Groton School Facilities Initiative

Building
Construction
Scenarios
&
Site Selection
Update

MILONE & MACBROOM + SLAM

Introduction

- Recap of Options from 7/25 Meeting
- Introduction –The S/L/A/M Collaborative
- Grant Reimbursement Overview
- Building Construction Scenarios for Consideration
- Workgroup Discussion – Concensus on Alternatives
- Update on Site Selection

Preferred Options Recap

Scenario 1: One Middle School	Build One New Middle School 6-8 (Site TBD)
	Renovate Cutler as New East Side PreK-5
	Renovate West Side as New West Side PreK-5
	Close Claude Chester, Pleasant Valley, and S.B. Butler
Scenario 2: Renovate Middle Schools & Build Two New Elementary	Renovate to New/Addition to West Side & Cutler MS (6-8 Config)
	Build TWo New PreK-5 East Side / West Side (Site TBD)
	Close Claude Chester, Pleasant Valley, and S.B. Butler
Scenario 3: Two New Middle Schools	Build Two New 600 Student 6-8 Middle Schools (Site TBD)
	Renovate Cutler as New East Side PreK-5
	Renovate West Side as New West Side PreK-5
	Close Claude Chester, Pleasant Valley, and S.B. Butler

SLAM – Firm Profile

MILONE & MACBROOM + SLAM

Total Staff of 160

- Large firm – Small studios
- Dedicated Education Studio
- Stability: Staff, Management, Financial
- Industry Reputation, Client Satisfaction

Multidisciplinary Firm

- Architecture
- Interior Design
- Programming & Planning
- Landscape Architecture
- Structural Engineering
- Cost Estimating Services
- Construction Management

In-house Firm Specialties

- Cost Modeling/ Planning
- Sustainable Design
- Building Information Modeling (BIM)
- Certified Specifications
- Building Analysis
- Code Expertise

SLAM – Firm Profile

Everybody has...

- PE Experience
- Design Expertise
- BSF Experience
- Design Awards
- Etc.

Only SLAM provides:

- **Integrated Approach**
  - Team of Experts
- **Building Information Modeling**
  - Documentation & more
- **Construction Services Studio**
  - Cost Modeling
  - Constructability
  - Pragmatic Approach
- **Programming Leadership**
  - Classroom to Career

Reimbursement Overview

- Groton Reimbursement Rate trending downward since 2012

	School Construction (20 – 80%)	New School Construction (10 – 70%)
2012:	57.50	47.50
2013:	56.79	46.79
2014:	56.07	46.07

Cost Modeling Assumptions

- Larger enrollment building area aligns with state space standards
- Smaller enrollment building areas are slightly higher than state space standards
- Building areas not based on Ed. Spec. program
- Estimated state reimbursement based on 2014 reimbursement rates
- Includes High Performance Design to meet CT HPDS (16a-38k)

Cost Modeling Assumptions

- Construction Manager at Risk delivery
- Escalated at 3% for remainder of 2013 and 4% per year from 2014 forward
- No Project Labor Agreement (PLA)
- Excludes Hazardous Building Material abatement costs
- Excludes site acquisition costs
- Groton proceeds “At Risk” with A/E design services after successful referendum to achieve proposed schedules

Scenario 1 Overview

Scenario 1: One Middle School	Build One New Middle School (Site TBD)
	Renovate Cutler as New East Side PreK-5
	Renovate West Side as New West Side PreK-5
	Close Claude Chester, Pleasant Valley, and S.B. Butler
	Remove Claude Chester, Pleasant Valley, and S.B. Butler

1,000 Students

- Successive construction projects
- Significant escalation costs
- Possibility of needing to purchase one site
- Model includes the following site development allowances:
  - $5 M for New Building
  - $1.5 M for Renovate To New Buildings

Scenario 1 - One New Middle School

Scenario 1: One Middle School	Build One New Middle School (Site TBD)
	Renovate Cutler as New East Side PreK-5
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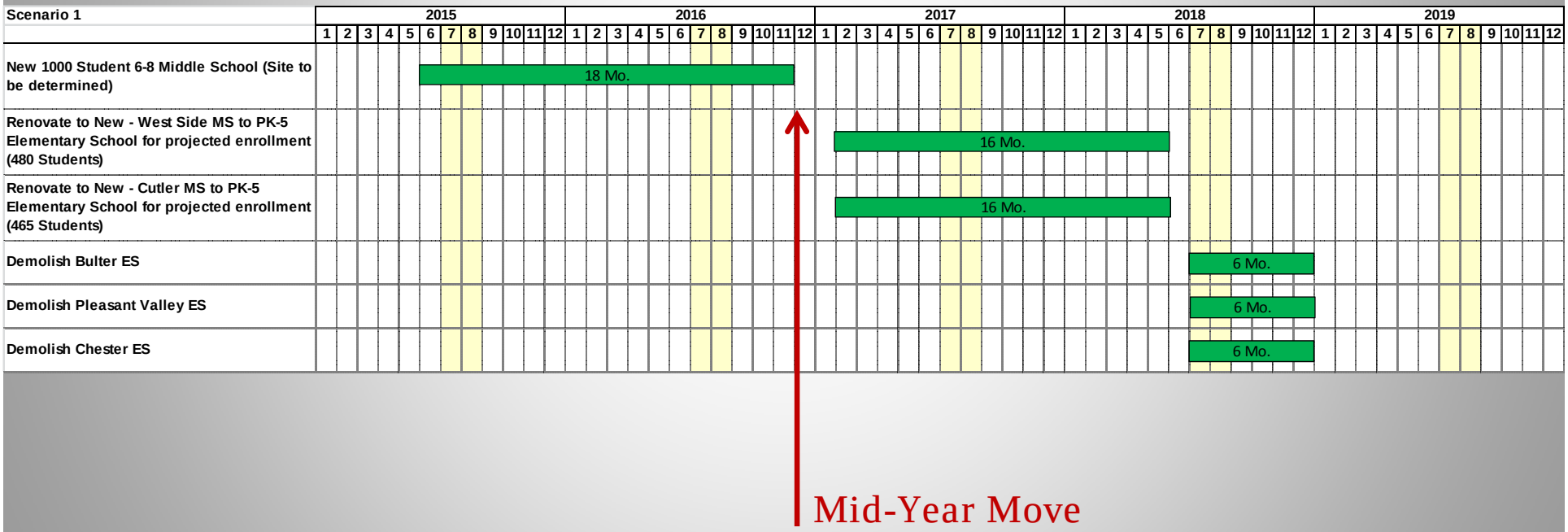
1,000 Students



Scenario 1 - One New Middle School

Updated: August 23, 2013

Scenario 1: One Middle School	Build One New Middle School (Site TBD)
	Renovate Cutler as New East Side PreK-5
	Renovate West Side as New West Side PreK-5
	Close Claude Chester, Pleasant Valley, and S.B. Butler
	Remove Claude Chester, Pleasant Valley, and S.B. Butler

1,000 Students

	Scenario 1 Cost Breakdown	Gross Building Area	Total Project Cost	Net Cost to Groton
1	New 1000 Student 6-8 Middle School (Site to be determined)	170,000	$ 76,015,152	$ 40,994,971
2	Renovate to New - West Side MS to PK-5 Elementary School for projected enrollment (480 Students)	74,200	$ 30,187,495	$ 15,833,819
3	Renovate to New - Cutler MS to PK-5 Elementary School for projected enrollment (465 Students)	70,071	$ 28,961,972	$ 14,835,247
4	Demolish Bulter ES	37,450	$ 1,296,226	$ 1,296,226
5	Demolish Pleasant Valley ES	40,408	$ 1,342,125	$ 1,342,125
6	Demolish Chester ES	43,581	$ 1,380,097	$ 1,380,097
	TOTAL:		**$ 139,183,069**	**$ 75,682,486**

Scenario 1A Overview

Scenario 1: One Middle School	Build One New Middle School (Site TBD)
	Renovate Cutler as New East Side PreK-5
	Renovate West Side as New West Side PreK-5
	Close Claude Chester, Pleasant Valley, and S.B. Butler
	Remove Claude Chester, Pleasant Valley, and S.B. Butler

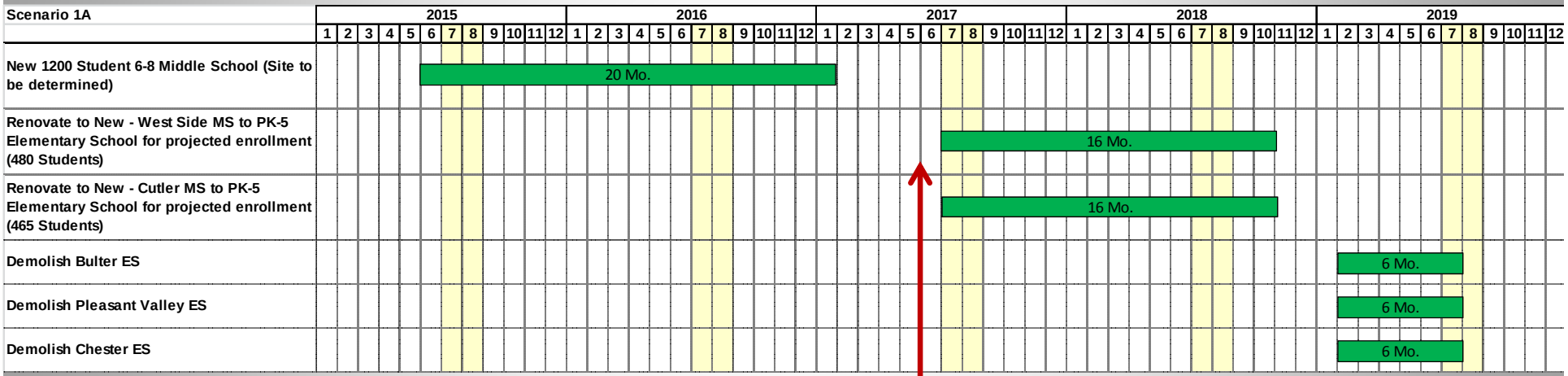
1,200 Students

- Successive construction projects
- Longer construction duration for new school extends overall schedule
- Significant escalation costs
- Possibility of needing to purchase one site
- Includes the same site development allowances as Scenario 1

Scenario 1A - One New Middle School

Scenario 1: One Middle School	Build One New Middle School (Site TBD)
	Renovate Cutler as New East Side PreK-5
	Renovate West Side as New West Side PreK-5
	Close Claude Chester, Pleasant Valley, and S.B. Butler
	Remove Claude Chester, Pleasant Valley, and S.B. Butler

1,200 Students



Difficult to move in Spring

Wait for Academic year end to start renovations

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Scenario 1A - One New Middle School

Updated: August 23, 2013

Scenario 1: One Middle School	Build One New Middle School (Site TBD)
	Renovate Cutler as New East Side PreK-5
	Renovate West Side as New West Side PreK-5
	Close Claude Chester, Pleasant Valley, and S.B. Butler
	Remove Claude Chester, Pleasant Valley, and S.B. Butler

1,200 Students

	Scenario 1A Cost Breakdown	Gross Building Area	Total Project Cost	Net Cost to Groton
1	New 1200 Student 6-8 Middle School (Site to be determined)	204,000	$ 89,240,737	$ 48,127,529
2	Renovate to New - West Side MS to PK-5 Elementary School for projected enrollment (480 Students)	74,200	$ 32,049,395	$ 16,810,415
3	Renovate to New - Cutler MS to PK-5 Elementary School for projected enrollment (465 Students)	70,071	$ 30,734,199	$ 15,743,038
4	Demolish Bulter ES	37,450	$ 1,313,862	$ 1,313,862
5	Demolish Pleasant Valley ES	40,408	$ 1,360,520	$ 1,360,520
6	Demolish Chester ES	43,581	$ 1,399,307	$ 1,399,307
	TOTAL:		**$ 156,098,019**	**$ 84,754,670**

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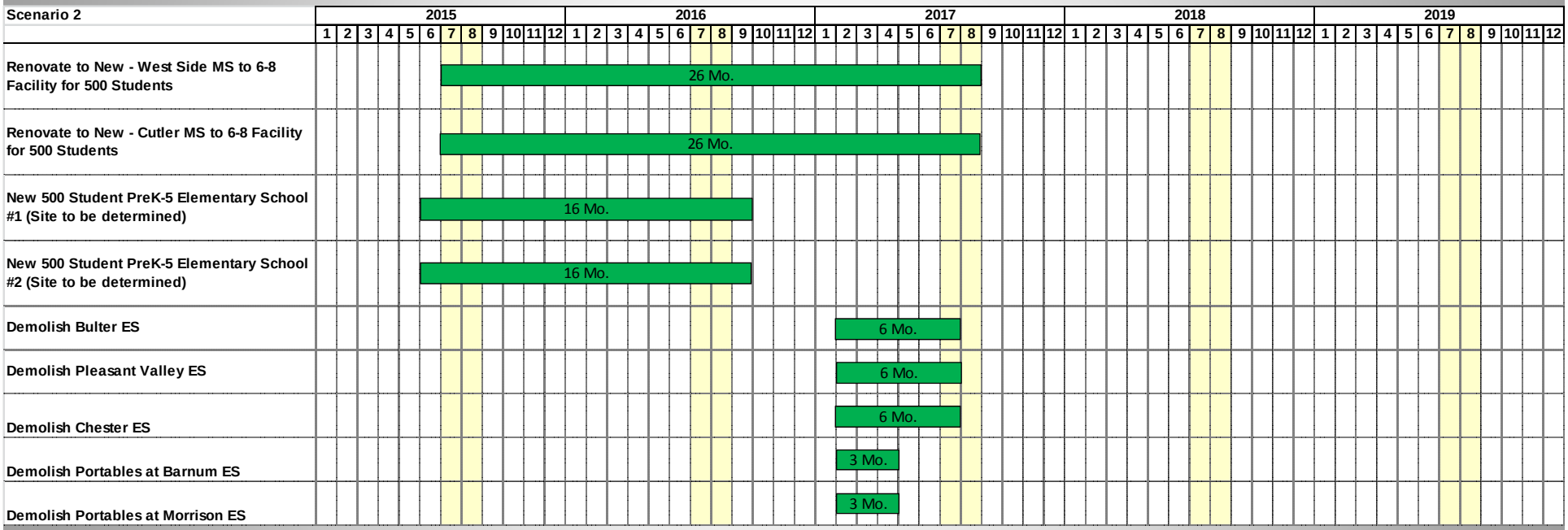
Scenario 2 Overview

Scenario 2: Renovate Middle Schools & Build Two New Elementary	Renovate to New/Addition to West Side & Cutler MS (6-8 Config)
	Build TWo New PreK-5 East Side / West Side (Site TBD)
	Close Claude Chester, Pleasant Valley, and S.B. Butler

- Concurrent construction projects
- Reduction in escalation costs, but requires Groton to fund and manage four projects simultaneously
- Possibility of needing to purchase two sites
- Model includes the following site development allowances:
  - $3.5 M for New Building
  - $1.5 M for Renovate To New Buildings

Scenario 2 - Two New PreK-5's

Scenario 2: Renovate Middle Schools & Build Two New Elementary	Renovate to New/Addition to West Side & Cutler MS (6-8 Config)
	Build TWo New PreK-5 East Side / West Side (Site TBD)
	Close Claude Chester, Pleasant Valley, and S.B. Butler



Scenario 2 - Two New PreK-5's

Updated: August 23, 2013

	Scenario 2 Cost Breakdown	Gross Building Area	Total Project Cost	Net Cost to Groton
1	Renovate to New - West Side MS to 6-8 Facility for 500 Students	90,000	$ 37,602,424	$ 17,552,553
2	Renovate to New - Cutler MS to 6-8 Facility for 500 Students	90,000	$ 38,045,542	$ 17,759,397
3	New 500 Student PreK-5 Elementary School #1 (Site to be determined)	72,500	$ 34,536,433	$ 20,151,896
4	New 500 Student PreK-5 Elementary School #2 (Site to be determined)	72,500	$ 34,536,433	$ 20,151,896
5	Demolish Bulter ES	37,450	$ 1,253,397	$ 1,253,397
6	Demolish Pleasant Valley ES	40,408	$ 1,297,452	$ 1,297,452
7	Demolish Chester ES	43,581	$ 1,333,446	$ 1,333,446
8	Demolish Portables at Barnum ES	1,800	$ 338,534	$ 338,534
9	Demolish Portables at Morrison ES	1,800	$ 338,534	$ 338,534
	TOTAL:		**$ 149,282,194**	**$ 80,177,106**

Scenario 3 Overview

Updated: August 23, 2013

Scenario 3: Two New Middle Schools	Build Two New 600 Student 6-8 Middle Schools (Site TBD)
	Renovate Cutler as New East Side PreK-5
	Renovate West Side as New West Side PreK-5
	Close Claude Chester, Pleasant Valley, and S.B. Butler

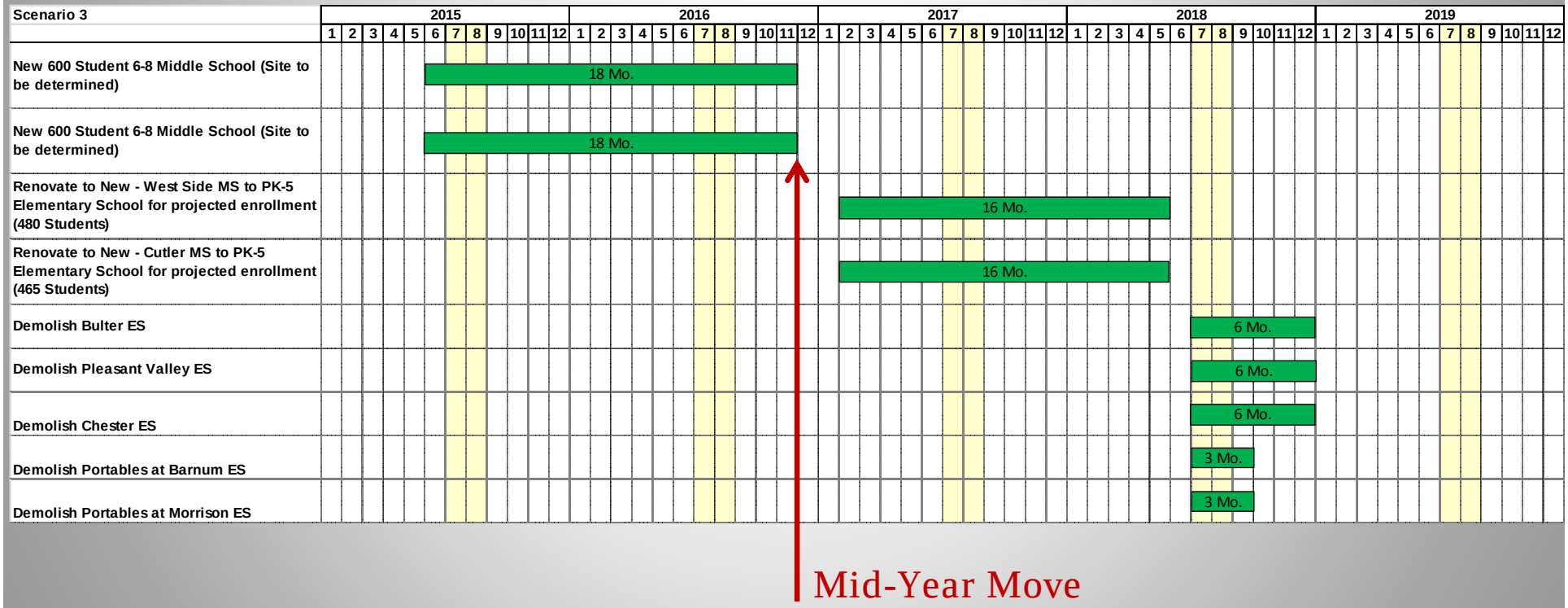
600 Students

- Successive construction projects
- Reduction in escalation costs, but requires Groton to fund and manage two projects simultaneously
- Possibility of needing to purchase two sites
- Model includes the following site development allowances:
  - $5 M for New Building
  - $1.5 M for Renovate To New Buildings

Scenario 3 - Two New Middle Schools

Scenario 3: Two New Middle Schools	Build Two New 600 Student 6-8 Middle Schools (Site TBD)
	Renovate Cutler as New East Side PreK-5
	Renovate West Side as New West Side PreK-5
	Close Claude Chester, Pleasant Valley, and S.B. Butler

600 Students



Scenario 3 - Two New Middle Schools

Updated: August 23, 2013

	Scenario 3 Cost Breakdown	Gross Building Area	Total Project Cost	Net Cost to Groton
1	New 600 Student 6-8 Middle School (Site to be determined)	105,000	$ 52,568,433	$ 28,879,642
2	New 600 Student 6-8 Middle School (Site to be determined)	105,000	$ 52,568,433	$ 28,879,642
3	Renovate to New - West Side MS to PK-5 Elementary School for projected enrollment (480 Students)	74,200	$ 30,187,495	$ 15,833,819
4	Renovate to New - Cutler MS to PK-5 Elementary School for projected enrollment (465 Students)	70,071	$ 28,961,972	$ 14,835,247
5	Demolish Bulter ES	37,450	$ 1,296,226	$ 1,296,226
6	Demolish Pleasant Valley ES	40,408	$ 1,342,125	$ 1,342,125
7	Demolish Chester ES	43,581	$ 1,380,097	$ 1,380,097
8	Demolish Portables at Barnum ES	1,800	$ 347,809	$ 347,809
9	Demolish Portables at Morrison ES	1,800	$ 347,809	$ 347,809
	TOTAL:		**$ 169,000,399**	**$ 93,142,417**

Scenario 3A Overview

Updated: August 23, 2013

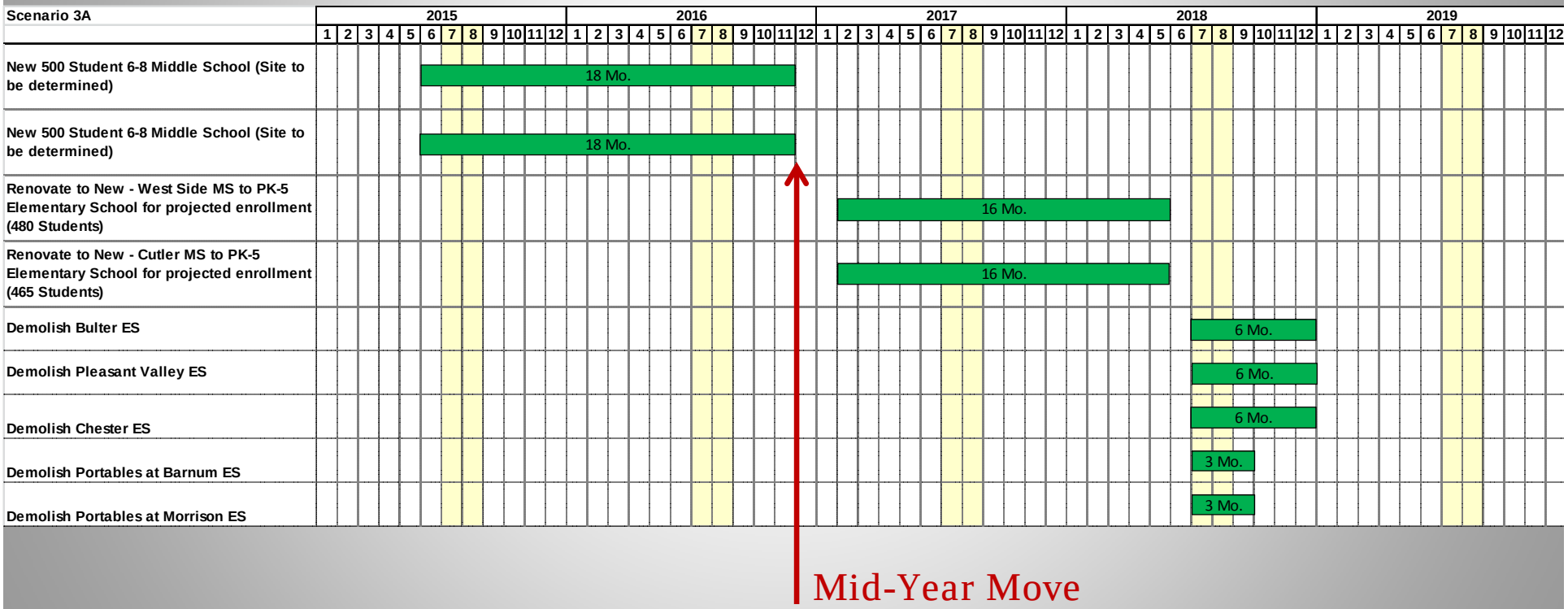
500 Students

- Successive construction projects
- Reduction in escalation costs, but requires Groton to fund and manage two projects simultaneously
- Possibility of needing to purchase two sites
- Model includes the following site development allowances:
  - $5 M for New Building
  - $1.5 M for Renovate To New Buildings

Scenario 3A - Two New Middle Schools

Updated: August 23, 2013

500 Students



Scenario 3A - Two New Middle Schools

Updated: August 23, 2013

	Scenario 3A Cost Breakdown	Gross Building Area	Total Project Cost	Net Cost to Groton
1	New 500 Student 6-8 Middle School (Site to be determined)	93,000	$ 48,050,764	$ 27,678,314
2	New 500 Student 6-8 Middle School (Site to be determined)	93,000	$ 48,050,764	$ 27,678,314
3	Renovate to New - West Side MS to PK-5 Elementary School for projected enrollment (480 Students)	74,200	$ 30,187,495	$ 15,833,819
4	Renovate to New - Cutler MS to PK-5 Elementary School for projected enrollment (465 Students)	71,871	$ 29,459,316	$ 15,449,880
5	Demolish Bulter ES	37,450	$ 1,296,226	$ 1,296,226
6	Demolish Pleasant Valley ES	40,408	$ 1,342,125	$ 1,342,125
7	Demolish Chester ES	43,581	$ 1,380,097	$ 1,380,097
8	Demolish Portables at Barnum ES	1,800	$ 347,809	$ 347,809
9	Demolish Portables at Morrison ES	1,800	$ 347,809	$ 347,809
	TOTAL:		**$ 160,462,406**	**$ 91,354,394**

Summary Comparison

Updated: August 23, 2013

		Total Project Cost	Net Cost to Groton	Remarks
1	Scenario 1	$ 139,183,069	$ 75,682,486	*Refer to Scenario 1 Summary and Detail*
2	Scenario 1A	$ 156,098,019	$ 84,754,670	*Refer to Scenario 1A Summary and Detail*
3	Scenario 2	$ 149,282,194	$ 80,177,106	*Refer to Scenario 2 Summary and Detail*
4	Scenario 3	$ 169,000,399	$ 93,142,417	*Refer to Scenario 3 Summary and Detail*
5	Scenario 3A	$ 160,462,406	$ 91,354,394	*Refer to Scenario 3A Summary and Detail*

Committee Discussion

School Construction
Discussion & Q&A

Breakout Discussion

- Bearing in Mind Discussions on School Construction, Programming, Configuration & Demographics.
  - What is the preferred future for Groton Schools?
    - Discuss & Rank Scenarios
- Reconvene – Group Consensus

30 minutes!

Update on Site Selection

Site Selection Update

- Conducted initial feasibility and test fits for single middle
- Identified 10 potential sites for single 175,000-200,000 sq ft middle school
- Process will be informed by committee consensus on preferred Scenarios

Single Middle School Matrix

Criteria	Minimum	Preferred
Site Suitability		
Acreage	20-25 Acres	25+ Acres
LA Test Fit	Good fitting of bldg; siting; topo; wetlands; site work; minimal grading; good vehicular flow	Excellent fitting of bldg; siting; topo; wetlands; site work; minimal grading; good vehicular flow
Water	Available in proximity	Available on site
Sewer	Available in proximity	Available on site
Transportation Access	Reasonable access	Collector or Arterial Access
Location		
Geographically central	Within 2 miles of center	Within 1 mile of center
Demographically Central	Within 1 mile of 20%	Within 1 mile of 30%
Potential for Ped Access	Fair	Good
Appurtenances		
Playground/ Fields	Softball, Baseball, Multi-purpose, play yard, basketball	Minimum plus community fields

Single Middle School Matrix

Criteria	Minimum	Preferred
Compatibility with Surrounding Land Use		
Adjacent Land Uses	Commercial and Industrial non-confliciting uses	Civic uses/ schools/ proximity to residential neighborhood
Site Disposition		
Ease of Gaining Site Control	Willing Private Seller	Already in Town Control with no conservation easements
Current Site Status (Environmental)	Limited site clean-up required	Greenfield Site
Compatibility with Town Plan		
Development Area/ Economic Development	Not within POCD Conservation Area	No known Economic Development Interest

Matrix

		Least Advantageous		Most Advantageou
		1	3	5
Site Suitability	Size	15-20 Acres	20-25 Acres	25+ Acres
	LA Test Fit	Site not suitable	Meets Test Fit	Meets Test Fit +
	Water	not promimate	proximate	onsite
	Sewer	not proximate/ sewer avoidance area	Proximiate or Flanders Road extention area	onsite
	Transportation Access	Local Roads/ Local Collector	Collector	Minor Arterial/ Arterial
Location	Geographically Central	Periphery	2 Miles	Geographic Center
	Demographically Central	Periphery	Within 1 mile of 20% of students	Within 1 mile of 30% of students
	Potential Pedestrian	Walking not possible (topography, traffic, distance)	Near neighborhoods, no current sidelwaks or trails	Sidewalks connect to neighborhoods
Appurtances	Playgrounds/ Fields	Does not meet minimum requirements	Meets minimum requirements	Sufficient space on site to accommodate ahtletic fields for school and community use
Compatability with LU	Adjacent Land Uses	Incompatable/ Potential Conflicts	Shades of grey	Civic Uses/ Schools/ Proximity to Residential Neighborhoods
Site Disposition	Ease of Gaining Site Control	Private	Town control with Easements	Town Control, no easements
	Environmental	Known Environmental Hazards	Demolition required	Greenfield
Compatability with Town Plan	Development Area/ Economic Development	In conservation area	Economic development area	No known economic development interest

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