



Newton Public Schools

Newton, Massachusetts

Long and Short Range Facilities Planning

November 10, 2010



Summary of Presentation

Part I: Background on Short and Long Term Planning

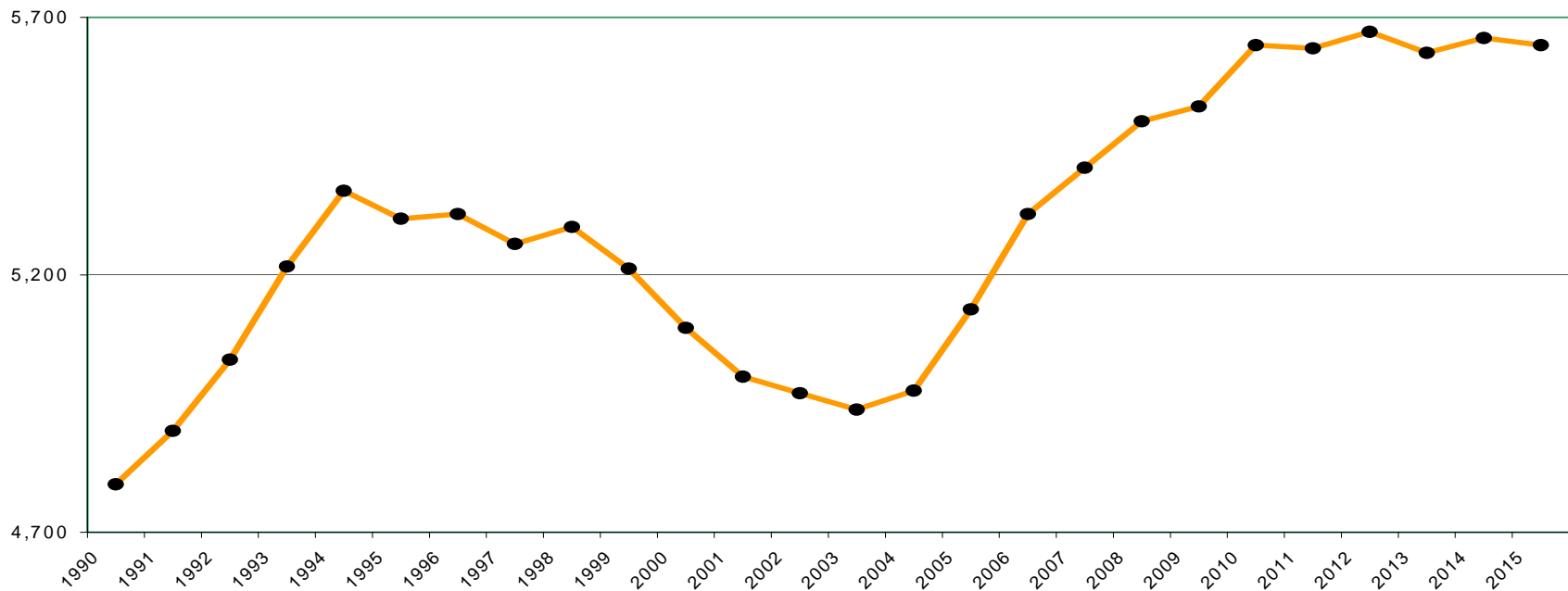
- a. Introduction
- b. Review of Enrollment Growth
- c. Current Status of Short and Long Term Planning
- d. Process for Moving Forward

Part II: Short Term Space Options

- a. Middle School Model and Statistics
- b. Day Options Considered
- c. Elementary Space Considerations
- d. FY12 Budget Implications

NPS Enrollment Trends 1990–1991 to 2015–2016

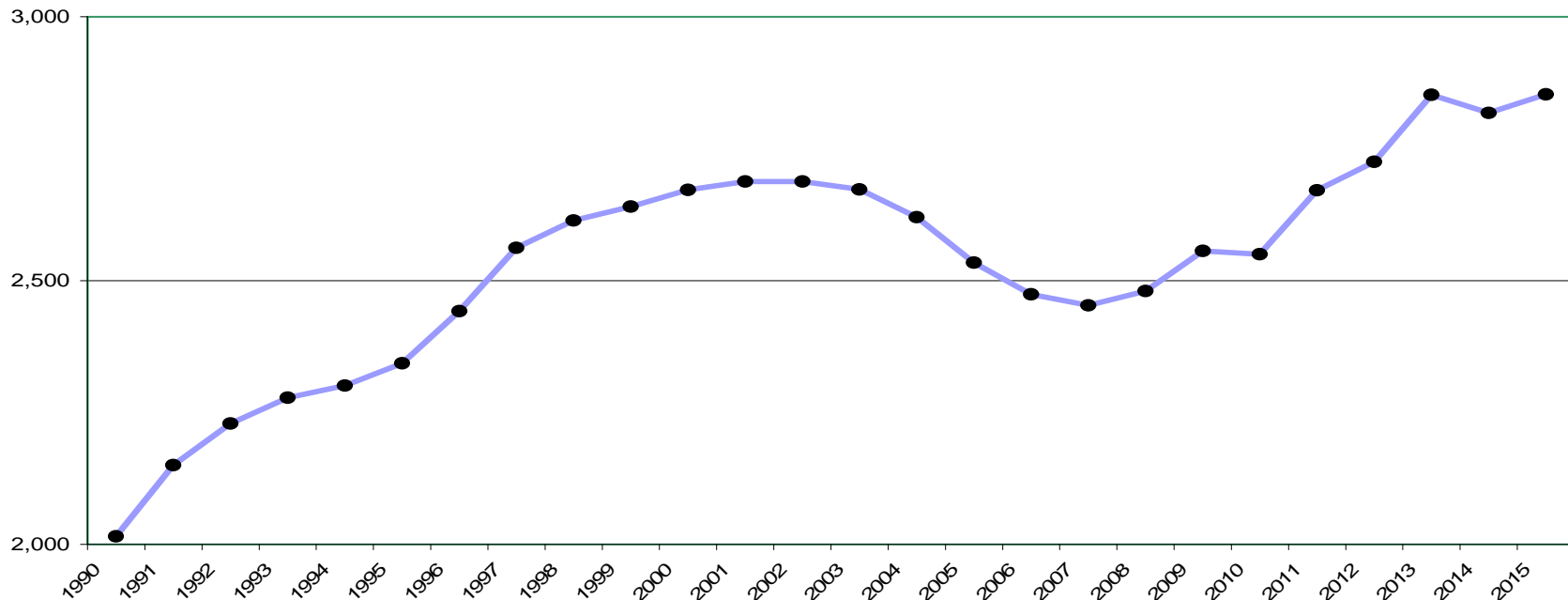
Elementary Schools



- Up 674 since 2004-2005
- 898 in K is at 2 decade peak

NPS Enrollment Trends 1990–1991 to 2015–2016

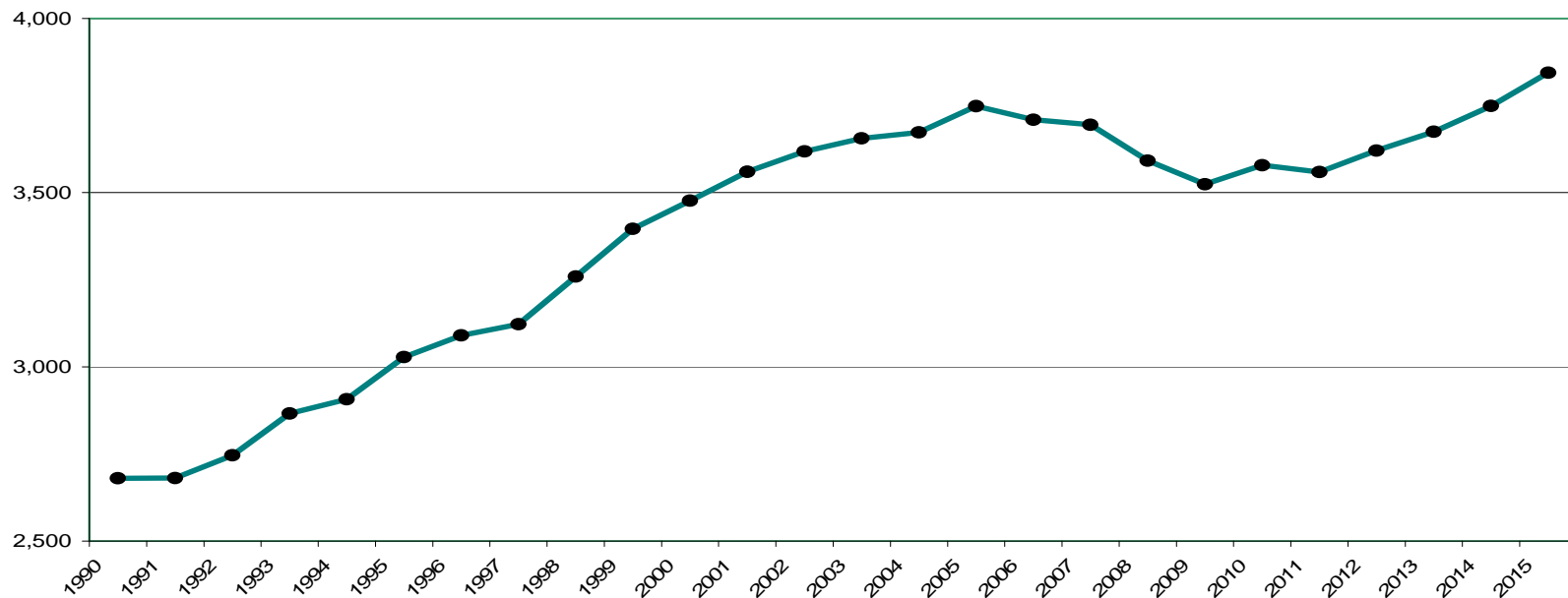
Middle Schools



- Up 108 since 2007-2008
- Up 441 by 2013-2014 (in 3 years)
(132 students at Day)

NPS Enrollment Trends 1990–1991 to 2015–2016

High Schools



- Peaked in 2006 at 3,758
- Expect to surpass peak in 4 years

Middle School Enrollment

2007-08 to 2013-14

School	Actual				Projected		
	2007-08	2008-09	2009-10	2010-11*	2011-12	2012-13	2013-14
Bigelow	487	505	527	523	532	518	564
Brown	644	681	684	669	690	703	752
Day	764	747	773	761	861	886	896
Oak Hill	558	547	572	608	634	658	682
Total	2,453	2,480	2,556	2,561	2,717	2,765	2,894
Change from Prior Year	-21	27	76	5	156	48	129
Cumulative from 2007-08		27	103	108	264	312	441

Cumulative at Day		-17	9	-3	97	122	132
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*FY11 Enrollments are preliminary.

Outgoing 8th Grade v. Incoming 6th Grade

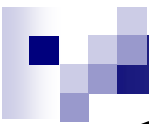
School	2010-11 Actual*			2011-12 Projected		
	Outgoing 8th	Incoming 6th	Diff	Outgoing 8th	Incoming 6th	Diff
Bigelow	165	162	-3	180	181	1
Brown	228	217	-11	226	244	18
Day	276	277	1	218	293	75
Oak Hill	179	208	29	196	223	27
Total	848	864	16	820	941	121

*FY11 Enrollments are preliminary.



HMFH Facilities Study

- School Committee Facilities Committee and Public Buildings commissioned a review of all school buildings, excluding high schools in 2006. Total cost was \$300,000.
- HMFH Architects, Inc. began full review in February 2007.
- All buildings surveyed and compared to MSBA standards. All needs and deficiencies were reported.
- School buildings were ranked in order of need based on criteria including building systems, building exterior, classroom/instructional space, and site conditions.
- Studied building capacity in relation to enrollment trends and space concerns.



Outcome of Study: Short-term and Long-term Space Needs

- Long Range Facilities Plan approved by School Committee in June 2008 and reviewed by the Board of Alderman.
- Long-term needs identified. These needs are subject to revision based on the outcome of any feasibility studies.
 - Replace 3 elementary schools
 - Renovate and expand 4 elementary schools
 - Renovate 5 elementary schools
 - Review middle schools based on enrollment; consider adding 5th middle school



Short-Term Middle School Space Solutions

- In Spring 2009, the Facilities Committee reviewed enrollment trends, studied redistricting and other options and revised the initial plan for a 5th middle school. The new plan called for expansion of Oak Hill and Day Schools.
- 4 Modular Classrooms added at Oak Hill in Summer 2010.
- Day Feasibility Study approved in 2009 and completed in 2010 by Raymond Design Associates, Inc. @ \$100,000.
- Day Middle School re-examined in 2010 with the following options:
 - Do nothing – No additional space added
 - Reconfigure existing space by utilizing other rooms such as TV studio and computer labs
 - Redistrict and use buffer zones to balance enrollment
 - Use permanent construction with options that included: additional classrooms, cafeteria expansion, and main office relocation for improved security



Process for Moving Forward Long Range Facilities Plan Forward

- School Committee voted long range plan. Schools were identified in priority order as Angier, Cabot, Zervas and Ward. (June 2008)
 - Angier, Cabot and Zervas were selected due to their central location.
 - Angier and Zervas slated to be expanded to accommodate increased enrollment in the elementary schools.
- Statements of Interest filed with the MSBA for 17 schools in June 2007 and again in November of 2008 and 2009.
- Priorities are established including renovation of Carr School to be used as swing space as top priority.
- School Committee and Mayor met with the MSBA to discuss priorities. (Spring 2010)
- Mayor to complete City inventory of all buildings as a precursor to moving the school plan forward. (Summer 2011)



Next Steps

- Feasibility Study per MSBA for Angier
- Determine “swing space” for long range construction projects
- Determine funding sources
- Implement Short-Term Facilities Plans



Part II: Short-Term Space Options

1. Middle School Model and Statistics
2. Day Options Considered
 - a. Do Nothing – No Additional Space Added
 - b. Reconfigure Existing Space
 - c. Redistricting and Buffer Zones
 - d. Permanent Construction Options
3. Elementary Space Considerations
4. FY12 Budget Implications



Middle School Model

- Flexible, multi-faceted learning environment that is responsive to middle school developmental needs.
- Student-centered core curriculum that is academically challenging, experiential, exploratory, and interdisciplinary.
- Educational structure with small, stable learning communities. **Teaming is the centerpiece of this structure.**



Middle Schools: The Numbers

- 4 subjects lend themselves to 4 (or possibly 2) teacher teams
- Targeted team size: 88-92
- Math levels cause higher than average class sizes

Team Size and Average Class Size

2009-10 (In Order of Team Size)

	Avg. Team Size	Avg. Class Size	% Classes > 25 students	% Classes < 20 Students
Brown	85	20.9	7%	28%
Bigelow	88	21.3	7%	21%
Day	91	21.9	15%	17%
Oak Hill	96	22.9	29%	11%

2010-11 (In Order of Team Size)

	Avg. Team Size	Avg. Class Size	% Classes > 25 Students	% Classes < 20 Students
Bigelow	87	21.3	9%	19%
Brown	89	21.7	7%	11%
Day	89	21.9	11%	17%
Oak Hill	93	21.9	26%	16%

Day at 36, 38, 40 or 42 Team Classrooms Average (with Min/Max) Team Size

# Team Classrooms	Team Size	2011-12	2012-13	2013-14	2014-15	2015-16
36	Average	93	97	99	98	98
	Min/Max	87/98	92/100	97/100	94/100	95/101
38	Average	N/A	91	94	93	93
	Min/Max	N/A	85/98	86/99	86/99	87/98
40	Average	N/A	87	89	88	88
	Min/Max	N/A	84/92	85/97	85/94	84/95
42	Average	N/A	83	85	84	84
	Min/Max	N/A	80/85	83/86	81/86	81/87

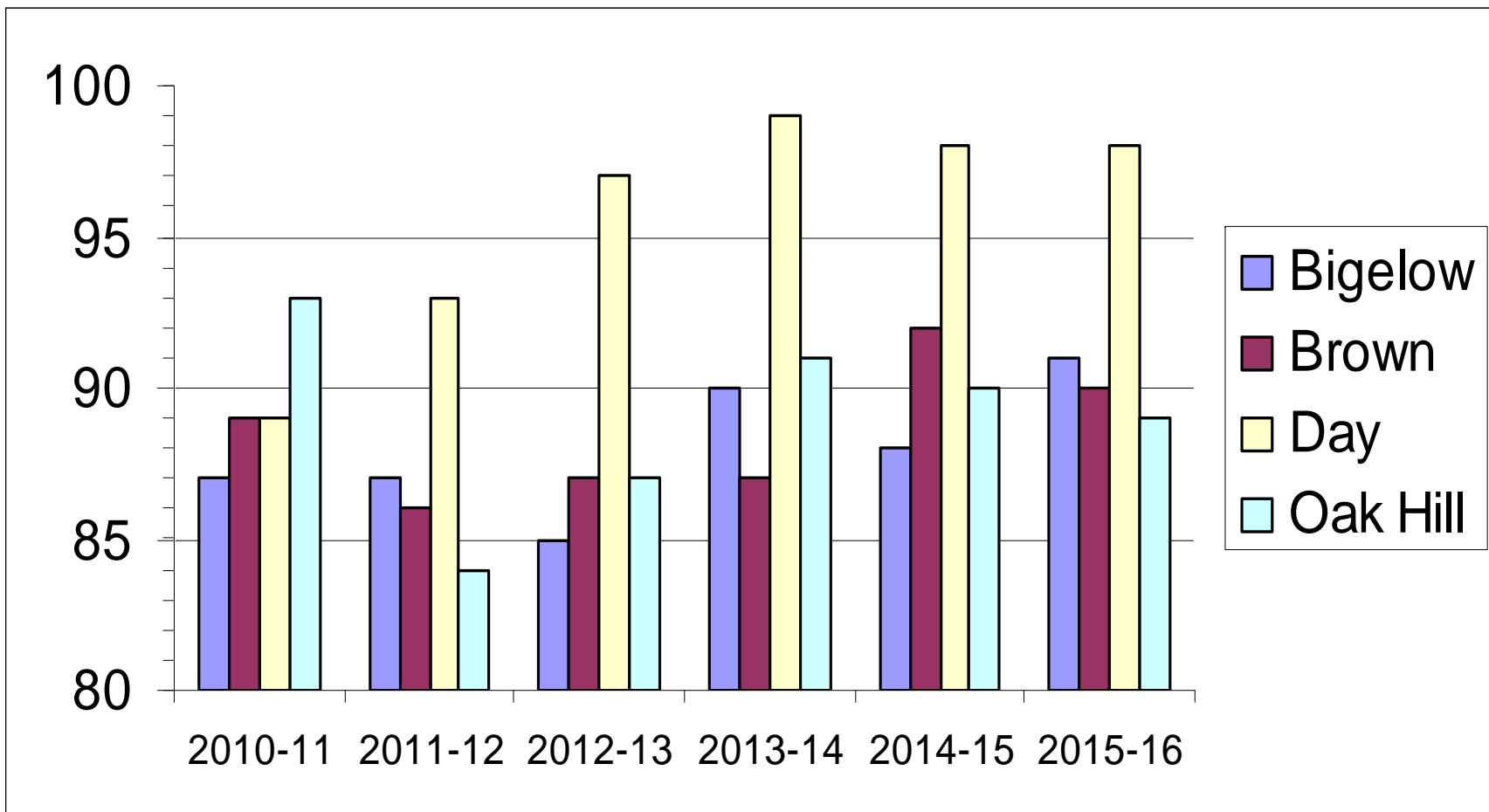


Other Space Needs and Constraints at Day

- Will require two (2) additional classroom spaces
- Special Education population growing at Day - has implications for space and staffing
- Three small classrooms with maximum capacity of 8 students will not be large enough to house larger Learning Center classes
- Day's ELL program will be expanded to include beginning ELL students; existing ELL space for 30 students will not be adequate
- Growing enrollment puts pressure on specialist classroom space – scheduling conflicts limit the extent to which specialist rooms can be shared

Average Team Size: Day at 36 Team Classrooms

(Max Team Size At Any Grade in Other Schools = 96)

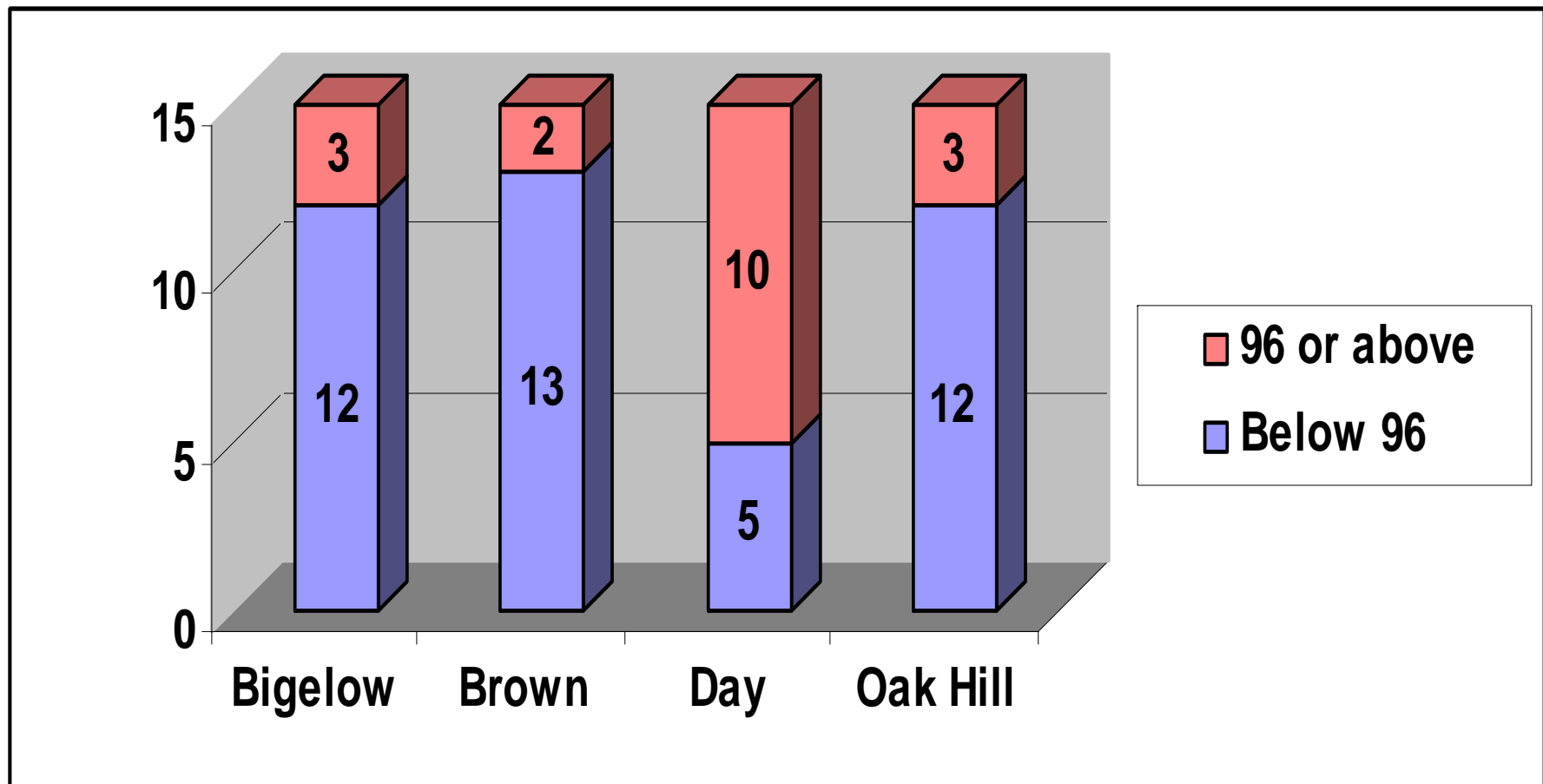


Number of Teams at 96 Students or Above

Day at 36 Team Classrooms

Max Team Size of 96 students at other schools

2011-12 through 2015-16





Redistricting Options

Guidelines

- All current students are grandfathered.
- Students follow new feeder patterns through all grades.

Options

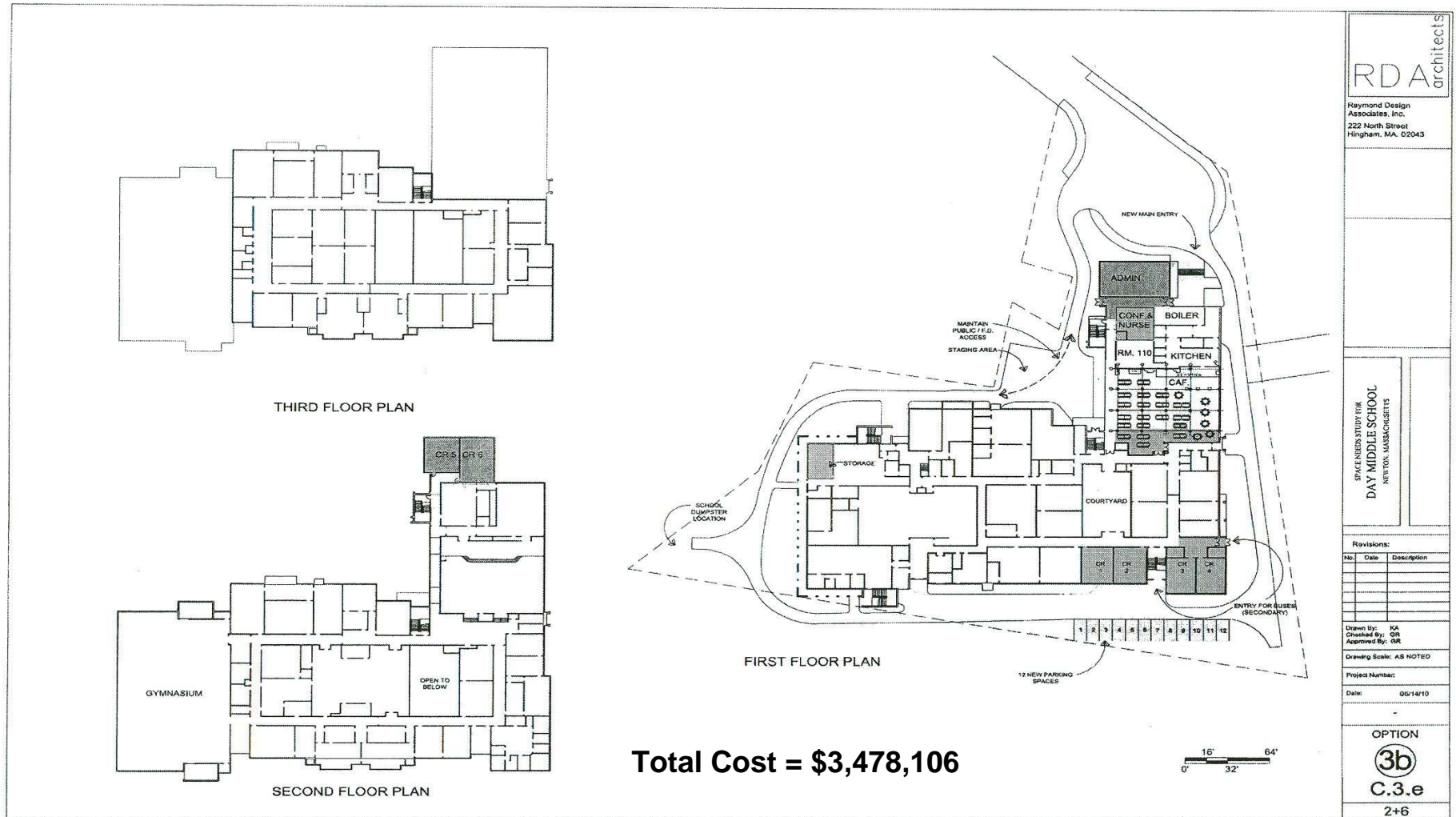
- No Redistricting: Significant space constraints at Bigelow and Day; North-South split grows to 292 students in FY21.
- 100% of Cabot to Bigelow: Larger space constraint at Bigelow; North-South split grows to 292 students in FY21.
- 100% of Cabot to Bigelow; 100% of Lincoln-Eliot to Day: Larger space constraint at Day; North-South split grows to 292 students in FY21.
- 100% of Cabot to Bigelow; 100% of Ward to Brown/South: Small space constraint at Bigelow; Brown North-South split to 38 students in FY21.



Day Options for Construction

- 70 options considered with total cost ranging from \$3 to \$6 million
- Many options in the \$5-6 million range were considered but rejected due to cost
- Options narrowed down to three recommended ranging from \$3.5 to \$3.8 million. All options add 6 new classrooms, expand the cafeteria and create new administrative offices for increased security
- Additional options discussed without office renovation and with fewer classrooms

Options for Construction - Option 3b



RDA architects

Raymond Design Associates, Inc.
222 North Street
Hingham, MA 02043

SPACE NEEDS STUDY FOR
DAY MIDDLE SCHOOL
NEWTON, MASSACHUSETTS

Revisions:

No.	Date	Description

Drawn By: KA
Checked By: CR
Approved By: CR

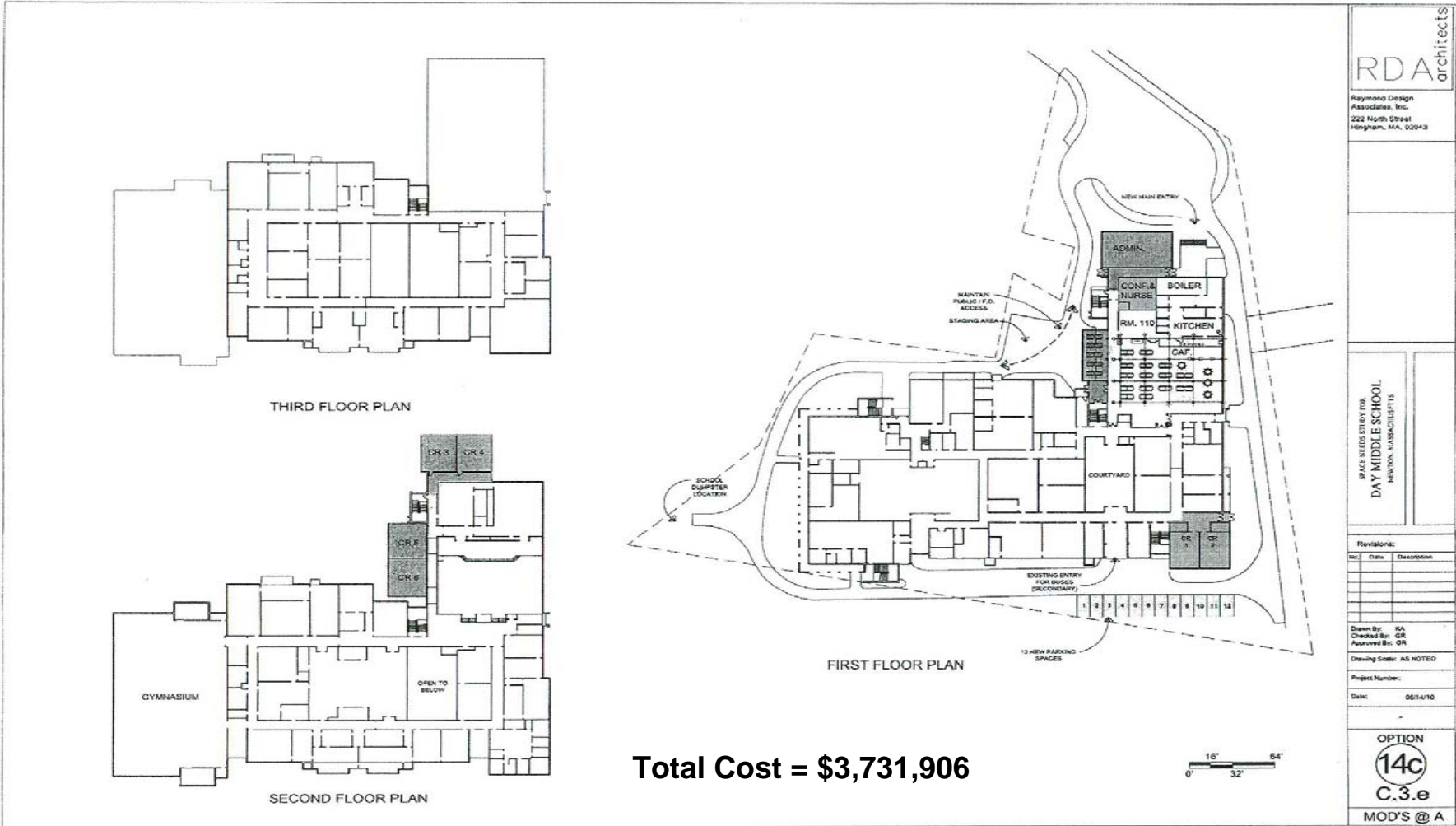
Drawing Scale: AS NOTED

Project Number:

Date: 06/14/10

OPTION
3b
C.3.e
2+6

Options for Construction - Option 14c



Total Cost = \$3,731,906

RDA architects
 Raymond Design Associates, Inc.
 222 North Street
 Hingham, MA, 02043

SPACE NEEDS STUDY FOR DAY MIDDLE SCHOOL, NEWTON, MASSACHUSETTS

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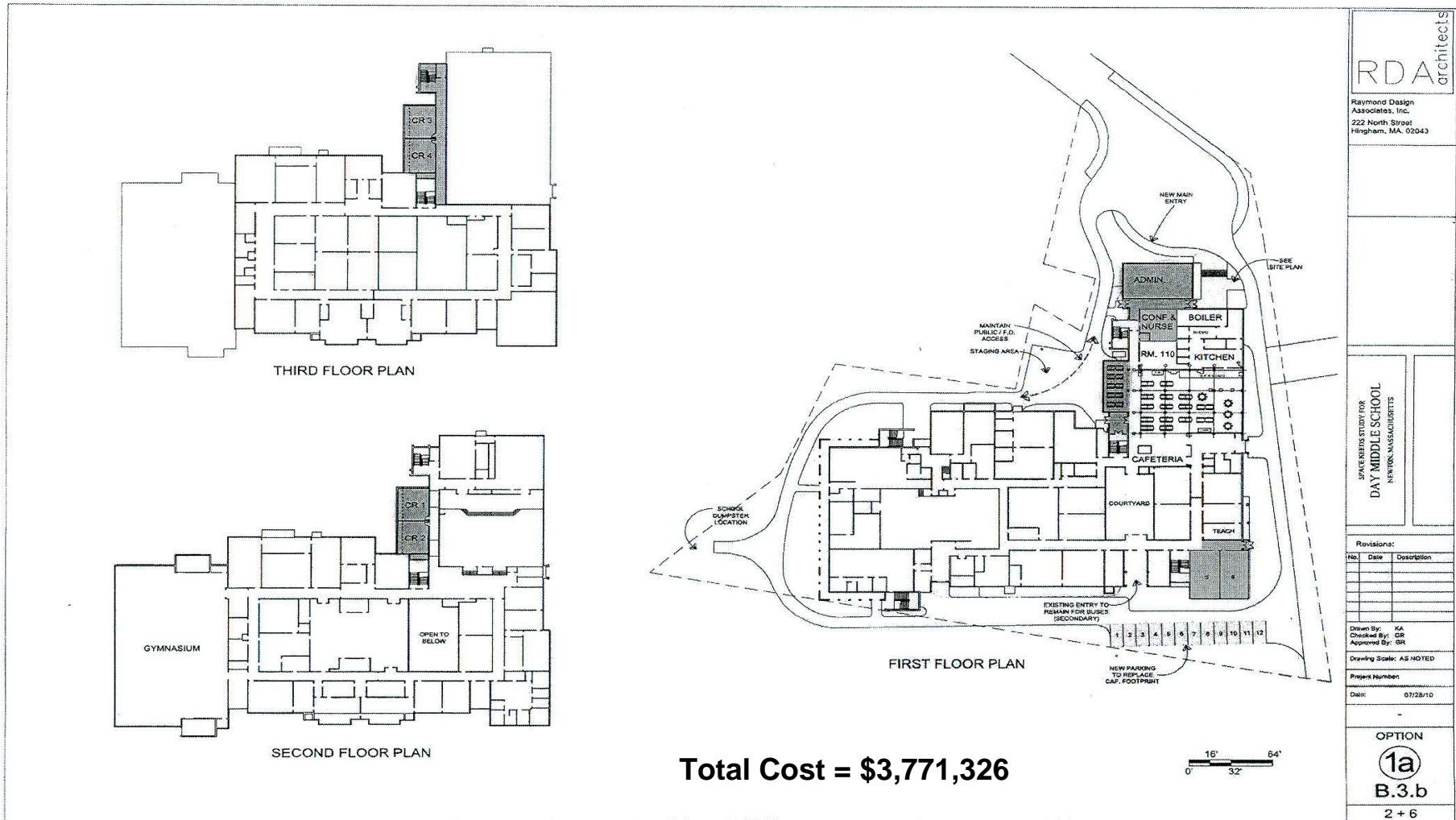
Drawing Scale: AS NOTED

Project Number:

Date: 05/14/10

OPTION 14c
 C.3.e
 MOD'S @ A

Options for Construction - Option 1a



RDA architects
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222 North Street
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SPACE STUDY FOR
DAY MIDDLE SCHOOL
NEHEM, MASSACHUSETTS

Revisions:		
No.	Date	Description

Drawn By: RA
Checked By: CR
Approved By: CR

Drawing Scale: AS NOTED

Project Number:
Date: 07/28/10

OPTION 1a
B.3.b
2 + 6



Timeline for Approval and Construction

- School Committee Approval: September-October 2010
- Board of Alderman Approval/Funding: November-December 2010
- Funding & Designer Selection: October-December 2010
- Design Permanent Construction: January-May 2011 (5 months)
- Bid and Award Permanent Construction: June-July 2011 (2 months)
- Permanent Construction: October 2011 – December 2012 (15 months)
- Open New Construction: as early as September 1, 2012



Elementary Short-Term Space Concerns

- Limited facilities remain a prominent issue when considering elementary space concerns
- Space needs have been reviewed with principals, central office, and operations and facilities staff – also reviewed in conjunction with updated enrollment projections
- Key considerations in decision making are instructional and other strategies such as combination classes, additional half teachers, and redistricting
- Eight (8) Modulars were added in summer 2007



Burr School

- 391 students in 19 full sized spaces - 17 classrooms, 1 Art room, and 1 Music room (shared with Aftercare)
- Art room will be needed for an 18th classroom in 2011-12
- Options: Art room could move to a space created in the cafeteria/all purpose room, or one modular could be added
- Recommendation: Add one modular



Countryside School

- 498 students in 25 full-sized spaces, 22 classrooms, 1 Literacy room, 1 ELL room, 1 Special Education room
- Classroom added last summer by moving Art room to space behind the gym (shared with After School)
- Recommendations:
- Combine ELL and Literacy to gain classroom in September 2011.
- Add modular classroom to address growing enrollment in September 2012.



Horace Mann School

- 374 students in 18 full sized spaces, 17 classrooms and 1 Art room
- ELL program and speech therapy displaced to lobby to gain a classroom this year
- Recommendation: Add modular classroom for increasing K enrollment and/or to house displaced services



Mason-Rice School

- 442 students in 21 full sized spaces, 19 classrooms, 1 Art room, and 1 Aftercare space
- Teachers' Room was moved to aftercare space to gain an inclusion classroom this year. A psychologist, inclusion facilitator, social worker and O.T. share one undersized space
- Recommendation: Add modular classroom for instructional space and return student services to classroom space



Zervas School

- 349 students in 17 full sized spaces, 16 classrooms and 1 Art room
- Learning Center, Speech and Inclusion housed in an undersized common area, along with the math coach, literacy specialist, O.T., P.T. and visual specialist
- Psychologist, social worker and ELL space housed behind the gym in a reconverted rest room
- Recommendation: Add modular two classrooms for needed classroom/instructional space



FY12 Budget Implications

- Enrollment growth is continuing for 7 years
- Planning focus is on the long-term needs of the schools
- Crowding exists at Day and the five elementary schools notwithstanding the number of team and regular classrooms
- Class size, student teacher ratios and programmatic offerings are not constants; facilities are constant