JOSLIN, LESSER + ASSOCIATES, INC.

Zervas Elementary School - Newton, MA

Zervas School Building Committee and Design Review Committee Joint Meeting

Tuesday, February 24, 2015

Newton Ed Center, Room 304

6:00PM

Agenda

- 1. Approval of ZSBC+DRC Joint Meeting Minutes October 9, 2014
- 2. Design Development Update
 - Schedule
 - Parks & Recreation Update
 - Site Plan, Floor Plans & Elevations
 - LEED Checklist
- 3. Public Comment
- 4. ZSBC+DRC Comment
- 5. Other Business
- 6. Upcoming Anticipated Meetings for Discussion

03/04/15 or 03/11/15	DRC Meeting	Location TBD	6:00PM
03/19/15	Conservation Commission	City Hall	7:00PM
03/25/15	DRC Meeting	Newton Library	6:00PM
04/02/15	Zervas Working Group (DD Cost Review)	City Hall (Rm TBD)	8:45AM
04/06/15	BOA+SC Joint Meeting	City Hall	7:45PM
04/07/15	Public Forum	Zervas Elementary School	Time TBD
04/09/15	ZSBC+DRC Joint Meeting	Newton Ed Center, Rm 210	7:30PM



ZERVAS SCHOOL BUILDING COMMITTEE (ZSBC) & DESIGN REVIEW COMMITTEE (DRC) JOINT MEETING

MEETING MINUTES

Newton Ed Center, Room 210

October 9, 2014

6:00 PM



ATTENDEES:

NAME	ZSBC	PRESENT	NAME	ASSOCIATION	PRESENT		
Diana Beck	ZSBC	Υ	Peter Barrer	DRC	Υ		
Arthur Cohen	ZSBC, DRC		William Eldredge	DRC			
Deb Crossley (Alderman)	ZSBC, DRC	Υ	Robert Franchi	DRC	Υ		
Diana Fisher Gomberg	ZSBC	Υ	Tom Gloria	DRC	Υ		
David Fleishman	ZSBC		James Freas	DRC			
Ruthanne Fuller (Alderman)	ZSBC	Υ	Jonathan Kantar	DRC	Υ		
Sandra Guryan	ZSBC, DRC	Y	Andrea Kelley	DRC			
Maureen Lemieux (CFO)	ZSBC		Ellen Light	DRC	Υ		
Joshua Morse (NPB)	ZSBC, DRC	Y	Marc Resnick	DRC			
Chris Neal	ZSBC	<u> </u>	Eve Tapper	DRC			
Nicholas Read	ZSBC		Caroline Wilson	DRC	Υ		
John Rice (Alderman)	ZSBC	Υ					
Margie Ross Decter	ZSBC	Y	Jeffery Luxenberg	JLA			
Steven Siegel	ZSBC, DRC	Y	David Krawitz	JLA	Υ		
Anne Snelling Lee	ZSBC	Y	Melissa Gagnon	JLA	Υ		
Setti Warren, Mayor	ZSBC						
Dori Zaleznik	ZSBC	Υ	Dave Finney	DPC			
			Robert Bell	DPC	Υ		
Carol Chafetz	NPS	Υ	Joe Drown	DPC	Υ		
Mike Cronin	NPS	Υ					
Ouida Young (Law Dept)	CITY	Υ	Jonathan Yeo	ZWG			

Newton Public Schools called the meeting to order at 6:15PM.

1. Approval of Minutes from the July 31, 2014 ZSBC+DRC Joint Meeting

MOTION: D. Fisher Gomberg moved, seconded by R. Fuller, that the July 31, 2014 meeting minutes be approved. **The vote was unanimous.**

2. Schematic Design Update

It was noted that Schematic Design represents development of the design to a reasonable level of detail. The building will be generally in its current location with some adjustments, refining and adding layers of definition in detail. The design team will work around existing trees and traffic studies. Newton Public Buildings indicated that the City is not trying to indicate that a traffic solution has been determined. The

traffic plan will be vetted through a public process. Sidewalks, parking spaces, drop off and pick up will all be refined to flow and function in the best way feasible. It was noted that the Design Review Committee (DRC) will make a recommendation to the Board of Aldermen for 5-58 Site Plan Approval. Before the BOA will vote to recommend for 5-58, by the end of this month the design team will have finalized the traffic study and submitted for review. In addition, the project is on the agenda to be reviewed by Newton Historic Commission and Conservation Commission on October 23 and October 30 respectively. It was also noted that based on the two independent SD cost estimates performed last month, the project is on budget.

DRC Comment

A DRC member noted that sustainable design elements are not locked in at this time. Coordination with the Conservation Commission and tree preservation are also not finalized at this time. These items will be delved into further. With regard to tree preservation, NPB noted that trees will be studied according to what the best trees are to preserve, maintaining tree diversity and in terms of what trees will survive protection during construction.

Public Comment

Srdjan Nedeljkovic, of the NHNAC, noted the following points with regard to the current design:

- Parking parking should be minimized in the front setback on Beacon Street
- Building orientation the building should be oriented to the community and to the pedestrians, rather than the parking lot.
- The building should be reoriented with its entrance plaza on the sunny south side
- Transportation plan right turn lane from Beacon to Beethoven and widening of Beethoven were identified as areas that need further study.
- Transportation further study needed for bus, teacher and parent ingress and egress.

DRC Vote

DRC vote to approve to submit site plan/schematics to the BOA for Site Plan Approval hearing to review pursuant to 5-58 approval.

MOTION: P. Barrer moved, seconded by T. Gloria, that the DRC vote to submit site plan/schematics to the BOA for Site Plan Approval hearing to review pursuant to 5-58 approval.

The vote was unanimous.

Site Plan

DPC walked through any updates since the last meeting on July 31 and noted the following adjustments: The (3) adjacent properties are key in aligning the entrances and exits to/from the parking lot off of Beacon Street with Paulson Road and Amy Circle (off of Beacon Street). It was noted that in response to previous feedback, the building has moved as far to the east as could reasonably be moved, further increasing the buffer from Beacon Street, while not encroaching on the wetlands. Overall, the building is approximately 125' from the nearest abutting property on Beethoven. This distance is the same as the current distance. The goal is to retain as many of the existing trees as possible. It was noted that the current design is not dependent on widening Beethoven Avenue. It was noted that per the current design, the having one entry is not only reasonable in terms of oversight and management but moreover, a single point of entry with foster and contribute to the overall sense of the Zervas community.

Floor Plans

DPC walked through the floor plans and noted that grade cluster arrangements with project areas create small learning communities which will contribute to maintaining a smaller scale and a sense of boundary and neighborhoods for the students. It was noted that the overall layout provides good visibility and that all spaces will be studied at a high level of detail, including but not limited to, the library/media center, art, music, administration, gymnasium, kitchen, etc. It was noted that by being located in a separate wing, the Cafetorium, Gymnasium and Music areas can be opened up for community events while maintaining separation from the rest of the school.

Exterior

It was noted that efforts are being made to bring down the scale of the building. Currently, renderings show a stone like masonry veneer at the first floor with metal panel above. Fenestration and material selection will be studied. It was explained that the building has become somewhat shorter and the amount of glass has been reduced slightly to maximize energy efficiency. By reducing glass on the west facing stairwell will maximize energy efficiency and help to reduce concerns from neighboring properties on Beethoven Avenue. Glazing at the north facing elevation at the Library will need to be carefully studied with regard to how natural light is let in. Having primarily clerestory at the north wall allows for more shelving to be on the perimeter which will help free up the layout of the library. It was noted that light coming in the art room (located on the south side of the building) will need to be distributed throughout the room.

Public Comment

There was concern noted about the overall size of the building as well as the current elevations not being vernacular and looking somewhat too modern and commercial for the neighborhood.

JLA noted a pitched roof would add a lot more cost to the project in terms of construction and maintenance. DPC will continue to study materials and fenestration. It was recommended that for future presentations, elevations are shown from street level perspectives, in lieu of aerial views.

3. ZSBC Vote to Approve 100% Schematic Design and Budget and to Allow the Project to Proceed to Design Development

MOTION: M. Ross Dexter moved, seconded by D. Fisher Gomberg, that the ZSBC approves 100% Schematic Design and Budget allowing the project to proceed to Design Development phase. **The vote was unanimous.**

4. Adjournment

MOTION: At 7:55PM, M. Ross Dexter moved, seconded by J. Morse, that the meeting be adjourned. **The vote was unanimous.**

Respectfully submitted,

Melissa Gagnon Joslin, Lesser + Associates, Inc.

[End of 10/09/14 Meeting Minutes]

Zervas Elementary School

Design Development Update



Zervas School Building Committee + Design Review Committee Meeting February 24, 2015









Anticipated Project Milestones & Updates

- Apr 2015 100% DD Update: ZWG / DRC / BOA / SC / ZSBC
- Apr 2015 Begin Construction Documents
- Oct 2015 CD Update: ZWG / DRC / BOA / SC / ZSBC
- 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

Site and Building Development



Main Entry Approach (From Bus Loop)



Fence/Gate Along Beethoven



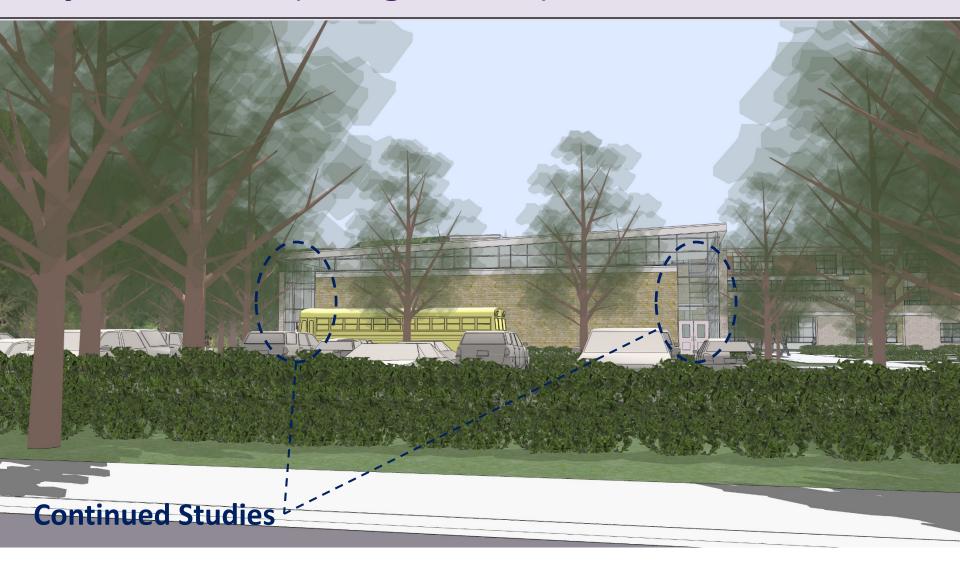
Continued Studies

Academic End Wall (Along Beethoven)



Reduced Brick Plane/Glass and Added Base + Canopy

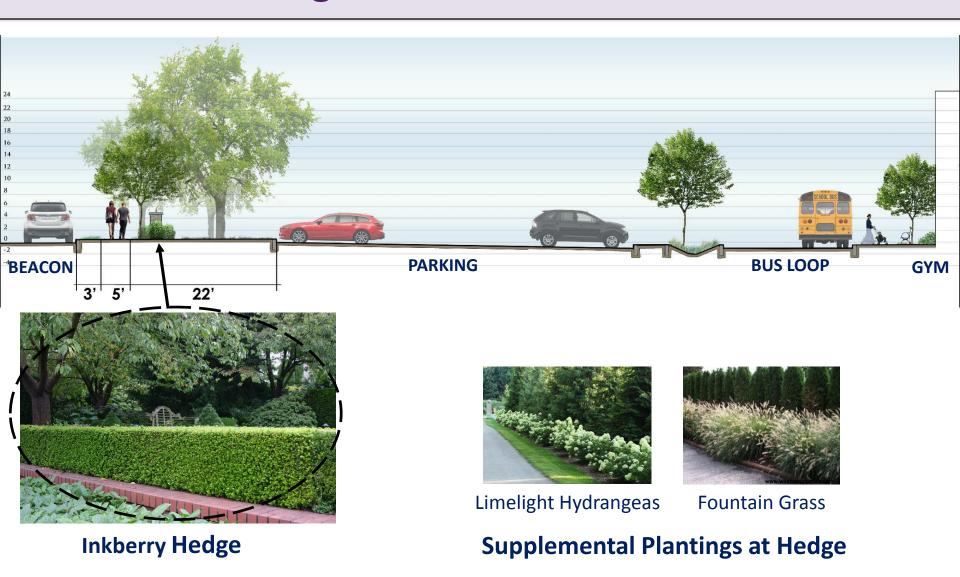
Gym End Wall (Along Beacon)



Gym End Wall (Along Beacon)



Site Buffer Along Beacon Street

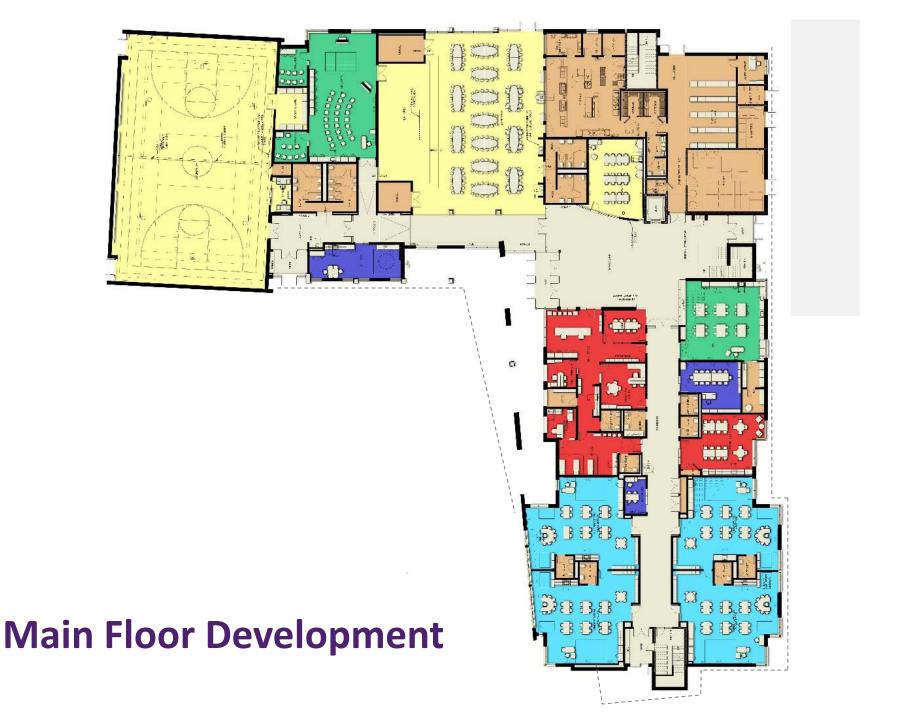


Site and Buffers



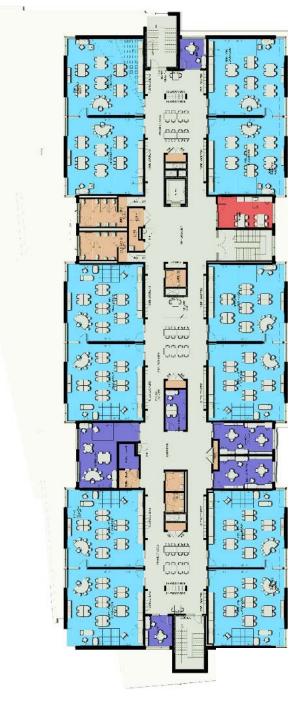
View Toward South (Through Wetlands)







Mid and
Upper Floor
Development



Bird's Eye View of North - West Face



Thornton Tomasetti

Zervas Elementary School LEED for New Construction v4

Project Checklist

Date Revised: February 19, 2015

Team Members
DPC: Design Partnership of Cambridge, Architect
TT: Thornton Tomasetti, LEED/ Energy Modeler
RWS: RW Sullivan, MEP Engineer
NE: Nitsch Engineering, Civil Engineer
BDG: Birchwood Design Group, Landscape
CTA: Cavanaugh Tocci Associates, Acoustics
GE: Girard Engineering, Structural Engineer
WTRC: W.T. Rich Company, Construction manager
JLA: Joslin, Lesser + Associates, Owner/Project manager

Yes ?+ ?- No	Meeting Minutes & Notes	Total points	Resp Partv	Action Items	Baseline Design	LEED Addition	Cost Implications
1	Integrative Process	1					
1	IP Credit 1: Integrative Process	1	тт				
	Energy Modeling: Perform simple box model before completion of SD and assess two of the following (site conditions, massing/orientation, basic envelope attributes, lighting levels, thermal comfort ranges, plug/process load needs. Water-Related Systems: Perform a preliminary water budget analysis before the completion of SD that explores how to reduce potable water loads in the building and accomplish related sustainability goals. Analyze indoor water demand, process water demand and supply sources. Utilize one on-site nonpotable water source to reduce demand on potable water.			Further investigation into the water budget analysis aspects of this credit will need to occur in order to determine if this credit will be possible for the project.	х	х	
2 2 2 9	Location & Transportation	15					
15	LT Credit 1: LEED for Neighborhood Development Location	8 to 15					
1	LT Credit 2: Sensitive Land Protection	1	тт				
•	Project is located on land that has been previously developed (Option 1).				х		
2	LT Credit 3: High Priority Site	1 to 2					
1 4	LT Credit 4: Surrounding Density and Diverse Uses	1 to 5	TT				
,	Option 1: Surrounding Density (2-3 pts) and/or Option 2: Diversity of Uses (1-2 pts): No more than 2 uses in each use type can be counted. Use types include Food Retail, Community-Serving Retail, Services, Civic and Community Facilities and Community Anchor Uses. It appears that the following services are within 1/2 mile walking radius: Farmers market, Coldspring park, China City, 4 Corners Pizza, Citizens Bank.				х		
1 1 2	LT Credit 5: Access to Quality Transit	4	TT/JLA				
,	Option 1: Transit-served Location (1-4 pts): The rail lines are outside of the 1/2 mile radius. Option 2: Pedestrian Access (1-4 pts): Show that the project has an attendance boundary such that the specified percentages of students live within no more than a 3/4 mile walking distance. (50% for 1 pt, 60% for 2 pts, 70%+ for 4 pts)			Follow up research on pedestrian access will be necessary. NPS will develop a demographic analysis confirming that, by current enrollments, Zervas meets the target of 60% or more of students within a 3/4 mile	х		
1	LT Credit 6: Bicycle Facilities	1					
	No shower will be provided. Point moved to "no".						
1	LT Credit 7: Reduced Parking Footprint	1	TT/DPC				
	Do not exceed the minimum local code requirements for parking capacity, and provide parking capacity that achieves a 40% reduction from the base ratios outlined in the LEED Reference Guide. (page 115)			Calculations will be needed to determine if project meets reduction requirements. TT to perform.	х		
1	LT Credit 8: Green Vehicles	1	DPC/JLA				
,	Option 1: Green Passenger Vehicles: 5% of all parking spaces used by project to be designated as preferred parking for green vehicles. Additionally, install electrical vehicle charging station in 2% of parking spaces used by the project. Clearly identify these spaces as reserved.			For Option 1, the total parking capacity of 70 spaces equates to 4 preferred parking for green vehicles and 2 vehicle charging stations. CoN and NPS to determine if		Х	Cost items: -Signage for preferred parking spaces and vehicle charging stations.

Yes ?+ ?- No	Meeting Minutes & Notes	Total	Resp	Action Items	Baseline	LEED	Cost Implications
765 . 1 . 110	Option 2: Green Buses and School-Owned Vehicles: Develop and implement a plan for every bus	points	Party	site plan should show preferred spaces and charging	Design	Addition	-installation of electrical vehicle charging
	serving the school to meet the emission standards within 7 years of occupancy, and develop and			stations.			stationsUpgrading vehicle fleet at the school.
	implement a plan for 100% of all other (non-bus) vehicles owned/leased to serve the school to be green vehicles.						
11 1	Sustainable Sites						
Υ	SS Prereq 1: Construction Activity Pollution Prevention ESC measures on-site that comply with 2012 EPA CGP standard. A list of these measures has	NA	NE/WRTC		х		
	been provided in LEED Reference Guide, pg 142. C0.1 and C2.0 outline the ESC measures planned for the site.				^		
Υ	SS Prereq 2: Environmental Site Assessment	NA	DPC				
	Conduct Phase I Environmental Site Assessment as described in ASTEM E1527-05. If site is contaminated, Phase II ESA must occur. Phase I assessment has occurred.						
1	SS Credit 1: Site Assessment	1	NE/BDG				
	Complete and document a site survey or assessment that includes the following information: topography, hydrology, climate, vegetation, soils, human use, and human health effects.			Nitsch and Birchwood to review the Site Assessment	Х		
	topography, hydrology, climate, vegetation, sons, numan use, and numan neath effects.			Worksheet and provide information about site assessments done to-date.			
2	SS Credit 2: Site Development, Protect or Restore Habitat Option 1: On-site Restoration (2 pts) - 30% of site (including building footprint). This assumes the	1 to 2	BDG		х		
х	LEED boundary reflects the property line.				^		
	Option 2: Financial Support (1 pt) - Provide at least \$0.40 per square foot for the total site area (including the building footprint) to a land trust or conservation organization.						
	(including the building footprint) to a land trust of conservation organization.						
1	SS Credit 3: Open Space	1	TT				
	Designate 30% of total site area (including building footprint) as open space. Pedestrian-oriented paving/turf, recreation-oriented paving/turf and garden space can contribute towards compliance.				Х		
	Based on the current site plan, credit compliance appears feasible. No E.P. option.						
3	SS Credit 4: Rainwater Management	1 to 3	NE				
	Option 1: Percentile of Rainfall Events, Path 1: 95th Percentile (2 pts) - Manage runoff on-site	1 10 0			х		
	(replicating natural site hydrology processes) for the 95th percentile of local rainfall events using LIDs and green infrastructure						
	Option 1: Percentile of Rainfall Events, Path 2: 98th Percentile (3 pts) According to Nitsch, the						
х	project is able to achieve both the 95th and 98th percentile events by increasing the size of the stone reservoir below the porous pavement and increasing the size of the perforated pipe within						
	the reservoir. Porous paving and bio retention areas are being provided on-site. Option 2: Natural Land Cover Conditions (3 pts) - Manage on-site the annual increase in runoff						
	volume from the natural land cover condition to the post developed condition.						
2	SS Credit 5: Heat Island Reduction	1 to 2	TT/BDG				
	Option 1: Nonroof and Roof (2 pts) - Low-sloped roof to have an initial SRI value of 82 and a 3- year aged SRI value of 64. Additionally, hardscape material will need to be either shaded, installed			Pedestrian-oriented hardscape materials to be specified as light-colored to meet the 50% nonroof requirement.	Х	х	Cost Items: -Light-colored hardscape for pedestrian
x	as open-grid pavement, or specified with SR value of at least .33. Weighted calculations use-			Nitsch to send hardscape calculations to TT for their			pathways and terraces.
	(areas of nonroof measures)/0.5 + (areas of high-reflectance roof)/.75 must be greater than or equal to the sum of total site paving area and total roof area. White EPDM roof membrane is			review.			
	being specified and porous paving has been indicated on site plan.						
<u> </u>	Option 2: Parking Under Cover (1 pt)						
4	CC Condit C. Links Ballution Badustion	,	DIMO				
'	SS Credit 6: Light Pollution Reduction Meet uplight and light trespass requirements using either the backlight-uplight-glare (BUG)	1	RWS				
	method or calculation method. Property line is used as lighting boundary, and can be adjusted						
	when located adjacent to public street, corridors, etc. Photometric analysis will be performed for the site, and lighting is being designed to meet light trespass requirements.						
1	SS Credit 7: Site Master Plan	1					
1	SS Credit 8: Joint Use of Facilities	1	DPC				
	GO Groun G. Volit Goe of Lacinities	'	DFC				

Yes ?+ ?- No	Meeting Minutes & Notes	Total points	Resp Party	Action Items	Baseline Design	LEED Addition	Cost Implications
	Option 1: Building Space Open to General Public - Ensure that at least three of the following	ротто	7 47 47		2 co.g	71007077	
x	spaces are accessible to and available for shared use by the general public: auditorium; gymnasium; cafeteria; one or more classrooms; playing fields and stadiums; and joint parking.						
	Additionally provide access to toilets in joint-use areas after normal school hours.						
	Option 2: Contract with Organizations to Share Building Space						
	Option 3: Use Shared Space Owned by other Organization						
5 2 1 2 V	Vater Efficiency	12					
Y	/E Prereq 1: Outdoor Water Use Reduction, 30% Reduction	NA	BDG				
	If irrigation is being provided, the landscape water requirement must be reduced by at least 30% from a calculated baseline. According to the irrigation plan, all athletic fields will be irrigated. Irrigation calculations will need to be performed using the WaterSense Water Budget Tool.			BDG to perform initial irrigation demand calculations for the site to determine overall savings.	х		
Y	/E Prereq 2: Indoor Water Use Reduction, 20% Reduction	NA	TT/RWS				
	Reduce aggregate water consumption by 20% from a baseline for plumbing fixtures and meet efficiency requirements for appliance and process water equipment. Water-efficient plumbing fixtures must be selected and installed. Recommendations include: 0.125 gpf urinals, 1.1 gpf toilets, 0.5 gpm autosensor lavatories, 1.25 gpm showerheads and 1.3 gpm spray valves, 1.5 gpm kitchen faucets.				х		
Y	/E Prereq 3: Building Level Water Metering	NA	RWS				
	Install permanent water meters and commit to sharing with USGBC for 5-year period.				х		
1 1 W	/E Credit 1: Outdoor Water Use Reduction	1 to 2	BDG				
х	Option 1: No Irrigation (2 pts) Option 2: Reduced Irrigation (1-2 pts), 50%-100%. See WEp1 comments. Providing no irrigation or rainwater reuse for irrigation will help achieve an additional LEED pt.				X		
3 1 1 W	/E Credit 2: Indoor Water Use Reduction, 25%-45%	1 to 5	TT				
	25%=1pt, 30%=2 pts, 35%=3 pts, 40%=4 pts, 45%= 5pts. See WEp2 comments. All eligible newly installed fixtures and fitting must be WaterSense labeled. Preliminary water calculations have been performed with the fixture recommendations listed above and indicate that approximately 39% water use reduction can be achieved. Please note that this fixtures are highly efficient and follow up conversations will need to occur.				X	X	Cost Items:Water-efficient fixtures that are not included as part of baseline design.
2 W	/E Credit 3: Cooling Tower Water Use	1 to 2					
1 W	/E Credit 4: Water Metering	1	RWS				
	Install permanent water meters for two of the following: irrigation, indoor plumbing fixtures and fittings, domestic hot water, boiler with aggregate projected annual water use of 100,000 gal or more, reclaimed water, or other process water.					х	Cost Items: -Additional water submeters.
13 10 2 6	Energy & Atmosphere	31					
Y E.	A Prereq 1: Fundamental Commissioning & Verification Commissioning agent to perform fundamental Cx services.	NA	СХ			L .	Cost Itoms:
						X	Cost Items: -Hire CxA for fundamental Cx services.
E.	A Prereq 2: Minimum Energy Performance, 5% new, 3% existing 5% improvement over ASHRAE 90.1-2010.	NA	TT		-		
v -		N1.5	DI4/O		X		
E.	A Prereq 3: Building-Level Energy Metering	NA	RWS		-		
	Install building-level energy meters that can be aggregated to provide building-level data representing total building energy consumption, and share with USGBC for 5-year period.				X		
Y E.	A Prereq 4: Fundamental Refrigerant Management	NA	RWS				
	Zero use of CFC-based refrigerants in new HVAC systems.				X		
	A Credit 1: Enhanced Commissioning	3 to 6	СХ				lo attrace
х	Option 1 (Path 1): Enhanced Systems Commissioning (3 pts)			Enhanced Cx and Envelope Cx are being targeted.		X	Cost Items:

Yes ?+ ?- No	Meeting Minutes & Notes	Total points	Resp Party	Action Items	Baseline Design	LEED Addition	Cost Implications
	Option 1 (Path 2): Enhanced and Monitoring-Based Commissioning (4 pts) and/or	_		Confirmation is needed that these services have been included as part of the CxA's scope.			-Hire CxA for enhanced Cx servicesHire CxA for envelope Cx services.
х	Option 2: Envelope Commissioning (2 pts)			included as part of the GXA's scope.			Time existed envelope ex services.
6 4 6	EA Credit 2: Optimize Energy Performance	1 to 16	TT				
х	Option 1: Whole-building energy simulation (1-18 pts) - 6%=1 pt, 8%=2 pts, 10%=3 pts, 12%=4 pts, 14%=5 pts, 16%=6 pts, 18%=7 pts, 20%=8 pts, 22%=9 pts, 24%=10 pts, 26%=11 pts, etc				Х		
	Option 2: Prescriptive compliance: ASHRAE Advanced Energy Design Guide (1-6 pts)						
<u> </u>	TT is updating the model and performing ECM studies.						
1	EA Credit 3: Advanced Energy Metering	1	RWS/TT				
	Install advanced energy metering for all whole-building energy sources used by the building, and					х	Cost Items:
	any energy end use that represents 10% or more of the total annual consumption of the bldg.						-Additional submeters for energy end uses.
2	EA Credit 4: Demand Response	1 to 2	DPC/JLA				
	Case 1: Demand Response Program available (2 pts) - Design a system with the capabilities of			Further conversation will be necessary to determine if		Х	Cost Items:
	DR. Enroll in a 1-year contract with qualified DR program for at least 10% of estimated peak electricity demand. Include as part of Cx scope of work.			this credit should be targeted.			- Enrollment in 1-year contract with
	Case 2: Demand Response Program not available (1 pt) - Provide intrastructure to take						qualified DR programAdditional Cx scope of work.
	advantage of future demand response programs (installation of interval recording meters with communications)						-Setting up the infrastructure on-site.
3	EA Credit 5: Renewable Energy Production, 1%, 5%,10%	1 to 3	TT				
	1%=1 pt, 5%=2 pts, 10%=3 pts. Additionally, solar gardens or community renewable energy systems are allowed to achieve compliance. Newton intends to implement a rooftop PV through a					х	Cost Items: -Renewable Energy Systems sized to
	PPA. Once the scope is confirmed, this can be included as points in EAc2.						meet the requirements of this credit.
1	EA Credit 6: Enhanced Refrigerant Management	1	RWS				
	Refrigerants being used that will meet the tonnage requirement.				Х		
2	EA Credit 7: Green Power and Carbon Offsets, 50%, 100% Engage in a contract (green power, RECs or carbon offsets) for a minimum of 5 years. The	1 to 2	TT/JLA			х	Cost Items:
	decision to pursue this credit can occur during construction.					^	-Purchasing green power.
2 3 8	Materials & Resources	13			1		
Υ	MR Prereq 1: Storage and Collection of Recyclables	NA	TT/JLA				
	Dedicated areas for recycling collection to be provided.				Х		
Υ	MR Prereq 2: Construction and Demolition Waste Management Planning	NA	WTRC				
	Develop and implement a CWM plan with diversion goals, and targeting at least 5 materials.						No Cost Items
3 2	MR Credit 1: Building Life-Cycle Impact Reduction	5	TBD				
	Option 1: Historic Building Reuse (5 pts)		100	The implementation of a Life Cycle Assessment is being		х	Cost Items:
	Option 2: Renovation of Abandoned or Blighted Building (5 pts)			further evaluated and may be an option for the project to			-Additional scope required to perform a
	Option 3: Building and Material Reuse (2-4 pts)			achieve 3 points.			LCA for the project.
x	Option 4: Whole-building Life-cycle assessment (3 pts) - Conduct a life-cycle assessment of the project's structure and enclosure that demonstrates a min of 10% reduction in at least 3 of the 6						
	impact categories. TT has the ability to perform LCAs.						
2	MR Credit 2: Building Product Disclosure & Optimization - Env Product Declarations	1 to 2	TBD			Х	Cost Items:
	Option 1: Environmental Product Declaration (1 pt) - Use at least 20 different permanently installed products sourced from at least 5 different manufacturers that meet the EPD requirements					^	-Purchase of materials that meet the EPD
	(product-specific LCAs)						requirements of this creditAdditional scope needed to research
	Option 2: Multi-Attribute Optimization (1 pt)						material opportunities.
2	MR Credit 3: Building Product Disclosure & Optimization - Sourcing of Raw Materials	1 to 2	TBD				
	Option 1: Raw Material Source & Extraction Reporting (1 pt) - Use at least 20 different					Х	Cost Items:
	permanently installed products from at least 5 different manufacturers that have publicly released						-Purchase of materials that meet the Raw Material Sourcing/Extraction Reporting
	a report from their raw materials suppliers which include raw material supplier extraction locations, a commitment to long-term ecologically responsible land use, a commitment to reducing						requirements of this credit.
	environmental harms, and a commitment to meeting applicable standards or programs.					I	-Additional scope needed to research

Yes ?+ ?- No	Meeting Minutes & Notes	Total points	Resp Party	Action Items	Baseline Design	LEED Addition	Cost Implications
	Option 2: Leadership Extraction Practices (1 pt) - Use products that meet at least one of the extraction criteria for at least 25% of total material cost: extended producer responsibility, biobased materials, certified wood products, materials reuse, recycled content.	,	,				Imaterial opportunities if Option 1 is pursued.
2	MR Credit 4: Building Product Disclosure & Optimization - Material Ingredients	1 to 2	TBD				
	Option 1: Material Ingredient Reporting (1 pt) - Use at least 20 different permanently installed products from at least 5 different manufacturers that use approved programs to demonstrate the chemical inventory of the product to at least 0.1%. This includes HPDs. Option 2: Material Ingredient Optimization (1 pt) - Use products that document their material ingredient optimization using GreenScreen, Cradle to Cradle, etc for at least 25% of the total value of permanently installed products.					х	Cost Items: -Purchase of materials that meet the HPD requirements of this creditAdditional scope needed to research material opportunities.
2	MR Credit 5: Construction and Demolition Waste Management, 50%, 75%	1 to 2	WTRC				
	Divert 50%-75% of total construction and demo materials from the landfill. Include at least 3-4 material streams. Alternatively the project can achieve 2 points by not generating more than 2.5 lbs of construction waste per square foot. Angier was 90% recycled so 75% should be a feasible target.				Х		
12 3 1	Indoor Environmental Quality	16				,	
Υ	EQ Prereq 1: Minimum IAQ Performance	NA	RWS				
	Meet ASHRAE 62.1-2010 standard requirements. Additionally, provide direct outdoor airflow measurement devices capable of measuring minimum OA intake flow.				Х		
Υ	EQ Prereq 2: Environmental Tobacco Smoke Control	NA	TT/JLA				
	Prohibit smoking on-site and provide signage at the property line indicating the no smoking policy.				Х		
Υ	EQ Prereq 3: Minimum Acoustic Performance	NA	СТА				
	Achieve the HVAC background noise level requirements (40 dBA) and reverberation requirements (ANSI Standard S12.60-2010) in classrooms and core learning spaces.				х		
2	EQ Credit 1: Enhanced IAQ Strategies	1 to 2	DPC/RWS				
x	Option 1: Enhanced IAQ Strategies (1 pt) - Entryway systems, interior cross-contamination prevention, filtration, natural ventilation design calculations, and mixed-mode design calculations. Similar to IEQc5 in LEED v2009. Entryway systems will be provided. MERV 13 filters are being specified, and exhaust will be provided to prevent cross-contamination. Option 2: Additional Enhanced Strategies (1 pt) - Select one of the following to pursue: exterior contamination prevention, increased ventilation, additional source control/monitoring, and natural ventilation room-by-room calculations.					х	
2 1	EQ Credit 2: Low-Emitting Materials	1 to 3	WTRC				
	Interior paints/coasting, interior adhesives/sealants, flooring, composite wood, ceilings/walls/thermal/acoustical insulation, furniture and exterior applied products. Points are based on number of compliant categories. 4=1 pt, 6=2 pts, 7=3 pts. A detailed review of the project specifications will need to occur to ensure that low-emitting materials will be selected.			DPC and WTRC to discuss this credit target and ensure that this credit can be achieved with acceptable products that fit the project budget.		х	Cost Items: -Additional costs associated with low- emitting products
1	EQ Credit 3: Construction IAQ Management Plan	1	WTRC				
	Develop and implement an IAQ Management plan for construction and preoccupancy phases. Prohibit the use of tobacco products in the building and within 25' of building entrance during construction.				Х		
1 1	EQ Credit 4: Indoor Air Quality Assessment	1 to 2	JLA/WTRC				
	Option 1: Flush-out (1 pt) Option 2: Air Testing (2 pts)			DPC, JLA and WTRC to determine how best to meet requirements with flushing or air testing.		Х	Cost Items: -Hiring an Air Testing contractor if Option 2 is pursued.
1	EQ Credit 5: Thermal Comfort	1	RWS				-Operational costs if Option 1 is pursued.
	Meet ASHRAE Standard 55-2010. Installation of cooling/heating system.				Х		
2	EQ Credit 6: Interior Lighting	1 to 2	RWS				
	Option 1: Lighting Control (1 pt) - For at least 90% of individual occupant spaces, provide individual lighting controls with at least 3 lighting levels/scenes. All multi-occupant spaces must have multizone control systems, lighting for presentations to be separately controlled.			Confirmation will be necessary to ensure quality and controllability requirements can be met in current design.		Х	Cost Items: -Multi-level controllability settings for individual workstations and classrooms.

Yes ?+ ?- No	Meeting Minutes & Notes	Total	Resp	Action Items	Baseline	LEED	Cost Implications
Tes :+ :- No	<u>-</u>	points	Party	Action terms	Design	Addition	Cost implications
	Option 2: Lighting Quality (1 pt) - Meet 4 of the 8 lighting quality options listed in the LEED Reference Guide (pg. 712). This includes light sources with a CRI of 80 or higher, rated life of at						
	least 24,000 hours, using overhead lighting for 25% or less of total connected load, and meeting thresholds for surface reflectance (85% for ceilings, 60% for walls, and 25% for floors).						
	thresholds for surface reflectance (65% for ceilings, 60% for walls, and 25% for hours).						
2 1	EQ Credit 7: Daylight	1 to 3	TT				
x	Option 1: Simulation: Spatial Daylight Autonomy (2-3 pts) - 55%=2 pts, 75%=3 pts. TT will perform			Follow up discussion on design assistance daylight		Х	Cost Items:
<u> </u>	design assistance daylight studies to help inform design decisions.			studies. TT to review current scope.		^	-Scope required to document LEED credit and daylight calculations.
	Option 2: Simulation: Illuminance Calculations (1-2 pts) - 75%=1 pt, 90%=2 pts						credit and dayiight calculations.
	Option 3: Measurement (2-3 pts) - 75%=2 pts, 90%=3 pts						
1	EQ Credit 8: Quality Views Achieve a direct line of sight to outdoors via vision glazing for 75% of all regularly occupied	1	TT/DPC		х		
	spaces, and meet at least 2 of the following 4 kinds of views: multiple lines of sight in different				_ ^		
	directions; views of sky, movement, flora/fauna, etc; views with distance of 3x head height of vision glazing; and views with view factor of 3 or greater.						
1	EQ Credit 9: Acoustic Performance	1					
5 1	Innovation & Design	6				1	
1	ID Credit 1.1: Innovation in Design: Green Education	1	TT/JLA				
	Implement a Green Education program in the building.	-				Х	Cost Items:
							-Signage or other marketing materials -Additional scope required to develop
							green education materials.
1	ID Credit 1.2: Innovation in Design: Green Cleaning	1	TT/JLA				
	Implement a Green Cleaning program in the building.					Х	Cost Items: -Hiring or training contractors to perform
							green cleaning services.
							-Additional costs associated with
1	ID Credit 1.3: Innovation in Design: TBD	1	TBD				
	Up to 2 points can be achieved with Exemplary Performance. Other points must be Innovation or Pilot credits.						
	Filot credits.						
1	ID Credit 1.4: Innovation in Design: TBD	1	TBD				
1	ID Credit 1.5: Innovation in Design: TBD	1	TBD				
1	ID Credit 2: LEED Accredited Professional Thornton Tomasetti meets this requirement.	1	TT		х		
	Thomas Tollacour mode and roquitorion.				,		
1 2 1	Regional Priority (4 points max)	4					
1	RP Credit 1.1: Regional Priority: Building Life-cycle impact reduction (2 pt threshold)	1					
4	DD Coodit 4.0. Regional Drivity, Deignates groups at (2 at the sale of 1)						
	RP Credit 1.2: Regional Priority: Rainwater management (2 pt threshold)	1					
1	RP Credit 1.3: Regional Priority: Indoor Water Use Reduction (4 pt threshold)	1					
	RP Credit 1.4: Regional Priority: High priority site, optimize energy performance (8 pt threshold), Renewable Energy Production.	1					
	THE CONTRACT OF THE CONTRACT O						
51 24 6 27	Project Totals	110					

JOSLIN, LESSER + ASSOCIATES, INC.

ELEMENTARY SCHOOL PROJECTS: MEETING & MILESTONE SCHEDULE

ANGIER - A





CABOT - C

1/2015 - 4/2015

U P D A T E D D R A F T - 02/24/15 (through Zervas DD and Cabot FS/Preferred SD)





		uno 1	MONDAY	TUESDAY	WEDNESDAY		THU	FRIDAY	
					AM	PM	AM	PM WABAN AREA COUNCIL MEETINGS	
WEEK OF (Monday)		CRITICAL MILESTONE	BOA/SC MEETINGS	WEEKLY PROGRAMMING/ DESIGN MEETIGS	CONSTRUCTION MEETINGS	DRC MEETINGS	WORKING GROUP MEETINGS	ASBC, ZSBC, CSBC + DRC JOINT MEETINGS	BOA/SC UPDATE PACKETS
			City Hall - 7:00PM	Location TBD, Time TBD	CONSTRUCTION MEETINGS: Angier site trailer 10:00-12:00PM	DRC MEETINGS: Library, Trustee's Rm, 6:00PM	WORKING GROUP MEETINGS: City Hall, 209 - 9:30-11:00AM	SBC+DRC JOINT MEETINGS: Newton Ed Center, Rm TBD - 6:00PM WAC: Waban Library, 7:00PM	
	01/05/15		01/05/15	01/06/15	A 01/07/15 CONSTRUCTION MTG; BLDG ENVELOPE CX (1:00)	01/07/15	C 01/08/15 <u>CWG</u> : PREP FOR CSBC+DRC MTG	01/08/15	Z 01/09/15 MEP SYSTEMS (10:00AM, WTR)
015	01/12/15	Z 01/16/15 50% DD DRAWINGS COMPLETE	C 01/12/15 <u>SC MEETING</u> (8:30AM) PROGRAM REVIEW	A 01/13/15 <u>COLOR MTG</u> (2:30PM) (ED CTR RM 217)	A 01/14/15 CONSTRUCTION MTG; MILLWORK MTG (12:00); MTL PANEL MTG (1:00)	01/14/15	Z 01/15/15 <u>ZWG</u> : PREP FOR 1/20 BOA+SC (8:45AM, CH Rm 202)	Z 01/15/15 Z: <u>DRC</u> (4:00PM, ED CTR 217) C: <u>CSBC+DRC</u> : (6:00PM, ED CTR 210)	Z 01/16/15 BOA PACKET UPDATE
N N								A 01/15/15 WABAN AREA COUNCIL (7:00PM, WLC)	
JAL	01/19/15		01/19/15 HOLIDAY (MLK DAY)	Z 01/20/15 <u>BOA + SC MEETING</u> (8:00PM) Z: 50% DD UPDATE C: PROGRAM UPDATE	A 01/21/15 CONSTRUCTION MTG	01/21/15	01/22/15	01/22/15	01/23/15
	01/26/15		01/26/15	01/27/15	A 01/28/15 CONSTRUCTION MTG	01/28/15	A 01/29/15 <u>AWG</u> : REVIEW OFF-SITE TRAFFIC (8:45AM, CH, Rm 222)	01/29/15	01/30/15
	02/02/15		02/02/15	02/03/15	A 02/04/15 CONSTRUCTION MTG MSBA SITE VISIT (12:00)	02/04/15	02/05/15	Z 02/05/15 <u>DRC-Z</u> : MEP/BLDG ENVELOPE (6:00PM, Library, Trustee's Rm)	Z 02/06/15 <u>PARKS & REC</u> (10:00AM, P&R OFFICE)
2	02/09/15		02/09/15	02/10/15	C 02/11/15 SC MEETING - PDP VOTE (8:30AM, Ed CTR RM 210)	02/11/15	Z 02/12/15 ZWG: DD UPDATE (8:45AM, City Hall Ald Chamber)	02/12/15	Z 02/13/15 <u>SAFETY & SECURITY</u> (12:30PM, Ed Ctr Rm 210)
2 0 1					A 02/11/15 CONSTRUCTION MTG		Z 02/12/15 ZERVAS DESIGN MTG W/NPS (12:00PM, Zervas ES)	A 02/12/15 WABAN AREA COUNCIL (7:00PM, WLC)	
EB	02/16/15		02/16/15	02/17/15	A 02/18/15 CONSTRUCTION MTG	02/18/15	02/19/15	02/19/15	02/20/15
H	02/23/15	Z 02/27/15 100% DD DOCS TO ESTIMATORS and to DRC	C 02/23/15 <u>CWG</u> : PREP FOR CSBC+DRC (8:30AM, Ed Ctr Room 217)	Z 02/24/15 ZSBC+DRC (6:00PM, Ed Ctr 304) CSBC+DRC (7:30PM, Ed Ctr 304)	A 02/25/15 CONSTRUCTION MTG		02/26/15	02/26/15	02/27/15
		C 02/27/15 MSBA: PDP SUBMISSION	C 02/23/15 PARKS & REC COMMISSION: Cabot Park Informational			02/25/15		02/26/15	
	03/02/15		03/02/15	03/03/15	A 03/04/15 CONSTRUCTION MTG	Z 03/04/15 <u>DRC-Z</u> : 100% DD UPDATE (6:00PM, location TBD)	C 03/05/15 <u>CWG</u> : PREP FOR CSBC+DRC MTG (8:30AM, location TBD)	03/05/15	03/06/15
2	03/09/15		03/09/15	03/10/15	A 03/11/15 CONSTRUCTION MTG	C 03/11/15 PUBLIC FORUM #1 (time/location TBD)	03/12/15	A 03/12/15 WABAN AREA COUNCIL (7:00PM, WLC)	C 03/13/15 SCHOOL COMMITTEE MTG (8:00AM, Ed Ctr Rm 210)
201								C 03/12/15 CSBC+DRC MEETING: FS UPDATE (6:00PM, Room 210)	
A R	03/16/15		C 03/16/15 BOA MEETING (7:45PM) CABOT: FS UPDATE	Z 03/17/15 100% DD cost estimate mtg	A 03/18/15 CONSTRUCTION MTG	03/18/15	03/19/15	Z 03/19/15 CONSERVATION COMMISSION (7:00PM, CH, Room TBD)	03/20/15
Σ			C 03/16/15 PARKS & REC COMMISSION: Cabot Park Review						
	03/23/15		03/23/15	03/24/15	A 03/25/15 CONSTRUCTION MTG	Z 03/25/15 <u>DRC-Z</u> : 100% DD UPDATE (6:00PM, location TBD)	C 03/26/15 CWG: PREP FOR BOA+SC & CSBC+DRC (8:30AM, location TBD)	03/26/15	03/27/15
	03/30/15		03/30/15	03/31/15	A 04/01/15 CONSTRUCTION MTG	04/01/15	Z 04/02/15 <u>ZWG</u> : 100% DD UPDATE (8:45AM, location TBD)	04/02/15	Z 04/03/15 BOA PACKET UPDATE
5	04/06/15		C 04/06/15 BOA & SC MEETING (7:45PM) C: FS UPDATE Z: 100% DD UPDATE	Z 04/07/15 PUBLIC FORUM (time TBD, Zervas ES)	A 04/08/15 CONSTRUCTION MTG	04/08/15	04/09/15	Z 04/09/15 ZSBC+DRC (6:00PM) 100% DD VOTE CSBC+DRC (7:30PM) PUBLIC FORUM FS VOTE (Ed Ctr, Room 210)	
0 1								A 04/09/15 WABAN AREA COUNCIL (7:00PM, WLC)	04/10/15
PR 2	04/13/15	Z 04/13/15 ZERVAS: BEGIN CONSTRUCTION DOCS C 04/16/15 CABOT: MSBA PREFERRED	04/13/15	04/14/15	A 04/15/15 CONSTRUCTION MTG	04/15/15	04/16/15	04/16/15	04/17/15
4	04/20/45	SD SUBMISSION	04/20/15	04/21/15	A 04/22/15 CONSTRUCTION MTG	C 04/22/15 <u>DRC-C</u> : SD KICK-OFF/	04/23/15	04/23/15	04/24/15
	04/20/15					INTEGRATED DESIGN MTG		04/23/15	
	04/27/15		04/27/15	04/28/15	A 04/29/15 CONSTRUCTION MTG	C 04/29/15 MSBA: FACILITIES ASSESSMENT MEETING	04/30/15	04/30/15	05/01/15