquisition of Zervas Elementary School Abutting Properties

Date: September 26, 2014

As you know, many members of the Honorable Board continue to have questions regarding the acquisition of the three residential properties that abut the Zervas Elementary School site. Attached you will find an Executive Summary of the process, responses to the 34 remaining questions from members of the Board and supporting documentation.

Executive Summary

The expansion of the Zervas School facility was prioritized within the Newton Public Schools Long Range Facilities Plan to strategically address current and future system wide elementary school enrollment capacity needs in a central location. The continued growth of elementary school student population, and in particular, the kindergarten population, has created space demands beyond the district's classroom capacity levels.

NEWTON PUBLIC SCHOOLS

	Ten Year Kindergarten Trends											Projected November 2013			
Grade	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014***	**2015**	**2016**	**2017**	**2018**
K	805	867	887	868	830	862	896	895	934	958	938	909	911	918	913
Elemenatary	4975	5133	5318	5408	5498	5527	5646	5687	5790	5799	5830	5870	5899	5963	5941
Middle	2620	2534	2474	2453	2480	2556	2550	2667	2719	2849	2808	2869	2852	2891	2944
High School	3673	3748	3709	3695	3592	3524	3579	3568	3661	3793	3865	4019	4150	4188	4224
All Grades	11,268	11,415	11,501	11,556	11,570	11,607	11,775	11,922	12,170	12,441	12,512	12,758	12,901	13,042	13,109
Cumulative Growth		*147*	*233*	*288*	*302*	*339*	*507*	*654*	*902*	*1,173*	*1,244*	*1,490*	*1,633*	*1,774*	*1,841*

*2014-15 Enrollment is preliminary as of September 19, 2014

- The Zervas project will mitigate significant deficiencies in the current aged and undersized facility, add the MSBA standard educational spaces, and will, most importantly, support the increased population with a planned enrollment of 490.

- The capacity expansion is the key strategic reason for the use of Zervas with its central location in Newton, and this strategy was endorsed by the School Committee as well as the community with successful passage of the Override ballot in 2013.

As detailed below, the project team evaluated 15 potential sites to determine the best location for the new Zervas School

ZERVAS ELEMENTARY SCHOOL - NEWTON,MA — FEASIBILITY STUDY

ALTERNATIVE SITE SELECTION MATRIX

Relative Cost:
$0
$ = less than $1M
$$ = $1M-$2M
$$$ = $2.M +

Feasible
Not feasible * (see footnote)
Not available

● Favorable
⊙ Neutral
○ Unfavorable

X Not available
⊘ Not reasonable

		IN ZERVAS DISTRICT				ADJACENT TO ZERVAS DISTRICT				OUT OF ZERVAS DISTRICT						
	CRITERIA	A	B	C	F	D	E	G	H	I	J	K	L	M	N	O
	Angler ES Comparison: Current usuable site: 1.76 acres Reclaimed site area: .08 acres Total size of new site: 1.84 acres Note: SF data does not include reclaimed area for parking and play space.	Existing Zervas site	Cold Springs Park (Beacon St)	Richardson Field (between Beethoven Ave and Allen St)	Newton Cemetery (Walnut St)	St. Philip Neri Church (1521 Beacon St)	Lincoln Playground (Montclair Rd)	Hyde Playground (Lincoln St)	DPW/Municipal (Elliot St)	City Hall (behind War Memorial)	Claffin Park (Lowell Ave)	Echo Bridge Office Park (Chestnut St & Elliot St)	Weeks Playground (near Crystal Lake)	Braceland Park (Chestnut St)	R.J. McGrath Playground (1600 Washington St)	Riverside parking lot (Grove St)
	SITE															
	1 Newton village	Waban	Waban	Waban	Newton Centre	Waban	Waban	Highlands	Highlands	Newton Centre	Newton Centre	Upper Falls	Newton Centre	Upper Falls	West Newton	Auburndale
	2 Distance from existing Zervas (miles)	---	0.1	0.4	1.3	0.4	0.6	1.1	1.2	1.2	1.3	1.5	1.5	1.7	1.8	2.9
	3 Size of site (acres)	5.3	65.0	3.0	TBD	1.6	5.4	1.0	13.8	TBD	1.2	4.3	1.7	8.8	10.1	22.5
AVAILABILITY & FEASIBILITY	4 Legal restrictions, City owned land	●	⊘	⊘	---	---	⊘	⊘	TBD	⊘	⊘	⊘	⊘	⊘	⊘	X
AVAILABILITY & FEASIBILITY	5 Site acquisition/legal issues, privately owned land	●	⊘	⊘	X	---	⊘	⊘	TBD	⊘	⊘	⊘	⊘	⊘	⊘	---
AVAILABILITY & FEASIBILITY	6 Publicly owned, available for school building	●	---	---	---	---	---	---	⊘	⊘	---	---	---	---	---	X
AVAILABILITY & FEASIBILITY	7 Privately owned, available for school building	---	---	---	X	X	---	---	---	---	---	⊘	---	⊘	---	---
AVAILABILITY & FEASIBILITY	8 Maximum buildable area	3.5	5.5	3.0	X	X	TBD	1.0	2.4	TBD	TBD	TBD	TBD	TBD	TBD	X
AVAILABILITY & FEASIBILITY	9 Maintains neighborhood 'walkability'	●	●	●	⊙	⊙	⊙	○	○	○	○	○	○	○	○	○
AVAILABILITY & FEASIBILITY	10 Minimizes busing	●	●	●	⊙	⊙	⊙	○	○	○	○	○	○	○	○	○
AVAILABILITY & FEASIBILITY	11 Degree of redistricting required	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
AVAILABILITY & FEASIBILITY	12 Optimizes parking and play capacity	○	●	○	●	○	○	○	⊙	○	○	○	○	○	○	○
AVAILABILITY & FEASIBILITY	13 Minimizes building height	⊙	●	⊙	●	○	⊙	○	⊙	⊙	⊙	⊙	⊙	⊙	⊙	●
AVAILABILITY & FEASIBILITY	14 Does not increase demand for on street parking	●	●	○	●	○	●	●	●	●	●	●	●	●	●	●
	PROJECT COST															
	1 Site acquisition cost	$0	TBD	TBD	$$	$$	$	$$$	$$$	$0	$	$$	$	$	$	$$
	2 Minimizes phasing logistics	TBD	$$	$$	$0	$0	$0	$0	$$$	$0	$0	$0	$0	$0	$0	$0
	3 Minimizes busing	$0	$0	$0	$	$	$	$	$	$$	$$	$$	$$	$$	$$	$$$
	4 Reduces need for swing space/busing	TBD	●	●	$0	$0	$0	$0	$0	$	$	$	$	$	$	$
	RECREATIONAL IMPACT															
	1 Minimizes recreational impact	●	○	○	●	●	○	●	○	⊙	⊙	●	○	○	○	●
		within current Zervas district														

The project team then developed 5 distinct layouts on the existing site and 5 more on a proposed expanded site. Upon thorough analysis of the relative merits it was clearly determined that:

- An expanded site would allow the full educational space program for both interior and exterior programming functions including play space and on-site parking while addressing community concerns, pedestrian safety, setbacks, and traffic impact.

EXISTING SITE – RANGE of STUDIES:

A1.1b Multi-Wing Plan

A1.2b Elbow Plan - South

A1.2c Elbow Plan - North

A1.3b Pinwheel Plan

A1.4b Add/Reno Plan

Disadvantages:

- Dual Entry/Approach
- Within 25' of Wetlands
- Within 75' of Homes
- Minimal Play Space
- Parking Dominant Beethoven
- Bus Access via Beethoven
- Minimal Snow Storage and Bio-Swale Drainage Areas

Designpartnership

BIRCHWOOD DESIGN GROUP

Program Goals	Program	Existing Zervas	Expanded Site	Without Expansion
Site Acreage		3.5 usable	4.2 usable	3.5 usable
24 Classroom Building SF	78,800 SF	35,000 SF	✓	✓
Shared Building Entry (if walking, driven or bused)	single entry point	✓	✓	X
Staff Parking	80	44	75	52
Separate Bus and Car (Pick-Up and Drop-Off)	4 buses/20+ cars	X	✓	✓
Keep Bus Traffic Off Beethoven	Beacon bus loop	X	✓	X
Entry Plaza + Gathering Space	8K SF	via lawn (8K SF)	✓	2K SF
Playgrounds + Fields	60K SF	43K SF	✓	50K SF
Outdoor Garden + Classroom	2,500 SF	✓	✓	✓
Walker Friendly + Enhanced Pedestrian Paths	separate from cars	X	✓	students cross traffic
Snow Storage	6K SF	4K SF	✓	0 SF
Drainage/Bio-Swales	8K SF	0 SF	✓	0 SF
Minimize Wetland Impact	no pavement within 25' buffer	X	✓	X
Minimize Massing Near Adjacent Properties	100'+ away	126'	115'	75'

EXPANDED SITE – RANGE of STUDIES:

A2.1b Multi-Wing Plan

A2.2b Elbow Plan - South

Preferred Option

- Elbow Plan, Open to NW

Variant to be Studied

- Locate Centrally on Site
- Shift Away from Wetland (for contiguous play)
- Shift Back from Beethoven
- Refine Traffic Assessment

A2.3b Elbow Plan - North

A2.3c Elbow Plan - North

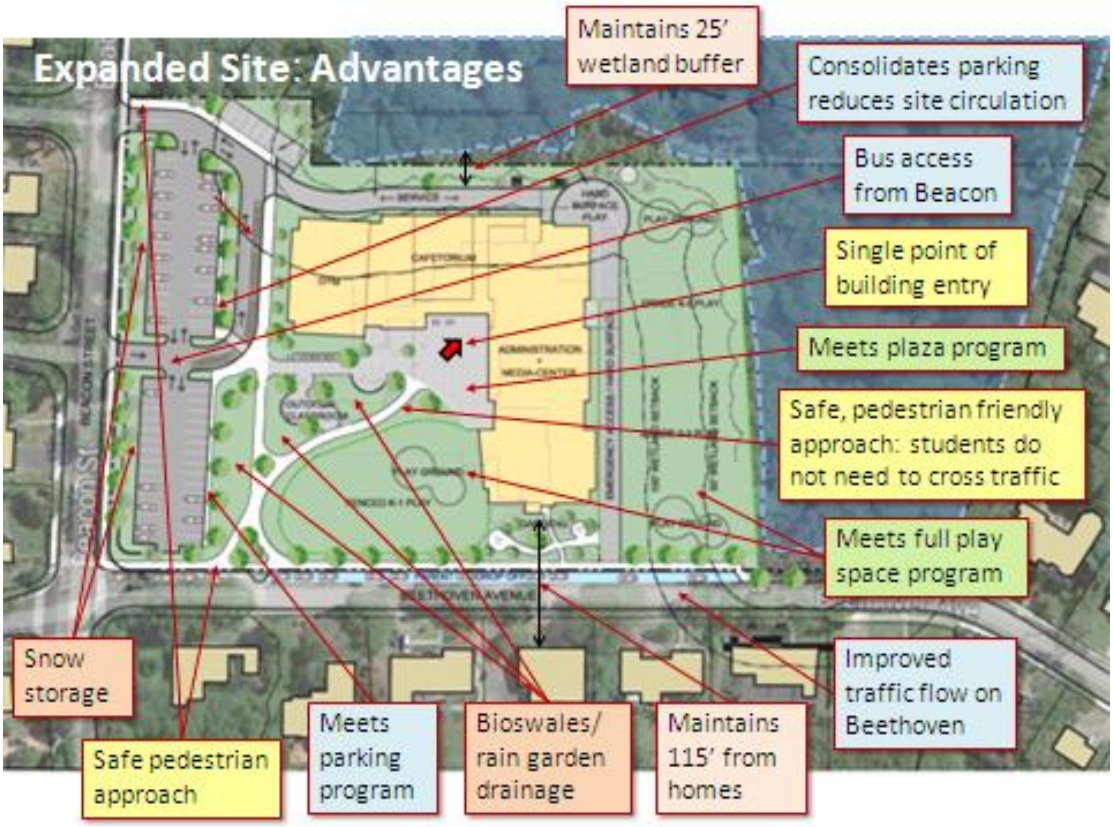
A2.4 Box Plan

Designpartnership

BIRCHWOOD DESIGN GROUP

The compelling benefits of acquiring the 3 adjacent residential properties to allow expansion of the Zervas School site are strongly advocated by a broad cross section of stakeholders:

- **Project Team:** Owner's Project Manager, Architect and Design Engineers
- **Client:** Newton Public Schools Superintendent, Administration, Faculty, PTO
- **Newton Agencies:** Public Buildings and Development Review Team
- **Oversight Committees:** Working Group, School Building Cmte, School Cmte, Design Review



For all of the above reasons, it is recommended by all of the groups who have been working on this project that the City acquire the 3 separately owned adjacent residential properties to facilitate design and construction of the best possible Zervas Elementary School project.

RESPONSES TO QUESTIONS FROM THE BOARD OF ALDERMEN

1) **Question: What is the maximum number of classrooms (i.e., 24 or 26)?**

Answer: There are 24 regular education classrooms for grades K-5. There are additional classrooms for art, music, and special education, as shown on the program/space summary.

2) **Question: What is the maximum student capacity?**

Answer: The design capacity is for 490 students. The 24 regular education classrooms allow for 490 students within class size guidelines. The overall school capacity is designed to accommodate 490 students in terms of cafeteria seatings, toilet facilities, library media space, and lockers/cubbies.

3) **Question: In the 9/15 presentation materials, the slides show the wetland boundaries slice through one of the abutting properties (e.g., slides 11 and 14), yet in the slides depicting the expanded site, those wetlands boundaries are a lot closer to the site in some places but no longer slice through the abutting property (e.g. slides 2, 5-9 & 15). Why is that? And which set of boundaries are the right ones? What changed, if anything? Was a survey done?**

(As a point of reference, the map of Wetlands and Conservation Areas on the city website is consistent with the earlier presentations of options without acquiring the abutting properties. On this map and on the earlier slides, the wetlands boundary clearly cuts through a corner of 1316 Beacon Street and goes almost all the way to Beacon Street. The 9/15/2014 presentation, on the other hand, shows the wetlands boundaries to be closer to the Zervas site in some places, but now appears to have been pulled back away from 1316 Beacon on the west and away from Beacon Street on the north.)

Answer: The wetlands lines you see on the City's website are approximate. Wetlands are identified by plants and hydric soils. The flags on site were placed by a wetland scientist in accordance with DEP procedures. The flags were then located in the field by our surveyors and put on the survey. Early plan options showed wetlands based on the available information from the City's GIS, DEP and partial survey information from the most recent modular addition. Our current plans are based on newer survey information of the existing site and along the shared boundary with Cold Spring Park, but we do not have updated information into and around the adjacent properties (yet). The last few flags (northern most) on the current survey seem to indicate the wetland pulls back, so the graphics respond without presuming what happens further along the 1316 Beacon Street property. Our designs and proposed use of that property, however, do respond to the potential of wetlands bisecting that property, thus the angled parking we have positioned on that site. Should the BOA approve the acquisitions, we would complete the site survey of the acquired property, including the wetlands survey of the land located at 1316 Beacon Street.

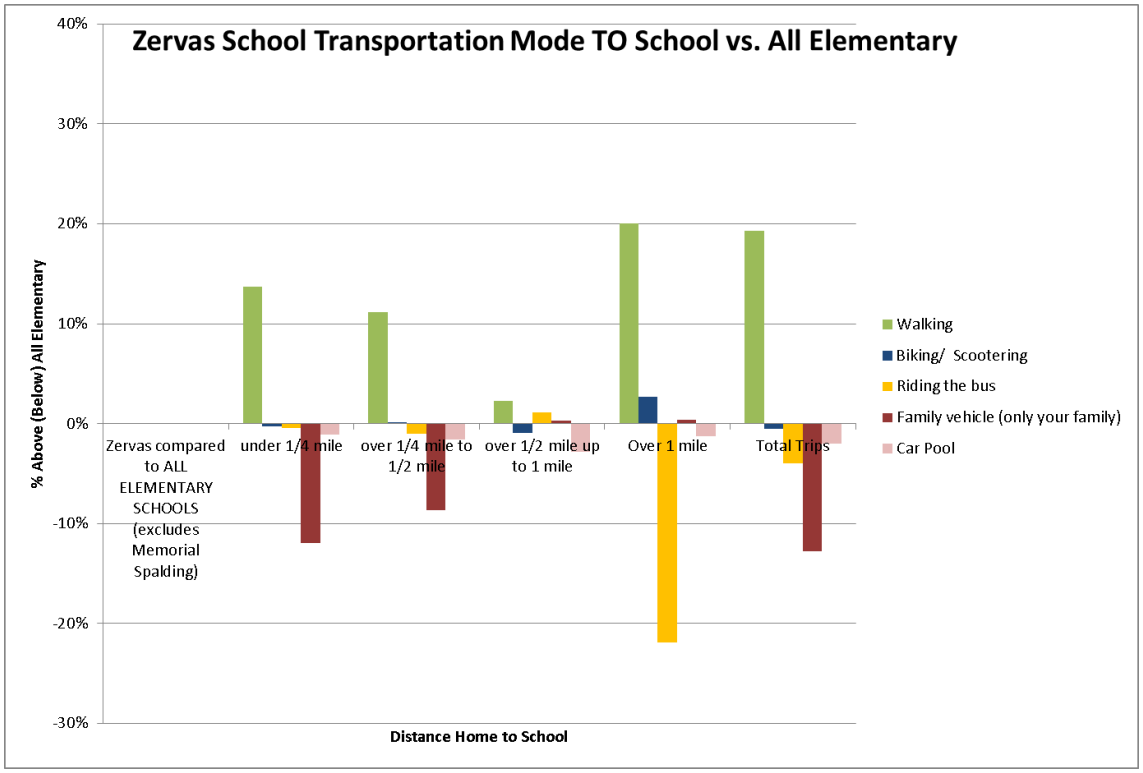
4) I believe someone on the design team mentioned a traffic study. I would like them to provide a copy to the aldermen.

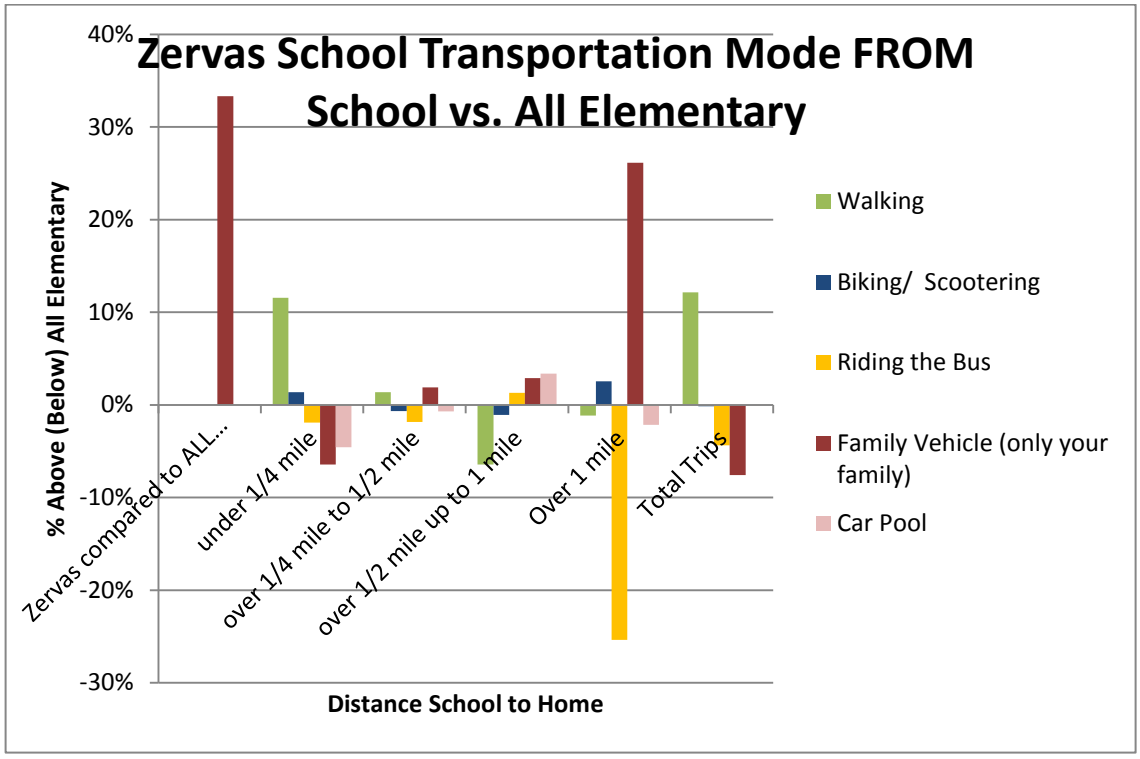
Answer: A complete traffic study has not been completed as the potential property acquisition will impact the site distribution and traffic on Beacon and Beethoven. Once we determine the final site layout, our traffic consultants will be able to complete the traffic study. That said, the traffic consultant has been involved since the beginning of the project, and attached you will find a letter from them

discussing all of the benefits of the property acquisitions in regards to traffic and site safety. The full traffic study will be completed and submitted for review prior to the 5-58 Site Plan Review/Approval.

5) **A map of the current street parking regulations in the area of the school**

6) The Safe Routes to School data about walking/driving patterns at Zervas.





7) How does the Zervas plan compare with the MSBA requirements?

Answer: The following chart compares the Zervas plan to Angier's program and space summary. Angier uses the MSBA standards and Zervas does as well, with some increases in space due to the enrollment difference of 25 students additional at Zervas, thus both schools conform to MSBA requirements.

Zervas Elementary	ANGIER / MSBA for 465 STUDENTS			ZERVAS SCHEMATC for 490 STUDENTS		
ROOM TYPE	NFA	QTY	TOTAL	NFA	QTY	TOTAL
CORE ACADEMIC SPACES			**21,450**			**23,300**
Pre-Kindergarten w/ toilet	0	0	0	0	0	0
Kindergarten w/ toilet	1,200	4	4,800	1,200	4	4,800
General Classrooms - Gr. 1-6	925	18	16,650	925	20	18,500
SPECIAL EDUCATION			**5,800**			**5,650**
Self-Contained SPED			0			0
Self-Contained SPED - toilet			0			0
Resource Room			0			0
Small Group Room / Reading			0			0
Substantially Separate Classroom	925	1	925	900	1	900
Learning Centers (K-2 & 3-5)	433	2	866	450	2	900
Breakout Rooms (1 for each grade)	125.3	6	752	125	6	750
ELL Program	240	1	240	150	1	150
OT/PT	450	1	450	450	1	450
Quiet Room (1 per academic floor)	105	2	210	100	2	200
Speech & Language	240	1	240	150	2	300
Reading/Literacy Classroom	925	1	925	900	1	900
Inclusion Facilitators	207	1	207	150	1	150
Literacy Specialist	140	1	140	125	1	125
Math Coach	127	1	127	125	1	125
IEP Conference Rooms	420	1	420	400	1	400
Psychologist (office, testing, therapy & storage)	149	1	149	150	1	150
Social Worker (office, testing & conference)	149	1	149	150	1	150
Intervention Office					0	0
ART & MUSIC			**2,575**			**2,725**
Art Classroom - 25 seats	1,000	1	1,000	1,000	1	1,000
Art Workroom w/ Storage & kiln	150	1	150	150	1	150
Music Classroom / Large Group - 25-50 seats	1,200	1	1,200	1,200	1	1,200
Music Practice / Ensemble	155	1	155	150	2	300
Music Storage	70	1	70	75	1	75
HEALTH & PHYSICAL EDUCATION			**6,300**			**6,300**
Gymnasium	5,997	1	5,997	6,000	1	6,000
Gym Storeroom	198	1	198	200	1	200
Health Instructor's Office w/ Shower & Toilet	105	1	105	100	1	100
MEDIA CENTER			**2,763**			**2,875**
Media Center / Reading Room	2,763	1	2,763	2,875	1	2,875

Zervas Elementary	ANGIER / MSBA for 465 STUDENTS			ZERVAS SCHEMATC for 490 STUDENTS		
ROOM TYPE	NFA	QTY	TOTAL	NFA	QTY	TOTAL
DINING & FOOD SERVICE			**6,366**			**6,663**
Cafeteria / Dining	3,025	1	3,025	3,200	1	3,200
Stage	996	1	996	1,000	1	1,000
Chair / Table / Equipment Storage	355	1	355	363	1	363
Kitchen	1,470	1	1,470	1,600	1	1,600
Staff Lunch Room	260	2	520	250	2	500
MEDICAL			**510**			**510**
Medical Suite Toilet	51	1	51	60	1	60
Nurses' Office / Waiting Room	234	1	234	250	1	250
Examination Room / Resting	112.5	2	225	100	2	200
ADMINISTRATION & GUIDANCE			**2,318**			**2,515**
General Office / Waiting Room / Toilet	681	1	681	680	1	680
Teachers' Mail and Time Room	included in General Office			included in General Office		
Duplicating Room	included in General Office			included in General Office		
Records Room	62	1	62	60	1	60
Principal's Office w/ Conference Area	300	1	300	300	1	300
Principal's Secretary / Waiting	included in General Office			included in General Office		
Assistant Principal's Office	125	1	125	125	1	125
Supervisory/Spare Office +After School Pgm	450	1	450	650	1	650
Conference Room	200	1	200	200	1	200
Guidance Office	0	0	0	0	0	0
Guidance Storeroom	0	0	0	0	0	0
Teachers' Work Room	250	2	500	250	2	500
CUSTODIAL & MAINTENANCE			**1,861**			**1,865**
Custodian's Office	130	1	130	125	1	125
Custodian's Workshop	0	0	0	0	0	0
Custodian's Storage	141	2	282	120	2	240
Custodian's Storage	185	1	185	200	1	200
Recycling Room / Trash	655	1	655	650	1	650
Receiving and General Supply	included in Recycling Room			included in Recycling Room		
Storeroom	176	2	352	200	2	400
Network / Telecom Room	257	1	257	250	1	250
Total Building Net Floor Area (NFA)			**49,943**			**52,403**
Total Building Gross Floor Area (GFA)^2			**74,960**			**78,800**
Grossing factor (GFA/NFA)			**1.50**			**1.50**

8) **What is the historic nature of 1316 Beacon Street?**

Answer: The house appears to have been built in 1840 and moved to its current location in 1897. The Assessor's Database lists the building as being built in 1780, but that has not been confirmed. If the Board approves sale of this property, the timber from the original house will be saved and marked so that the structure can be reassembled at another site in the future.

9) **How does the Newton Highlands Area Council Plan B compare with the current proposal?**

Answer: The design team evaluated a plan very similar to the Area Council's proposed plan early on in the process. Although it was an efficient use of the existing site, they were not able to meet program in parking or play space. It also was not ideal for site safety and distribution, and parking lots in the wetlands buffer zone was a non-starter when we knew there were other practical ways to achieve the parking needs. Additionally, this approach creates 2 entrances, which was not desired by the School Dept for security and operational reasons. A single main entrance is easier to control, manage, and is optimal from a security standpoint. This approach also places the three story portion of the school closest to the abutters, which we felt was less than ideal.

10) **Is it possible to have the staff park off-site?**

Answer: The short answer to this is "yes", however it is more complicated than that. This option was discussed, but relying on off-site parking year round creates potential problems throughout the neighborhood. During periods of snow, sleet, freezing rain, etc, having staff members walk from off site is less than ideal, especially if compounded by having to carry all of their work to and from the off site location. Additionally, snowy winters will cause the streets to "shrink". Further, the only areas nearby have their own use and parking needs, and although they are not always at capacity, during functions or events we could be creating a parking problem. After evaluating the alternatives, we felt that it was in the best interest of the city to provide on-site parking for the staff.

11) As I was disappointed with the lack of data/information of how the 75 spaces were determined, I would like the spreadsheet which contains the details and calculations regarding the following:

1. **Number of regular fulltime FTEs: Arrival & Departure Times – conclusion of parking spaces needed/per day**
2. **Number of regular part-time FTEs: Days of the week, Arrival & Departure Times – conclusion of parking spaces needed/per day**
3. **Number of itinerant teachers: Days of the week, Arrival & Departure Times – conclusion of parking spaces needed**
4. **At peak hours of the classroom day, what is the estimated usage/vacancy rate of the parking lot?**
5. **At the peak hours of the classroom day, what is the estimated need for on-streeparking?**

Answer: The following chart illustrates the expected staffing for Zervas at the planned enrollment of 490 students. Zervas staffing was reviewed and compared to larger Newton elementary schools such as Bowen to estimate the staffing needed for the enrollment above the current level. The staffing is listed by full time and part time employees, with schedules including days of the week. The resulting need for peak parking, or parking at opening of the school day at 8:20 am through early afternoon, is 70 spaces for the full time staff, and 11 spaces for the part time staff, assuming sharing of spaces for part time staff where feasible. An estimated 14 Central Office staff members may visit the school during peak hours; on average, there will be two visitors per day. The chart shows at 90% attendance, there is a need for 86 parking spaces at any given time. With 75 parking spaces available, 11 staff cars would likely be parked on local streets at peak times. If parking were to be reduced to 50 spaces, 39 staff cars would be parked on local streets.

ZERVAS PARKING PROJECTIONS

FOR SEPTEMBER 2017 AND BEYOND

	# FTE	# HEAD-COUNT	ARRIVAL TIME	DEPARTURE TIME	DAYS PER WEEK
TYPES OF STAFF AND VISITORS					
FULL TIME STAFF			SCHEDULE:	SCHEDULE:	
PRINCIPAL	1	1	7:00 AM	5:00 PM	M-F
ASSISTANT PRINCIPAL	1	1	8:00 AM	4:00 PM	M-F
EXEC. ASST.	1	1	8:00 AM	4:00 PM	M-F
NURSE	1	1	8:00 AM	3:30 PM	M-F
CUSTODIAN	1	1	6:30 AM	3:30 PM	M-F
HEAD CUSTODIAN	1	1	6:30 AM	3:30 PM	M-F
TEACHERS-REGULAR EDUCATION	24	24	8:00 AM	4:00 PM	M-F
TEACHERS-SPECIAL EDUCATION	5	5	8:00 AM	5:00 PM	M-F
LITERACY SPECIALIST	1	1	8:00 AM	4:00 PM	M-F
ART TEACHERS	1	1	8:00 AM	4:00 PM	M-F
MUSIC TEACHERS	1	1	8:00 AM	4:00 PM	M-F
PHYSICAL EDUCATION TEACHERS	1	1	8:00 AM	4:00 PM	M-F
MATH COACH	1	1	8:00 AM	4:00 PM	M-F
ELEMENTARY CLASSROOM AIDES	2	2	8:30 AM	3:00 PM	M-F
LIBRARY MEDIA TEACHER	1	1	8:00 AM	4:00 PM	M-F
I.T. SPECIALIST	1	1	8:00 AM	4:00 PM	M-F
TEAM SPECIALIST-SP. ED.	1	1	8:00 AM	4:00 PM	M-F
INCLUSION FACILITATOR	1	1	8:00 AM	4:00 PM	M-F
SPECIAL EDUCATION AIDES-ALL	20	20	8:30 AM	3:00 PM	M-F
ISS STAFF	3	3	8:30 AM	3:00 PM	M-F
PSYCHOLOGIST	1	1	7:45 AM	4:00 PM	M-F
TOTAL FULL TIME STAFF	70	70			
PART TIME STAFF			SCHEDULE:	SCHEDULE:	
BUILDING AIDE	0.6	1	9:00 AM	2:00 PM	M-F
CUSTODIAN	0.5	1	2:30 PM	6:00 PM	M-F
ART TEACHERS	0.3	1			2 day/wk
PHYSICAL EDUCATION TEACHERS	0.6	1			2-3 days/wk
EARLY LITERACY AIDES	1.5	3	9:00	1:00	M-F
EARLY INTERVENTION AIDES	1.5	2	9:00	1:00	M-F
ELL TEACHERS	1.4	2	8:00	4:00	M-F
ELL AIDES	1.5	2	8:30	3:00	M-F
SOCIAL WORKER	0.8	1	8:00	4:00	4 days/wk
O.T./P.T.	0.4	2	8:00	3:30	2 days/wk
LUNCH MANAGER	0.4	1	11:00	2:00	M, W-F
LUNCH AIDES	0.6	2	11:30	2:00	M, W-F
SPEECH AND LANGUAGE	0.9	1	8:00	4:00	M-F
TOTAL PART TIME STAFF	11	20			
TOTAL ALL STAFF	**81**	**90**			
CENTRAL OFFICE VISITS					
SUPERINTENDENT	1		9:00 AM	2:00 PM	
ASSISTANT SUPERINTENDENTS	3		9:00 AM	2:00 PM	
CURRICULUM COORDINATORS	7		9:00 AM	2:00 PM	
OPERATIONS/FACILITIES	1		9:00 AM	2:00 PM	
MAINTENANCE	2		9:00 AM	2:00 PM	
TOTAL	14		9:00 AM	2:00 PM	
TOTAL PER DAY	2	2	9:00 AM	2:00 PM	
ASSUME:		**DAILY**			
FULL TIME STAFF, DAILY	**70**	**70**	**@ 90%**	**63**	**63**
PART TIME STAFF DAILY, WITH SHARING	**20**	**14**	**@ 90%**	**12.6**	**13**
CENTRAL OFFICE	**14**	**2**	**@ 90%**	**1.8**	**2**
TOTAL USED MOST DAYS	**104**	**86**		**77.4**	**78**

To provide additional information to support the need for 75 proposed parking spaces, a survey of parking utilization was conducted on September 17, 2014 at Mason-Rice, Memorial-Spaulding and Zervas. The following chart puts the 75 proposed spaces for Zervas in context.

- Mason Rice had 75 cars and 9/15/14 enrollment of 474
- Memorial Spaulding had at least 67 cars and 9/15/14 enrollment of 433
- Zervas had 65-70 cars and 9/15/14 enrollment of 309

The following table summarizes the results of the survey:

	Mason-Rice	Memorial-Spaulding	Current Zervas
Time of Observation	10:45am	10:00am	11:45am
Day of Observation	Wed Sept 17	Wed Sept 17	Wed Sept 17
Parking Spots in Lot	64	52	57
Cars Parked in Lot	64	56	60
Additional NPS Cars Parked Outside Street	7-10	11+	5-10
Total NPS Cars In and Outside Lot	71-74	67+	65-70
% of Lot Capacity	111%-114%	129%+	114%-123%
Staff then in School	75	70	65
9/15/14 Enrollment	474	433	309

12) In addition can you please let me know the following:

a. Options/configurations that were considered along with the pros and cons of each option

b. Research done, as Alderman Norton suggested, regarding best practices for parking at public/school buildings in an urban/suburban setting and how this information was/was not applied during the decision making process

c. What incentives are being provided to encourage car-pooling and use of public transportation?

Answer: The options/configurations have been provided in the Executive Summary of this response. Additionally, the project team visited numerous schools outside of Newton to look at a variety of items including how other communities address their parking needs. All of the schools we visited had onsite parking for all of the staff and visitors. Use of public transportation is always encouraged, but with many of Newton's teachers living well outside of Newton, public transportation is not always an option. Car-pooling is also encouraged and the project team is evaluating the benefits of preferred parking for staff that car-pool.

13) Could the architects, or some other appropriate person, provide comparable schools (built in last 10 years), within similar size cities, that would compare to the scope of the project proposed at Zervas? I am seeking to know how schools of 490 kids and staff manage facility, parking, play areas, etc.

School Name	Location	Year of Completion	Design Enrollment	Building Area	Playspace Area	Parking Count
Zervas ES	**Newton**	**2017 est.**	**490 (K-5)**	**78,800 SF**	**60k SF**	**75**
Abner Gibbs ES	**Westfield**	TBD	600 (K-5)	95,600 SF	110-120k SF	152+34*
Bennet Academy	**Manchester**	2008	800 (6)	130,000 SF	64k SF	96+20*
Country ES	**Weston**	2004	484 (PK-3)	72,400 SF	52k+130k SF**	75
F.T. Bresnahan ES	**Newburyport**	2014	760 (PK-3)	112,500 SF	80-90k SF	179
Joeseph Estabrook ES	**Lexington**	2014	540 (K-5)	90,000 SF	199k SF	83
Memorial ES	**Medfield**	2004	582 (PK-1)	57,100 SF	115k SF	37+83***
Mill Pond IM	**Westborough**	2004	1,125 (4-6)	152,000 SF	143k SF	132
West Parish ES	**Gloucester**	2016 est.	355 (K-5)	65,500 SF	62k	91
Woodland ES	**Milford**	2016 est.	985 (3-4)	132,500 SF	195	90-100

Information obtained or estimated from schematic presentations to the MSBA and Google Maps Area Calculator.

*additional on-street parking designated.

**adjacent 130k SF field utilized for physical education.

***parking shared with administration building

14) **Parking: Paid parking has come up quite often when schools are discussed. Do we currently have a proposed program, or pilot program, of paid parking with the goals of reducing auto traffic, and encouraging carpooling? I am concerned that we are paying $2.4M, plus construction costs, to ensure convenient and free staff parking**.

Answer: The School Department does not have a program of paid parking. The property acquisition not only allows us to meet our parking needs, it allows us to meet the place space program needs, improve site distribution, improve site safety, and improve traffic around the school.

15) **Please provide the names of the persons involved who had "conversations" with the Conservation Commission regarding parking in the buffer zone. When did those conversations take place and who from the Conservation Commission used the term "non-starter"?**

Answer: There were early references to “conversations with the ConCom.” To be clear, the design team has not met with the conservation commission. In order for the Conservation Commission to evaluate the impact of a project on the wetlands/buffer zone, all surveys, studies, and engineering work must be completed and submitted for review. The design team met with the City’s Conservation Agent to try and determine what the project limitations would be, and has referred to this as meeting with the ConCom. The statements made about work within 25ft of the wetlands being a non-starter is based on numerous meetings with ConCom on projects at a variety of schools where work was completed within the buffer zones. A good example is the modulars at the Countryside School. The following is an explanation of the roles and responsibilities of the ConCom, the laws we’re working with, and our approach to work within the buffer zone on the Zervas School Project.

The Conservation Commission’s mission in regards to the Zervas School Project is governed by MGL Ch. 40 Sec. 8C and the Newton Ordinance Article II Section 22-19 and is as follows:

- The Conservation Commission shall undertake “the protection of watershed resources” of Newton. This is accomplished by implementing the state Wetlands Protection Act and Newton floodplain ordinance.
- The Wetlands Protection Act states that any activities with the magnitude of the Zervas School Project within the 100ft setback is both protected and regulated by the law, and enforced by the Conservation Commission, and requires the submission of a Notice of Intent. The Conservation Commission is tasked with ensuring that there is absolutely not adverse impact, nor the potential for adverse impact, by allowing any disturbance, development, or work within the 100ft setback.
- There are eight interests protected by the Act:
  - Protection of Public and Private Water Supply
  - Protection of Groundwater Supply
  - Flood Control
  - Storm Damage Prevention
  - Prevention of Pollution
  - Protection of Land Containing Shellfish
  - Protection of Wildlife Habitat

- Any work within the 100ft setback must not in any way adversely impact any of the above interests. The Home Rule Wetlands Bylaws states that the “Applicant has burden of proving that the work proposed will not harm the interests protected by the bylaw.”
- Furthermore, the guidance provided for work within the buffer zone is to “Avoid, Minimize, and Mitigate.” Avoid work within the buffer zone when practicable, Minimize the impact to the buffer zone, and Mitigate any impacts.

In order for any Conservation Commission to approve the work within a buffer zone, the design team must provide all of the studies, reports, and engineering needed to ensure that none of the eight interests above, are, or could be, adversely impacted. This work is costly and time-consuming, and the further you get into the buffer zone, the harder it is to prove there will be no adverse impacts. In addition to this, we know that some uses for buffer zones have a higher likelihood of adverse impacts. For example, a parking lot against the wetlands line itself, has the potential to impact all 8 of the above interests. Other uses either impact fewer of the interests, or are much less likely to have an adverse impact. A good example of this would be a playground, as it is much easier to prove protection of the interests with a use such as this.

When possible, work within the 100ft buffer zone should be avoided. In the case of Zervas, we felt that site constraints required work within the buffer in order to meet program. That said, we also respect the fact that we need to do everything we can to protect the buffer zone, and part of that is minimizing the amount of buffer we disturb. In addition to this, there is a point at which we hit diminishing returns. A great deal of time and money can be spent trying to prove no adverse impacts within 25ft of the wetlands, just to find out that the determination is that we cannot proceed, or cannot prove no adverse impact. That said, a judgment call is often made that when we don’t absolutely have to push into the 25ft line, we don’t do so to prevent using funds for something that may never come to fruition. In the case of Zervas, we needed to work within the buffer zone to meet the program, but we did not need to push past the 25ft mark to achieve our needs. Work within the buffer zone should be avoided when possible, therefore it would reason that the closer you get to the wetlands line, the more this work

should be avoided. The theory that work with 25ft of the wetlands is a "no-go" is based on our experience that proving that there is absolutely no adverse impact to any of the 8 interests is at best a long shot, and potentially impossible.

Our design team has completed all of the necessary surveys to ensure that we are utilizing the site as efficiently as possible. We feel that we have squeezed every square inch of space out of the site, as can be responsibly and reasonable accomplished.

16) **Please provide the date when the School Department made the determination to go from a 450 student Zervas population to a 490 student Zervas population.**

Answer: The 450 enrollment figure was used for planning purposes in the HMFH Long Range Plan of 2007, updated in 2011. In an October 15, 2013 presentation to the School Committee regarding long-range planning the "theoretical" school size of Zervas was listed as 450. Once the Owner's Project Manager for the Zervas project was hired, in Fall 2013, and the project team was complete, the team determined a goal of 24 classrooms to ensure maximum enrollment flexibility. From this period forward, the planned enrollment design capacity was for 490 students in 24 classrooms (4 classrooms per cohort) and a building of approximately 80,000 square feet for the Zervas site. The Zervas site could support more than the 465 students at the Angier site which limited the building to only 75,000 square feet in size and 21 classrooms. At a presentation made to the School Committee on February 24, 2014, the designers included 490 students as a design enrollment to fit to class size guidelines, planned program and the goal of 24 regular education classrooms.

17) **Please provide the date and the minutes of the School Committee where the determination to go from a 450 student Zervas population to a 490 student Zervas population was made.**

Answer: The design enrollment of 490 students was shown in a presentation to the School Committee at their meeting of February 24, 2014.

A link to the minutes is as follows:

http://www3.newton.k12.ma.us/sites/default/files/users/44/minutes%20-%202-24-14_0.pdf

18) **Please provide the date and minutes or presentations made to the community informing them that a decision was made to go from a 450 student Zervas population to a 490 student Zervas population.**

Answer: At the public Zervas School Building Committee Meeting (ZSBC) on February 6, 2014, it was stated that the intent was for the Zervas School to serve more than 450 students. The minutes state:

"NPS noted that the City of Newton has competing needs due to the condition of existing school buildings as well as current and long range enrollment. It was noted that the Angier and Cabot projects have a focus on the building condition and lack of program spaces whereas with the Zervas project the focus is a small school where there would be an opportunity to expand and make a sizeable impact to the community. The intent is that the new Zervas school would servemore than 450 students (with 24 classrooms)."

At the February 27, 2014 ZSBC meeting, the Proposed Space Summary presented at the February 24, 2014 School Committee Meeting was shown with a "Preliminary Zervas 490 Students" as the design enrollment.

The minutes of this meeting state:

"Review Preliminary Program Design Partnership of Cambridge (DPC) presented the prepared the Proposed Space Summary for Zervas, which was presented to the School Committee on 2/24/14. Relative to the Angier program and MSBA guidelines, differences in the Zervas program were highlighted and explained. It was noted that the proposed student enrollment would add approximately 150 students to the current enrollment for the new Zervas Elementary School which equates to 24 classrooms. NPS noted that the desired number of classrooms keeps a pure model of four (4) classrooms/grade. The after school classroom would be full size whereas at Angier it is half size. DPC explained that the sizes of core program areas such as Media Center and the Cafeteria are generated by the total number of students. It was reiterated that the Space Program is the basis for determining the needs for the new building. DPC presented the Proposed Classroom and Site Program slide as it relates to the gross differential from Angier with regard to classrooms, parking andplayground/playfields. "

A link to the ZSBC minutes of 2/6/14 is as follows:

http://zervas.projects.joslinlesser.com/download/meeting_minutes/2014%2002%2006%20ZSBC%20Meeting%20Minutes%20APPROVED.pdf

A link to the ZSBC minutes of 2/27/14 is as follows:

http://zervas.projects.joslinlesser.com/download/meeting_minutes/2014%2002%2027%20ZSBC%20DRC%20Meeting%20Minutes%20APPROVED(2).pdf

A link to the ZSBC presentation on 2/27/14 is as follows:

http://zervas.projects.joslinlesser.com/download/presentations/2014%2002%2027%20ZSBC-DRC%20Presentation.pdf

19) **Please provide information on any "conversations" that have taken place with the Tree Warden regarding the trees on the three properties on Beacon Street.**

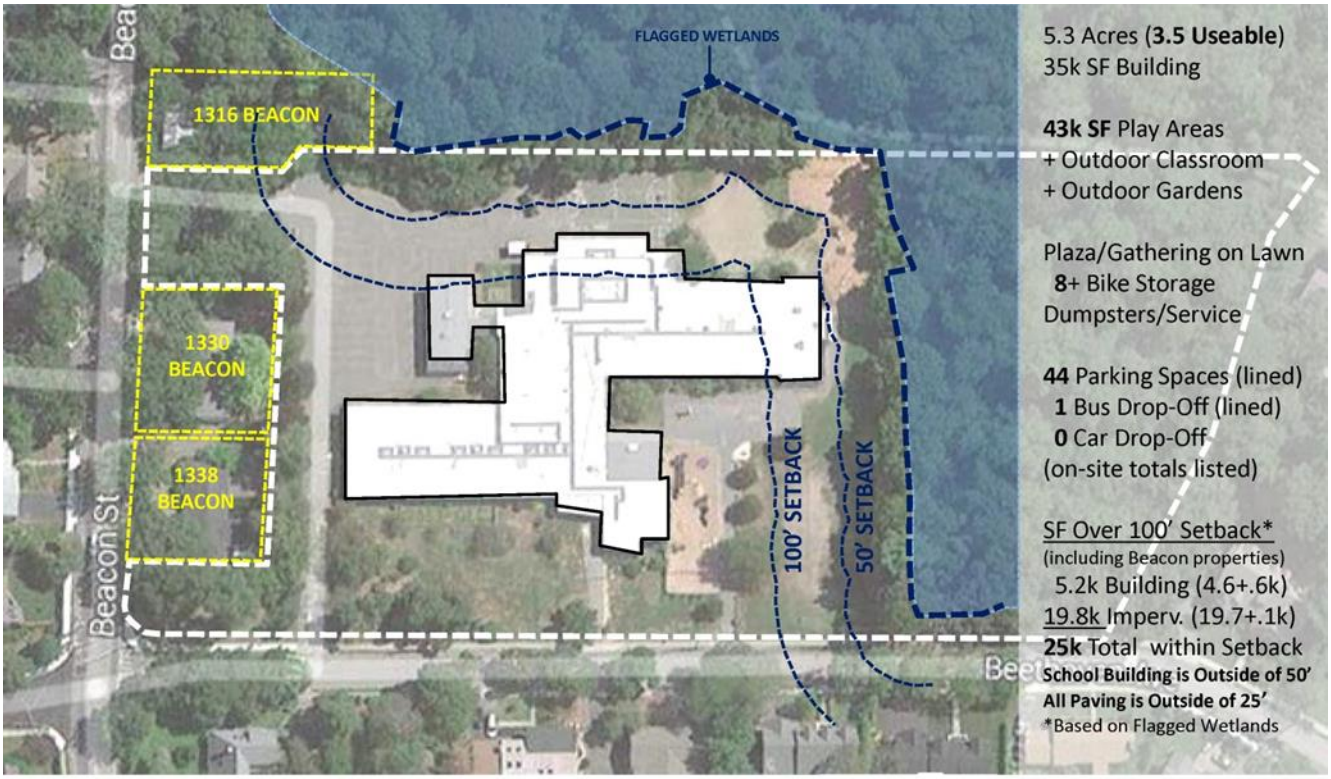
Answer: Early this past summer a conversation was had with the Tree Warden regarding the trees and the Zervas School Project. This included the trees on the existing site, and the trees on the 3 abutting properties. The city's intent is to save as many of the trees as possible, and as such we asked that the Tree Warden help with the inventory, condition analysis, and tree protection plan. Once the vote for the property acquisition occurs, we will be able to complete this work. The plan will be provided once the work is complete.

20) **Please produce the traffic counts/turning movements that were observed in order to conclude that the proposed site plan requires the purchase of the three homes.**

Answer: Although the full traffic study cannot be completed until we know the site layout, we have attached a letter from the traffic consultant that describes the benefits of the property acquisition from their standpoint.

21) Please produce a map delineating the wetland buffer zones including the three properties on Beacon Street.

Answer: A map has been provided below showing the wetlands and buffer zones for the existing site. We will complete the wetland, buffer zone, and site survey of the abutting properties if and when the acquisition is approved. We felt it would be presumptuous to pay to survey the abutting properties prior to a vote to acquire them. The lines shown on our presentations are an estimate based on the information we currently have, and we do not anticipate the survey changing the lines significantly.



EXISTING SITE

22) Please produce the parking study or other information used to conclude the necessity for 75 car parking lot on site.

Answer: Comparable recent elementary school projects are listed below. Additionally please see response to Question #11.

	Parker Elementary School	Freeman Kennedy Centennial School
Location	Billerica, MA	Norfolk, MA
School opened	September 2012	September 2012
# of students	500	585
# of classrooms	24	32
# of parking spaces	92 + 4 HCP	186 + 7 HCP

23) Please produce traffic study or observations used to determine need for cut-in for blue zone. If such cut-in is to be constructed, will the City remove the Do Not Enter restriction and allow the street to be entered during school drop-off and pick-up hours?

Answer: Through many meetings with residents, staff, and public safety personnel we heard an overwhelming need to improve the traffic flow and blue zone on Beethoven Street. The option to widen Beethoven was in response to this need. Any and all traffic mitigation plans will go through the normal public process, involving the traffic council, the BOA, and the public. The full traffic study can be completed as soon as we know what our final site layout will be.

24) I would like to know why a renovation/addition to the Zervas School was ruled out as "not being a viable option" and not "providing for the school's program needs". In addition, I would like to know how much money this renovation/addition would have cost, including the renovation of the current school and the building of a new addition to house more classrooms, gymnasium, cafeteria, etc. Finally, what would have been the total student capacity of a renovation/addition, and what is the total capacity of the proposed new school. I am looking for the capacity, not the projected 490 student enrollment.

Answer: Expanding and renovating the existing Zervas School was one of the first set of options explored. The addition and renovation options (designated A1.4 and A1.4b) were reviewed through a series of successive Committee meetings on Feb 23, March 6 and April 3. At this last meeting, the Committee chose to move forward with several options which did not include the addition and renovation scheme. There were many reasons why new building schemes were chosen over the additions & renovations; chief among these are the following:

- Although the existing building is approximately 35,000 SF, when the modular classrooms are removed and the parts of the building that do not meet the educational program requirements are taken out of consideration, only about 22,000 SF remains. Approximately 56,000 SF then needs to be built new to meet program. This means that, even in the best of circumstances, an additions & renovations scheme that meets the program requirements is over 70% new construction.

- The plan of the existing building uses the site very poorly and divides it into small zones, so that there is no space for large playfields. Even with a renovation & additions plan that is largely new construction, the building plan is still a “pinwheel” plan that divides the site.

- The existing building is over 60 years old and in need of very extensive renovation. When the cost of full systems replacement, replacement of all renewable envelope components (windows, doors, roof), all new finishes, all new provisions for HC accessibility and other requirements are taken into account, the value of what is salvaged is very small.

- Although this option was removed from consideration before detailed cost estimates were done, analysis of the add-reno option on a cost/SF basis strongly suggests that the savings for the add/reno scheme, compared to a comparable all-new scheme, is between 0 and 10%.

- For buildings designed to meet the program identified for Zervas, the building’s educational capacity, whether a new building or a renovation / addition, is 490 students. The building’s capacity from a fire and building code perspective is larger, but this is not a realistic measure of the building’s capacity as a school.

25) **What does the Newton Housing Partnership think of the possible demolition of three homes?**

Answer: Should the Honorable Board vote that the acquisition of the land upon which each of these properties stand is in the public interest in order to build the best project for the citizens of the City of Newton, the administration will be happy to issue a Request for Proposal for any bidders to purchase any one of these properties for the purpose of relocating said property elsewhere in the City.

26) **Does Second Step or any other shelter have any families that are ready to occupy ranch homes?**

Answer: As in the response to #25 above, should the Honorable Board vote that the acquisition of the land upon which each of these properties stand is in the public interest in order to build the best project for the citizens of the City of Newton, the administration will be happy to issue a Request for Proposal for any bidders to purchase any one of these properties for the purpose of relocating said property elsewhere in the City.

27) What branch of the city government will be responsible for moving and maintaining 1316 Beacon Street?

Answer: The Project Team under the supervision of the Public Buildings Department will be responsible for salvage and storage of the timbers from the 1316 Beacon Street property.

28) **How many children from Upper Falls or the Margaret Road section of Newton Highlands attend Countryside?**

Answer: There are two existing Newton Public Schools buffer zones within the Newton Upper Falls neighborhood. As of October 2013, there were 6 students in the Countryside-Zervas buffer zone, a small buffer zone with a section of Circuit Ave south of Boylston Street. Two students in this buffer zone attend Countryside, 1 student attends Zervas and 3 students attend other schools. Margaret Road is parallel to Circuit Ave and in the Zervas district with no students attending Countryside on this street and two students attending Zervas. The larger Countryside – Angier buffer zone has 209 resident elementary school children of which 132 attend Countryside and 63 attend Angier, with a small number of students attending other elementary schools.

29) **How many children from the Buffer Zone east of Countryside attend Bowen?**

Answer: As of October 1, 2013, there were 60 elementary students residing in the Bowen – Countryside buffer zone on the east side of the Countryside district. The majority of those students attend either Bowen or Countryside, although there are some students with out-of-assigned district placements: 12 students attend Bowen and 44 students attend Countryside.

30) How many buses does it take to transport children from Upper Falls to Angier/Carr, Countryside, etc., and what does it cost per year?

Answer: Angier@Carr -$ 79,380 this year for the one bus from Upper Falls to Carr
Countryside - $158,760 this year for the two buses
Total - $238,140 for FY15

The rate will increase over the next two years:
FY16 will be $446 per day for a total of $240,840
FY17 will be $451 per day for a total of $243,540

Please note: the two buses for Countryside complete routes to other schools before and after the Countryside route, so eliminating theses buses would not save the district money.

31) **How many Article 97 approvals of transfer of parks for other uses have been approved by the General Court?**

Answer: The Executive Office of Energy and Environmental Affairs ("EOEEA"), which oversees Art. 97 requests, does not maintain a count of all Art. 97 legislative acts passed by the Massachusetts General Court. However, an informal list kept by EOEEA for calendar years 2007-2012 (which covers 3 terms of the General Court) shows that during those years, approximately 146 Art. 97 requests were approved by the General Court, many of which were for temporary uses such as the Art. 97 approval received by Newton for the 18 month use of the Nahanton Park entrance for Fire Station 10. It is significant that from 2007-2012 none of the Art. 97 requests authorized the use of park/playground lands for school purposes. Staff at EOEEA noted that the stringent requirements for any Art. 97 request imposed by EOEEA's Policy, a copy of which is attached, may account for this fact.

32) How many acres would a large school take on the Braceland Playground? Would it be less than the 8.8 Acres of Open Space that the Upper Falls Greenway will add to the neighborhood?

Answer: As can be seen from the table of state requirements below, many states have adopted a common standard for elementary school sites that would stipulate a site size of 10 acres for a 490 pupil elementary school. Massachusetts had endorsed that standard in the past.

More recently, MSBA has recognized that, with good site design, it is possible to design good schools on smaller sites, and they have eliminated the minimum acreage requirement from their regulations. Their requirements now state:

" The site selected shall be chosen on the basis that it will meet the educational need, maximize the use of any available community resources, and minimize any possible adverse educational, environmental, social, or economic impact upon the community. "

The current plan for the Zervas School meets all requirements of the program within the 4.2 acres available with the acquisition of neighboring properties. This is possible because the site is flat and has proportions that lend themselves to very efficient building footprint and site design. The fact that the building has a three-story classroom wing is part of what makes this possible. Sites with different characteristics might well require more acreage to support the same building and site program.

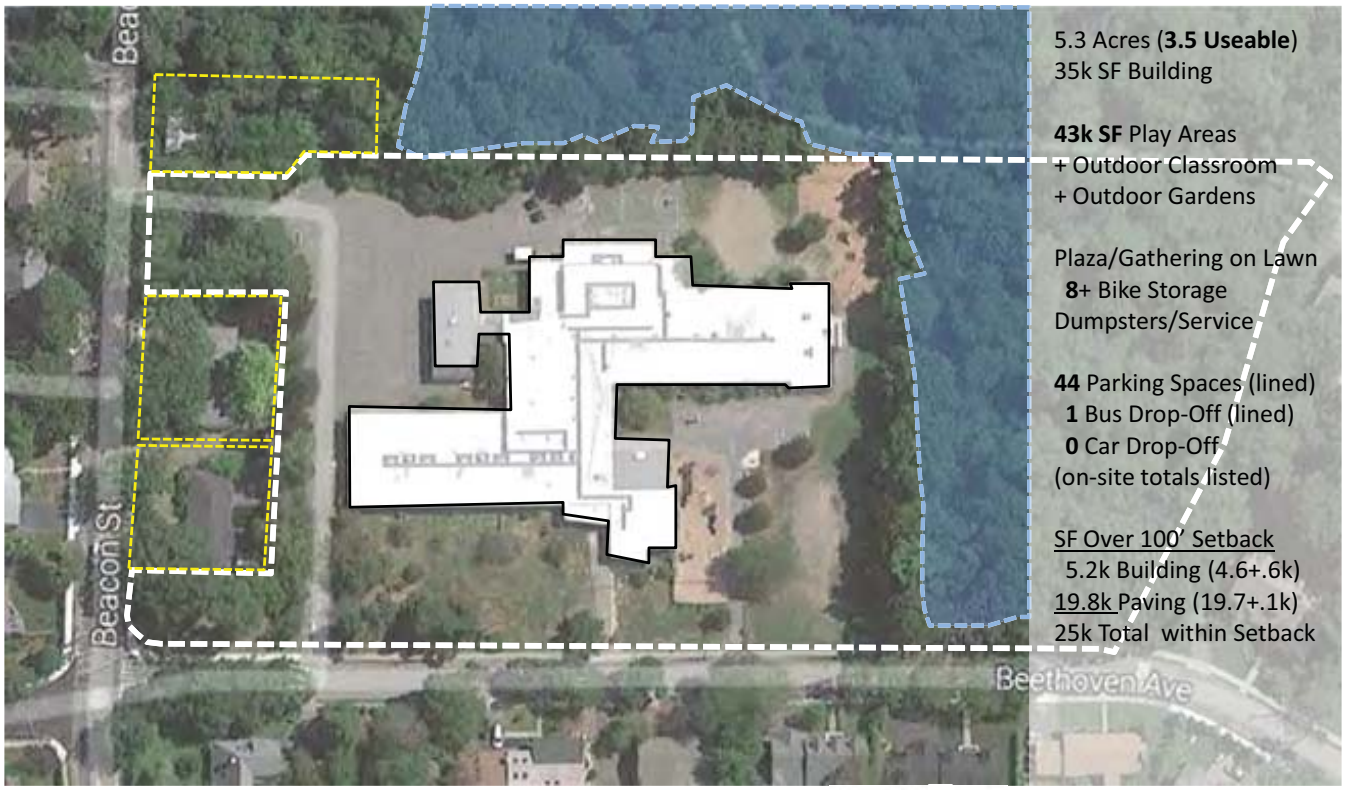
BOARD of ALDERMEN Meeting

Zervas Elementary School – Newton, MA

September 15, 2014

Designpartnership OF CAMBRIDGE

JOSLIN LESSER Project Management



EXISTING AERIAL

Zervas Elementary School – Newton, MA

September 15, 2014

Designpartnership OF CAMBRIDGE

JOSLIN LESSER Project Management

Priority Site Goals:

- **Safety of Students/Pedestrians**
  (Including Separation of Bus and Car Drop Off)
- **Maximize Open Space**
- **Minimize Traffic Impact on Beethoven**
- **Minimize Impact on Abutters**

Site Program: Expanded vs. Non-Expanded

Program Goals	Program	Existing Zervas	Expanded Site	* Without Expansion
Site Acreage		3.5 usable	4.2 usable	3.5 usable
24 Classroom Building SF	78,800 SF	35,000 SF	✓	✓
Shared Building Entry (if walking, driven or bused)	single entry point	✓	✓	X
Staff Parking	80	44	75	52
Separate Bus and Car (Pick-Up and Drop-Off)	4 buses/20+ cars	X	✓	✓
Keep Bus Traffic Off Beethoven	Beacon bus loop	X	✓	X
Entry Plaza + Gathering Space	8K SF	via lawn (8K SF)	✓	2K SF
Playgrounds + Fields	60K SF	43K SF	✓	50K SF
Outdoor Garden + Classroom	2,500 SF	✓	✓	✓
Walker Friendly + Enhanced Pedestrian Paths	separate from cars	X	✓	students cross traffic
Snow Storage	6K SF	4K SF	✓	0 SF
Drainage/Bio-Swales	8K SF	0 SF	✓	0 SF
Minimize Wetland Impact	no pavement within 25' buffer	X	✓	X
Minimize Massing Near Adjacent Properties	100'+ away	126'	115'	75'

LEGEND

meets program
does not meet program

* Based on Option A1.2C

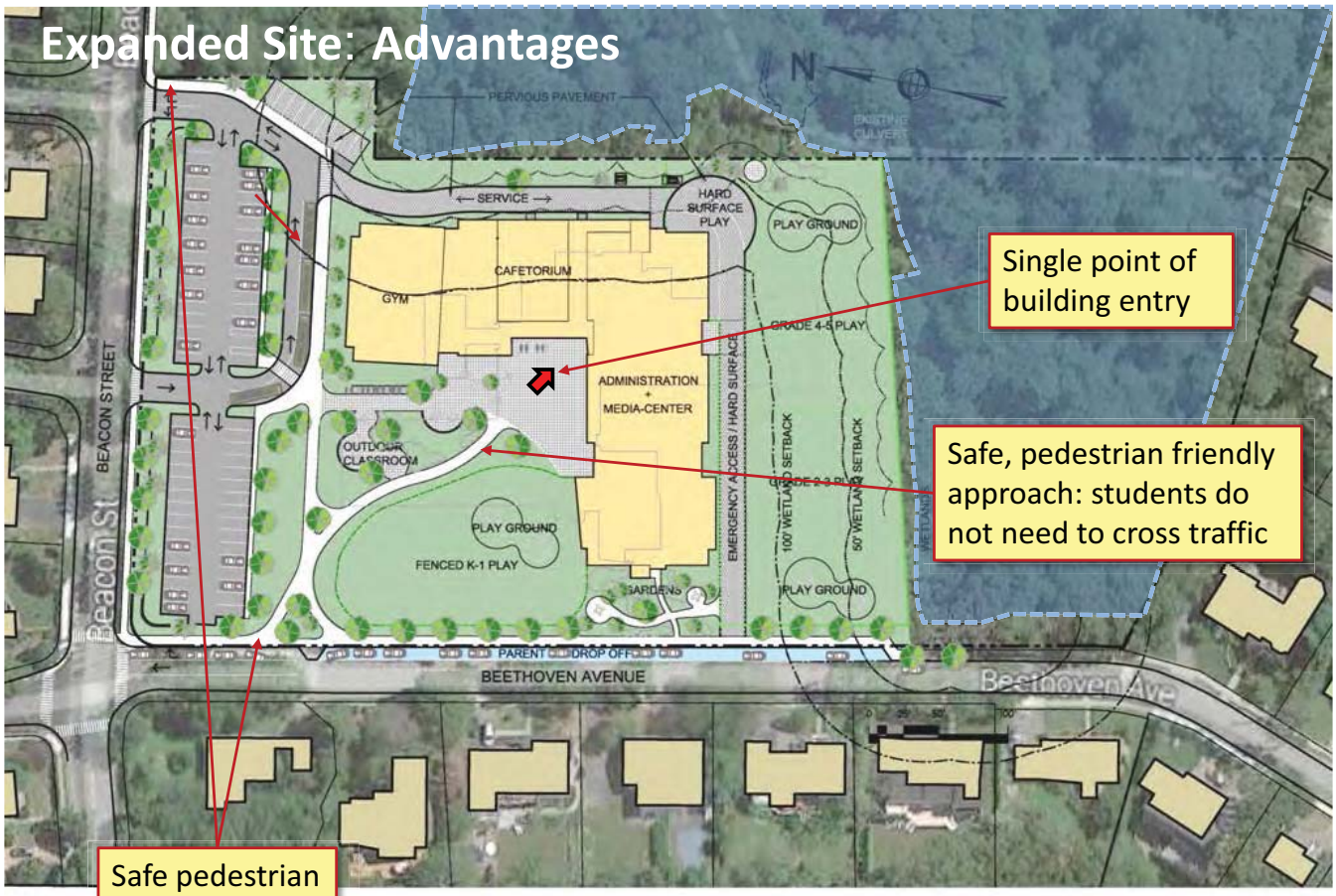
SCHEMATIC DESIGN PROGRESS – SITE PLAN

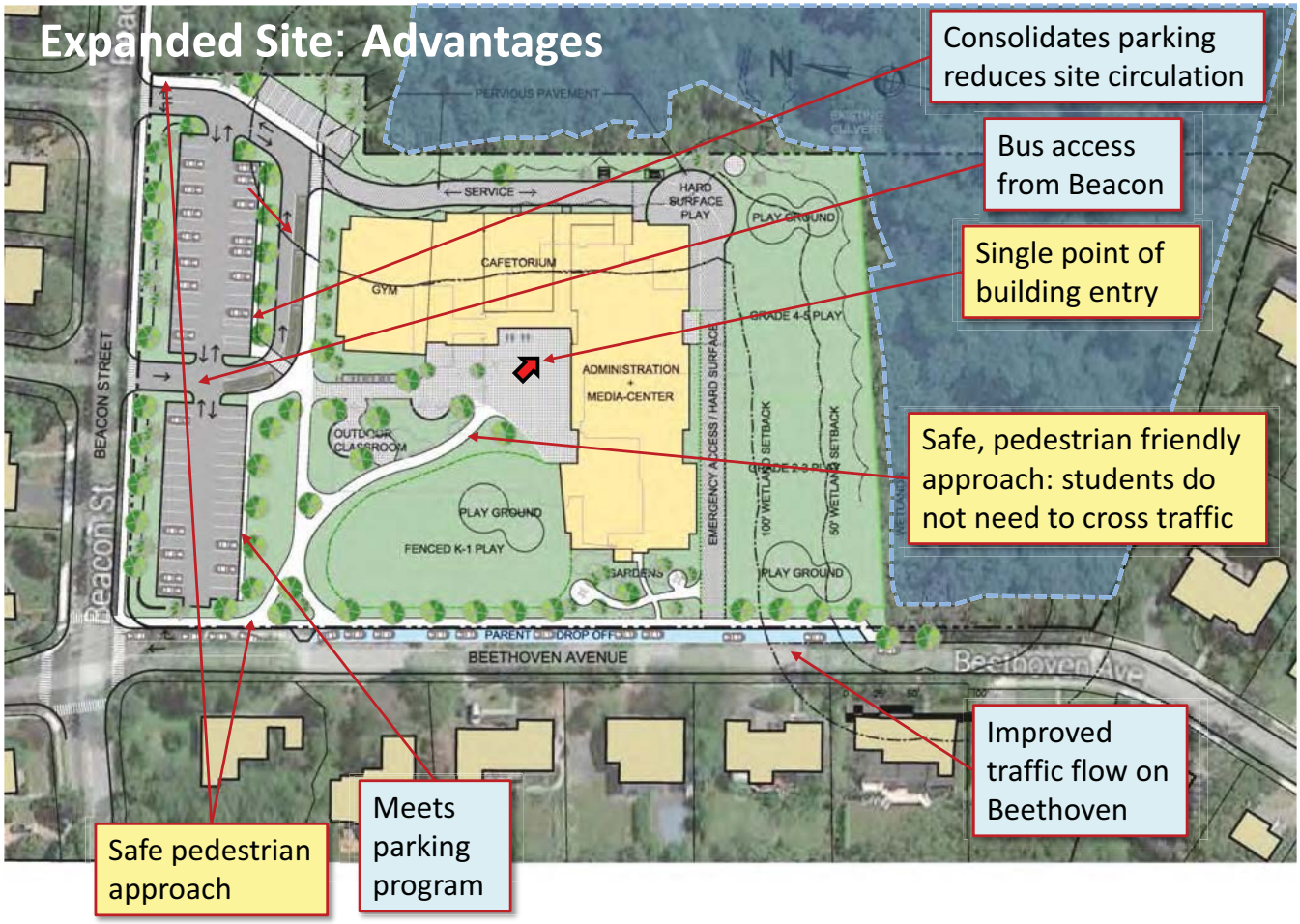
Zervas Elementary School – Newton, MA

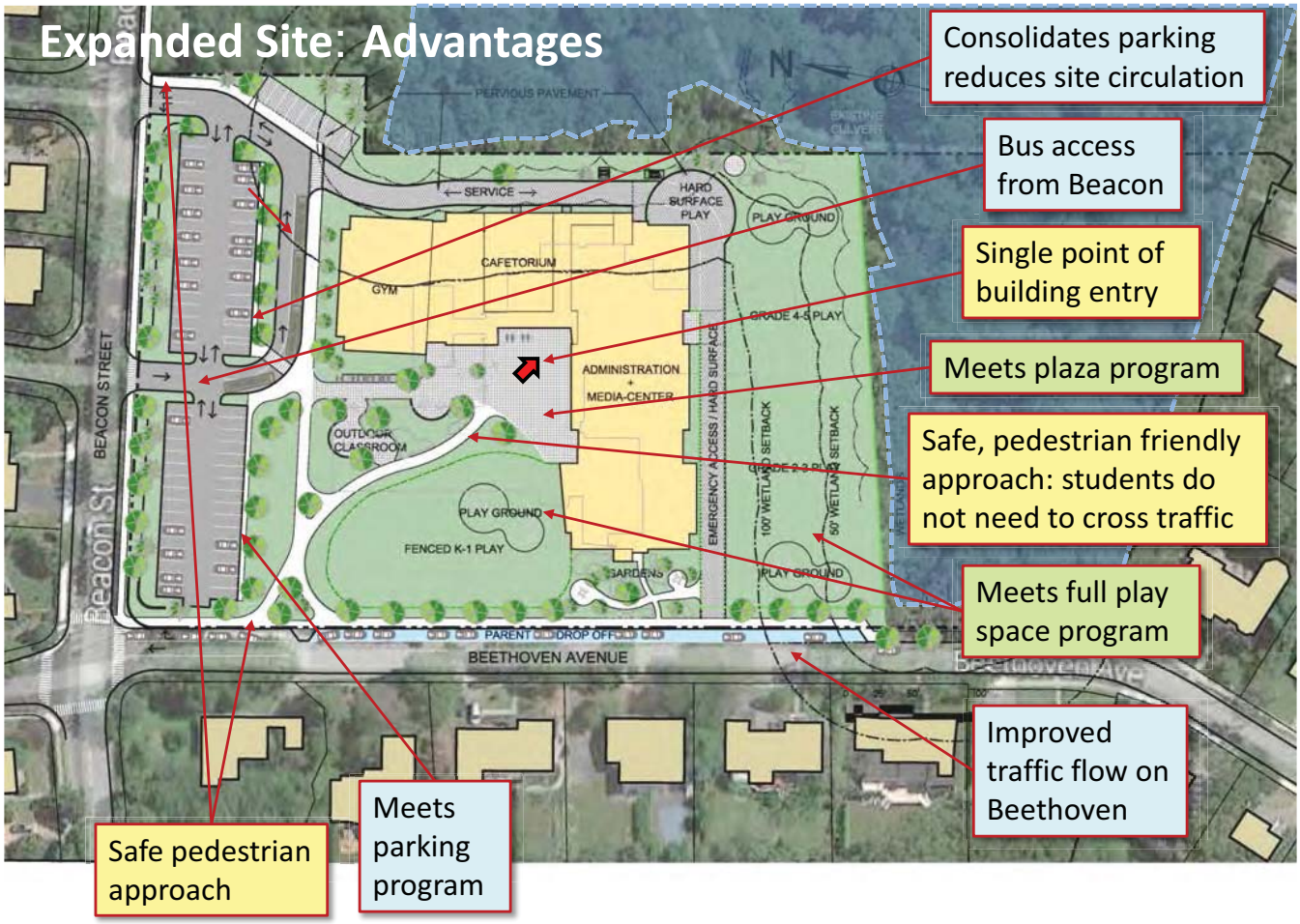
September 15, 2014

Designpartnership OF CAMBRIDGE

BIRCHWOOD DESIGN GROUP




Expanded Site: Advantages
Consolidates parking reduces site circulation
Bus access from Beacon
Single point of building entry
Safe, pedestrian friendly approach: students do not need to cross traffic
Improved traffic flow on Beethoven
Meets parking program
Safe pedestrian approach
PERVIOUS PAVEMENT
SERVICE
HARD SURFACE PLAY
PLAY GROUND
CAFETORIUM
GYM
GRADE 4-5 PLAY
ADMINISTRATION + MEDIA-CENTER
OUTDOOR CLASSROOM
EMERGENCY ACCESS / HARD SURFACE
100' WETLAND SETBACK
50' WETLAND SETBACK
PLAY GROUND
FENCED K-1 PLAY
GARDENS
PARENT DROP OFF
BEETHOVEN AVENUE
BEACON STREET
Beacon St
Beethoven Ave


Expanded Site: Advantages
Consolidates parking reduces site circulation
Bus access from Beacon
Single point of building entry
Meets plaza program
Safe, pedestrian friendly approach: students do not need to cross traffic
Meets full play space program
Improved traffic flow on Beethoven
Meets parking program
Safe pedestrian approach
PERVIOUS PAVEMENT
SERVICE
HARD SURFACE PLAY
PLAY GROUND
CAFETORIUM
GYM
GRADE 4-5 PLAY
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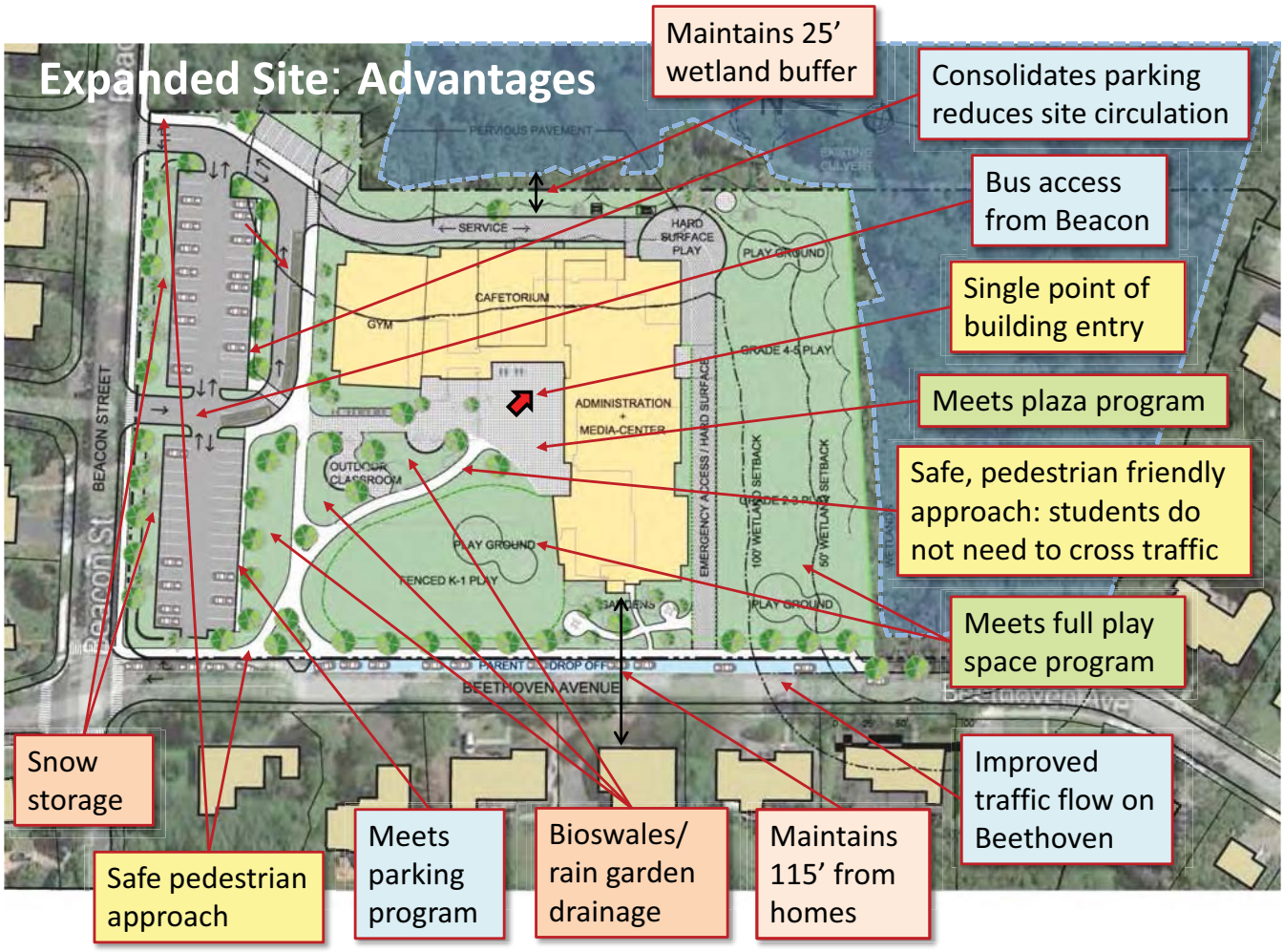
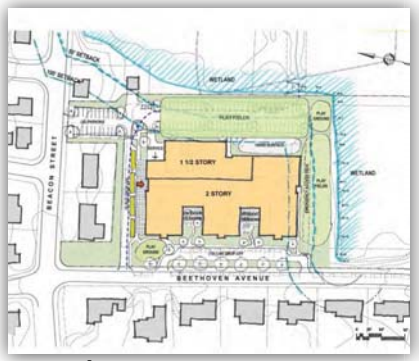


EXISTING SITE STUDIES		SITE PROGRAM ELEMENTS						OTHER NOTES
5.3 acre site (3.5 useable including setbacks)		Play Space	Parking	Car Drop*	Bus Drop	Outdoor Learning	Service	Including Wetland Buffers**
	**EXISTING** Pinwheel Plan	43k square feet	44 lined	0 cars	1 bus	2 (classroom + garden)	2 dumpsters + loading	• Small Scale / 1 to 1-1/2 Story Building • Wetland Buffer Overlaps = 25k SF • West Facing Entry • East/West Classroom Orientation • All Bus & Car Drop-Offs on Street
	**A1.1b** Multi-Wing Plan	50k square feet	20 spaces	10 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• 2 Story Along Beethoven Edge, 1 & 2 Story Behind • Reduced Wetland Buffer Overlap • Hidden / North Entry • Playfields Behind School
	**A1.2b** Elbow Plan - South	50k square feet	36 spaces	0 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• Maintains 1 & 2 Story Building • Increased Wetland Buffer Overlap • North-West Entry • Narrow / Separated Playfields
	**A1.2c** Elbow Plan - North	50k square feet	52 spaces	23 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• Wetland Buffer Overlap = Existing • South-West Entry • 3-Story Adjacent to Neighbors with 1 & 2 Story Caf/Gym Opposite
	**A1.3b** Pinwheel Plan	50k square feet	38 spaces	0 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• Maintains 1 & 2 Story Building • Reduced Wetland Buffer Overlap • North-West Entry • Very Separate Playfields
	**A1.4b** Add/Reno Plan	45k square feet	40 spaces	0 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• Maintains 1 & 2 Story Building • Reduced Wetland Buffer Overlap • South-West Entry • Very Separated Playfields
PROGRAM NEEDS		50-60k	80-95	TBD	4	2	2	

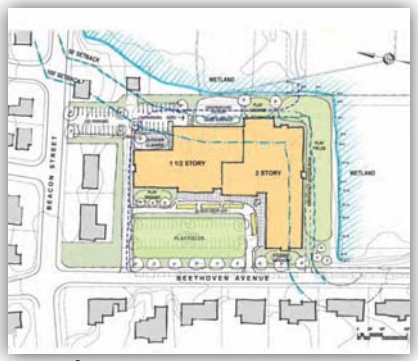
*Car drop-off counts listed are within the property. Additional drop-off/cueing remains along Beethoven Avenue.

** Any work within wetland buffers requires Conservation Commission approval

EXISTING SITE – RANGE of STUDIES:



A1.1b Multi-Wing Plan



A1.2b Elbow Plan - South

A1.2c Elbow Plan - North

A1.3b Pinwheel Plan

A1.4b Add/Reno Plan

Disadvantages:

- Dual Entry/Approach
- Within 25’ of Wetlands
- Within 75’ of Homes
- Minimal Play Space
- Parking Dominant Beethoven
- Bus Access via Beethoven
- Minimal Snow Storage and Bio-Swale Drainage Areas

Site Program: Expanded vs. Non-Expanded

Program Goals	Program	Existing Zervas	Expanded Site	* Without Expansion
Site Acreage		3.5 usable	4.2 usable	3.5 usable
24 Classroom Building SF	78,800 SF	35,000 SF	✓	✓
Shared Building Entry (if walking, driven or bused)	single entry point	✓	✓	X
Staff Parking	80	44	75	52
Separate Bus and Car (Pick-Up and Drop-Off)	4 buses/20+ cars	X	✓	✓
Keep Bus Traffic Off Beethoven	Beacon bus loop	X	✓	X
Entry Plaza + Gathering Space	8K SF	via lawn (8K SF)	✓	2K SF
Playgrounds + Fields	60K SF	43K SF	✓	50K SF
Outdoor Garden + Classroom	2,500 SF	✓	✓	✓
Walker Friendly + Enhanced Pedestrian Paths	separate from cars	X	✓	students cross traffic
Snow Storage	6K SF	4K SF	✓	0 SF
Drainage/Bio-Swales	8K SF	0 SF	✓	0 SF
Minimize Wetland Impact	no pavement within 25' buffer	X	✓	X
Minimize Massing Near Adjacent Properties	100'+ away	126'	115'	75'

LEGEND

meets program
does not meet program

*** Based on Option A1.2C**

EXPANDED SITE STUDIES		SITE PROGRAM ELEMENTS						OTHER NOTES
6.0 acre site (4.2 useable including setbacks)		Play Space	Parking	Car Drop*	Bus Drop	Outdoor Learning	Service	Including Wetland Buffers**
	**EXISTING** Pinwheel Plan	43k square feet	44 lined	0 cars	1 bus	2 (classroom + garden)	2 dumpsters + loading	• Small Scale / 1 to 1-1/2 Story Building • Wetland Buffer Overlaps = 25k SF • West Facing Entry • East/West Classroom Orientation • Bus & Car Drop-Offs on Street
	**A2.1b** Multi-Wing Plan	50k square feet	80 spaces	10 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• 2 Story Along Beethoven, 1 & 2 Story Behind • Reduced Wetland Buffer Overlaps • Hidden / North Entry • Playfields Behind School
	**A2.2b** Elbow Plan - South	50k square feet	80 spaces	15 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• Wetland Buffer Overlap = Existing • North West Entry • Separate Playfields + Rd Crossing • Long / Narrow Service Approach
	**A2.3b** Elbow Plan - North	58k square feet	80 spaces	30 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• 3-Story Along Beacon, 2 Story Behind • Reduced Wetland Buffer Overlaps • South West Entry • Diverts Culvert
	**A2.3c** Elbow Plan - North	50k square feet	80 spaces	30 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• 2 Story • Reduced Wetland Buffer Overlaps • South West Entry • Tight Service & Perimeter Access • Diverts Culvert
	**A2.4** Box Plan	45k square feet	80 spaces	0 cars	4 buses	2 (classroom + garden)	2 dumpsters + loading	• 2 Story along Wetland, 1 Story Front • Wetland Buffer Overlap = Existing • North West Entry • Narrow / Separated Playfields • Building Plan Not Ideal (un-zoned)
PROGRAM NEEDS		50-60k	80-95	TBD	4	2	2	

*Car drop-off counts listed are within the property. Additional drop-off/cueing remains along Beethoven Avenue.

** Any work within wetland buffers requires Conservation Commission approval

EXPANDED SITE – RANGE of STUDIES:

A2.1b Multi-Wing Plan

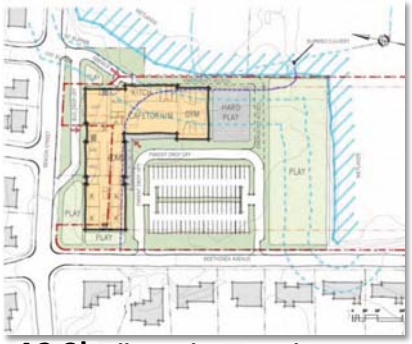
A2.2b Elbow Plan - South

Preferred Option

- Elbow Plan, Open to NW

Variant to be Studied

- Locate Centrally on Site
- Shift Away from Wetland (for contiguous play)
- Shift Back from Beethoven
- Refine Traffic Assessment



A2.3b Elbow Plan - North

A2.3c Elbow Plan - North

A2.4 Box Plan

Zervas Elementary School – Newton, MA

September 15, 2014

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SCHEMATIC DESIGN PROGRESS – SITE PLAN

Zervas Elementary School – Newton, MA

September 15, 2014

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Questions and Answers

SCHEMATIC DESIGN PROGRESS – PRELIMINARY ELEVATIONS

Zervas Elementary School – Newton, MA

September 15, 2014

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VIEW FROM BEACON/BEETHOVEN INTERSECTION

SCHEMATIC DESIGN PROGRESS – PRELIMINARY ELEVATIONS

Zervas Elementary School – Newton, MA

September 15, 2014

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VIEW FROM BEETHOVEN TOWARD BEACON

SCHEMATIC DESIGN PROGRESS – PRELIMINARY ELEVATIONS

Zervas Elementary School – Newton, MA

September 15, 2014

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Staff Parking Estimates

* Part-time staff work a variety of schedules and may be in the building each day for just a portion of the day, therefore needing their own parking spot. Also, some part-time staff overlap with one another (ie: Social Worker and Psychologist may each work 3-4 days a week) so sharing a space may be problematic. Some sharing of spaces is expected but overlap cannot be determined accurately at this point.

Current Enrollment			Projected Enrollment		
Position	Full/Part	# of spots	Position	Full/Part	# of spots
16 teacher	full	13	20 teacher	full	20
Kindergarten	full	3	4 teacher	full	4
4 sped	full	4	5 sped	full	5
1 IF	full	1	1 IF	full	1
1 SW/1 Psych	part *	1 to share	1 SW/1 Psych	part *	2
4 specialists	full	4	4+ specialists	full	4
1 OT/1PT/1 VS	part*	1 to share	1 OT/1PT/1 VS/1 Adap PE	part*	2 to share
2 S/L	part*	1 to share	2 S/L	part*	2
2 ELL	part*	1 to share	2 ELL	part*	2
1 principal	full	1	1 principal	full	1
1 admin asst	full	1	1 admin asst	full	1
1 nurse	full	1	1 nurse	full	1
1 lit spec	full	1	1 lit spec	full	1
1 math coach	part	1	1 math coach	part	1
14 sped aides	full	14	20 sped aides	full	20
1 custodian	full	1	2 custodian	full	2
2 ISS	part*	1 to share	3 ISS	part*	2 to share
1 building aide	part	1 to share	2 building aide	part*	1 to share
1 lunch mgr	part	1	1 lunch mgr	part	1
2 lunch aides	part	2	3 lunch aides	part	3
Other itinerant	part*	1	Other itinerant	part*	2
			1 asst princ	part*	1
Total:			Total:		
59+ staff		56+ spots	81+ staff		79+ spots

Program Comparison

Zervas Elementary	ANGIER / MSBA for 465 STUDENTS			ZERVAS SCHEMATC for 490 STUDENTS		
ROOM TYPE	NFA	QTY	TOTAL	NFA	QTY	TOTAL
CORE ACADEMIC SPACES			**21,450**			**23,300**
Pre-Kindergarten w/ toilet	0	0	0	0	0	0
Kindergarten w/ toilet	1,200	4	4,800	1,200	4	4,800
General Classrooms - Gr. 1-6	925	18	16,650	925	20	18,500
SPECIAL EDUCATION			**5,800**			**5,650**
Self-Contained SPED			0			0
Self-Contained SPED - toilet			0			0
Resource Room			0			0
Small Group Room / Reading			0			0
Substantially Separate Classroom	925	1	925	900	1	900
Learning Centers (K-2 & 3-5)	433	2	866	450	2	900
Breakout Rooms (1 for each grade)	125.3	6	752	125	6	750
ELL Program	240	1	240	150	1	150
OT/PT	450	1	450	450	1	450
Quiet Room (1 per academic floor)	105	2	210	100	2	200
Speech & Language	240	1	240	150	2	300
Reading/Literacy Classroom	925	1	925	900	1	900
Inclusion Facilitators	207	1	207	150	1	150
Literacy Specialist	140	1	140	125	1	125
Math Coach	127	1	127	125	1	125
IEP Conference Rooms	420	1	420	400	1	400
Psychologist (office, testing, therapy & storage)	149	1	149	150	1	150
Social Worker (office, testing & conference)	149	1	149	150	1	150
Intervention Office					0	0
ART & MUSIC			**2,575**			**2,725**
Art Classroom - 25 seats	1,000	1	1,000	1,000	1	1,000
Art Workroom w/ Storage & kiln	150	1	150	150	1	150
Music Classroom / Large Group - 25-50 seats	1,200	1	1,200	1,200	1	1,200
Music Practice / Ensemble	155	1	155	150	2	300
Music Storage	70	1	70	75	1	75
HEALTH & PHYSICAL EDUCATION			**6,300**			**6,300**
Gymnasium	5,997	1	5,997	6,000	1	6,000
Gym Storeroom	198	1	198	200	1	200
Health Instructor's Office w/ Shower & Toilet	105	1	105	100	1	100
MEDIA CENTER			**2,763**			**2,875**
Media Center / Reading Room	2,763	1	2,763	2,875	1	2,875

Zervas Elementary School – Newton, MA
September 15, 2014

Program Comparison

Zervas Elementary	ANGIER / MSBA for 465 STUDENTS			ZERVAS SCHEMATC for 490 STUDENTS		
ROOM TYPE	NFA	QTY	TOTAL	NFA	QTY	TOTAL
DINING & FOOD SERVICE			**6,366**			**6,663**
Cafeteria / Dining	3,025	1	3,025	3,200	1	3,200
Stage	996	1	996	1,000	1	1,000
Chair / Table / Equipment Storage	355	1	355	363	1	363
Kitchen	1,470	1	1,470	1,600	1	1,600
Staff Lunch Room	260	2	520	250	2	500
MEDICAL			**510**			**510**
Medical Suite Toilet	51	1	51	60	1	60
Nurses' Office / Waiting Room	234	1	234	250	1	250
Examination Room / Resting	112.5	2	225	100	2	200
ADMINISTRATION & GUIDANCE			**2,318**			**2,515**
General Office / Waiting Room / Toilet	681	1	681	680	1	680
Teachers' Mail and Time Room	included in General Office			included in General Office		
Duplicating Room	included in General Office			included in General Office		
Records Room	62	1	62	60	1	60
Principal's Office w/ Conference Area	300	1	300	300	1	300
Principal's Secretary / Waiting	included in General Office			included in General Office		
Assistant Principal's Office	125	1	125	125	1	125
Supervisory/Spare Office +After School Pgm	450	1	450	650	1	650
Conference Room	200	1	200	200	1	200
Guidance Office	0	0	0	0	0	0
Guidance Storeroom	0	0	0	0	0	0
Teachers' Work Room	250	2	500	250	2	500
CUSTODIAL & MAINTENANCE			**1,861**			**1,865**
Custodian's Office	130	1	130	125	1	125
Custodian's Workshop	0	0	0	0	0	0
Custodian's Storage	141	2	282	120	2	240
Custodian's Storage	185	1	185	200	1	200
Recycling Room / Trash	655	1	655	650	1	650
Receiving and General Supply	included in Recycling Room			included in Recycling Room		
Storeroom	176	2	352	200	2	400
Network / Telecom Room	257	1	257	250	1	250
Total Building Net Floor Area (NFA)			**49,943**			**52,403**
Total Building Gross Floor Area (GFA)^2			**74,960**			**78,800**
Grossing factor (GFA/NFA)			**1.50**			**1.50**

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Recommended Minimum Size of School Sites and Formula for Additional Acres by States and Type of School

State	Elementary Schools		Secondary Schools	
	Minimum (acres)	Formula or comment for additional acreage	Minimum (acres)	Formula or comment for additional acreage
(1)	(2)	(3)	(4)	(5)
Alabama	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Arizona	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Arkansas*	10	For 360 pupils; 1 extra for each additional 100 pupils.	25	For 500; higher enrollments, 40 acres.
California*	5	Plus an additional acre for each 100 pupils.	30	Plus an additional acre for each 100 pupils.
Colorado*	5	Plus 1 acre for each 100 pupils maximum enrollment.	15	Plus 1 acre for each 100 maximum enrollment.
Connecticut	5	Plus an additional acre for each 100 pupils.	10	Too low; might well be 20 acres.
Delaware*	5	Plus an additional acre for each 100 pupils.	5	Plus an additional acre for each 100 pupils.
District of Columbia	5	. . . . .	7	For junior high; 10–15 for senior high.
Florida*	2	Plus an additional acre for each 50 pupils.	2	Plus an additional acre for each 50 pupils.
Georgia	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Idaho*	5	Plus 1 usable acre for each additional 100 pupils.	10	Plus 1 usable acre for each 100 additional pupils.
Illinois*	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Indiana	7	Up to 200 pupils; plus 1 for each 100 pupils.	12	Up to 300 pupils, plus 1 acre for each 100 pupils.
Iowa	4	Average 4–5 acres; recommend	20	Recommend 30–40 acres

		5 acres up.		according to enrollment.
Kansas	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Kentucky	5	For small, 10 for large, plus 1 for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Louisiana	5	Plus 1 acre for each 100 pupils; 7 for each 200 pupils.	10	Plus 1 acre for each 100 pupils; 15 for each 500 pupils.
Maine	5	Plus 1 acre for each 100 pupils; 7 for each 200 pupils.	10	Plus 1 acre for each 100 pupils; 15 for each 500 pupils.
Maryland	8	Local board decision. 10 acres suggested.	20	For junior high; 30 for senior high.
Massachusetts	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Michigan	. . .	No rule-of-thumb formula. Guide to approximate space needs is provided by State department. Larger areas required where community colleges are included in programs.		
Minnesota	8–10	For K–6; 10–12 acres for K-12.	20–25	For junior high; 30–40 for senior high or combination.
Mississippi	5	Plus an additional acre for each 100 pupils.	15	Plus an additional acre for each 100 pupils.
Missouri	5	Should range from 5–10 or more acres.	10	Should range from 10–30 or more acres.
Montana*	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Nebraska*	10–15	Procure new sites for over 300 pupils or two K–6 units.	30–40	New sites for junior-senior, or for either over 700 pupils.
Nevada*	5	Usable acres plus 1 for each 100 pupils.	20	Usable acres for junior high, 30 for senior high; plus 1 acre for each 100 pupils.
New Hampshire	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
New Jersey	5	Plus an additional acre for each 100 pupils.	20	Plus an additional acre for each 100 pupils.

New Mexico	15	No formula established.	30	No formula established.
New York	5	Plus an additional acre for each 100 pupils.	10	Plus 2 acres for each 100 pupils up to 500; plus 1 acre for each 100 pupils over 500.
North Carolina	10	For 200–400; 12 for 500–600; 15 acres for 800.	12	For 299–400 pupils; 14 for 500; 16 for 600; 20 for 800: 24 for 1,000; 26 acres for 1,200.
North Dakota	5	For 200 pupils, 7 acres; 8 for 300; 9 for 400; 15 for 1,000 pupils.	10	Plus an additional acre for each 100 pupils.
Ohio	5	Plus 1 acre for each 100 ultimate enrollment.	10	Plus 1 acre for each 100 ultimate enrollment.
Oklahoma*	5	Plus 1 acre for each 100 pupils ultimate enrollment.	10	Plus an additional acre for each 100 pupils.
Oregon	5	Plus 1 acre for each 100 pupils (6 acres for 100).	10	Plus an additional acre for each 100 pupils.
Pennsylvania	8–12	Urban; rural, 10–14; suburban, 18–20.	20–25 30–40	Junior high urban; rural, 20; suburban 25–30. Senior high urban; suburban and rural, 40–45.
Rhode Island*	5	Plus an additional acre for each 75 pupils.	25	Plus an additional acre for each 75 pupils.
South Carolina*	10	For 500 pupils maximum, plus 1 acre for each 100.	10	Plus an acre for each 100 pupils.
South Dakota*	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Tennessee	4	For grades 1–8, plus 1 acre for each 100 pupils.	8	For grades 7–12 or 12 grades, plus an additional acre for each 100 pupils.
Texas	5	Plus an additional acre for each 100 pupils.	15	Plus an additional acre for each 100 pupils.
Utah*	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Vermont	5	For 100 pupils; 7 1/2 for 200; 10 for 300; 11 for 500; 12–13 for 700; 17 for 1,200.	10	Plus an additional acre for each 100 pupils.
Virginia	3	For grades 1–3; grades 1–7, 4;	10	Plus an additional acre for each

		plus 1 for each 100 pupils.		100 pupils.
Washington*	5	Plus an additional acre for each 100 maximum enrollment.	10	Plus 1 acre for each 100 maximum enrollment.
West Virginia	5	Plus an additional acre for each 100 pupils.	10	Plus an additional acre for each 100 pupils.
Wisconsin*	5	Plus an additional acre for each 100 pupils.	15	Plus an additional acre for each 100 pupils.
Wyoming*	. . .	No minimums established.	. . .	No minimums established.
Alaska*	5	Recommend an additional acre for each 100 pupils over original capacity.	10	Recommend an additional acre for each 100 pupils over original capacity.
Puerto Rico*	1 1/2–2	For 8–24 classroom buildings.	4 1/2–5	For 8–24 classroom buildings.

*Information obtained from State school building handbooks, except in States followed by an asterisk (*) which indicates that information was obtained from responses to questionnaires.

Source: Taylor, James L., *School Sites; Selection, Development and Utilization*, U. S. Department of Health, Education, and Welfare, 1958, pp. 37–39.

Table 2 shows minimum standards for school site size recommended by various local planning agencies and school authorities. Since the March 1952 ASPO Planning Advisory Service Information Report No. 36, *Planning for School Capacities and Locations*, there have been some changes in the minimum area requirements. The earlier report stated:

Although acreage is related to size of school enrollments, most authorities say that the minimum land area requirement for elementary schools is five acres, with an additional acre for each one hundred pupils of ultimate enrollment. Secondary schools should have a minimum of ten acres, plus an additional acre for each one hundred pupils of ultimate enrollment.

Although elementary school standards for minimum site size have not changed appreciably during the past decade, those for junior and senior high schools have increased rather dramatically, in some cases 100% over what they were in 1952. The recommended size of junior high sites ranges from 10 to 20 acres, with the median being 15 acres; recommended senior high sites range from 20 to 30 acres, with the median being 25 acres. The standard formula of one additional acre for each one hundred pupils of ultimate enrollment applies for both junior and senior high schools.

33) I understand that expanding Zervas is part of NPS's long range plan of dealing with capacity issues at the elementary level by increasing the size of many of our current schools rather than doing fewer expansions and constructing an additional elementary school. Has there been a financial analysis comparing these two paths? Expanding numerous schools carries costs, including increased busing costs, and constructing a new school carries its own set of costs. It would be instructive to see a rigorous analysis if one has been done.

Answer:

Operating Budget Analysis:

On average for the district, the gross annual operating budget impact of adding an additional elementary school is $3.9 million in FY15 dollars. The incremental annual operating budget of adding the additional school is 16% of $3.9 million, or $625,000. Eighty-four percent of

operating expenses exist whether or not a new school is constructed and include instructional and support staff as well as per pupil expenditures. The 16% incremental cost is based on an historical analysis of the expenses which would result from adding an elementary school; expenses include a principal, secretary, two custodians, utilities and building maintenance supplies. The addition of $625,000 in annual operating budget costs with another elementary school could require an equivalent budget reduction.

School Expansion Considerations:
The elementary school long-range plan is meant to accommodate growing student enrollment; however, the plan equally addresses updating the functionality of the schools as well as replacing temporary modular classrooms. The elementary school long-range plan includes expansion/renovation of elementary schools due to programmatic needs which cannot be met due to configuration constraints. Most schools do not have sufficient instructional spaces for art, music, special education, library, information technology and ELL services as well as proper facilities for lunch, auditorium venues, and after school programs. Replacement/renovation/expansion projects are necessary to replace modular classrooms in six schools including Zervas, Cabot, Countryside, Mason-Rice, Bowen and Burr.

Capital Budget Analysis:
The cost of a new school is $37.5 million to $45 million in FY15 dollars, or approximately the same as the renovation of four schools @ $10 million to $11 million each. For equivalent dollars, the funds can be used to upgrade four schools in lieu of building one new one.

34) What is the goal for average # of students per class at the new Zervas in the near future?

Answer: The goal for average number of students per class at the new Zervas includes 24 core academic spaces, of which four are Kindergarten classrooms and 20 are General Classrooms for grades 1-5. Assuming average enrollments in Kindergarten of 18 students, Grade 1-2 classrooms of 20 students and Grade 3-5 with 22 students, the core academic classrooms are planned to serve 490 students.

Designpartnership
OF CAMBRIDGE

September 14, 2014

Joshua R. Morse,
Public Buildings Commissioner
Public Buildings Department
City of Newton

HOOD BUSINESS PARK
500 RUTHERFORD AVENUE
CHARLESTOWN, MA 02129

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Project : Zervas Elementary School, Newton
Re: Beneficial traffic impacts of acquiring properties on Beacon Street

Dear Commissioner Morse,

Attached is a memorandum from our Traffic Consultant, Judith Nitsch Engineering, describing their analysis of the traffic improvements that can be achieved through the acquisition of the three Beacon Street properties abutting the Zervas School site.

As regards the completion of a traffic study for the project, our Traffic Consultant has been involved early and often in the feasibility and schematic design phase of the Zervas School Project. They have already made recommendations such as signal optimization, loop repair, and other infrastructure investments based on the observed traffic flow on Beacon and Beethoven Streets. They have analyzed the impact of different site configurations and features to determine the best site distribution to maximize the safety for students, staff, parents, and the community as a whole.

A comprehensive traffic study is part of any project of this nature and size. However, until the determination of acquisitions can be finalized, the final site layout cannot be achieved, and the potential therefore exists for a variation in the entrances, exits, and general site distribution. Therefore, the complete traffic study would not be completed until the site configuration can be determined. This would of course be done prior to Newton's 5-58 Site Plan Approval process, and all traffic recommendations would be vetted through community, council, and committee meetings.

I hope this memorandum sufficiently addresses concerns. Please let me know if more information is required in this matter,

Regards,

DESIGN PARTNERSHIP OF CAMBRIDGE

David R. Finney, AIA LEED AP
President

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MEMORANDUM

TO: Joseph Drown, AIA, NCARB

FROM: Jeffrey T. Bandini, PE, PTOE, LEED Green Associate

DATE: September 12, 2014

RE: Zervas School Adjacent Properties Nitsch Project #10023.1

INTRODUCTION

Nitsch Engineering has been retained by Design Partnership of Cambridge to assess the traffic impacts of several proposed alternatives for redevelopment of the existing Zervas School, located at 30 Beethoven Avenue, located in the village of Waban in Newton, Massachusetts.

Several proposed Zervas School redevelopment alternatives included the acquisition of properties bound by the south side of Beacon Street, the west side of Beethoven Avenue and the existing Zervas School site to the east in order to increase the redevelopment area and provide a contiguous area located to the southeast of the intersection of Beacon Street at Beethoven Avenue.

BENEFITS OF ADJACENT PROPERTY ACQUISITION

Nitsch Engineering offers the following benefits of acquiring the adjacent properties for inclusion within the redevelopment of the existing Zervas School.

Site Access and Egress

Acquiring the adjacent properties would allow placement of site access and egress in the optimal location with respect to the existing location of City of Newton zoning requirements, adjacent roadways, driveways, utilities and other site characteristics.

Parking

Acquiring the adjacent properties would provide adequate parking on-site for school employees, visitors and space for snow storage. As noted previously, the existing Zervas School site does not provide adequate employee and visitor parking and space for snow storage.

Beethoven Avenue Pick-Up/Drop-Off

Acquiring the adjacent properties would allow for the widening of Beethoven Avenue on its east side from the southern border of the Zervas School site all the way to the intersection with Beacon Street. Widening the roadway would provide a dedicated pick-up/drop-off “Blue Zone” that does not overlap with the traffic operations along Beethoven Street. As noted previously, vehicles frequently “double-park” during the pick-up/drop-off periods, making it more difficult for through vehicles to access Beacon Street, causing significant delays and contribute to driver frustration.

This widening would also allow for the inclusion of a dedicated right-turn lane north of the “Blue Zone” along the Beethoven Street approach to the Beacon Street intersection, which would reduce vehicle delay at Beacon Street at Beethoven Avenue intersection.

Pedestrian

Acquiring the adjacent properties would provide the extra width for the ability to include extra wide pedestrian paths between the southeast corner of the intersection of Beacon Street at Beethoven Avenue to the school entrance, making the site and environs more walkable.

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COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS

EOEA ARTICLE 97 LAND DISPOSITION POLICY
FEBRUARY 19, 1998

I. Statement of Policy

It is the policy of EOEA and its agencies to protect, preserve and enhance all open space areas covered by Article 97 of the Article of Amendment to the Constitution of the Commonwealth of Massachusetts. Accordingly, as a general rule, EOEA and its agencies shall not sell, transfer, lease, relinquish, release, alienate, or change the control or use of any right or interest of the Commonwealth in and to Article 97 land. The goal of this policy is to ensure no net loss of Article 97 lands under the ownership and control of the Commonwealth and its political subdivisions. Exceptions shall be governed by the conditions included in this policy. This policy supersedes all previous EOEA Article 97 land disposition policies.

An Article 97 land disposition is defined as a) any transfer or conveyance of ownership or other interests; b) any change in physical or legal control; and c) any change in use, in and to Article 97 land or interests in Article 97 land owned or held by the Commonwealth or its political subdivisions, whether by deed, easement, lease or any other instrument effectuating such transfer, conveyance or change. A revocable permit or license is not considered a disposition as long as no interest in real property is transferred to the permittee or licensee, and no change in control or use that is in conflict with the controlling agency's mission, as determined by the controlling agency, occurs thereby.

II. Conditions for Disposition Exceptions

EOEA and its agencies shall not support an Article 97 land disposition unless EOEA and its agencies determine that exceptional circumstances exist. A determination of 'exceptional circumstances" is subject to all of the following conditions being met:

1. all other options to avoid the Article 97 disposition have been explored and no feasible and substantially equivalent alternatives exist (monetary considerations notwithstanding).
   Note: The purpose of evaluating alternatives is to avoid using/affecting Article 97 land to the extent feasible. To that end, the scope of alternatives under consideration shall be commensurate with the type and size of the proposed disposition of Article 97 land, and must be performed by the proponent of the disposition to the satisfaction of EOEA and its agencies. The scope of alternatives extends to any sits that were available at the time the proponent of the Article 97 disposition first notified the controlling agency of the Article 97 land, and which can be reasonably obtained: (a) within the appropriate market area for private proponents, state and/or regional entities; or (b) within the appropriate city/town for municipal proponents.
2. the disposition of the subject parcel and its proposed use do not destroy or threaten a unique or significant resource (e.g., significant habitat, rare or unusual terrain, or areas of significant public recreation), as determined by EOEA and its agencies;

3. as part of the disposition, real estate of equal or greater *fair market value* or *value in use of proposed use*, whichever is greater, and significantly greater resource value as determined by EOEA and its agencies, are granted to the disposing agency or its designee, so that the mission and legal mandate of EOEA and its agencies and the constitutional rights of the citizens of Massachusetts are protected and enhanced;
4. the minimum acreage necessary for the proposed use is proposed for disposition and, to the maximum extent possible, the resources of the parcel proposed for disposition continue to be protected;
5. the disposition serves an Article 97 purpose or another public purpose without detracting from the mission, plans, policies and mandates of EOEA and its appropriate department or division; and
6. the disposition of a parcel is not contrary to the express wishes of the person(s) who donated or sold the parcel or interests therein to the Commonwealth.

III. Procedures for Disposition

Although legislation can be enacted to dispose of Article 97 land without the consent of an EOEA agency, it is the policy of EOEA to minimize such occurrences. To that end, and to ensure coordination, EOEA agencies shall:

1. develop an internal review process for any potential Article 97 land disposition to ensure that, at a minimum, the conditions in Section II above are met;
2. develop, through the Interagency Lands Committee, a joint listing of all requests, regardless of their status, for the disposition of Article 97 land;
3. notify the Interagency Lands Committee of any changes to the Article 97 land disposition list;
4. monitor all legislation that disposes of Article 97 land, and communicate with legislative sponsors regarding their intent;
5. recommend to the Secretary that the Governor veto any legislation that disposes of Article 97 land, the purchase, improvement, or maintenance of which involved state funds, on and for which the EOEA agency has not been consulted and received documentation (including information on title, survey, appraisal, and a MEPA review, all at the proponent's expense);
6. obtain the concurrence of the Secretary of EOA for any proposed Article 97 land disposition decision prior to finalizing said decision;
7. if recommending an Article 97 disposition, attach to all Article 97 legislative recommendations and TR-1 forms a justification of the disposition and an explanation of how it complies with this policy, signed by the EOEA agency head;
8. ensure that any conditions approved by EOEA and its agencies to any Article 97 land disposition are incorporated within the surplus declaration statement submitted to and published by DCPO as required by M.G.L. C. 7, §40F and 40F1/2 and throughout the disposition process, and if such conditions are not incorporated in said statement throughout the disposition process, the EOEA agency head shall recommend to the Secretary that the Governor veto any resulting legislation;
9. recommend to the Secretary that the Governor veto legislation that disposes of Article 97 land of which the agency disapproves; and

10. ensure that any Article 97 land disposition is authorized by enacted legislation and approved by all municipal, state and federal agencies, authorities, or other governmental bodies so required and empowered by law prior to conveyance.

IV. Applicability of the Policy to Municipalities

To comply with this policy, municipalities that seek to dispose of any Article 97 land must:

1. obtain a unanimous vote of the municipal Conservation Commission that the Article 97 land is surplus to municipal, conservation and open space needs;
2. obtain a unanimous vote of the municipal Park Commission if the land proposed for disposition is parkland;
3. obtain a two-thirds Town Meeting or City Council vote in support of the disposition;
4. obtain two-thirds vote of the legislature in support of the disposition, as required under the state constitution;
5. comply with all requirements of the Self-Help, Urban Self-Help, Land and Water Conservation Fund, and any other applicable funding sources; and
6. comply with EOEA Article 97 Land Disposition Policy [note: the municipality must also file an Environmental Notification Form with EOEA's MEPA office].

After the effective date of this policy, any municipality that proposes, advocates, supports or completes a disposition of Article 97 land without also following the terms of this policy, regardless of whether or not state funds were used in the acquisition of the Article 97 land, shall not be eligible for grants offered by EOEA or its agencies until the municipality has complied with this policy. Compliance with this policy by municipalities shall be determined by the EOEA Secretary, based on recommendations by the EOEA Interagency Lands Committee.

Trudy Coxe, Secretary
Executive Office of Environmental Affairs