

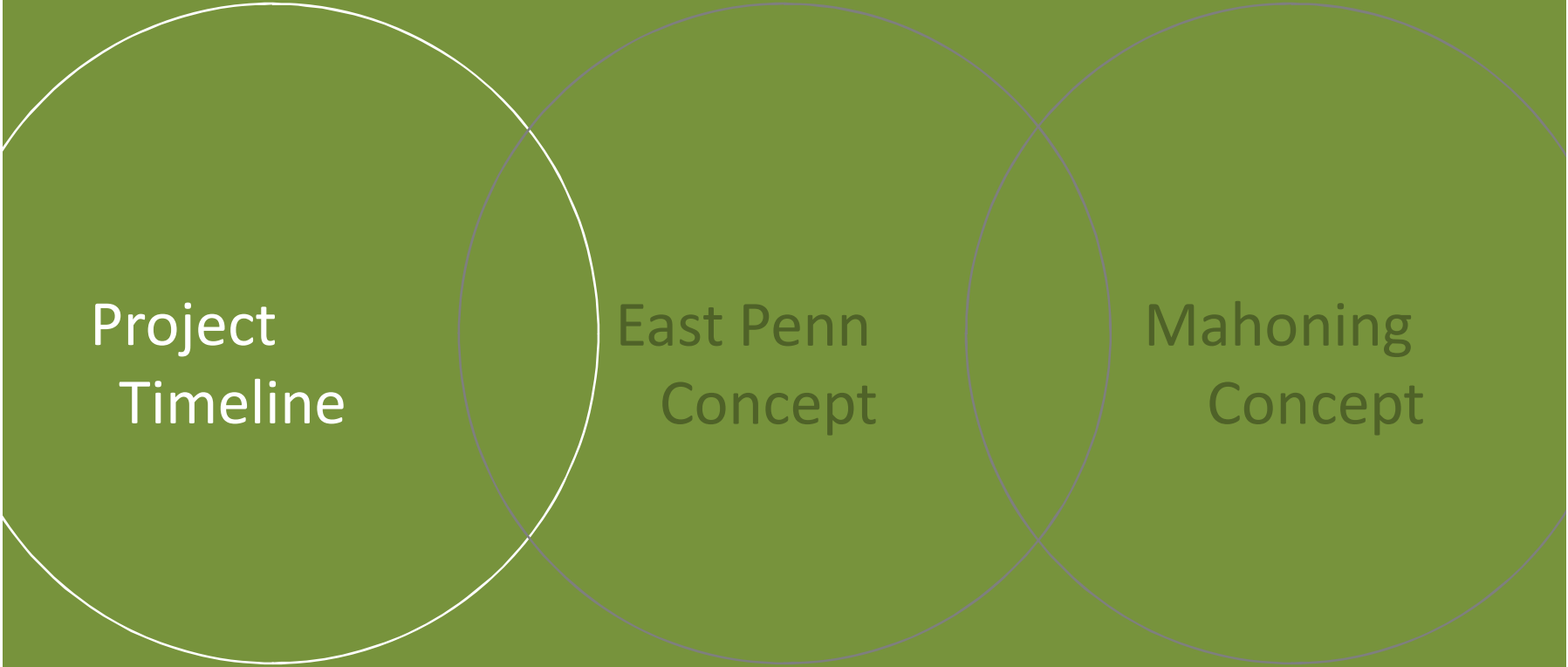


LEHIGHTON AREA
SCHOOL DISTRICT

16 December 2013



East Penn Elementary School Mahoning Elementary School



Project
Timeline

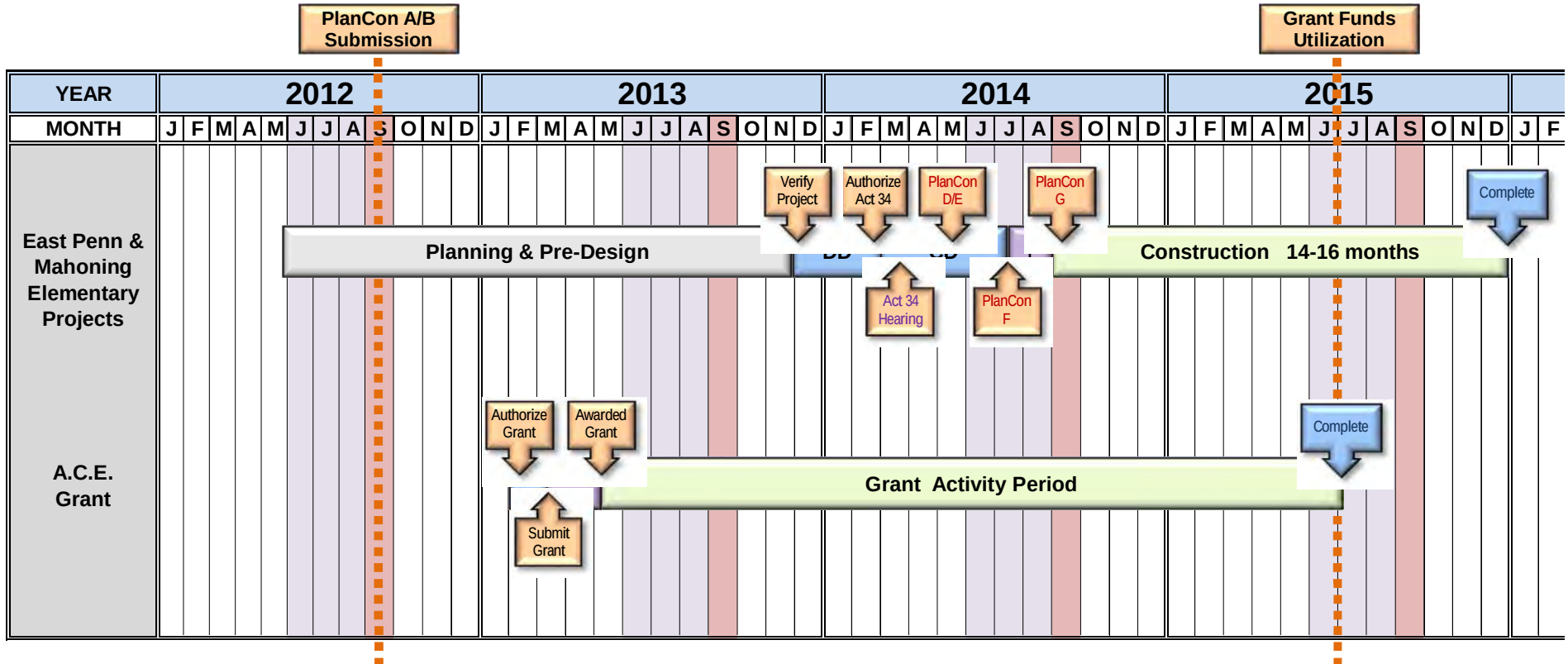
East Penn
Concept

Mahoning
Concept

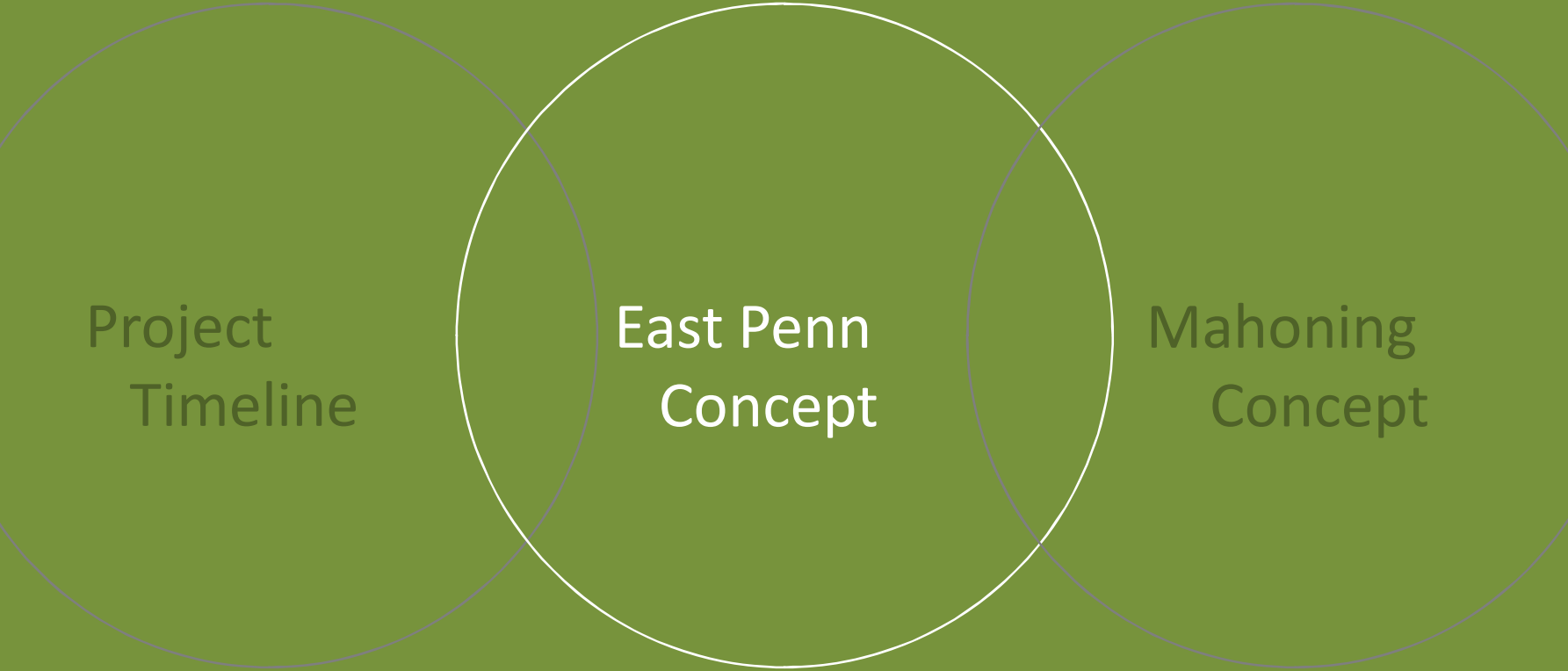


Project Timeline

East Penn & Mahoning Elementary Schools



East Penn Elementary School Mahoning Elementary School



Project
Timeline

East Penn
Concept

Mahoning
Concept



East Penn Elementary School



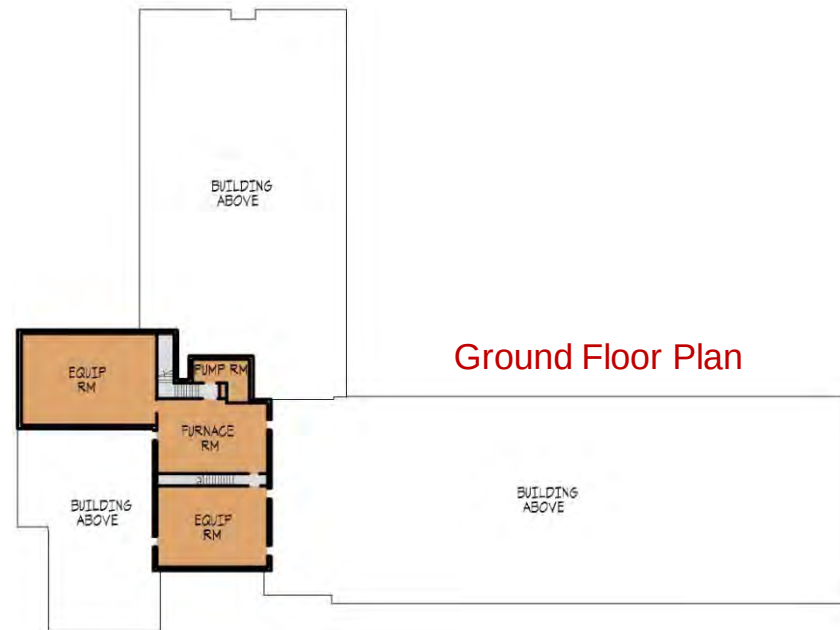
Built: 1954; A&A 1991

Site: 12.65 acres

Area: 24,270 SF

Capacity: 125

Enrollment: 138



East Penn Elementary School

AREA	NO.	AREA	TOTAL	CAPACITY
ANCILLARY AREAS				
ADMINISTRATION / GUIDANCE			1,250 s.f.	0
HEALTH SUITE			650 s.f.	0
FACULTY			565 s.f.	0
SHARED AREAS				
FOOD SERVICES			5,900 s.f.	0
Student Dining	1	3400	3400	
Stage & Support	1	850	850	
Kitchen Areas & Storage	1	1400	1400	
Table & Chair Storage	1	250	250	
PHYSICAL EDUCATION			3,800 s.f.	0
Gymnasium	1	3400	3400	
P.E. Instructor Office	1	150	150	
Gym Storage	1	250	250	
INSTRUCTIONAL AREAS				
K-6 GRADES			11,680 s.f.	350
Kindergarten	2	840	1,680	50
First Grade Classroom	2	840	1,680	50
Second Grade Classroom	2	840	1,680	50
Third Grade Classroom	2	840	1,680	50
Fourth Grade Classroom	2	870	1,740	50
Fifth Grade Classroom	2	760	1,520	50
Sixth Grade Classroom	2	850	1,700	50
SHARED INSTRUCTIONAL AREAS				
ACADEMIC SUPPORT AREAS			1,385 s.f.	0
S.E. Classroom	1	800	800	
S.E. S.G.I.	1	335	335	
S.G.I.	2	125	250	
ART / MUSIC EDUCATION			850 s.f.	0
Art /Music Classroom	1	850	850	
MEDIA CENTER			1,400 s.f.	0
Reading / Stack Area	1	1,400	1,400	
Office / Workroom / Storage	1	200	200	

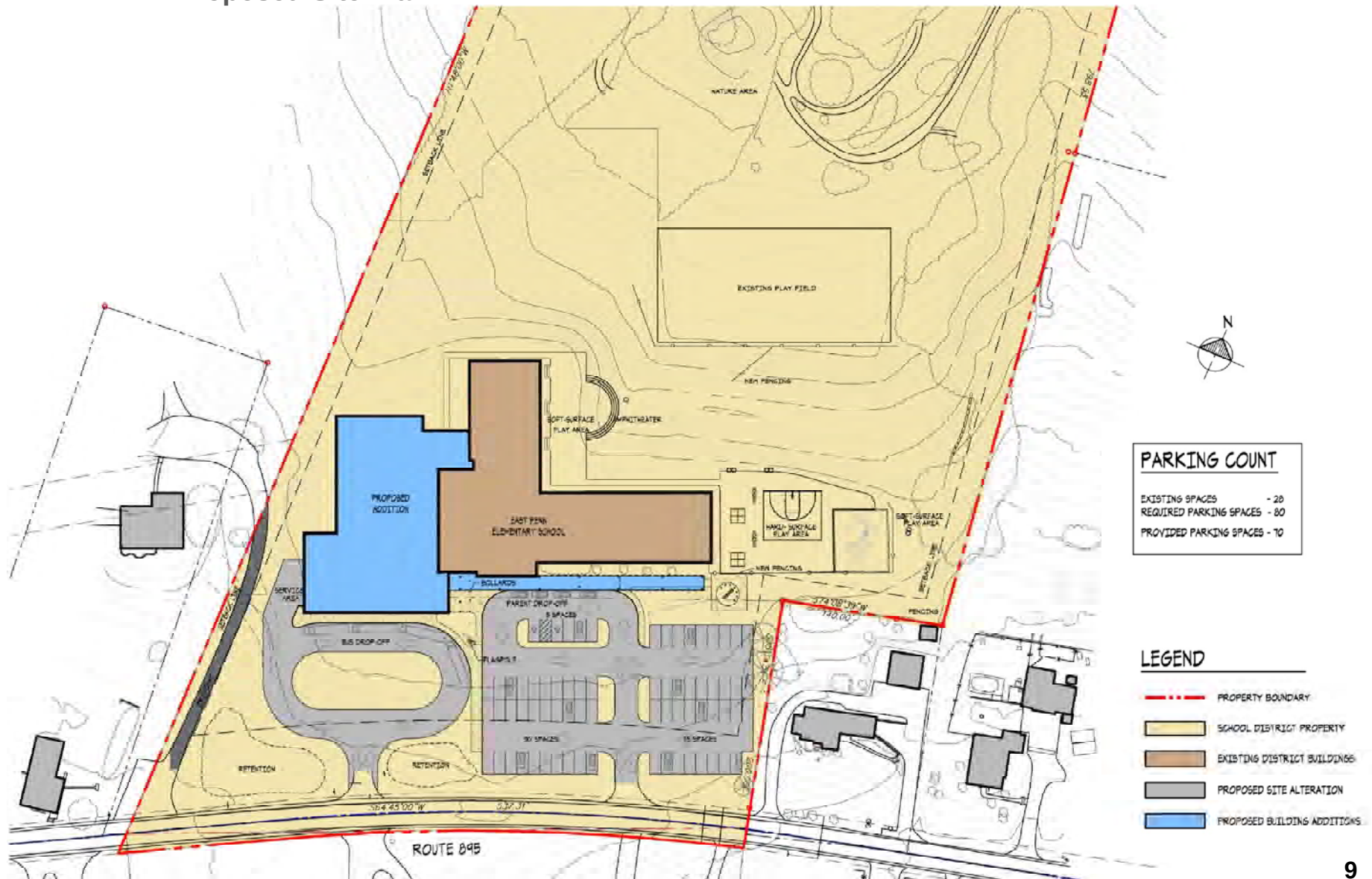
East Penn Elementary School

Existing Site Plan



East Penn Elementary School

Proposed Site Plan



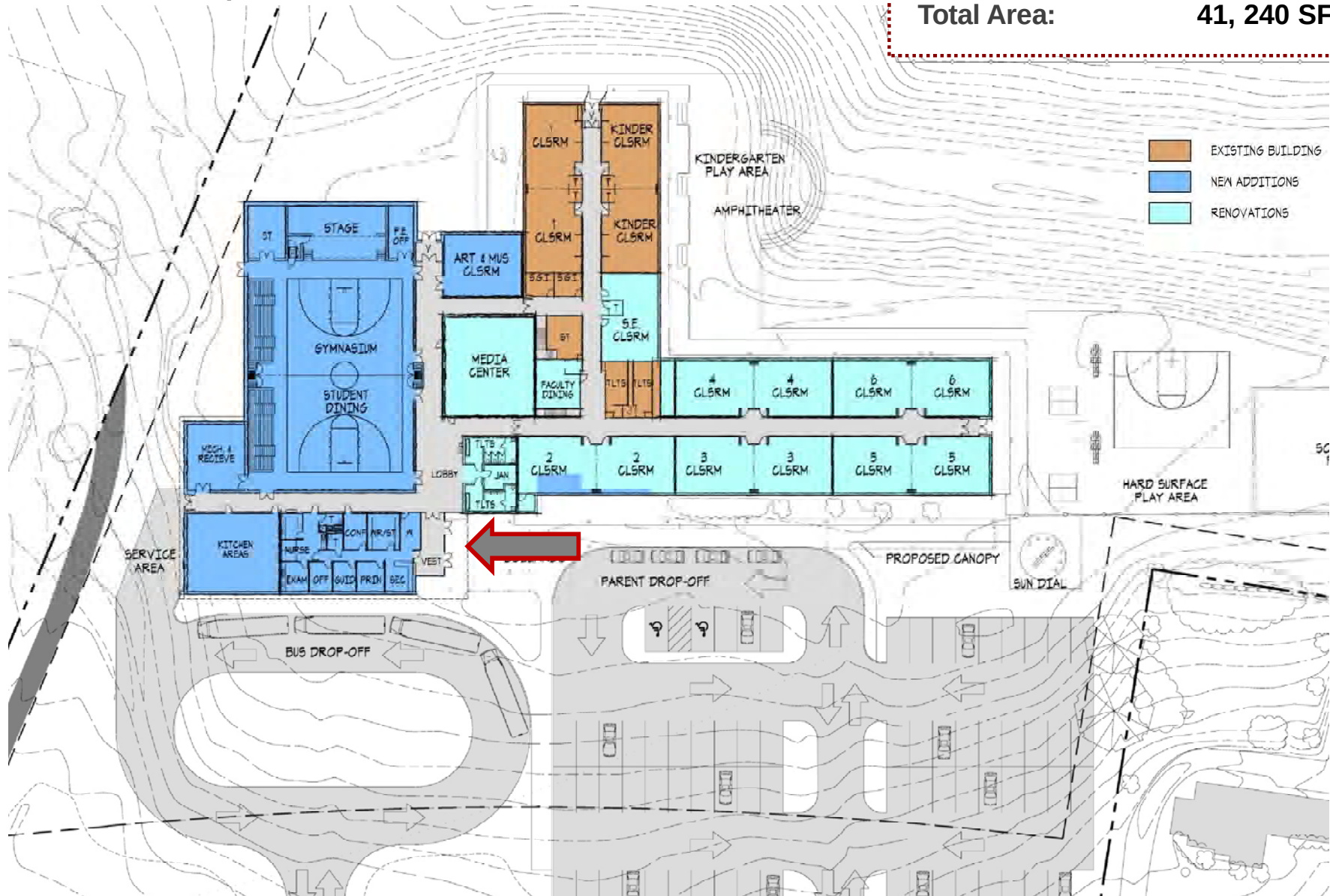
East Penn Elementary School

Proposed Floor Plan

Existing Area: 24,240 SF

New Area: 17,000 SF

Total Area: 41, 240 SF



East Penn Elementary School

Existing Building

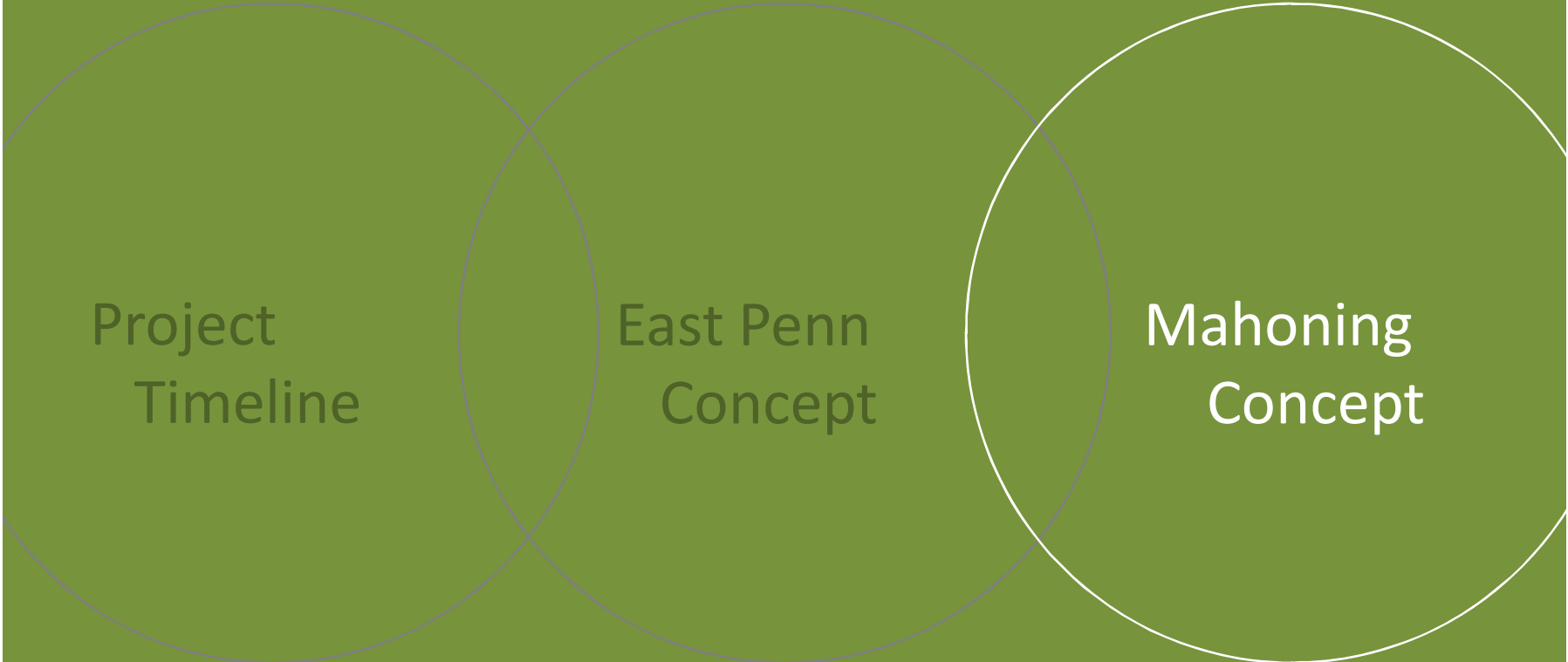


East Penn Elementary School

Conceptual Rendering



East Penn Elementary School Mahoning Elementary School



Project
Timeline

East Penn
Concept

Mahoning
Concept



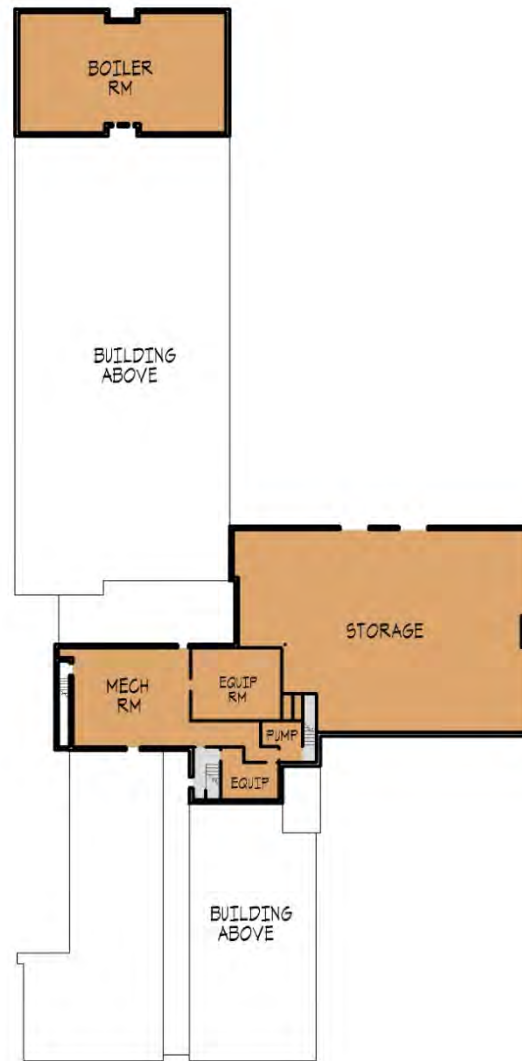
Mahoning Elementary School

Mahoning Elementary School

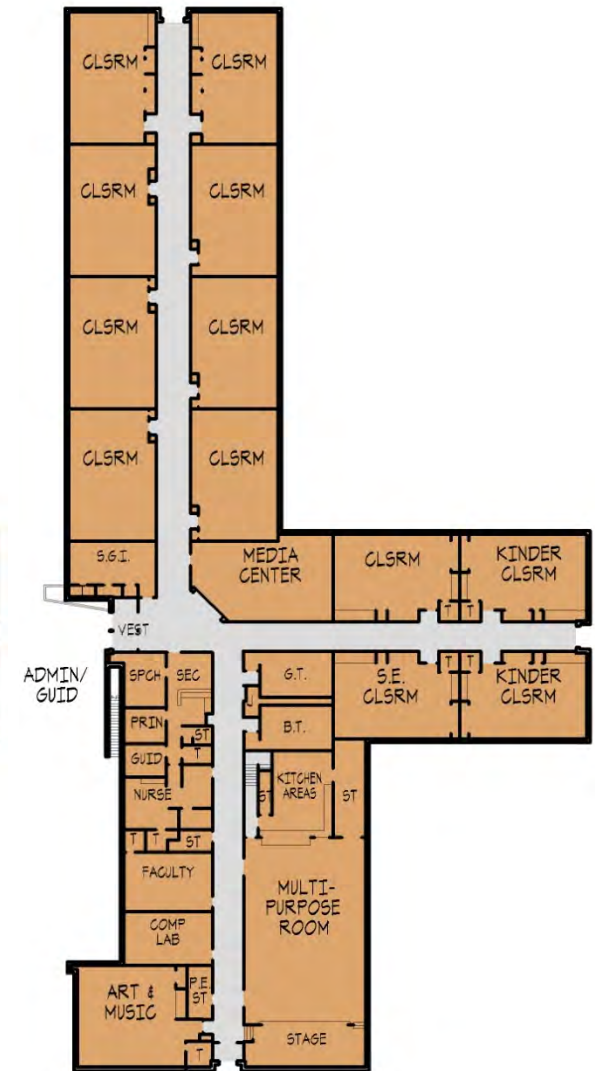


Built: 1954; A&A 1991
Site: 7.13 acres
Area: 28,470 SF
Capacity: 175
Enrollment: 187

Ground Floor Plan



First Floor Plan

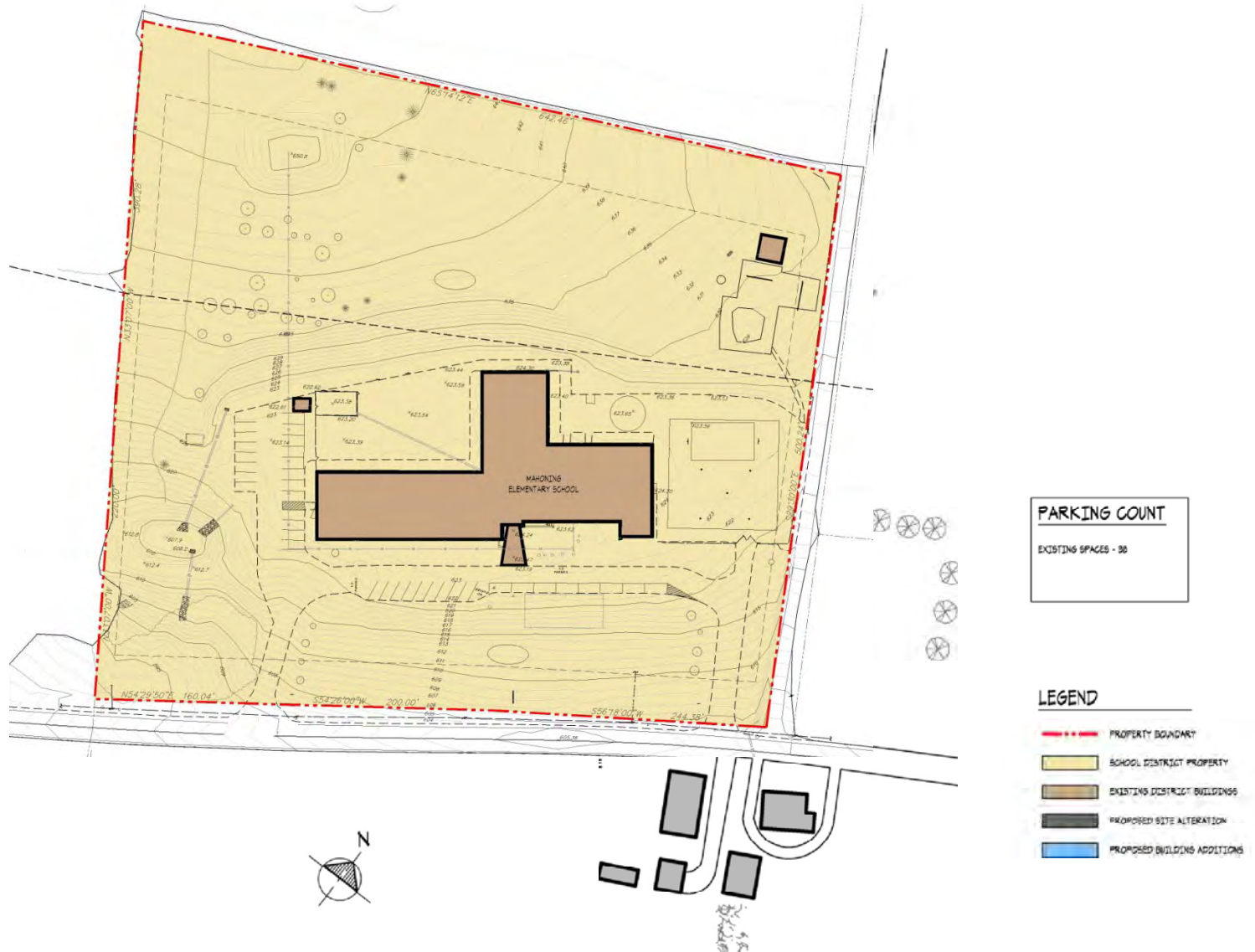


Mahoning Elementary School

AREA	NO.	AREA	TOTAL	CAPACITY
ANCILLARY AREAS				
ADMINISTRATION / GUIDANCE			1,250 s.f.	0
HEALTH SUITE			650 s.f.	0
FACULTY			750 s.f.	0
SHARED AREAS				
FOOD SERVICES			5,900 s.f.	0
Student Dining	1	3400	3400	
Stage & Support	1	850	850	
Kitchen Areas & Storage	1	1400	1400	
Table & Chair Storage	1	250	250	
PHYSICAL EDUCATION			3,800 s.f.	0
Gymnasium	1	3400	3400	
P.E. Instructor Office	1	150	150	
Gym Storage	1	250	250	
INSTRUCTIONAL AREAS				
K-6 GRADES			11,700 s.f.	350
Kindergarten	2	780	1,560	50
First Grade Classroom	2	780	1,560	50
Second Grade Classroom	2	860	1,720	50
Third Grade Classroom	2	860	1,720	50
Fourth Grade Classroom	2	860	1,720	50
Fifth Grade Classroom	2	860	1,720	50
Sixth Grade Classroom	2	850	1,700	50
SHARED INSTRUCTIONAL AREAS				
ACADEMIC SUPPORT AREAS			2,375 s.f.	0
S.E. Classroom	1	840	840	
S.E. S.G.I.	1	335	335	
S.G.I.	3	400	1,200	
ART / MUSIC EDUCATION			850 s.f.	0
Art /Music Classroom	1	850	850	
MEDIA CENTER			1,800 s.f.	0
Reading / Stack Area	1	1,800	1,800	
Office / Workroom / Storage	1	200	200	

Mahoning Elementary School

Existing Site Plan





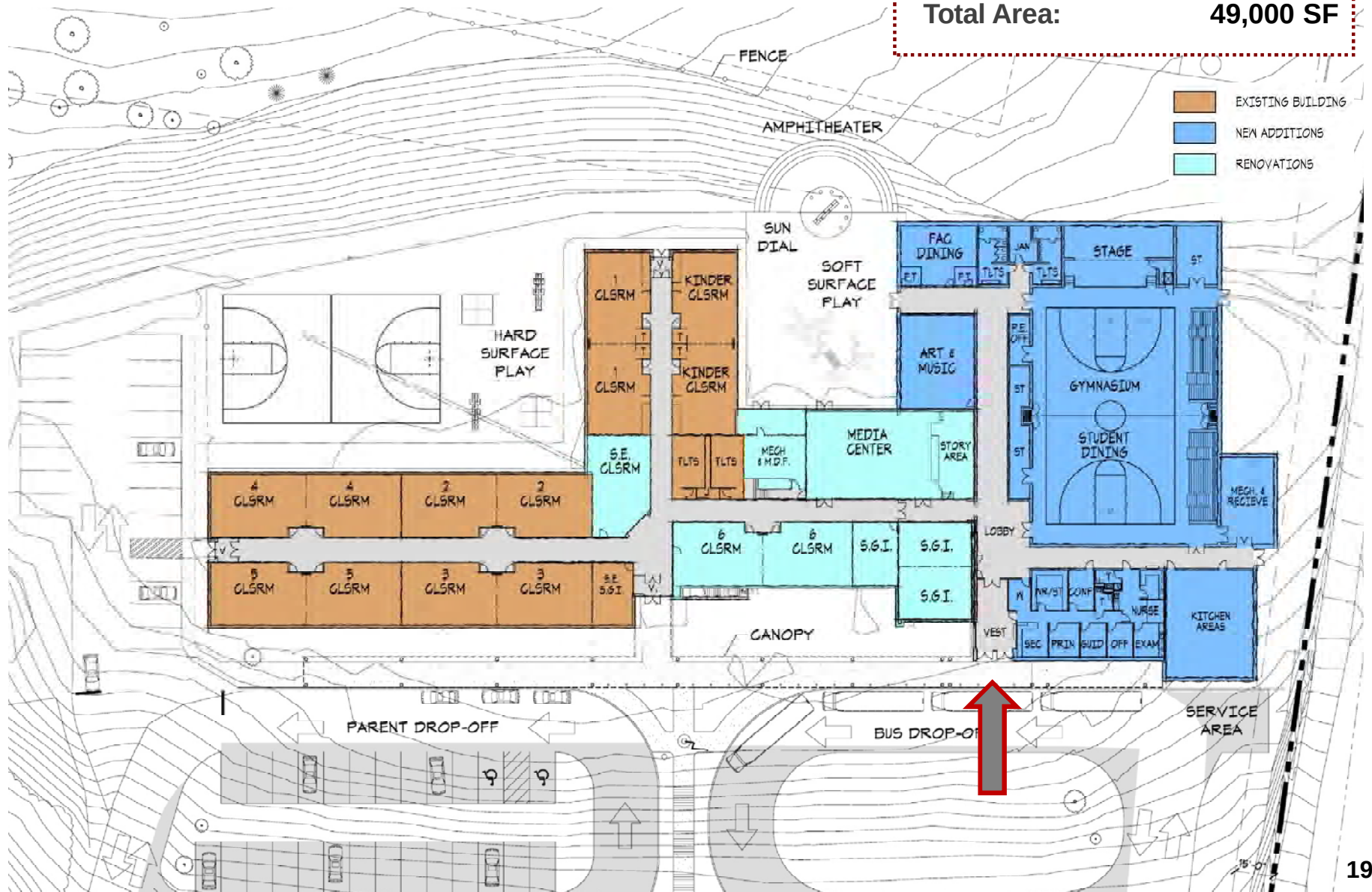
Mahoning Elementary School

Proposed Floor Plan

Existing Area: 33,000 SF

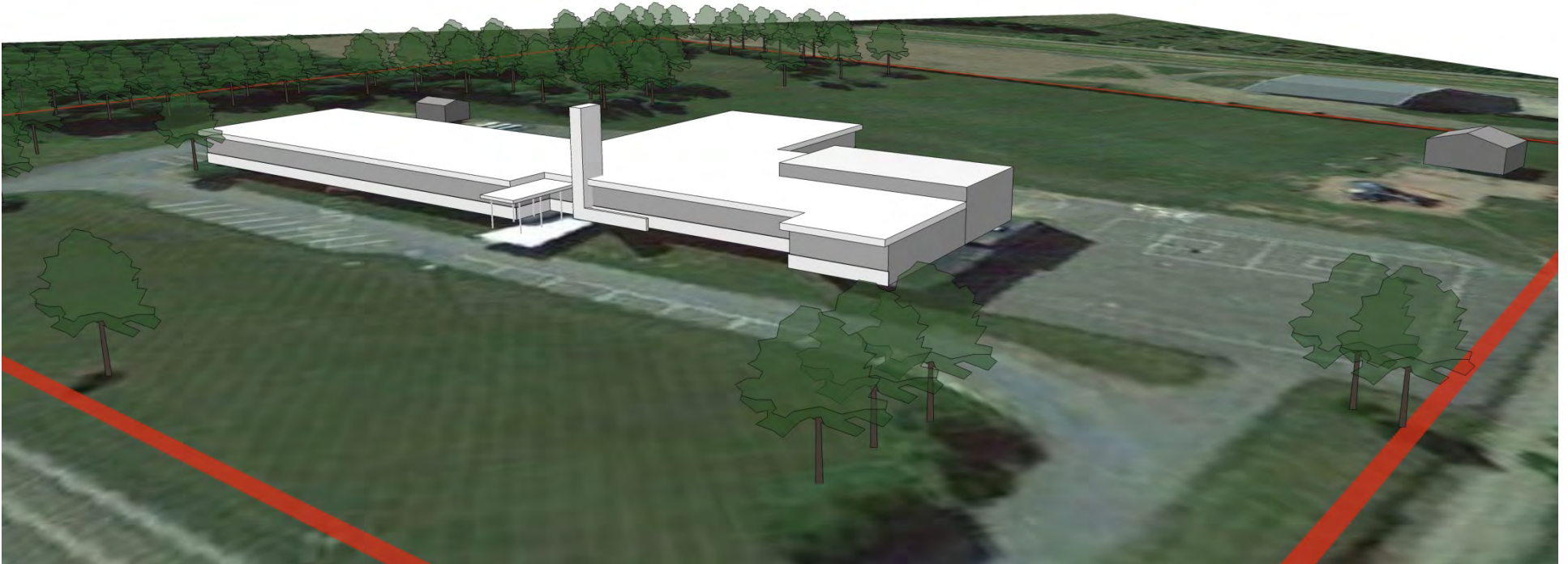
New Area: 16,000 SF

Total Area: 49,000 SF



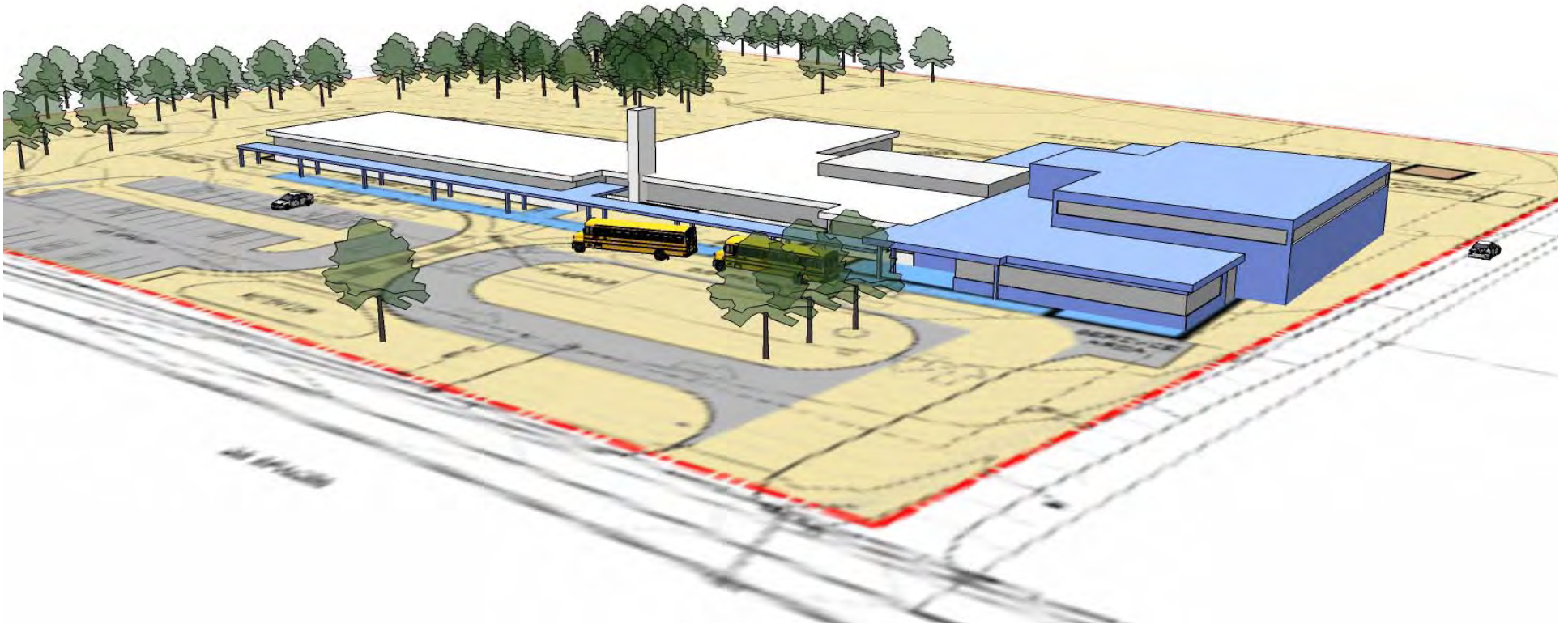
Mahoning Elementary School

Existing Building



Mahoning Elementary School

Conceptual Rendering



**ENERGY
USE**



30-50%

**CARBON
EMISSIONS**



35%

**WATER
USE**



40%

**SOLID
WASTE**



70%

REDUCE

Average Savings of Green Buildings

LEED Gold checklist -- East Penn E.S.

LEED 2009 for Schools New Construction and Major Renovation										Project Name: East Penn Elementary School	
Project Checklist										Date: 12/02/2013	
11 12 1 Sustainable Sites										Possible Points: 24	
Y	N	7	Prereq 1	Construction Activity Pollution Prevention							
Y			Prereq 1	Environmental Site Assessment							
1			Credit 1	Site Selection							
	4		Credit 2	Development Density and Community Connectivity							
1			Credit 3	Brownfield Redevelopment							
	4		Credit 4.1	Alternative Transportation—Public Transportation Access							
	1		Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms							
2			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles							
2			Credit 4.4	Alternative Transportation—Parking Capacity							
	1		Credit 5.1	Site Development—Protect or Restore Habitat							
1			Credit 5.2	Site Development—Maximize Open Space							
1			Credit 6.1	Stormwater Design—Quantity Control							
	1		Credit 6.2	Stormwater Design—Quality Control							
	1		Credit 7.1	Heat Island Effect—Non-roof							
	1		Credit 7.2	Heat Island Effect—Roof							
1			Credit 8	Light Pollution Reduction							
1			Credit 9	Site Master Plan							
1			Credit 10	Joint Use of Facilities							
6 3 2 Water Efficiency										Possible Points: 11	
Y			Prereq 1	Water Use Reduction—20% Reduction							
4			Credit 1	Water Efficient Landscaping							
	2		Credit 2	Innovative Wastewater Technologies							
2			Credit 3	Water Use Reduction							
1			Credit 3	Process Water Use Reduction							
14 9 10 Energy and Atmosphere										Possible Points: 33	
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems							
Y			Prereq 2	Minimum Energy Performance							
Y			Prereq 3	Fundamental Refrigerant Management							
10		9	Credit 1	Optimize Energy Performance							
	7		Credit 2	On-Site Renewable Energy							
	2		Credit 3	Enhanced Commissioning							
	1		Credit 4	Enhanced Refrigerant Management							
2			Credit 5	Measurement and Verification							
2			Credit 6	Green Power							
10 3 Materials and Resources										Possible Points: 13	
Y			Prereq 1	Storage and Collection of Recyclables							
2			Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof							
1			Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements							
2			Credit 2	Construction Waste Management							
Materials and Resources, Continued											
Y	N	7	Credit 3	Materials Reuse							
2			Credit 4	Recycled Content							
2			Credit 5	Regional Materials							
	1		Credit 6	Rapidly Renewable Materials							
1			Credit 7	Certified Wood							
15 3 1 Indoor Environmental Quality										Possible Points: 19	
Y			Prereq 1	Minimum Indoor Air Quality Performance							
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control							
Y			Prereq 3	Minimum Acoustical Performance							
	1		Credit 1	Outdoor Air Delivery Monitoring							
	1		Credit 2	Increased Ventilation							
	1		Credit 3.1	Construction IAQ Management Plan—During Construction							
	1		Credit 3.2	Construction IAQ Management Plan—Before Occupancy							
	4		Credit 4	Low-Emitting Materials							
	1		Credit 5	Indoor Chemical and Pollutant Source Control							
	1		Credit 6.1	Controllability of Systems—Lighting							
	1		Credit 6.2	Controllability of Systems—Thermal Comfort							
	1		Credit 7.1	Thermal Comfort—Design							
	1		Credit 7.2	Thermal Comfort—Verification							
	2	1	Credit 8.1	Daylight and Views—Daylight							
	1		Credit 8.2	Daylight and Views—Views							
	1		Credit 9	Enhanced Acoustical Performance							
	1		Credit 10	Mold Prevention							
6 Innovation and Design Process										Possible Points: 6	
			Credit 1.1	Innovation in Design: Green Building Education							
			Credit 1.2	Innovation in Design: Green Housekeeping							
			Credit 1.3	Innovation in Design: Occupant Recycling							
			Credit 1.4	Innovation in Design: Integrated Pest Management							
			Credit 2	LEED Accredited Professional							
			Credit 3	The School as a Teaching Tool							
3 1 Regional Priority Credits										Possible Points: 4	
			Credit 1.1	Regional Priority: SSc4.4							
			Credit 1.2	Regional Priority: SSc6.1							
			Credit 1.3	Regional Priority: WEc1, Opt. 1 or WEc2							
			Credit 1.4	Regional Priority: EAc2(1X) or SSc5.1							
65 31 14 Total										Possible Points: 110	
Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110											

LEED Gold checklist -- Mahoning E.S.

LEED 2009 for Schools New Construction and Major Renovation				Project Name: Mahoning Elementary School	
Project Checklist				Date: 12/02/2013	
11 12 1		Sustainable Sites	Possible Points: 24	Materials and Resources, Continued	
Y	N	7		Y	N
Y			Prereq 1 Construction Activity Pollution Prevention	2	
Y			Prereq 1 Environmental Site Assessment	2	
1			Credit 1 Site Selection	2	
4			Credit 2 Development Density and Community Connectivity	1	
1			Credit 3 Brownfield Redevelopment	1	
4			Credit 4.1 Alternative Transportation—Public Transportation Access		
1			Credit 4.2 Alternative Transportation—Bicycle Storage and Changing Rooms		
2			Credit 4.3 Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles		
2			Credit 4.4 Alternative Transportation—Parking Capacity		
1			Credit 5.1 Site Development—Protect or Restore Habitat		
1			Credit 5.2 Site Development—Maximize Open Space		
1			Credit 6.1 Stormwater Design—Quantity Control		
1			Credit 6.2 Stormwater Design—Quality Control		
1			Credit 7.1 Heat Island Effect—Non-roof		
1			Credit 7.2 Heat Island Effect—Roof		
1			Credit 8 Light Pollution Reduction		
1			Credit 9 Site Master Plan		
1			Credit 10 Joint Use of Facilities		
6 3 2		Water Efficiency	Possible Points: 11	Indoor Environmental Quality	
Y			Prereq 1 Water Use Reduction—20% Reduction	Y	
4			Credit 1 Water Efficient Landscaping	Y	
2			Credit 2 Innovative Wastewater Technologies	1	
2			Credit 3 Water Use Reduction	1	
1			Credit 3 Process Water Use Reduction	1	
14 9 10		Energy and Atmosphere	Possible Points: 33	Materials Reuse	
Y			Prereq 1 Fundamental Commissioning of Building Energy Systems		1 to 2
Y			Prereq 2 Minimum Energy Performance		1 to 2
Y			Prereq 3 Fundamental Refrigerant Management		1 to 2
10		9	Credit 1 Optimize Energy Performance		1
7			Credit 2 On-Site Renewable Energy		1
2			Credit 3 Enhanced Commissioning		1
1			Credit 4 Enhanced Refrigerant Management		1
2			Credit 5 Measurement and Verification		1
2			Credit 6 Green Power		1
10 3		Materials and Resources	Possible Points: 13	Recycled Content	
Y			Prereq 1 Storage and Collection of Recyclables		1 to 2
2			Credit 1.1 Building Reuse—Maintain Existing Walls, Floors, and Roof		1
1			Credit 1.2 Building Reuse—Maintain 50% of Interior Non-Structural Elements		1 to 2
2			Credit 2 Construction Waste Management		1
6		Innovation and Design Process	Possible Points: 6	Regional Materials	
1			Credit 1.1 Innovation in Design: Green Building Education		1
1			Credit 1.2 Innovation in Design: Green Housekeeping		1
1			Credit 1.3 Innovation in Design: Occupant Recycling		1
1			Credit 1.4 Innovation in Design: Integrated Pest Management		1
1			Credit 2 LEED Accredited Professional		1
1			Credit 3 The School as a Teaching Tool		1
3 1		Regional Priority Credits	Possible Points: 4	Rapidly Renewable Materials	
1			Credit 1.1 Regional Priority: SSc4.4		1
1			Credit 1.2 Regional Priority: SSc6.1		1
1			Credit 1.3 Regional Priority: WEc1, Opt. 1 or WEc2		1
1			Credit 1.4 Regional Priority: EAc2(1X) or SSc5.1		1
65 31 14		Total	Possible Points: 110	Certified Wood	
					1

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

Project Cost Breakdown -- Alterations & Additions

COST BREAKDOWN	East Penn Elementary	Mahoning Elementary
Existing / Renovation SF	24,270	33,130
General	\$1,437,000	\$1,014,000
Mechanical	\$728,000	\$994,000
Plumbing	\$194,000	\$265,000
Electrical	\$728,000	\$994,000
Total Renovation Costs	\$3,087,000	\$3,267,000
New Construction SF	17,000	16,000
General	\$1,870,000	\$1,760,000
Mechanical	\$510,000	\$480,000
Plumbing	\$170,000	\$160,000
Electrical	\$510,000	\$480,000
Total New Construction Costs	\$3,060,000	\$2,880,000
TOTAL CONSTRUCTION COSTS	\$6,147,000	\$6,147,000
TOTAL SOFT COSTS	\$1,353,000	\$1,353,000
TOTAL PROJECT COSTS	\$7,500,000	\$7,500,000

Project Cost Breakdown -- Alterations & Additions

TOTAL CONSTRUCTION COSTS	\$6,147,000	\$6,147,000
TOTAL SOFT COSTS	\$1,353,000	\$1,353,000
TOTAL PROJECT COSTS	\$7,500,000	\$7,500,000

ALTERNATE BID COST BREAKDOWN	East Penn Elementary	Mahoning Elementary
Alternate Bid Items		
Deduct 2 Classrooms in Addition	-\$400,000	-\$400,000
Gymnasium Bleacher Seating	\$40,000	\$40,000
Septic System Upgrade & Drainage Fields	\$200,000	\$200,000
Additional Parking	\$350,000	\$250,000
Outdoor Educational Space (Ampitheater)	\$70,000	\$70,000
ALTERNATE BID CONSTRUCTION COSTS	\$260,000	\$160,000

MAXIMUM ELIGIBLE REIMBURSEMENT	\$2,622,500	\$2,622,500
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ACE GRANT	\$750,000	\$750,000
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LEED Cost Breakdown -- Maximize Reimbursement

LEED Certification Costs				
	East Penn E.S.	Mahoning E.S.	Total	Total
Project Registration/Certification	\$3,900	\$3,900	\$7,800	\$7,800
* Sustainable Consulting/Coordination	\$16,000	\$16,000	\$32,000	\$32,000
* LEED Specifications	\$2,000	\$2,000	\$4,000	\$4,000
LEED Const. Admin./Documentation	\$30,000	\$30,000	\$60,000	\$60,000
Energy Modeling	\$10,000	\$10,000	\$20,000	\$20,000
+ * Minimum Acoustical Performance	\$4,000	\$4,000	\$8,000	
+ * Daylighting Analysis	\$2,500	\$2,500	\$5,000	
+ Fundamental Commissioning	\$45,000	\$45,000	\$90,000	
Thermal Comfort – Verification	\$1,000	\$1,000	\$2,000	\$2,000
Total	\$114,400	\$114,400	\$228,800	\$125,800
			Required for LEED Projects	Specific to LEED Projects
Additional LEED Reimbursement \$239,700 + \$239,700 = 479,400 x 0.6011	\$144,100	\$144,100	\$288,200	\$288,200
Net Gain for a LEED Project	\$29,700	\$29,700	\$59,400	\$162,400

* LEED Services included in A/E fee

+ Standard of care for Architectural Practice