



Ludington Area Schools

Facilities Development Update

October 10, 2018

LUDINGTON AREA SCHOOLS

Snapshot of Current Facilities



Ludington Area Schools Building Summary		
Name of Building: Lakeview Elementary		
Total Square Feet:	29,000	
Current Student Population:	212	
Number of Classrooms:	15	
Approximate Year of initial Construction:	1964	
Additions:		
Year	Square Feet	Description
1971	6,500	Library, Gym and Kitchen
1991	750	Office Area
Name of Building: Foster Elementary		
Total Square Feet:	45,000	
Current Student Population:	451	
Number of Classrooms:	16	
Number Used:	12	
Approximate Year of initial Construction:	1925	
Includes 2008 addition		
Additions:		
Year	Square Feet	Description
1969	10,500	Library, 5 classes
1991*	9,400	Renovation, extension
2008	4000	Renovation, extend 2 rooms.
* 1991 project 3 phases		

Ludington Area Schools Building Summary		
Name of Building: Franklin Elementary		
Total Building Square Feet:	26,500	
Current Student Population:	263	
Number of (Building) Classrooms:	15	
Approximate Year of initial Construction:	1957	
Additions:		
Year	Square Feet	Description
1963	8,712	5 Classes
1973	4,500	Library
Name of Building: South Hamlin		
Total Building Square Feet:	18,835	
Current Student Population:	Unknown	
Number of (Building) Classrooms:	9	
Approximate Year of initial Construction:	1953	
Additions:		
Year	Square Feet	Description
1956	3,380	4 classes
1973	8,690	Library, kitchen, gym, office

LUDINGTON AREA SCHOOLS

Snapshot of Current Facilities



Ludington Area Schools Building Summary		
Name of Building: Pere Marquette Elementary		
Total Building Square Feet:	14,346	
Current Student Population:	175	
Number of (Building) Classrooms:	7	
Additional Portable Classes:	2	
Approximate Year of initial Construction:	1965	
Additions:		
Year	Square Feet	Description
1997	560	Title 1, Health/speech room, Conference and Office space
	1,680	Portable, 2 classes
The portable is not part of square footage total above. It is not attached to the building.		
Name of Building: O.J.. DeJonge Jr. High		
Total Square Feet:	105,867	
Current Student Population:	537	
Number of Classrooms:	30	
Approximate Year of initial Construction:	1965	
Includes 1997 square footage		
Additions:		
Year	Square Feet	Description
1970	34,000	18 classes
1974	42,400	Auditorium, Gym/Cafeteria
1997	5,867	Renovate, and add 2 science rooms.

Ludington Area Schools Building Summary		
Name of Building: Ludington High School		
Total Square Feet:	95,280	
Current Student Population:	667	
Number of Classrooms:	41	
Approximate Year of initial Construction:	1953	
Additions:		
Year	Square Feet	Description
1957	31,800	17 Classes: shop, kitchen, and cafeteria
1969	3,730	3 Classes: S.E. complex
1974	9,250	4 classes: Auto, draft, graph
1990	2,000	Expand/Remodel Science
Name of Building: Administration Building		
Total Square Feet:	13,050	
Current Student Population:	Not applicable	
Number of Classrooms:	Not applicable	
Approximate Year of initial Construction:	1974	
Additions:		
Year	Square Feet	Description
1984	8,685	ERC and warehouse



LASD Strategic Plan Adopted by Board of Education: January 19, 2015

Ludington Area Schools Strategic Planning Summary

MISSION STATEMENT

The Ludington Area School District, in partnership with parents and community, will educate and empower students to adapt and succeed in their future.

VISION STATEMENT

Ludington Area School students will graduate from a top-performing district, confident and prepared with the knowledge and skills required for their success in the global community.

BELIEF STATEMENTS

- ◆ High expectations for students and staff result in high achievement.
- ◆ High quality teaching is the most important factor for student learning.
- ◆ Students have a right to a safe environment in which diversity, citizenship and work ethic are nurtured.
- ◆ All students want to learn, be challenged, and supported.
- ◆ Students will take ownership of their own learning when inspired by excellent instruction.
- ◆ Education is a partnership among students, parents, district staff, and the community.
- ◆ Students must be prepared in all content areas for the global community, equipped with the thinking and social skills necessary for success.
- ◆ All decisions for the district must be made based on the best options for students while remaining fiscally responsible.

STRATEGIC FOCUS AREAS

- Student Achievement
- Communication/Community Engagement
- Facilities
- Financial
- Learning Environment
- Technology



STUDENT ACHIEVEMENT

Strategic Goal Statement: All students in the Ludington Area School District will increase their performance in all content areas.

Objectives:

- Increase performance of all students in core curriculum areas (math, science, writing, reading, social studies).
- Establish and implement vertical and horizontal alignment of the curriculum pre-k to post-secondary.
- Develop a transitional plan for students pre-k to post-secondary (academic guidance & career pathways).

COMMUNICATION/COMMUNITY ENGAGEMENT

Strategic Goal Statement: We will connect and communicate with the community.

Objectives:

- Establish more cohesive, effective, consistent communication system.
- Build partnerships with local businesses and community to create opportunities for our students.
- Develop the community schools model to provide additional services for students within the school setting.

FACILITIES

Strategic Goal Statement: Develop and prepare a facilities improvement plan that will evaluate the cost effectiveness of upgrading existing facilities vs. new construction.

Objectives:

- Create a committee of administrators, teachers, other school personnel and community members to develop a long-term facilities plan through consultation with a construction management firm.

FINANCIAL

Strategic Goal Statement: The Ludington Area Schools shall obtain a fund balance to current operating expense ratio of 10% or greater.

Objectives:

- Utilize technologies to gain efficiencies and cost savings.
- Develop a plan to inform and encourage families to apply for free/reduced programming.
- Investigate industry best practices for spending.

LEARNING ENVIRONMENT

Strategic Goal Statement: Create an interesting, challenging and supportive culture of learning for all.

Objectives:

- Provide professional development for staff on how to best differentiate instruction.
- Develop a plan at each school to ensure all students have a connection with at least one adult in the school community (parents, mentors, staff members, coaches, etc.)

TECHNOLOGY

Strategic Goal Statement: Ludington Area School District will use technology to establish a partnership with the community to motivate parent, student and teacher learning.

Objectives:

- Investigate options for families who don't have access to wifi.
- Create online and offline learning opportunities for parents, students, and teachers.
- Establish grade level expectations with the implementation of technology to ensure proper usage and positive student growth.

Focus Areas: Facilities

Strategic Goal Statement:

Develop and prepare a facilities improvement plan that will evaluate the cost effectiveness of upgrading existing facilities vs. new construction.

Objective:

Create a committee of administrators, teachers, other school personnel and community members to develop a long term facilities plan through consultation with a construction management firm.

Adopted by the Ludington Board of Education on January 19, 2015

LASD Strategic Plan

Focus Areas: Facilities and Learning Environment

Ludington Area Schools Strategic Planning Summary

MISSION STATEMENT

The Ludington Area School District, in partnership with parents and community, will educate and empower students to adapt and succeed in their future.

VISION STATEMENT

Ludington Area School students will graduate from a top-performing district, confident and prepared with the knowledge and skills required for their success in the global community.

BELIEF STATEMENTS

- High expectations for students and staff result in high achievement.
- High quality teaching is the most important factor for student learning.
- Students have a right to a safe environment in which diversity, citizenship and work ethic are nurtured.
- All students want to learn, be challenged, and supported.
- Students will take ownership of their own learning when inspired by excellent instruction.
- Education is a partnership among students, parents, district staff, and the community.
- Students must be prepared in all content areas for the global community, equipped with the thinking and social skills necessary for success.
- All decisions for the district must be made based on the best options for students while remaining fiscally responsible.

STRAATEGIC FOCUS AREAS

- Student Achievement
- Communication/Community Engagement
- Facilities
- Financial
- Learning Environment
- Technology



STUDENT ACHIEVEMENT

Strategic Goal Statement: All students in the Ludington Area School District will increase their performance in all content areas.

Objectives:

- Increase performance of all students in core curriculum areas (math, science, writing, reading, social studies).
- Establish and implement vertical and horizontal alignment of the curriculum pre-k to post-secondary.
- Develop a transitional plan for students pre-k to post-secondary (academic guidance & career pathways).

COMMUNICATION/COMMUNITY ENGAGEMENT

Strategic Goal Statement: We will connect and communicate with the community.

Objectives:

- Establish more cohesive, effective, consistent communication system.
- Build partnerships with local businesses and community to create opportunities for our students.
- Develop the community schools model to provide additional services for students within the school setting.

FACILITIES

Strategic Goal Statement: Develop and prepare a facilities improvement plan that will evaluate the cost effectiveness of upgrading existing facilities vs. new construction.

Objectives:

- Create a committee of administrators, teachers, other school personnel and community members to develop a long-term facilities plan through consultation with a construction management firm.

FINANCIAL

Strategic Goal Statement: The Ludington Area Schools shall obtain a fund balance to current operating expense ratio of 10% or greater.

Objectives:

- Utilize technologies to gain efficiencies and cost savings.
- Develop a plan to inform and encourage families to apply for free/reduced programming.
- Investigate industry best practices for spending.

LEARNING ENVIRONMENT

Strategic Goal Statement: Create an interesting, challenging and supportive culture of learning for all.

Objectives:

- Provide professional development for staff on how to best differentiate instruction.
- Develop a plan at each school to ensure all students have a connection with at least one adult in the school community (parents, mentors, staff members, coaches, etc.)

TECHNOLOGY

Strategic Goal Statement: Ludington Area School District will use technology to establish a partnership with the community to motivate parent, student and teacher learning.

Objectives:

- Investigate options for families who don't have access to wifi.
- Create online and offline learning opportunities for parents, students, and teachers.
- Establish grade level expectations with the implementation of technology to ensure proper usage and positive student growth.

Adopted by the Ludington Board of Education on January 15, 2015



21st Century Think Tank Process



Facilities Assessment

Ludington Area School District 2018 Facility Assessment



Table of Contents:

Pere Marquette Elementary

- o Accessibility Assessment
- o Architectural / Interior Finishes Assessment
- o Building Envelope
- o Electrical
- o Food Service
- o Life Safety
- o Mechanical and Plumbing
- o Technology and Communications

Franklin Elementary

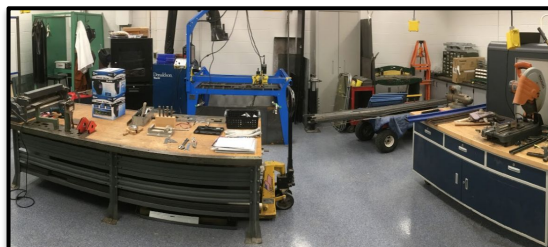
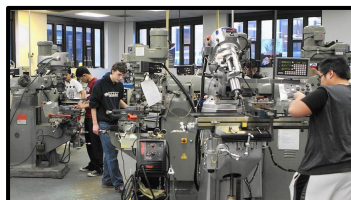
- o Accessibility Assessment
- o Architectural / Interior Finishes Assessment
- o Building Envelope
- o Electrical
- o Food Service
- o Life Safety
- o Mechanical and Plumbing
- o Technology and Communications

Lakeside Elementary

- o Accessibility Assessment
- o Architectural / Interior Finishes Assessment
- o Building Envelope
- o Electrical
- o Food Service
- o Life Safety
- o Mechanical and Plumbing
- o Technology and Communications

GMBae
GMB Associates, Inc.

Internal and External Site Visits



Research and Active Learning Ecosystems



Franklin Elementary Accessibility Assessment



Assessment Notes:

1. Interior

- The bathrooms observed throughout the school do not meet minimal levels of ADA compliance. This includes the six single occupant classroom toilets and the two gang bathrooms.
- The classroom sinks do not meet code requirements for a side or front approach.
- The platform, adjacent to the multi-purpose room, does not have any ADA access. A ramp or lift is needed to meet current code requirements.
- The classroom door handles are generally of a lever type and are in compliance.
- Most of the auxiliary rooms, i.e. bathrooms, custodial closets, storage closets, etc. have a knob type handle and need to be replaced with a lever type.



Assessment Categories:

- Accessibility
- Building Envelope
- Electrical / Lighting
- Food Service
- Interior Finishes
- Life Safety
- Mechanical / Plumbing

- There is no access from the west parking lot to the main entrance. The stairs should be reworked into an ADA compliant ramp for adequate access..



2. Exterior

- ADA auto operators observed at the main entrance doors. The interior, mullion mounted, actuator does not meet code requirements and should be replaced.
- There are no tactile warning strips observed at crosswalks.
- There is striped ADA parking with signage.
- The front walk is in good condition and easily navigable

LUDINGTON AREA SCHOOLS

Facilities Assessment



Item #	Franklin Elementary	TOTAL
	Subtotal Items	\$4,964,536
1	Remodel Toilet rooms throughout to meet ADA requirements	\$187,200
2	The Classroom sinks do not meet code requirements. Replace	\$85,800
3	ramp	\$10,400
4	Replace Interior door knobs with lever type handle	\$10,400
5	Replace actuator at the main entrance doors.	\$22,880
6	Install tactile warning strips at all crosswalks	\$36,400
7	adequate access.	\$260,000
8	Repair expansion joints in exterior brick where necessary.	\$77,688
9	Replace existing wood and metal soffit and fascia with new metal	\$174,460
10	Remove and replace all secondary exterior HM doors with FRP doors	\$23,296
11	Replace Roofing - See roofing report supplied by LPS	\$414,336
12	Reconfigure the food service serving area. Remodel Kitchen	\$468,000
13	Install a grease interceptor for the 3 compartment sink. Unable to verify	\$6,448
14	Install a hood for the existing residential stove/oven	\$3,570
15	Replace Carpet	\$98,280
16	Replace the flooring in the MP Room	\$56,160
17	Replace VCT Flooring at exterior doors with Ceramic Tile	\$12,688
18	Repair the Perforated Metal Panels Ceilings	\$133,120
19	Paint the ceiling in the MP Room	\$7,020
20	Paint the hard lid Ceilings	\$16,640
21	Remove and install new Casework for Classrooms	\$390,000
22	Remove and replace interior Doors	\$109,824
23	Provide Lockers or cubbies ILO hooks and shelves	\$140,400
24	Replace Markerboards throughout	\$37,440
25	Sprinkle the entire building	\$77,240
26	New Furniture	\$338,000
27	New HH'w System	\$228,800
28	Replace horizontal UV with YUV	\$280,800
29	Add Cooling to YUV (DX coils w/ Ground Mounted Units)	\$120,276
30	Building Lacks secure entry. Provide	\$258,700
31	Upgrade Playground equipment. Improve Fencing	\$348,400
32	Reconfigure Site	\$313,352
33	Electrical Upgrades	\$216,518

Summary for
Franklin
Elementary

LUDINGTON AREA SCHOOLS

Facilities Assessment

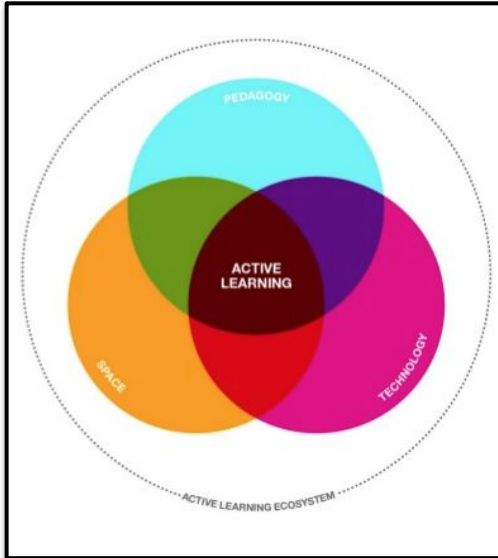


	LOCATION	Subtotal Cost: (Rounded)
	Franklin Elementary	\$4,965,000
	Lakeview Elementary	\$6,506,000
	High School	\$7,526,000
	Middle School	\$7,774,000
	Transportation Building	\$443,700
	Foster Elementary	\$3,996,513
	Athletics	\$3,576,000
	Pere Marquette	\$486,935
TOTAL DIRECT TRADE COSTS:		\$35,273,000
SUBTOTAL INDIRECT CONSTRUCTION COSTS:		\$7,196,000
TOTAL CONSTRUCTION COSTS:		\$42,468,000
TOTAL OWNER COSTS:		\$12,629,000
TOTAL CONSTRUCTION & OWNER COSTS:		
TOTAL ESTIMATED PROJECT COST :		\$55,097,000

Executive Summary from Facility Assessment



Research and Active Learning Ecosystems



Change is driven by pedagogy; Teaching methodologies are evolving as research about brain development evolves.

Technology needs careful integration; Students are digital natives, while teachers are usually digital adopters.

Space impacts learning; Interactive pedagogy requires learning spaces where everyone can see and interact with content; Fluidity supports diversity of learning styles.

Tips For New Classrooms

These tips for planning and designing new classroom environments have been developed with the Steelcase Human-Centered Design Research Process, conducted at schools and colleges across the U.S. and Canada. They are intended to provide some guiding tenets to those who plan education spaces, assisting in the design of more interactive and flexible learning spaces that give permission to act differently.



PEDAGOGY

- 1 Design to support fluid transitions among multiple teaching modes: lecture, team project, discussion, etc.
- 2 Design for peer-to-peer learning.
- 3 Allow freedom of movement for the instructor, enabling frequent interactions and ongoing assessment.
- 4 Support the implementation of professional development to increase adoption of new teaching strategies.
- 5 Set expectations for what an active learning environment looks like – learning is messy, things move.
- 6 Expose students to how these environments enable, support and allow them to take ownership of their learning.
- 7 Support individual learning.

TECHNOLOGY

- 1 Design for sharing, leveraging both vertical and horizontal surfaces for display; use projection and interactive surfaces.
- 2 Integrate, use and allow access to BYOD and instructional technology tools and devices.
- 3 Allow for displayed information to be persistent over time.
- 4 Ensure thoughtful planning occurs when selecting technology so the tools are used as intended to enhance outcomes.
- 5 Be intentional about what technologies should be used and how to support pedagogical strategies.
- 6 Incorporate tools that support synchronous and asynchronous learning and collaboration.
- 7 Support learning styles with both analog and digital means to co-create.

SPACE

- 1 Design for visual and physical access, giving every student the best seat in the house and allowing the instructor and student access to each other.
- 2 Facilitate social learning by designing spaces where students can easily connect and collaborate.
- 3 Design to support quick reconfiguration among multiple modes: from lecture to project work to discussion, test taking and back again.
- 4 Include wall protection for table and chair movement.
- 5 Support a range of postures to enhance wellbeing.
- 6 Integrate the design to support and reflect the educational goals and mission of the institution.

“Students prepare for a future no one can predict and for jobs that, in many cases, haven’t been invented yet.”



Steelcase Learning and Innovation Center

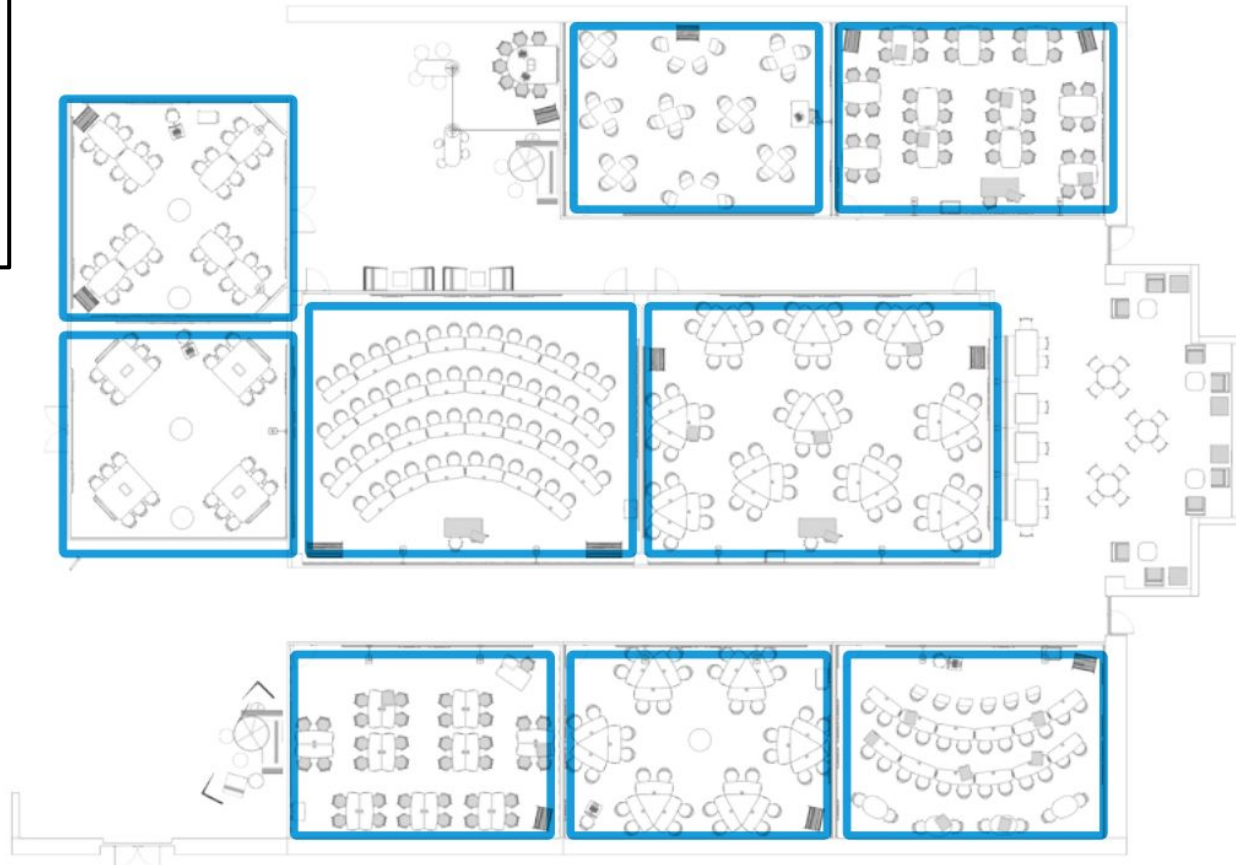
Examples of other site visits:
Holland, Zeeland, Spring Lake,
Byron Center, Farmington,
Bloomfield, West Leyden, GVSU

Application Ideas: Classrooms

These are classrooms that rethink "the box" and move away from the traditional setting of rows of fixed tablet chairs and a lectern. Here you will find learning spaces that can easily morph from lecture mode to team-work to group presentation, discussion and back again. Every seat is the best seat, with access to content, other students and instructors who are available to everyone. Technology is integrated, providing democratic access for all. These are classrooms that engage and inspire by putting control of the learning space in the hands of students and instructors.

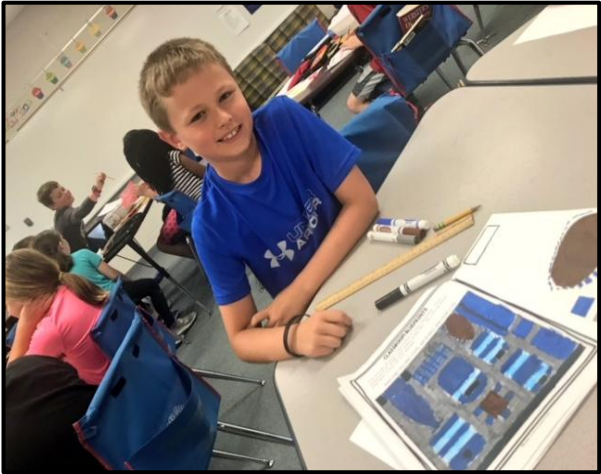
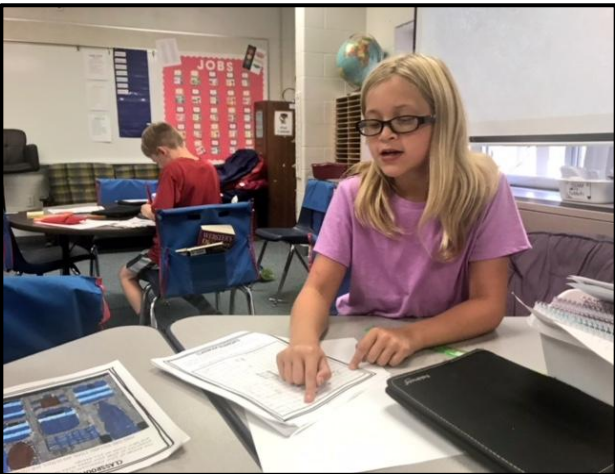


Classroom spaces should be designed with the principles of private/together spaces.





Foster Students and Classroom Design

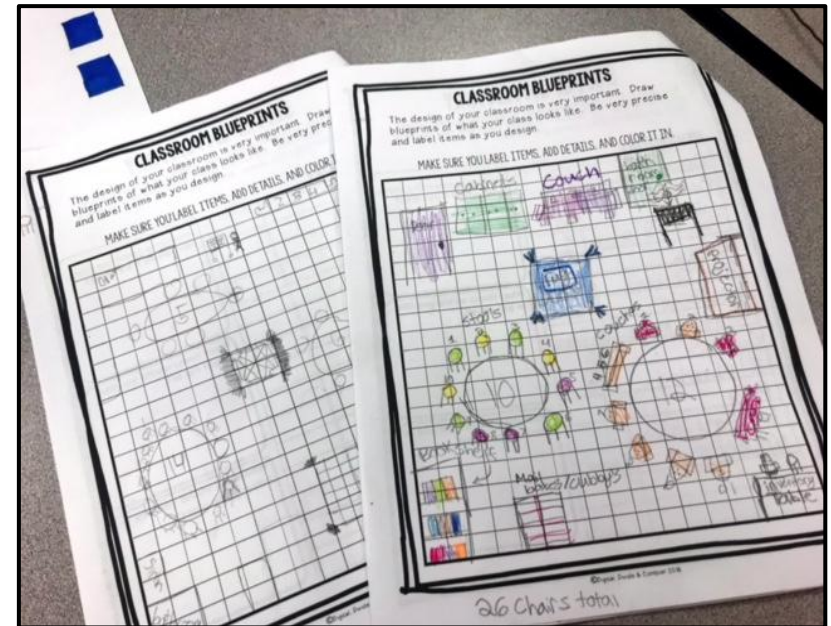




Foster Students and Classroom Design

What do 4th grade students at Foster desire in their ideal classroom?

- Space
- Flexible seating
- Legos and engineering lab
- Quiet places to read
- Lots of books
- Technology and iPads
- Playground with space to run
- Gaga pit on the playground
- Ball pit





Concept Scenarios

LUDINGTON AREA SCHOOLS



Scenario	Description	Cost	Millage Change	Annual Tax Bill Change
A	<ul style="list-style-type: none"> New Pre K-2 New 3-5 Additions/Renovations MS/HS, Retain PAC & Pool Improved Transportation Center Improve Athletics 	\$132,214,000	+2.86	\$143
B	<ul style="list-style-type: none"> New Pre K-2 New 3-5 MS/HS Additions and Renovations, Retain PAC & Pool New Transportation Center Relocate Athletics 	\$136,299,000	+2.86	\$143
C	<ul style="list-style-type: none"> Renovate Pre K-2 in existing MS/HS Renovate 3-5 in existing MS/HS New MS/HS Retain PAC & Pool New Transpiration Center Improve Athletics 	\$110,028,900	+2.01	\$100
D	<ul style="list-style-type: none"> New Pre K-2 Renovate 3-5 (Foster) MS/HS Additions and Renovations, Retain PAC & Pool Improve Transpiration Center Improve Athletics 	\$96,586,000	+1.5	\$75
E	<ul style="list-style-type: none"> New Pre K-2 New 3-5 New MS/HS, New PAC & Pool Improved Transportation Center Improve Athletics 	\$160,222,000	+3.46	\$173

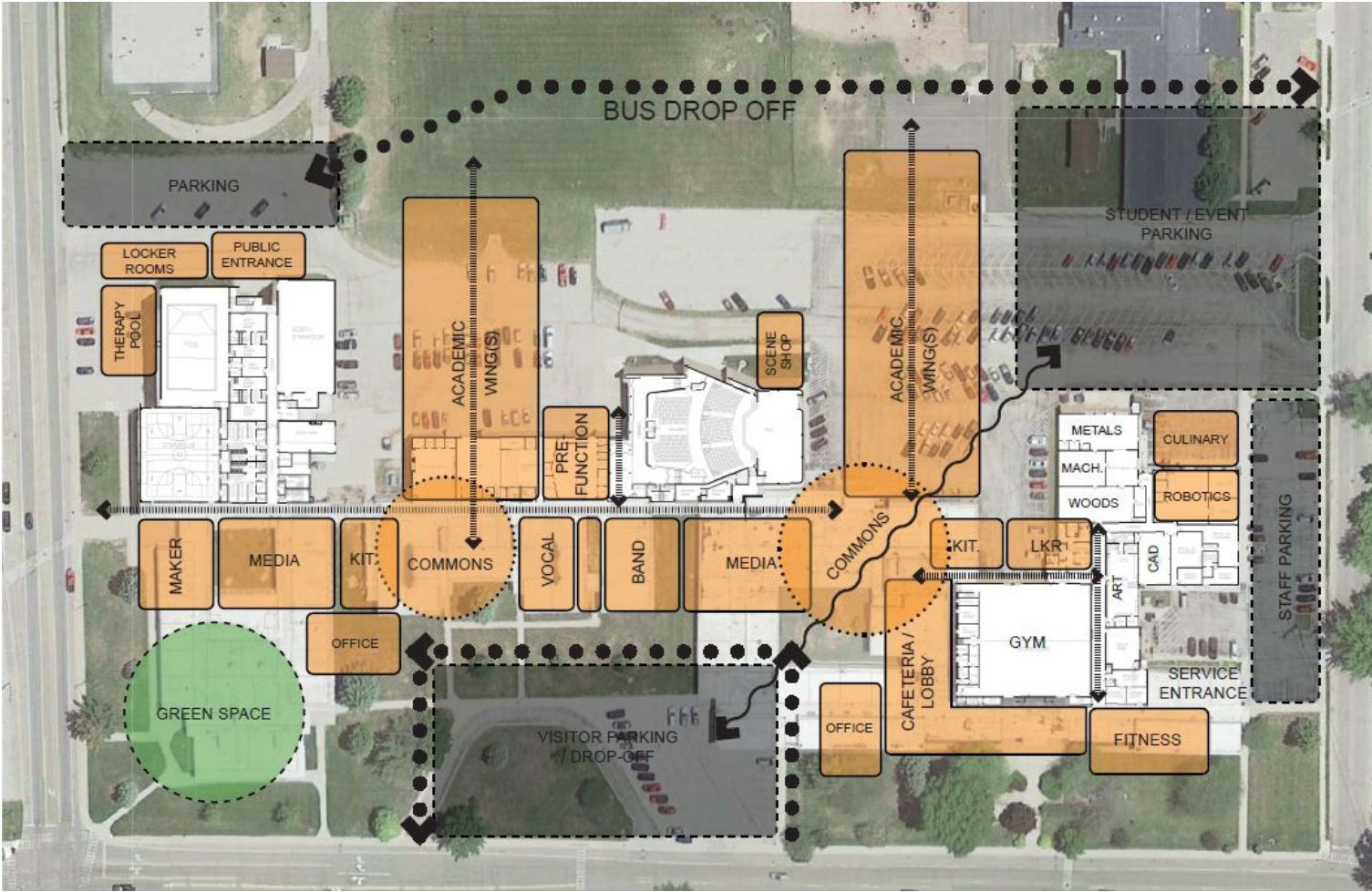




Scenario	Description	Cost
F	<ul style="list-style-type: none"> • New Pre K-5 • Additions/Renovations MS/HS, Retain PAC & Pool • Improved Transportation Center • Improve Athletics 	\$96,827,000
G	<ul style="list-style-type: none"> • New Pre K-5 • MS/HS Additions and Renovations, Retain PAC & Pool • New Transportation Center • Relocate Partial Athletics (Stadiums & Softball) & Improve Portion of Athletics 	\$111,141,000
H	<ul style="list-style-type: none"> • New Pre K-5 • MS/HS Additions and Renovations, Retain PAC & Pool • New Transportation Center • Relocate Partial Athletics (Stadiums & Baseball) & Improve Portion of Athletics 	\$110,680,000

LUDINGTON AREA SCHOOLS

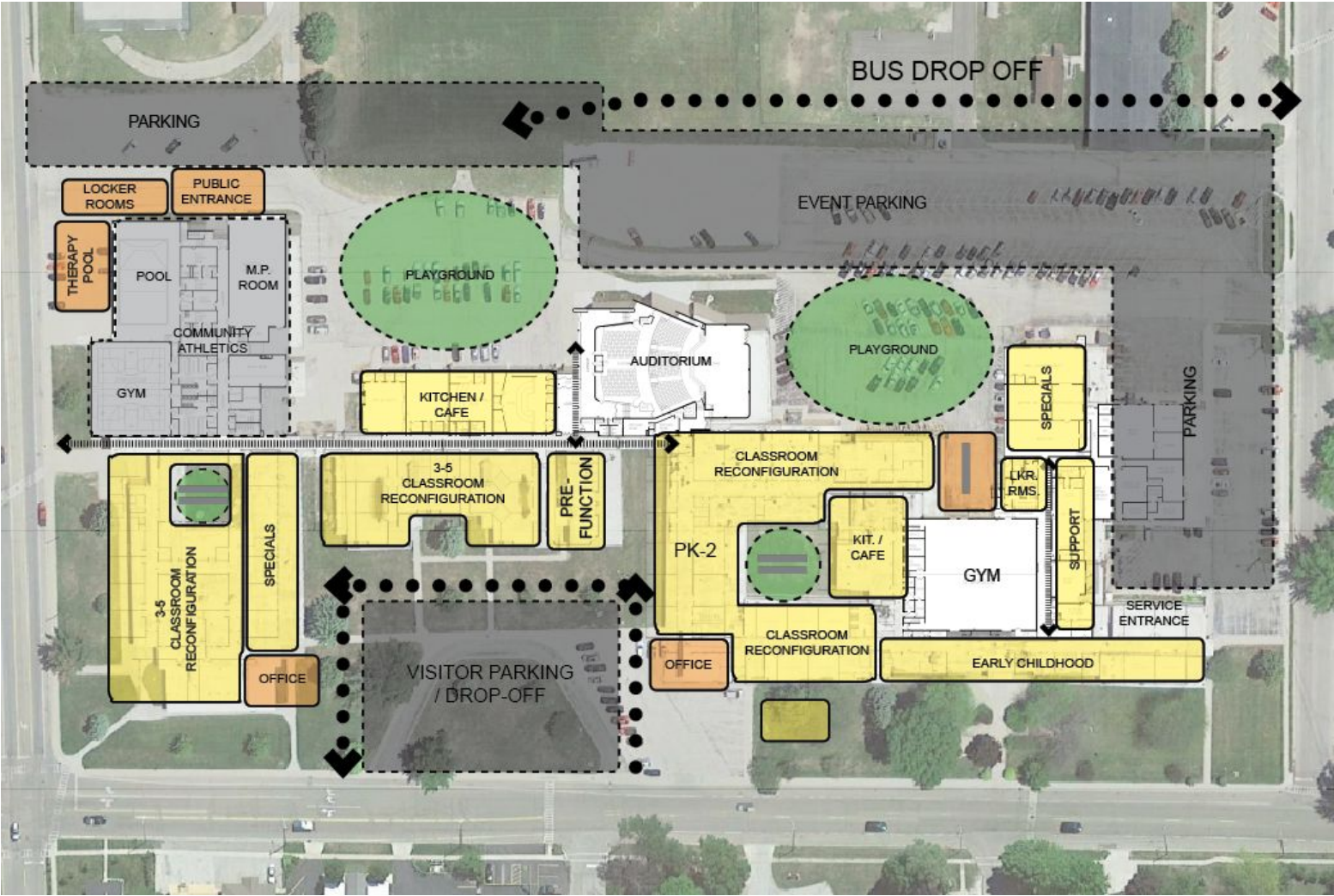
Middle School / High School Addition & Renovation Concept (Scenarios A & B)



Estimated cost:
\$76,030,126

LUDINGTON AREA SCHOOLS

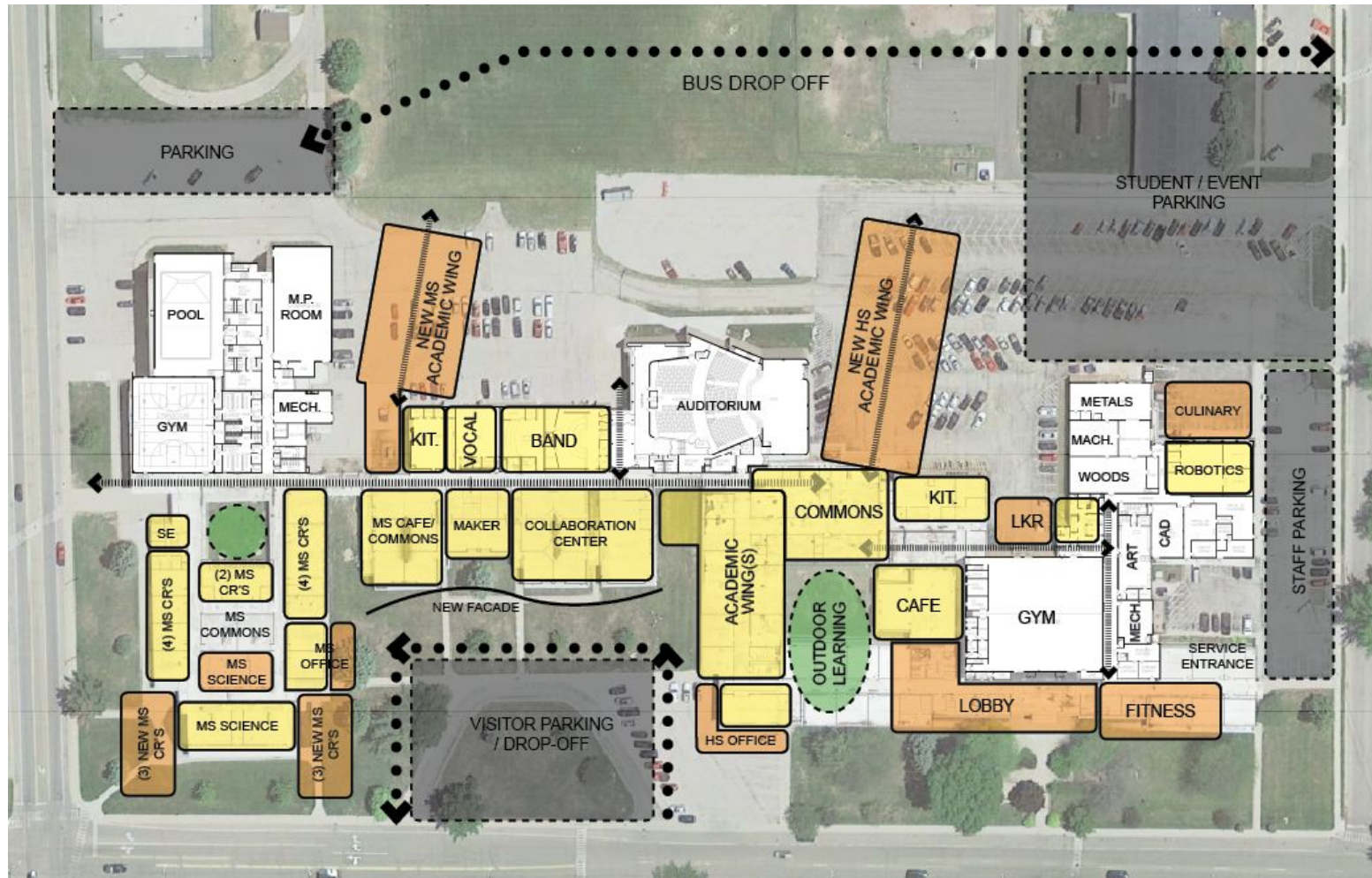
Elementary Remodel Concept (Scenario C)



Estimated cost
to build new
MS/HS complex,
less common
space:
\$68,750,000

LUDINGTON AREA SCHOOLS

Middle School / High School Addition & Renovation Concept (Scenario D)



Estimated cost:
\$39,034,587

**Savings over
new build, less
renovation:**
\$29,715,413

**Savings over
new build, plus
renovation:**
\$36,995,539

LUDINGTON AREA SCHOOLS

Foster Elementary Concept (Scenario D)





Why does consolidating our elementary buildings make sense?

- **Improved Communication**
- **Improved Consistency**
- **Improved Continuity**
- **Improved Collaboration**
- **Improved Cash Flow and Operational Efficiency**
 - **Focus resources on instructional programming**

What concerns exist in doing so?

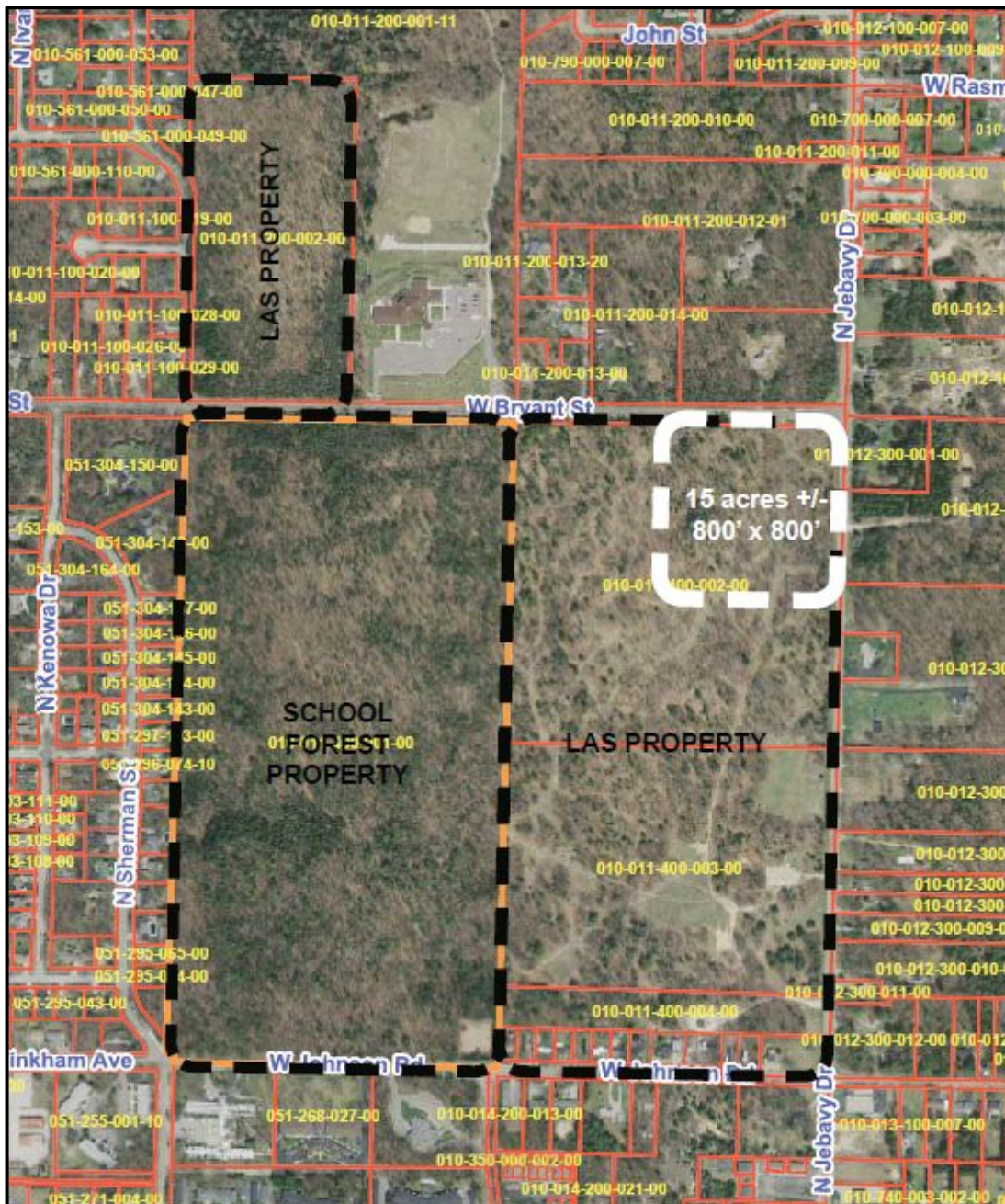
- **Move from community schools to a consolidated school building.**



Scenario	Description	Cost
Outcalt Property (See Map)	<ul style="list-style-type: none">New Pre K-5; One elementary campusAdditions/Renovations MS/HS, Retain PAC & Pool; One secondary campusImproved Transportation CenterImprove Athletics	\$96,000,000 - \$100,000,000
New Property Purchase	<ul style="list-style-type: none">New Pre K-5; One elementary campusAdditions/Renovations MS/HS, Retain PAC & Pool; One secondary campusImproved Transportation CenterImprove Athletics	\$96,000,000 - \$100,000,000

Add \$250,000 for improvement on Bryant per MCRC; Add left turn lane and right turn deceleration lane.

LUDINGTON AREA SCHOOLS



LIBER 500 PAGE 1856

STATE OF MICHIGAN, COUNTY OF MASON
Recorded May 27, 1999
at 11:02 AM Lib. 500 Page 1856
Herman A. Outcalt
Register of Deeds

WARRANTY DEED

The Grantor, HERMAN A. OUTCALT as Receiver for MARK C. OUTCALT and HERMAN A. OUTCALT, whose address is 16088 West Eagle Ridge, Surprise, Arizona 85374, conveys and warrants to Grantee, LUDINGTON AREA SCHOOL DISTRICT, a Michigan general powers school district operating under the provisions of the Revised School Code, MCLA 380.1, et seq, as amended, whose address is 809 East Tinkham Avenue, Ludington, Michigan 49431 1594, the following described premises situated in the Township of Pere Marquette, Mason County, Michigan:

The East Half (E-1/2) of the Southeast Quarter (SE-1/4) of Section 11, Township 18 North, Range 18 West, Except the South 10 acres thereof.

for the sum of Seven Hundred Thousand and no/100 (\$700,000.00) Dollars.

The Grantor grants to the Grantee the right to make all division(s) under Section 108 of the Land Division Act, Act 1288 of the Public Acts of 1967. This property may be located within the vicinity of farmland or a farm operation. Generally accepted agricultural and management practices which may generate noise, dust, odors, and other associated conditions may be used and are protected by the Michigan Right to Farm Act.

Dated this 13th day of May, 1999.

Signed in presence of:

HERMAN A. OUTCALT, as Receiver for MARK C. OUTCALT and HERMAN A. OUTCALT

Gerald W. Turley, III
GERALD W. TURLEY, III
Frances J. Turley
FRANCES J. TURLEY

By Herman A. Outcalt
Herman A. Outcalt

STATE OF ARIZONA)
COUNTY OF Maricopa)

The foregoing instrument was acknowledged before me this 13 day of May, 1999, by Herman Outcalt, appeared before and signed the aforesaid document as his free act and deed.



Jane Lindsay
Notary Public
Maricopa County, Arizona
My Commission Expires: 05-29-2002

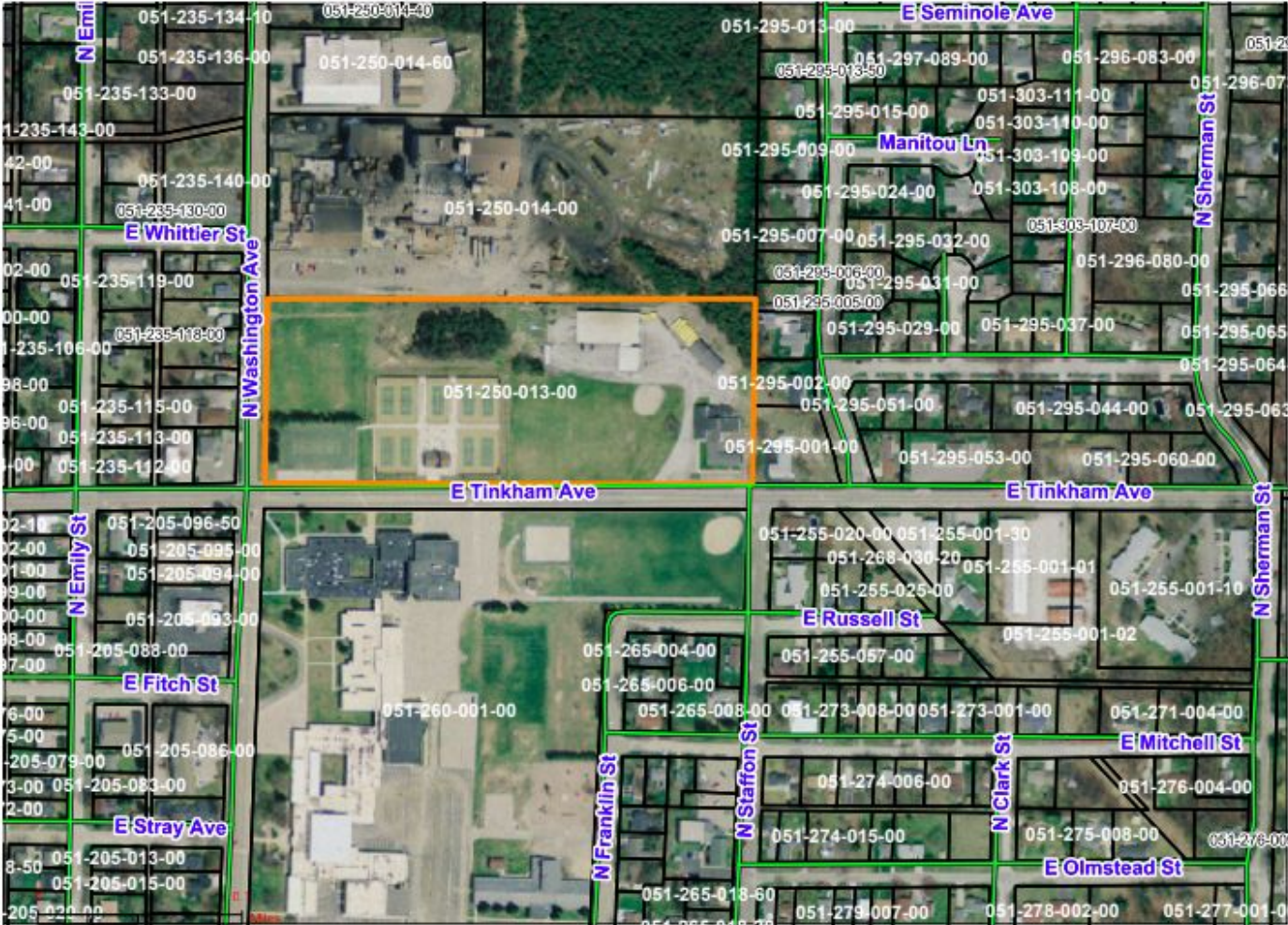


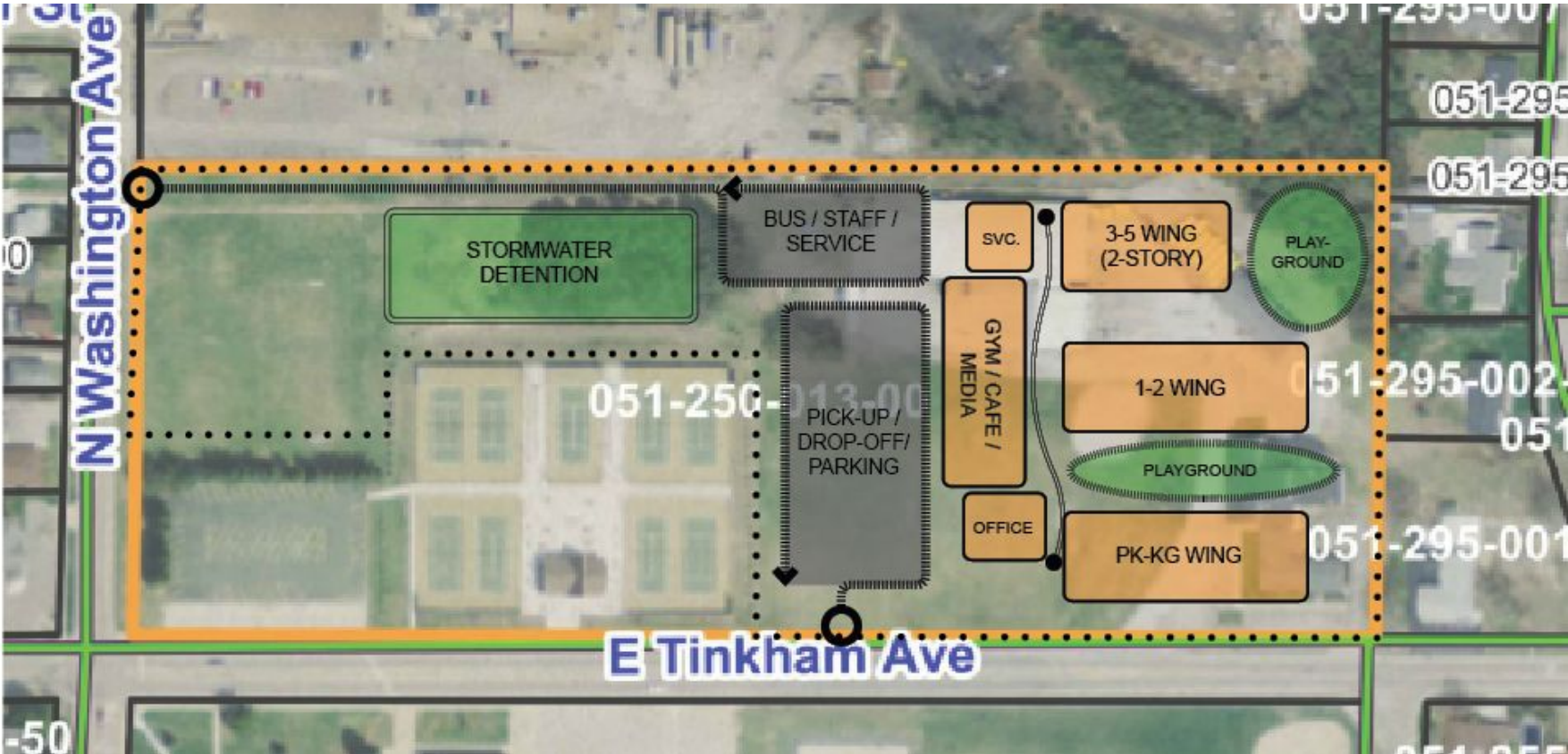


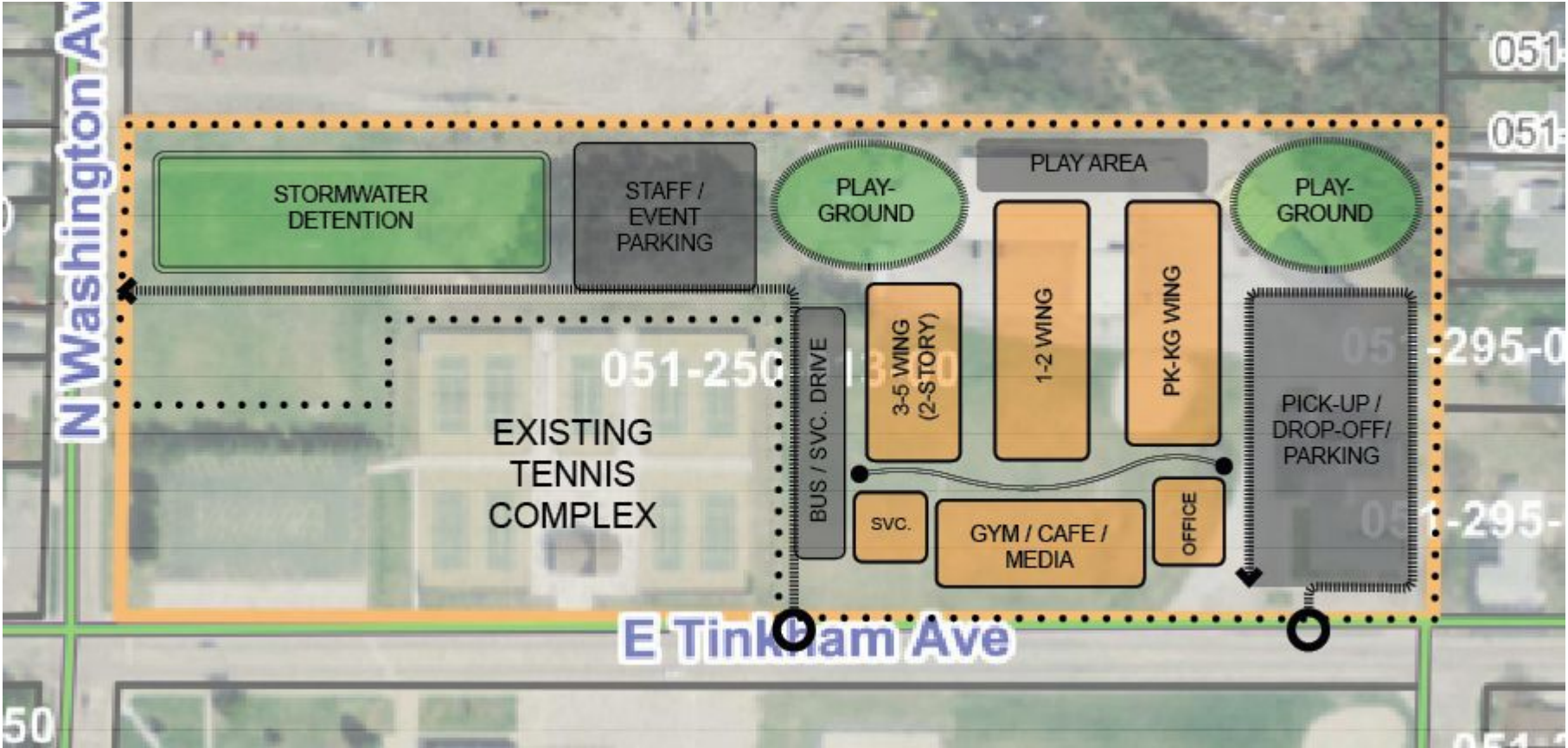
Newly Proposed Concept Scenario

LUDINGTON AREA SCHOOLS

New Pre-K through Grade 5 Elementary Concept









EXECUTIVE SUMMARY RECOMMENDATIONS

	LOCATION	Subtotal Cost:
	New PreK-5 Building (on Current Transportation Site), 132K SF	\$25,043,040
	MS/HS - Concept 3 (Additions/Renovations)	\$39,034,587
	Relocate Transportation Building	\$2,115,000
	Improve Existing Athletics	\$2,627,520
TOTAL DIRECT TRADE COSTS:		\$68,820,000
SUBTOTAL INDIRECT CONSTRUCTION COSTS:		\$10,411,000
TOTAL CONSTRUCTION COSTS:		\$79,231,000
TOTAL OWNER COSTS:		\$19,867,000
TOTAL CONSTRUCTION & OWNER COSTS:		
TOTAL ESTIMATED PROJECT COST :		\$99,098,000



Financial Scenarios and Debt Comparison

Provided by: Jesse Nelson, CPA; Partner

H.J. Umbaugh & Associates

Certified Public Accountants, LLP

2150 Association Drive, Suite 100

Okemos, MI 48864

LUDINGTON AREA SCHOOLS

Financial Scenarios



LUDINGTON AREA SCHOOL DISTRICT COUNTY OF MASON, STATE OF MICHIGAN

TAXABLE VALUE HISTORY AND GROWTH ASSUMPTIONS

Year	Taxable Value	Personal Property Tax Loss	Total Value	
2018	1,319,718,248	30,288,405 *	1,350,006,653	4.58%
2017	1,260,582,245	30,288,405	1,290,870,650	5.42%
2016	1,207,029,297	17,528,982	1,224,558,279	5.08%
2015	1,165,398,680		1,165,398,680	2.34%
2014	1,138,712,113		1,138,712,113	2.59%
2013	1,110,002,480		1,110,002,480	3.16%
2012	1,076,027,157		1,076,027,157	0.75%
2011	1,068,047,683		1,068,047,683	-0.23%
2010	1,070,535,157		1,070,535,157	-1.29%
2009	1,084,516,504		1,084,516,504	3.16%
2008	1,051,306,245		1,051,306,245	6.16%
2007	990,342,906		990,342,906	8.17%
2006	915,585,308		915,585,308	5.65%
2005	866,628,209		866,628,209	3.87%
2004	834,359,129		834,359,129	4.68%
2003	797,029,543		797,029,543	3.81%
2002	767,795,142		767,795,142	6.32%
2001	722,177,455		722,177,455	3.80%
2000	695,722,021		695,722,021	1.47%
1999	685,668,575		685,668,575	1.77%
1998	673,712,621		673,712,621	

5 Year Average [1] 4.00%

20 Year Average [2] 3.56%

[1] Must assume taxable value growth for years 1 through 5 equal to the present five year average or lower.

[2] Must assume taxable value growth for years 6 and beyond equal to the present twenty year average no lower than 0.00% and no greater than 3.00%.

*Still waiting on final figure from county.



**LUDINGTON AREA SCHOOL DISTRICT
COUNTY OF MASON, STATE OF MICHIGAN**

PROPOSED CAPITAL IMPROVEMENT PLAN - MAY, 2019 ELECTION

I. Debt Service Millage Rate and Annual Tax Bill

Estimated 2019/2020 millage rate	3.14
Less estimated 2018/2019 millage rate	(1.64)
Change in millage rate	<u>1.50</u>
Annual tax bill change (\$100,000 market value/\$50,000 taxable value)	<u>\$75.00</u>
Per month	<u>\$6.25</u>

II. Capital Improvement Plan Summary

Series I - 2019

Construction allowance	\$34,819,369
Underwriting allowance	350,000
Bond issuance cost allowance	161,150
Less estimated interest income [1]	(330,519)
Par amount of bonds	<u>\$35,000,000</u>

Series II - 2023

Construction allowance	\$64,817,540
Underwriting allowance	565,500
Bond issuance cost allowance	237,600
Less estimated interest income [1]	(620,640)
Par amount of bonds	<u>\$65,000,000</u>

Proposal Total

Construction allowance	\$99,636,909
Underwriting allowance	915,500
Bond issuance cost allowance	398,750
Less estimated interest income [1]	(951,159)
Par amount of bonds	<u>\$100,000,000</u>

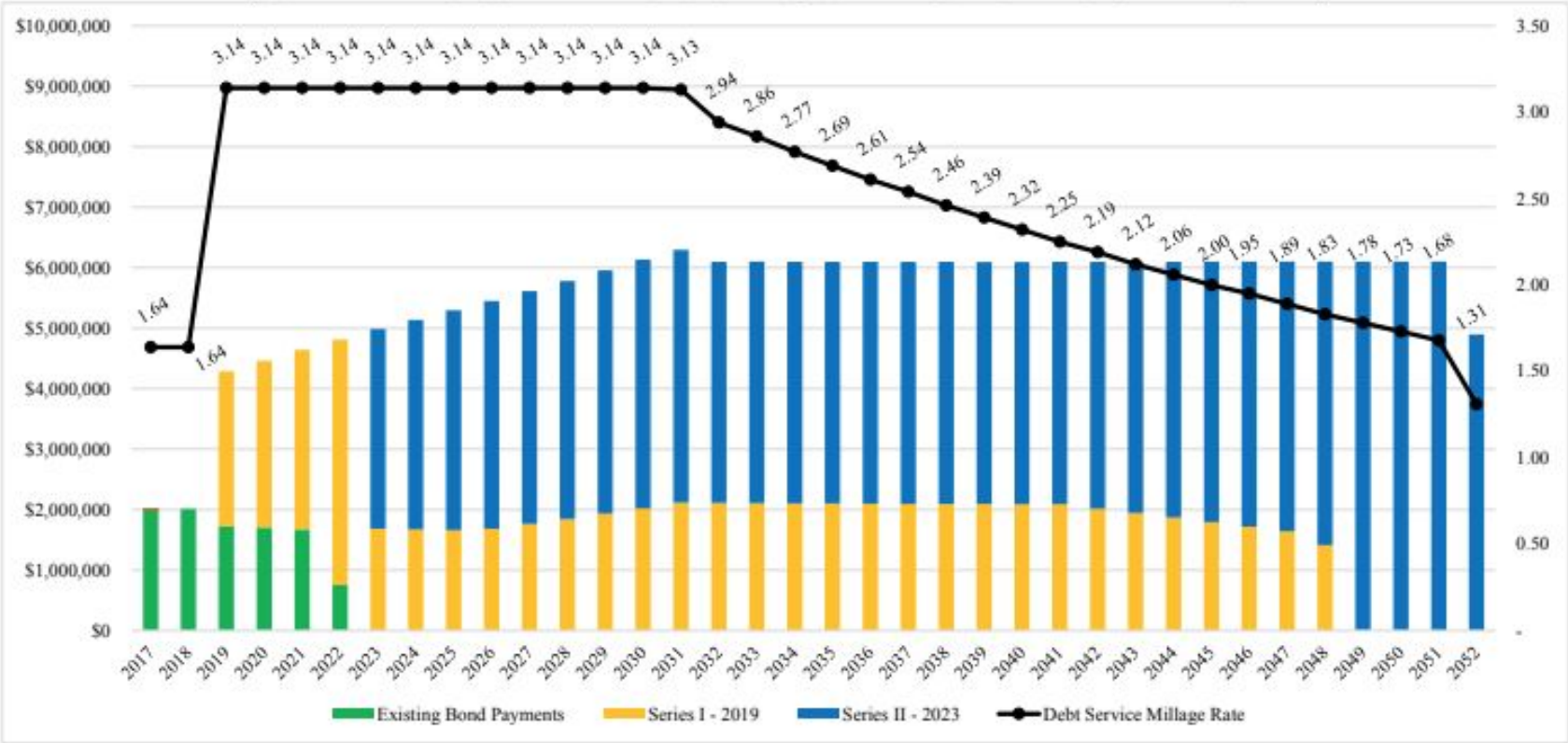
[1] Assumes a 24 month construction period with earnings at 1.00%.

Note: Bus purchases have a 6 year useful life and technology equipment has a 5 year useful life from the time installed.



LUDINGTON AREA SCHOOL DISTRICT
COUNTY OF MASON, STATE OF MICHIGAN

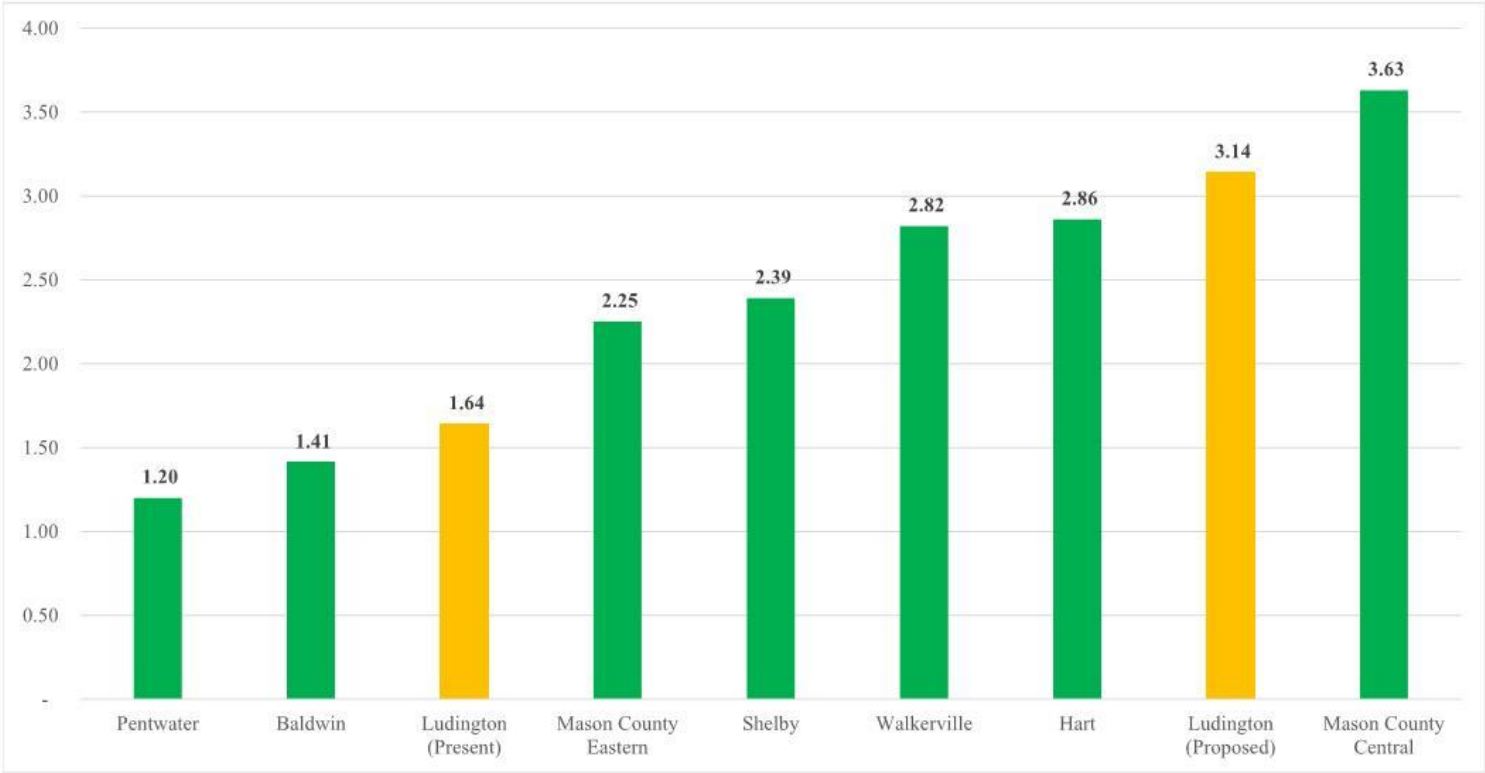
ESTIMATED PROPOSED MILLAGE STUDY - \$100 MILLION - 2 SERIES - CHART FORMAT





LUDINGTON AREA SCHOOL DISTRICT
COUNTY OF MASON, STATE OF MICHIGAN

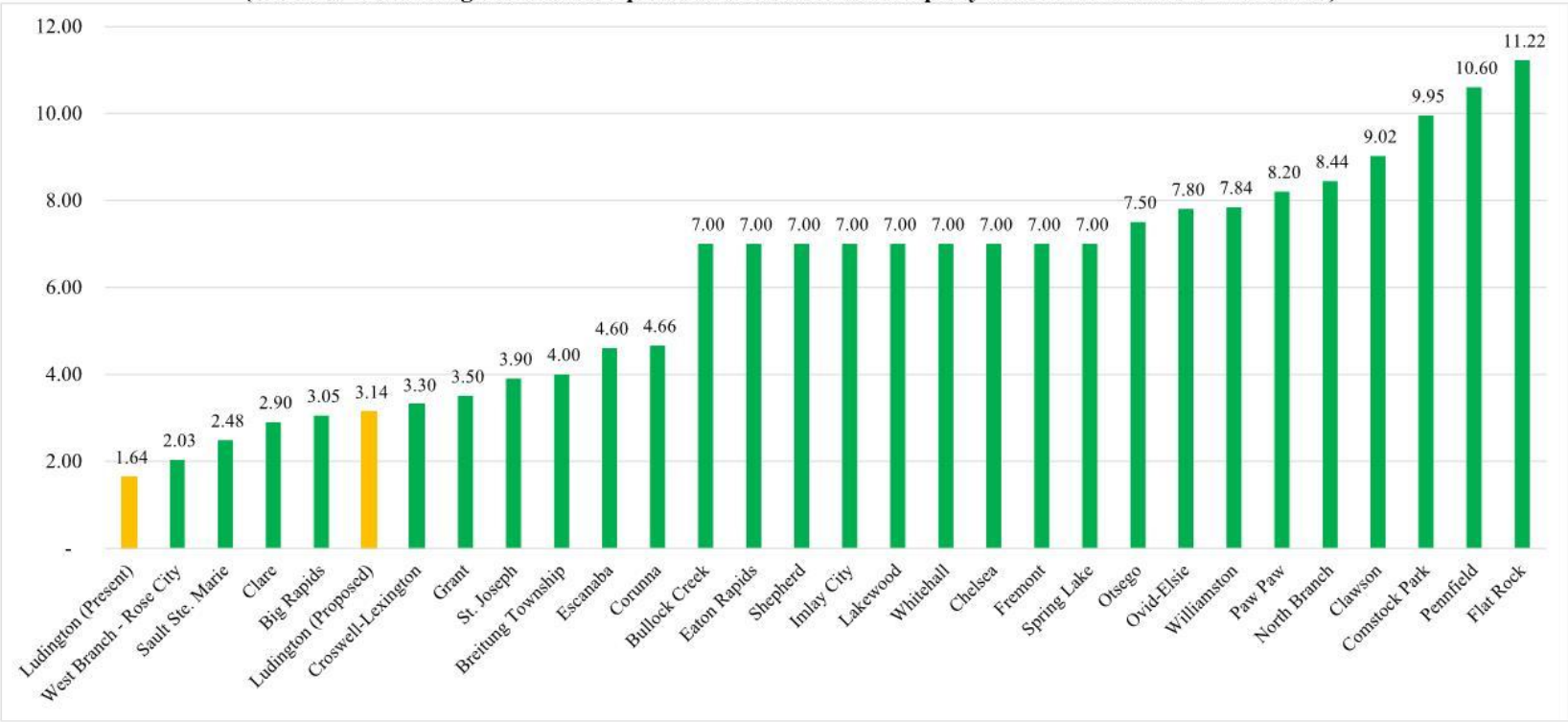
COMPARISON OF 2017 DEBT SERVICE MILLAGE RATES - WEST SHORE ESD
(Per 2017 Continuing Disclosure Report and State Personal Property Tax Reimbursement Worksheet)





LUDINGTON AREA SCHOOL DISTRICT
COUNTY OF MASON, STATE OF MICHIGAN

**COMPARISON OF 2017 DEBT SERVICE MILLAGE RATES -
SIMILAR ENROLLMENT AND NOTABLY SUCCESSFUL DISTRICTS**
(Per 2017 Continuing Disclosure Report and State Personal Property Tax Reimbursement Worksheet)



LUDINGTON AREA SCHOOLS

Financial Scenarios

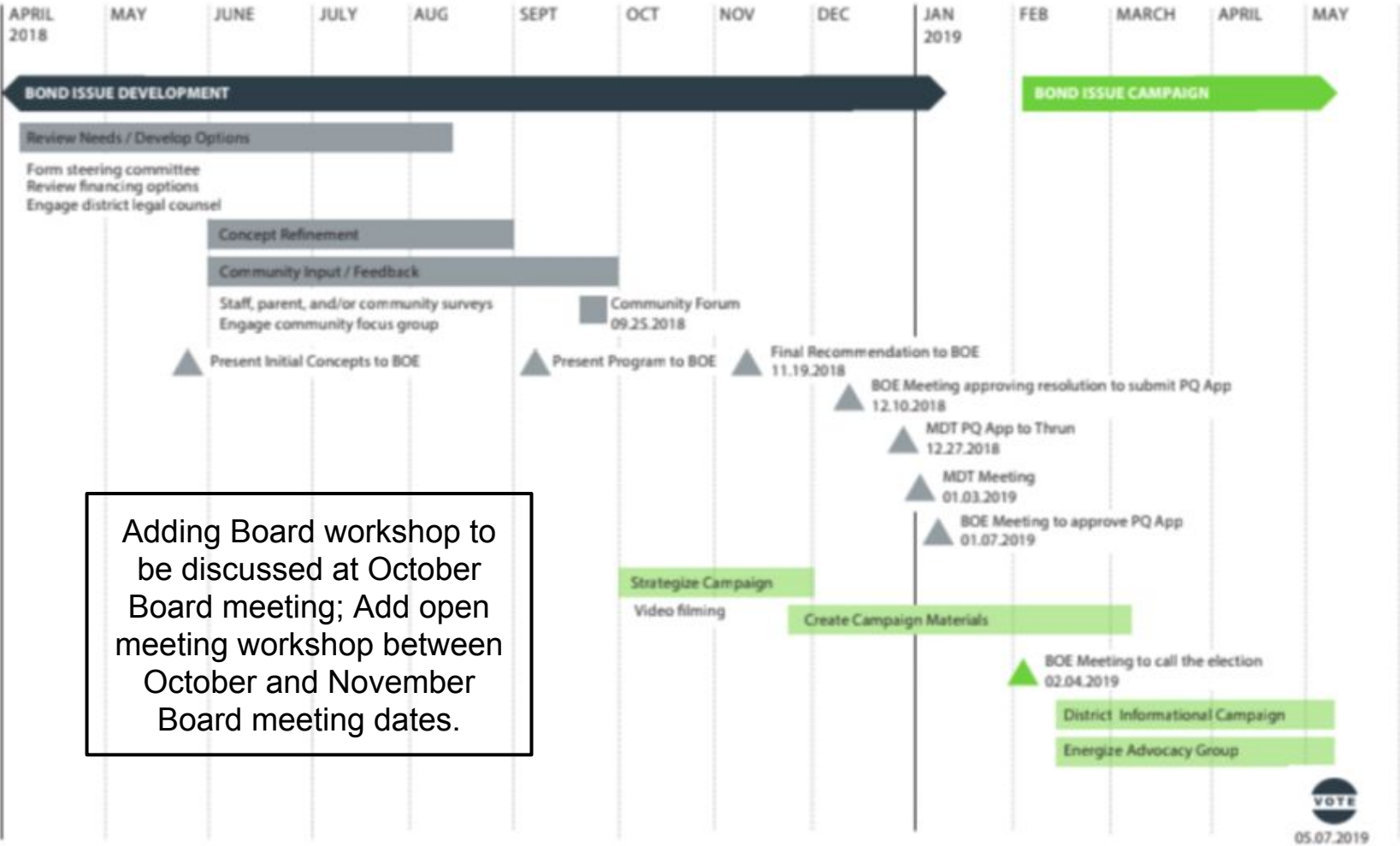


LUDINGTON AREA SCHOOL DISTRICT COUNTY OF MASON, STATE OF MICHIGAN

ANNUAL TAX BILL INCREASE CHART - 1.50 MILLS

Market Value	Taxable Value	Millage Increase	Annual Increase	Monthly Increase
45,000	22,500	1.50	\$33.75	\$2.81
50,000	25,000	1.50	37.50	3.13
55,000	27,500	1.50	41.25	3.44
60,000	30,000	1.50	45.00	3.75
65,000	32,500	1.50	48.75	4.06
70,000	35,000	1.50	52.50	4.38
75,000	37,500	1.50	56.25	4.69
80,000	40,000	1.50	60.00	5.00
85,000	42,500	1.50	63.75	5.31
90,000	45,000	1.50	67.50	5.63
95,000	47,500	1.50	71.25	5.94
100,000	50,000	1.50	75.00	6.25
105,000	52,500	1.50	78.75	6.56
110,000	55,000	1.50	82.50	6.88
115,000	57,500	1.50	86.25	7.19
120,000	60,000	1.50	90.00	7.50
125,000	62,500	1.50	93.75	7.81
130,000	65,000	1.50	97.50	8.13
135,000	67,500	1.50	101.25	8.44
140,000	70,000	1.50	105.00	8.75
145,000	72,500	1.50	108.75	9.06
150,000	75,000	1.50	112.50	9.38
155,000	77,500	1.50	116.25	9.69
160,000	80,000	1.50	120.00	10.00
165,000	82,500	1.50	123.75	10.31
170,000	85,000	1.50	127.50	10.63
175,000	87,500	1.50	131.25	10.94
180,000	90,000	1.50	135.00	11.25
185,000	92,500	1.50	138.75	11.56
190,000	95,000	1.50	142.50	11.88
195,000	97,500	1.50	146.25	12.19

Market Value	Taxable Value	Millage Increase	Annual Increase	Monthly Increase
200,000	100,000	1.50	\$150.00	\$12.50
205,000	102,500	1.50	153.75	12.81
210,000	105,000	1.50	157.50	13.13
215,000	107,500	1.50	161.25	13.44
220,000	110,000	1.50	165.00	13.75
225,000	112,500	1.50	168.75	14.06
230,000	115,000	1.50	172.50	14.38
235,000	117,500	1.50	176.25	14.69
240,000	120,000	1.50	180.00	15.00
245,000	122,500	1.50	183.75	15.31
250,000	125,000	1.50	187.50	15.63
255,000	127,500	1.50	191.25	15.94
260,000	130,000	1.50	195.00	16.25
265,000	132,500	1.50	198.75	16.56
270,000	135,000	1.50	202.50	16.88
275,000	137,500	1.50	206.25	17.19
280,000	140,000	1.50	210.00	17.50
285,000	142,500	1.50	213.75	17.81
290,000	145,000	1.50	217.50	18.13
295,000	147,500	1.50	221.25	18.44
300,000	150,000	1.50	225.00	18.75
305,000	152,500	1.50	228.75	19.06
310,000	155,000	1.50	232.50	19.38
315,000	157,500	1.50	236.25	19.69
320,000	160,000	1.50	240.00	20.00
325,000	162,500	1.50	243.75	20.31
330,000	165,000	1.50	247.50	20.63
335,000	167,500	1.50	251.25	20.94
340,000	170,000	1.50	255.00	21.25
345,000	172,500	1.50	258.75	21.56
350,000	175,000	1.50	262.50	21.88



LUDINGTON AREA SCHOOLS

Community Feedback Survey on Facilities



LUDINGTON AREA SCHOOLS

Menus | Parent Portal | Staff Directory

DISTRICT SCHOOL BOARD ATHLETICS CALENDAR TECHNOLOGY SCHOOLS

Soaring High

DISTRICT NEWS

Oriole Foundation
Soaring Higher
Donate directly to the Oriole Foundation. Choose Education in the first drop down and the Oriole Foundation in the second.

LUDINGTON HIGHLIGHTS

October 5, 2018
Facilities Forum Added for October 10
After listening to the community, the District has scheduled another community forum on Wednesday, October 10, 2018 at 6:00 PM in the Ludington High School Library.
[Read Full Article](#)

October 2, 2018
Community Feedback Survey
As we look to the future of educating our community's children, it's important to understand and plan for how our district will continue to provide the best possible environments for their learning and development. Teachers and learning look much different when our school buildings are constructed and renovated.
[Read Full Article](#)

CALENDAR

Upcoming Events

10 OCT Book Swap
PSAT Testing for Juniors
PTC Meeting
3:30 PM to 4:30 PM

11 OCT 3rd Grade to White Pine Valley
Regional Golf at Pine Valley Golf Club
9:00 AM to 1:00 PM
Girls Swim @ Northville
6:00 PM to 6:30 PM
Var Soccer @ Fremont
6:45 PM

11 thru OCT 14 Equestrian - State Finals

Due: November 1, 2018

Access to Community
Feedback Survey:

<http://www.lasd.net/Core/News/Article/11377/>



Questions?
Thank you!