



LAKE MILLS HIGH SCHOOL FACILITY STUDY

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eppstein uhen : architects

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SECTION 1
EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Facilities Study is a critical first step in the planning process which helps school districts and their communities to better understand the current state of its facilities and how well these components support educational goals. The Facilities Study provides an independent, objective analysis of the present conditions and capabilities of the district's facilities and grounds. This study also serves as a foundational resource document to support immediate and long term facilities planning.

The information presented in this report was gathered through on-site inspections of the sites and buildings and interviews with various building administrators and maintenance staff. Included in this report is an analysis of the existing building capacities, building envelope and MEP assessments, and an overview of the High School occupied by the Lake Mills Area School District.

Lake Mills High School serves approximately 417 students through the District.

Lake Mills School District Mission Statement:

"Preparing all of today's students for tomorrows opportunities".

For each building and major section of this report, Eppstein Uhen Architects (EUA) has identified professional observations and recommendations to inform future facilities planning. This Executive Summary attempts to capture significant findings that are detailed within the larger Facilities Study. Please reference the complete Facilities Study in the following sections for supporting data to the observations and recommendations.

The intention of the Facilities Study is to bring focus on the areas that are inadequate and/or require a significant investment in the near future. Any decisions made to maintain or improve High School should support long term solutions. Providing the optimum combination of adaptable and appropriate spaces for teaching and learning should support student and staff achievement and reflect the Lake Mills Area School District's community values.



The following paragraphs provide an introductory description of the specific issues reviewed in each report section:

SITE AND BUILDING CAPACITY DATA

The Lake Mills High School campus occupies approximately 43 acres of land bordered by East Lake Park Place to the north, Catlin Drive to the east, Lake Mills Golf Course to the south, and Pinnacle Drive to the west. The 9-12 campus site has athletic fields, tennis courts and track. Based on the total existing enrollment for this school, a similar campus should have approximately 45.78 acres of buildable area as recommended by the Council of Educational Facility Planners International (CEFPI) and other guideline publications.

The student capacity was reviewed and evaluated against several nationally recognized educational planning recommendations. Three different capacity calculation methods were used:

1. **Functional Capacity by Area** is based on the maximum number of students recommended per the area of each educational (classroom/teaching) space.
2. **Capacity based on Building Area** analyzes the entire school's **gross square footage** and determines capacity by utilizing best practices for square foot per student in comparable facilities.

Over the past decade, recommended space provided per student has increased. The major reasons are:

- Space is needed to support children with special needs; students with disabilities, cognitively disabled students and special education needs.
- Space needed to support specialists in the area of reading, speech, occupational therapy, physical therapy, and Title I programs.
- Space needed to support paraprofessionals, volunteers and parent support groups.
- Space needed to support personalized learning, team teaching, and flexible collaboration in common areas.
- Space to accommodate technology and its infrastructure.



The capacity study indicates that the high school is well under capacity according to the amount of academic spaces, however the common and transitional spaces cannot support this number:

- The 2014-2015 enrollment for the facility was 417 total students.
- According to the Functional Capacity by Area method, the school has room for 233 additional students.
- According to the Functional Capacity based on Gross Square Footage, the school is over capacity by 69 students which indicates a disproportionate number of non-academic spaces.
- Common spaces and transitional spaces within the building appear to be adequate compared with the amount of academic space provided. However, the common spaces may not be utilized efficiently.

The high school was also studied to determine exactly how its academic spaces were being used throughout the day. This analysis give us a clear picture of the current **Building Utilization**. Based on timetables provided by staff the following observations were made:

1. The HS is on a two day block system. **The Building Utilization Factor for LMHS Day 1 is at 73.6%, for Day 2 it is 68.6%**. Schools are considered at recommended utilization when utilization averages 80%. This means that the building on average has not approached optimum utilization. When looking more closely at this data, the core academic environments are at or over the 80% recommendation. It is advisable to see whether the underutilized spaces could be made more flexible to serve more than one academic function or create additional environments that would provide some flexibility in the daily schedule.
2. Spaces that may be particularly underutilized include Family and Consumer Science, Technical Education and Agricultural spaces. Additional analyses of staffing and scheduling procedures may be warranted for these spaces to determine opportunities for efficiency and shared spaces.
3. **Average Class Size for LMHS is at 18.2 students per instructional space on Day 1 and on Day 2 it is 20.5 students per instructional space.** Generally, based on current space sizes and staffing levels, additional students could be added in many of the classrooms on both Block days.
4. The High School is split between two buildings- the High School and the Tech Ed Building- that are separated by an enclosed walkway.
5. The nonacademic spaces at the HS are of an adequate size for your current population.
6. The HS learning environments are not in alignment with the Middle School educational model.
7. The HS learning environments do not provide flexibility or transparency for personalized/active/team oriented learning.
8. The FACE learning environment is disproportionately large compared to the current and projected class size.
9. The technology in many of the classrooms is outdated or non-operational.
10. The HS campus site is crowded and does not allow for expansion of athletic program fields as the needed.
11. Substandard fill is located on the South portion of the site and constrains any opportunity for expansion on this portion of the site.



FACILITIES SUMMARY

The **Building Systems Assessment** considers the building's shell and mechanical, electrical, and plumbing systems. The following is a summary of Building Systems. A deeper analysis is provided within the complete Facilities Assessment report. The findings presented in this report will provide the Lake Mills Area School District with up-to-date information to assess its existing site and building conditions relative to providing optimal learning environments for successful curriculum delivery. The report identifies the positive aspects of the facility as well as deficient conditions that impact building function and educational opportunity. Please refer to the detailed assessment for further description and photographs.

Lake Mills High School

Main Building Positives:

- Face brick and mortar generally in good condition.
- LMASD maintains the roof according to MFG standards. At this time general repairs are made and the roof is in good condition. Replace as directed by roofing mfg.
- Clear ADA path to front doors of the High School.
- Clear security sequence at the main entrance.
- Newer Aerco boiler installed to replace older National Boiler.
- The main 2000 Amp service in the facility has capacity for future additions/renovations.
- Majority of the fluorescent fixtures have been upgraded and converted to T8 lamps and ballasts.
- Gym recently upgraded to 204 high bay fluorescent lighting.
- Parking lot lights have been converted to LED.
- Security system at front desk can be expanded as required
- Toilet rooms near the second floor Auditorium have been upgraded and are in good condition.
- Hot water heaters were new in 2013 and are in good condition and sized for the current load. Will need to re-evaluate capacity if there is future additions and remodeling.
- Water softener system is in good condition.
- Fire protection system is up to date on testing and appears to be in good condition.

Main Building Negatives:

Architectural

- Asphalt parking lots on the North of the school may need to be replaced in the future. (Planned Summer 2015)
- Access road and asphalt on the South side of the HS has failed and should be considered for replacement.
- Additions to the existing buildings should be accommodated to the West of the 1962 building and South of the Tech Ed wing.
- According to current educational site planning the bus drop of and parent drop off are conflicting and pose potential hazards. LMHS discussed and acknowledged the shortcomings but feel they make due given their circumstances.
- Some concrete walks are showing signs of settling and cracking. Should plan for replacement in future budgets.
- Clean and paint rusting lintels.
- Single pane windows should be replaced. (Planned for the 1962 building Summer 2015)
- Some tuck pointing required. Discolored areas on the 1988 and 1964 additions should be inspected, cleaned and repaired as required.
- Concrete vault on the North side of the building should be repaired/replaced.



- Concrete stoops at egress doors do not comply with ADA and as paved areas are replaced the ADA requirements will need to be addressed.
- Large canopy/entry feature at the 1962 building will need to be cleaned of rust and repainted as required.
- Site stairs on the North side of the building adjacent to the generator will need to be replaced due to failure.

Mechanical

- Remaining National Boiler is original to the building and is in marginal condition.
- Current flow pumping system does not take advantage of the high efficiency capability of the Aerco boiler.
- With the exception of the 2005 roof top mechanical units all other air handling equipment is original to the building and in need of replacement.
- Outdated pneumatic control systems.
- All indoor air handling units are original to the building and in need of replacement.
- If the district replaced the boiler plant, air handling units, and controls per the recommendations in the report, they could expect about a 15% gain in overall efficiencies.

Electrical

- Branch electrical panels are original to the building and have limited capacity and should be replaced.
- Provide emergency lighting in all areas of the building to bring the current building up to code.
- Cabling and wiring not supported above the ceilings and in data closets.
- Fire alarm system outdated and should be updated to full code compliance.
- According to new IBC code facilities will be required to provide a voice annunciated fire alarm system.
- Clock/public address system is nearing the end of its lifespan and should be considered for replacement.
- Emergency generator dated to the original construction.
- No emergency power shut off in the Tech Ed area.
- Wire in Tech Ed areas should be supported and in conduit.

Plumbing

- Replace old restroom fixtures with low flow units.
- ADA compliant shower units are required.
- All interior and exterior sewers below grade should be investigated with a camera.

As of July, 2002 the building code in the State of Wisconsin changed to the International Building Code (IBC). One major difference between the prior code and the current IBC that impacts school projects is the requirement for schools to be protected by a fire sprinkler system if the fire areas within the facility are over 12,000 square feet. Although this requirement does not affect existing facilities that do not receive upgrades, significant remodeling or additions to an existing structure may trigger this requirement.

CONCLUSION

At the High School, the two calculations tell two different stories. According to the Functional Capacity by Area, there is sufficient classroom space to support 233 additional students with the current enrollment of 417 students. The Gross Square Footage Calculation, however, says that the building is over capacity by 69 students. This suggests there is a disproportionate number of non-academic spaces. The organization and current layout of the instructional spaces doesn't mirror Lake Mills School District's efforts to adopt the 21st Century learning model as seen in the Lake Mills Middle School. Although the academic spaces can physically contain several more students, the utilization of the core academic spaces



is on the high end of what is recommended for a functioning high school. The creation of additional learning environments would allow for greater flexibility in the daily schedule and could allow for learning environments that provide the personal learning seen at the elementary and middle school. As the district considers possible options to address the future, drivers for the scope of work could include:

- Creation of personalized learning spaces
- Internal flexibility for adequate resource space serving Psychology, Athletic Director, & Transportation
- Create flexibility to provide an improved Sensory Room serving students with special needs
- Create a smoother circulation path around the kitchen serving line during the dedicated lunch periods

As a growing school district, the school board and community should realize the importance of long term planning. This analysis is a wise step toward the future and will allow appropriate options as the district expands its student population.

This study is not intended to provide specific solutions or exact scope of work but rather allows the school district to understand the existing conditions of the buildings and campus layout. The educational market is entering an era of increased consumer choice and increasing competition between public, private and charter school options. This ultimately impacts enrollment and the associated operational funding.

RECOMMENDED NEXT STEPS

At the conclusion of a Facilities Study, many schools ask how to proceed. It is our recommendation that the Administration and Board of Education review the document for content and understand the observations and recommendations. The next step should be prioritizing the items identified in this report into two different categories; items that can be budgeted for with annual maintenance funds and those items which would require significant capital expenditure.

This facilities study could be considered a work in progress and a system should be put in place to track items that get updated through a Capital Improvement Plan. This study should serve as a reference to the district and its constituents in making informed decisions for effective planning into the future.

Thank you for the opportunity to participate in this endeavor. If you have any questions or concerns regarding this summary, please feel free to contact the EUA team.

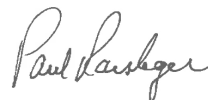
Sincerely,



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