



Updated 10/25/2013

SKANSKA

MODULE 2
Assemble Team

MODULE 3
Feasibility Study

Feasibility Study Participants
Minuteman School Building Committee Elected Officials
District Representatives
Skanska: Owner's Project Manager (OPM)
Designer: Kaestle Boos Associates, Inc.
Massachusetts School Building Authority

During Feasibility Study
The District and its team collaborate with the MSBA to generate an initial space summary, document existing conditions, establish design parameters, develop and evaluate alternatives, and recommend the most cost effective and educationally appropriate solution to the MSBA Board of Directors.

Schedule: April 8, 2013 - December 19, 2013

Schedule: December 19, 2013 - June 4, 2014

Preliminary Design Program

- 3.1.1 Introduction
- 3.1.2 Educational Program
- 3.1.3 Initial Space Summary
- 3.1.4 Evaluation of Existing Conditions
- 3.1.5 Site Development Requirements
- 3.1.6 Preliminary Evaluation of Alternatives
- 3.1.7 Local Actions and Approvals of PDP

Preliminary Design Program Submission to MSBA
(Submittal Date no later than November 4, 2013)

MSBA Review of Preliminary Design Program
(MSBA may take up to 30 days to respond)

District Response to MSBA PDP Review Comments
(District has 14 days to respond December 18)

Preferred Schematic Report

- 3.3.2.1 Introduction
- 3.3.2.2 Evaluation of Existing Conditions
- 3.3.2.3 Final Evaluation of Alternatives
- 3.3.2.4 Preferred Solution
- 3.3.2.5 Local Actions and Approvals

* SBC Select the preferred solution to recommend to MSBA
**Approve submission of Preferred Schematic Report

Preferred Schematic Report Submission to MSBA
(Submittal Date no later than April 17, 2014)

MSBA Review of Preferred Schematic Report
MSBA Facilities Assessment Subcommittee Meeting April 30, 2014
(Target MSBA Meeting Date June 4, 2014 after SBC approval)

Approval by MSBA BOD to Proceed into Schematic Design 6/4/14

NOTE: Final Selection of a preferred solution by MSBA BOD

MODULE 4

Schedule: June 4, 2014 - October 2, 2014

Preferred Schematic Solution - Option B
May Proceed to Schematic Design of the Preferred Solution with MSBA BOD Approval and SBC approval to proceed with only the Preferred Solution Selected

During Schematic Design
Develop robust schematic design in order to:
Establish - Scope
Budget
Schedule
Submittal for DESE Approval (SPED)

Schematic Design Submittal

Certification from OPM to MSBA: 9/18/2014

- Submittal Reviewed
- Submittal Complete
- Submittal Within District's Budget

SBC/District Approves Submission
OPM - Schematic Design to MSBA: 10/02/2014

MSBA Review Period and Comments

Establishing Scope, Budget and Schedule which is foundation for next appropriation

*** Attend Project Scope and Budget Conference: If needed**
October 15th or 29th, 2014
** Obtain DESE Approval (SPED)

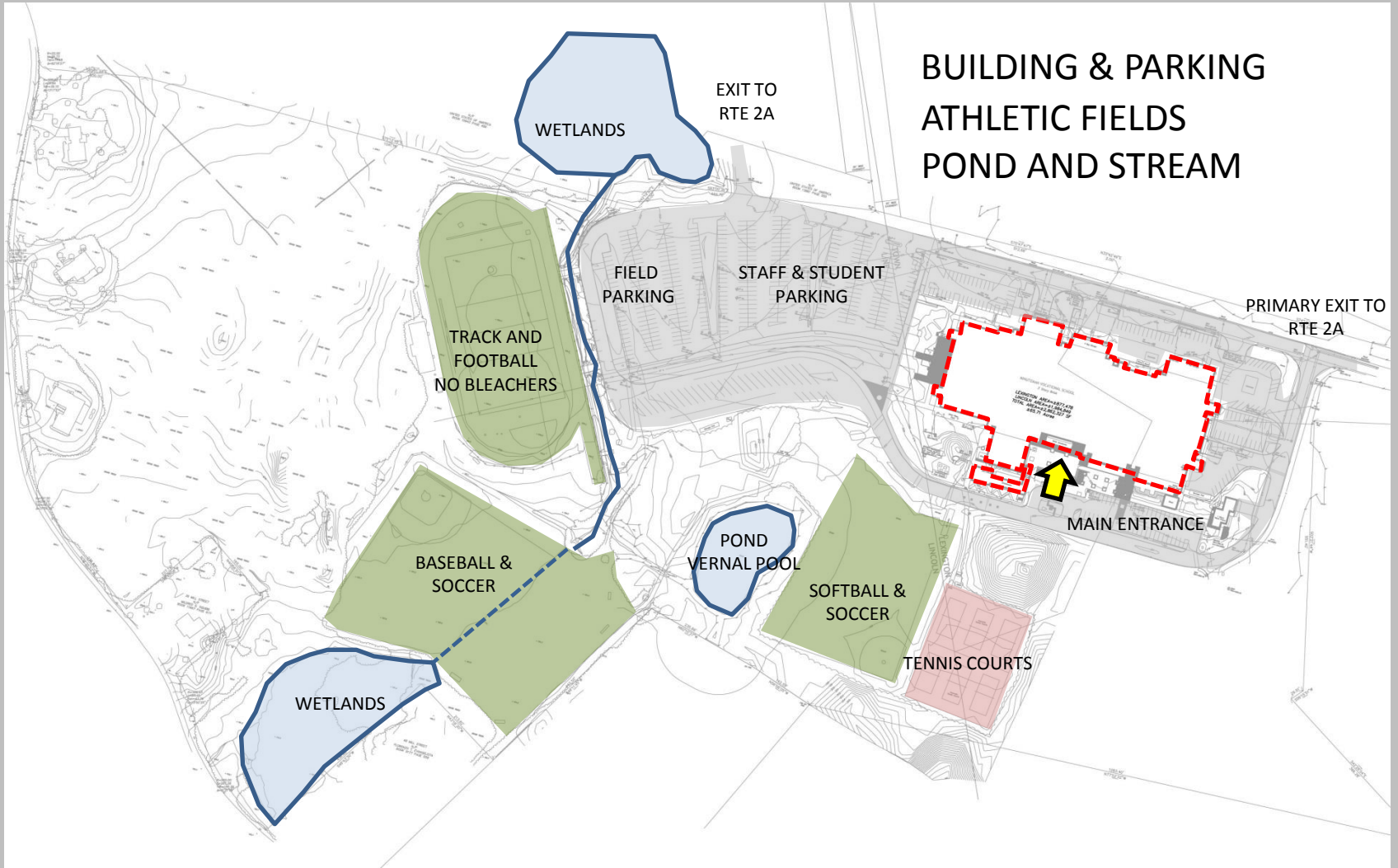
MSBA Board Acceptance for Proposed Project: November 19, 2014

Note: Approval of a project by the MSBA Board of Directors, at the conclusion of Module 4 – Schematic Design, establishes the MSBA's participation in the proposed project, as documented by an executed Project Scope and Budget Agreement, its Exhibits and the Schematic Design submission. The Total Project Budget will become (Exhibit A) part of the Project Scope & Budget Agreement and Reimbursement Rate understood.

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Site Plan: Existing Conditions



MSBA Requested Study:

435 Students –Member Towns

800 Students –Member Towns and Non-Member Towns

The Options:

6 Options are Required for the Feasibility Study

OPTION 1

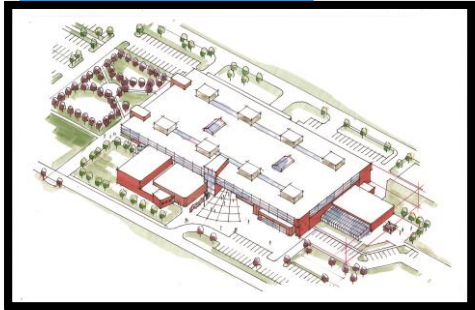


Repair High School

305,808 s.f.



OPTION A



Renovate 435 Student Existing High School

New Construction 25,515 s.f.

Renovation 233,168 s.f.

Total 258,683 s.f.

OPTION B

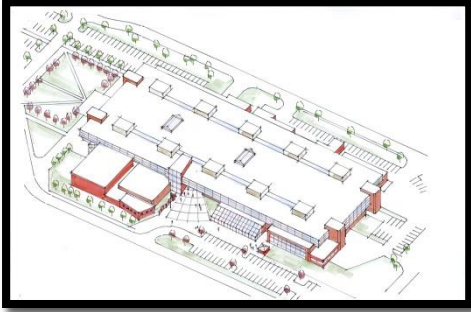


New Construction 435 Student High School

New Construction 224,997s.f.



OPTION C



Renovate 800 Student Existing High School

New Construction 35,717 s.f.

Renovation 301,467 s.f.

Total 337,184 s.f.

OPTION D



**Partial Renovation and New Addition 800
Student High School**

New Construction 198,388 s.f.

Renovation 139,900 s.f.

Total 338,288 s.f.

OPTION E

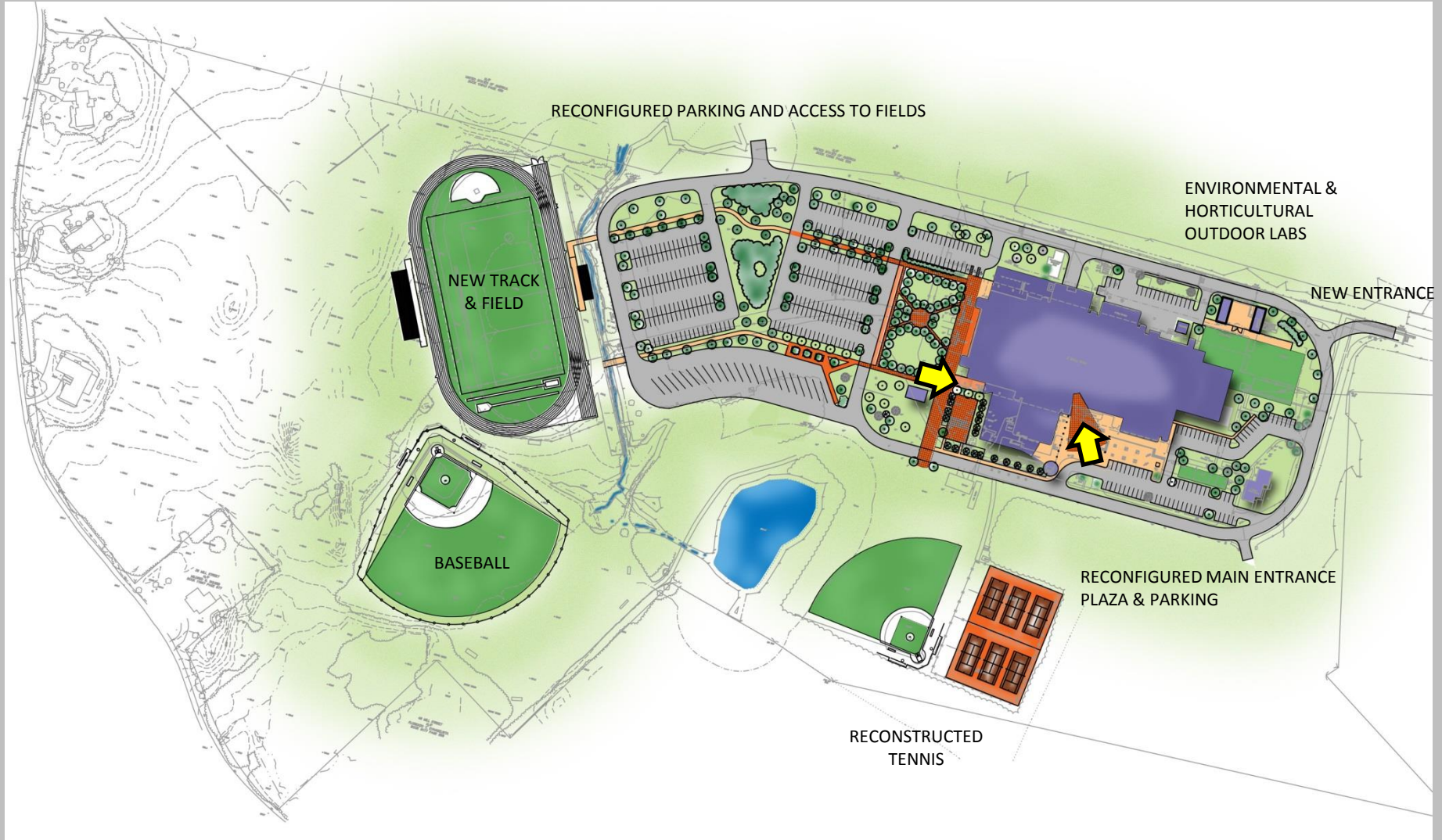


New Construction 800 Student High School

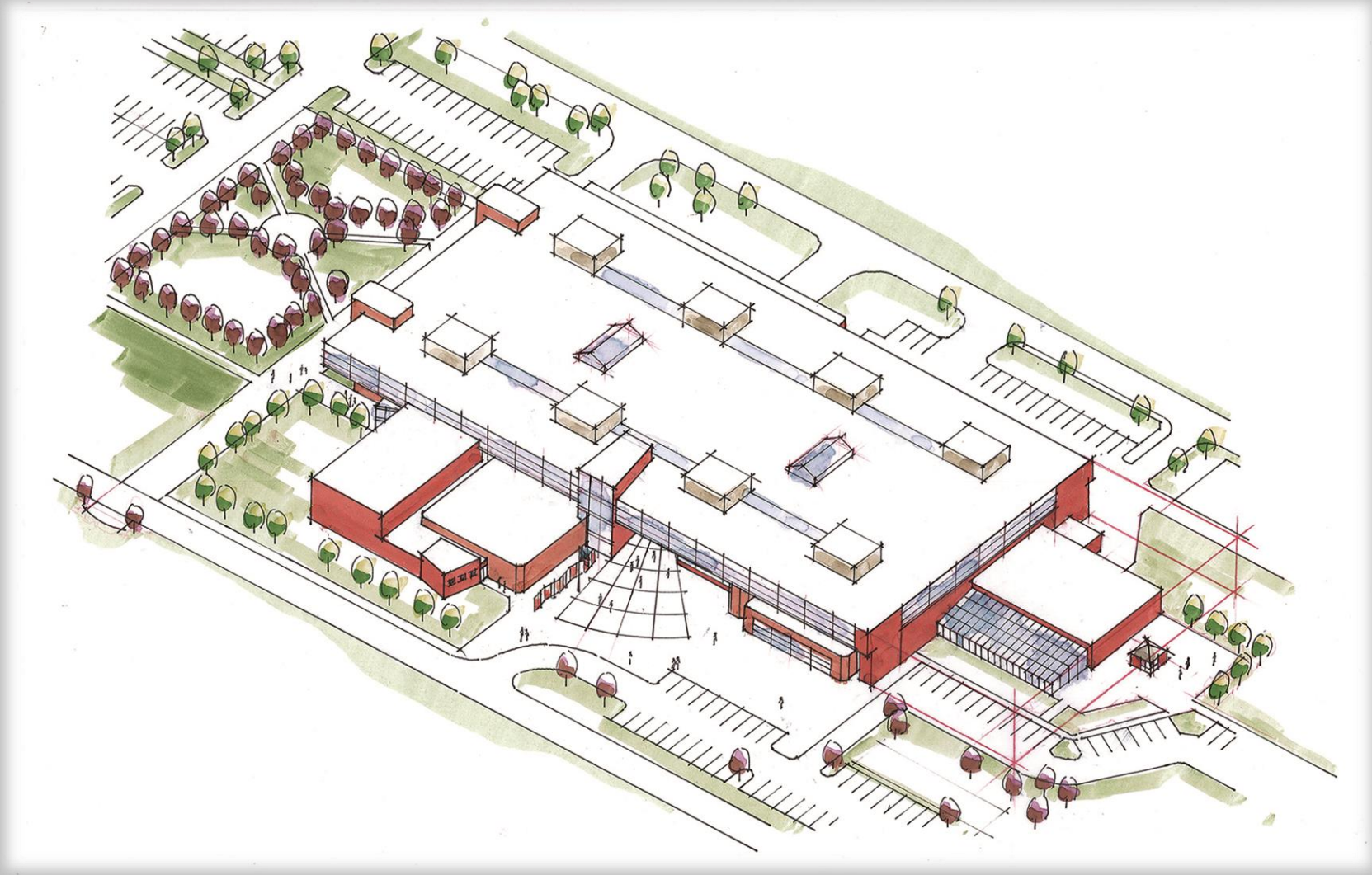
New Construction 323,537 s.f.



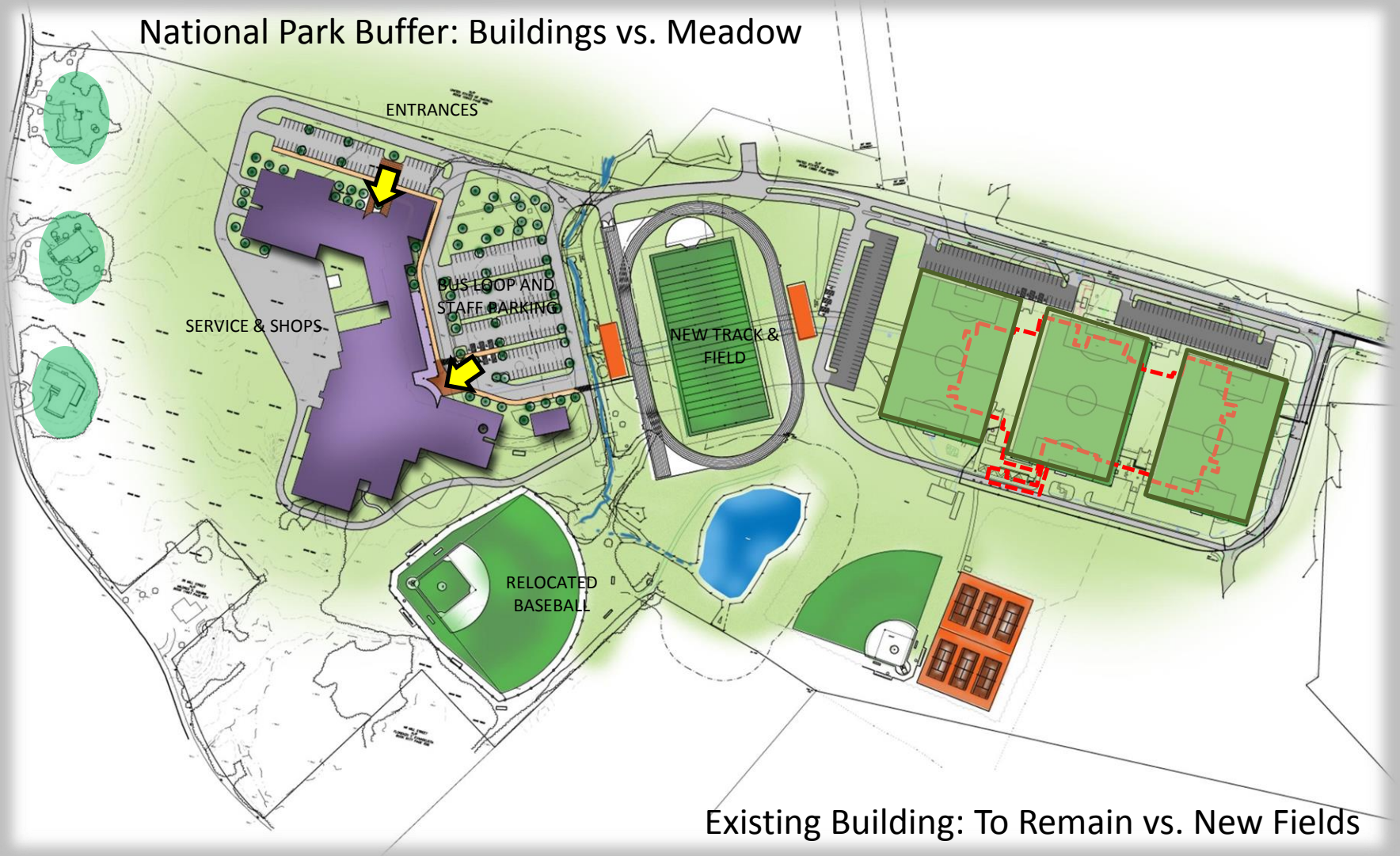
Site Plan: Option "A" Renovation ~ 435 Students



Rendering: Option "A" Renovation ~ 435 Students



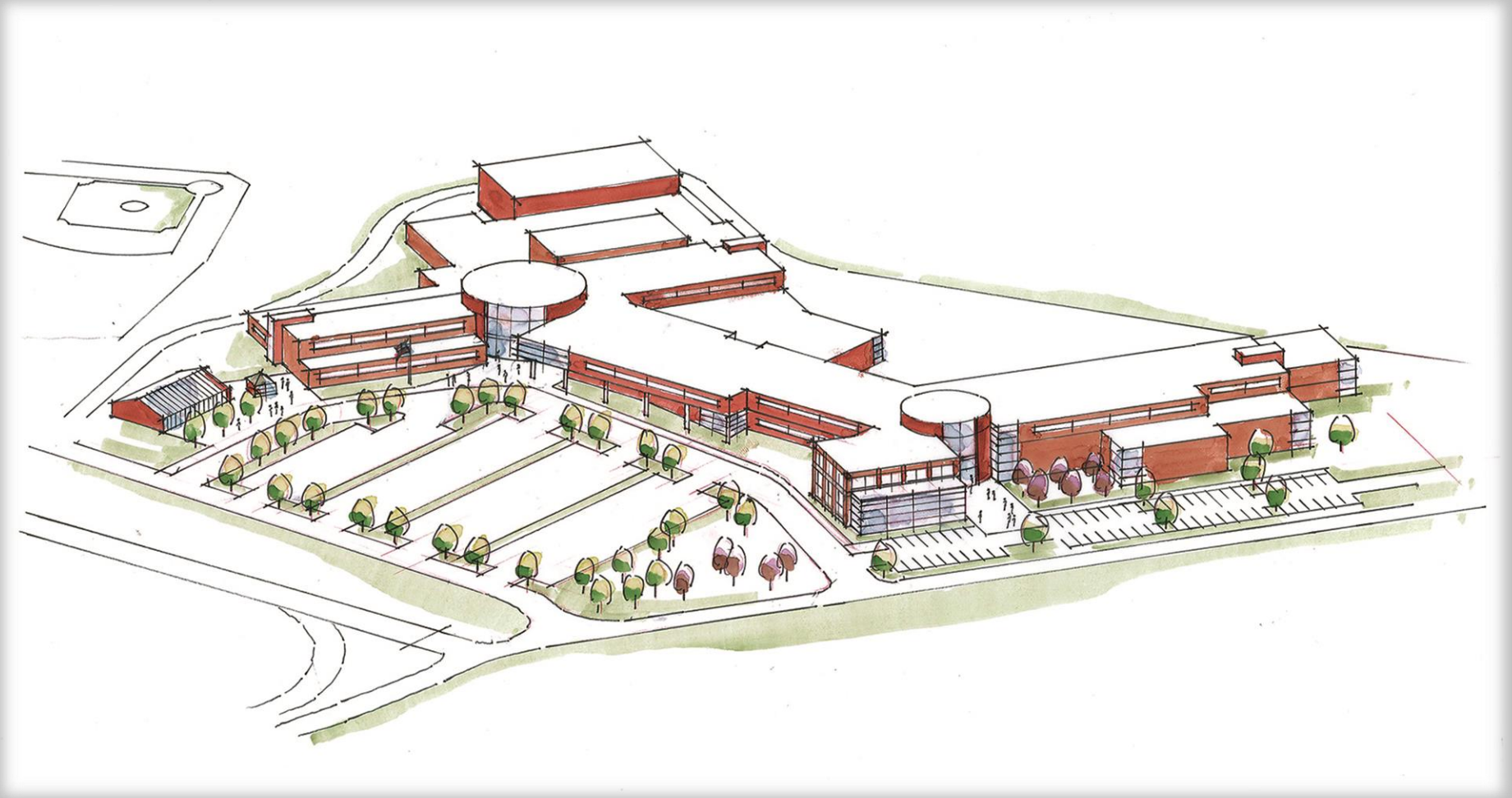
National Park Buffer: Buildings vs. Meadow



Existing Building: To Remain vs. New Fields

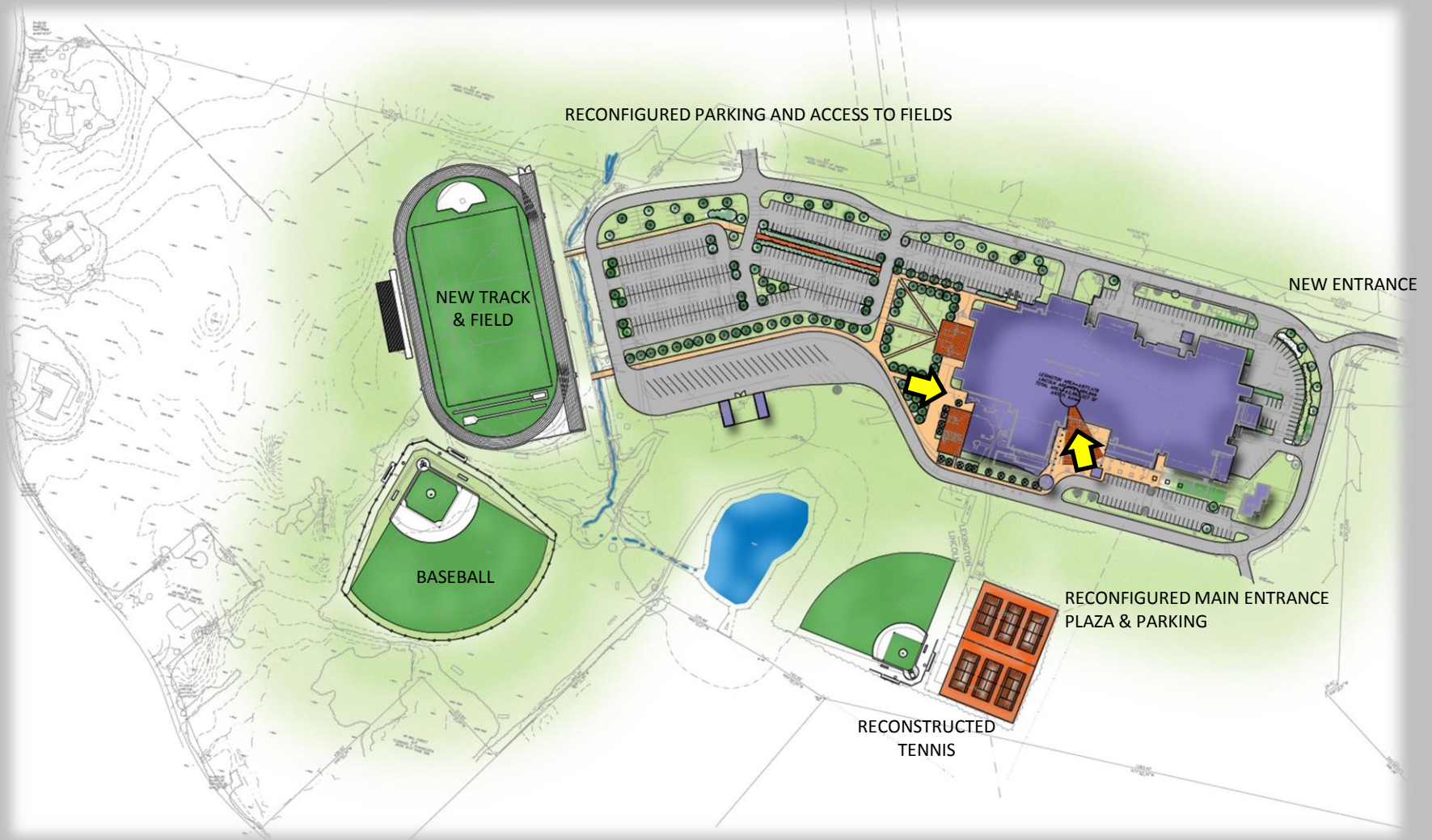


Rendering: Option "B" New ~ 435 Students

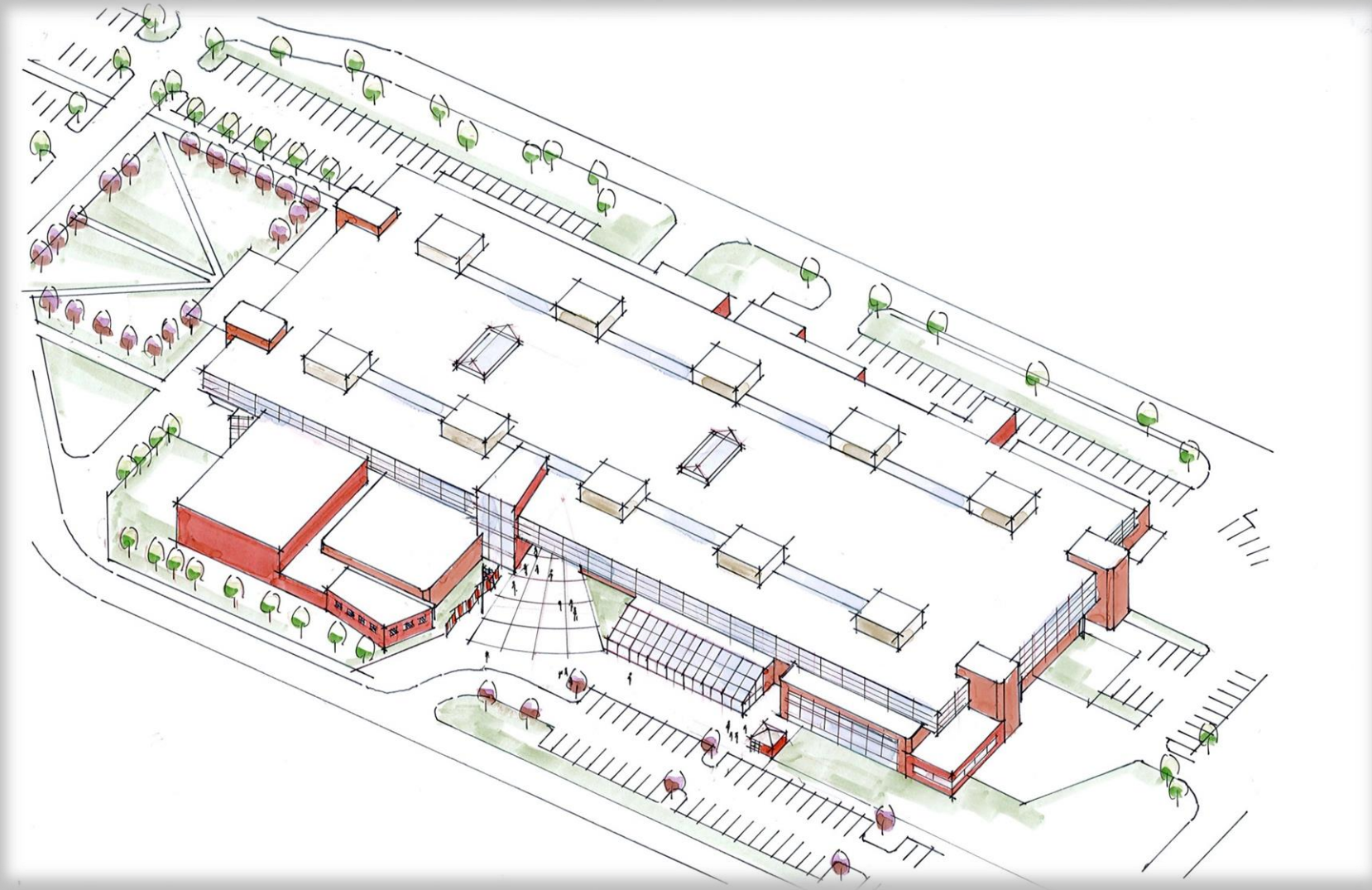


MINUTEMAN
A REVOLUTION IN LEARNING

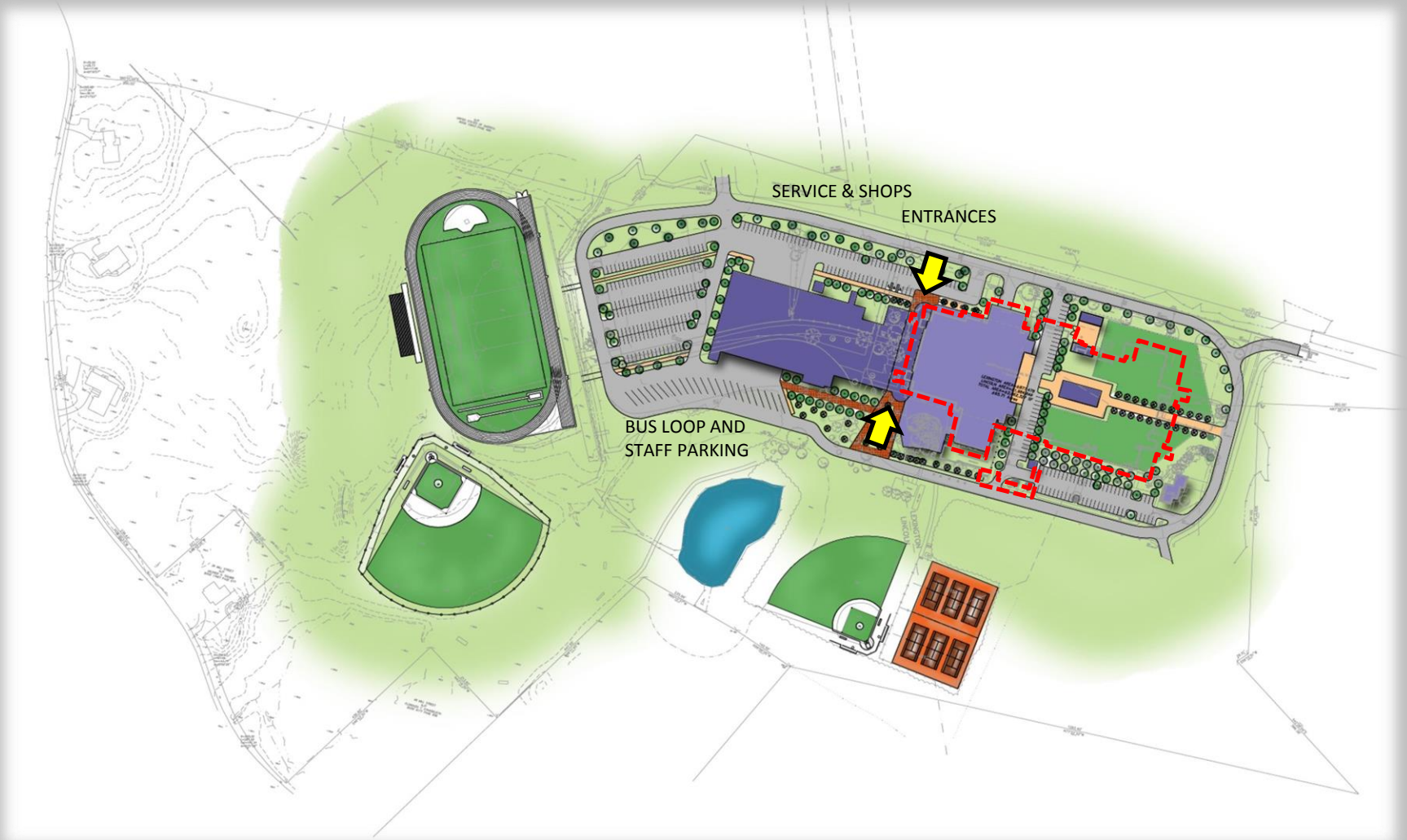
Site Plan: Option "C" Renovation ~ 800 Students



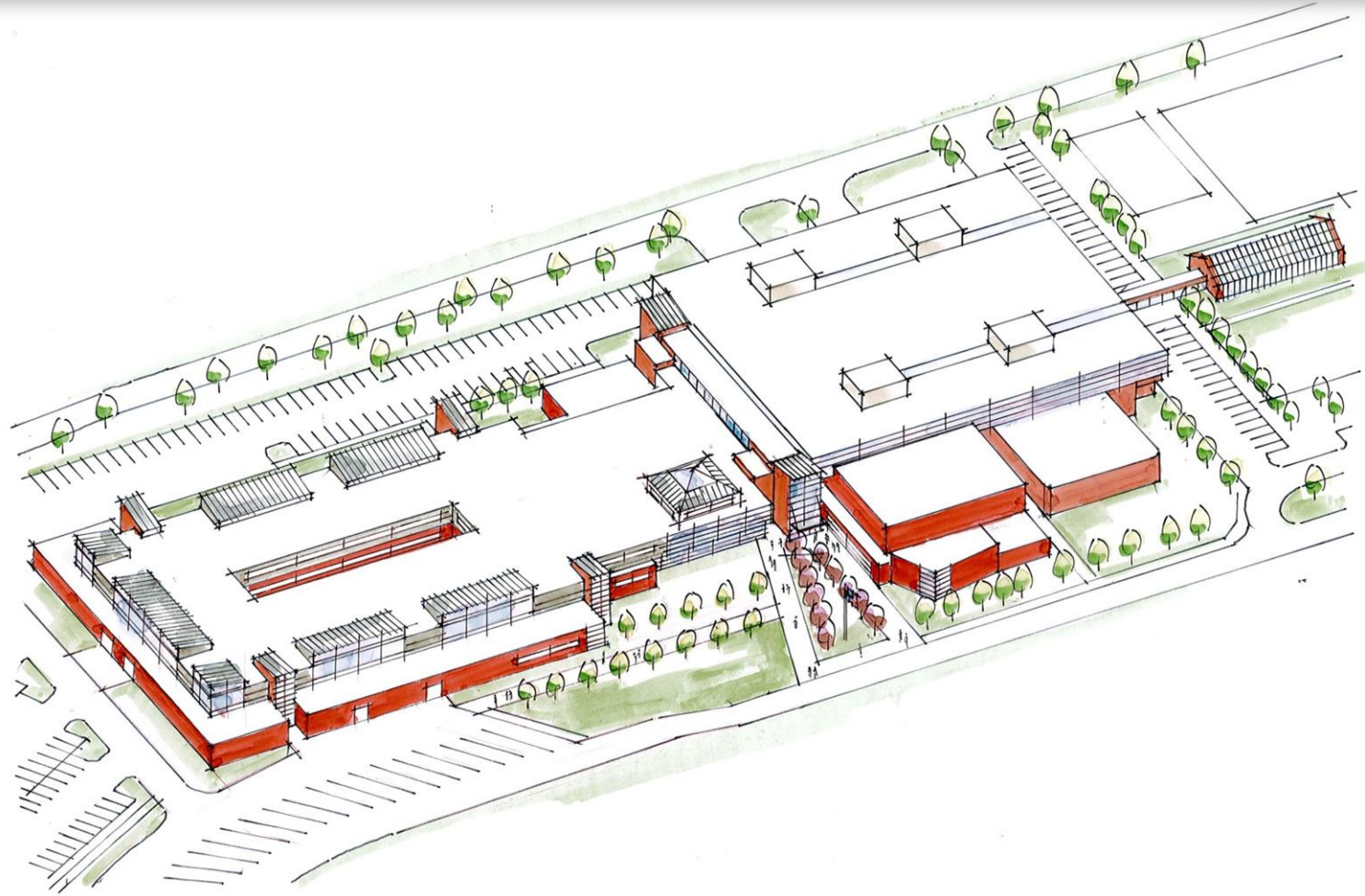
Rendering: Option "C" Renovation ~ 800 Students



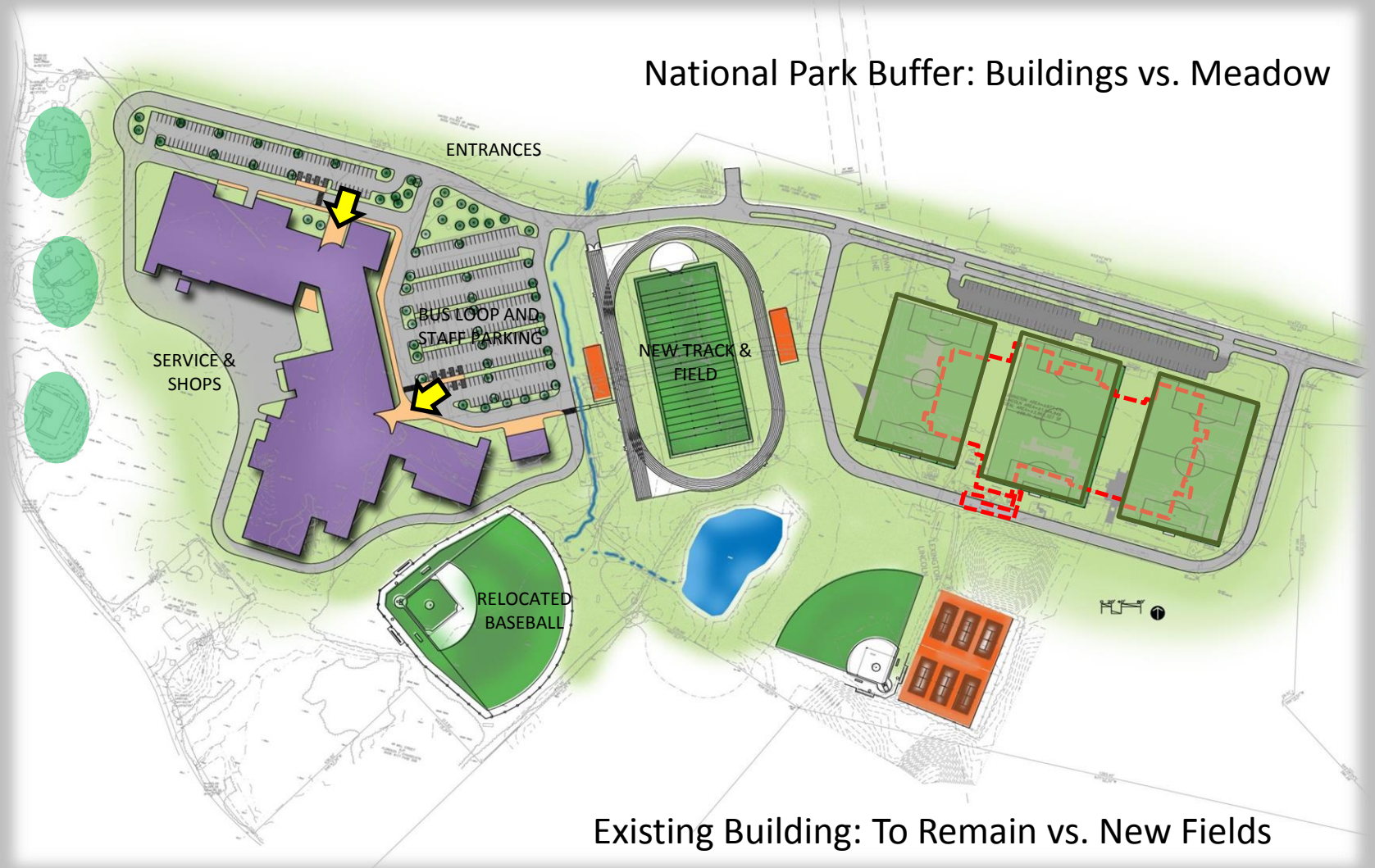
Site Plan: Option "D" Addition/Renovation ~ 800 Students



Rendering: Option "D" Addition/Renovation ~ 800 Students



National Park Buffer: Buildings vs. Meadow



Existing Building: To Remain vs. New Fields



Rendering: Option "E" New ~ 800 Students



MINUTEMAN
A REVOLUTION IN LEARNING

COST/OPTION MATRIX

OPTION	Option 1	Option A	Option B	Option C	Option D	Option E
Description	Repair High School	Renovation 435 Student High School	New Construction 435 Student High School	Renovation 800 Student High School	Partial Renovation New Addition 800 Student High School	New Construction 800 Student High School
Location	758 Marrett Road Lexington	758 Marrett Road Lexington	758 Marrett Road Lexington	758 Marrett Road Lexington	758 Marrett Road Lexington	758 Marrett Road Lexington
New Construction SF		25,515	224,997	35,717	198,388	323,537
Renovation SF	305,808	233,168		301,467	139,900	
Total Square Footage	305,808	258,683	224,997	337,184	338,288	323,537
Construction Cost	\$ 37,783,399	\$ 52,319,416	\$ 58,330,107	\$ 65,807,153	\$ 76,121,830	\$ 79,454,100
Site Development	\$ -	\$ 7,570,000	\$ 9,070,000	\$ 7,570,000	\$ 7,570,000	\$ 9,070,000
Direct Trade Cost Subtotal	\$ 37,783,399	\$ 59,889,416	\$ 67,400,107	\$ 73,377,153	\$ 83,691,830	\$ 88,524,100
Design/Price Contingency 10%	\$ 3,778,340	\$ 5,988,942	\$ 6,740,011	\$ 7,337,715	\$ 8,369,183	\$ 8,852,410
Building Cost	\$ 41,561,739	\$ 65,878,358	\$ 74,140,118	\$ 80,714,868	\$ 92,061,013	\$ 97,376,510
Demolish Existing Building		\$ 394,088	\$ 1,659,008	\$ 50,499	\$ 900,067	\$ 1,659,008
HAZARDOUS Waste Abatement	\$ 820,000	\$ 1,195,000	\$ 1,320,000	\$ 820,000	\$ 1,070,000	\$ 1,320,000
Trade Cost SubTotal	\$ 42,381,739	\$ 67,467,446	\$ 77,119,126	\$ 81,585,367	\$ 94,031,080	\$ 100,355,518
General Conditions & GRs	\$ 8,400,000	\$ 5,734,733	\$ 5,783,934	\$ 6,934,756	\$ 7,992,642	\$ 7,526,664
General Requirements (GRs) 2%	\$ 847,635	w/ GC's above	w/ GC's above	w/ GC's above	w/ GC's above	w/ GC's above
Insurance 1.10%	\$ 558,599	\$ 805,224	\$ 911,934	\$ 973,721	\$ 1,122,261	\$ 1,186,704
GC Bonds 1.10%	\$ 564,744	\$ 814,081	\$ 921,965	\$ 984,432	\$ 1,134,606	\$ 1,199,758
Permit by Owner 1% w/Fees						
Fee 3%	\$ 1,557,152	\$ 2,244,645	\$ 2,542,109	\$ 2,714,348	\$ 3,128,418	\$ 3,308,059
Estimated Construction Cost	\$ 54,309,869	\$ 77,066,128	\$ 87,279,067	\$ 93,192,625	\$ 107,409,006	\$ 113,576,703
Escalation mid point const. 10%	\$ 5,430,987	\$ 7,706,613	\$ 8,727,907	\$ 9,319,263	\$ 10,740,901	\$ 11,357,670
Construction Cost Escalated	\$ 59,740,856	\$ 84,772,741	\$ 96,006,975	\$ 102,511,888	\$ 118,149,907	\$ 124,934,373
Construction Schedule Phasing Approach	48 - 60 Months Phased & Occupied Swing Space Req.	36 -42 Months Phased & Occupied Swing Space Req.	24 Months Single Phase No Swing Space	42 - 48 Months Phased & Occupied Swing Space Req.	30 - 36 Months Phased & Occupied Swing Space Req.	28 - 30 Months Single Phase No Swing Space
Temp Space Cost	\$ 5,000,000	\$ 3,500,000		\$ 4,000,000	\$ 3,000,000	
Fees (OPM/Design/Permits) 15%	\$ 8,961,128	\$ 12,715,911	\$ 14,401,046	\$ 15,376,783	\$ 17,722,486	\$ 18,740,156
Other Soft Costs	\$ 1,920,000	\$ 2,175,000	\$ 2,175,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000
Project Contingency 10%	\$ 5,974,086	\$ 8,477,274	\$ 9,600,698	\$ 10,251,189	\$ 11,814,991	\$ 12,493,437
Total Project Cost	\$ 81,596,070	\$ 111,640,927	\$ 122,183,719	\$ 136,139,860	\$ 154,687,384	\$ 160,167,966
Reimbursement 40% of Eligible Costs						

- NOTES:
1. Assumes Construction Start June 2016/Mid-Point of Construction varies and is not calculated
 2. Cost Estimates are highly conceptual and considered "Order of Magnitude" only
 3. Approximate Cost to Demolish Existing Building and Replace with 3 soccer fields \$5,545,000 included in new options above
 4. New pool cost not included in New Construction Options above and would need to be calculated.



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Questions and Comments