

STATE HIGH

PROJECT PLANNING MEETING

January 27, 2014



Crabtree, Rohrbaugh & Associates,
Architects

Agenda

Site / Building Design Review

CRA

Methodology

Cost Estimate

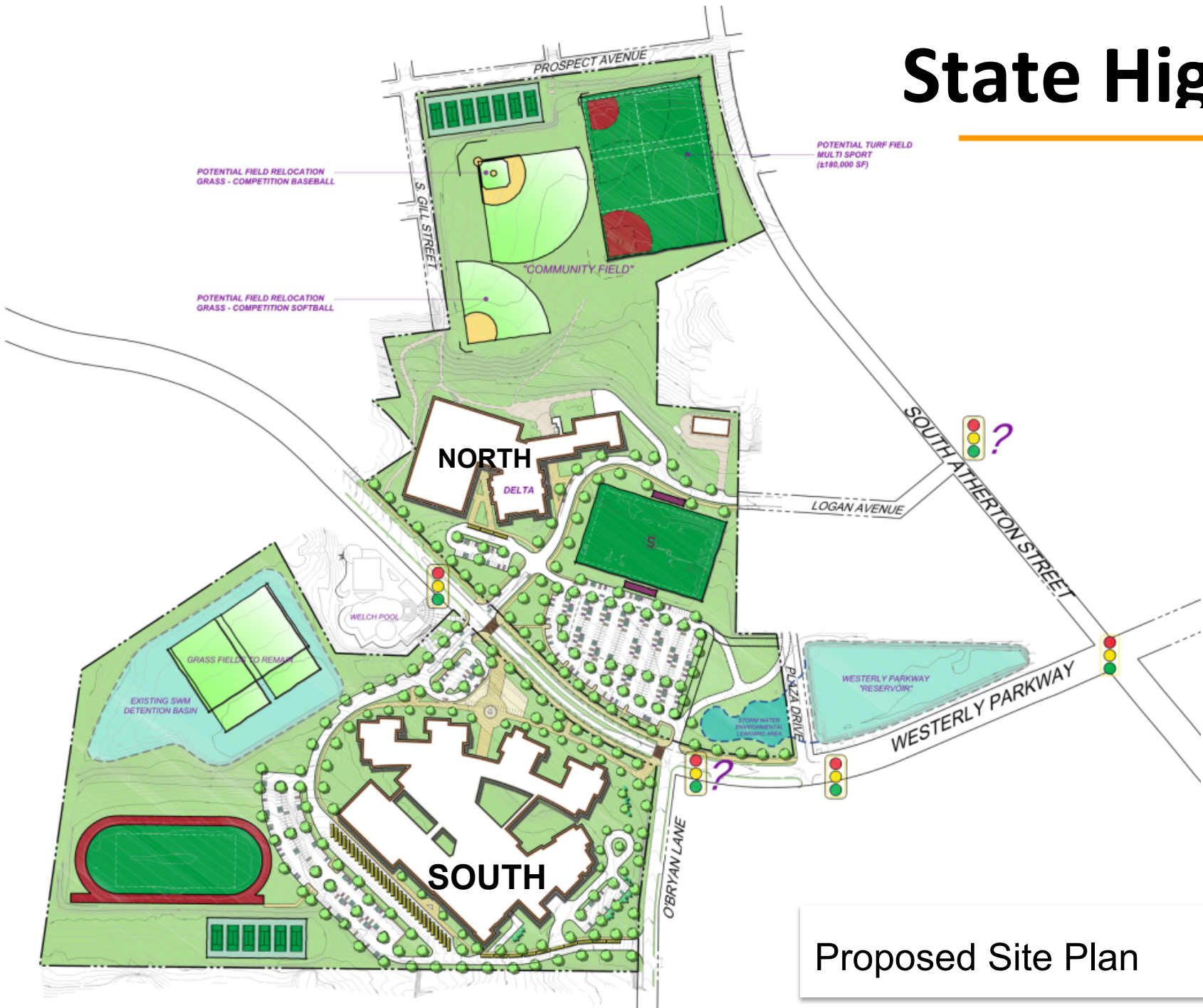
Alexander Building

Construction

Methodology

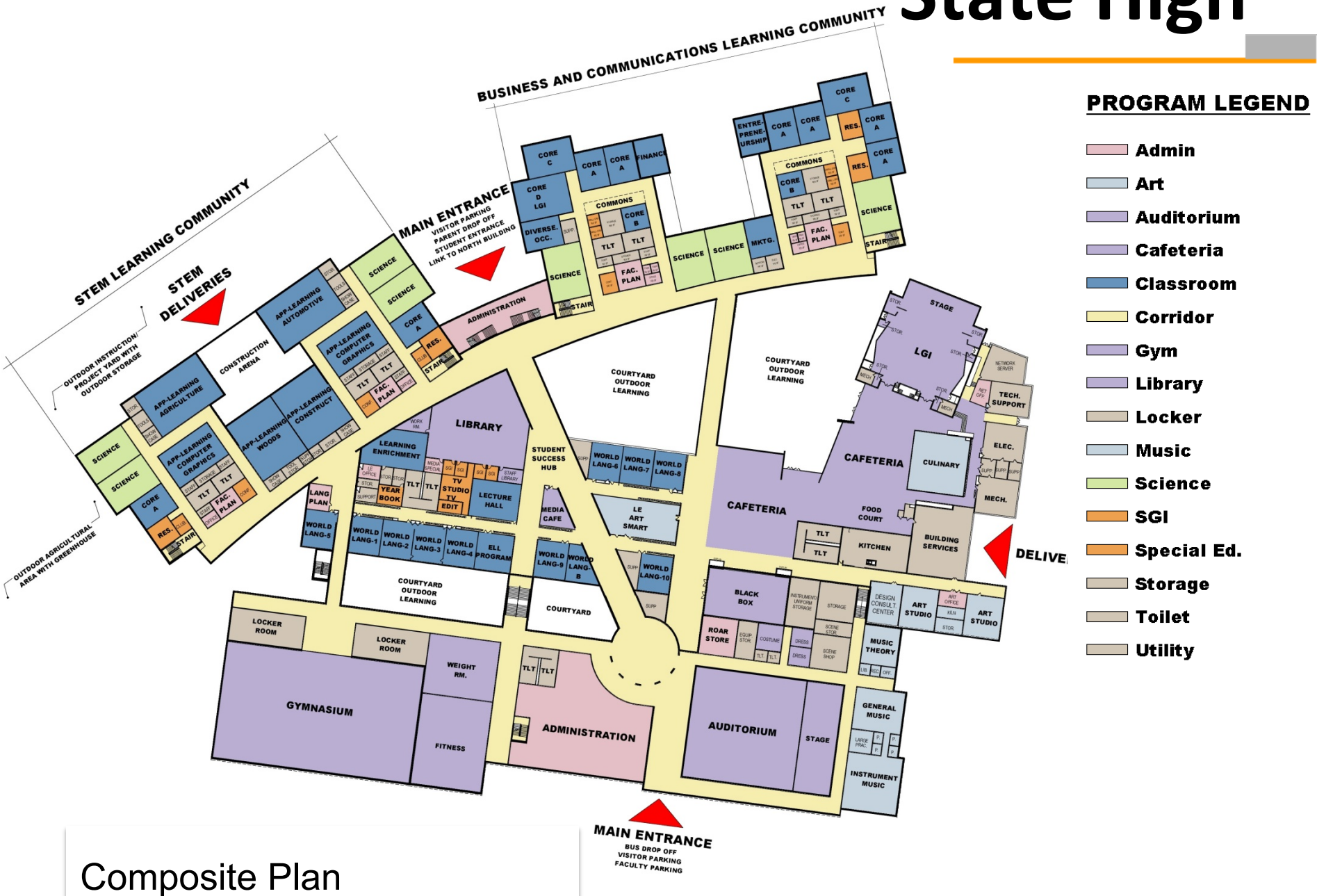
Cost Estimate

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Proposed Site Plan

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Government	Percentage
Current government	85%
Previous government	15%



	Admin
	Art
	Auditorium
	Cafeteria
	Classroom
	Corridor
	Gym
	Library
	Locker
	Music
	Science
	SGI
	Special Ed.
	Storage
	Toilet
	Utility

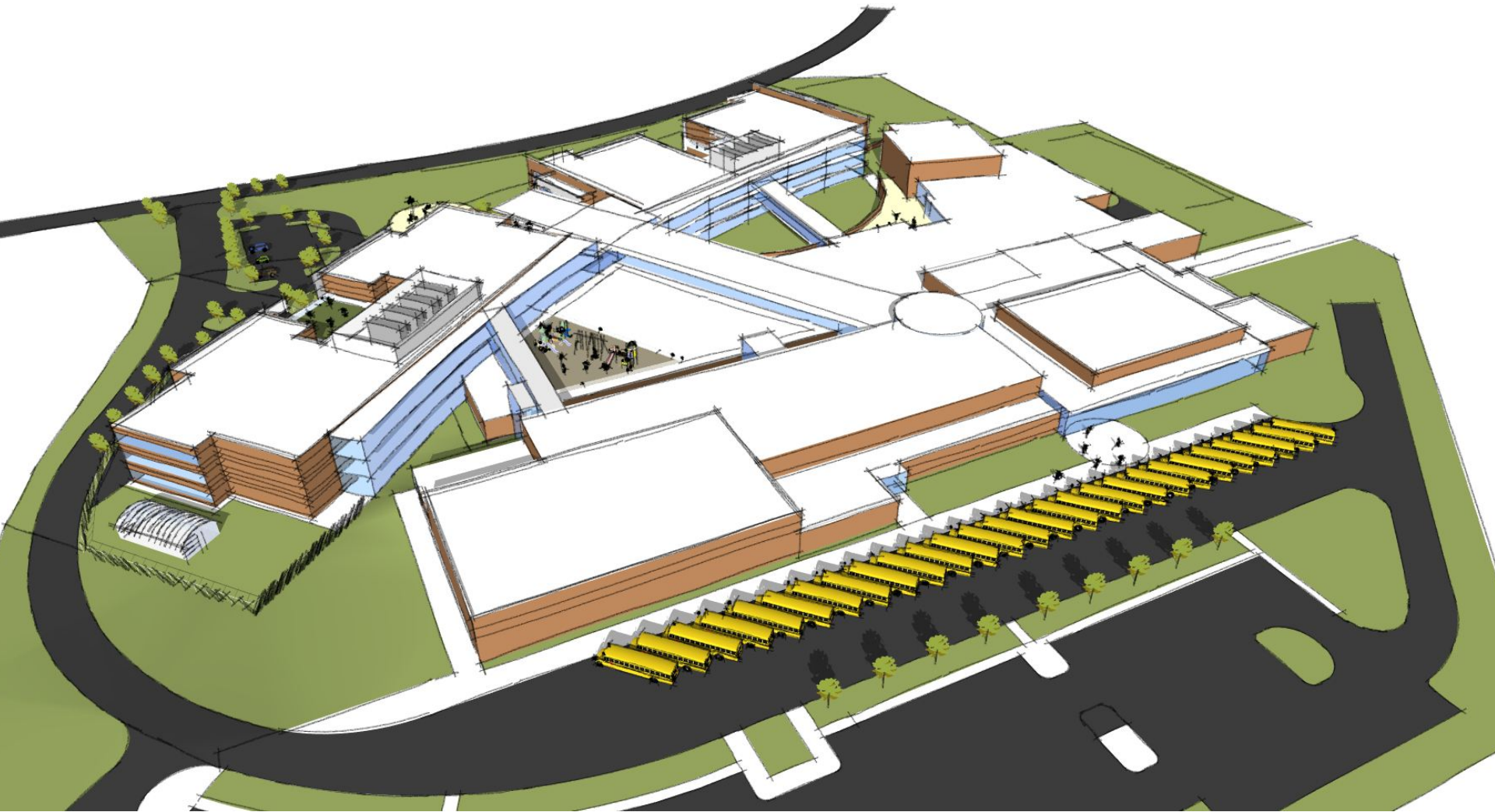
-  **Admin**
-  **Art**
-  **Auditorium**
-  **Cafeteria**
-  **Classroom**
-  **Corridor**
-  **Gym**
-  **Library**
-  **Locker**
-  **Music**
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-  **Storage**
-  **Toilet**
-  **Utility**

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Massing Study

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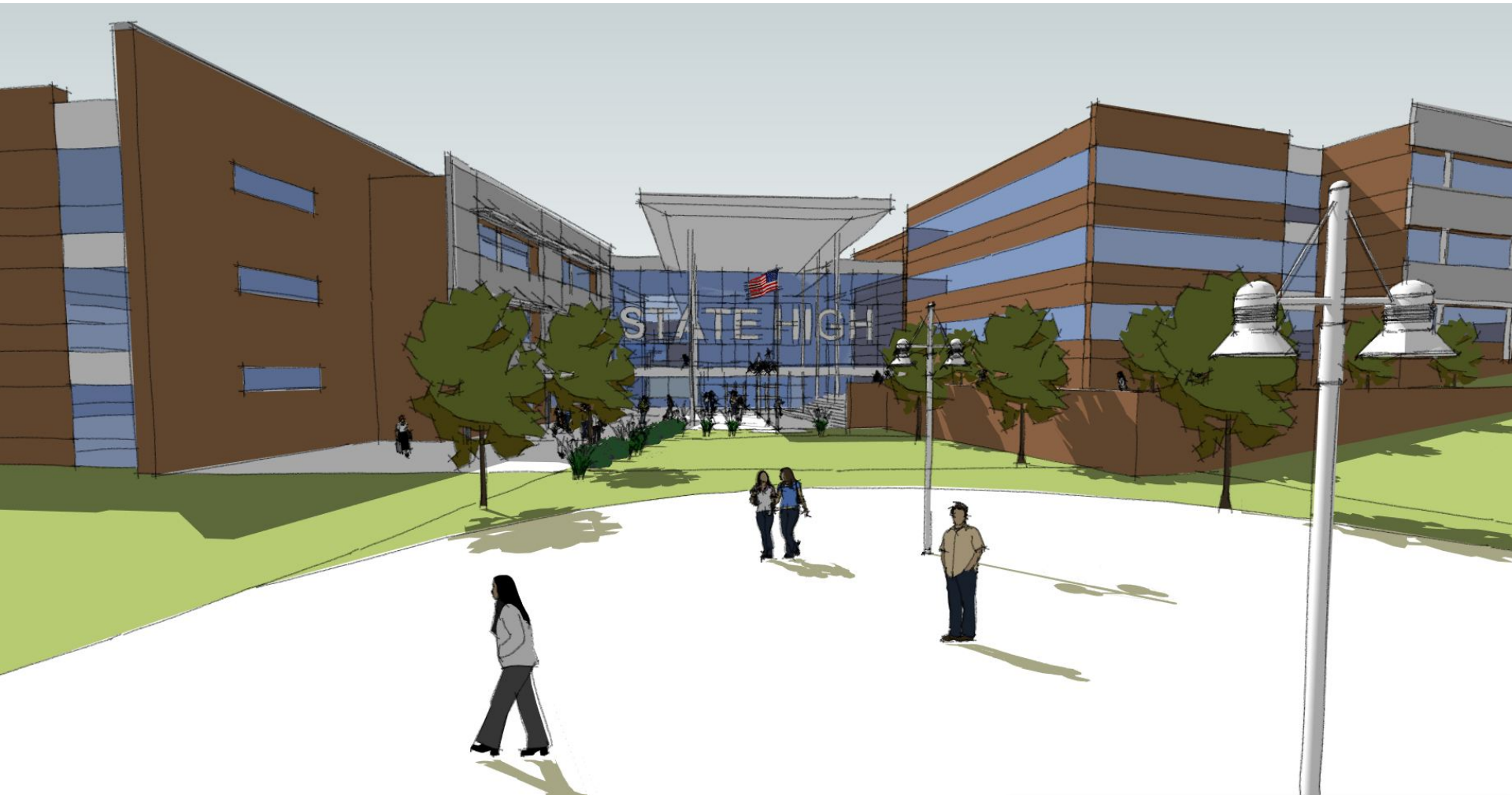
Massing Study

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Westerly Parkway View

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Main Entry View

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Schematic Design Effort:

- Floor Plans / Site Design
- Established Preliminary Building Systems
- Establish Construction Type
 - Basis of Design : Mid-West HS
 - LEED Gold
- Design & Construction Schedule
- Established Soft Costs
 - Supervision, Loose Equipment, etc.
 - Fundamental/Enhanced Commissioning
- Identify **PENDING** Scope of Work Items
 - Plaza Drive / Storm Water Management
 - Impact of Traffic Study
 - Welch Pool Parking
 - Geotechnical Testing
 - Alternates

SOUTH BUILDING			
1	Existing Area	189,000	SF
2	Proposed Demolition	97,000	SF
3	Proposed New Construction	385,000	SF
4	Proposed Renovations	92,000	SF
5	Hybrid Renov. area	4,500	SF
6	Total	481,500	SF

State High - Delta

Schematic Design Effort:

- Floor Plans / Site Design
- Established Preliminary Building Systems
- Establish Construction Type
 - Basis of Design : Mid-West, LEED Gold
- Design & Construction Schedule
- Established Soft Costs
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 - Fundamental/Enhanced Commissioning
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NORTH BUILDING			
1	Existing Area	238,000	SF
2	Proposed Demolition	137,000	SF
3	Proposed New Construction	20,000	SF
4	Proposed Renovations	101,000	SF
5	Area of No Work	(14,000)	SF
6	Total	107,000	SF
SUMMARY			
	SOUTH	481,500	
	NORTH	107,000	
	Total	588,500	

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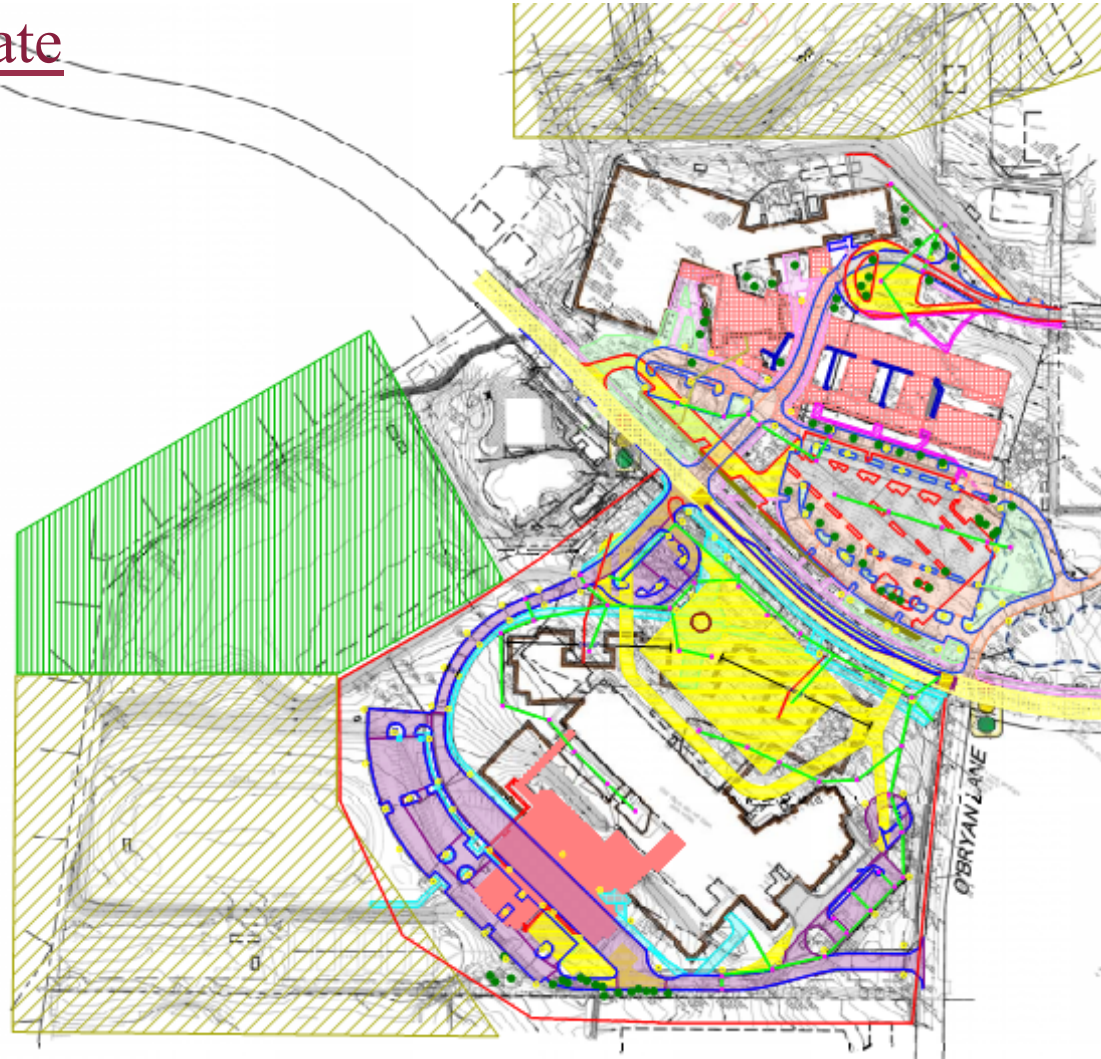
CRA PRELIMINARY CONSTRUCITON COST ESTIMATE						
	Proposed Scope Of Work			SOUTH BUILDING	NORTH BUILDING	
1	Demolition Cost			\$ 630,500	\$ 685,000	
2	Renovation Cost			\$ 10,904,500	\$ 3,480,000	
3	Asbestos Abatement			\$ 226,395	\$ 262,080	
4	New Construction Cost			\$ 61,600,000	\$ 3,000,000	
5	Site Work			\$ 3,400,000	\$ 3,250,000	
6	Equipment			\$ 2,000,000	\$ 700,000	
7	Subtotal			\$ 78,761,395	\$ 11,377,080	
8	Escalation to Mid Point			\$ 4,725,684	\$ 682,625	
9	Estimating Contingency			\$ 2,504,612	\$ 361,791	
10	Structure Subtotal			\$ 85,991,691	\$ 12,421,496	
11	Construction Related Costs					
12	Contingency/Testing/Permits/CM			\$ 5,483,472	\$ 825,397	
13	Other Project Costs					
14	Professional Services					
15	Design/Engineering/Printing			\$ 5,979,410	\$ 1,040,301	
16	Financing			\$ 650,000	\$ 150,000	
17	Moveable Fixtures & Equipment			\$ 2,149,792	\$ 186,322	
18	Subtotal			\$ 14,262,674	\$ 2,202,020	
19	Estimated Total Project Cost			\$ 100,254,365	\$ 14,623,516	
				SOUTH BUILDING	NORTH BUILDING	
	Summary					
	SOUTH Project Costs			\$ 100,254,365		
	NORTH Project Costs			\$ 14,623,516		
	Combined Projects			\$ 114,877,881		

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Alexander Collaborative Estimating Approach

Development of the Estimate

- ➔ Quantity Take Off
- ➔ Fill the Gaps
- ➔ Accurate Unit Prices
- ➔ Input from the Market



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Alexander Collaborative Estimating Approach

Estimate as a Tool

➔ Alternate Solutions

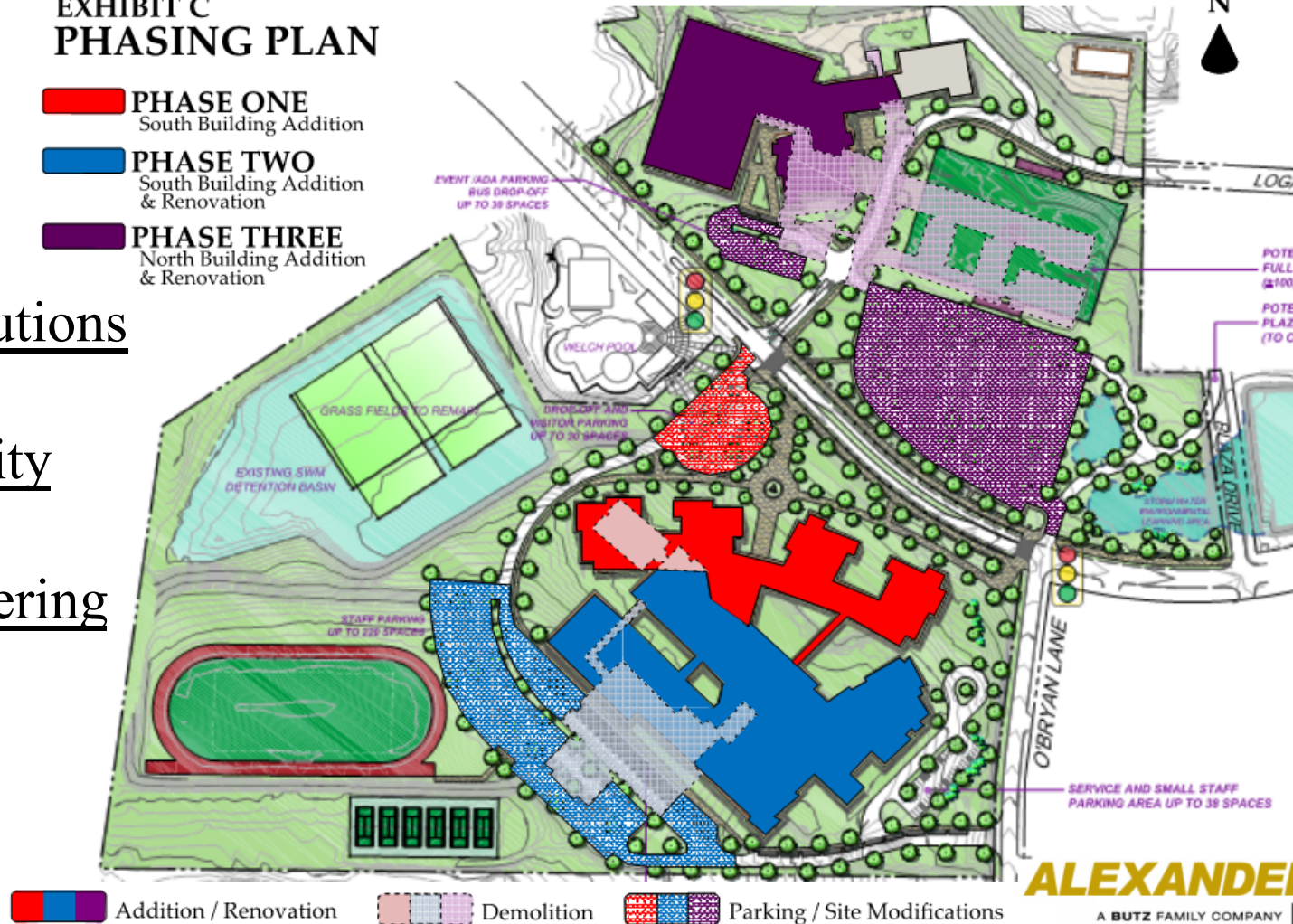
➔ Constructability

➔ Value Engineering

➔ Phasing/
Sequencing

SCASD HIGH SCHOOL PRE-SCHEMATIC ESTIMATE EXHIBIT C PHASING PLAN

- **PHASE ONE**
South Building Addition
- **PHASE TWO**
South Building Addition
& Renovation
- **PHASE THREE**
North Building Addition
& Renovation



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Alexander Estimate SOUTH

Pre Schematic Estimate Comparison

SOUTH		South Building					
		CRA	Alexander				
			Alternate		Base		
1	Area Summary (SF)						
	Existing Building Renovation	96,500		96,500		96,500	
	New Building Area	385,000		385,000		385,000	
	Total Building Area	481,500		481,500		481,500	
	Total Demolition	97,000		97,000		97,000	
2	Demolition Cost	\$ 630,500		\$ 1,009,512		\$ 1,009,512	
3	Renovation Cost	\$ 10,904,500		\$ 13,320,728		\$ 14,501,027	
4	Asbestos Abatement Cost	\$ 226,395		\$ 225,000		\$ 225,000	
5	New Construction Cost	\$ 61,600,000		\$ 59,777,351		\$ 63,349,739	
6	Site Work	\$ 3,400,000		\$ 5,147,667		\$ 5,206,917	
7	Equipment	\$ 2,000,000		\$ 2,000,000		\$ 2,000,000	
	Subtotal Structure Cost	\$ 78,761,395		\$ 81,480,258		\$ 86,292,195	
	Escalation Factor	\$ 4,725,684 6.00%		\$ 4,481,414 5.50%		\$ 4,746,071 5.50%	
	Subtotal Adjusted Structure Cost	\$ 83,487,079		\$ 85,961,672		\$ 91,038,266	
	Estimating Contingency	\$ 2,504,612 3.00%		\$ 2,578,850 3.00%		\$ 2,731,148 3.00%	
	Subtotal Construction Cost	\$ 85,991,691		\$ 88,540,522		\$ 93,769,414	
8	Construction Related Soft Costs	\$ 5,483,472 6.38%		\$ 6,082,734 6.87%		\$ 6,444,206 6.87%	
	Subtotal Construction & Construction Soft Costs	\$ 91,475,163		\$ 94,623,256		\$ 100,213,620	
9	Additional Soft Costs	\$ 5,979,410 6.54%		\$ 5,979,410		\$ 5,979,410	
10	Financing	\$ 650,000		\$ 650,000		\$ 650,000	
11	Moveable Fixtures/Equipment	\$ 2,149,792 2.50%		\$ 2,213,513 2.50%		\$ 2,344,235 2.50%	
12	Total Project Costs	\$ 100,254,365		\$ 103,466,180		\$ 109,187,266	

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Alexander Estimate NORTH

Pre Schematic Estimate Comparison

ORTH

				North Building			
		CRA		Alexander			
				Alternate		Base	
1	Area Summary (SF)						
	Existing Building Renovation	87,000		87,000		87,000	
	New Building Area	20,000		20,000		20,000	
	Total Building Area	107,000		107,000		107,000	
	Total Demolition	137,000		137,000		137,000	
2	Demolition Cost	\$ 685,000		\$ 1,052,285		\$ 1,052,285	
3	Renovation Cost	\$ 3,480,000		\$ 2,591,184		\$ 2,591,184	
4	Asbestos Abatement Cost	\$ 262,080		\$ 225,000		\$ 225,000	
5	New Construction Cost	\$ 3,000,000		\$ 3,222,870		\$ 3,327,133	
6	Site Work	\$ 3,250,000		\$ 3,713,722		\$ 3,713,722	
7	Equipment	\$ 700,000		\$ 700,000		\$ 700,000	
	Subtotal Structure Cost	\$ 11,377,080		\$ 11,505,061		\$ 11,609,324	
	Escalation Factor	\$ 682,625	6.00%	\$ 632,778	5.50%	\$ 638,513	5.50%
	Subtotal Adjusted Structure Cost	\$ 12,059,705		\$ 12,137,839		\$ 12,247,837	
	Estimating Contingency	\$ 361,791	3.00%	\$ 364,135	3.00%	\$ 367,435	3.00%
	Subtotal Construction Cost	\$ 12,421,496		\$ 12,501,975		\$ 12,615,272	
8	Construction Related Soft Costs	\$ 825,483	6.65%	\$ 890,141	7.12%	\$ 898,207	7.12%
	Subtotal Construction & Construction Soft Costs	\$ 13,246,979		\$ 13,392,115		\$ 13,513,479	
9	Additional Soft Costs	\$ 1,040,214	7.85%	\$ 1,040,214		\$ 1,040,214	
10	Financing	\$ 150,000		\$ 150,000		\$ 150,000	
11	Moveable Fixtures/Equipment	\$ 186,322	1.50%	\$ 187,530	1.50%	\$ 189,229	1.50%
12	Total Project Costs	\$ 14,623,515		\$ 14,769,859		\$ 14,892,922	

TOTAL PROJECT COMPARISON

CRA: \$ 114,877,881
 Alexander Alternate: \$ 118,236,038
 Alexander Base: \$ 124,080,188

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PROJECT PLANNING MEETING

January 27, 2014



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Questions ?