

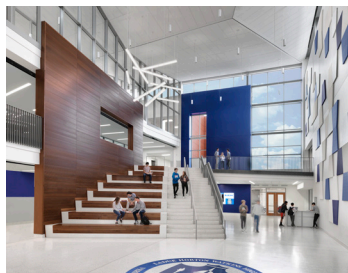
# Facilities Master Plan



# Overview and Introduction

The Ladue Schools Board of Education approved the original Facilities Master Plan on Dec. 12, 2011 for the purpose of providing a structure for facilities planning for the next 10-15 years. It was intended then – as now – to be a fluid document to be updated and revised as economic, educational, and demographic conditions evolve. An update to the original plan was developed in 2012 and introduced potential timelines and the resulting debt service tax implications of implementing the plan given the economic indicators and state of district facilities at the time.

In the fall of 2018, the priority initiative identified in those initial documents – a major renovation of Ladue Horton Watkins High School – was completed. (See following section: History of Approved Bond Levy Requests for Capital/Facility Improvements.) As a result, the district's Facilities Planning Board Advisory Committee undertook this latest update of the district's Facilities Master Plan.



Except as noted, the priorities, timelines and financial projections reflected in these planning documents are for discussion purposes only. They reflect potential solutions for current building needs as developed by the Facilities Planning Board Advisory Committee and the resulting financial implications as projected by the district's financial consultants. Except where specifically noted, *they are not intended to be, nor should they be construed to be, specific recommendations approved by the Board of Education.*

In the spirit of the originally approved Facilities Master Plan, this information is being brought forward on behalf of the Ladue School District by the Facilities Planning Board Advisory Committee based on the district's Strategic Plan and these organizations' respective Vision Statements.

## Ladue School District Vision Statement

Together, we will empower every student to become a passionate learner and achieve his or her highest potential.



## Facilities Board Advisory Committee Vision Statement

The vision of the Facilities Board Advisory Committee is to provide for the immediate and long-term land use and building needs of the district, maintaining sufficient facilities that are sustainable, of high quality and state-of-the-art, fostering a physical environment that promotes achievement of the principles of the Ladue School District's overall Mission and Vision.

# Planning Team

## Facilities Board Advisory Committee

Judy Abrams  
Andy Bresler

Aaron Early  
James Faron

Sheldon Johnson  
Scott Lackey

Michael Myers  
Anne Noble

Dr. Kimberly Stallons  
Mike Tarpey

Kelly Waller

## Ladue School District Administration

Dr. Donna Jahnke - Superintendent  
Dr. Jason Buckner - Assistant Superintendent for Business & Finance  
Dr. Ken Rossics - Assistant Superintendent for Human Resources  
Dr. Amy Zielinski - Assistant Superintendent for Curriculum & Instruction  
Susan Downing - Director of Communications  
Rob Highfill - Director of Technology  
Mike Noonan - Director of Facilities & Maintenance  
Dr. Derrick Wallace - Director of Student Services

## Board of Education (2018-19 School Year)

Andy Bresler - President  
Carolyn Jaeger - Vice President  
Sheldon Johnson - Treasurer  
Jeff Kopolow - Secretary  
Sheri Glantz - Director  
Nancy Goldstein - Director  
Kisha Lee - Director



## Facility Locations



### **Ladue Early Childhood Center**

Director: Kerri Wetzel  
10890 Ladue Road  
St. Louis, MO 63141-8425  
314-993-5724 | 314-432-0980 (fax)



### **Conway Elementary**

Principal: Dr. Lane Narvaez  
9900 Conway Road  
St. Louis, MO 63124-1651  
314-993-2878 | 314-994-3988 (fax)



### **Old Bonhomme Elementary**

Principal: Cheryl Kirchgessner  
9661 Old Bonhomme Road  
St. Louis, MO 63132-4112  
314-993-0656 | 314-994-3987 (fax)



### **Reed Elementary**

Principal: Dr. Chris Schreiner  
9060 Ladue Road  
St. Louis, MO 63124-1902  
314-991-1456 | 314-994-3981 (fax)



### **Spoele Elementary**

Principal: Dr. Kim Stallons  
425 N. Spoele Road  
St. Louis, MO 63141-7715  
314-432-4438 | 314-432-6098 (fax)



### **Ladue Fifth Grade Center**

Principal: Dr. Julie Helm  
10900 Ladue Road  
St. Louis, MO 63141-8425  
314-983-5540 | 314-983-5539 (fax)



### **Ladue Middle School**

Principal: Dr. Tiffany Taylor-Johnson  
9701 Conway Road  
St. Louis, MO 63124-1646  
314-993-3900 | 314-997-8736 (fax)



### **Ladue Horton Watkins High School**

Principal: Brad Griffith  
1201 S. Warson Road  
St. Louis, MO 63124-1266  
314-993-6447 | 314-994-1467 (fax)



### **Administrative Center**

Superintendent: Dr. Donna Jahnke  
9703 Conway Road  
St. Louis, MO 63124-1646  
314-994-7080 | 314-994-0441 (fax)



### **Maintenance Building**

Director of Facilities: Mike Noonan  
9701-Rear Conway Road  
St. Louis, MO 63124-1646  
314-994-3500 | 314-993-2979 (fax)

## History of Approved Bond Levy Requests for Capital/Facility Improvements

<b>1950</b>	\$675,000 bond issue passed to build Ladue Horton Watkins High School.
<b>1953</b>	\$1.95 million bond issue passed to expand Ladue Horton Watkins High School. Included restructuring of the internal building to add 18 classrooms and an auditorium with band and chorus rooms (opened April 1955) and a swimming pool with an upper gym (opened January 1956.)
<b>1956</b>	(January 31) – \$3 million bond issue passed to build a junior high school, a new elementary school, twelve classrooms to be added to existing buildings and necessary auxiliary facilities to accommodate increased enrollment.
<b>1959</b>	(April 7) – Bond issue (amount not recorded) passed to purchase 30 acres at Ladue & Graeser roads for the purpose of erecting a second junior high school, expanding existing schools and building an Administrative Center.
<b>1960</b>	(February 9) – Bond issue passed for \$3.3 million for expansion of school facilities (25 classrooms at the high school), building of a second junior high, and purchasing land for two new grade schools.
<b>1963</b>	(February) – \$1.475 million bond issue passed to expand the high school. Included building a third hallway on the back of the school for 25 additional classrooms, adding science classrooms in the basement below the third hallway and enlarging the cafeteria and boiler room. Renovations were also made to other district buildings.
<b>1971</b>	(February) – \$2.56 million bond issue passed.
<b>2001</b>	\$40.9 million bond issue passed to expand four elementary schools and the high school including the Ramming Athletic Center; and to install and upgrade the HVAC and electrical systems in these five schools.
<b>2007</b>	\$29.97 million bond issue passed to renovate and expand K-12 schools, upgrade technology and improve safety and security features.
<b>2010</b>	\$32 million bond issue passed to purchase Westminster Christian Academy property, build a new Ladue Early Childhood Center on the property and renovate the existing building in order to open a Fifth Grade Center in the 2013-14 school year.
<b>2016</b>	\$85.1 million bond issue (Prop R) passed. The majority of the funds (\$82.2 million) designated for a significant renovation of Ladue Horton Watkins High School, \$2 million for improvements on other district campuses and \$900,000 to build an artificial turf field on the Ladue West Campus to replace fields displaced by construction at the high school.



## Putting Past Projects in Context with Current Facility Planning Philosophy

The ultimate purpose of the Facilities Master Plan is to ensure the educational needs of Ladue Schools students are met in both the short and long term. To accomplish this goal, the Facilities Master Plan endeavors to take into account all that has been accomplished to address the needs of existing facilities, identify what remains to be done, and set forth a path for moving forward. A primary goal is to ensure facility improvements become and remain proactive, rather than reactive, by anticipating building and systems life cycles and incorporating prudent financial planning.

With the early childhood center and high school projects complete, it is now time to turn energy and focus to the district's elementary schools (including the Fifth Grade Center) and middle school to ensure these facilities are also sufficient to meet the educational and enrollment needs of the students we serve. These are the projects on which this update of the Facilities Master Plan focus.

As can be seen in the following sections, which provide more detailed breakdowns of the needs of each individual building, the next phase of the Facilities Master Plan concentrates on replacing major infrastructures components currently reaching the end of their life cycles.

Examples include:

- Window Replacement
- Fire Suppression
- ADA Accessibility Improvements
- Security Improvements
- HVAC Replacement/Improvements
- Electrical Upgrades
- Plumbing Upgrades
- Parking Improvements

In addition, several buildings need additional classrooms and larger common spaces in order to appropriately accommodate current and projected enrollment. These buildings include Old Bonhomme Elementary, Spoede Elementary and Ladue Middle School.

### Sustainable Design

All planning, design and resulting construction incorporate a focus on:

- Optimal educational environments for both students and teachers
- Reduction of operational costs
- Protection of the environment

Following are examples of how the district incorporated sustainable design features into the renovation of Ladue Horton Watkins High School.

- The district received rebates and incentives from Ameren Corporation and Spire Inc. in excess of \$275,000 for incorporating certain features into the high school renovation project. These include conversion of incandescent and fluorescent lighting to LED technology, motion and timer control of the LED technology and curtain wall glazing using Low-E window systems with window shades.
- Upgrade of HVAC controls to better regulate the building's heating and cooling systems during occupied hours, while gaining energy setback savings at night and on the weekends.
- Replacement of antiquated boilers with efficient new technology gas boilers.
- Use of 3,606 square yards of carbon neutral flooring, reducing atmospheric carbon by 33 metric tons, or the equivalent of the emissions from a car traveling 80,992 miles.

As the district approaches improvements to the Fifth Grade Center during the summer of 2019, energy incentives as noted above for the high school will be employed.

The two main advantages of incorporating these and other sustainability features are increased energy efficiency and decreased routine maintenance. For example, the lifespan of LED lighting systems range from 8 to 10 years and operate at a fraction of the cost of incandescent and fluorescent lighting which last from just a few months to a few years.

In addition to incorporating these energy savings strategies for these larger projects, the Facilities Department incorporates retrofits on a smaller scale for gym, common area and exterior lighting, transitioning these systems in house, when appropriate.

## Seismic Upgrades

Seismic renovations required of the district as renovations and expansions are made are included in the Facilities Master Plan. Any additional levels of upgrades to seismic enhancements still need to be discussed and identified.

## Physical Specifications of Current Facilities

Buildings	Original Building	Additions	Acreage
Ladue Horton Watkins High School	1952	1953, 1961, 1965, 1971, 2002, 2009, 2018	27.25
Ladue Middle School Campus			30.8
Ladue Middle School	1959	1965, 1994, 2009	
Administrative Center	1960		
Warehouse/Maintenance	1965	1985	
West Campus	2011		30
Fifth Grade Center	2013		
Early Childhood Center	2011		
Conway	1949	1954, 1958, 1992, 2002, 2008	5.56
Old Bonhomme	1954	1956, 1959, 1991, 2002, 2008	8
Reed	1938	1954, 1991, 2002, 2006	6.1
Spoede	1949	1954, 1991, 2002, 2006	9.8

<b>Building</b>	<b>Square Footage</b>
Conway Elementary School.....	60,150
Old Bonhomme Elementary School.....	54,100
Reed Elementary School.....	65,465
Spoede Elementary School .....	64,152
Fifth Grade Center.....	120,722
Ladue Middle School .....	144,828
Ladue Horton Watkins High School.....	374,298
Ladue Early Childhood Center.....	50,000
Maintenance.....	14,100
Administrative Center .....	10,704
<b>TOTAL.....</b>	<b>958,519</b>



## Financial Considerations

In any conversation regarding the funding of capital projects, it is important to discriminate between the uses of funds derived from the district's operating tax levy, the district's debt service (or bond) levy and other sources. Specifically, for purposes of discussion regarding the Facilities Master Plan, the following points are important to note:

- Operating taxes support the day-to-day operation of the schools, including salaries, utilities, etc. The Ladue School District's 2018 total adjusted operating tax levy is \$3.0715 and remains the lowest total adjusted operating tax levy in St. Louis County. The next lowest to Ladue School's total adjusted operating tax levy is Clayton's at \$3.2425, with Affton having the highest total adjusted operating tax levy at \$5.4694.
- A portion of the operating budget is generally set aside for capital needs such as repairs and maintenance of existing district facilities, as well as minor renovations and equipment.
- Income derived from the sale or lease of district property must be used for facility renovation or improvement. It cannot be used to fund the daily operations of the school district (salaries, utilities, transportation, etc.) However, by doing so, the district may be able to set aside fewer dollars derived from the operating tax levy to be placed in the capital fund and reallocate those dollars for other district operating purposes.
- As the Facilities Master Plan continues to be implemented, the district will take advantage of sustainable planning, design and construction processes to ensure the impact on the operating budget is as minimal as possible. While the district has little control over utility costs, sustainable design and construction will ensure our buildings operate as efficiently as possible from project completion through the life cycle of the buildings and systems.
- Debt service taxes repay bond debts incurred for facility improvements that have been previously and specifically approved by voters, as noted in the history of the district's requested and approved bond levies.
- In 2018, Ladue Schools debt service levy was set at \$.78 and was thirteenth out of the 22 districts in St. Louis County with Mehlville's being the lowest at zero, and Normandy's being the highest at \$1.7336.

### Facilities Master Plan Financing

As noted in the summary and on the applicable individual building cost sheets that follow, funding for components of this project will come from various sources, some of which have already been identified and some are yet to be determined. Following is a general overview.

- Improvements to the Fifth Grade Center have already been approved by the Board of Education. Funding for the project will come from existing resources, including funds remaining from the Proposition R bond referendum and the sale of the former Ladue Early Childhood Center on Clayton Road.
- Improvements to Ladue Horton Watkins High School have already been approved by the Board, and will be funded primarily by donations garnered by the Ladue Education Foundation (LEF) and interest earned on Proposition R bond funds.
- The remaining projects, which include improvements to all four elementary schools, the middle school and the administrative center, are still in the planning and discussion phases. As they are refined, and if the Board of Education makes the decision to move forward with some or all of these plans, funding would likely be requested of district voters through a bond referendum.

### Escalation of Construction Costs and Construction Contingencies

Projections shown in the following sections reflect 2018 costs and include a 10% contingency. A 5% inflationary factor should be added annually.

## Next Steps

1. The Facilities Master Plan is designed to be a fluid document to be revised and expanded, as plans for implementation evolve. As discussions continue, additional information will be incorporated into the plan.
2. The solutions identified in this plan are recommendations developed from a high planning level. The programs and costs outlined here will need to be reviewed and significantly refined before projects are presented to stakeholders for consideration and/or implemented.
3. In addition, assuming the Board of Education continues to be generally in favor of proceeding with some or all of the projects encompassed in the Facilities Master Plan – in whatever timeline is eventually determined – administration recommends beginning a community education process immediately. As took place in the years preceding the bond levies requesting funding for a new early childhood center and renovation of the high school, significant and deliberate effort will need to be put forth to ensure the community understands the background and specific needs motivating the development and implementation of the Facilities Master Plan.





Ladue School District  
Master Plan - Building Summary

Building	Current Building Statistics (2018)							Building Statistics with Proposed Improvements							Proposed Improvements		Cost Estimate
	Overall Existing Area (sf)	Enrollment	Average Core Classroom Siz (sf)	# Core Classrooms*	# Specialty Classrooms **	Building Capacity per Ladue Schools Guidelines**	Addition Area (sf)	Demolition Area (sf)	Resulting Overall Area (sf)	Highest Enrollment Projected (w/in next 5 yrs.)	Average Core Classroom Size (sf)	# Core Classrooms*	Specialty Classrooms**	Projected Enrollment +/-	Core Classrooms +/-	Future Building Capacity per Ladue Schools Guidelines*** Based on 2018 construction costs. 5% inflationary factor should be added annually.	
SUMMER 2019 (APPROVED; SCHEDULED; FUNDED THROUGH EXISTING RESOURCES)																	
Fifth Grade Center	120,722	316	720	20	6	480		-6,347	114,375	387	720	22	6	71	2	528	\$ 6,268,123
Ladue Horton Watkins High School	363,010	1,271	825	61	51	1,708			363,010	1,308	825	61	51	37		1,708	\$ 1,800,000

TOTAL

\$ 8,068,123

\* Science Labs are included in Core Classroom numbers

FUTURE PROJECTS (PLANNING IN PROCESS; TIMING AND FUNDING TO BE DETERMINED)																	
Conway Elementary	60,150	338	794	18	9	378			60,150	344	794	18	9	6		378	\$ 1,186,821
Old Bonhomme Elementary	54,100	435	770	21	6	441	12,300		66,400	457	770	25	6	22	4	525	\$ 8,676,408
Reed Elementary	65,465	411	806	21	5	441			65,465	441	806	21	5	30		441	\$ 1,300,102
Spoede Elementary	64,152	421	712	22	5	462	49,200	-48,152	65,200	436	800	28	5	15	6	588	\$ 23,034,400
TOTAL																	\$ 34,197,731

Options for Ladue Middle School and Administration Building Improvements

Option One (Stand Alone Projects)

Ladue Middle School (Stand Alone Project)	144,828	963	676	55	8	1,375	29,344	TBD	TBD	1,019	800	60	8	56	5	1,500	\$ 23,202,424
Administration (Stand Alone Project)	10,704						500	TBD	TBD								\$ 2,347,000
Option One Subtotal																	\$ 25,549,424

Option Two (Combined Project)

LMS/Administration (Combined Project)	155,532	963	676	55	8	1,375	25,140	TBD	180,672	1,019	800	60	8	56	5	1,500	\$ 28,002,424
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FUTURE PROJECTS TOTALS

With Option One	399,399	2,568	3,758	137	33	3,097	91,344	TBD	TBD	2,697	3,970	152	33	129	15	3,432	\$ 59,747,155
With Option Two	399,399	2,568	3,758	137	33	3,097	86,640	TBD	437,887	2,697	3,970	152	33	129	15	3,432	\$ 62,200,155

\*\* Specialty Classroom Types Include: Music, Art, Computer Labs, Weight Room, FACS, Drama, Industrial Tech (as applicable)

\*\*\* Ladue Schools Guidelines for Maximum Students per Classroom:  
PreK: 19  
K-2: 20  
3-4: 22  
5: 24  
6-8: 25  
9-12: 28

Information current as of:  
June 6, 2018

# Conway Elementary School

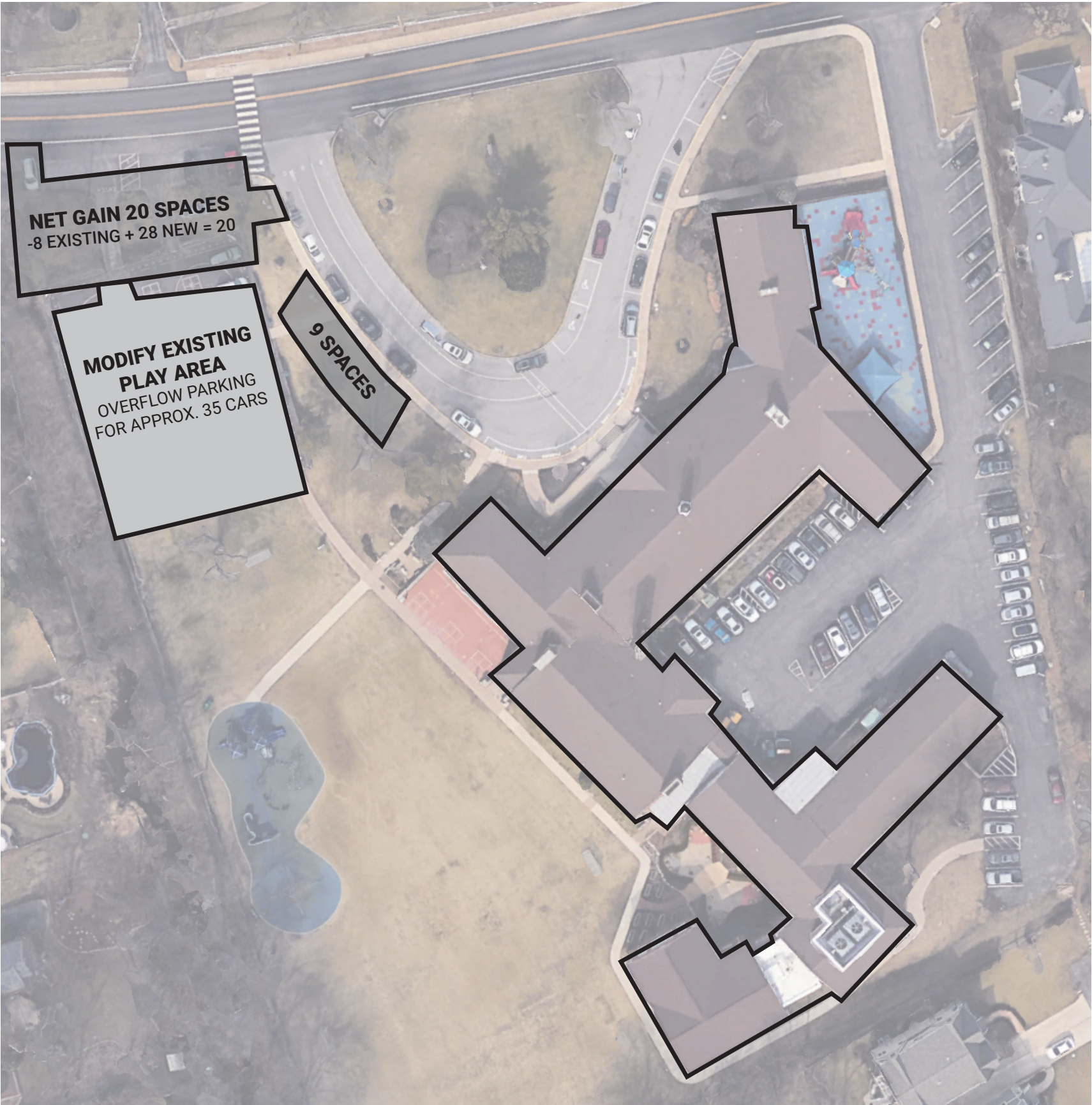
## Building Overview

	Current	Proposed
Campus Size	5.56 Acres	5.56 Acres
Building Sq. Footage (sf)	60,150 sf	60,150 sf
Stories	2	2
Enrollment	338	344*
# Core Classrooms	18	18
Average Core Classroom (sf)	794 sf	794 sf
Expected Building Lifespan	50+ years	50+ years

## Needs

Space Needs	General Facility Needs
(None)	Window Replacement
	Fire Suppression
	Expanded Parking

Cost Estimate: \$1,186,821





# Old Bonhomme Elementary School

## Building Overview

	Current	Proposed
Campus Size	8 Acres	8 Acres
Building Sq. Footage (sf)	54,100 sf	66,400 sf
Stories	1	1
Enrollment	435	457
# Core Classrooms	21	25
Average Core Classroom (sf)	770 sf	770 sf
Expected Building Lifespan	40+ years	40+ years

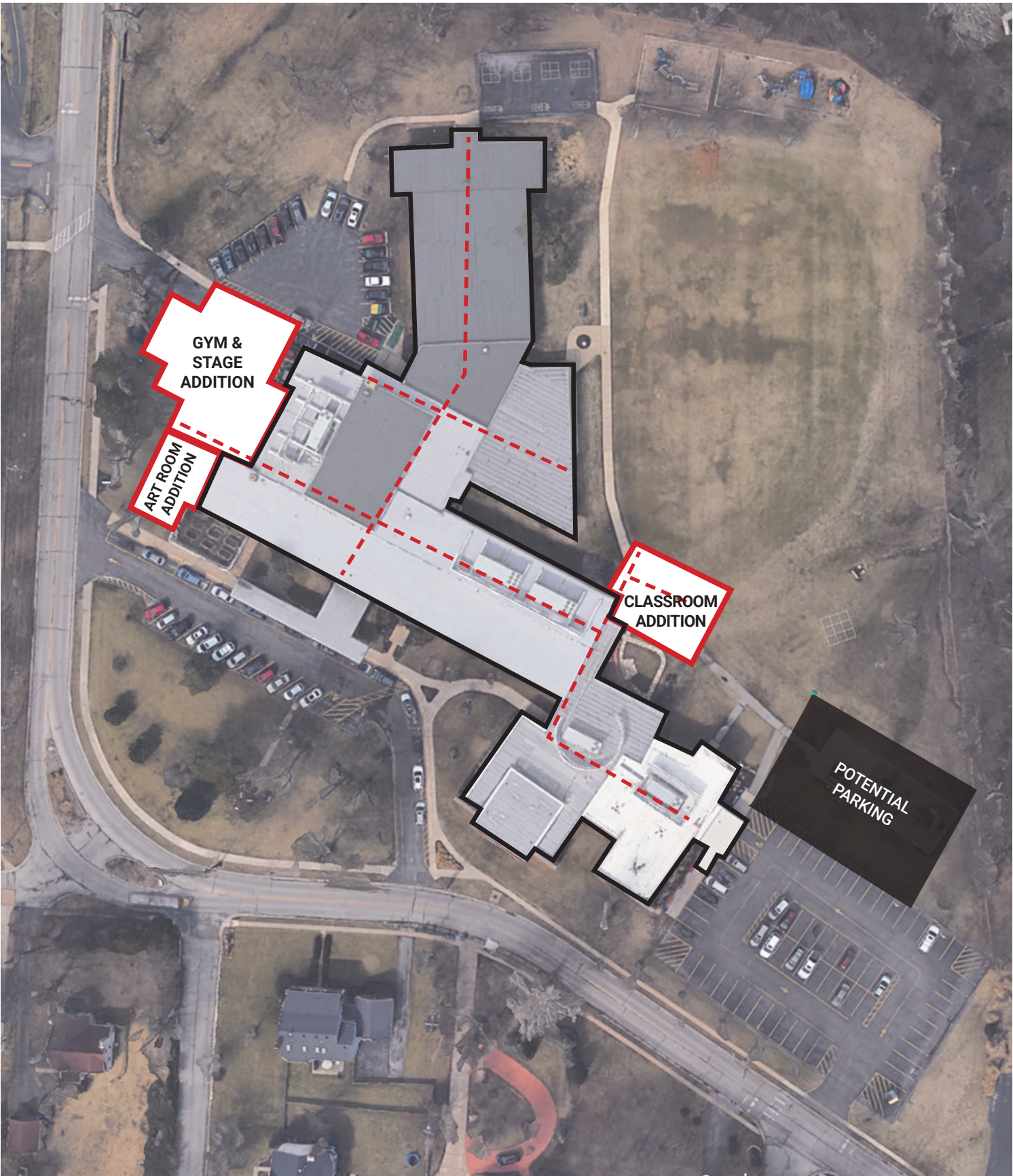
## Needs

Space Needs	General Facility Needs
Spaces currently below MSIP Standards:	Window Replacement
- Gym: (2,384)	Fire Suppression
- Cafeteria: (544)	ADA Improvements
- Library: (238)	Minor Abatement
- Art Room: (189)	Minor Security Improvements
- Nurse's Suite: (388)	Signage
Science Lab	Exterior Lighting
Classrooms (4)	Parking Improvements
	Seismic Retrofits

## Recommended Solutions

Space Solutions	General Facility Solutions
Gym addition w/stage and art room (8,300 sf)	Replace Windows
Renovate existing gym into cafeteria (serve out of existing kitchen)	Renovate classroom into science lab
Renovate existing cafeteria into multipurpose space	Reconfigure nurse's suite
Move classroom function out of library	Install fire suppression
Renovate art room into classroom	Seismic retrofits
4 additional core classrooms (800 sf each)	Signage
Additional art room addition	Reconfigure parking
	Exterior lighting
	Minor ADA improvements

Cost Estimate: \$8,676,408





# Reed Elementary School

## Building Overview

	Current	Proposed
Campus Size	6.1 Acres	6.1 Acres
Building Sq. Footage (sf)	65,465 sf	66,400 sf
Stories	3	1
Enrollment	411	441
# Core Classrooms	21	21
Average Core Classroom (sf)	806 sf	806 sf
Expected Building Lifespan	50+ years	50+ years

## Needs

Space Needs	General Facility Needs
(None)	Nurse's Suite Reconfiguration
	Window Replacement
	Fire Suppression

Cost Estimate: \$1,300,102





# Spoede Elementary School

## Building Overview

	Current	Proposed
Campus Size	9.8 Acres	9.8 Acres
Building Sq. Footage (sf)	64,152 sf	65,200 sf
Stories	3	1
Enrollment	421	436
# Core Classrooms	22	28
Average Core Classroom (sf)	712 sf	800 sf
Expected Building Lifespan	< 10 years	50+ years

## Needs

### Space Needs

Classrooms (6)

### General Facility Needs

- Building has differential settlement
- Poor site utilization
- Inadequate traffic circulation and limited room for future expansion

## Recommended Solutions

### Space Solutions

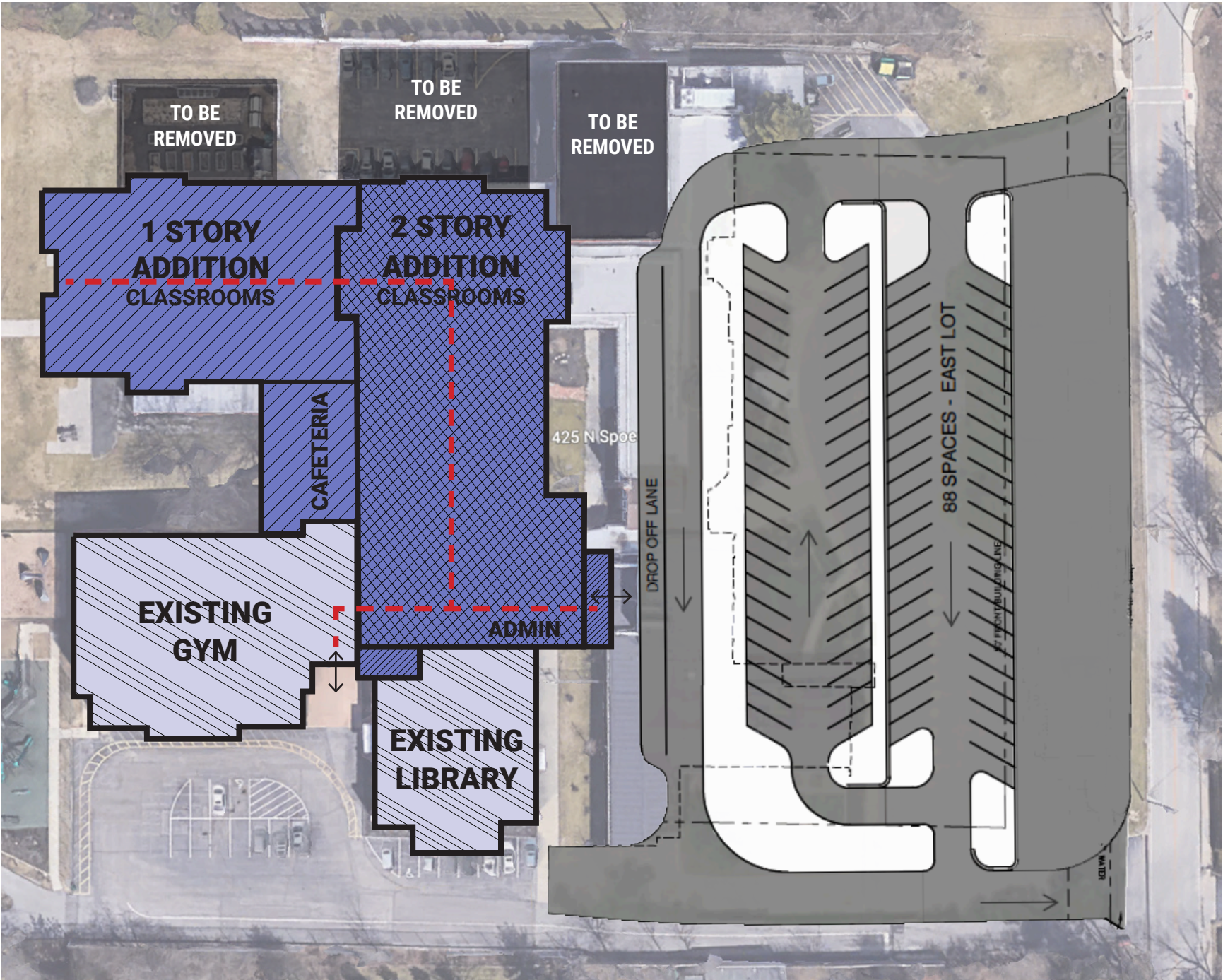
6 additional core classrooms  
New administration spaces  
New cafeteria  
Specialist classrooms  
Multipurpose space

### General Facility Solutions

New entrance  
Renovate existing spaces at connection to new construction  
Improve and expand site drop off and east parking lot  
Improvements at existing south parking lot  
Overflow parking lot turned back into play space  
Will meet MSIP, building and seismic codes  
New exterior signage

During construction (20-24 months), front half of existing building may be able to stay operational. If this is desired, modular classrooms will be needed.

**Cost Estimate: \$23,034,400**





# Fifth Grade Center

## Building Overview

	Current	Proposed
Campus Size	30 Acres	30 Acres
Building Sq. Footage (sf)	120,722 sf	114,375 sf
Stories	3	1
Enrollment	316	387
# Core Classrooms	20	22
Average Core Classroom (sf)	720 sf	720 sf
Expected Building Lifespan	50+ years	50+ years

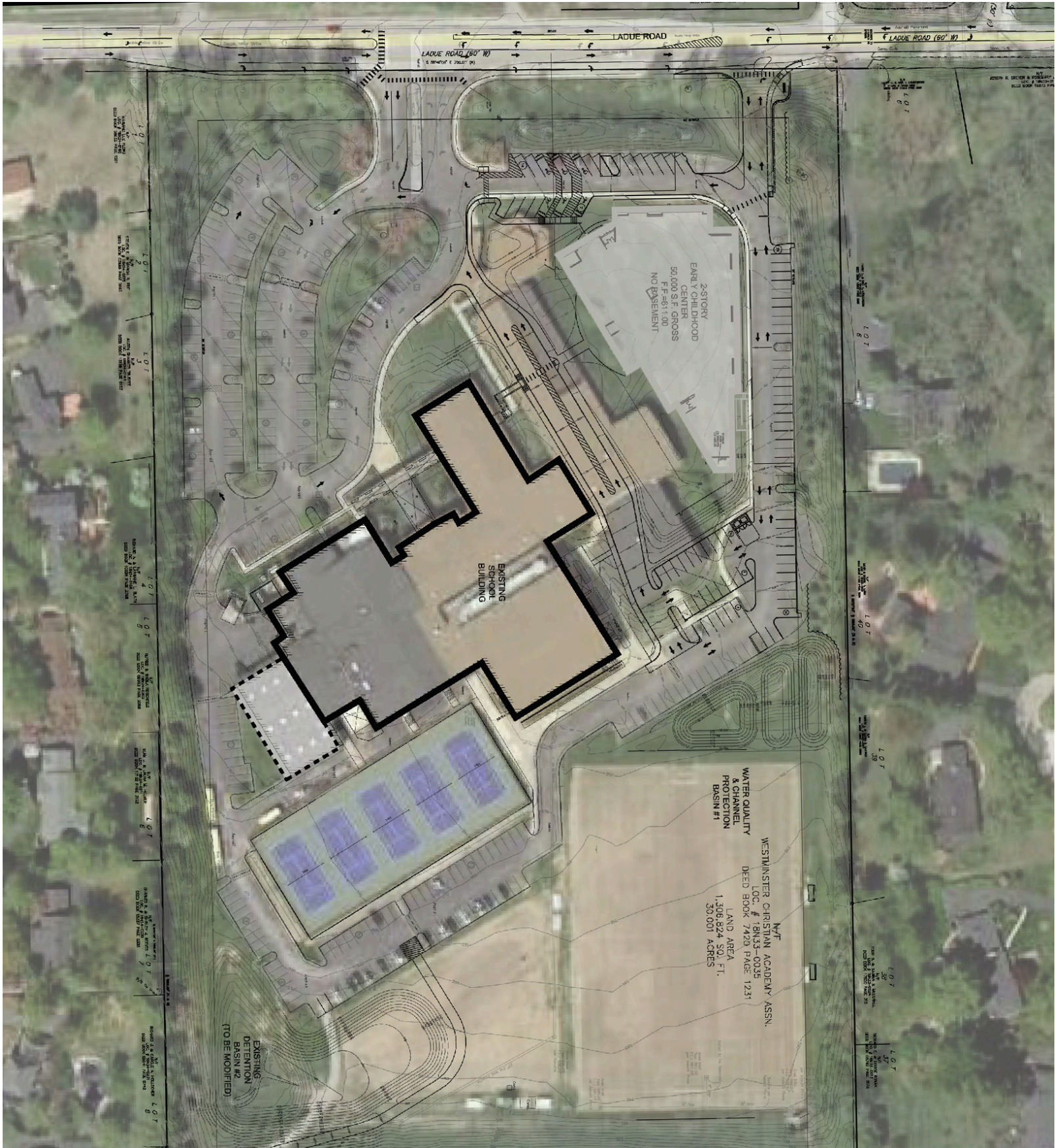
## Needs

Space Needs	General Facility Needs
Classrooms (2)	Fire Suppression
Natatorium unused	Air condition 1960 wing
	Replace classroom air conditioning units in 1999 wing
(Portions currently used for administrative offices)	ADA improvements
	Security upgrades

## Recommended Solutions

Space Solutions	General Facility Solutions
Demolish natatorium building or renovate to storage	Fire Suppression (entire facility)
	Air condition (entire facility)

Cost Estimate: \$6,268,128





# Ladue Middle School

## Option 1 - Stand Alone Project

### Building Overview

	Current	Proposed
Campus Size	30.8 Acres	30.8 Acres
Building Sq. Footage (sf)	144,828 sf	169,172 sf
Stories	2	2
Enrollment	963	1,019
# Core Classrooms	55	60
Average Core Classroom (sf)	676 sf	800 sf
Expected Building Lifespan	50+ years	50+ years

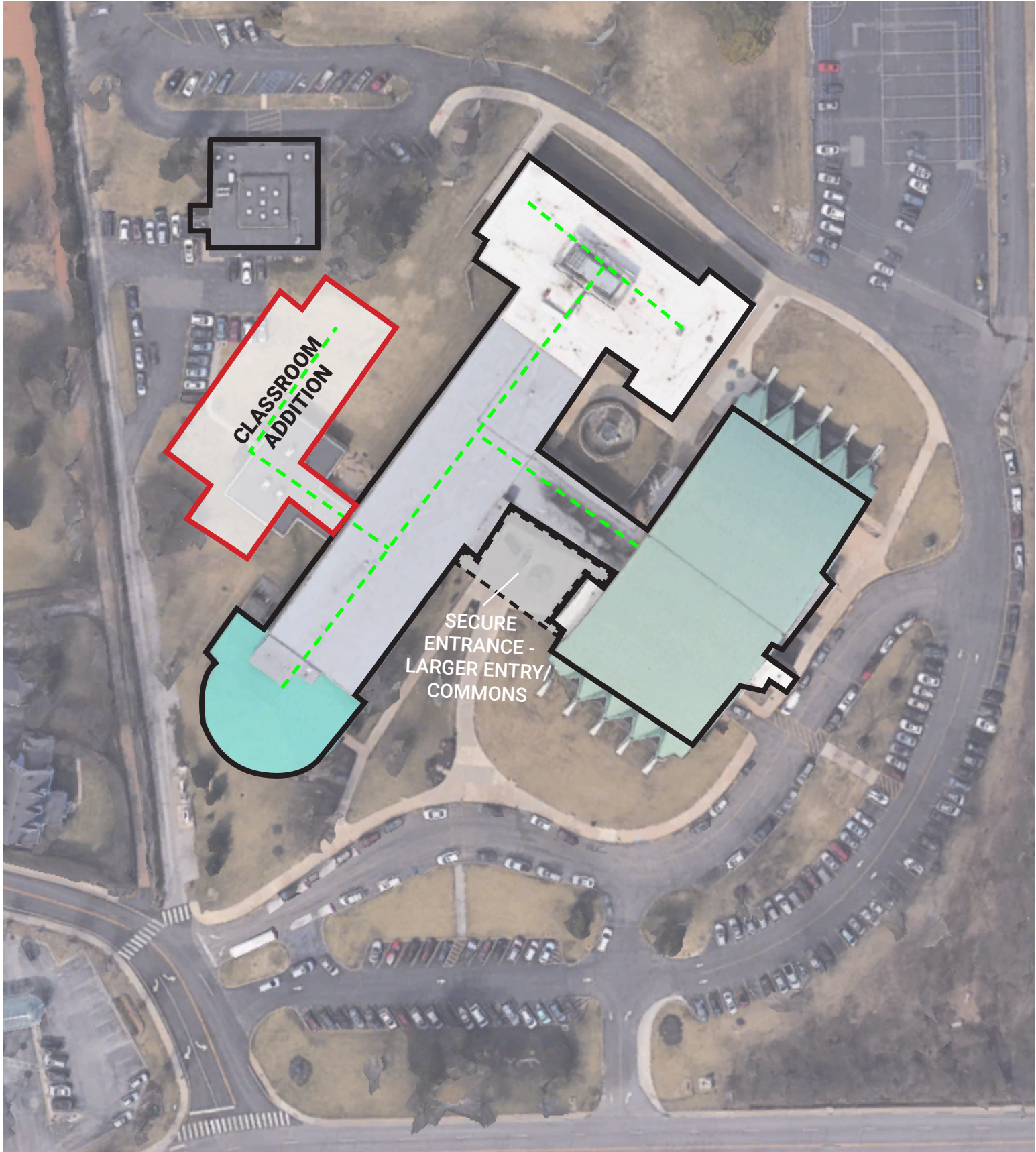
### Needs

Space Needs	General Facility Needs
General and elective classrooms are small and crowded	Window replacement in original building
Additional classrooms needed	ADA improvements
No room for additional growth	Signage
No dedicated SSD classrooms	Seismic retrofits
Additional building storage needed	Redundant chiller
Corridors congested during passing time	
Library below MSIP standards (-2,826 sf)	
Multipurpose/student commons	
Acoustic separation between cafeteria and kitchen for use after lunch	

### Recommended Solutions

Space Solutions	General Facility Solutions
Enhanced security at entrance	Gym entry plaza
2-Story classroom addition	Replace windows in original building
Renovate 1st and 2nd floor of original building	Renovate science rooms in original building
<ul style="list-style-type: none"><li>Combine 3 classrooms into 2 larger classrooms</li><li>Add storage</li><li>Increase width of corridor</li></ul>	Signage
Renovate 1st floor of original building	Minor ADA improvements
<ul style="list-style-type: none"><li>Convert classrooms to administrative, counseling and nurse office space, SSD classrooms</li></ul>	Minor security improvements
Expand media center and convert adjacent classrooms to media center support spaces	
Expand Elective space into former administrative offices	
Expand former LMS administrative office space to use for elective classrooms	

Cost Estimate: \$23,202,424





# Ladue Middle School/Administrative Center

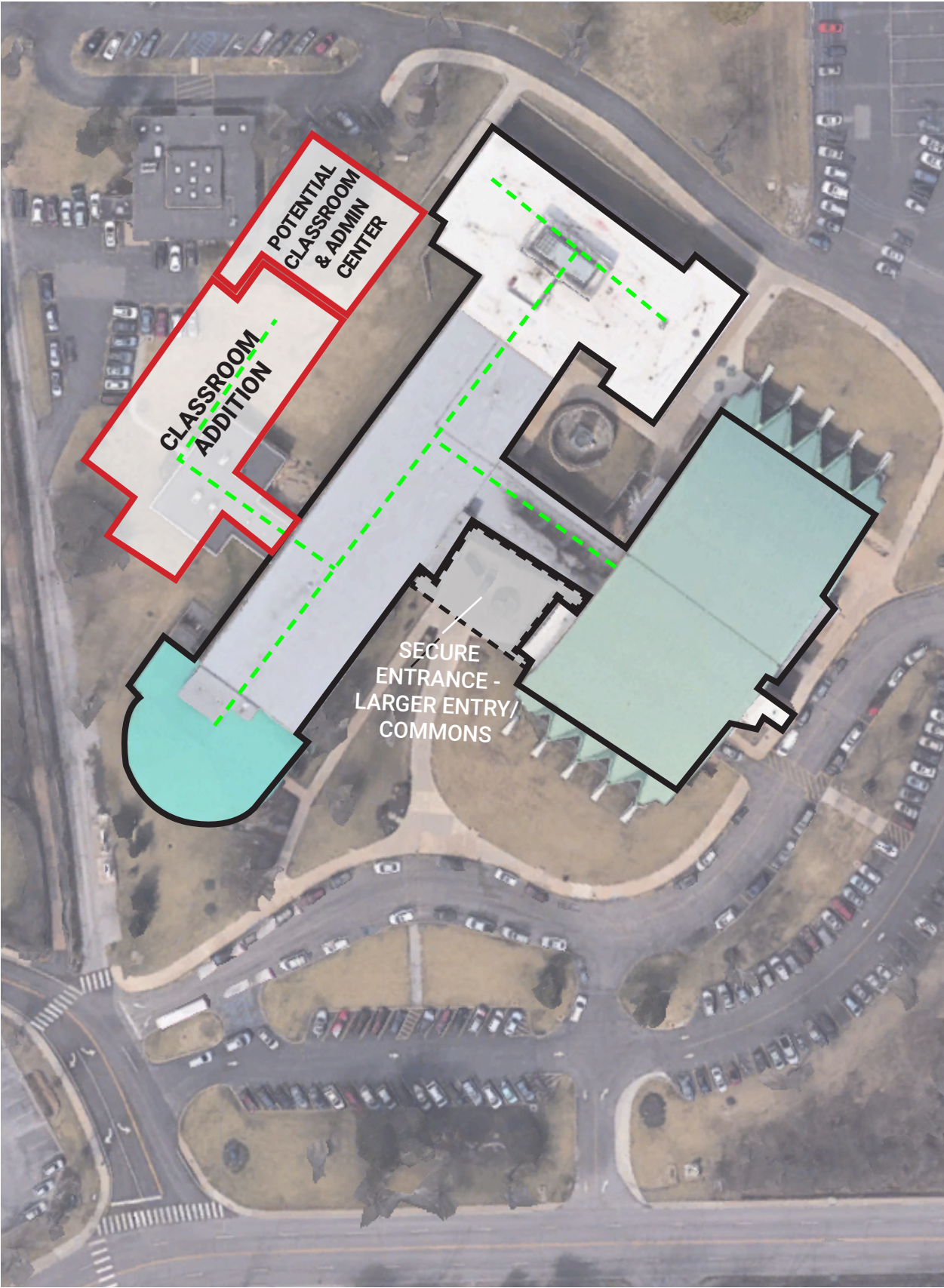
## Option 2 - Combined Project

Building Overview					
Ladue Middle School			Administrative Center		
	Current	Proposed		Current	Proposed/Projected
Campus Size	30.8 Acres	30.8 Acres	Campus Size	30.8 Acres	30.8 Acres
Building Sq. Footage (sf)	144,828 sf	169,172 sf	Building Sq. Footage (sf)	10,704 sf	11,500 sf
Stories	2	2	Stories	2	2
Enrollment	963	1,019	Enrollment	N/A	N/A
# Core Classrooms	55	60	# Core Classrooms	N/A	N/A
Average Core Classroom (sf)	676 sf	800 sf	Average Core Classroom (sf)	N/A	N/A
Expected Building Lifespan	50+ years	50+ years	Expected Building Lifespan	< 10 years	50+ years

Needs			
Ladue Middle School		Administrative Center	
Space Needs	General Facility Needs	Space Needs	General Facility Needs
<ul style="list-style-type: none"><li>General and elective classrooms are small and crowded</li><li>Additional classrooms needed</li><li>No room for additional growth</li><li>No dedicated SSD classrooms</li><li>Additional building storage needed</li><li>Corridors congested during passing time</li><li>Library below MSIP standards (-2826 sf)</li><li>Multipurpose/student commons</li><li>Acoustic separation between cafeteria and kitchen for use after lunch</li></ul>	<ul style="list-style-type: none"><li>Window replacement in original building</li><li>ADA improvements</li><li>Signage</li><li>Seismic retrofits</li><li>Redundant chiller</li></ul>	<ul style="list-style-type: none"><li>Overcrowded</li><li>Not enough offices at this location for current staff</li><li>Offices are outdated and many are of insufficient size</li><li>Circular Board Room is inefficient</li><li>Interdependent offices are separated with professional development and other offices at the Fifth Grade Center and the Technology Department at the high school</li></ul>	<ul style="list-style-type: none"><li>Window replacement</li><li>New HVAC, plumbing, electric and lights</li><li>Fire suppression</li><li>Fire alarm</li><li>ADA improvements, including elevator</li></ul>

Recommended Solutions			
Ladue Middle School		Administrative Center	
Space Needs	General Facility Needs	Space Needs	General Facility Needs
<ul style="list-style-type: none"><li>Enhanced security at entrance</li><li>2-story classroom addition</li><li>Renovate 1st and 2nd floor of original building<ul style="list-style-type: none"><li>Combine 3 classrooms into 2 larger classrooms</li><li>Add storage</li><li>Increase width of corridor</li></ul></li><li>Renovate 1st floor of original building<ul style="list-style-type: none"><li>Convert classrooms to Administrative, Counseling and Nurse office space, SSD classrooms</li></ul></li><li>Expand media center and convert adjacent classrooms to media center support spaces</li><li>Expand former LMS admin office space to use for Elective classrooms</li></ul>	<ul style="list-style-type: none"><li>Secure entrance/commons expansion</li><li>Replace windows in original building</li><li>Renovate science rooms in original building</li><li>Signage</li><li>Minor ADA improvements</li><li>Minor security improvements</li></ul>	<ul style="list-style-type: none"><li>Right-size office and conference room spaces to accommodate administrative and support staff and meeting room needs</li></ul>	<ul style="list-style-type: none"><li>New infrastructure, including HVAC, plumbing, electric and lights, fire suppression, fire alarm</li><li>ADA compliant</li></ul>

Cost Estimate: \$28,002,424





# Ladue Horton Watkins High School

## Building Overview

	Current	Proposed
Campus Size	27.25 Acres	27.25 Acres
Building Sq. Footage (sf)	363,010 sf	363,010 sf
Stories	3	3
Enrollment	1,271	1,308
# Core Classrooms	61	61
Average Core Classroom (sf)	825 sf	825 sf
Expected Building Lifespan	50+ years	50+ years

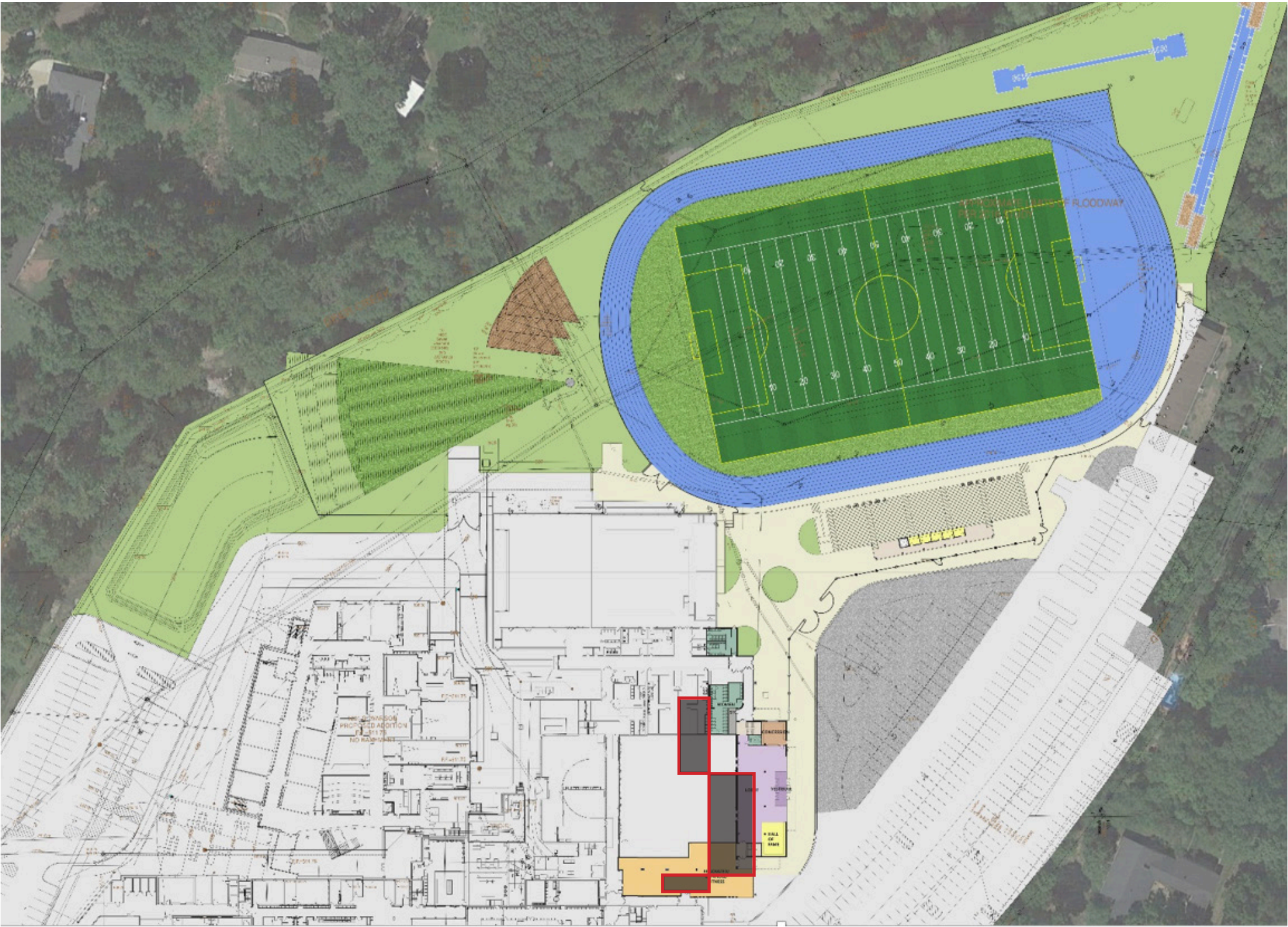
## Needs

Space Needs	General Facility Needs
<ul style="list-style-type: none"><li>• Additional restrooms based on new stadium capacity</li><li>• Health classrooms</li></ul>	<ul style="list-style-type: none"><li>• Additional surveillance cameras</li><li>• Update of Nielson Gym lobby</li><li>• Update stairwells</li><li>• Renovation of Fitness Center</li><li>• Adequate new/renovated concessions</li></ul>

## Recommended Solutions

Space Solutions	General Facility Solutions
<ul style="list-style-type: none"><li>• Reconfigure locker rooms space in the Ramming Center to accommodate additional restrooms</li><li>• Reconfigure space used by construction management during renovation for health classrooms</li></ul>	<ul style="list-style-type: none"><li>• Provide concession area to service both Nielson Gym and stadium and West Gymnasium attendees</li><li>• Renovate Fitness Center in line with athletic and physical education programming, as well as community use</li><li>• Cosmetic renovation of remainder of Nielson lobby and associated stairwells</li></ul>

Cost Estimate: \$1,800,000





# Administrative Center

## Option 1 - Stand Alone Project

### Building Overview

	Current	Proposed
Campus Size	Part of LMS Campus	Part of LMS Campus
Building Sq. Footage (sf)	10,704 sf	11,500 sf
Stories	2	2
Expected Building Lifespan	< 10 years	50+ years

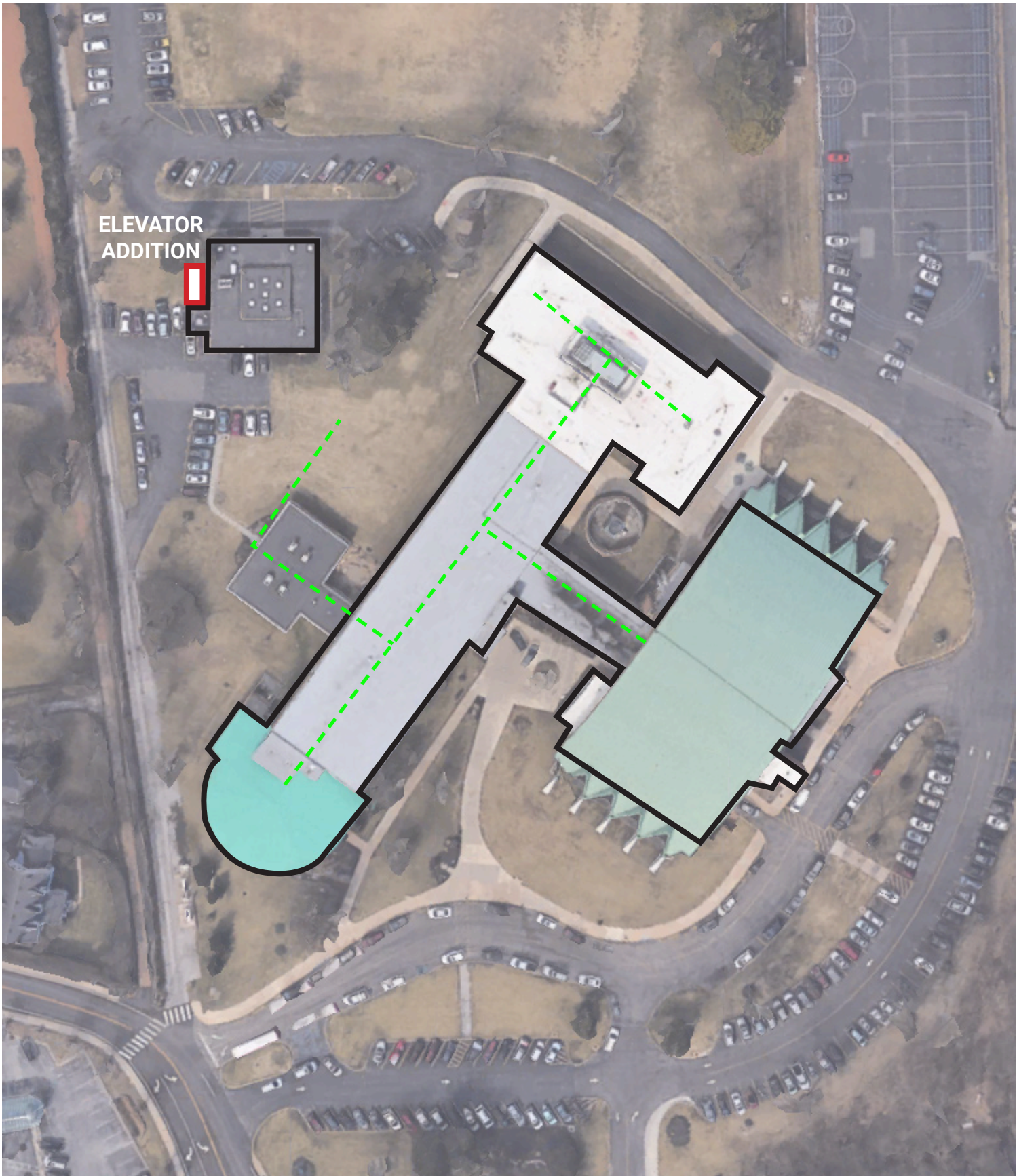
### Needs

Space Needs	General Facility Needs
Overcrowded	New HVAC, plumbing, electric and lights
Not enough offices at this location for current staff	Fire suppression
Offices are outdated and many are not of sufficient size	Fire alarm
Circular Board Room is inefficient	ADA improvements, including elevator
Interdependent offices are separated with professional development and other offices at the Fifth Grade Center and the Technology Department at the high school	

### Recommended Solutions

Space Solutions	General Facility Solutions
Removal and renovation of round Board Room to allow for more efficient office layout and larger conference room	Renovate existing building
	Upgrade HVAC, electrical, plumbing
	Elevator addition
	Install fire suppression
	Install fire alarm

Cost Estimate: \$2,347,000





## Ladue Master Plan Cost Estimate by Building Conway Elementary School

Improvement	Size	Unit	Cost	Total*	Notes
Replace Windows	3,815	sf	\$ 75	\$ 314,738	1
Fire Suppression	60,150	sf	\$ 7	\$ 463,155	
BMP			Allowance	\$ 200,000	2
Additional Parking (New Lot)	8,300	sf	\$ 6	\$ 51,128	
Additional Parking (Off Circle Drive)	2,500	sf	\$ 6	\$ 15,400	
School Saftey - Classroom Intruder Door Hardware			Allowance	\$ 32,400	
School Saftey - Other Items			Allowance	\$ 110,000	
<b>Conway Elementary Total</b>				<b>\$ 1,186,821</b>	

Estimates are based on 2018 construction costs. A 5% inflationary factor should be added annually to estimated costs.

### Notes

\* Includes 10% contingency

1 - Utility usage will decline with replacement

2 - MSD storm water management requirement

## Ladue Master Plan Cost Estimate by Building Old Bonhomme Elementary School

Improvement	Size	Unit	Cost	Total*	Notes
Replace Windows	3,980	sf	\$ 75	\$ 328,350	1
Gym Addition	7,120	sf	\$ 180	\$ 1,409,760	
Art Classroom Addition	1,180	sf	\$ 240	\$ 311,520	
Classroom Addition	4,000	sf	\$ 240	\$ 1,056,000	2
Utility Relocation			Allowance	\$ 22,000	
BMP			Allowance	\$ 200,000	3
Renovate Gym into Cafeteria	3,050	sf	\$ 140	\$ 469,700	4
Reconfigure Nurse's Office	600	sf	\$ 480	\$ 316,800	
Renovate Former Art Classroom into Classroom	910	sf	\$ 120	\$ 120,120	
Add Classroom windows at new addition			Allowance	\$ 14,300	
Install Fire Suppression	54,160	sf	\$ 7	\$ 417,032	
Hazardous Material Abatement			Allowance	\$ 35,000	
New Fire Alarm Panel			Allowance	\$ 15,000	
New HVAC System	54,160	sf	\$ 26	\$ 1,548,976	
Interior Signage			Allowance	\$ 11,000	
Additional Parking - East (Including Retaining Wall)	18,000	sf	\$ 9	\$ 173,250	5
ADA Renovations			Allowance	\$ 30,800	
FEMA Safe Room	4,000	sf	\$ 480	\$ 2,112,000	6
School Safety - Classroom Intruder Door Hardware			Allowance	\$ 34,800	
School Safety - Other Items			Allowance	\$ 50,000	
<b>Old Bonhomme Elementary Total</b>				<b>\$ 8,676,408</b>	

Estimates are based on 2018 construction costs. A 5% inflationary factor should be added annually to estimated costs.

### Notes

\* Includes 10% contingency

1 - Utility usage will decline with replacement

2 - 4 classrooms and hallway

3 - MSD storm water management requirement

4 - Reconfigure existing kitchen to serve new cafeteria

5 - Retaining wall requirement

6 - 600 People x 5 sf/person = 3,000 sf gym to be safe room

## Ladue Master Plan Cost Estimate by Building

### Reed Elementary School

Improvement	Size	Unit	Cost	Total*	Notes
Replace Windows	2,852	sf	\$ 75	\$ 235,290	1
Reconfigure Nurse's Office	600	sf	\$ 480	\$ 316,800	
Install Fire Suppression	86,599	sf	\$ 7	\$ 666,812	2
School Safety - Classroom Intruder Door Hardware			Allowance \$	31,200	
School Safety - Other Items			Allowance \$	50,000	
<b>Reed Elementary Total</b>			<b>\$</b>	<b>1,300,102</b>	

Estimates are based on 2018 construction costs. A 5% inflationary factor should be added annually to estimated costs.

#### Notes

\* Includes 10% contingency

1 - Utility usage will decline with replacement

2 - includes 21,134 sf of attic



## Ladue Master Plan Cost Estimate by Building Spoede Elementary School

Improvement	Size	Unit	Cost		Total*	Notes
Build New Elementary School	65,200	sf	\$	240	\$ 17,212,800	1
Reuse Existing Gym, Media Center and Adjacent Recent Additions	16,000	sf	\$	(200)	\$ (3,520,000)	2
BMP				Allowance	\$ 360,000	3
Hazardous Material Abatement				Allowance	\$ 120,000	
Demo Remaining Existing Building				Allowance	\$ 440,000	
Renovate Existing Spaces at New Connection	4,500	sf	\$	200	\$ 990,000	4
New East Parking Lot / Site Work				Allowance	\$ 462,000	
Improvements at Existing South Parking Lot				Allowance	\$ 61,600	
Exterior Signage				Allowance	\$ 11,000	
Furniture	1			Allowance	\$ 550,000	5
Include FEMA Safe Room	4,000	sf	\$	480	\$ 2,112,000	6
<b>Spoede Elementary Sub-Total</b>				<b>\$ 18,799,400</b>		
Modular classrooms during construction (28 Total)	14	Units	\$	275,000	\$ 4,235,000	7
Each unit = 2 Classrooms						
<b>Spoede Elementary School Total</b>				<b>\$ 23,034,400</b>		

Estimates are based on 2018 construction costs. A 5% inflationary factor should be added annually to estimated costs.

### Notes

\* Includes 10% contingency

1 - Maintain recent additions

2 - Credit for keeping existing spaces

3 - MSD storm water management requirement

4 - Library size will increase

5 - New Furniture

6 - 688 People x 5sf/person = 3,440 sf Cafeteria as Safe Room

7 - Additional new trailers

## **Fifth Grade Center Cost Sheet**

### **Project Scheduled for Summer 2019**

The Board of Education approved this project on March 11, 2019, for completion in the summer of 2019. Funding for the project will come from existing resources including funds remaining from the Proposition R bond referendum and the sale of the former Ladue Early Childhood Center on Clayton Road.

The district's contract with Ameresco, Inc. was amended to include this project at a cost of \$6,268,123 with the scope of the project as follows:

#### General Scope

- Fire and life safety systems
- Upgraded fire panel and devices where applicable
- 100% fire suppression
- Intruder resistant film at main entry
- Front office presence at main entry
- Replacement of approximately 100 windows with new efficient low E units
- Replacement of glass curtain wall at cafeteria with knee wall and intruder resistant glass system. Glass will also have tinted windows to reduce visibility inside
- Slab to slab demising walls throughout facility to provide corridor fire rating as well as return plenum
- Repurpose pool area into district storage

#### Lighting

- LED retrofit for entire facility (combo of new and retrofitted)
- Elimination of battery inverter (emergency lighting will now be self-contained)
- All classrooms receive 60/40 dimmable new fixtures to replace existing up-light fixtures
- Other fixtures to be either renovated or replaced with appropriate type fixtures/retrofit kits
- Motion detection, light harvesting applications to be incorporated as required by code

#### HVAC

- 1965 wing will have total climate control
- All new rooftop units for makeup and delivered air for entire facility including new gym
- 51 heat pumps will supply conditioned filtered air to the individual rooms. Gyms and cafeteria will be supplied by RTU's and air handlers



- Reuse existing district installed air handler/incorporate electric heat for cafeteria
- Rebuild one fluid cooler/add additional in tower well

#### Electrical

- New right-sized distribution and branch circuiting for 1965 wing and replacement of non-grounded panels and distribution system with grounded three-phase system to accommodate additional heat pumps

**Ladue Master Plan Cost Estimate by Building**  
**Ladue Middle School - Option I (Stand Alone Project)**

Improvement	Size	Unit	Cost	Total*	Notes
Demolish Existing One-story Wing	5,000	sf	\$ 12	\$ 66,000	
Seismic			Allowance	\$ 500,000	
Add Wing of Classrooms to Northwest	29,344	sf	\$ 240	\$ 7,746,816	1
Secure Entrance/Multipurpose	6,000	sf	\$ 220	\$ 1,320,000	
Replace Windows in Original Building	5,931	sf	\$ 75	\$ 489,308	2
Interior Signage			Allowance	\$ 15,000	
Enlarge Media Center / Computer Lab			Allowance	\$ 28,000	
BMP			Allowance	\$ 350,000	3
Renovate Original Building Classrooms	40,600	sf	\$ 120	\$ 5,359,200	4
Kitchen / Cafeteria Minor Modifications			Allowance	\$ 15,000	5
Replace Existing Chairlifts			Allowance	\$ 82,500	6
Mechanical			Allowance	\$ 500,000	7
Abatement of Hazardous Material			Allowance	\$ 500,000	
Include FEMA Safe Room	5,500	sf	\$ 480	\$ 2,904,000	8
School Safety - Classroom Intruder Door Hardware			Allowance	\$ 81,600	
School Safety - Other Items			Allowance	\$ 220,000	9
<b>Ladue Middle School Sub-Total</b>				<b>\$ 20,177,424</b>	
Modular Classrooms during Construction	10	units	\$ 275,000	\$ 3,025,000	
<b>Ladue Middle School Grand Total</b>				<b>\$ 23,202,424</b>	

**Ladue Middle School - Option 2 (House Administrative Center w/in Middle School)**

Improvement	Size	Unit	Cost	Total*	Notes
Wing to House Administrative Center and Classrooms	20,000	sf	\$ 240	\$ 4,800,000	

Estimates are based on 2018 construction costs. A 5% inflationary factor should be added annually to estimated costs.

**Notes**

\* Includes 10% contingency

1 - Similar in size to eighth-grade wing

2 - Utility usage will decline with replacement

3 - MSD storm water management requirement

4 - Classrooms, Admin/Nurse office

5 - Acoustic separation, rolling gates & ceiling modifications

6 - \$15,000 each, assuming 5

7 - Redundant chiller

8 - Classrooms as Safe Room 1,100 x 5sf/person = 5,500

9 - Secure entrance



## **Ladue Horton Watkins High School Cost Sheet**

### **Project Scheduled for Summer 2019**

The projects outlined below are being prepared for implementation. This project was approved by the Board of Education on April 9, 2019. The project is anticipated to cost \$1.8 to \$2 million and will be funded primarily by donations garnered by the Ladue Education Foundation (LEF) and interest earned on Proposition R bond funds.

Using a conservative estimate of \$1.8 million to continue the planning process, the specific components of the project are as follows:

#### **Contracted Construction**

Health Classrooms (Not to exceed \$125,000). The high school has seven sections of Health as a state requirement. This will provide the program with a dedicated space beginning in the 2019-20 school year.

Restrooms / Concessions / Stairways / Halls / Nielson Lobby (Not to exceed \$1,425,000). The need for restrooms and concessions to accommodate the stadium will intensify in the fall. St. Louis County code requires a specific count of toilets per the number of spectators the stadium will accommodate. The stadium bleacher system capacity is 2,002 people.

A cosmetic renovation of paint, floor covering, ceilings, and fixtures in the adjacent stairways, hallways and the lobby will occur. The east restroom in the lobby is currently being evaluated for demolition to provide additional space. Updated trophy cases will be constructed, as well.

#### **Projects Overseen by the District (Not a contractor)**

Surveillance cameras for the high school and West Campus (FGC) exteriors, as well as additional video coverage in the interior of the high school. (Not to exceed \$150,000)

Fitness Center Renovation (Labor and materials funded by district operating budget)

Feasibility Study for all other district buildings cited for improvements in the Facilities Master Plan. (Not to exceed \$100,000)

## Ladue Master Plan Cost Estimate by Building Administrative Center

Renovate Existing Building*	Size	Unit	Cost	Total**	Notes
Elevator Addition			Allowance \$	275,000	
Fire Suppression	11,000	Sf	\$ 7	\$ 84,700	
Fire Alarm Panel			Allowance \$	15,000	
Mechanical	11,000	Sf	\$ 26	\$ 314,600	
Roof Replacement	11,000	Sf	\$ 23	\$ 278,300	
Renovate Interior Spaces - Optional	11,000	Sf	\$ 100	\$ 1,210,000	
Replace Lighting w/ LEDs - Optional	11,000	Sf	\$ 14	\$ 169,400	1
<b>Total Administration Building</b>			<b>\$</b>	<b>2,347,000</b>	

\* See Ladue Middle School Phase II for option to demolish existing building and rebuild as annex to Ladue Middle School.

\*\* These estimates are based on 2018 construction costs. A 5% inflationary factor should be added annually to estimated costs.

1 - Including heavy abatement