

Project Minutes

Project: Stoneham High School Feasibility Study Project No.: 20033
 Prepared by: Joel Seeley Meeting Date: 6/21/2021
 Re: School Building Committee Meeting Time: 6:00pm
 Location: Central Middle School Library and Remote Participation Meeting No: 28
 Distribution: Attendees (MF)

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	Marie Christie	Co-Chair, School Building Committee	Voting Member
✓	David Bois	Co-Chair, School Building Committee; Community Member with Architecture Experience	Voting Member
✓	Nicole Nial	School Committee Member	Voting Member
✓	Raymie Parker	Select Board Member	Voting Member
✓	Douglas Gove	Community Member with Engineering Experience	Voting Member
✓	Stephen O'Neill	Community Member with Engineering Experience	Voting Member
✓	Josephine Thomson	Community Member	Voting Member
✓	Jeanne Craigie	Town Moderator	Voting Member
	Lisa Gallagher	Community Member, School Secretary, Past member of Middle School Building Committee	Voting Member
✓	Sharon Iovanni	Community Member	Voting Member
✓	Cory Mashburn	Community Member, Finance and Advisory Board	Voting Member
✓	Paul Ryder	Community Member with Construction Experience	Voting Member
✓	David Pignone	Athletic Director, Member knowledgeable in educational mission and function of facility	Voting Member
✓	Kevin Yianacopolus	Local Official responsible for Building Maintenance	Voting Member
✓	Dennis Sheehan	Town Administrator / MCPPO Certified	Non-Voting Member
✓	John Macero	Superintendent of Schools, Secretary of School Building Committee	Non-Voting Member
✓	Bryan Lombardi	Stoneham High School Principal	Non-Voting Member
	Brian McNeil	Town Facilities Director	Non-Voting Member
	April Lanni	Town Procurement Officer / MCPPO Certified	Non-Voting Member
✓	Brooke Trivas	Perkins and Will	
✓	Patrick Cunningham	Perkins and Will	
✓	Leo Liu	Perkins and Will	
✓	David Warner	Warner Larson	
✓	Kristy Lyons	Consigli Construction	
✓	Christian Riordan	Consigli Construction	
✓	Todd McCabe	Consigli Construction	
✓	Joel Seeley	SMMA	

Item #	Action	Discussion
28.1	Record	Call to Order, 7:00 PM, meeting opened.
28.2	Record	This meeting will be a hybrid meeting held both via video conference and in person and a recording of such will be posted on the Town's website.
28.3	Record	A motion was made by R. Parker and seconded by J. Thomson to approve the 6/16/21 School Building Committee meeting minutes. No discussion, motion passed unanimous.
28.4	K. Lyons	<p>B. Trivas, P. Cunningham and K. Lyons presented the follow-up Building-Related Value Engineering Items and the Site-Related Value Engineering Items for Committee review, attached.</p> <p>Committee Discussion:</p> <ol style="list-style-type: none"> 1. EN-07 <ol style="list-style-type: none"> 1. Committee consensus is to accept this VE item. 2. IN-60 and IN-61 <ol style="list-style-type: none"> 1. B. Lombardi reviewed the fume hood needs with the teaching staff and eliminating fume hoods will limit the flexibility and scheduling of the labs. 2. Committee consensus is not accept this VE item. 3. D-04a <ol style="list-style-type: none"> 1. Committee consensus is not accept this VE item. 4. D-04b <ol style="list-style-type: none"> 1. D. Sheehan indicated he reviewed with Chief Grafton and the cafeteria and kitchen would be sufficient for a warming/cooling center. 2. Committee consensus is to accept this VE item. 5. D-08 <ol style="list-style-type: none"> 1. Committee consensus is not accept this VE item. 6. D-30b <ol style="list-style-type: none"> 1. J. Craigie asked how much does it cost to maintain the existing system in the middle school. <i>K. Yianacopolus indicated he did not have those figures, but the system is maintained by a service company once a year.</i> 2. J. Craigie asked if there is a safety difference between the central system and the point-of-use system? <i>K. Yianacopolus indicated no, but preventative maintenance would be higher for six separate systems compared to a central system.</i>

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		<ul style="list-style-type: none">3. S. Iovanni asked if Consigli has installed a similar type system in other schools? <i>K. Lyons indicated they are currently installing three separate systems in lieu of a central system in a middle school.</i>4. B. Trivas indicated she reviewed with her in-house science team and they recommend this item.5. Committee consensus is to accept this VE item.
		<ul style="list-style-type: none">7. D-36<ul style="list-style-type: none">1. J. Macero indicated he reviewed with the drama staff and that items 1 and 2 would be acceptable, but not item 3.2. Committee consensus is to accept items 1 and 2 of this VE item.
		<ul style="list-style-type: none">8. D-40<ul style="list-style-type: none">1. D. Sheehan indicated he reviewed with Chief Grafton and as long as the sidewall sprinkler heads meet code, this item is acceptable.2. Committee consensus is to accept this VE item.
		<ul style="list-style-type: none">9. CL-01<ul style="list-style-type: none">1. D. Bois indicated this is a 50-year school, plows will damage the concrete curbing.2. S. O'Neill does not recommend changing to concrete curbing.3. J. Craigie indicated the concrete would be damaged by the salt.4. Committee consensus is not accept this VE item.
		<ul style="list-style-type: none">10. CL-02<ul style="list-style-type: none">1. Committee consensus is not accept this VE item.
		<ul style="list-style-type: none">11. CL-03<ul style="list-style-type: none">1. Committee consensus is not accept this VE item.
		<ul style="list-style-type: none">12. CL-07<ul style="list-style-type: none">1. D. Sheehan indicated a concern with having un-supervised use of the overlook deck with potential trash and debris cleanup issues so close to the wetlands.2. Committee consensus is to accept this VE item.
		<ul style="list-style-type: none">13. CL-10<ul style="list-style-type: none">1. J. Macero indicated he would recommend this item for the overall benefit of the project.2. D. Pignone indicated practices would need to occur at other Town fields and the Town will need to work with other town's for home games.3. K. Yianacopolus indicated he would be ok with accepting this item related to the baseball field.4. D. Gove asked if the unsuitable soils can be re-used on site?

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		<p><i>D. Warner indicated yes, the geo-technical engineer indicated it would be acceptable to re-use under the playfields and parking lots but must be kept dry when moved and compacted.</i></p> <p>5. D. Gove asked how many trucks would be required to export the unsuitable soils off-site? <i>K. Lyons indicated approximately 1,600 trucks would be needed for the full export and import operation.</i></p> <p>6. D. Bois asked if the VE cost takes into account related costs, such as fencing and stockpile maintenance? <i>K. Lyons indicated yes, the VE cost includes fencing, maintenance and covering.</i></p> <p>7. J. Craigie asked if the project should refurbish the other Town fields? <i>D. Bois indicated seeding would not make them usable in time, since three growing seasons would be required.</i></p> <p>8. D. Pignone asked will the timeline for completing the playfields construction be impacted? <i>K. Lyons indicated no, but Consigli will review in greater detail.</i></p> <p>9. D. Pignone asked if the construction schedule for the north turf field remains, starting in May 2024 and completing August 2024? <i>K. Lyons indicated yes.</i></p> <p>10. D. Gove asked will the stockpile impact the existing 36-inch culvert? <i>K. Lyons indicated no.</i></p> <p>11. D. Bois asked if the processing operation on the south soccer/lacrosse field can held off until 2023? <i>K. Lyons indicated Consigli will review in greater detail.</i></p> <p>12. Committee consensus is to accept this VE item.</p> <p>14. CL-12a</p> <p>1. D. Sheehan indicated concern that the stockpile will significantly impact the use of the site for the Town's leaf recycling operation.</p> <p>2. Committee consensus is not accept this VE item.</p> <p>15. CL-12b</p> <p>1. D. Pignone indicated concern that losing the north soccer/lacrosse playfield, in addition to the baseball and south soccer/lacrosse playfield, would be too impactful.</p> <p>2. Committee consensus is not accept this VE item.</p> <p>16. CL-14</p> <p>1. D. Pignone indicated the Playfields Subcommittee reviewed the playfield needs and recommended all three turf fields.</p>

Item #	Action	Discussion
		<ol style="list-style-type: none">2. P. Ryder indicated the turf fields can be a revenue generator for the Town.3. S. O'Neill indicated he would recommend keeping all three turf fields.4. P. Ryder indicated after a heavy rainstorm, turf fields can be played on without impact, but playing on grass fields would damage them.5. N. Nial indicated concern about the replacement cost of all three turf fields.6. J. Macero indicated he is in favor of all three turf fields and will be working with the School Committee on a maintenance and turf replacement plan.7. S. Iovanni asked if the revenue gained from renting the turf fields can be set aside for future replacement cost? <i>J. Macero indicated that will be looked into in developing the plan.</i>8. M. Christie indicated she recommends keeping the three turf fields and that at the 6/16/21 SSBC meeting, the VE items were reviewed against the goal of providing the students a 21st century school, and she views providing the three turf fields the same way.9. Committee consensus is not accept this VE item. <p>17. CL-15</p> <ol style="list-style-type: none">1. Committee consensus is not accept this VE item. <p>18. CL-27a, CL-27b and CL-27c</p> <ol style="list-style-type: none">1. S. O'Neill indicated lighting the turf fields maximizes the hours of use.2. D. Bois indicated he would support lighting the south turf field and the stadium and making the north turf field a bid alternate.3. P. Ryder indicated there may be neighborhood concerns about lighting the north turf field, as this area of the site does not currently have any lighting.4. S. O'Neill asked if the north soccer/lacrosse field remained grass and unlit, could the baseball field be turf with lighting? <i>D. Warner indicated that would be more costly as the turf area would be a larger after factoring in the overlay and there would be more lights.</i>5. J. Craigie asked how late into the evening would the turf fields be utilized? <i>J. Macero indicated that would depend on the season and that the School Committee will determine.</i>

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		<ul style="list-style-type: none">6. J. Craigie indicated concern if the baseball field is lit and not the softball field.7. Committee consensus is not accept these VE items.19. CL-31<ul style="list-style-type: none">1. R. Parker indicated she would not support this as a separate Town project.2. D. Bois indicated the traffic signals have to happen and are part of the project.3. Committee consensus is not accept this VE item.20. CL-32<ul style="list-style-type: none">1. Committee consensus is not accept this VE item.21. CL-34a, CL-34b and CL-34c<ul style="list-style-type: none">1. N. Nial asked if there are any hidden risks in accepting this item? <i>D. Warner indicated once a more rigorous geo-technical investigation program is undertaken in the Design Development Phase, it may indicate additional rock removals with the lower elevation.</i>2. S. O'Neill asked if the south turf field and tennis courts elevation can be lowered? <i>D. Warner indicated the south turf field is at the existing grade already so as to not impact the 36-inch culvert and lowering the tennis courts would bring them into rock.</i>3. S. O'Neill indicated concern that the soils have not been pre-characterized and understands they will be in the Design Development Phase. <i>K. Lyons indicated the cost estimate includes a \$200,000 allowance for contaminated soil removal.</i>4. R. Parker asked if this would impact the aesthetic design of the building? <i>P. Cunningham indicated no.</i>5. Committee consensus is to accept these VE items.22. CL-37<ul style="list-style-type: none">1. Committee consensus is not accept this VE item.23. CL-38a, CL38b and CL-38c<ul style="list-style-type: none">1. D. Pignone indicated scoreboards are needed on all the playfields.2. Committee consensus is not accept these VE items.24. CL-40<ul style="list-style-type: none">1. J. Macero indicated providing dugouts is required for safety2. Committee consensus is not accept this VE item.

Item #	Action	Discussion
		<p>25. MD-03</p> <ol style="list-style-type: none">1. Committee consensus is not accept this VE item. <p>26. MD-04</p> <ol style="list-style-type: none">1. J. Macero indicated the amphitheater is in a perfect location as an extension of the auditorium and music spaces.2. J. Craigie indicated the amphitheater provides an academic focus to the site planning and not just an athletic focus.3. D. Bois asked if processing the unsuitable soils on site will reduce the VE cost of this item? <i>K. Lyons indicated no.</i>4. D. Bois asked if the VE item was reduced by 50%, could an amphitheater still be provided? <i>D. Warner indicated the capacity would be reduced to about 30-40 from 75 – 100 viewers.</i>5. Committee consensus is not accept this VE item. <p>27. MD-12a, MD-12b and MD-12c</p> <ol style="list-style-type: none">1. D. Pignone indicated if the locker rooms were removed, they would need to be provided in the school building.2. J. Macero indicated the locker rooms were located in the toilets/locker room building as way of reducing the overall building size.3. D. Pignone indicated toilets will still be required for the stadium.4. J. Craigie asked if there is a Trainer’s Room in both the school building and the toilets/locker room building? <i>D. Pignone indicated yes, the Trainer’s Room in the toilets/locker room building can support students right off the fields.</i>5. Committee consensus is not accept these VE items. <p>28. MD-12d</p> <ol style="list-style-type: none">1. R. Parker asked if the relocated concessions would be under the bleachers? <i>B. Trivas indicated it may be just outside from under the bleachers.</i>2. Committee consensus is to accept this VE item. <p>29. MD-19</p> <ol style="list-style-type: none">1. P. Cunningham indicated the estimated EUI from Thornton Tomasetti is 27 based on comparative projects and at the end of year 50 this item shows \$2 million more in savings over the current design.2. D. Bois asked if Consigli was able to review the PPA for the geo-thermal wells program?

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		<p><i>T. McCabe indicated yes, however there needs to be more investigation before understanding if this is a viable program.</i></p> <p>3. R. Parker indicated that the 25 EUI has been the goal, can the project still achieve it? <i>P. Cunningham indicated 25 was ambitious, it may not be possible with this item.</i></p> <p>4. R. Parker indicated disappointment that if the SSBC accepts this VE Item, a lot of hard work by the Green Initiatives Subcommittee to attain an EUI of 25 would not be met, but recognizes the significant up-front cost savings and the \$2 million long term savings over the current system would benefit the residents.</p> <p>5. J. Craigie asked if the VE item is accepted, can the system be changed back during future design phases? <i>P. Cunningham indicated that would not be possible.</i></p> <p>6. N. Nial asked is the partial geo-thermal system the same to maintain as the full geo-thermal system? <i>P. Cunningham indicated the maintenance on the partial geo-thermal system would be slightly higher than the current design.</i></p> <p>7. M. Christie indicated she would be disappointed about the potential of not getting to zero net energy with the 27 EUI.</p> <p>8. N. Nial asked is there a guarantee that the project would get to zero net energy with the 25 EUI? <i>P. Cunningham indicated no, since over 30% of the energy use is based on user adherence to plug load management.</i></p> <p>9. D. Sheehan asked if the LEED score would be affected by this item? <i>P. Cunningham indicated no.</i></p> <p>10. Committee consensus is to accept this VE item.</p> <p>K. Lyons indicated the updated construction cost estimate would be \$153,418,660 after incorporating all the accepted VE Items and J. Seeley indicated the updated Total Project Budget would be \$189,593,594.</p> <p>A motion was made by R. Parker and seconded by N. Nial to approve the Total Project Budget of \$189,593,594 inclusive of the accepted VE Items and authorize submission to the MSBA. No discussion, motion passed unanimous by roll call vote.</p> <p>Perkins and Will to incorporate the accepted VE Items into the Schematic Design documents.</p>
28.5	Record	<p>A motion was made by J. Craigie and seconded by C. Mashburn to approve the Schematic Design Submission, inclusive of the accepted VE Items and authorize</p>

Item #	Action	Discussion
		submission to the MSBA. No discussion, motion passed unanimous by roll call vote.
28.6	Record	Committee Questions - none
28.7	PR Subcommittee	Old or New Business 1. J. Craigie indicated the Historical Commission asked her if a time capsule was placed with the existing building and if so could it be saved. <i>The PR Subcommittee will issue a press release asking for any information from town members.</i>
28.8	Record	Public Comment – none
28.9	Record	Next SSBC Meeting: July 19, 2021 at 7:00 pm.
28.10	Record	A Motion was made by J. Craigie and seconded by C. Mashburn to adjourn the meeting. No discussion, motion passed unanimous.

Attachments: Agenda, Value Management Log, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

PROJECT MEETING SIGN-IN SHEET

Project: Stoneham High School Feasibility Study Project No.: 20033.00
 Prepared by: Joel Seeley Meeting Date: 6/21/2021
 Re: School Building Committee Meeting Time: 7:00pm
 Location: Central Middle School Library and Remote Locations Meeting No: 28
 Distribution: Attendees, (MF)

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	Marie Christie	mariechristie@comcast.net	Co-Chair, Past Member of the School Committee/Middle School Building Committee
	David Bois	bois@arrowstreet.com	Co-Chair, Community Member with Architecture Experience
	Nicole Nial	nicole.nial@stonehamschools.org	School Committee Member
	Raymie Parker	rparker@stoneham-ma.gov	Select Board Member
	Douglas Gove	goved11@gmail.com	Community Member with Engineer Experience
	Stephen O'Neill	soneill@hayner-swanson.com	Community Member with Engineer Experience
	Josephine Thomson	jthomson315@yahoo.com	Community Member, Middle School Faculty
	Jeanne Craigie	jcraigie@stoneham-ma.gov	Town Moderator
	Lisa Gallagher	lgallagher@stonehamschools.org	Community Member, School Secretary, Past member of Middle School Building Committee
	Sharon Iovanni	sharon.iovanni@stonehambank.com	Community Member
	Cory Mashburn	cory.mashburn910@gmail.com	Community Member, Finance and Advisory Board
	Paul Ryder	pryder@Cambridgema.gov	Community Member with Construction Experience
	David Pignone	dpignone@stonehamschools.org	Athletic Director, Member knowledgeable in educational mission and function of facility
	Kevin Yianacopolus	kyianacopolus@stonehamschools.org	Local Official responsible for Building Maintenance
	Dennis Sheehan	DSheehan@stoneham-ma.gov	Town Administrator / MCPPO Certified
	John Macero	jmacero@stonehamschools.org	Superintendent of Schools, Secretary of School Building Committee
	Bryan Lombardi	blombardi@stonehamschools.org	Stoneham High School Principal
	Brian McNeil	bmcneil@stonehamschools.org	Facilities Director
	April Lanni	ALanni@stoneham-ma.gov	Town Procurement Officer / MCPPO Certified
	Brooke Trivas	brooke.trivas@perkinswill.com	Perkins and Will
	Patrick Cunningham	Patrick.cunningham@perkinswill.com	Perkins and Will
	Leo Liu	xi.liu@perkinswill.com	Perkins and Will
	Christian Riordan	criordan@consigli.com	Consigli
	Todd McCabe	tmccabe@consigli.com	Consigli
	Timothy Ericson	tericson@consigli.com	Consigli
	Steve Banak	sbanak@consigli.com	Consigli
	Kristy Lyons	klyons@consigli.com	Consigli
	Robert Smith	rsmith@smma.com	SMMA
	Joel Seeley	jseeley@smma.com	SMMA

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1000 Massachusetts Avenue
 Cambridge, MA 02138
 617.547.5400

DAVID WARNER dwarner@warnerlarson.com WarnerLarson

Agenda

Project:	Stoneham High School Feasibility Study	Project No.:	20033
Re:	School Building Committee Meeting	Meeting Date:	6/21/2021
Prepared by:	Joel Seeley	Meeting Time:	6:00 PM
Location:	Central Middle School Library and Remote Participation		
Distribution:	Attendees (MF)		

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Schedule and Budget Update
5. Review Value Engineering Options
6. Vote to Approve Total Project Budget / MSBA Submission
7. Subcommittee Updates
8. New or Old Business
9. Committee Questions
10. Public Comments
11. Next Meeting: June 28, 2021
12. Adjourn

Join Go-To-Meeting:

<https://global.gotomeeting.com/join/433673861>

Dial-in: +1 (646) 749-3122 Access Code: 433-673-861

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Perkins&Will

**STONEHAM HIGH SCHOOL
BUILDING COMMITTEE MEETING**

6.21.2021

AGENDA

- 1\ General Cost Update
- 2\ Building VE: Follow-up Items
- 3\ Building VE: New Items
- 4\ Budget Reduction Ideas: Site
- 5\ SSBC to Vote for Approval of Total Project Budget



Perkins&Will

General Cost Update

Building Committee Meeting

PRELIMINARY SCHEMATIC DESIGN COST ANALYSIS

Schematic Design Estimating Schedule

May 3 – Issue Site pricing documents

May 17 – Issue Engineering pricing documents

May 24 – Issue Architecture pricing documents

June 7 – Cost estimates due from PM&C and Consigli

June 10 – Estimates reconciliation meeting

June 14 – Reconciled estimates due

June 16 – Present estimates and VE to SSBC

June 21 – Present VE to SSBC for voting and approval of Total Project Cost

June 23 – Submit Total Project Cost to MSBA

PRELIMINARY SCHEMATIC DESIGN COST ANALYSIS

PSR SUBMISSION: 12.3.2020	TOTAL COST/ MILLIONS
Construction Cost	\$140.60
FFE/Technology	\$2.50
Fees, Testing, Utilities + Expenses	\$23.20
Contingencies	\$9.90
TOTAL PROJECT BUDGET	\$176.20

Average Residential Taxpayer Annual Increase, 30 year 3%-3.5%: \$738 - \$789

PRELIMINARY SCHEMATIC DESIGN COST ANALYSIS

PRELIMINARY SD COST ESTIMATE: 6.14.2021	TOTAL COST/ MILLIONS
Construction Cost	\$159.90
FFE/Technology	\$2.50
Fees, Testing, Utilities + Expenses	\$22.90
Contingencies	\$11.20
TOTAL PROJECT BUDGET	
	\$196.50

Average Residential Taxpayer Annual Increase, 30 year 3%-3.5%: \$864- \$921

PRELIMINARY SCHEMATIC DESIGN COST ANALYSIS

PSR CONSTRUCTION COST/ BREAK-DOWN	CONSTRUCTION COST/ MILLIONS
Building Trade Costs	\$79.20
Sitework Costs	\$22.40
Markups, Escalation, Contingencies	\$39.00
TOTAL CONSTRUCTION COSTS	\$140.60

PRELIMINARY SCHEMATIC DESIGN COST ANALYSIS

PSR CONSTRUCTION COST/ BREAK-DOWN	ORIGINAL PSR	MARKET IMPACT	GEOTECH.	ADJUSTED PSR
Building Trade Costs	\$79.20	\$2.4	\$2.5	\$84.10
Sitework Costs	\$22.40			\$22.40
Markups, Escalation, Contingencies	\$39.00			\$39.00
TOTAL CONSTRUCTION COSTS	\$140.60	\$2.4	\$2.5	\$145.50

PRELIMINARY SCHEMATIC DESIGN COST ANALYSIS

SD CONSTRUCTION COST/ BREAK-DOWN	ADJUSTED PSR	PMC Estimator	CONSIGLI CM
Building Trade Costs	\$84.10	\$85.9	\$86.3
Sitework Costs	\$22.40	\$33.8	\$35.2
Markups, Escalation, Contingencies	\$39.00	\$37.8	\$38.4
TOTAL CONSTRUCTION COSTS	\$145.50	\$157.5	\$159.9

Note: Geothermal Wells carried in Building Cost is PSR

PRELIMINARY SCHEMATIC DESIGN COST ANALYSIS

Holistically review site costs and building costs for savings.

Due to the amount and complexity of the Budget Reduction items, divide into two parts:

- Building Trade Costs Budget Reduction Items – 6/16/21 SSBC Meeting
- Site Costs Budget Reduction Items – 6/21/21 SSBC Meeting

Vote to Submit Total Project Budget to MSBA – 6/21/21 SSBC Meeting

VALUE MANAGEMENT – BUILDING SUMMARY

Building VM Summary from 6/16/21 Building Committee Meeting:

Preliminary Approval:	\$1.53 M
Pending/Maybe:	\$1.11 M
Rejected:	\$2.69 M

Current Baseline Estimate	\$157.5 M
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Perkins&Will

Building Value Engineering: Follow-up Items

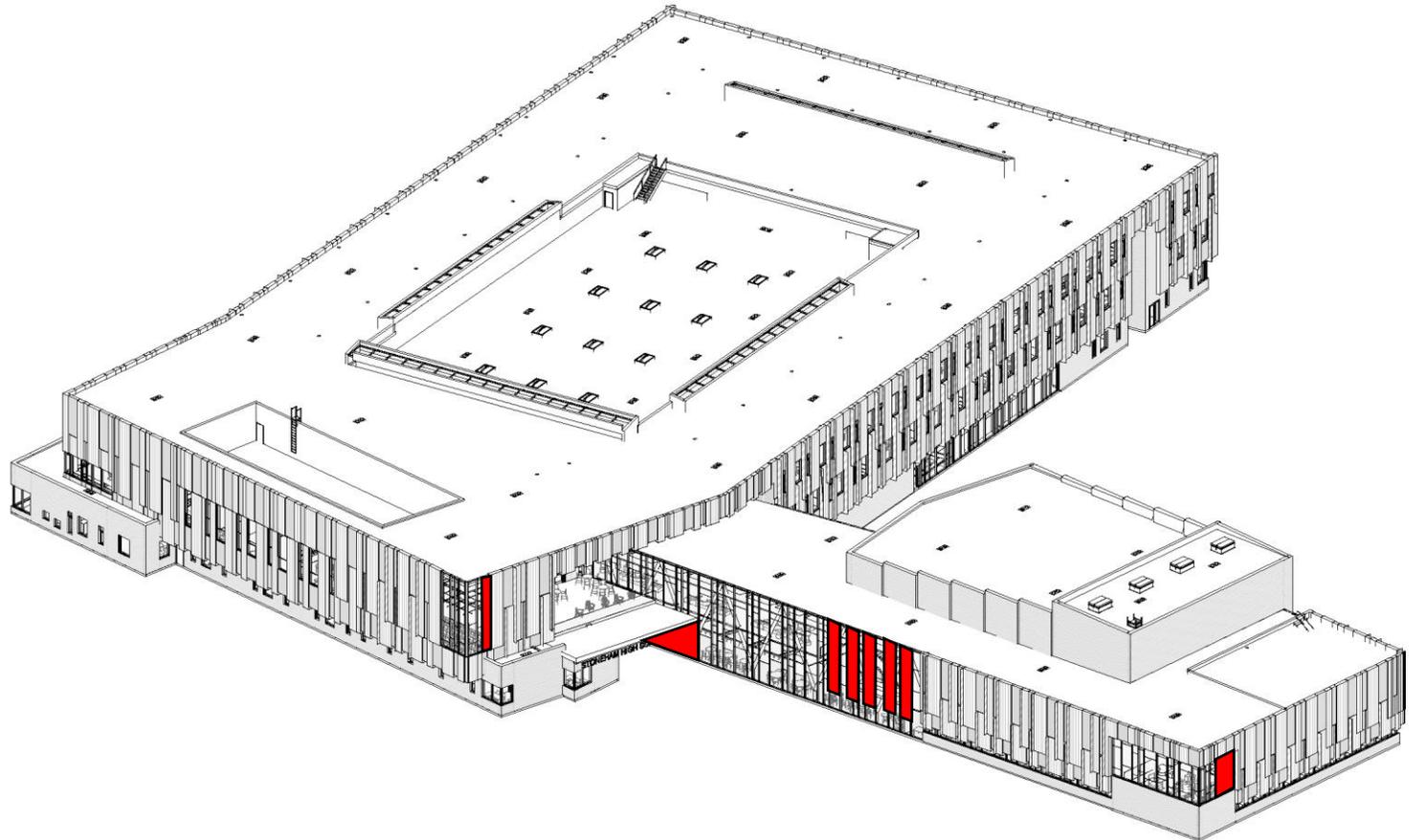
Building Committee Meeting

Value Engineering Ideas

- **EN-07** – CURTAINWALL - Reduce curtainwall at Spartan Place & Band/Chorus by 25%;
Replace with siding
- VM Amount: **\$145,947**

Reduction Summary:

- Performance Room: 2%
- Entry/Vestibule: 8.5%
- Spartan Place: 12.5%
- Band/Chorus: 2%



Main Entry – Before 25% Curtainwall Reduction

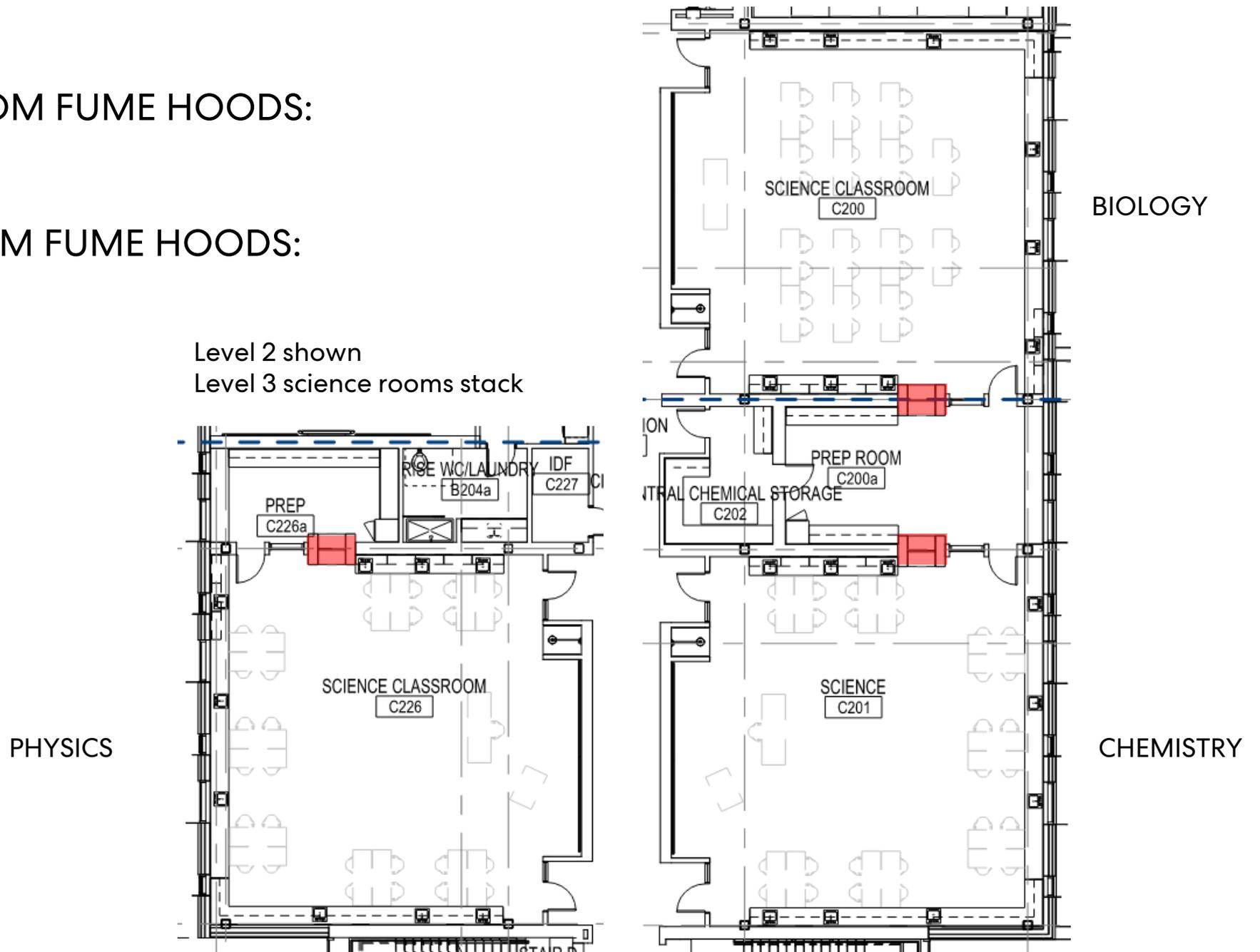


Main Entry – After 25% Curtainwall Reduction



Value Engineering Ideas

- **IN-60** – SCIENCE ROOM FUME HOODS:
Eliminate (2) total
- VM Amount: **\$38,008**
- **IN-61** – SCIENCE ROOM FUME HOODS:
Eliminate (4) total
- VM Amount: **\$76,016**
- (mutually exclusive)



Value Engineering Ideas

- **D-04a** – ELECTRICAL: Reduce size of generator to 500 kw (no warming/cooling center)
- VM Amount: **\$512,805**

- **D-04b** – ELECTRICAL: Reduce size of generator to 1,000 kw (Cafeteria & Kitchen function as warming/cooling center)
- VM Amount: **\$319,749**

Value Engineering Ideas

- **D-08 – ELECTRICAL:** Reduce hardwire tel/data drop quantities by 25%
- VM Amount: **\$90,495**

Analysis by AV & Tech Consultants:

1. The current ratio is low to start with based on other school projects we are working on.
2. Every new project is different because every Owner is different. We've had clients where a dozen data drops in a classroom was the minimum standard and other projects where a maximum of 3 drops was the norm.
3. We have 2 projects opening this summer with the following drops to student ratios. These drop totals include all structured cabling for data, voice, wireless and security cameras:
 - Drops : Students
 - 1125:800 = 1.4
 - 1440:1030 = 1.4
4. In comparison, the below is Stoneham's pre-VE cut ratio:
 - Drops: Students
 - 568:695 = .8

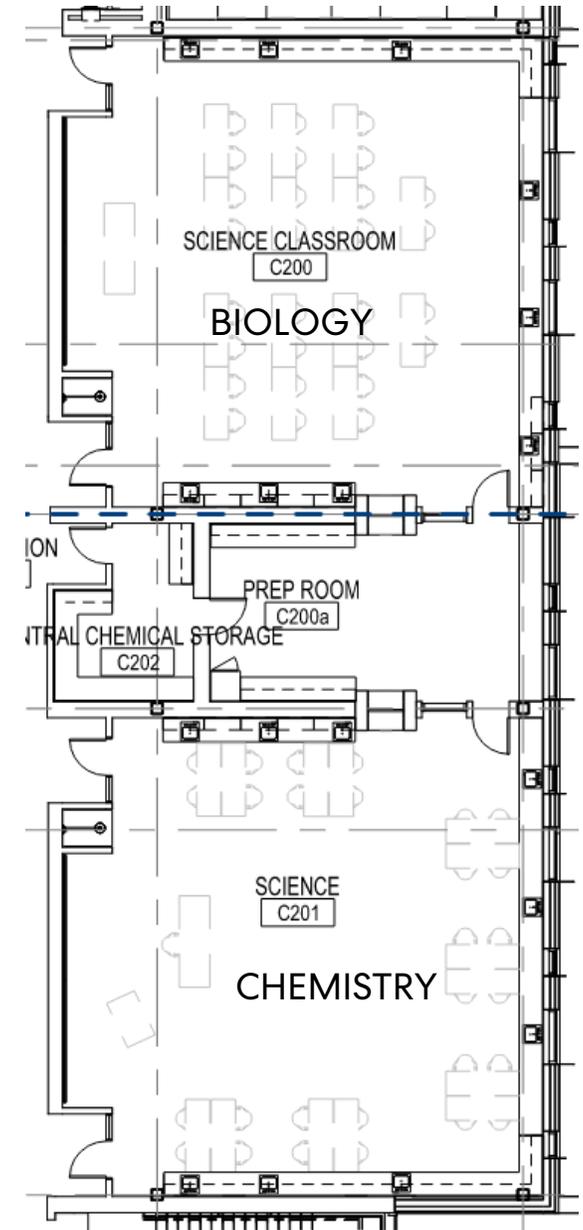
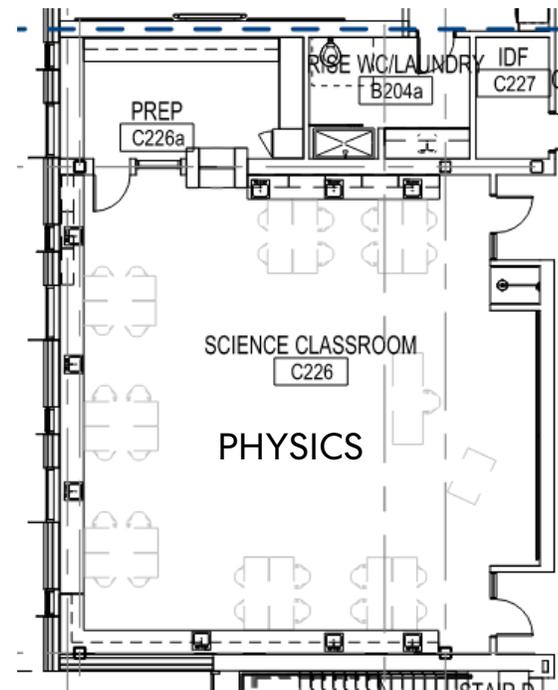
Potential Areas of Cost Savings:

1. All offices currently have typical voice with two data drops. This is standard on most projects.
2. All classrooms currently have four accessible drops, 1 for phone and 3 for data connections. This is on the conservative side.
3. Teacher Planning & Department Offices
 - Each desk is equipped with a voice and data jack (quantity 2). If they are not equipping each of these desks with telephones, then there is some savings there. Providing a wired connection to the network is good idea for teacher workspaces.

Value Engineering Ideas

- **D-30b** – CHEMICALS: Utilize point-of-use acid neutralization systems; Localized below 3-sink bays in each science classroom
- VM Amount: **\$359,696**

Level 2 shown
Level 3 science rooms stack



Value Engineering Ideas

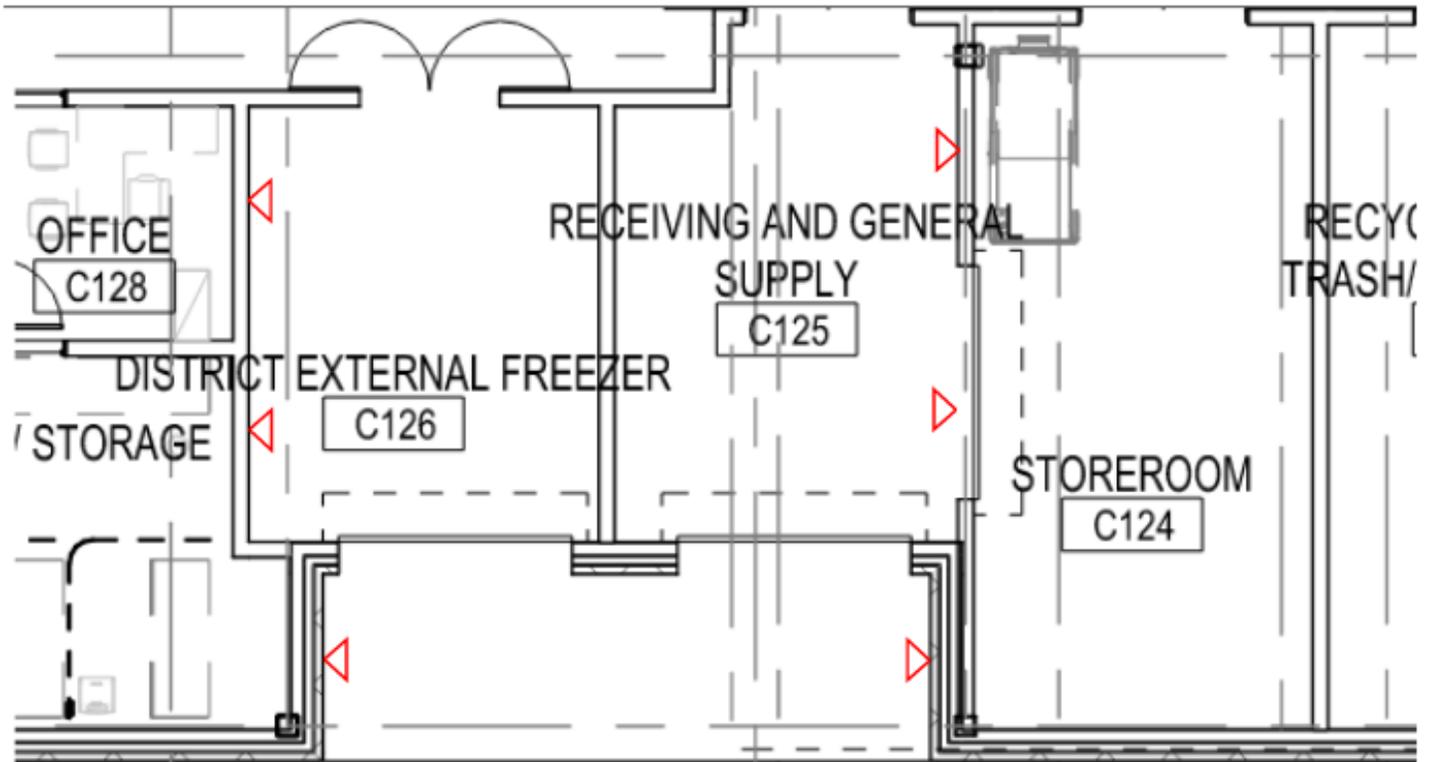
- **D-36a** – EQUIPMENT: Reduce theatrical lighting fixtures & controls scope by 10%
- VM Amount: **\$88,564**

- **D-36b** - EQUIPMENT: Reduce theatrical lighting fixtures & controls scope but maintain all auto yokes in both spaces
- VM Amount: **\$50,000**

11 61 91 - THEATER LIGHTING INSTRUMENTS AND ACCESSORIES	Proscenium		Performance Room	
Item	100SD	VE	100SD	VE
Spotlights				
7 Color Led Spot (ETC Lustr II)	30	30	20	0
4 Color LED (ColorSource Spot)	80	80	35	55
EDLT Barrels	125	125	75	75
Wash Fixtures				
4 Color Led Wash (ETC ColorSource PAR)	35	35	20	20
Wash Diffusers (D40 / ColorSource)	70	70	40	40
Cyc Fixtures				
4 Color LED Strip Light	9	9	0	0
ColorForce II Diffusers	9	9	0	0
Follow Spots				
Oz - 600w Cool White LED 7° - 14.5° Followspot w/ GT1000 Tripod	2	0	0	0
GT1000 Tripod Stand	2	0	0	0
Altman AFS-700 LED Followspot	0	2	0	0
Moving Fixtures / Accessories				
City Theatrical Auto Yoke	5	5	3	0
City Theatrical Auto Yoke Digital Iris	5	5	3	0
Accessories				
6.25" Top Hats	55	55	30	30
7.5" Top Hats	20	20	10	10
City Theatrical Safer Side Arms	20	20	15	15
Pattern Holder	35	35	20	20
Backpack Dimmers - ETC ES750	6	6	4	4
Cable				
Cable Package for Rig (Power / 5 Pin / Terminators)	Lot	Lot	Lot	Lot

Value Engineering Ideas

- **D-40** – DRY SPRINKLERS – Replace w/ wet sidewall sprinkler heads at Loading/Receiving
- VM Amount: **\$33,761**



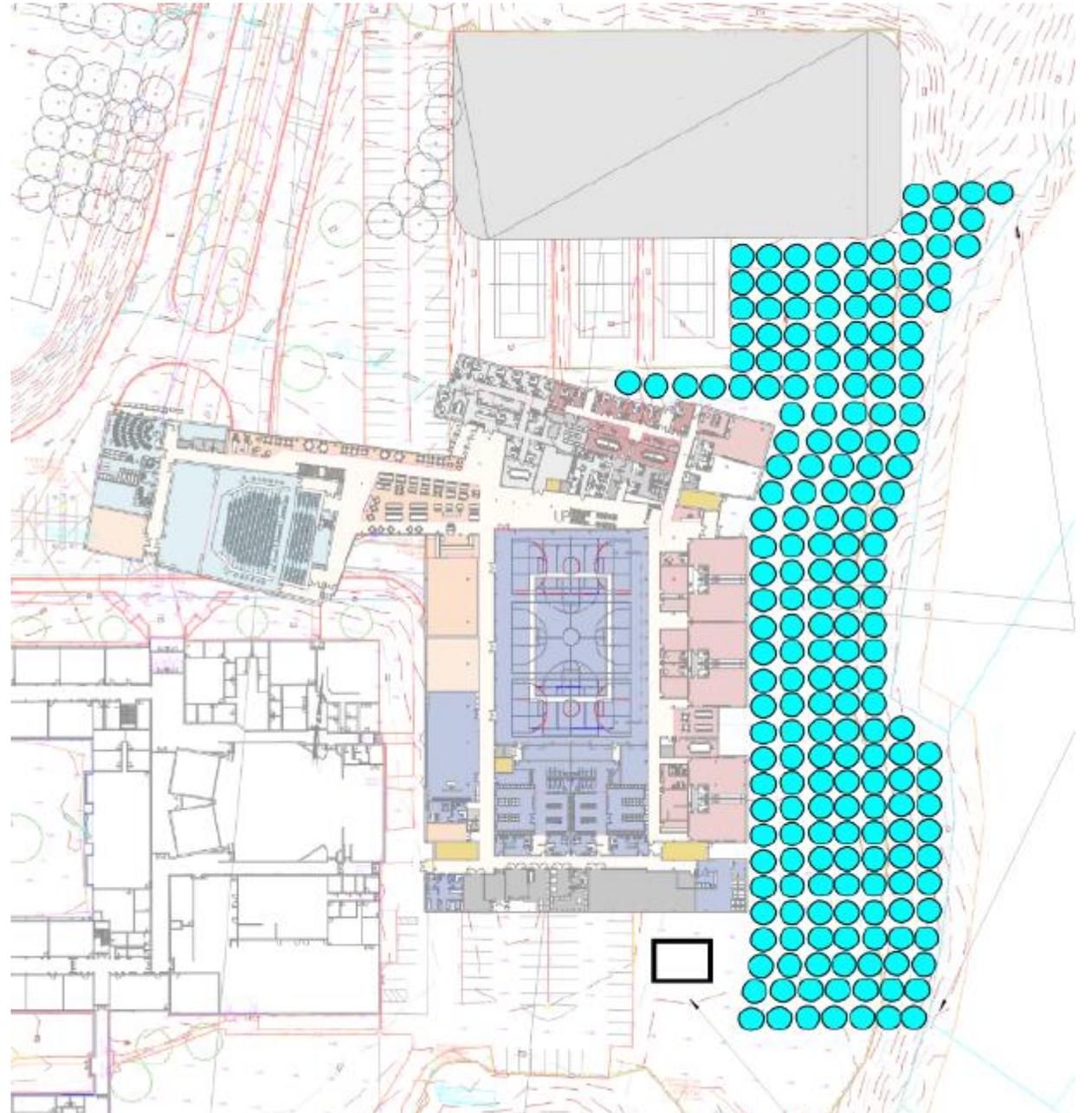
Perkins&Will

Building Value Engineering: New Items

Building Committee Meeting

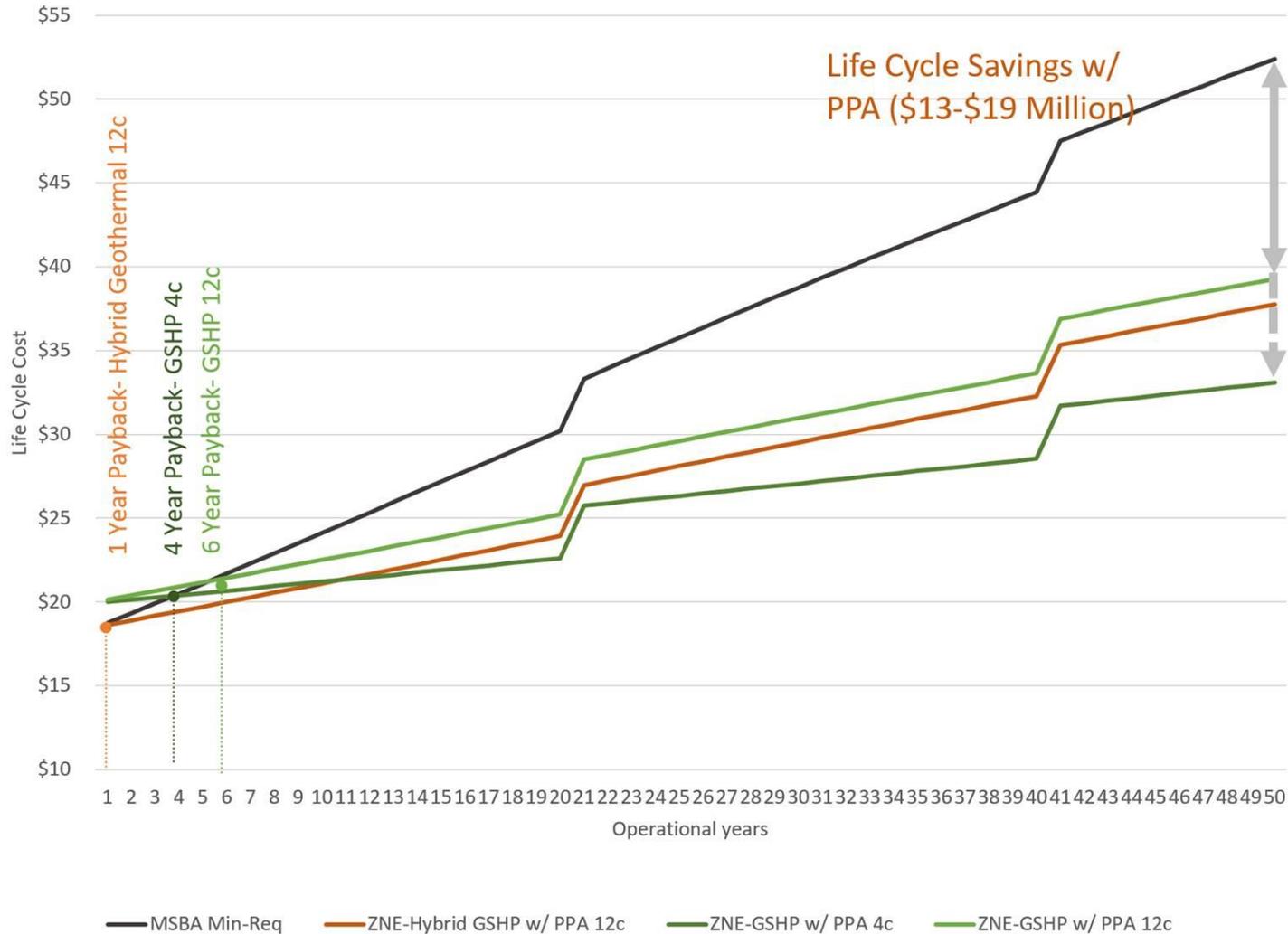
Value Engineering Ideas

- **MD-19** – HVAC SYSTEM DESIGN -
Reduce Geothermal Wells by 28;
Revised HVAC System
- VM Amount: **\$1,353,481**



Value Engineering Ideas

- **MD-19** – HVAC SYSTEM DESIGN - Reduce Geothermal Wells by 28; Revised HVAC System
- VM Amount: **\$1,353,481**



Perkins&Will

Site Budget Reduction Ideas

Building Committee Meeting

VALUE MANAGEMENT – SITE SUMMARY

21 Site Trade Cost Budget Reduction Items
(3 w/ multiple options)

\$9.6M Total Potential Savings

Perkins&Will

SMMA

Project Management

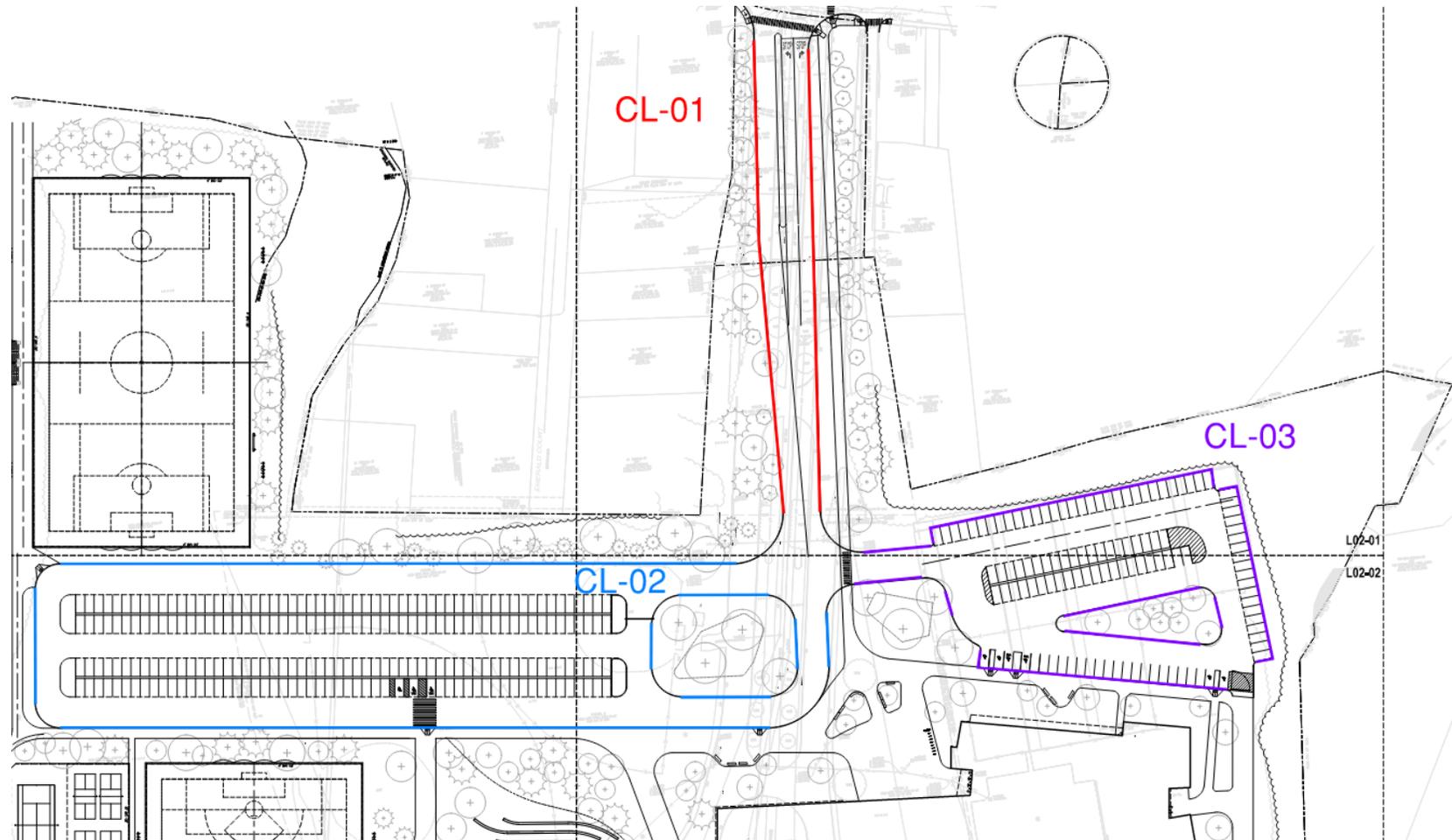


CONSIGLI

Est. 1905

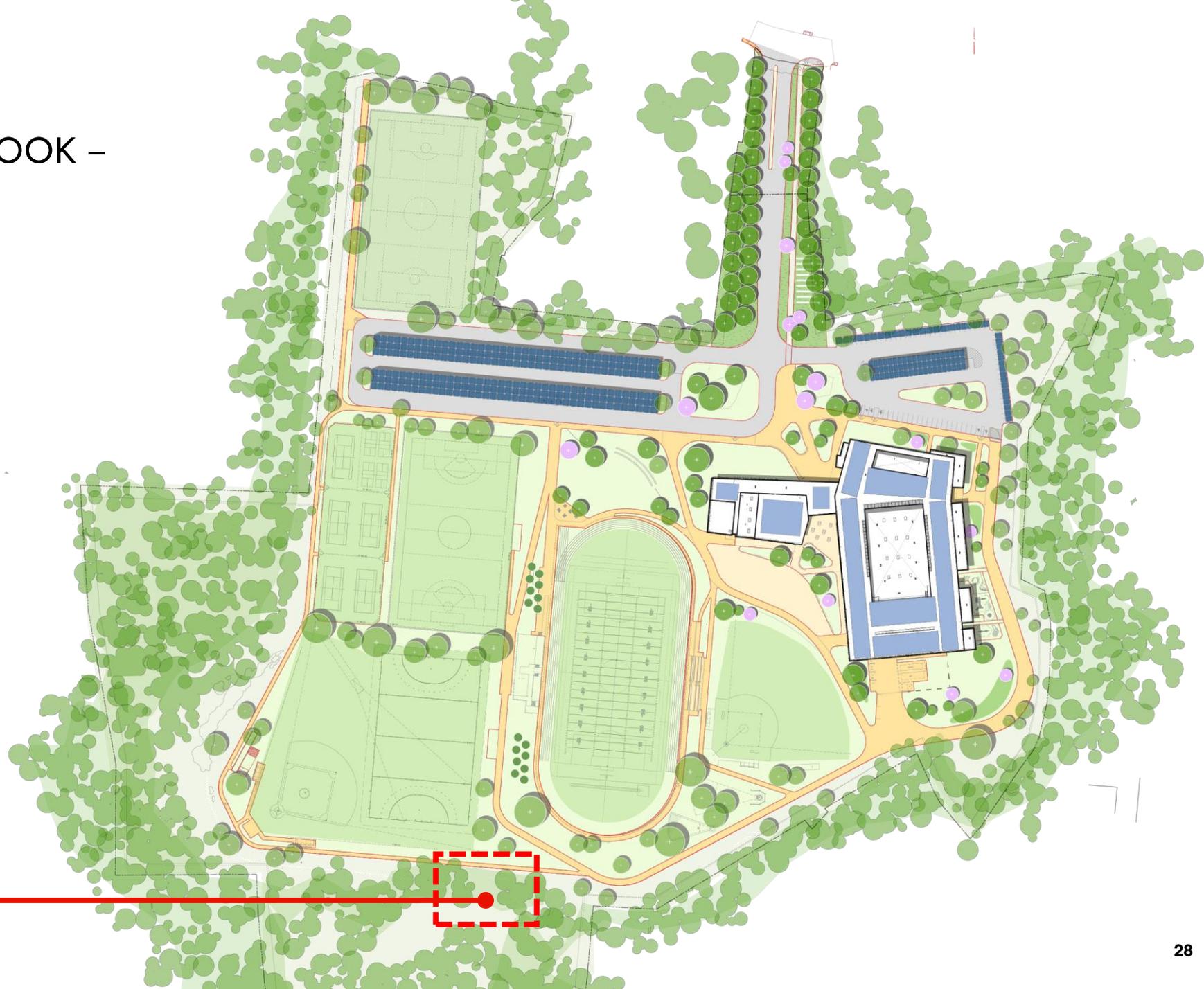
Value Engineering Ideas

- **CL-01** – ENTRY CURB - Change Vertical Granite to precast concrete along the Entry Drive, radius to remain Vertical Granite
- VM Amount: **\$15,642**
- **CL-02** – WEST CURB - Change Vertical Granite to Cape Cod Berm in the West Parking Lot, radius to remain Vertical Granite
- VM Amount: **\$28,633**
- **CL-03** – EAST CURB - Change Vertical Granite to Cape Cod Berm in the East Parking Lot, radius to remain Vertical Granite
- VM Amount: **\$19,173**



Value Engineering Ideas

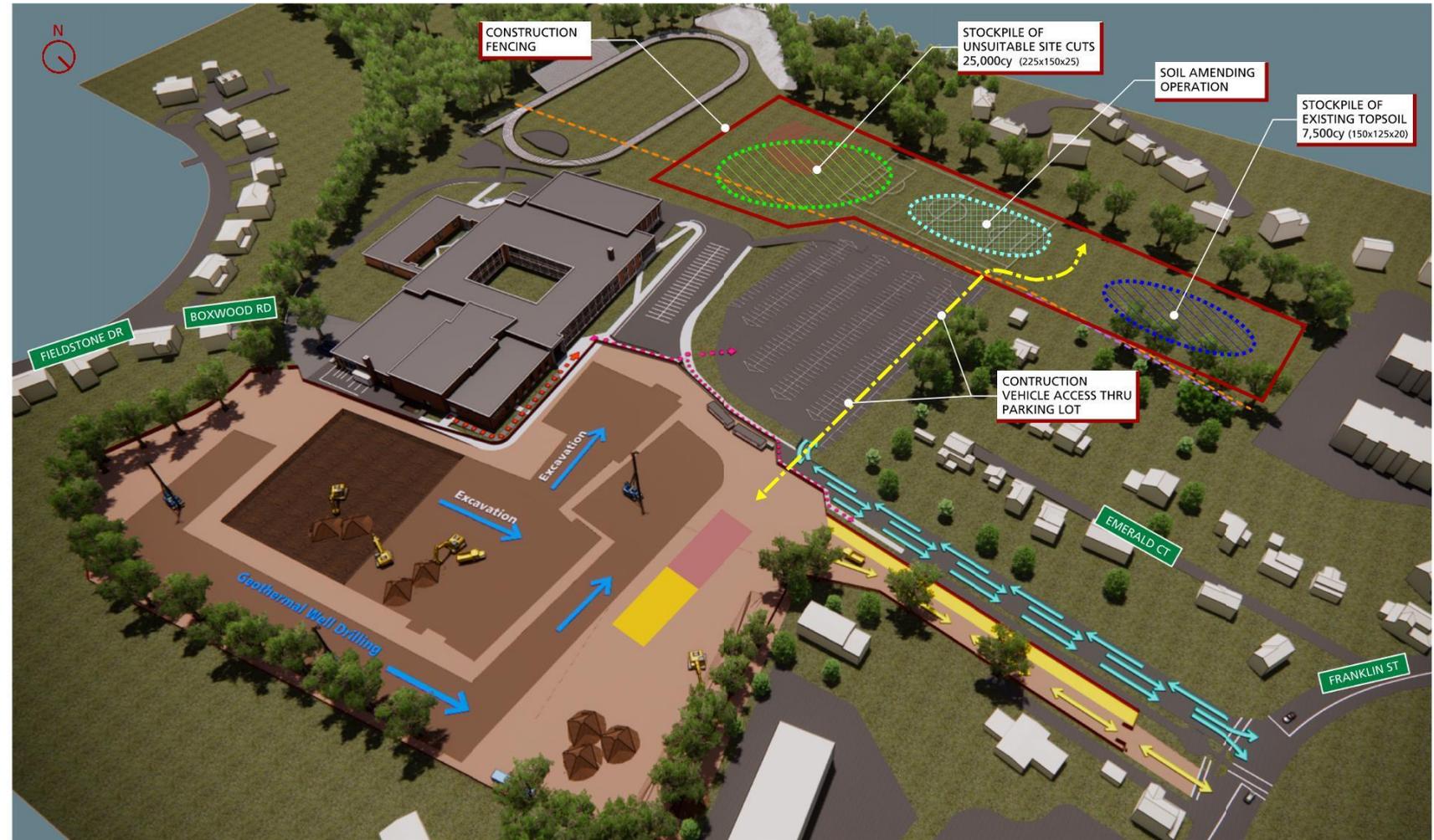
- **CL-07** – WETLANDS OVERLOOK – Eliminate
- VM Amount: **\$23,472**



WETLANDS OVERLOOK DECK

Value Engineering Ideas

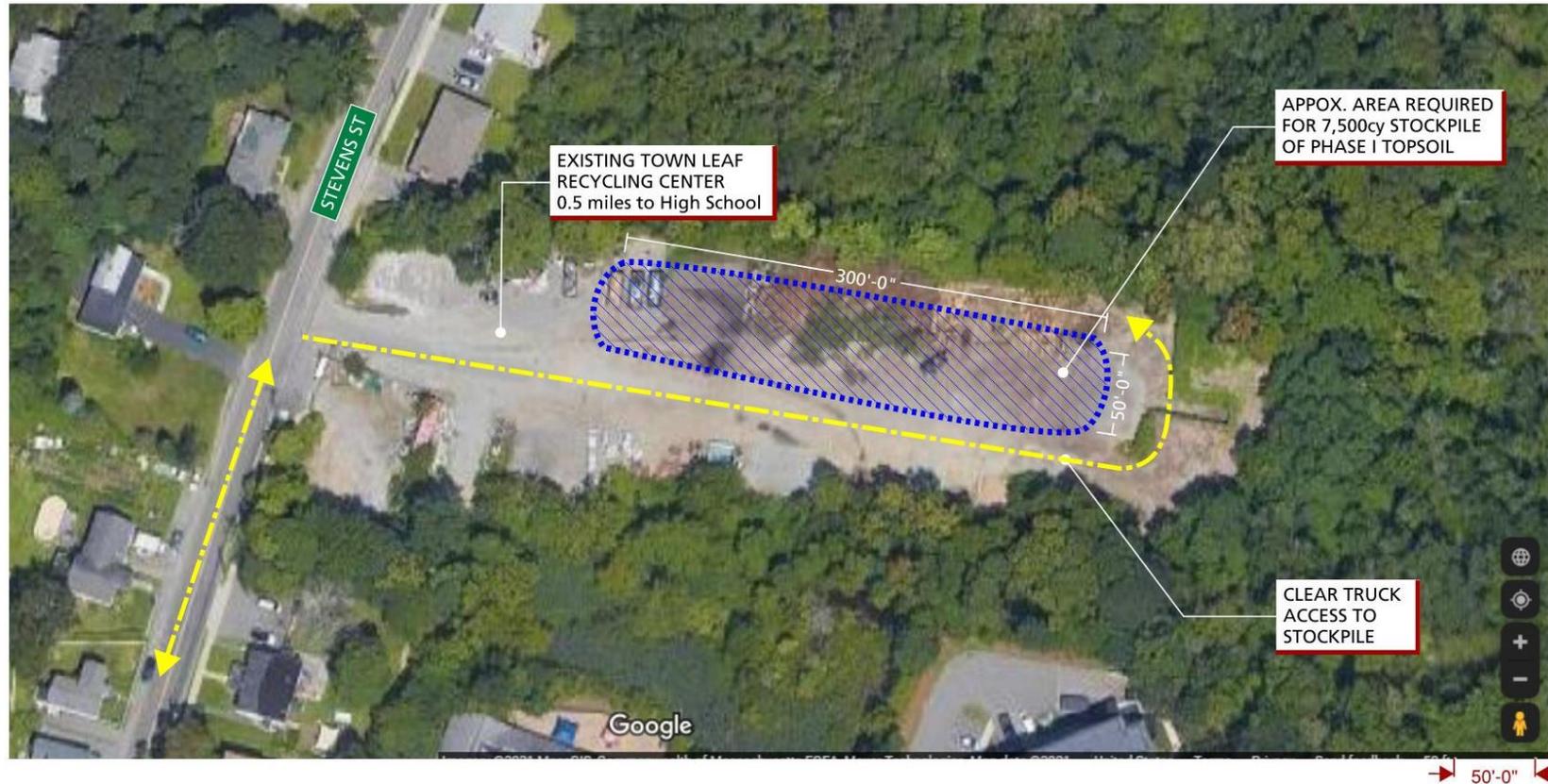
- **CL-10** – SOIL - Stockpile all soils onsite (building unsuitables); with amending operation. 25,000cy approximately 225' x 150' x 25'. Phase II site cuts to fills to be managed onsite.
- VM Amount: **\$1,066,593**



Value Engineering Ideas

- **CL-12a** – TOPSOIL - Utilize local site for stockpile of existing Phase I topsoil for reuse in Phase II.
- 7,500 Cubic yards = approximately 125' x 150' x 25'
- VM Amount: **\$72,396**

NOTE:
This site is adequate to store
Topsoil generated during Phase I
for reuse in Phase II.



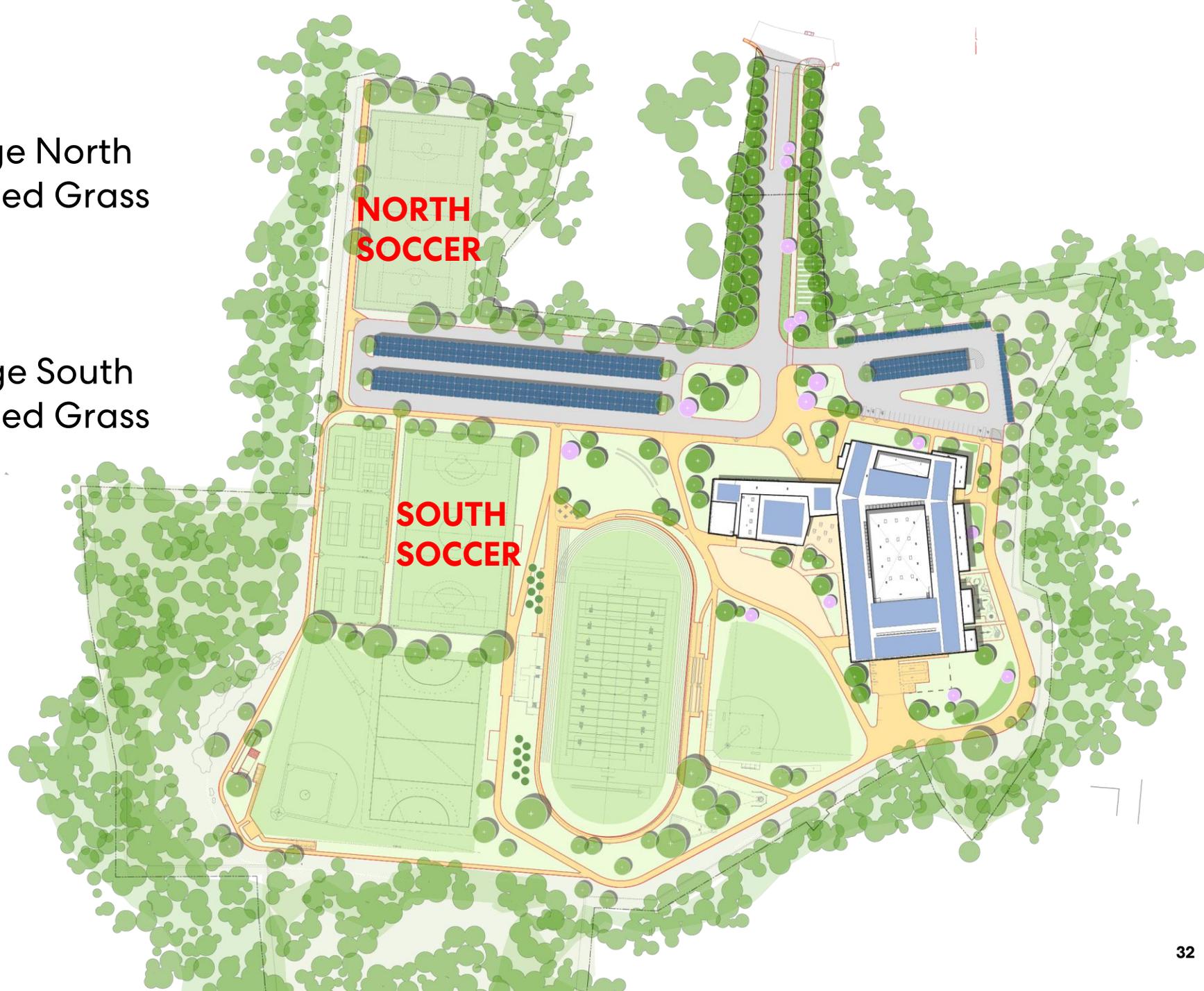
Value Engineering Ideas

- **CL-12b** – TOPSOIL - Stockpile all Phase I existing topsoil onsite for reuse in Phase II with amending operation.
- 7,500 Cubic yards = approximately 125' x 150' x 25'
- VM Amount: **\$144,792**

Value Engineering Ideas

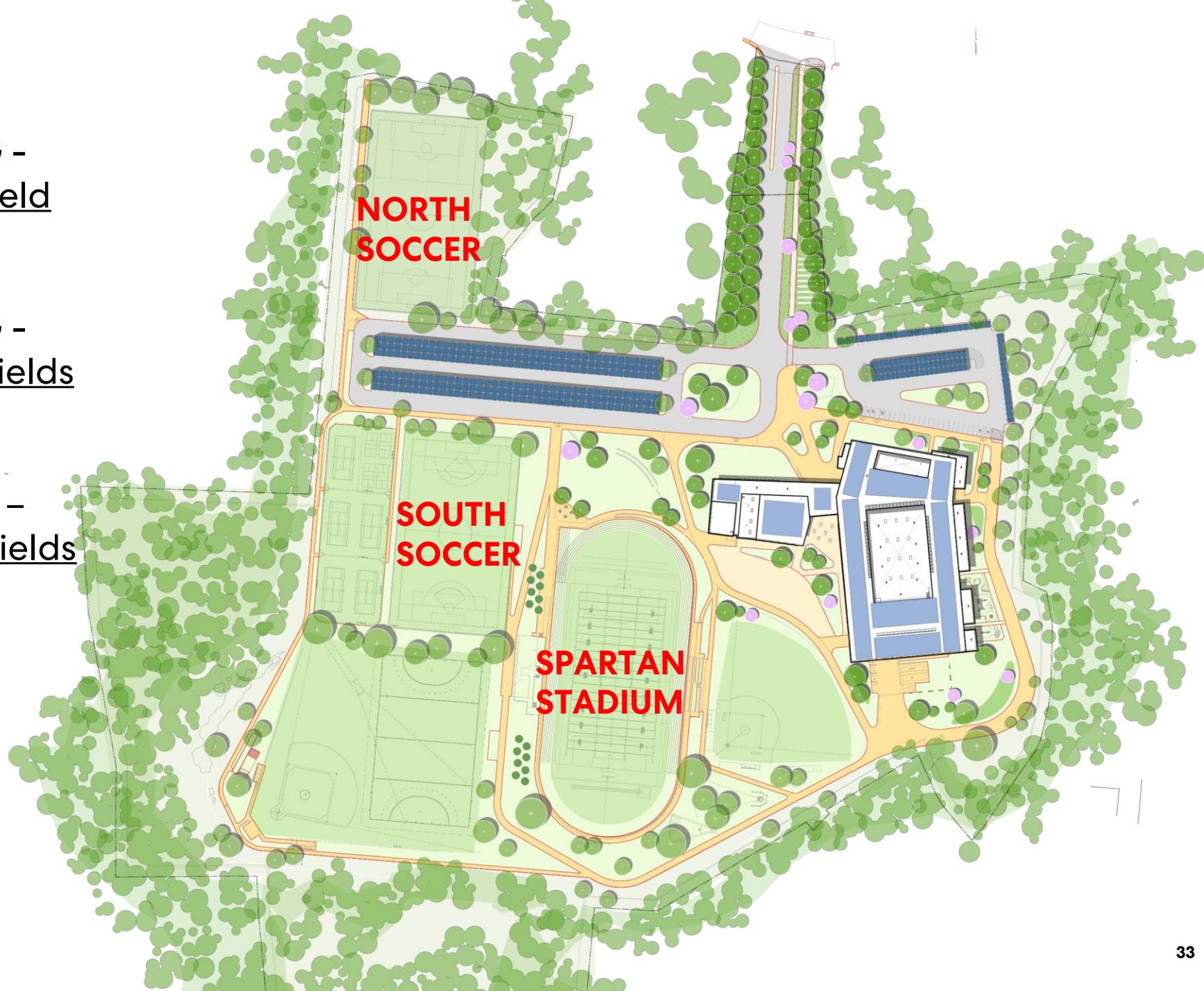
- **CL-15** – TURF FIELD - Change North Synthetic Turf Field to Seeded Grass field with irrigation
- VM Amount: **\$453,786**

- **CL-14** – TURF FIELD - Change South Synthetic Turf Field to Seeded Grass field with irrigation
- VM Amount: **\$458,868**



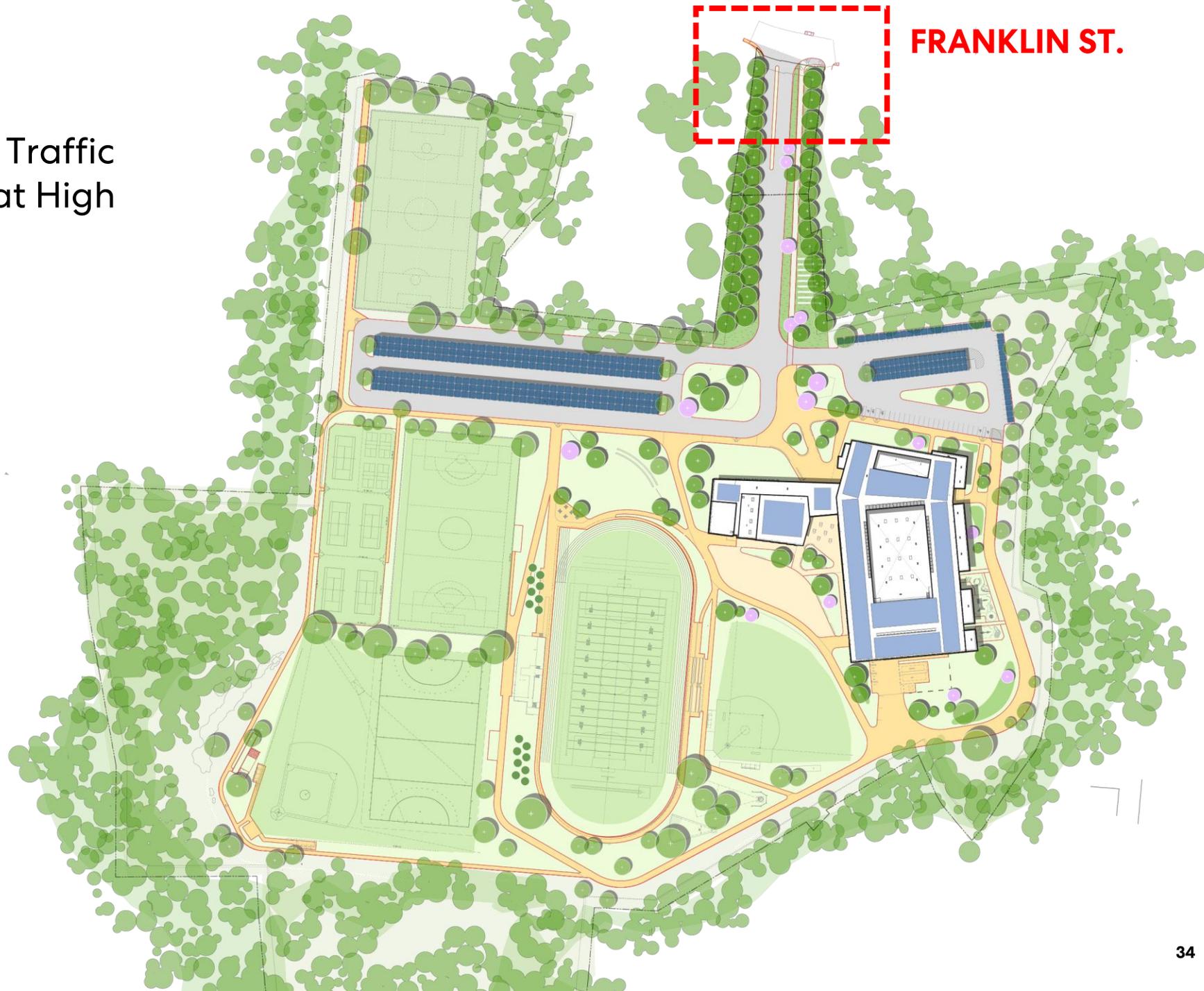
Value Engineering Ideas

- **CL-27a** – SPORTSLIGHTING –
Delete sports lighting at 1 field
- VM Amount: **\$601,261**
- **CL-27b** – SPORTSLIGHTING –
Delete sports lighting at 2 fields
- VM Amount: **\$1,202,522**
- **CL-27c** – SPORTSLIGHTING –
Delete sports lighting at 3 fields
- VM Amount: **\$1,803,783**



Value Engineering Ideas

- **CL-31** – TRAFFIC SIGNALS – Traffic Signal & Intersection work at High School Entrance by Town
- VM Amount: **\$685,233**

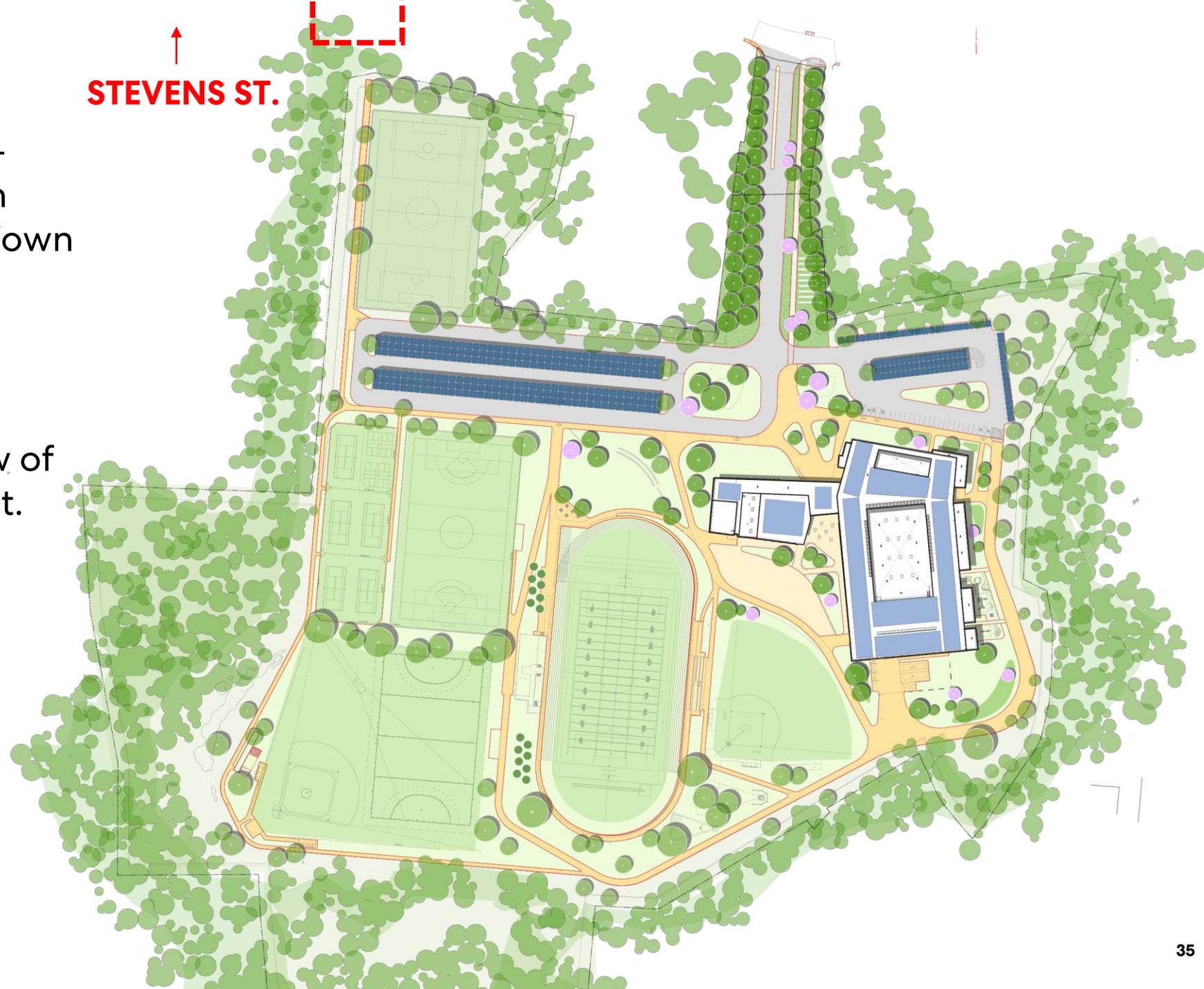


Value Engineering Ideas

- **CL-32** – TRAFFIC SIGNALS – Traffic Signal & intersection work at Stevens Street by Town
- VM Amount: **\$318,707**

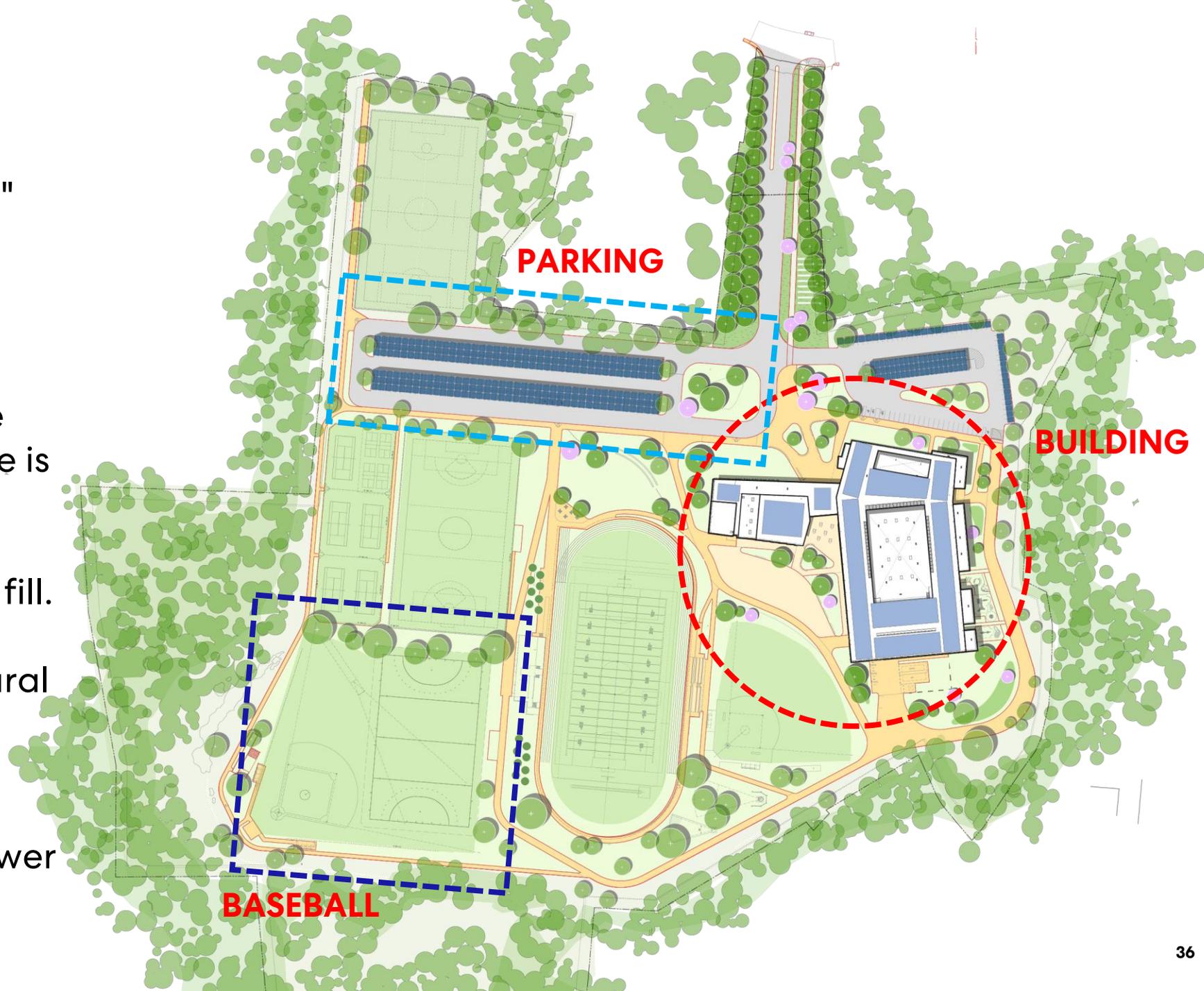
Note:

The actual intersection at Stevens Street is just off-view of this graphic, to the northwest.



Value Engineering Ideas

- **CL-34a** – EARTHWORK - Lower baseball field by 1'-0"
• VM Amount: **\$165,391**
- **CL-34b** – EARTHWORK - Lower building / first floor elevation by 1'-0" to reduce the cost of earthwork. There is a potential need for replacement of unsuitable soils / ledge with structural fill. Removal of unsuitables will still be required; but structural import will be reduced.
• VM Amount: **\$229,254**
- **CL-34c** – EARTHWORK - Lower Student Parking lot by 1'-0"
• VM Amount: **\$120,660**

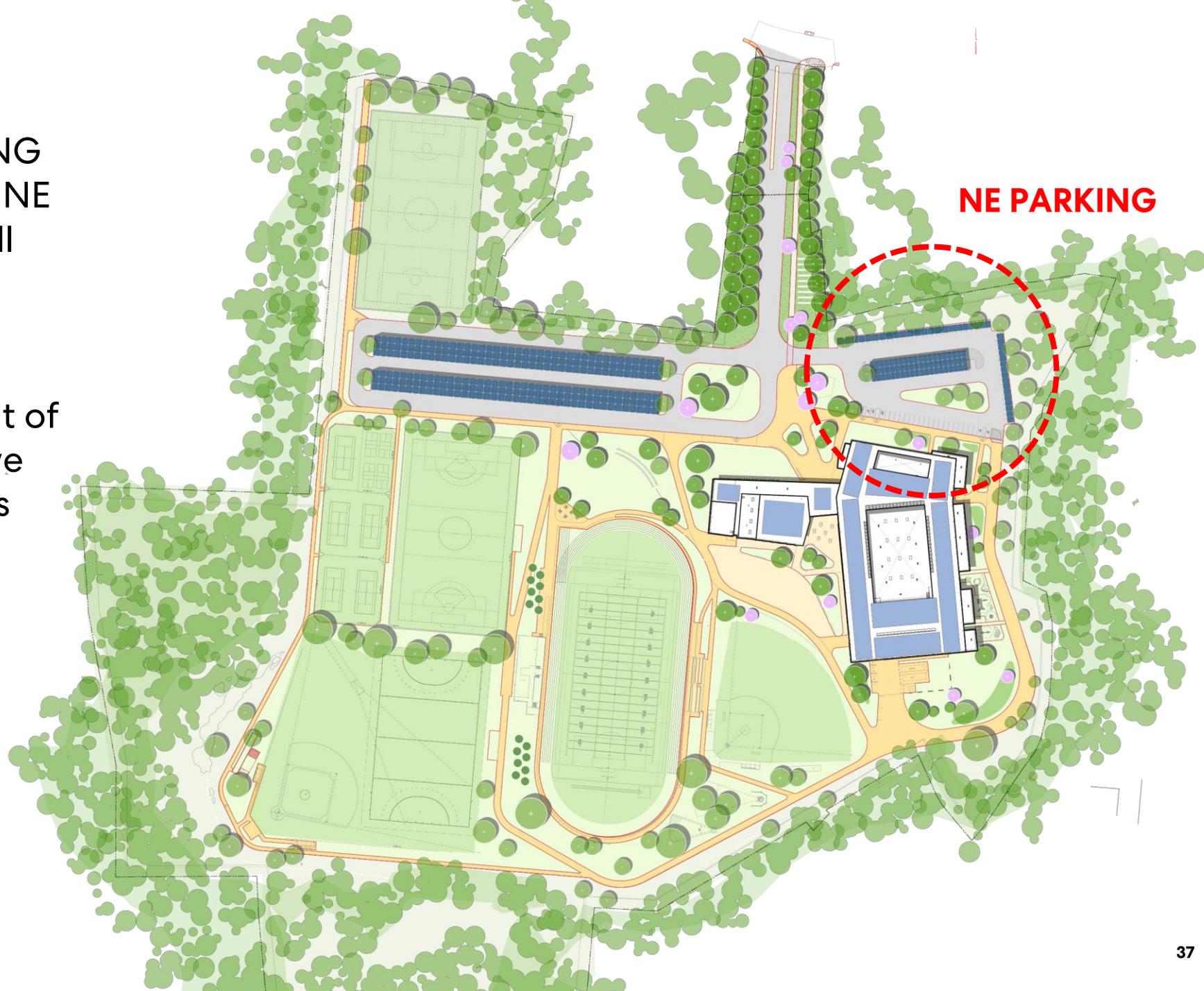


Value Engineering Ideas

- **CL-37** – SITE/SOIL & PARKING
 - Remove 75% of spaces in NE parking lot to reduce cut/fill
- VM Amount: **\$100,413**

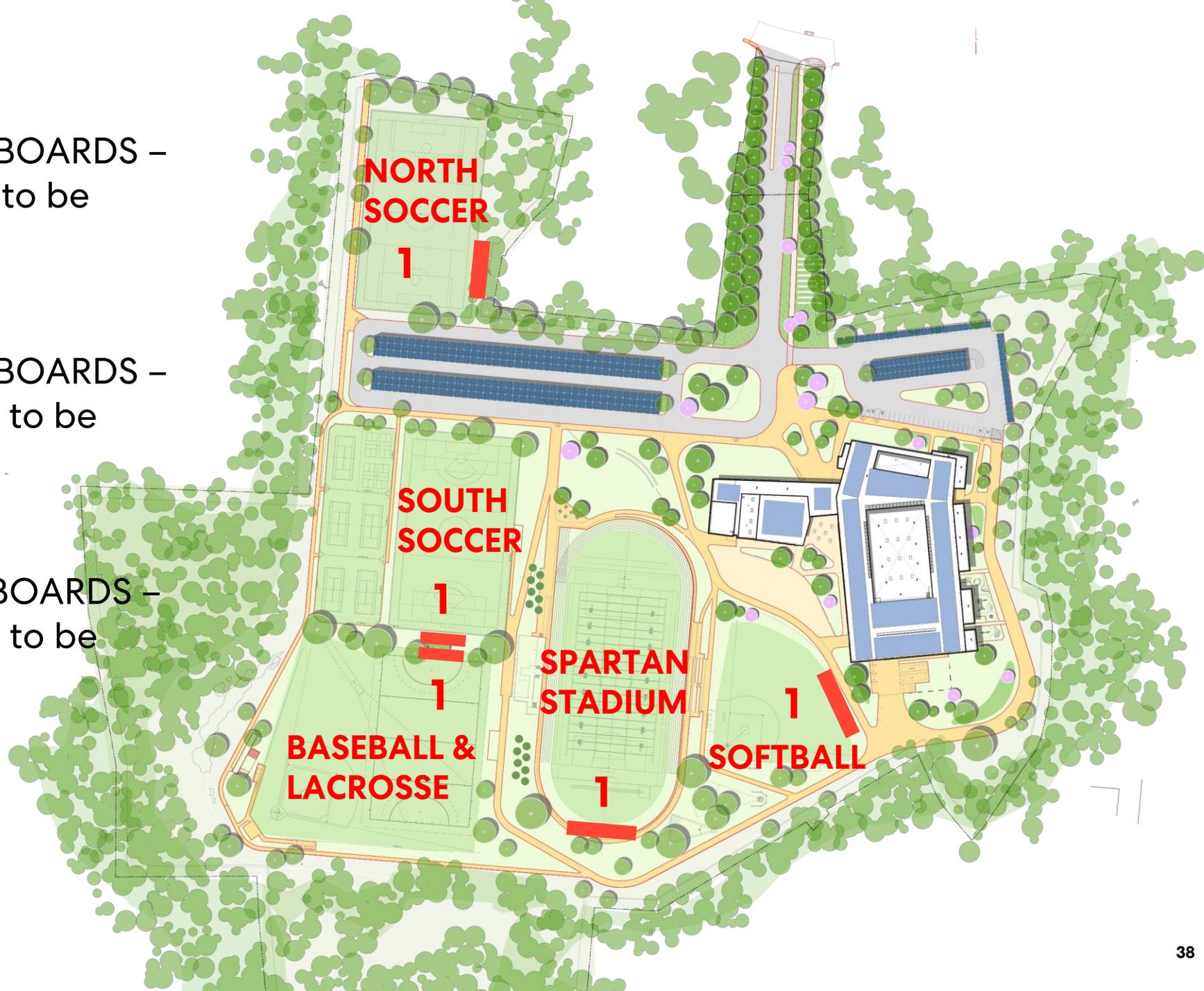
Concern:

This item reduces the amount of PV array over parking that we have available, which affects our ZNE goals.



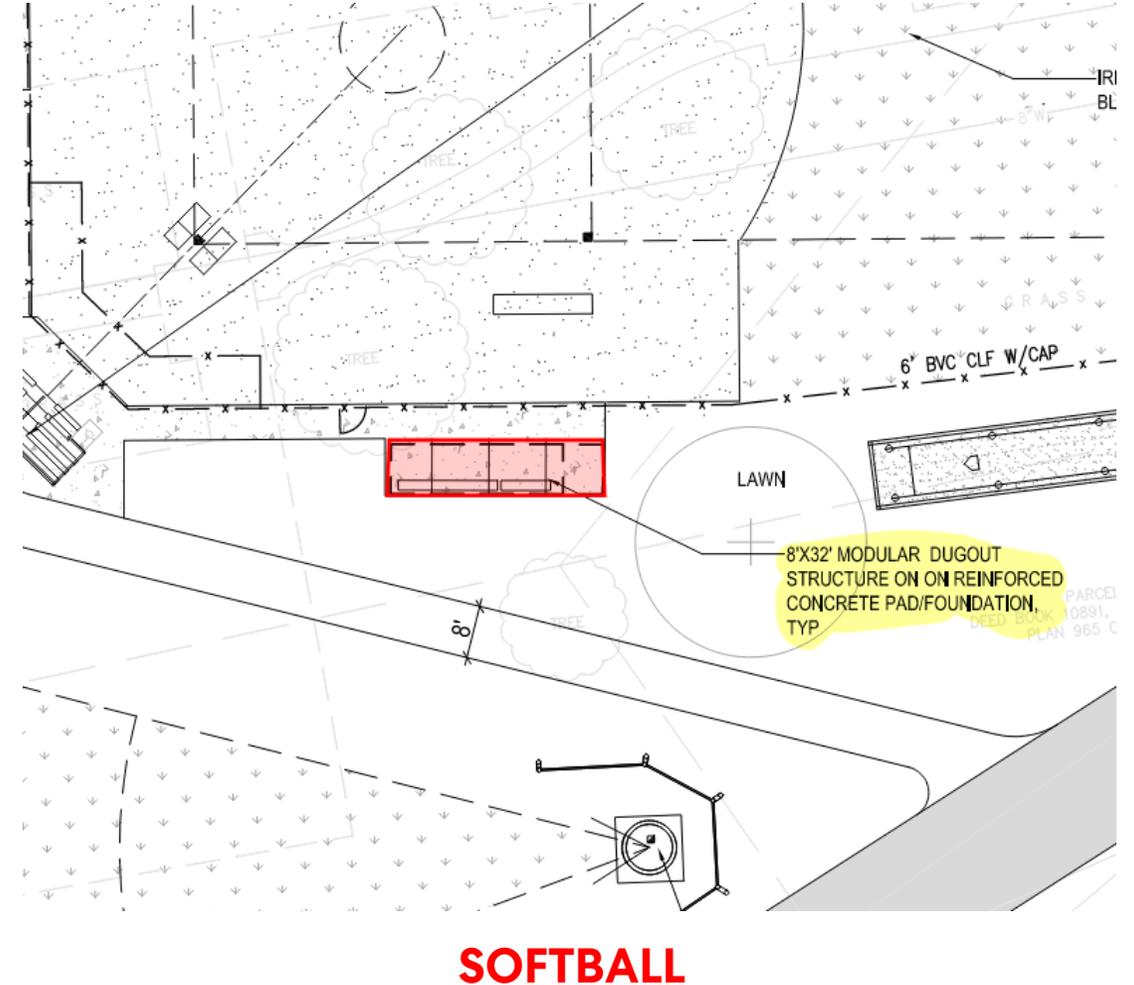
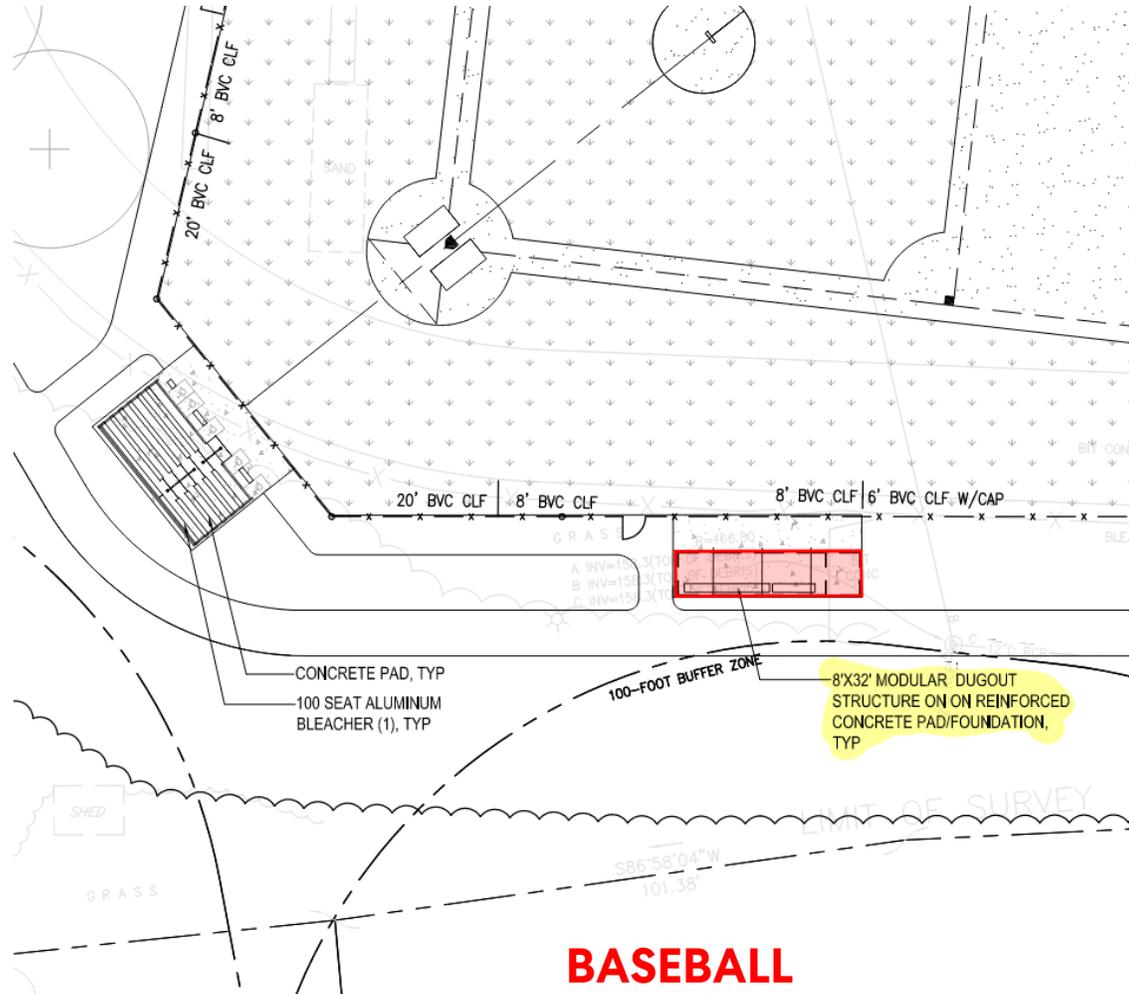
Value Engineering Ideas

- **CL-38a** – EXTERIOR SCOREBOARDS – Eliminate (1); Infrastructure to be provided
- VM Amount: **\$66,363**
- **CL-38b** – EXTERIOR SCOREBOARDS – Eliminate (2); Infrastructure to be provided
- VM Amount: **\$132,726**
- **CL-38c** – EXTERIOR SCOREBOARDS – Eliminate (3); Infrastructure to be provided
- VM Amount: **\$199,089**



Value Engineering Ideas

- **CL-40** – EQUIPMENT - Reduce/eliminate prefabricated dugouts at baseball and softball fields
- VM Amount: **\$134,374**



Value Engineering Ideas

- **MD-04** – AMPHITHEATER - Eliminate amphitheater and associated soil fills (follow land naturally)
- VM Amount: **\$684,231**



CURRENT SCOPE

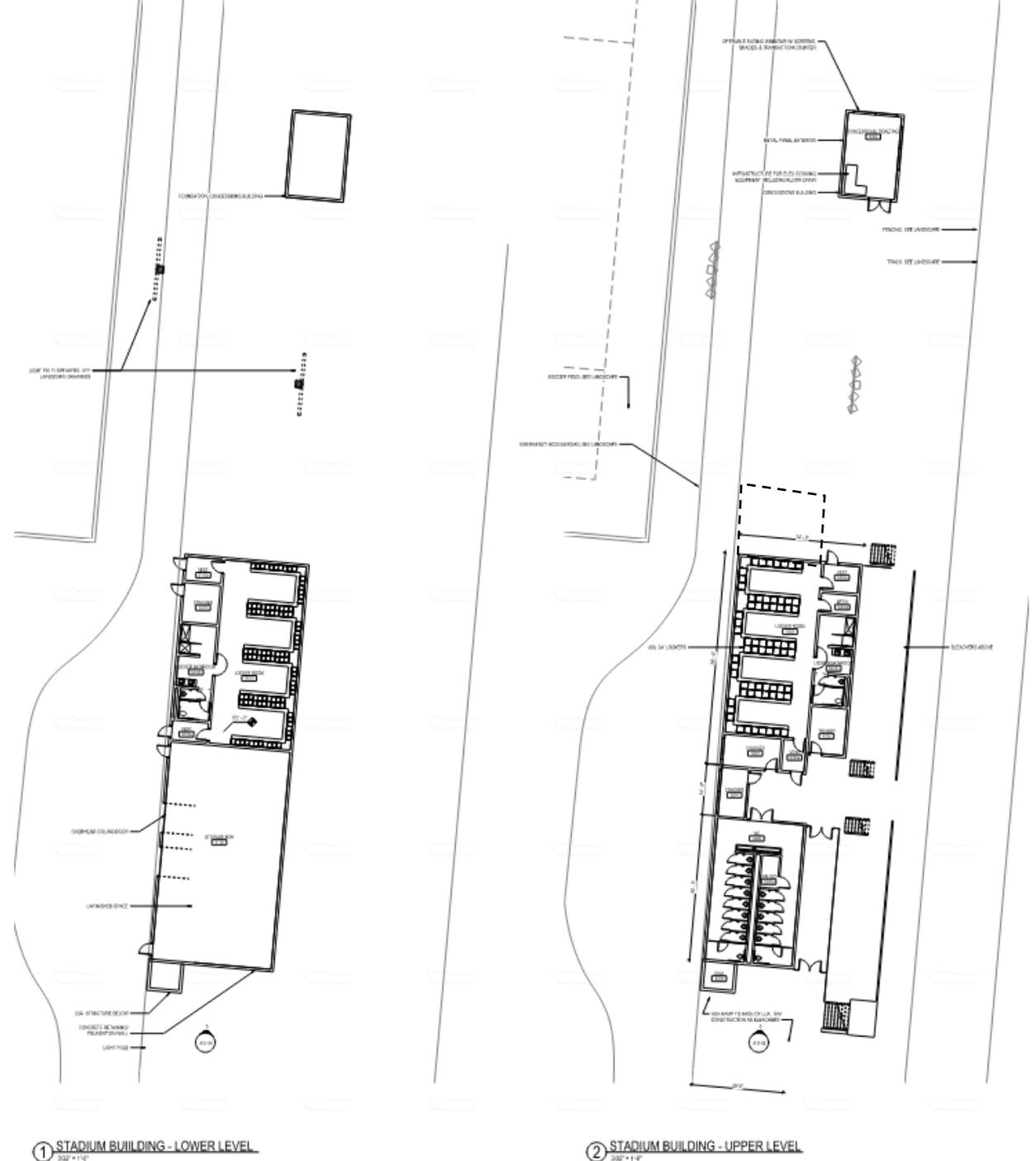
• MD-12 – STADIUM AREA

Concessions Building – 1-story

- \$228,873 value
- Concessions only

Stadium Building - 2-stories

- \$2,352,616 value
- LOWER LEVEL PROGRAM
 - BOH Storage
 - Toilets
 - Locker Room
 - Toilets
 - Showers
 - (1) Coaches Office
- UPPER LEVEL PROGRAM
 - Locker Room
 - Toilets
 - Showers
 - (2) Coaches Offices
 - Trainer
 - MEP Closet
 - **REQUIRES ELEVATOR**



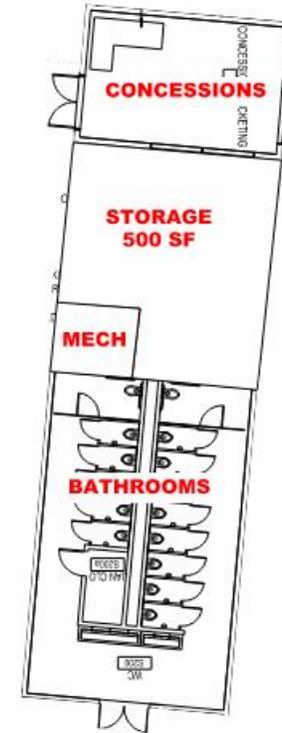
Value Engineering Ideas

- **MD-12a** – STADIUM AREA - Incorporate Toilets, Concessions and 500sf of storage into single-story **standalone building** adjacent to bleachers
- VM Amount: **\$1,578,036**

THIS OPTION KEEPS....

1-story building

- Toilets
- Concessions
- 500 SF Storage
- Separate from / adjacent to bleachers



**STADIUM LEVEL -
ADJACENT**

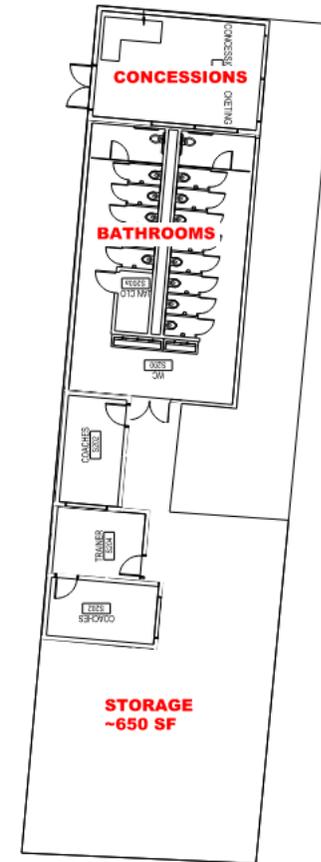
Value Engineering Ideas

- **MD-12b** – STADIUM AREA - Incorporate Toilets, Concessions, 500sf of storage and Trainer/Coach Office into **single-story building** under bleachers
- VM Amount: **\$1,342,159**

THIS OPTION KEEPS....

1-story building

- Toilets
- Concessions
- 500 SF Storage
- Trainer
- Coaches Office
- Beneath bleachers structure



**STADIUM LEVEL -
UNDER BLEACHERS**

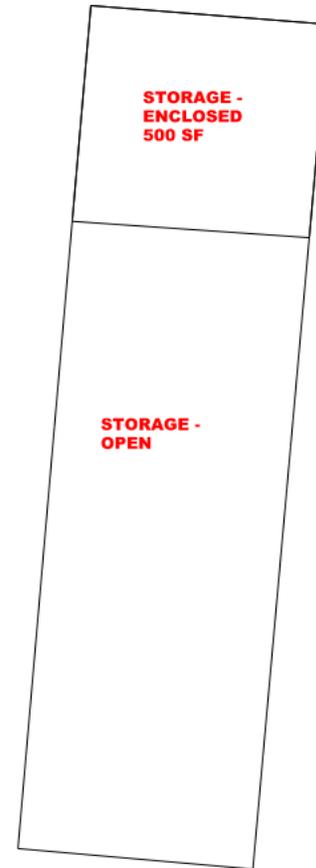
Value Engineering Ideas

- **MD-12c** – STADIUM AREA – Incorporate Toilets, Concessions, Trainer/ Coach Offices and a single Locker Room into a **two-story building** under bleachers. Maintain 500 SF of Storage below with an unfinished & excavated open storage area adjacent.
- VM Amount: **\$597,171**

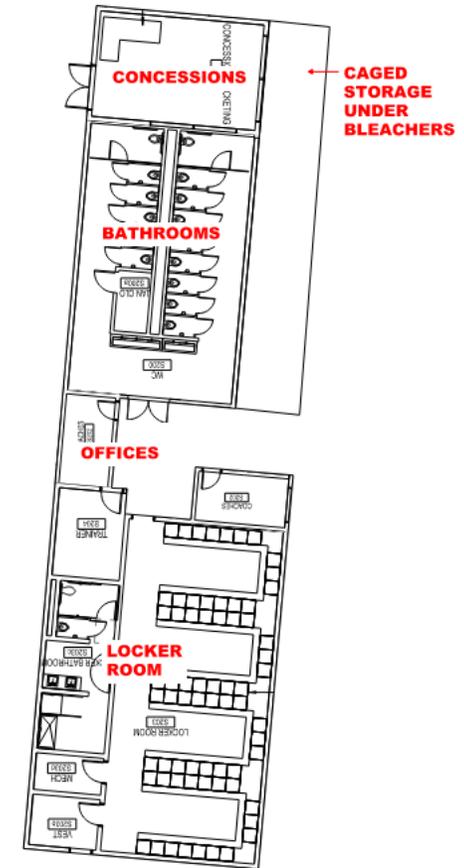
THIS OPTION KEEPS....

2-story building

- Toilets
- Concessions
- 500 SF Storage
- Trainer
- Coaches Office
- Locker Room
 - Toilets
 - Showers
- Beneath bleachers structure
- Unfinished & excavated open storage space adjacent to enclosed storage



LEVEL BELOW



**STADIUM LEVEL -
UNDER BLEACHERS**

Perkins&Will

Vote for Total Project Budget

Building Committee Meeting

Perkins&Will

Thank You

Building Committee Meeting