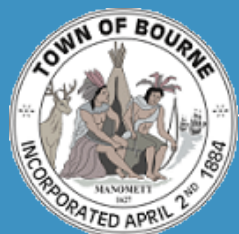


Community Forum No.4
January 21, 2016
Feasibility Study

Bourne Elementary Schools

Community Workshop



PROJECT MANAGEMENT **SMMA**
Massachusetts School Building Authority

Flansburgh Architects

Agenda

- Introductions
- MSBA Process
- Project Schedule
- Defining the Need
- Selecting the Best Alternative
- Next Steps
- Questions

School Building Committee

James L. Potter	Chairman, School Building Committee
Christopher Hyldborg	Chairman, School Committee
Steven M. Lamarche	Superintendent of Schools, BPS
Peter J. Meier	Board of Selectmen
Edward S. Donoghue	Director of Business Services, BPS
Thomas M. Guerino	Town Administrator
Jonathan Nelson	Director of Facilities, Town of Bourne
Elizabeth Carpenito	Principal, Bournedale Elementary School
Kathy Anderson	Member, School Building Committee
Mary Jo Coggeshall	Member, School Building Committee
Rick Howe	Member, School Building Committee
Richard A. Lavoie	Member, Finance Committee
William Meier	Member, School Building Committee
Natasha Scarpato	Member, School Building Committee
Mitch McClain	Bourne School Committee

Design Team

Kent Kovacs

Flansburgh Architects

Betsy Garcia

Flansburgh Architects

Owner's Project Manager

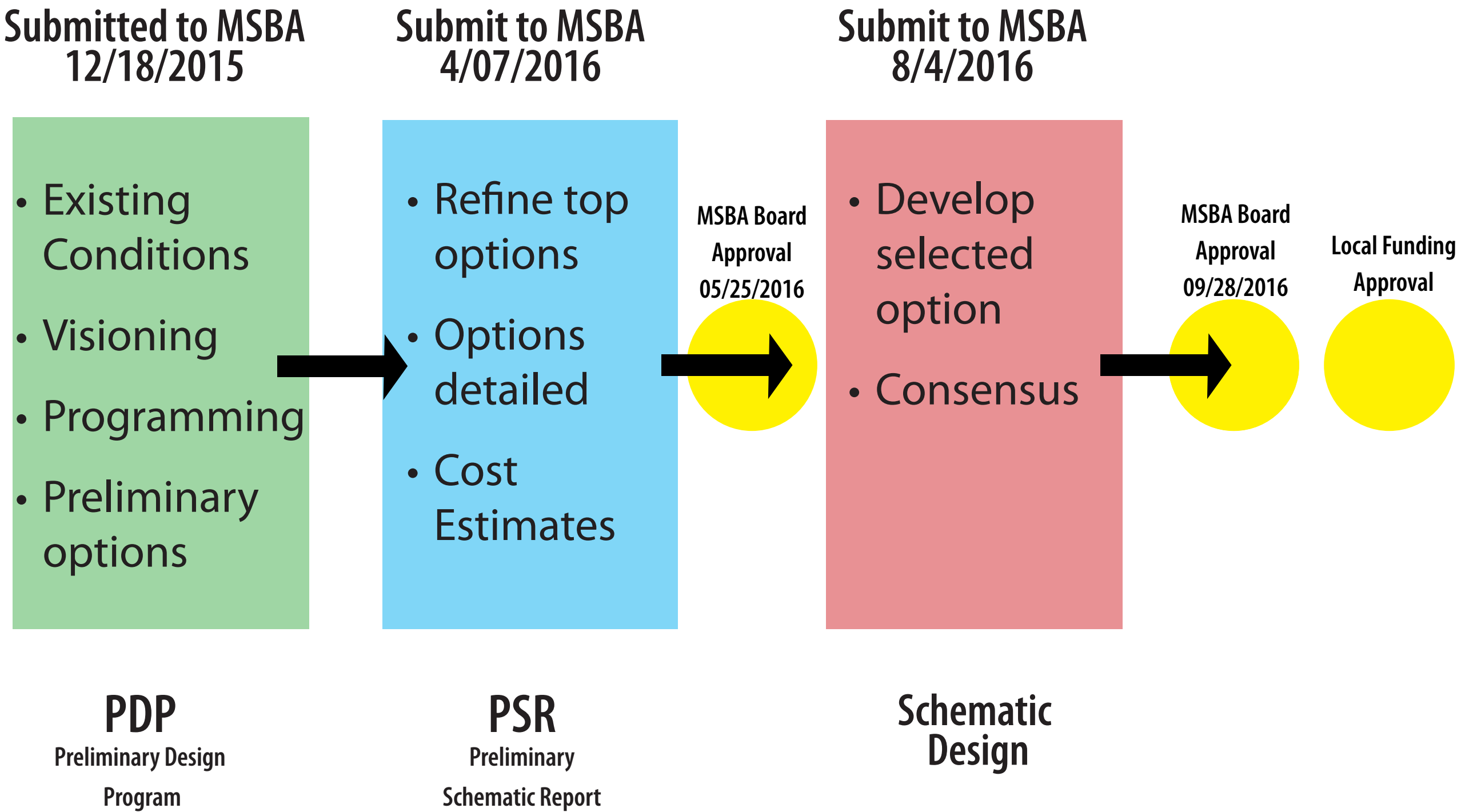
Joel Seeley

Symmés, Maini & McKee

MSBA Process

- **MSBA** is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects.
- **MSBA** mandates a multi-step rigorous study and approval process
- **MSBA** will fund **43.84%** plus incentives of eligible project cost for an approved project if accepted by the voters of Bourne

MSBA Process



MSBA Process

Submitted to MSBA
12/18/2015

- Existing Conditions
- Visioning
- Programming
- Preliminary options

PDP
Preliminary Design
Program

Submit to MSBA
4/07/2016

- Refine top options
- Options detailed
- Cost Estimates

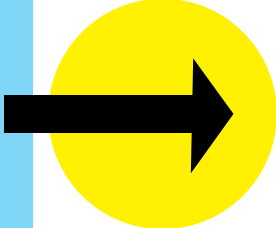
PSR
Preliminary
Schematic Report

Submit to MSBA
8/4/2016

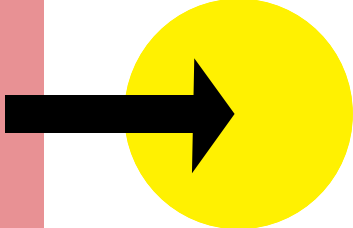
- Develop selected option
- Consensus

Schematic Design

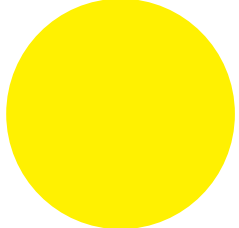
MSBA Board
Approval
05/25/2016



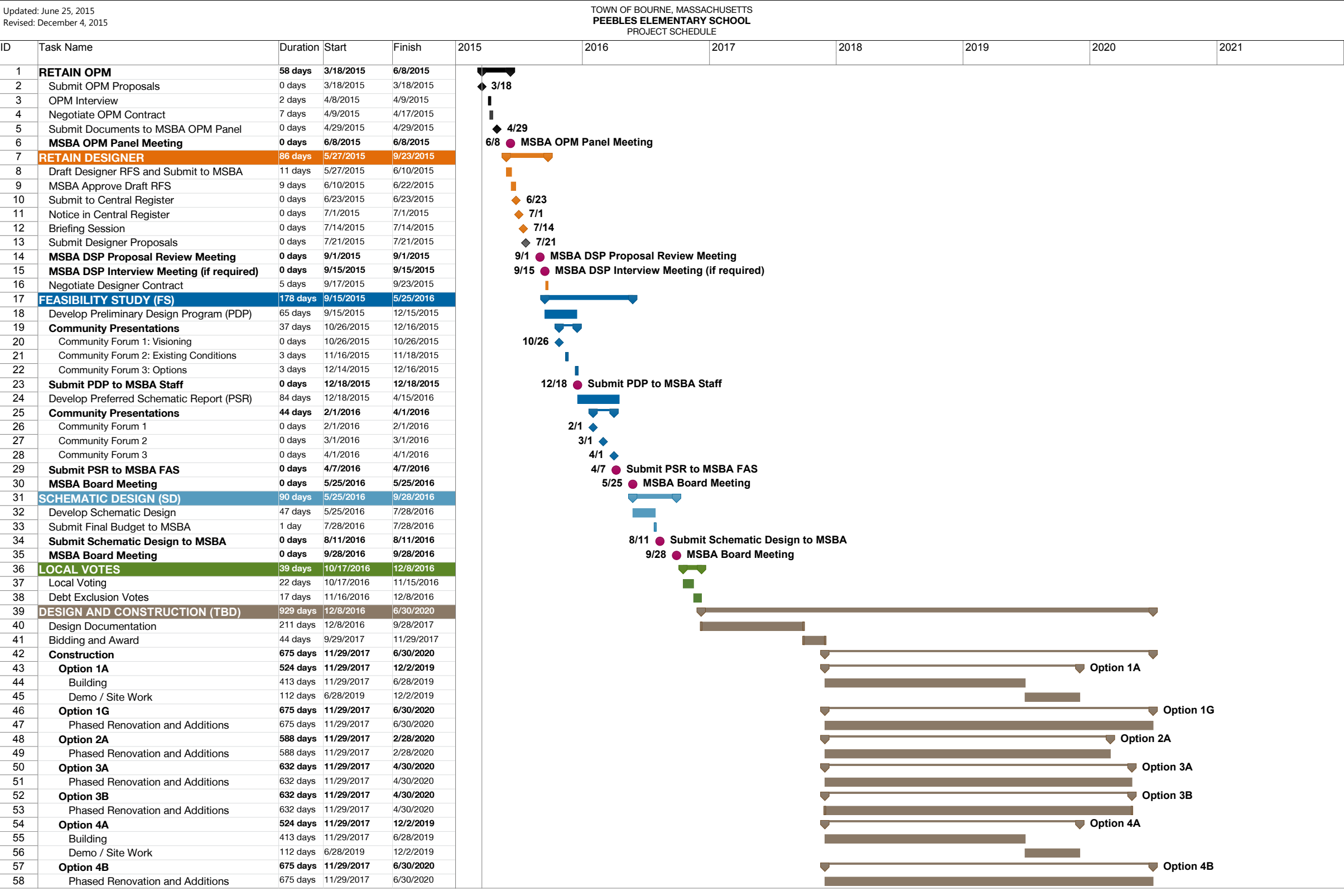
MSBA Board
Approval
09/28/2016



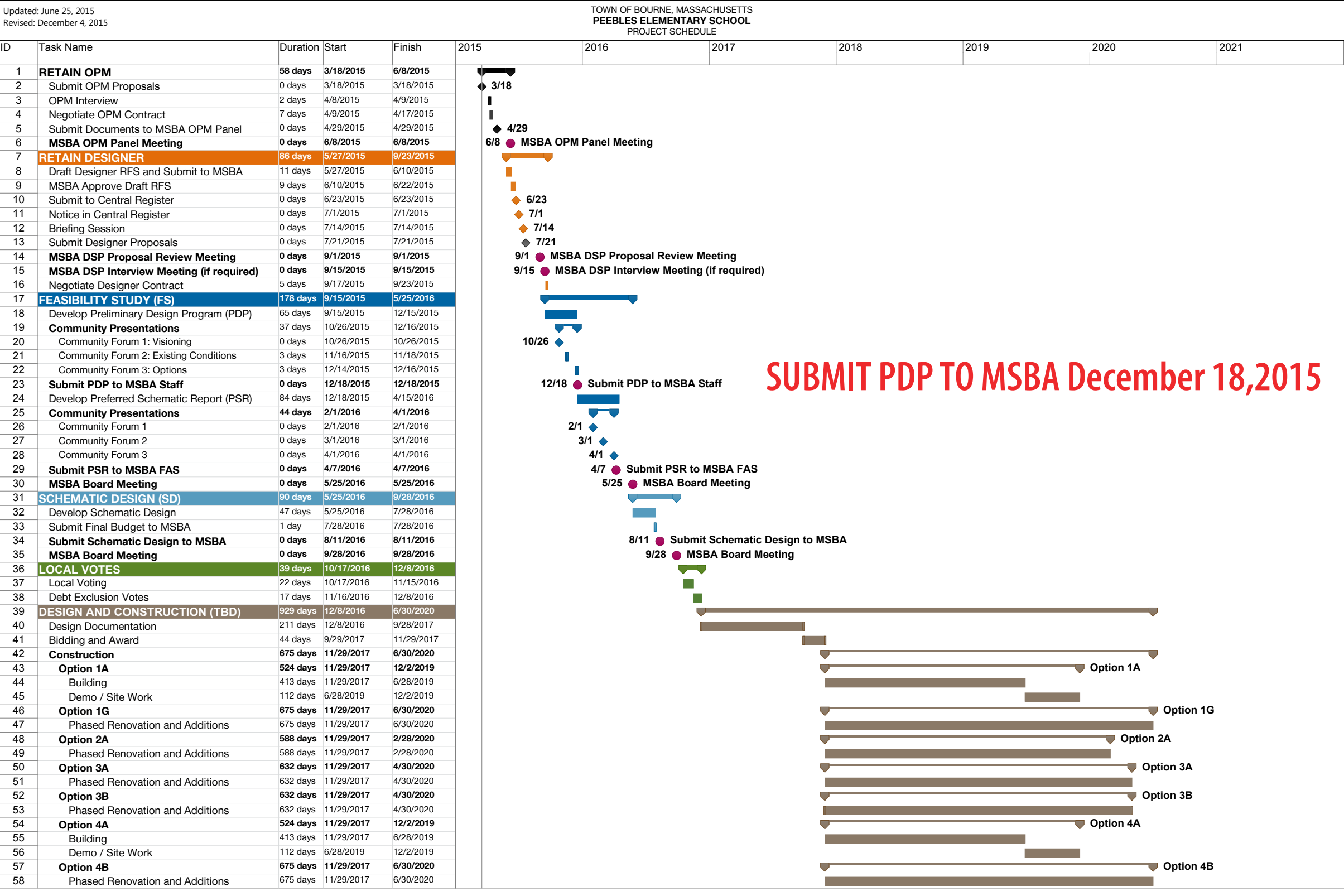
Local Funding
Approval



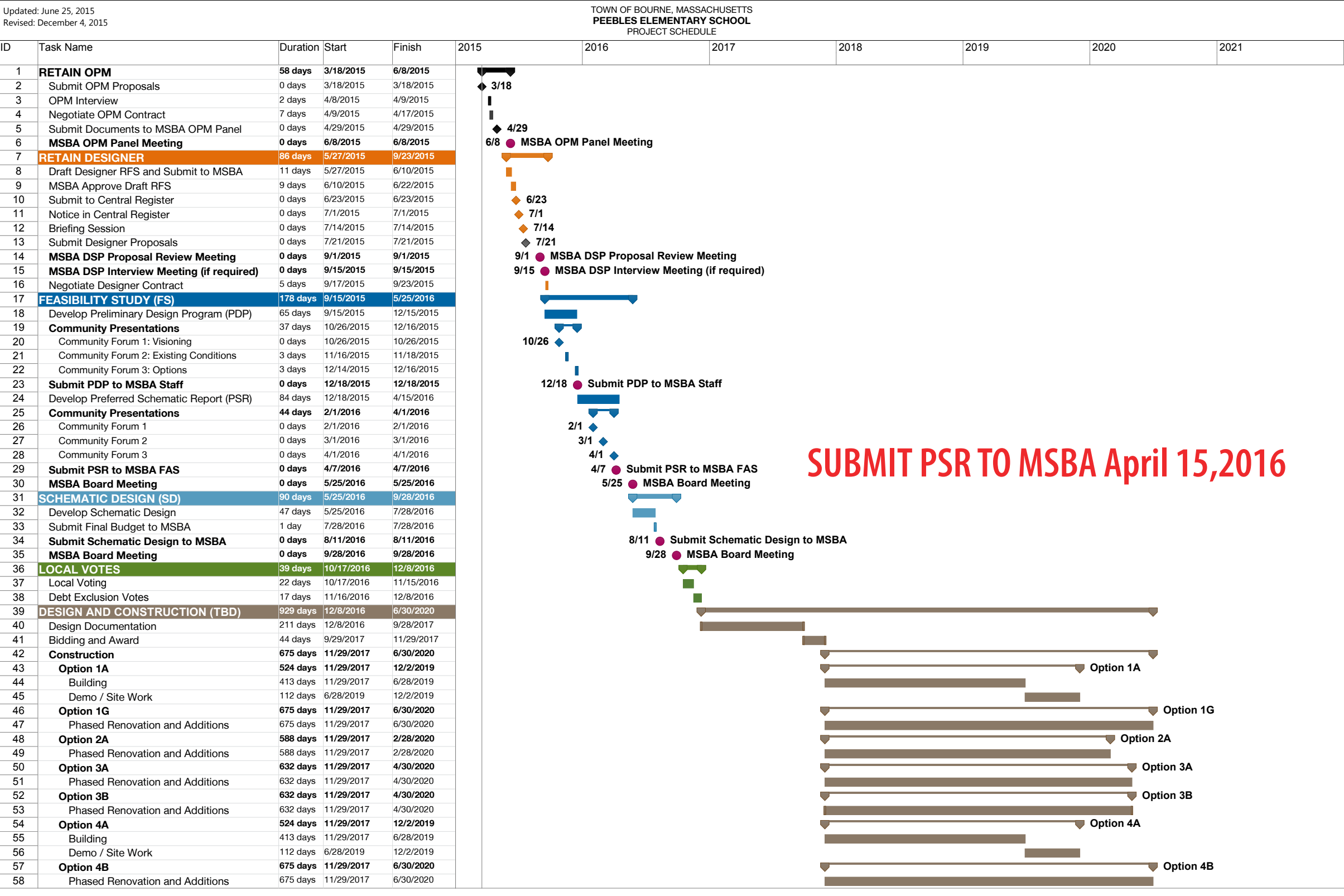
Project Schedule



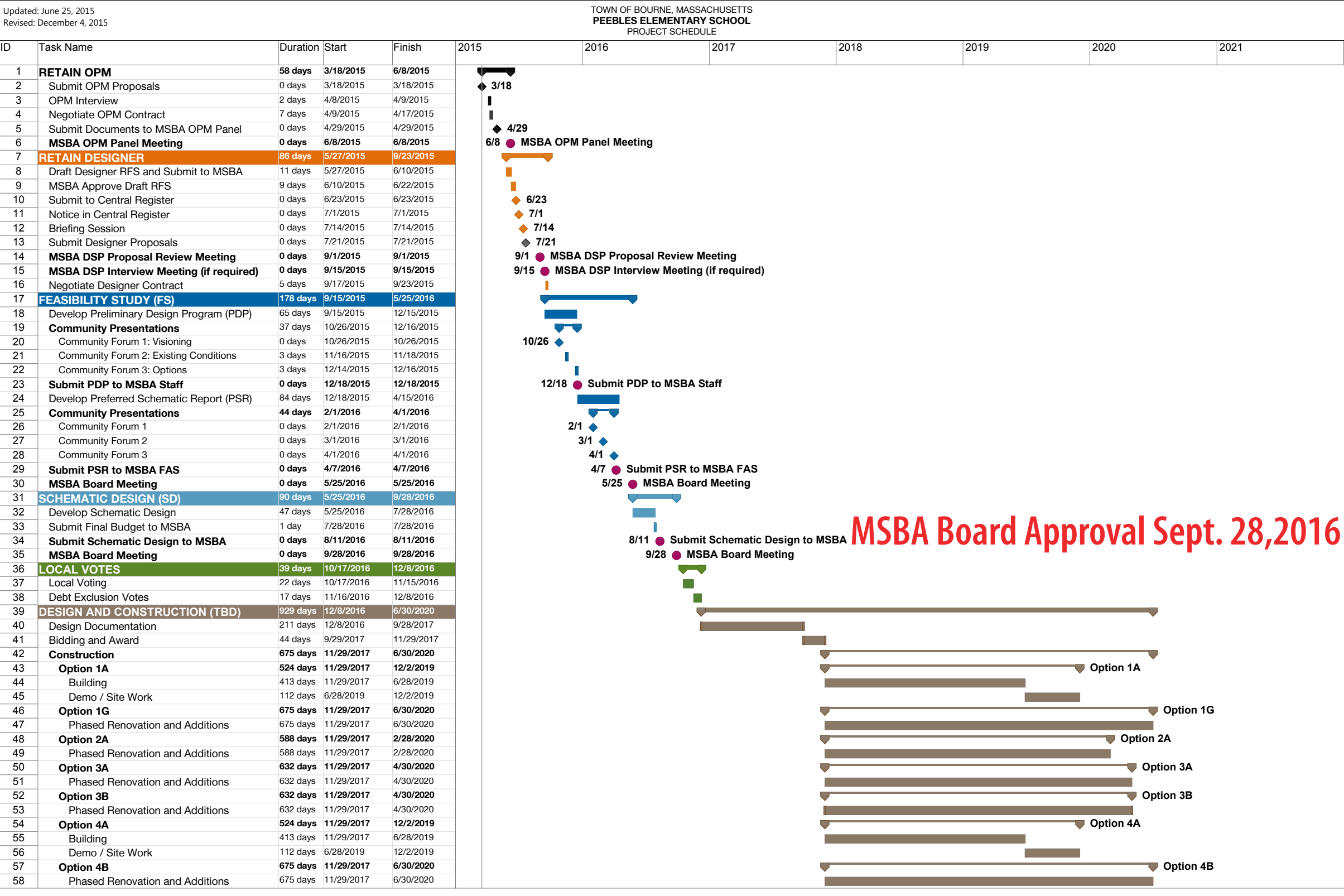
Project Schedule



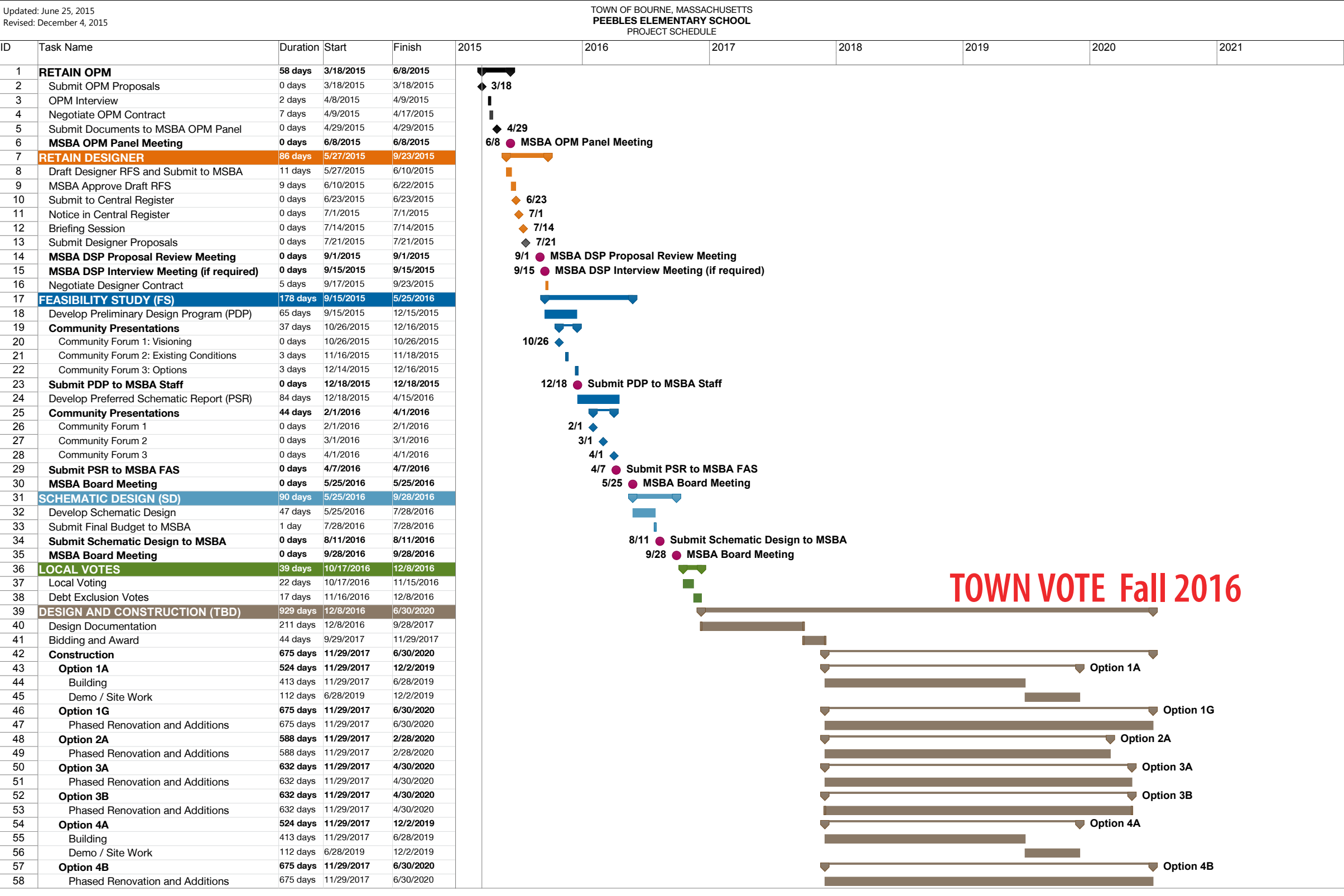
Project Schedule



Project Schedule



Project Schedule



Completed Milestones

- January 09, 2012 - Bourne submits SOI to MSBA
- December 16, 2014 - MSBA Approves Student Enrollment
- February 11, 2015 - MSBA Executes Feasibility Agreement
- June 08, 2015 - Town retains Owner's Project Manager (OPM)
- September 22, 2015 - Town retains Architect
- October 17, 2015 - Community Forum No.1
- November 17, 2015 - Community Forum No. 2
- December 08, 2015 - Community Forum No. 3
- December 18, 2015 - PDP Submitted to the MSBA

Completed Tasks

- Educational Program
- Visioning Program
- Space Summary Spreadsheets
- Building Evaluation
- Structural Evaluation
- MEP Evaluation
- Hazardous Materials Inspection
- Phase 1 Environmental Assessment
- Site Evaluation
- Traffic Evaluation
- Options Development
- Comparison Matrix
- Cost Analysis
- Options Evaluation
- Design Alternatives reduced from 7 to 4
- PDP Report Submitted to the MSBA

Defining the Need

Defining the NEED

- Provide a long term solution to resolve the existing deteriorating school
- Provide educational spaces that meet the MSBA state standards
- Update the school to meet the “Visioning” workshop goals
- Provide 21st Century Educational spaces
- Provide a school that is safe, code compliant, and a place Bourne can be proud of

Defining the **NEED** - Existing Conditions

Peebles Elementary School

Year Built: 1953,1959 *(62 yrs. old)*

Site Poor drainage, traffic, and HC accessibility

Exterior Cracks, leaks, and lack of insulation

Interior Worn out, broken, and needs replacement

MEP systems Antiquated, inefficient, & poor temperature control



Cafeteria Unit Ventilator



Vinyl Siding at Spandrel



Storage



Furniture

Defining the NEED - Existing Conditions

Bournedale Elementary School

Year Built: 2009 *(7 yrs. old)*

Site Good site circulation and proper drainage

Exterior Exterior envelope is in good condition. Leaks at roof to wall intersection

Interior Finishes are in good condition. Acoustics need to be improved in limited spaces

MEP systems Systems are functioning properly and have continued life expectancy



Window Sills



Roofing



Cubbies

Defining the NEED - Visioning and 21st Century Learning

1. Community Connected

- A Place You Want to Be
- Future Orientation with Connections to Tradition
- Community Access

2. Purposefully Innovative & Creative

- Visible Learning
- Flexible and Adaptable Learning Environments

3. Collaborative & Interconnected

- Learning Communities

4. Connections to 21st-Century Learning

- Inquiry-Based Learning
- Teacher as Designer



Defining the **NEED** - Meeting State Standards?

- The Existing Peebles Elementary School does not meet the state standards for space requirements in *Special Education, Physical Education, Library, Administration, Guidance, Arts, and Music*
- The Existing Bournedale School does not meet the state standards for space requirements in *Special Education and Physical Education*

Selecting the Best Design Alternative

MSBA Study Scope

Option 1

Grades
K to 4

Neighborhood
Elementary
School

250 students

Option 2

Grades
PreK to 4

District-wide
Elementary
School

725 students

Option 3

Grades
PreK to 5

District-wide
Elementary
School

885 students

Option 4

Grades
K to 5

Neighborhood
Elem. School
with District-
wide 5th grade

410 students

MSBA Study Scope

Option 1

Grades
K to 4

Neighborhood
Elementary
School

250 students

Option 2

Grades
PreK to 4

District-wide
Elementary
School

725 students

Option 3

Grades
PreK to 5

**ELIMATED DUE
TO SCHOOL
SIZE AND
SITE RESTRICTIONS**

885 students

Option 4

Grades
K to 5

Neighborhood
Elem. School
with District-
wide 5th grade

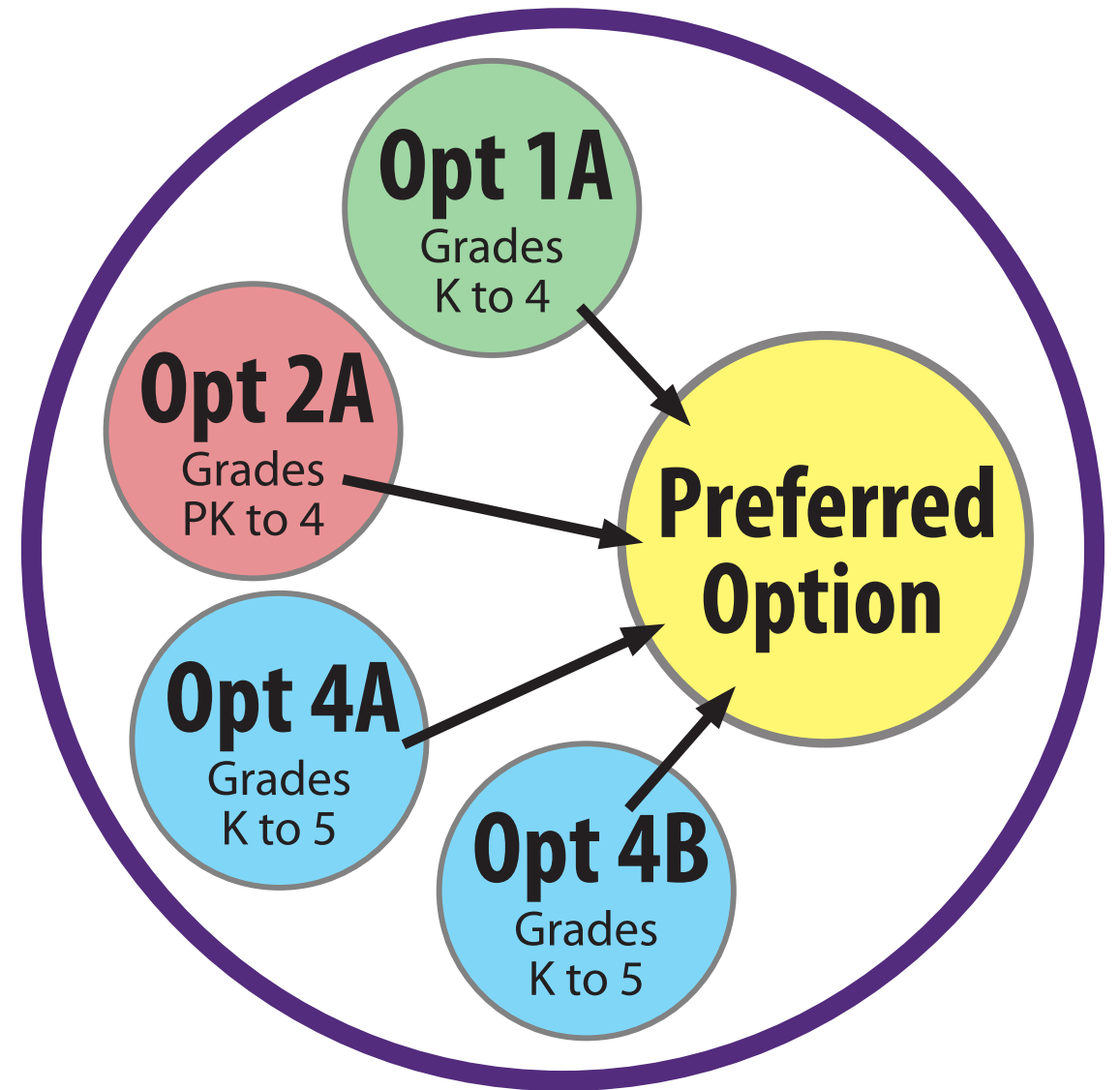
410 students

Design Selection Process

7 options to 4 (PDP phase)

- 7 original options plus “Base Repair” option were evaluated
- Matrix of evaluation criteria developed to compare options and costs
- Advantages and Disadvantages were discussed at Community Workshops and School Building Committee meetings
- Two options were eliminated for being too large and restrictive on the existing site
- One option was eliminated for the disruption to students during construction and compatibility with visioning goals
- This leaves 4 options; 1A (K-4), 2A (PK-4), 4A (K-5), and 4B (K-5)

4 options to 1 (PSR phase)



Design Selection Process - Evaluation Matrix

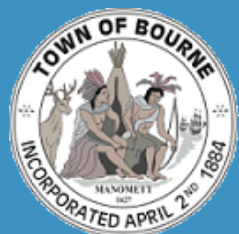
Evaluation Criteria	
1	Size of School
2	Grade Separation Issues
3	Reinforces Campus Feel
4	Opportunity for Collaboration & Mentoring
5	District-wide Culture and Advantages
6	Traffic Impact
7	Separation of Community / Academic Uses
8	Creation of Community Space
9	Limits Disruption to Students
10	Cost Effectiveness: Operation / Construction
11	Maximum Building Efficiency
12	Least Environmental Impact
13	Most Beneficial Construction Schedule
14	Best Site Option for Neighborhood Schools
15	Adequate Play & Parking Areas
16	Continued Use of Athletic Resources
17	Maximum Score for NE-CHPS / LEED
18	Best Space Adjacencies
19	Best Separation of Parent / Bus / Service Circulation
20	Resolves Geographic Separation by Canal
21	Centralized Elementary Resources
22	Centralized Campus Resources
23	Advantages to Middle School
24	Maximize MSBA Reimbursement

	Total Score by Option*						
Committee Member	Option 1A (250 Students)	Option 1G (250 Students)	Option 2A (725 Students)	Option 3A (885 Students)	Option 3B (885 Students)	Option 4A (410 Students)	Option 4B (410 Students)
Natasha Scarpato	39	24	44	38	38	57	41
Mary Jo Coggleshall	47	24	45	40	40	61	49
Janey Norton	58	50	44	41	44	65	46
Elizabeth Carpenito	48	24	65	48	41	65	54
Steven Lamarche	50	41	47	45	45	58	48
Frederick Howe	33	30	43	40	40	54	43
James Potter	54	42	57	54	56	55	42
Edward Donoghue	49	41	41	40	42	54	47
Richard Lavoie	53	24	50	43	43	56	24
William Meier	37	37	55	44	44	53	44
Jonathan Nelson	48	40	42	32	31	59	52
AVERAGE	47	34	48	42	42	58	45

Ranking:

3 for most favorable
2 for acceptable
1 for least favorable

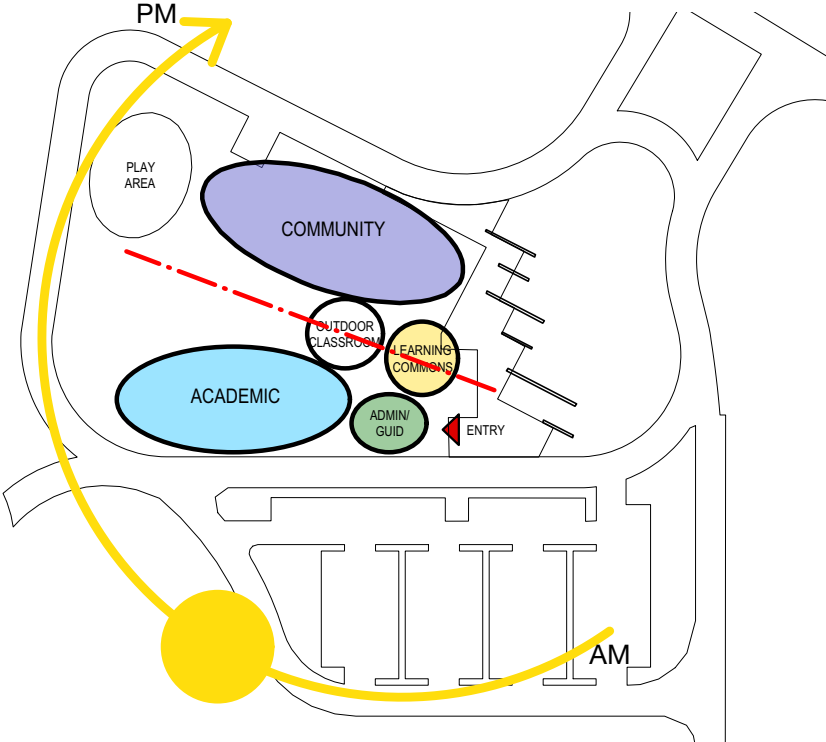
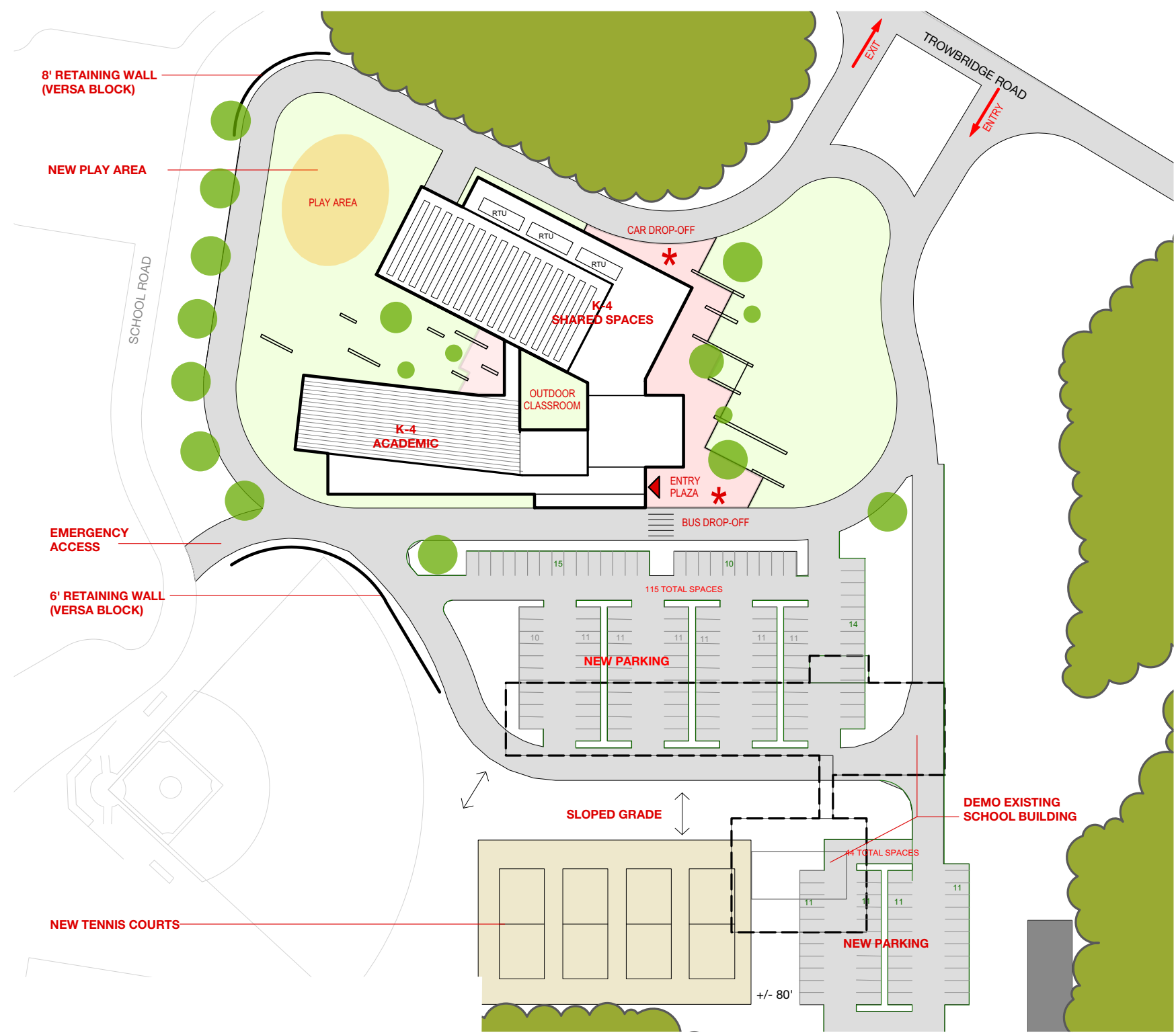
* Committee members ranked each of the 24 evaluation criteria with a 3, 2, or 1 and totaled these rankings by option.



PROJECT MANAGEMENT **SMMA**
Massachusetts School Building Authority

Flansburgh Architects

Peebles New Construction Option 1A (250 students)

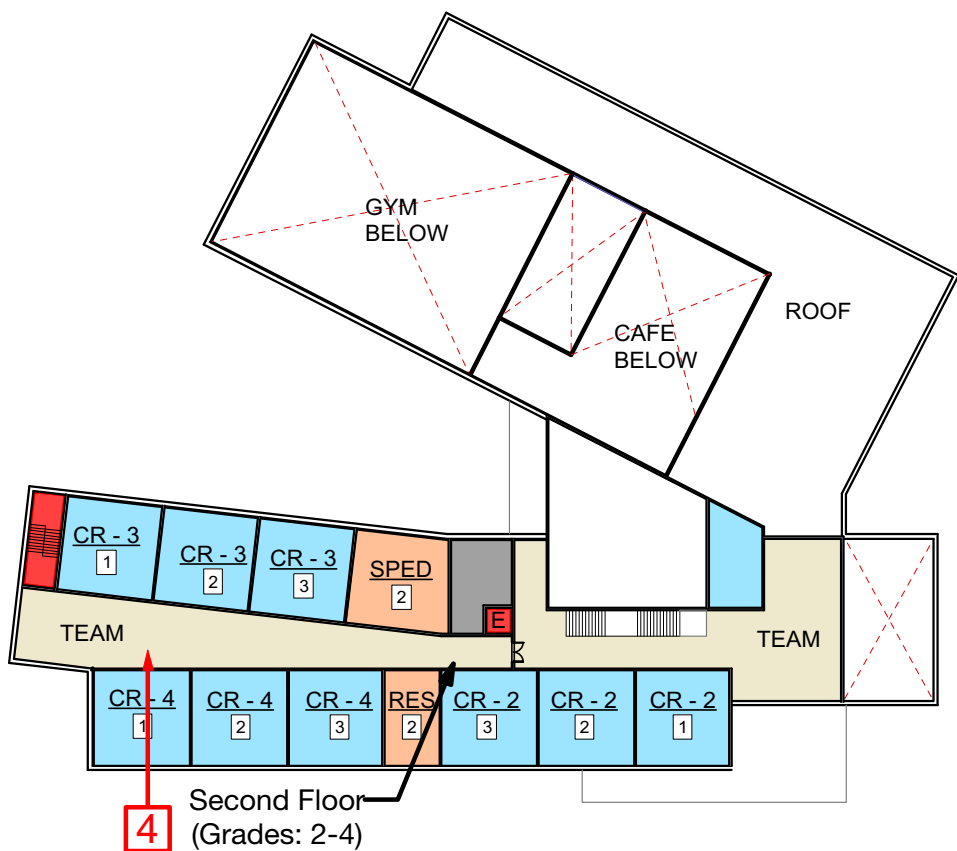


Organizational Diagram

Peebles New Construction Option 1A (250 students)

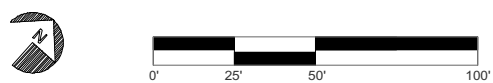


FIRST FLOOR PLAN



SECOND FLOOR PLAN

KEY	
1. Arts & Innovation Studio: -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources	4. Academic: -Neighborhood collab/display
2. Outdoor Classroom: - Limits distraction to academic classrooms -project area with water, power	5. Play Area: -Adjacent to Gymnasium to limit distraction to academic classrooms
3. Community: - Stage open to gym & cafe to support larger venue to support greater community events on this side of the canal	6. Campus Resource: - Adjacent to Middle School and High School,Historic Village, Canal
	7. Entry Plaza connects separate car and bus zones



Peebles New Construction Option 1A (250 students)

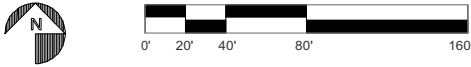
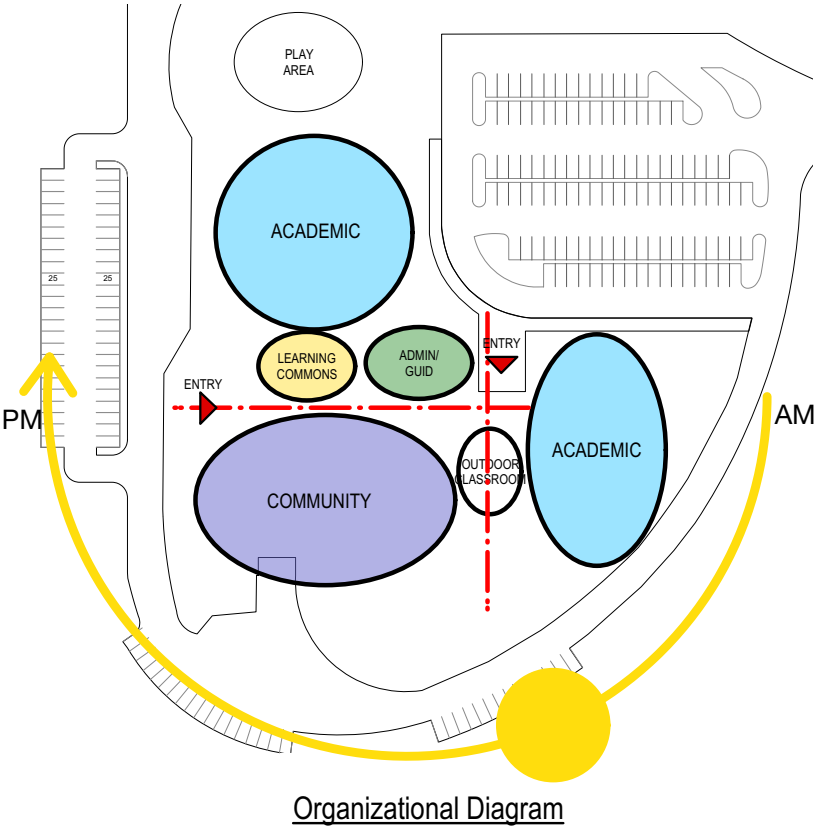
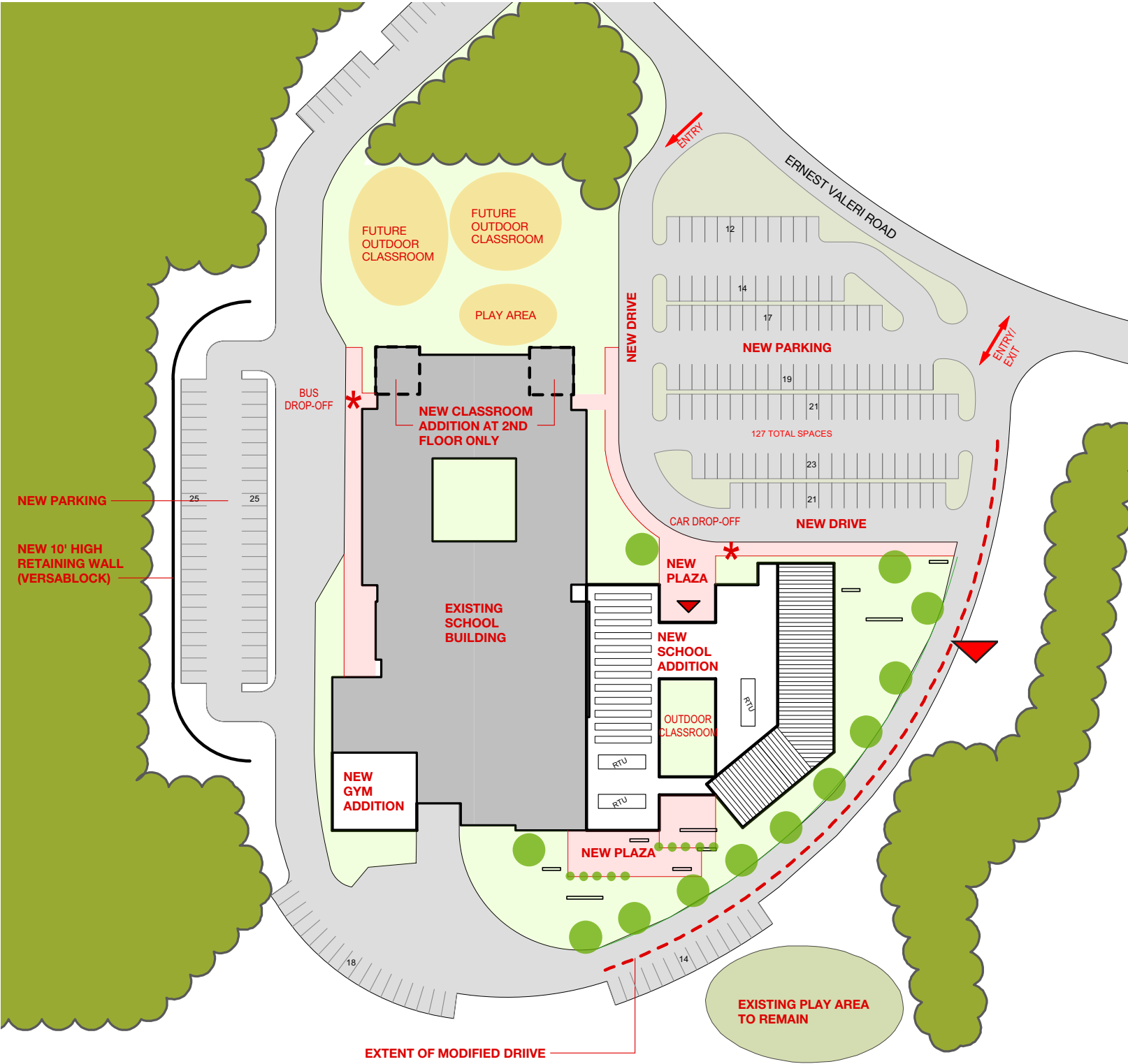
Pros:

- New Construction alternative with least disruption to students during construction
- Centralized resources as part of a campus
- Clear Articulation between Community and Academic wings; good community access
- Team Spaces promote interconnection
- Outdoor Classroom a beautiful, enclosed focal point for building; good access encourages use.
- Innovation Studio located along main axis; proximity to Art and to Media Center offers flexibility and opportunity for collaboration.
- New Construction provides flexibility in building and site design

Cons:

- Very small school
- Does not alleviate space demand in Middle School
- Does not relocate 5th grade within elementary school setting
- High cost of a small school

Bournedale Option 2A (725 students)



Bournedale Option 2A (725 students)



FIRST FLOOR PLAN



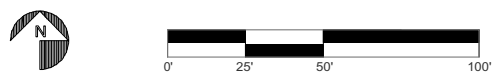
SECOND FLOOR PLAN

KEY

1. Arts & Innovation Studio:
-Grouped with Arts to promote collaboration, shared resources
-Remote from Learning Commons
2. Outdoor Classroom:
- Limits distraction to academic classrooms
-project area with water, power
3. Community:
-Larger venue to support greater community events

New Addition: - - - - -

4A. Academic: Neighborhood collab/display
4B. Academic: Existing building limits opportunity for Team Areas
5. Play Area: Remote from gymnasium
6. Separate car and bus drop-off entry locations
7. Distinct academic neighborhood:
Existing Wing: PK-2, New Addition: 3-4



Bournedale Option 2A (725 students)

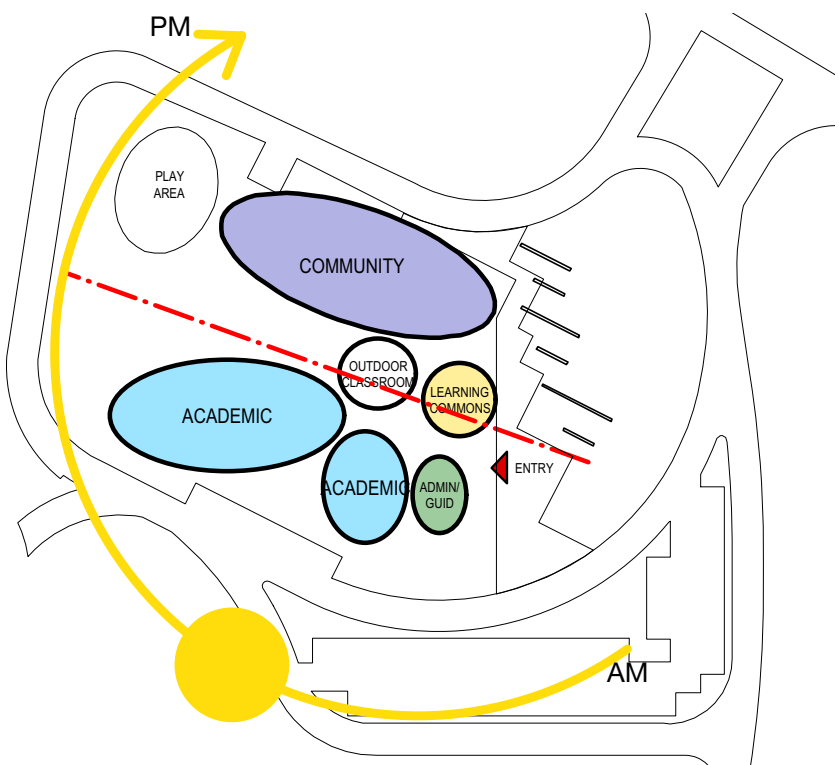
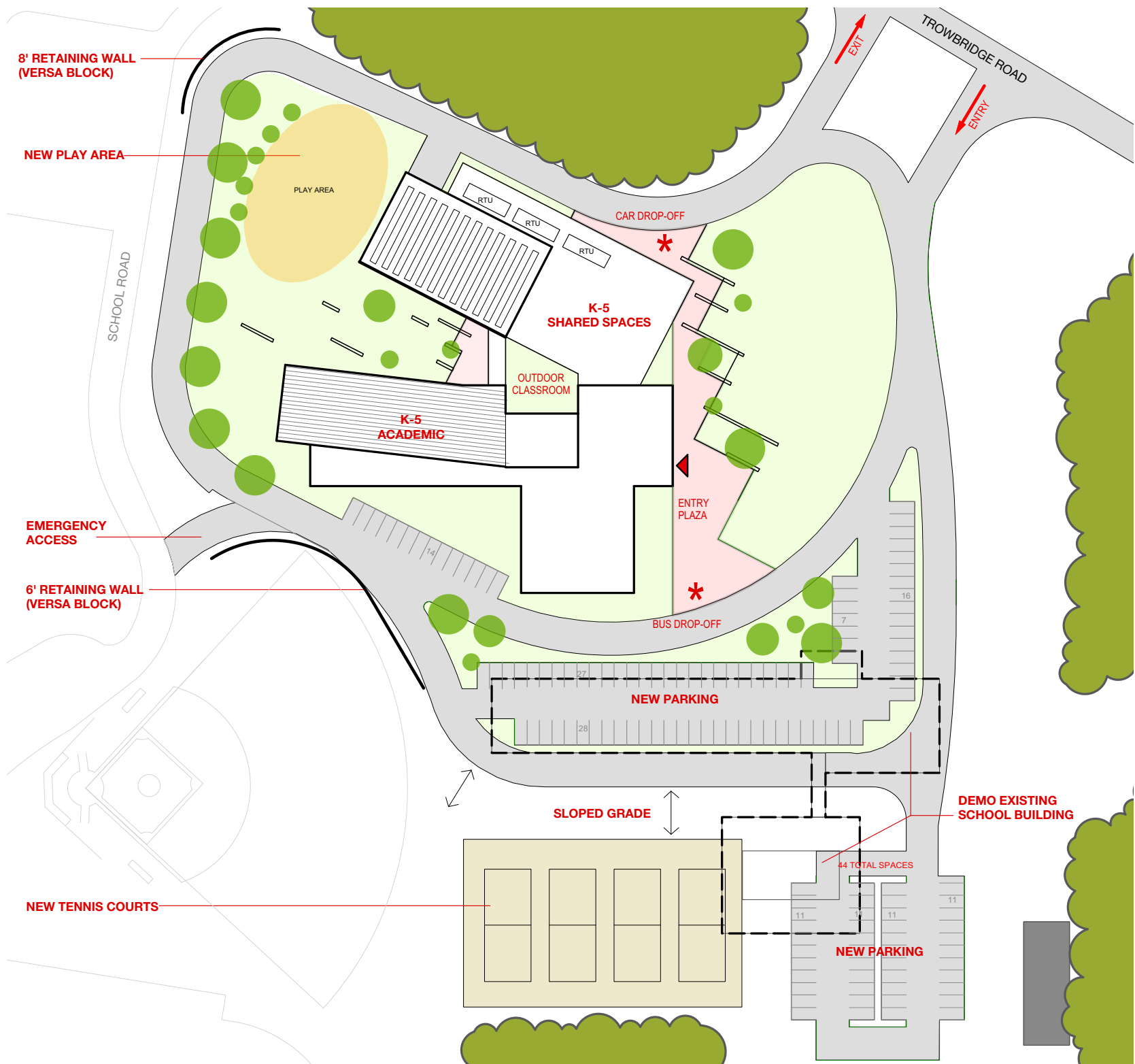
Pros:

- Consolidates K-4 grades and resources; creates equitable student experience
- Collaborative and interconnected learning communities
- Distinct academic communities for lower and upper grades
- Maintains existing structure and facility with minimal disruption to learning
- New entry lobby and courtyard provide buffer for noise and secure use of outdoor classroom
- The existing “newer” school that can be easily expanded

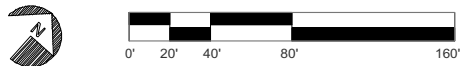
Cons:

- Large school
- Does not alleviate space pressure on Middle School or relocate 5th grade within elementary school
- Requires phasing, although minimal, with some disruption to students
- Loss of neighborhood school for Peebles families
- Creates empty Peebles building requiring significant upgrades for future use

Peebles New Construction Option 4A (410 students)



Organizational Diagram



Peebles New Construction Option 4A (410 students)

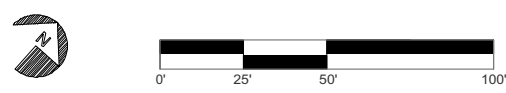


FIRST FLOOR PLAN



SECOND FLOOR PLAN

KEY	
1. Arts & Innovation Studio: -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources	4. Academic: -Neighborhood collab/display
2. Outdoor Classroom: - Limits distraction to academic classrooms -project area with water, power	5. Play Area: -Adjacent to Gymnasium to limit distraction to academic classrooms
3. Community: - Stage open to gym & cafe to support larger venue to support greater community events on south side of the canal	6. Campus Resource: - Adjacent to Middle School and High School,Historic Village, Canal
	7. Entry Plaza connects separate car and bus zones



Peebles New Construction Option 4A (410 students)

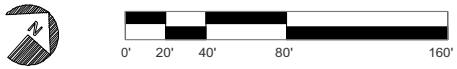
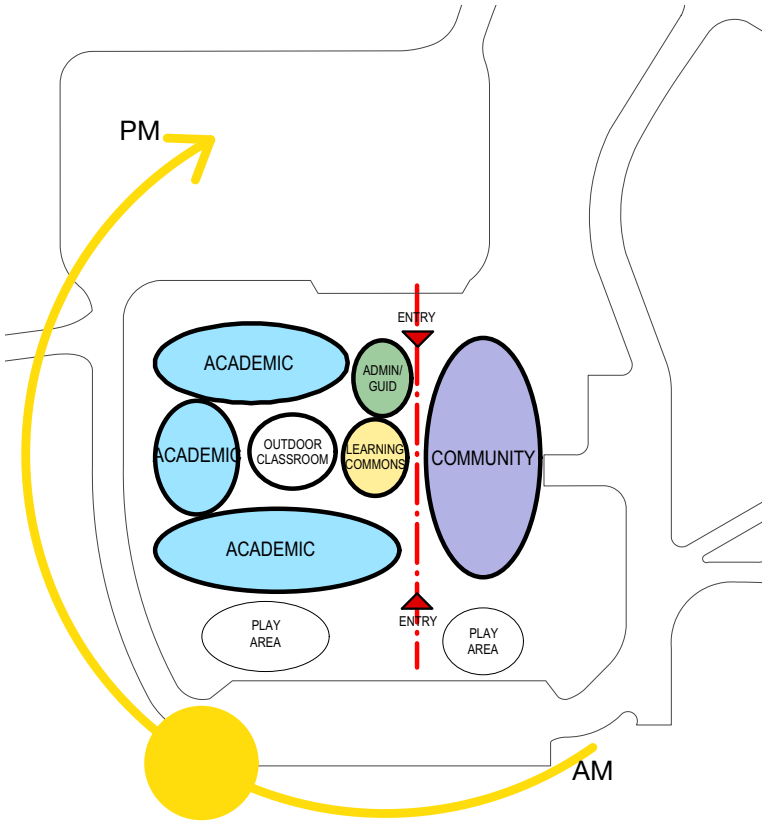
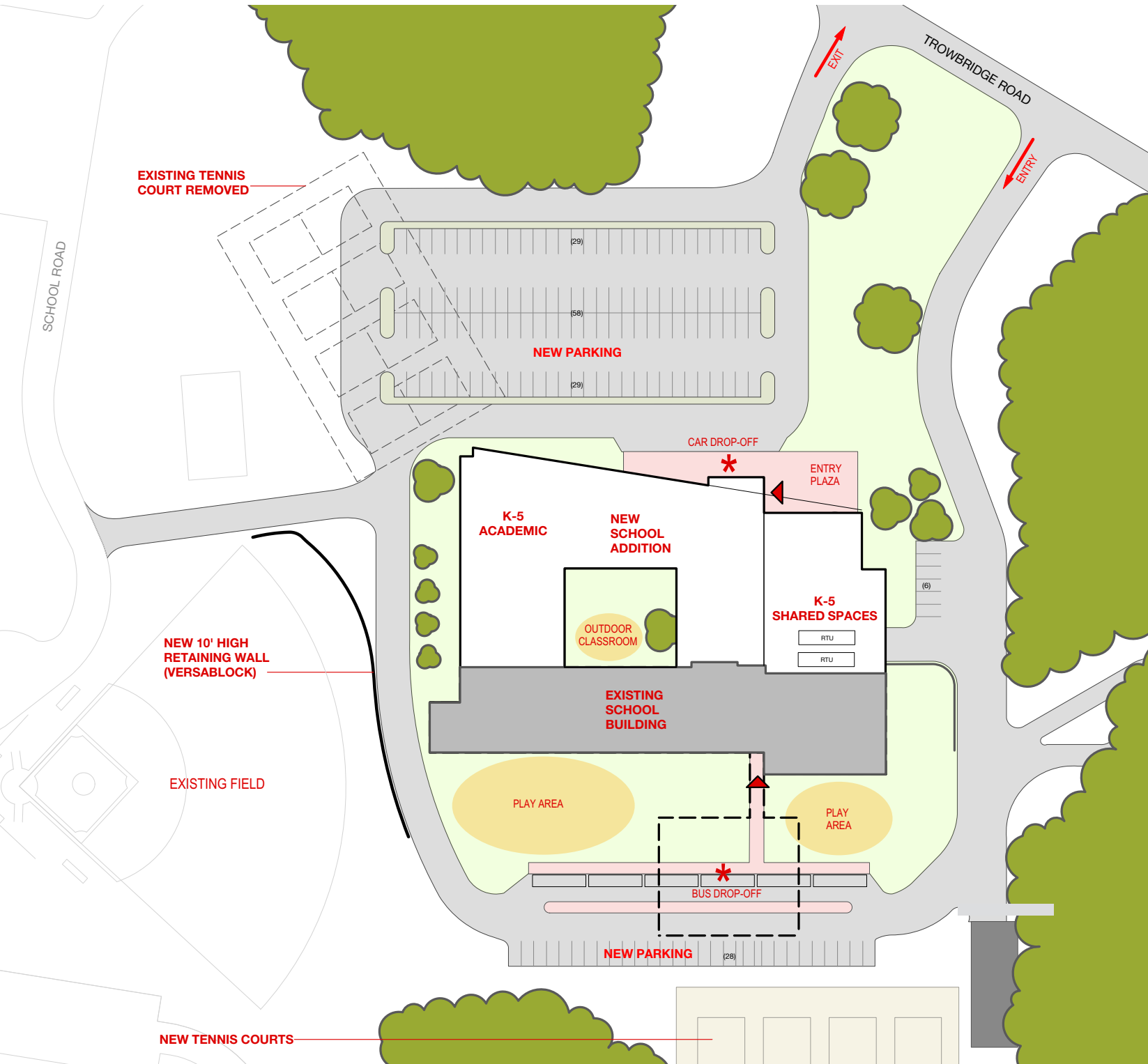
Pros:

- Alleviates transition issue for 5th grade students; relieves space demand in middle school
- Maintains K-5 neighborhood school on Cape side of bridge and campus connectivity
- 5th grade as “leaders” in own wing in preparation for middle school
- Centralized resources as part of a campus
- New Construction alternative with least disruption to students during construction
- Clear Articulation between Community and Academic wings; good community access
- Team Spaces promote interconnection
- Outdoor Classroom a beautiful, enclosed focal point for building; good access encourages use.
- Innovation Studio located along main axis; proximity to Art and to Media Center offers flexibility and opportunity for collaboration.
- Well-located Special Education spaces, Admin, and Gym; Stage between Gym and Cafe offers flexibility
- New construction allows flexibility in building and site design

Cons:

- One-year transition for Bournedale 5th graders could be challenging
- Dynamics between K-4 students and 5th graders, with 5th grade representing 40% of population

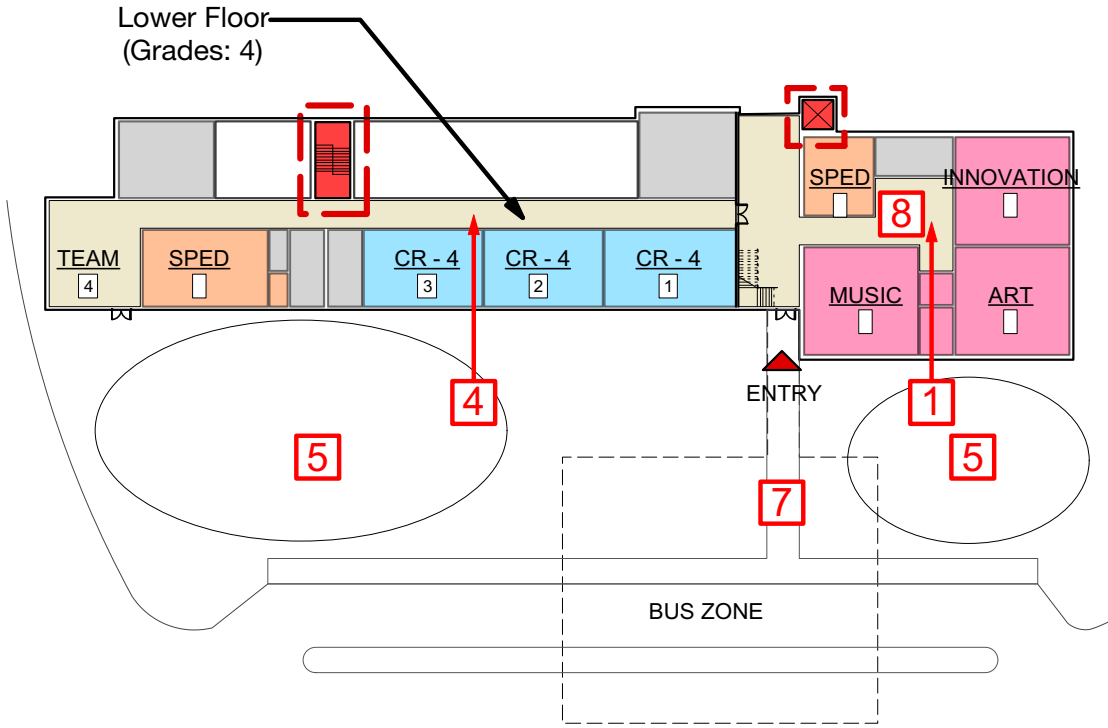
Peebles Addition / Renovation Option 4B (410 students)



Peebles Addition / Renovation Option 4B (410 students)



FIRST FLOOR PLAN



SECOND FLOOR PLAN

KEY

1. Arts & Innovation Studio:
-Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources (tucked away on lower level)

2. Outdoor Classroom:
- Embedded within classroom wings may disrupt learning

3. Community:
- Larger venue to support greater community events on this side of the canal

4. Academic: Neighborhood collab/display
-Existing Bldg. has limited opportunity for larger Team Areas

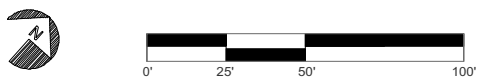
5. Play Area: Remote from gymnasium

6. Campus Resource:
- Adjacent to Middle School and High School, Historic Village,Canal

7. Separate car and bus drop-off entry locations

8. Potential noise concerns from proximity of gym to admin & Arts/Innovation area to Cafeteria Above

New Addition: - - - - -



Peebles Addition / Renovation Option 4B (410 students)

Pros:

- Modernizes Peebles aesthetically and physically; provides new face of building
- Eliminates Annex, most deficient part of building
- Well-size courtyard provides secure outdoor access
- Main street connects community spaces
- Maintains clear articulation between Community and Academic Wings
- Reconstructed and safer parent and bus drop-offs

Cons:

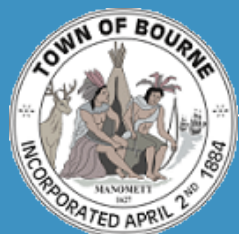
- One-year transition for Bournedale 5th graders could be challenging
- Visible Learning, Classroom Neighborhoods, and Collaboration difficult in older building
- Innovation Lab tucked away on lower level
- Considerable disruption during construction
- Requires extensive phasing
- Potential noise issues from proximity of Gym to Admin suite and from Cafeteria to learning spaces below

PRELIMINARY COST MODELS

Preliminary Cost Models - (7 options and the “Base Repair”)

		Option 1 (K-4) 250 students		Option 2 (PK-4) 725 students	Option 3 (PK-5) 885 students		Option 4 (K-5) 410 students		Base Repair Only
		1A New	1G Add/Reno	2A Add/Reno	3A Add/Reno	3B Add/Reno	4A New	4B Add/Reno	
Gross SF		57,248 SF		114,593 SF	131,382 SF		72,473 SF		55,190 SF
*Construction Cost \$ (Hard Cost)	Building	\$23.25M	\$23.15M	\$25.63M	\$30.63M	\$30.03M	\$26.96M	\$27.46M	\$10.53M
	Hazmat/Demo	\$1.71M	\$1.24M	\$0	\$0	\$0	\$1.7M	\$1.21M	\$1.16M
	Sitework	\$4.05M	\$4.17M	\$4.65M	\$4.78M	\$4.75M	\$4.34M	\$4.29M	\$1.38M
	Total	\$29.01M	\$28.56M	\$30.28M	\$35.41M	\$34.78M	\$32.99M	\$32.96M	\$12.07M
Soft Cost \$	Fees & Expenses	\$5.9M	\$5.47M	\$5.61M	\$6.38M	\$6.28M	\$6.5M	\$6.13M	\$2.8M
	FF&E	\$1.75M	\$1.75M	\$1.02M	\$1.5M	\$1.5M	\$1.23M	\$1.23M	\$1.25M
	Contingencies	\$2.32M	\$2.57M	\$2.42M	\$2.83M	\$2.78M	\$2.64M	\$2.97M	\$1.68M
Other Town Costs		no cost	no cost	TBD	TBD	TBD	no cost	no cost	no cost
TOTAL		\$37.98M	\$37.35M	\$39.34M	\$46.12M	\$45.35M	\$43.36M	\$43.28M	\$16.8M

* Estimated Cost subject to change as project is refined



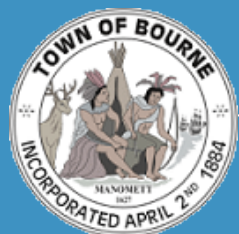
PROJECT MANAGEMENT **SMMA**
Massachusetts School Building Authority

Flansburgh Architects

Preliminary Cost Models - (4 remaining options and the “Base Repair”)

		Option 1 (K-4) 250 students		Option 2 (PK-4) 725 students	Option 3 (PK-5) 885 students		Option 4 (K-5) 410 students		Base Repair Only
		1A New	1G Add/Reno	2A Add/Reno	3A Add/Reno	3B Add/Reno	4A New	4B Add/Reno	
Gross SF		57,248 SF		114,593 SF	131,382 SF		72,473 SF		55,190 SF
*Construction Cost \$ (Hard Cost)	Building	\$23.25M	\$23.15M	\$25.63M	\$30.63M	\$30.03M	\$26.96M	\$27.46M	\$10.53M
	Hazmat/Demo	\$1.71M	\$1.24M	\$0	\$0	\$0	\$1.7M	\$1.21M	\$1.16M
	Sitework	\$4.05M	\$4.17M	\$4.65M	\$4.78M	\$4.75M	\$4.34M	\$4.29M	\$1.38M
	Total	\$29.01M	\$28.56M	\$30.28M	\$35.41M	\$34.78M	\$32.99M	\$32.96M	\$12.07M
Soft Cost \$	Fees & Expenses	\$5.9M	\$5.47M	\$5.61M	\$6.38M	\$6.28M	\$6.5M	\$6.13M	\$2.8M
	FF&E	\$1.75M	\$1.75M	\$1.02M	\$1.5M	\$1.5M	\$1.23M	\$1.23M	\$1.25M
	Contingencies	\$2.32M	\$2.57M	\$2.42M	\$2.83M	\$2.78M	\$2.64M	\$2.97M	\$1.68M
Other Town Costs		no cost	no cost	TBD	TBD	TBD	no cost	no cost	no cost
TOTAL		\$37.98M	\$37.35M	\$39.34M	\$46.12M	\$45.35M	\$43.36M	\$43.28M	\$16.8M

* Estimated Cost subject to change as project is refined



PROJECT MANAGEMENT **SMMA**
Massachusetts School Building Authority

Flansburgh Architects

Next Steps

The School Building Committee meetings are every two weeks. Meeting agendas and dates are posted on the District's website.

- *January 21, 2016 - Community Forum No.4 at Bournedale Elementary School Cafeteria*
- March 03, 2015 - Community Forum No. 5 at Peebles Elementary School Cafeteria
- April 06, 2015 - Community Forum No. 6 at Bournedale Elementary School Cafeteria
- April 15, 2016 - Submit PSR document to the MSBA
- August 11, 2016 - Submit Schematic Design documents to MSBA
- September 28, 2016 - MSBA Board Meeting to approve project to bring to voters
- Fall 2016 - Town Vote

Questions?