# High School Facilities Study and Assessment

For

Madison Metropolitan School District



## West High School

January 14, 2019

(Revised) May 8, 2019

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.

ZAS project number: 180125.00


ZIMMERMAN
ARCHITECTURAL STUDIOS, INC.

# Table of Contents

## Long Range Master Plan:

## West High School


Introduction / Methodology ..... 3

Section One — Acknowledgements ..... 5

Section Two — Facility Observations and Assessments ..... 7

Meeting: Leadership Team
Meeting: Building Services
Meeting: Buildings Trades
Meeting: Safety and Security
Meeting: COLT

Section Three — Building Functionality ..... 15

Site Observations
Plan Observations

Section Four — Educational Spaces ..... 27

Meeting: Instructional Team
Meeting: Technology Team
Meeting: Music and Arts
Meeting: Pathways

Section Five — Athletic and Community Spaces ..... 30

Meeting: Athletics & Co-Curricular
Meeting: MSCR

Section Six — Design Recommendations and Options

Common Themes ..... 31

Tiers of Recommendations:

Maintenance ..... 33
Renewal ..... 41
Aspire ..... 49

Appendix A: Capital Improvement Cost Matrix ..... 57

Appendix B: High School Input ..... 61




zimmerman ARCHITECTURAL STUDIOS, INC.


ZIMMERMAN
ARCHITECTURAL STUDIOS, INC.

# Introduction / Methodology

## INTRODUCTION

The facility condition report and the athletic facility assessment reports completed in 2017 created a great framework for outlining areas of each building that required improvement. In conjunction with the reports, the Madison Metropolitan School District (MMSD) established a Strategic Framework. To accomplish the vision, any improvement to the buildings must align with the values: Excellence, Belonging, Racial Equality, Voice, Focus and Creativity.

The next step in developing a Long Range Master Plan, MMSD selected Zimmerman Architectural Studios to join the team and analyze West High School. The study not only reviews what physical improvements (maintenance) are needed, but how the improvements will assist the District in preparing every child to graduate ready for college, career and community. The improvements need to seamlessly compliment and bolsters these values.

## METHODOLOGY

To accomplish this task, our team executed a three phased approach.

1. The first phase was to review the physical condition of the building. How is the current building restricting MMSD to provide a quality learning environment? Mechanical, electrical, plumbing and all architectural elements have been reviewed. Life Safety codes continue to change and the safety and security of staff, students and community need to be addressed. The Team met with the following 2 groups from MMSD to gain input regarding the ongoing care and maintenance of the buildings:
    a. Building Services
    b. Building Trades

    Multiple site visits also occurred for onsite observation and analysis.
    Service Demographics and enrollment indicate that West is over capacity. The study will address how in a logical manner the future enrollment can be accommodated.
    **Sections two and three identify the obstacles the existing build and site produce.**

2. Simply improving the physical environment will not meet the stated goals and vision. The Strategic Framework must guide the improvements. To gain a better understanding of the educational direction, our team met with the following groups of District's Leadership Team and department heads:
    a. Central Office Leadership Team
    b. Instructional Team
    c. Technology Team
    d. Music and Arts
    e. Pathways
    f. Athletics

    Each group was asked what works, what doesn't work, what is absolutely needed, and what would be nice to have to assist them in providing a quality education.

    The Community is a large and integral part of any discussion on how the building can help bring the community together. Meeting with the following groups, we gained a better understanding of the dynamics of the MMSD/Community relationship.
    a. Athletics & Co-Curricular
    b. MSCR

**Sections four and five document our discussions.**

3. Once all information was gathered, the team worked to develop a conceptual design to address the issues, concerns, ideas and thoughts presented during the meetings. The plan is developed in three categories:
    a. Maintenance basic must have
    b. Renewal = Maintenance plus additional items
    c. Aspire = Maintenance + Renewal plus additional items

    Estimated costs for each category are also provided.

# Section One: Acknowledgements

**ZAS Team**

- Doug Barnes, AIA, NCARB, Vice President | Principal
- Greg Strand, Educational Planner, Designer
- Riley McKenzie, Architectural Support
- Nico Teresi, Architectural Support
- Honey Szymanski, Marketing Coordinator
- Ceil Wudy, Administrative Assistant
- Diane Ziegler, Administrative Assistant

**MMSD Team**

- Chad Wiese
- Andrew Statz
- Kelly Ruppel
- Andrew Statz
- Rick Hopke
- Alisa Brown
- Jo Anderson
- Tom Kannal
- Mike MacDonald
- Dave Kapp
- Jeff Knutson
- T.J McCray
- Lynda Chen
- Scott Fernholz
- Stacy Smith-Buckley
- Renae Ferraro
- Mark Penisten
- Peter Kuzma
- Najjah Thompson
- Peter Kuzma
- Cynthia(Cindi) Green
- Jen Wagner
- Alex Fralin
- Devon Peterson
- Jeremy Schlitz
- Kevin Porter
- Thomas Rogness
- Jacob Tisue
- Bo McCready
- Lisa Kyistad
- John E Harper

**PRA Team –** Portions of the FCI document integrated into this document were completed by PRA in 2017


ZIMMERMAN
ARCHITECTURAL STUDIOS, INC.

## Section Two: Facility Observations and Assessments

# Madison West High School:

30 Ash St., Madison, WI 53726

### SITE STATISTICS

Site = 9.13 Acres
Building Area = 362,112 sf
Original Construction 1930
Additions 1967, 1970, 1968, 1975

### FCA COMPOSITE SUMMARY

| | |
|---|---|
| Site Elements | C |
| Building Envelope | C |
| Life Safety | C |
| Accessibility | D |
| Interior Finishes | C |
| Specialty Areas/Needs | D |
| Mechanical Systems | C |
| Electrical Systems | B |
| Technology Systems | B |
| Aesthetics | C |
| Sustainability & Energy Efficiency | C |
| **COMPOSITE GRADE** | **C** |



# Facility Observations and Assessments

## LEADERSHIP
## BUILDING SERVICES
## BUILDING TRADES

### SITE ELEMENTS

**Asphalt Paving:** Inadequate parking availability for staff. No student parking. Cracking throughout.

**Concrete Walks:** Large areas of walks are either missing, cracked or crushed.

**Landscaping:** Large areas where grass is missing.

**Fencing:** Adequate condition with minimal rust present.

**Steps**: Cracking, heaving and general deterioration is present.

**Railings**: Proper extensions at the front. Railing along the main entry stairs needs repainting.

**Sports Fields**: Some areas are in need of reseeding. Drainage issues exist. The retaining wall surrounding the fields has major cracking and heaving.

**Site Accessibility (Ramps, Handicap Parking, Vans):** Site has multiple levels of grade. Some are only accessible by doors from the building.

**Buses and Parent Drop-Off**: Drop off along Regent Street has minimal congestion and no visibility issues. Drop off along Van Hise is only a 2 lane road and causes backup.

**Fire Truck Access:** School is centered on a city block and access is available on all sides.

**Dumpsters:** Dumpsters are not enclosed.

**Entrance Bridges:** Many entrances throughout the building are accessible via a concrete bridge from the sidewalk to entry. The underside of the bridges are deteriorating and large areas where rebar is exposed. The Guard railing along the sides are also in deteriorating condition.

### BUILDING ENVELOPE

**Brick:** Minimal tucking-pointing is needed. Large areas of green and black sediment are present on the surface of brick under overhangs.

**Main Entry Doors:** Doors seal and look in adequate condition. Minimal rust along the threshold.

**Main Entry Columns and Entablature**: Columns have no cracking. Entablature is in good condition.

**Side Portico:** Concrete steps are cracking and heaving. Column supports are no longer plumb. Cracking is present in the portico roof.

**Windows:** Few windows are operable. There are approximately 10% of the windows that have water intrusion issues.

**Louvers:** Majority of louvers are bent, rusty and damaged.

**Miscellaneous soffit Trim and Gravel Stops**: Adequate condition.

**Roof:** Mix of flat and sloped tile roof. Newly installed roof continues to experience leaking.

## LIFE SAFETY

**Fire Alarm and Fire Detection**: Good condition.

**Fire Protection, Sprinkler System**: Only the auditorium stage has a fire protection sprinkler system, remainder of the building is not sprinklered.

**Egress**: Adequate.

**Fire Extinguishers:** Noted throughout building.

**Classroom in Lower Level (Adjusted to Area Well):** Trees in area well. Area well not accessible due to window upgrade.

## ACCESSIBILITY FOR DISABLED

**Elevator/Lift:** 4 foot by 4 foot elevator that only goes up to the third floor.

**Toilet Rooms:** Three (3) single user toilet rooms are accessible throughout the facility.

**Automatic Entrances:** All exterior entrances except one have automatic entrances.

**Door Clearances:** Approximately 75% of doors do not meet clearances.

**Door Hardware:** Hardware are knobs or older panic bars.

**Casework:** Most of the casework is at a 3 foot height and does not meet ADA accessibility requirements.

**Sink Access at Casework**: Sinks in casework do not have proper knee clearances.

**Drinking Fountains:** A few proper drinking fountains have been installed in the building.

**Stairs**: Proper extensions are not present.

**Stage:** No ramp access. Stage has a portable lift system that does not properly latch, has fallen over, and has other issues.

**4th Floor:** Only accessible by stairs.

**Music:** Music rooms are not ADA accessible.

## INTERIOR FINISHES

**Flooring:** Wood flooring in classrooms is in good condition. Carpeting in classrooms (10%) is in poor condition. VCT flooring is in adequate condition.

**Ceilings:** Approximately 15% of the ceilings are in need of replacement due to staining from leaks or age.

**Walls:** Plaster is blistering on exterior walls where moisture is attacking it. Areas that have tile or wainscoting on the walls are in need of patchwork.

**Casework:** All casework throughout is dated and showing wear. Delamination is also present.

**Doors:** Doors show wear and tear.

**Marker Boards**: Adequate condition.

**Corridor Lockers/Cubbies**: Most lockers are in adequate to good condition. Approximately 20% of the lockers should be repainted.

**Toilet Partitions:** Painted metal partitions are starting to rust and twist in place. Latches don't work to close doors properly.

**Shades**: Good condition

## SPECIALTY AREAS/NEEDS

**Secure Entrance**: Office has a window off the main entry hallway. Multiple entry points throughout the facility and many of the entries have keypad and are locked. Security concern is texting someone inside building to gain entry.

**Classrooms Locks:** Doors must be key locked from the outside. Maintenance goes through in the morning and keys all doors to be defaulted as locked. HVAC issues in many rooms result in doors being propped open removing the security.

**Security Cameras:** There are three (3) areas where cameras are blind.

**Administration:** Multiple office clusters spread throughout the building. The office near the main entry is small but has good flooring, ceiling, and finishes. The other office areas are sufficient in space and have good finishes. Carpeting is worn and in poor condition in carpeted offices.

**Mail Room/Staff Work**: Insufficient mail box quantity for staff and organizations present. Mailboxes are too small.

**Stage:** Good condition. Lighting recently replaced.

**Gymnasium - First Floor:** Flooring tile is popping. Ceiling is in adequate condition. Flooring is showing some wear.

**Gymnasium - Second Floor:** Bleachers are in constant repair. Leak through vent onto floor. Operable walls function. Some damage to the west operable partition is present. Doors into the gym can be pulled open even when locked.

**Gym Locker/Shower:** Need to be replaced/upgraded.

**Pool Locker/Shower**: Need to be replaced/upgraded.

**Nurse:** One (1) cot, original floor tile. Handwashing sink is present. Toilet room is not accessible with sink inside.

**Cafeteria:** Original tile floor. Exposed ceiling. Damage to flooring caused by tables that don't turn properly.

**Cafeteria/Gym:** Movable partition doesn't move. Wood flooring is damaged. Bleachers don't function properly.

**Kitchen**: Full functioning kitchen. Flooring showing wear.

**After School Program:** Gyms, auditorium and cafeteria are used as after school spaces.

**Pottery Room**: Doorway entry is small. Kiln does not have proper exhaust. Clay dust difficult to completely remove.

**Metal Arts Room:** Sinks need to be replaced. Ventilation for soldering area does not function properly. Casework is worn. Exposed concrete Floor is in good condition.

**Gallery**: All finishes are in good condition.

**Band:** Better acoustics are needed, very live space. Curtains over windows are in need of replacement. No accessibility to the space. Flooring is in good condition. Ceiling is in adequate condition.

**Orchestra:** Better acoustics are needed, very live space. Curtains over windows are in need of replacement. No ADA accessibility to the space. Flooring is in good condition. Ceiling is in adequate condition.

**Library/IMC:** New carpet. Ceiling is in good condition. Circulation desk is in adequate condition. Space is lacking baseboard.

**Pool:** Adequate lighting. Ceramic tile in floor, walls and pool are all damaged. Insufficient space for audience viewing during competition.

**Auditorium**: Recently upgraded seating and finishes. Some cracking in the sloped concrete floor is present.

**Shop and Tech Spaces**: No heating in the classrooms near shop areas. Concrete floor and exposed ceilings.

**Science Rooms**: Need upgrading. Epoxy countertops are outdated and breaking off in places. Two (2)

exhaust hoods are not functioning. Sinks clog often. Door latches are difficult to open.

**Home Economics**: VCT tile flooring, plastic laminate counter tops are delaminating.

Cabinets are in good condition. There are no ADA accessible stations.

## MECHANICAL SYSTEMS

**Boiler:** Installed in 1960 and has exceeded projected life expectancy.

**Air Handlers**: Majority of the air handlers are new and recently installed.

**Power Roof Ventilator:** Installed in 1990 and has exceeded projected life expectancy.

**Cabinet Unit heaters, Convectors and Baseboard Radiation**: Cabinet heaters and coils installed in 1949. Base board radiation installed in 1960. Unit heaters were installed in 1968. All have exceeded projected life expectancy.

**HVAC Pumps and Valves**: Heat pumps installed in 2013 and have 13 years of useful life remaining. Valves installed in 1960 have exceeded projected life expectancy, and valves installed in 2013 have 12 year of useful life remaining.

**Air Conditioning:** Majority of the building is air conditioned.

**Temperature Controls**: All of the temperature controls are new and recently installed.

**Plumbing Fixtures:** Various installation dates and have exceeded projected life expectancy.

**Water Heater:** Installed in 1968 and has exceeded projected life expectancy.

**Water Softener**: Two water softeners; one installed in 1990 and has exceeded projected life expectancy; and the other installed in 2000 and has 4 years of useful life remaining.

**Plumbing Pumps and Piping**: Installed in 1968 and have exceeded projected life expectancy.

**Domestic Hot Water Piping**: Various installation dates and have exceeded projected life expectancy.

**Geothermal System and Heat Exchangers:** Geothermal installed in 2013. The School District has been addressing issues associated with making system operate as intended.

## ELECTRICAL SYSTEMS

**Switchgear:** Installed in 2013 and has 17 years of useful life remaining.

**Panels:** Installed in 2012 and have 21 years of useful life remaining.

**Transformer:** Installed in 2004 and has 3 years of useful life remaining.

**Generator:** Installed in 2005 and has 14 years of useful life remaining.

**Lighting:** Various installation dates with majority of lighting having 6-12 years of useful life remaining.

**Power Outlets**: Older installation date. Insufficient number of outlets.

## TECHNOLOGY SYSTEMS (Phone, Data, Communications)

**PA System:** Installed in 2008 and has 7 years of useful life remaining.

**Phone:** Installed in 2001 and has exceeded projected life expectancy.

**Data Outlet:** Installed in 2001 and has exceeded projected life expectancy. Insufficient number of outlets.

**Wireless:** Yes.

## AESTHETICS

**Site:** Sports fields and landscaping look good. Stairs and concrete are in poor condition.

**Exterior Façade:** Looks almost new, though areas toward the back needs cleaning and repair.

**Interior Spaces:** Majority of space is showing age.

# Section Three:  Building Functionality

The following drawings display the campus and the building in the current conditions. Areas that will be addressed, along with notes identifying the deficiencies as indicated in the Long Range Master Plan, are identified on these drawings.

## SITE DEFICIENCIES AND OBSERVATIONS

- Parking needs to be addressed.
- Stone retaining walls need to be rebuilt.
- Pedestrian bridge on Southside of building, from Regent street to the building needs to be repaired/or removed.
- All practice fields are worn, and have poor drainage.
- The baseball field does not have team dugouts.

## BUILDING DEFICIENCIES AND OBSERVATIONS

- Building is over capacity.
- The building has multiple ADA accessibility issues:
  - The Fourth Floor is not ADA accessible.
  - The stage of the theater is not ADA accessible.
  - Many rooms are not ADA accessible.
  - Restrooms do not meet ADA accessible standards.
- The main accessible entrance is hidden.
- Less than 35% of the windows have been replaced.
- Classroom finishes need to be upgraded.
- All restrooms need to be upgraded.
- All locker rooms need to be upgraded.
- Science Classrooms and labs to be updated.
- Both the Theater and Pool need major upgrades.
- The building should be converted from steam to hot water. All piping needs to be replaced.

# EXISTING SITE - WEST HIGH SCHOOL



SITE PLAN

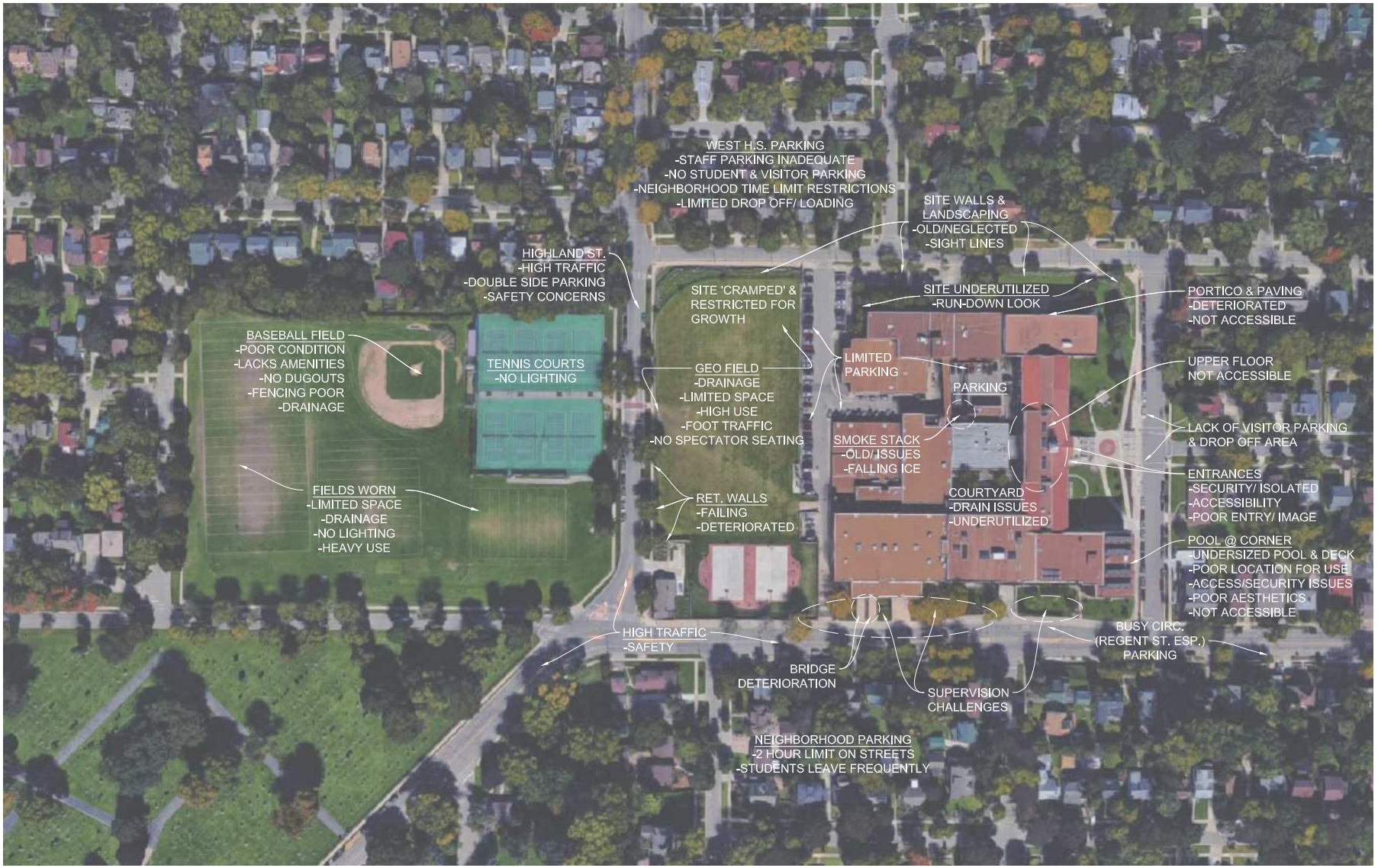
ZAS Project # 180125.00 | 12 - 21 - 2018

Madison West High School

Ash St., Madison, WI

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

# ISSUES & OBSERVATIONS




SITE PLAN

ZAS Project # 180125.00 | 12 - 21 - 2018

**ISSUES & OBSERVATIONS**

Madison West High School

Ash St., Madison, WI

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

# SITE OPPORTUNITIES




SITE PLAN

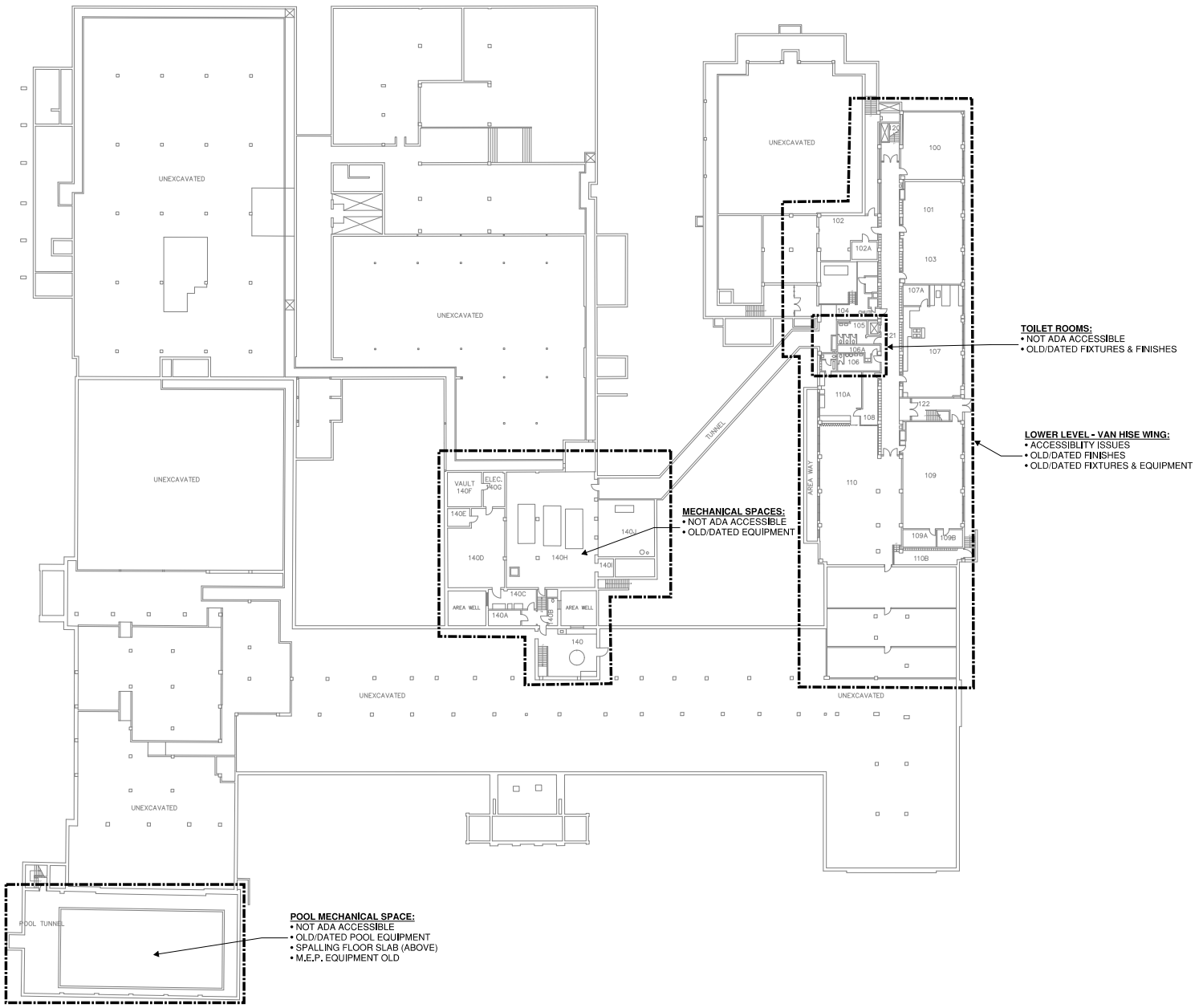
ZAS Project # 180125.00 | 12 - 21 - 2018

**SITE OPPORTUNITIES**

Madison West High School

Ash St., Madison, WI

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com



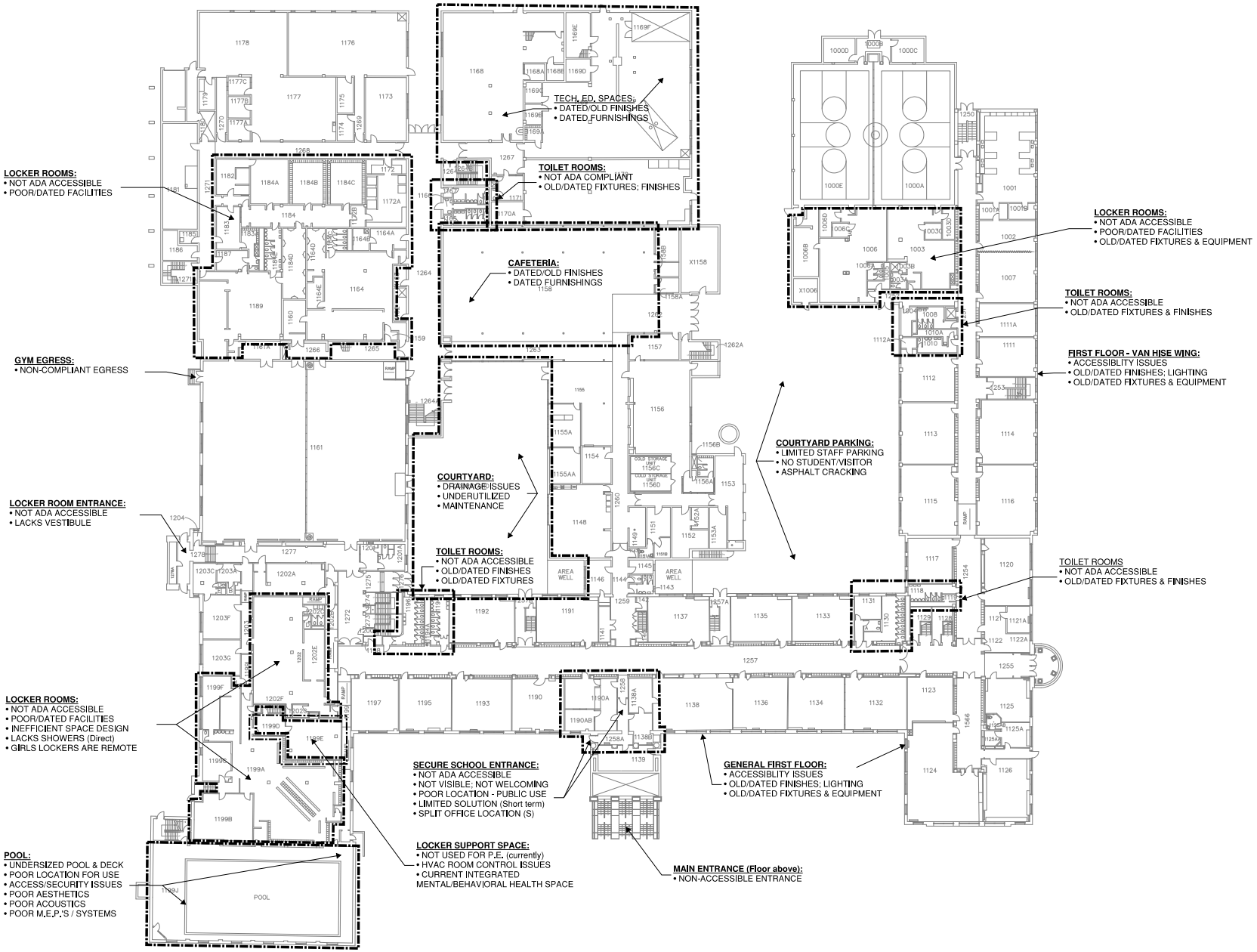

BASEMENT PLAN

ZAS Project # 180125.00 | 11 - 12 - 2018

# Madison West High School

Ash St., Madison, WI

zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com



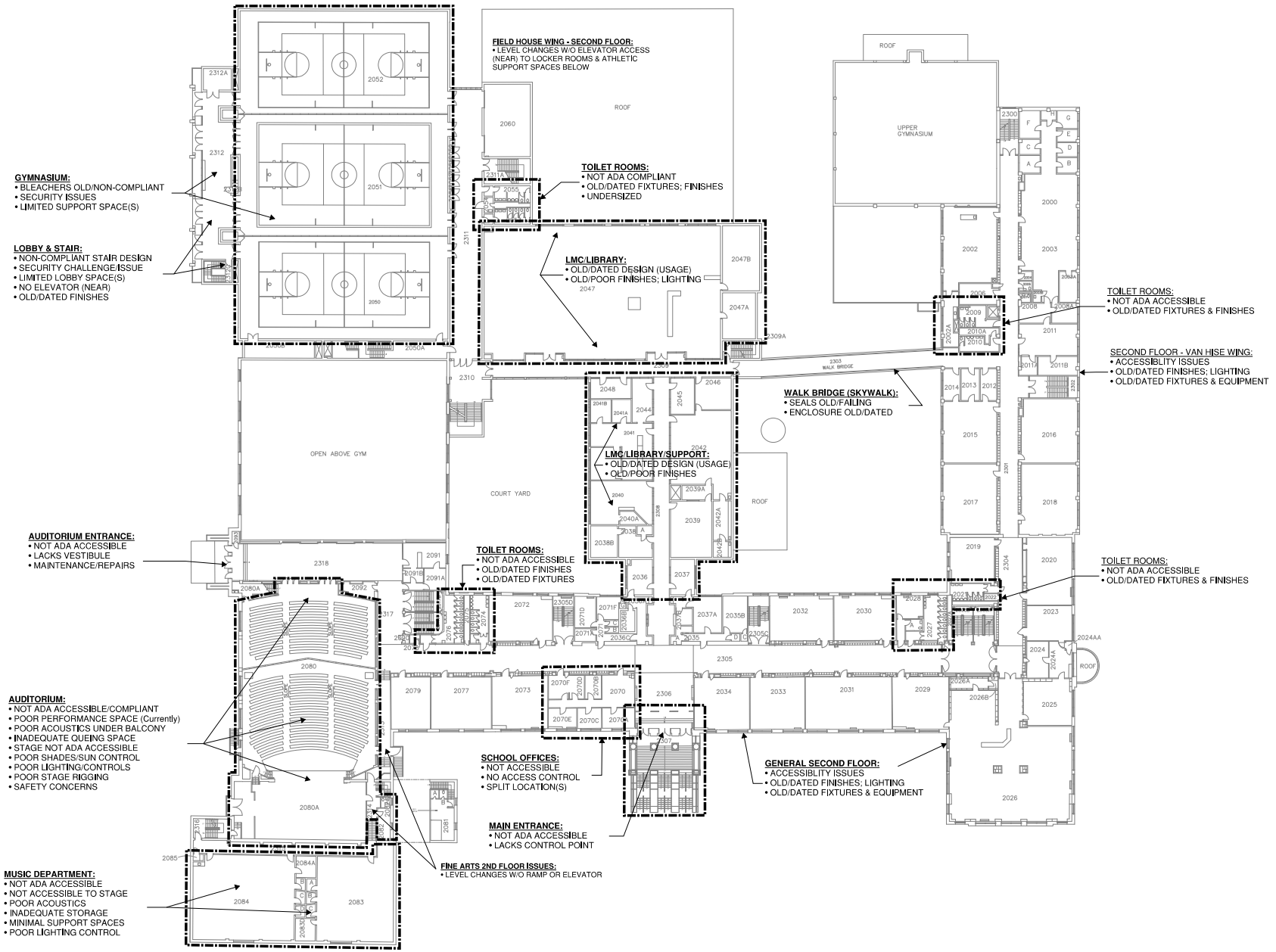

FIRST FLOOR PLAN

ZAS Project # 180125.00 | 11 - 12 - 2018

# Madison West High School

Ash St., Madison, WI

Zimmerman Architectural Studios, Inc.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com



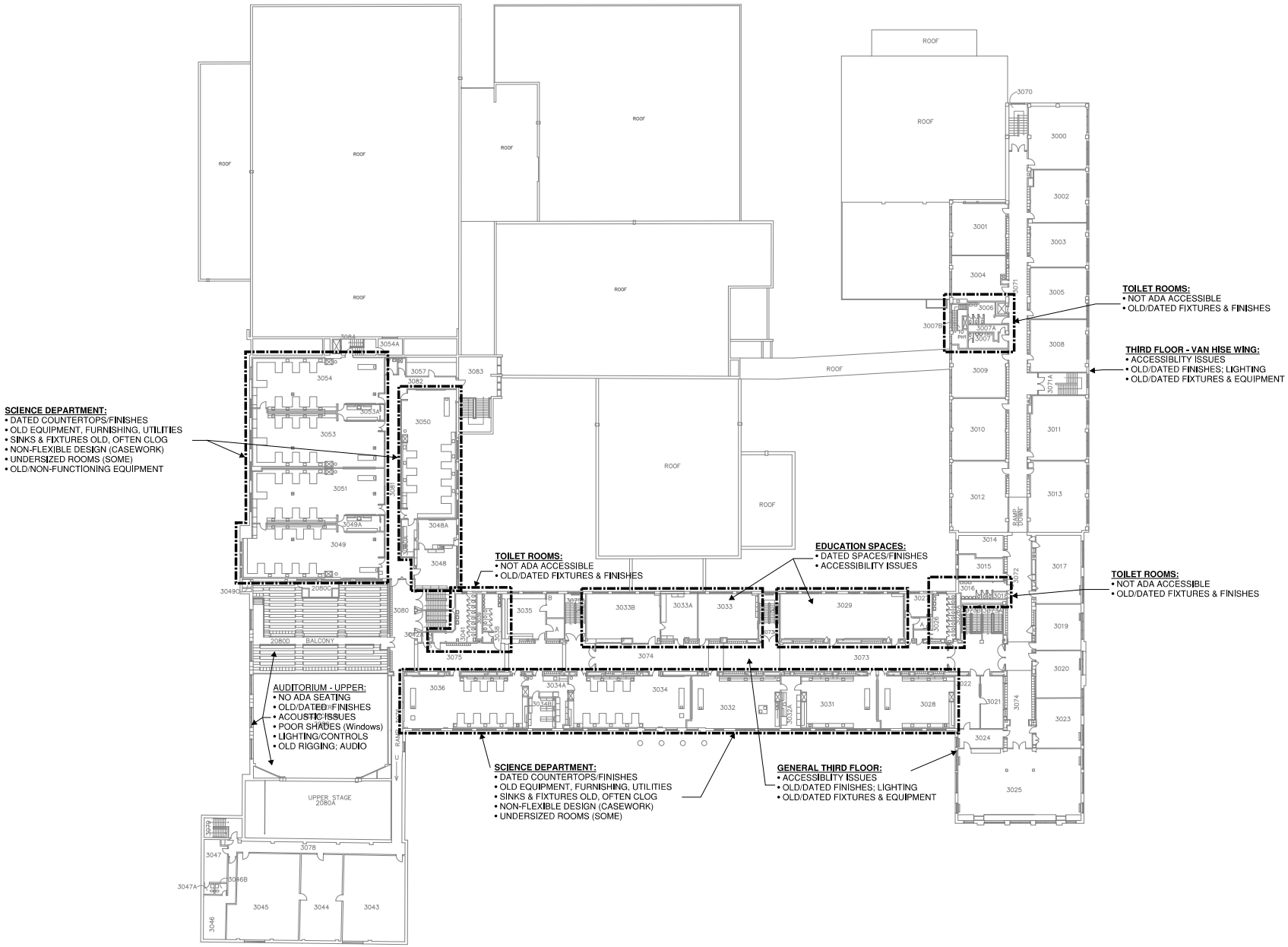

SECOND FLOOR PLAN

ZAS Project # 180125.00 | 11 - 12 - 2018

# Madison West High School

Ash St., Madison, WI

Zimmerman ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zasstudios.com



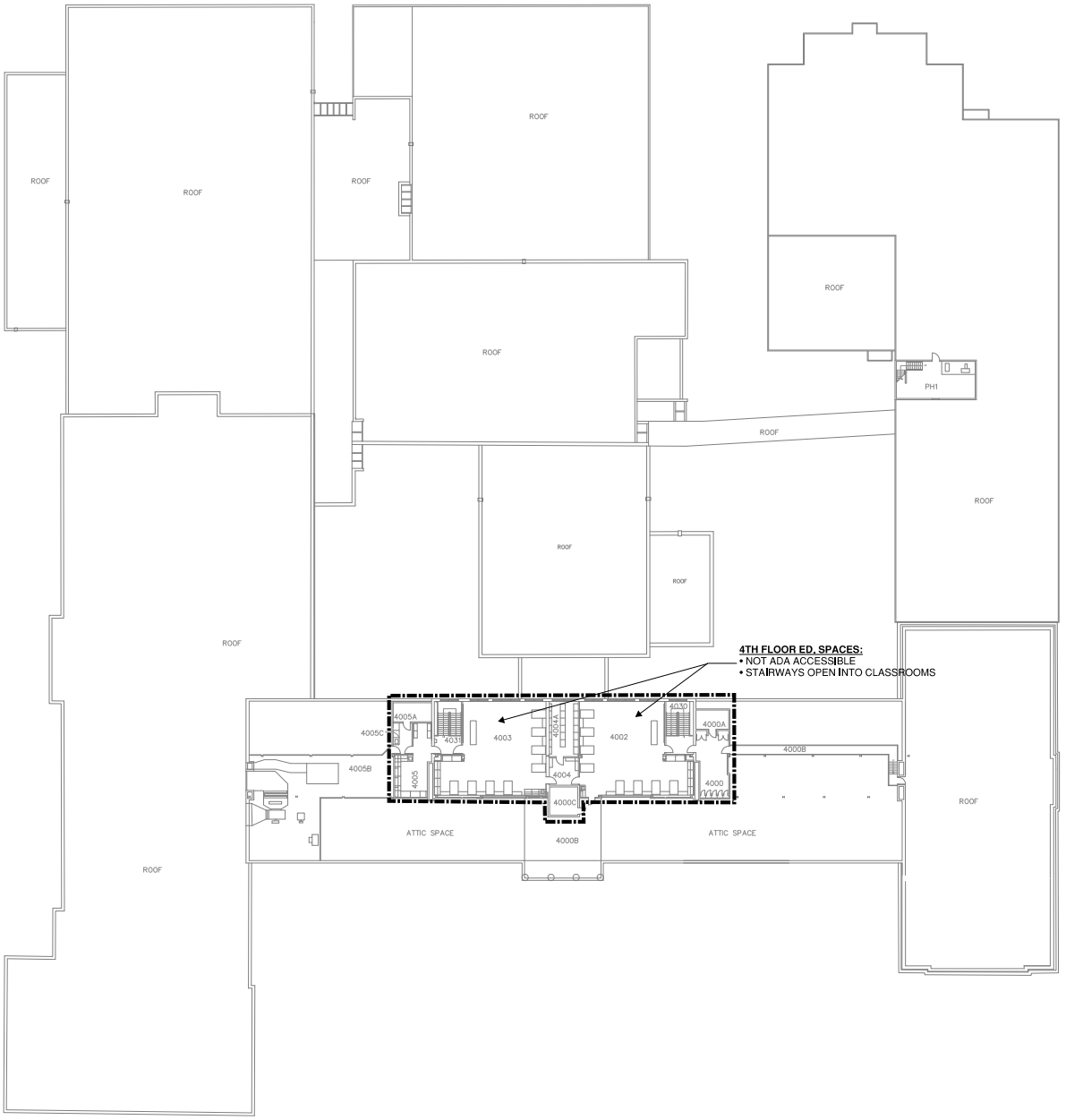

THIRD FLOOR PLAN

ZAS Project # 180125.00 | 11 - 12 - 2018

# Madison West High School

Ash St., Madison, WI

zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com



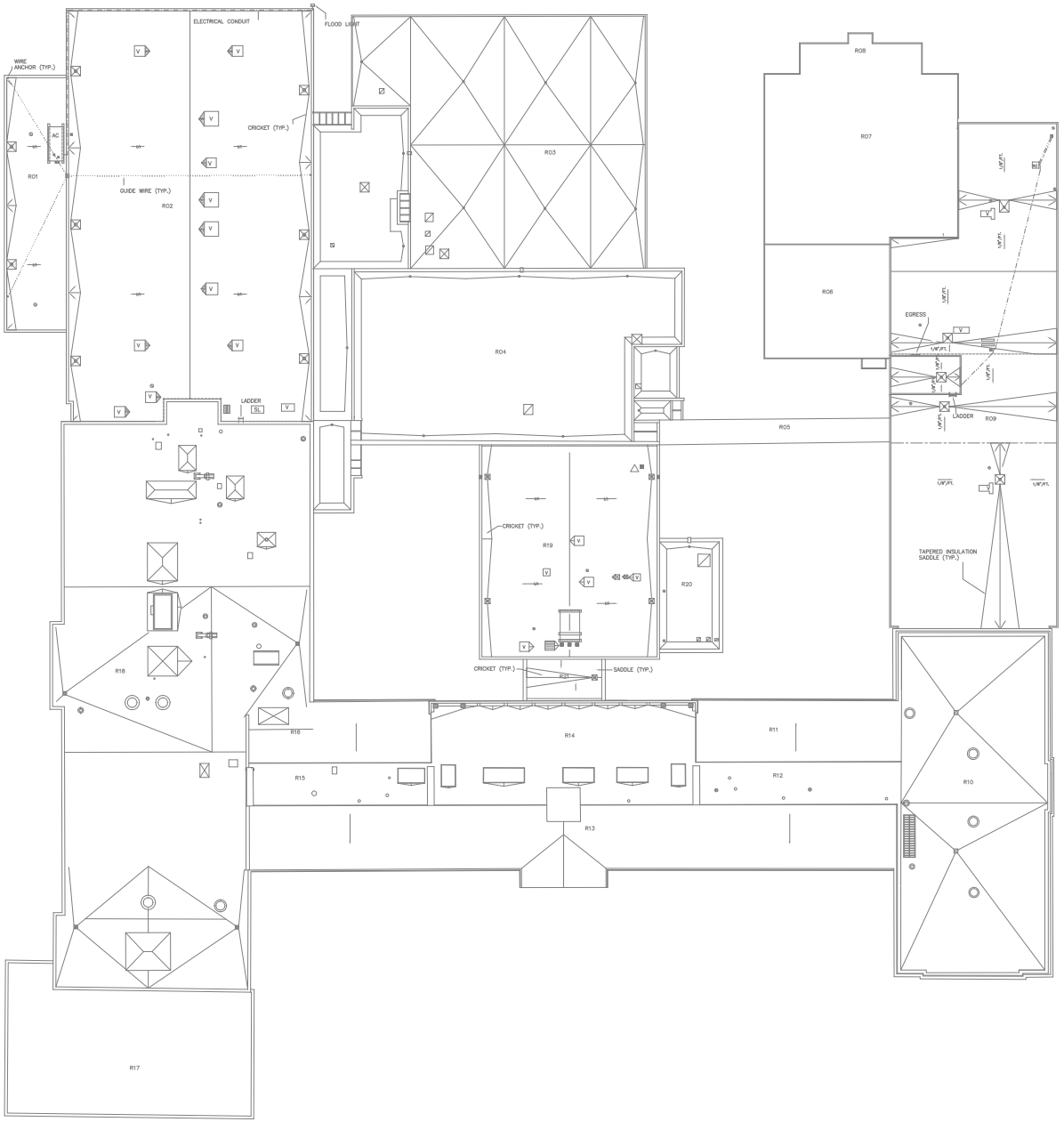

FOURTH FLOOR PLAN

ZAS Project # 180125.00 | 11 - 12 - 2018

# Madison West High School

Ash St., Madison, WI

zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com



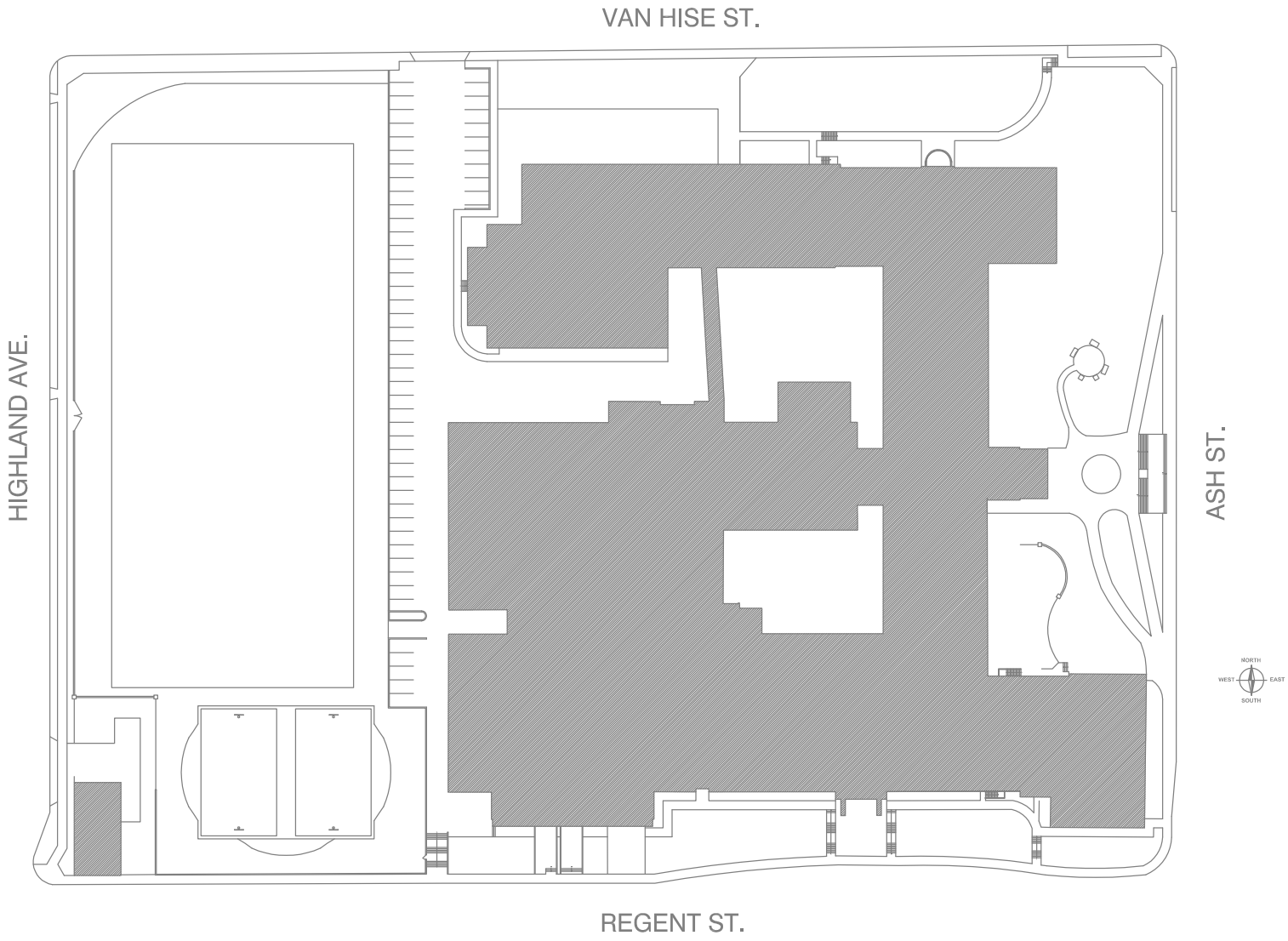

ROOF PLAN

ZAS Project # 180125.00 | 11 - 12 - 2018

# Madison West High School

Ash St., Madison, WI

zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




SITE PLAN

ZAS Project # 180125.00 | 11 - 12 - 2018

Madison West High School

Ash St., Madison, WI

zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com


ZIMMERMAN
ARCHITECTURAL STUDIOS, INC.

# Section Four: Educational Spaces

## INSTRUCTIONAL TEAM

**NOTED DEFICIENCIES:**

- Student capacity is too high, all spaces are maxed out spaces limiting instruction capabilities and opportunities.
- The wayfinding in the school needs to be improved. There are long narrow corridors, many that are not accessible.
- OTP/PT learning environments need to be improved.
- The Welcome Center is not welcoming.
- Virtual/on-line classrooms are in the future.
- Teacher collaboration space is needed.
- The LMC could be improved with additional windows.
- The building and furniture look and feel dated.

**DESIGN CONSIDERATIONS**

- By adding a new Welcome Center and moving the location of the pool, classroom space and additional rooms could be added. Greater ADA accessibility would be gained.
- Learning environments for students with all disabilities (hearing, behavior, mental health, and therapeutic) should and be created, with expanded Day School options taken into account.
- All classrooms need to be updated, including the furniture that will allow each classroom to have flexibility.
- Classrooms should be able to address the visual, auditory, kinesthetic, and verbal learning styles.
- Create flexible learning options including on-line, ITV (Interactive Television Classes) or a blend.

## TECHNOLOGY TEAM

**NOTED DEFICIENCIES:**

- Need flexible spaces for learning:
  - Groups; Individual study
  - Coffee Shop in Library (idea/fee)
- More user friendly spaces are needed.
- Classrooms are too confined, at a minimum, more glass should be used. Bring learning to the corridors.
- The LMC needs better lighting and should be “brought back to life”.
- MMSD is moving to a 1 – 1 technology use with Chromebook.
- More outlets – overall need access to power.
- Secure work space(s) for technicians is needed.

**DESIGN CONSIDERATIONS**

- Create a better more flexible space for faculty and staff to collaborate. There should be a combination of “right sized” rooms to accommodate groups of various sizes. All furniture should be flexible for team building exercises.
- Library/IMC will be designed to be the school and technology hub. Group and individual rooms should be created. Rows of book stacks should not dominate the area.

## MUSIC AND ARTS

**NOTED DEFICIENCIES:**

- The theater has acoustic problems under balcony (sound shadows).
- Original design intended to meet dual roles: Assembly and Theater.
- School has a lack of a true lobby space; circulation is a mess; more space for flow.
- The stage is not ADA accessible.
- Stage rigging needs to be replaced.
- “House” needs better lighting/power controls; AV systems.
- Theater needs to be redesigned to function as a performance space.
- Need better and accessible spaces for dressing rooms, toilet rooms, support spaces.
- Music rooms are ADA accessible.
- Music rooms need better/more appropriate instrument storage.
- Acoustics in music rooms difficult/challenging for users & instruction.
- Types of storage make it hard to maintain and store the Visual Arts projects.

**DESIGN CONSIDERATIONS**

- Theater to be completely renovated – rebranding the space, and bringing it to a performance quality venue.
- Adding an elevator will address the accessibility issues for the theater and the music classrooms.
- Proper instrument storage will create a better and safer learning environment.

## Pathways

**NOTED DEFICIENCIES:**

- Student capacity is too high; maxing out spaces; limiting instruction capabilities.
- Everything looks exactly what it looked like 20, 30 40+ years ago.
- Furniture must be flexible.
- Learning is hidden – need to open it up. Everything is too “compartmentalized”.
- Music and theater areas need to be redone/replaced.
- Appropriate sized classrooms are needed for current curriculum instruction. Education spaces that enhance/stimulate learning – not restrict & limit opportunities.
- Need Flexible classrooms / instruction spaces / Break-out spaces
- Science rooms & Labs space renovations; updates (equipment, furnishings, utilities).
- Classrooms in need of updating (generally); transition from 1970 look to 2020 education. Furniture for flexible instruction; collaboration for whiteboards / tackboards, updated finishes.
- All Lighting & ventilation needs to be upgraded.
- Improved accessibility and ADA compliance.
- More glass and/or openings for visual flow between spaces; supervision.
- Bigger & improved large group instruction spaces; study hall space(s).
- Improved/enhanced capabilities/support for technology; personal computers/devices.

**CONSIDERATIONS:**

- The proposed Welcome center addition will create a new vibrancy into the building honoring the history and esthetic nature of the original structure welcoming students and staff into the 21st century learning environment. The new space will also address many of the ADA issues plaguing the building.
- By expanding into the courtyard with the relocation of the pool, addition classrooms will be added.
- With the District moving to 1-1 technology for students, open collaborative spaces, as well as independent study areas can be created in the Library / LMC.
- The courtyard addition will also allow for new STEM classrooms to be located on the same floor as the updated science classrooms / labs.
- Parking can be addressed in two ways. A small area could be created under the new pool, and/or a new structure west of Highland could be created.

# Section Five: Athletics and Community Spaces

## ATHLETICS AND CO-CURRICULAR

**NOTED DEFICIENCIES:**

- Athletic fields are worn due to heavy use.
- Pool needs to have the entire system upgraded.
- Locker rooms are in terrible condition.
- The first floor locker rooms are not accessible (ADA) to the second floor gym.
- The Main Field has limited space & amenities; heavy use for grass; worn foot paths.
- The Baseball field is in poor condition; No dugouts, poor backstop & fencing, poor grading/drainage.
- Pool location & facilities are not ideal; undersized for pool and spectators.

**DESIGN CONSIDERATIONS:**

- To remain competitive in the Big 8 Conference, and retain the quality athletic talent Madison youth has developed, all athletic venues need to be replaced and/or completely renovated.
- All locker rooms should be renovated.
- Improve Baseball field and add dugouts.
- Add field turf to athletic fields.

## MSCR & COMMUNITY USE

**NOTED DEFICIENCIES:**

- Parking.
- Pool needs a facelift. Pool is hard to maintain when it is being used throughout the year.
- Better Security is needed. MSCR utilizes the building after 7:00 PM.
- Club sports and other organizations use the spaces, which only congest the utilization.
- High community use creates additional wear and tear on facilities; lack funds (Fund 180) to keep up with usage needs.
- The current MSCR Offices are in the Hoyt Building, not associated with any of the high schools where most of the activity occurs. Current office at Memorial is too small.
- Need a space to accommodate 200-300 people.
- Need more/dedicated storage.
- Poor visitor/user wayfinding. It is hard to find way to gym; pool; field house.
- Need new dividers; the old divider is failing.

**DESIGN CONSIDERATIONS**

- Parking needs to be addressed, by adding a structure on the athletic field's site on Highland, the parking issue would be addressed for both the school during the day, and MSCR in the evening.
- By moving the pool to the West side of the campus, at the current location of the basketball courts, a new entry could be constructed to link the pool and fieldhouse with an more accessible community entrance. This will also help eliminate some of the security issues.

# Section Six: Design Recommendations and Options

COMMON THEMES:

## CAPITAL MAINTENANCE

- Mechanical systems need to be upgraded (energy efficiency, climate control, reliability).
- Building envelope maintenance (masonry repairs, windows, roof membrane).
- Finishes (floors, ceilings, walls) need to be refreshed.
- Life safety (fire alarms, fire suppression, PAs).
- Many bathrooms are original, need for more all-gender.
- Site work (landscaping plan, signage, asphalt repair, sidewalks and stairs, stormwater control).

## BUILDING FUNCTIONALITY

- Building is at capacity or overcrowded.
- Building ADA accessibility issues need to be resolved.
- Parking needs to be improved.
- Review traffic flow in common spaces.
- Placement of student support areas and Welcome Centers.
- Consider support of Small Learning Communities, collaboration spaces.
- Better support of community partnerships and usage.
- Security improvements.

## EDUCATIONAL SPACES

- Science lab spaces are dated and in poor condition.
- LMC to be updated to 21st century educational standards.
- Instructional spaces are not flexible (furniture and expandable spaces).
- Art and music spaces are very dated and in many cases too small.
- Theater needs complete overhaul.
- All spaces must be accessible.

## ATHLETICS & COMMUNITY

- All field spaces overused and worn; replace with Field Turf (as practical).
- Locker rooms need complete overhaul (accessibility, all-gender, Title 9).
- Insufficient practice spaces.
- Competition spaces need to be refreshed and accessibility needs to be addressed.

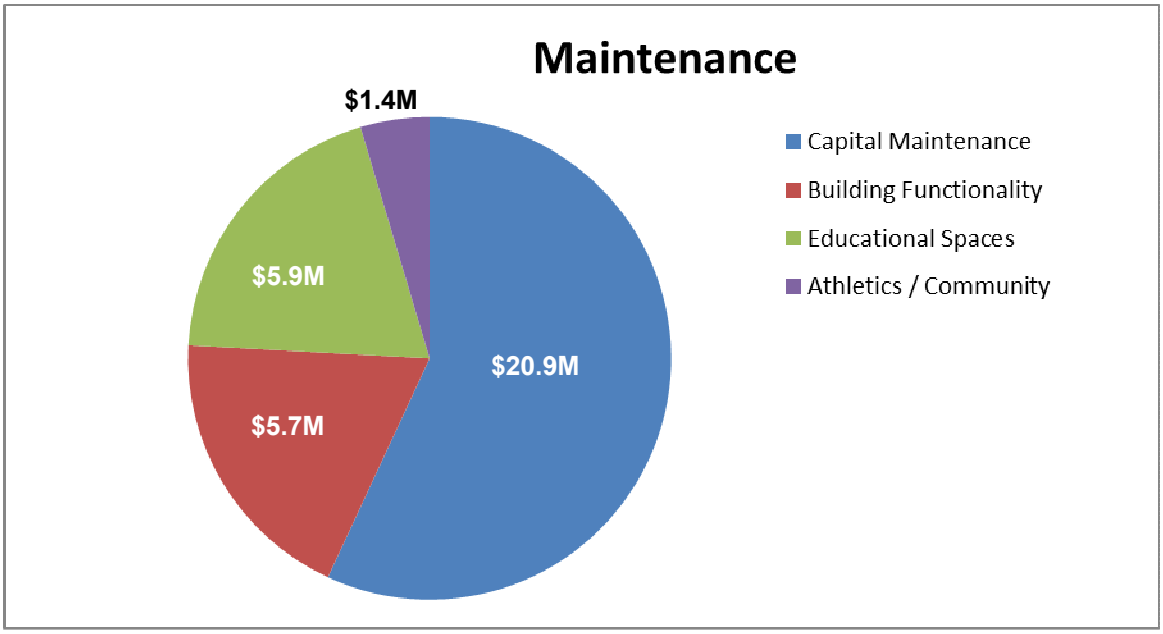
## Maintenance Option

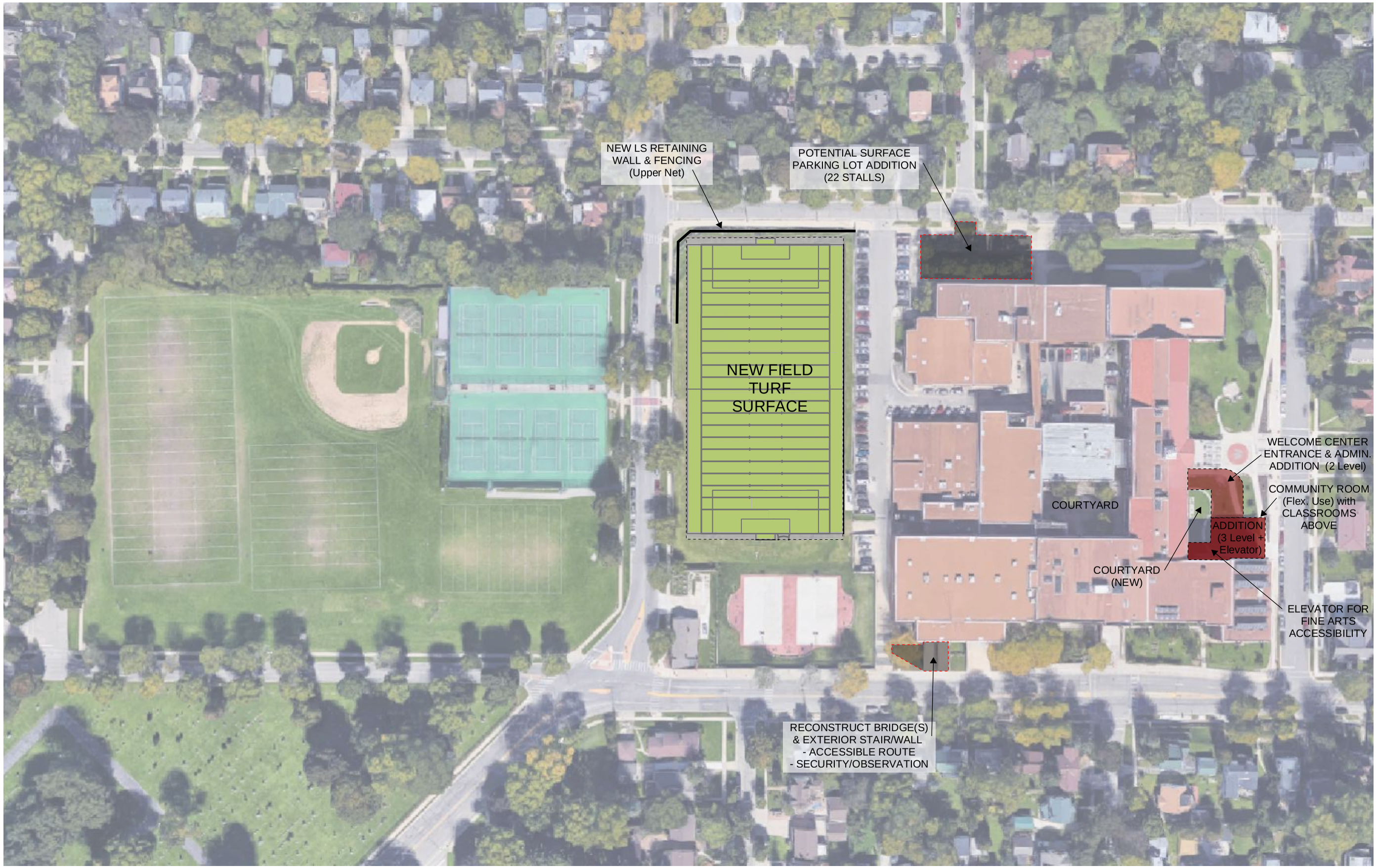
1. **Capital Maintenance**
   a. Roofs & Copings (replacement)
   b. Exterior Doors
   c. Brick Repair/Tuckpointing
   d. Eliminate steam boilers; convert to electric or gas hot water heat. All piping needs to/should be replaced.
   e. Replace air handlers; Gym AHU replacement priority
   f. Replace pool mechanicals
   g. Replace/upgrade mechanical controls
   h. Replace water softener
   i. Replace domestic tank heaters
   j. Replace remaining valves
   k. Window Replacement
   l. Restroom Renovations
   m. Locker Room Upgrades
   n. Lighting Upgrades
   o. Upgrade Classroom Finishes
   p. Parking

2. **Building Functionality**
   a. Welcome Center
   b. Safety and Security Upgrades
   c. Office Consolidation
   d. ADA Improvements
   e. Signage and Branding

3. **Educational Spaces**
   a. 3 Story addition with/ Classrooms and elevator

4. **Athletics & Community Space**
   a. Bleacher Replacement
   b. Field Turf






SITE PLAN

ZAS Project # 180125.00 | 05 - 01 - 2019

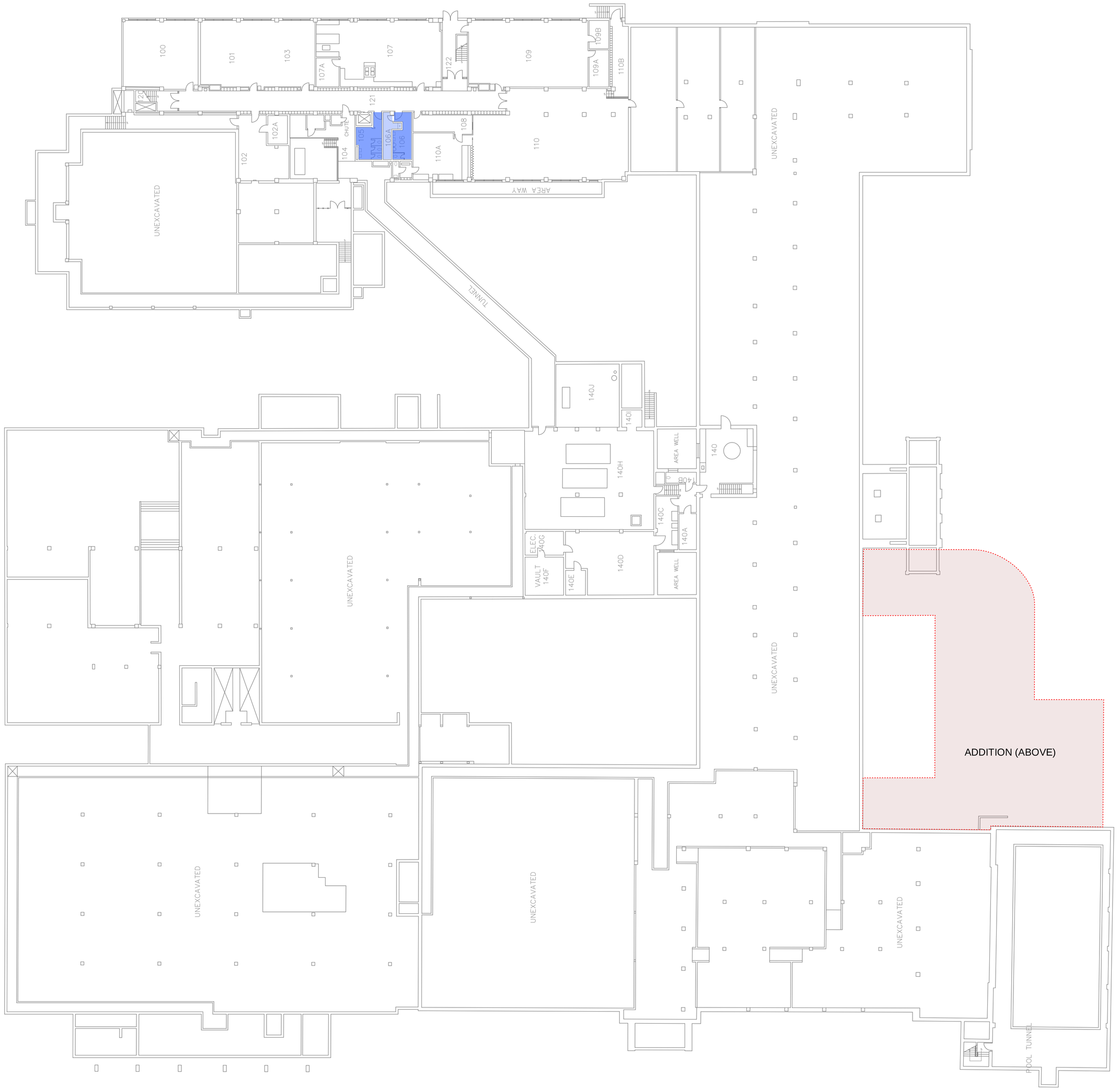
Madison West High School

Ash St., Madison, WI

MAINTENANCE OPTION

= NEW ADDITION (PROPOSED)

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




= EXISTING
= NEW ADDITION (PROPOSED)
= RENOVATION (per ADDITIONS)

= CAPITAL MAINTENANCE
= BUILDING FUNCTIONALITY
= EDUCATION SPACES
= ATHLETICS / COMMUNITY

# MAINTENANCE OPTION

BASEMENT PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




# MAINTENANCE OPTION

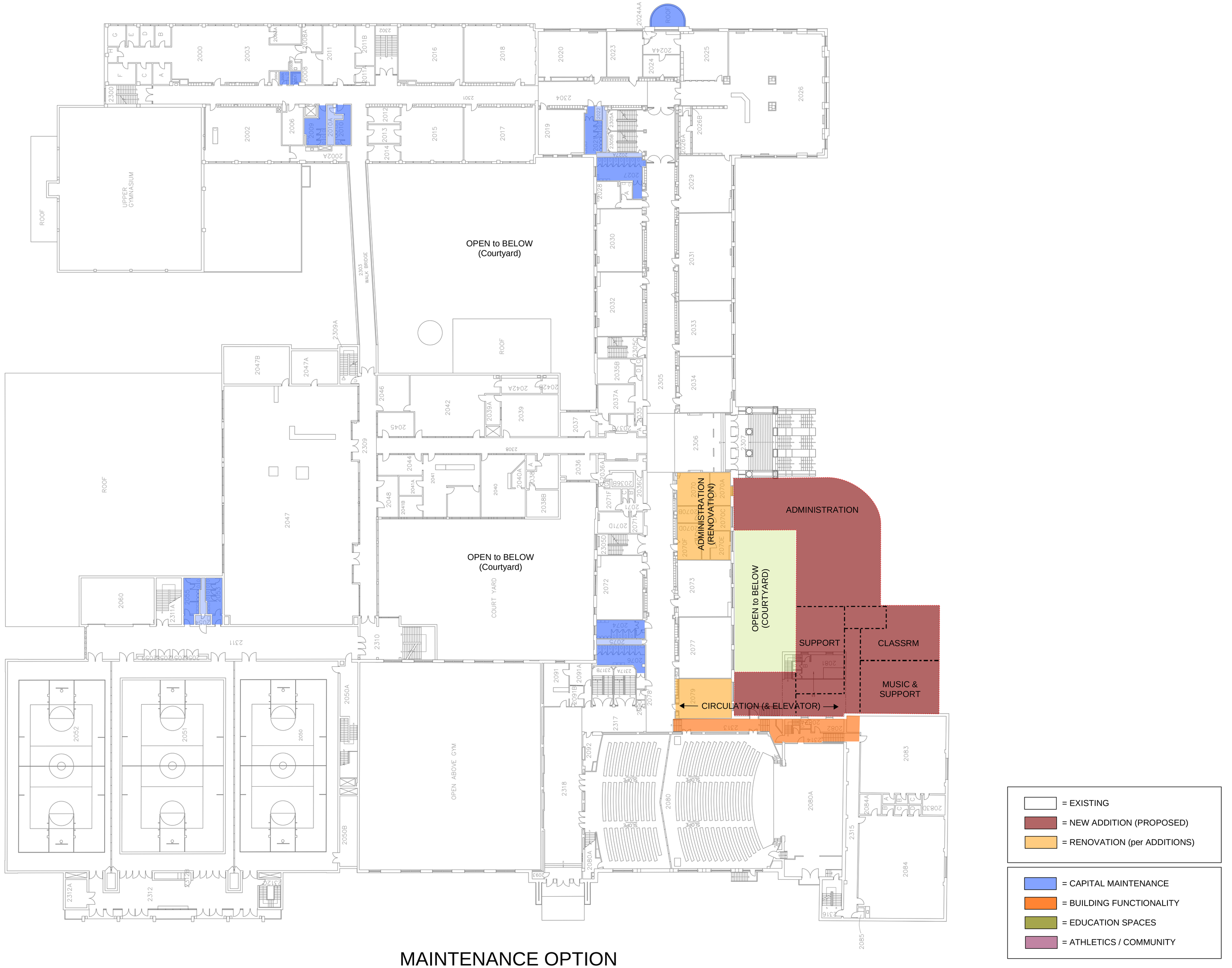
FIRST FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




# MAINTENANCE OPTION

SECOND FLOOR PLAN

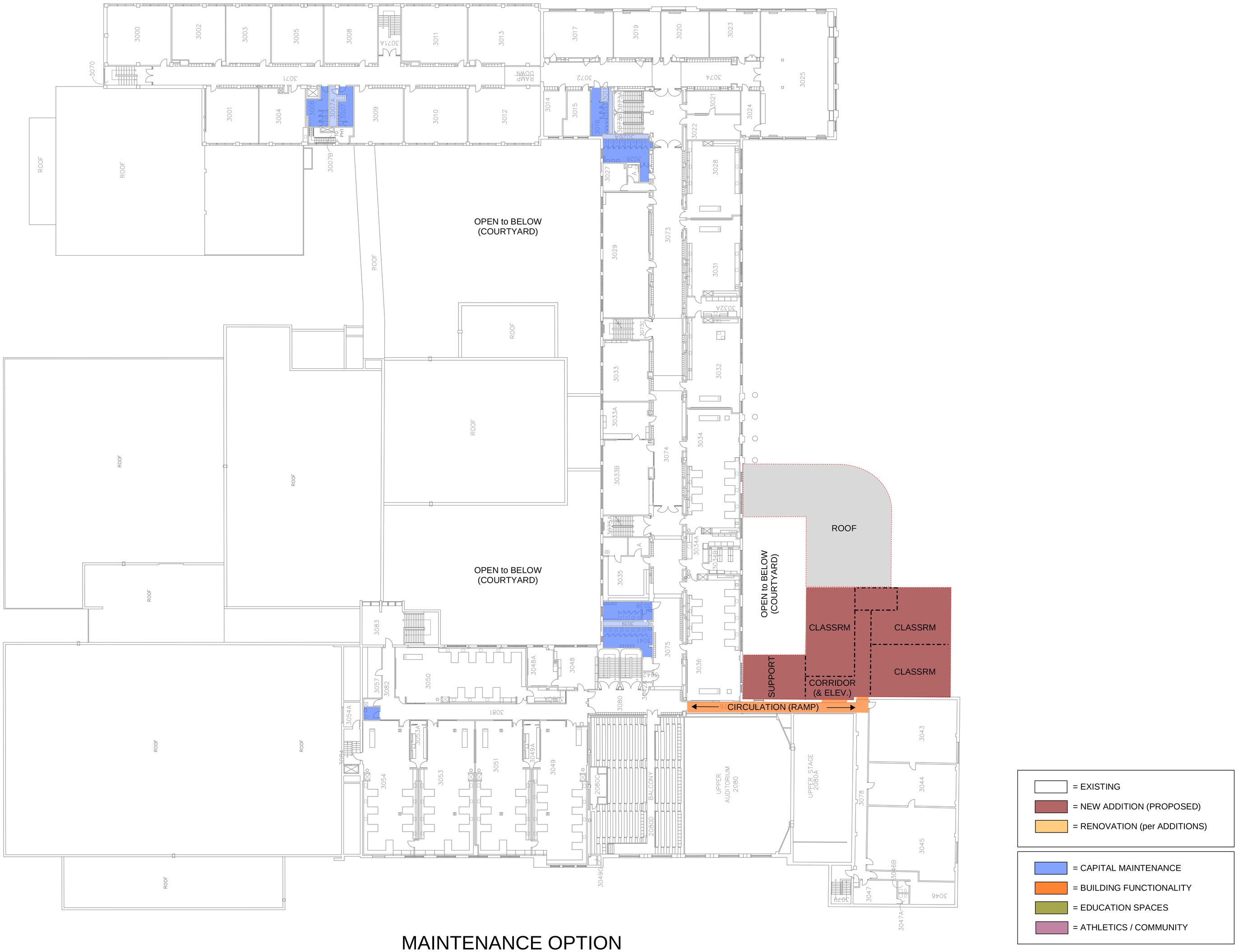
## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019


ZIMMERMAN ARCHITECTURAL STUDIOS, INC.

2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




# MAINTENANCE OPTION

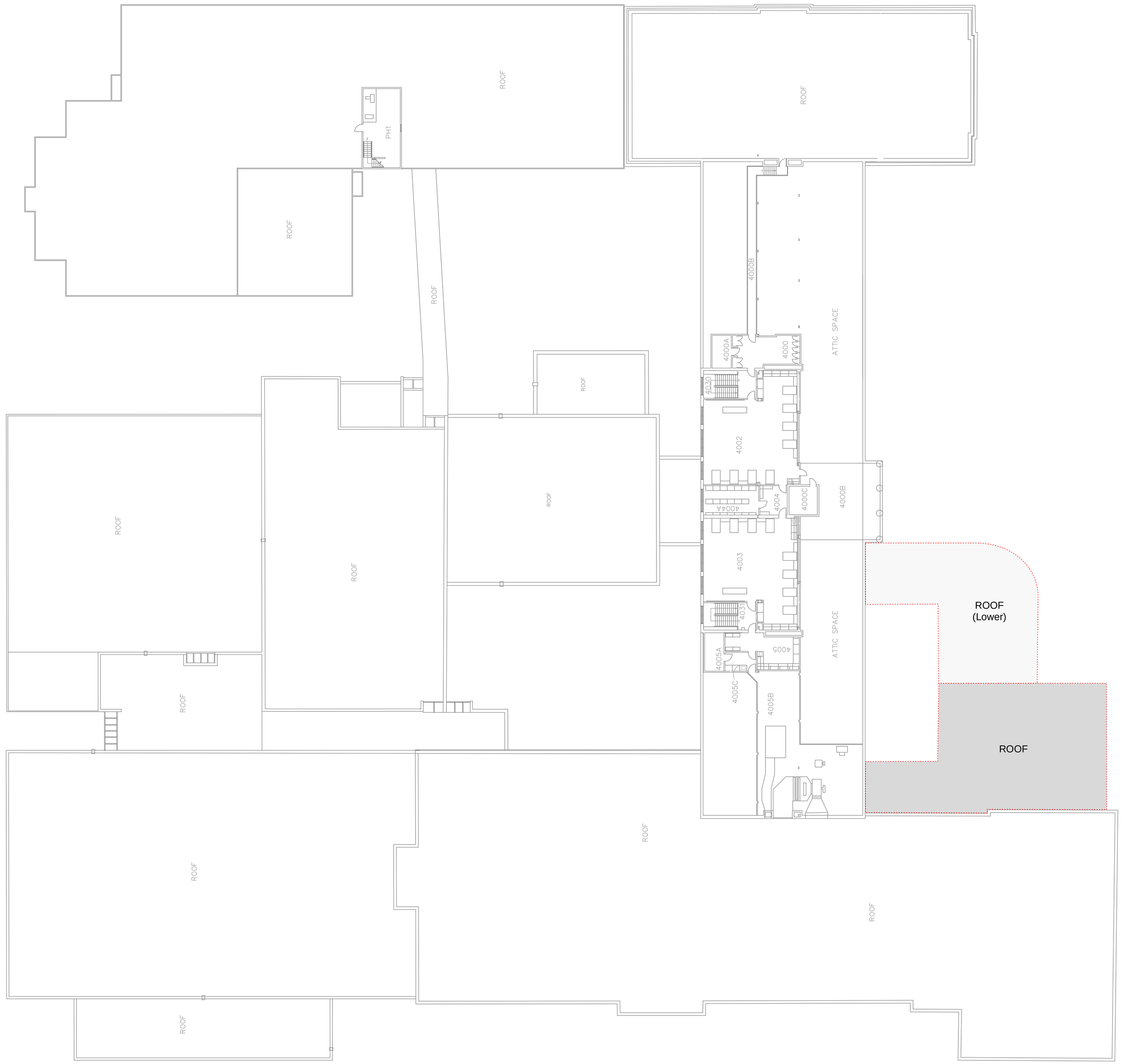
THIRD FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




= EXISTING

= NEW ADDITION (PROPOSED)

= RENOVATION (per ADDITIONS)

= CAPITAL MAINTENANCE

= BUILDING FUNCTIONALITY

= EDUCATION SPACES

= ATHLETICS / COMMUNITY

# MAINTENANCE OPTION

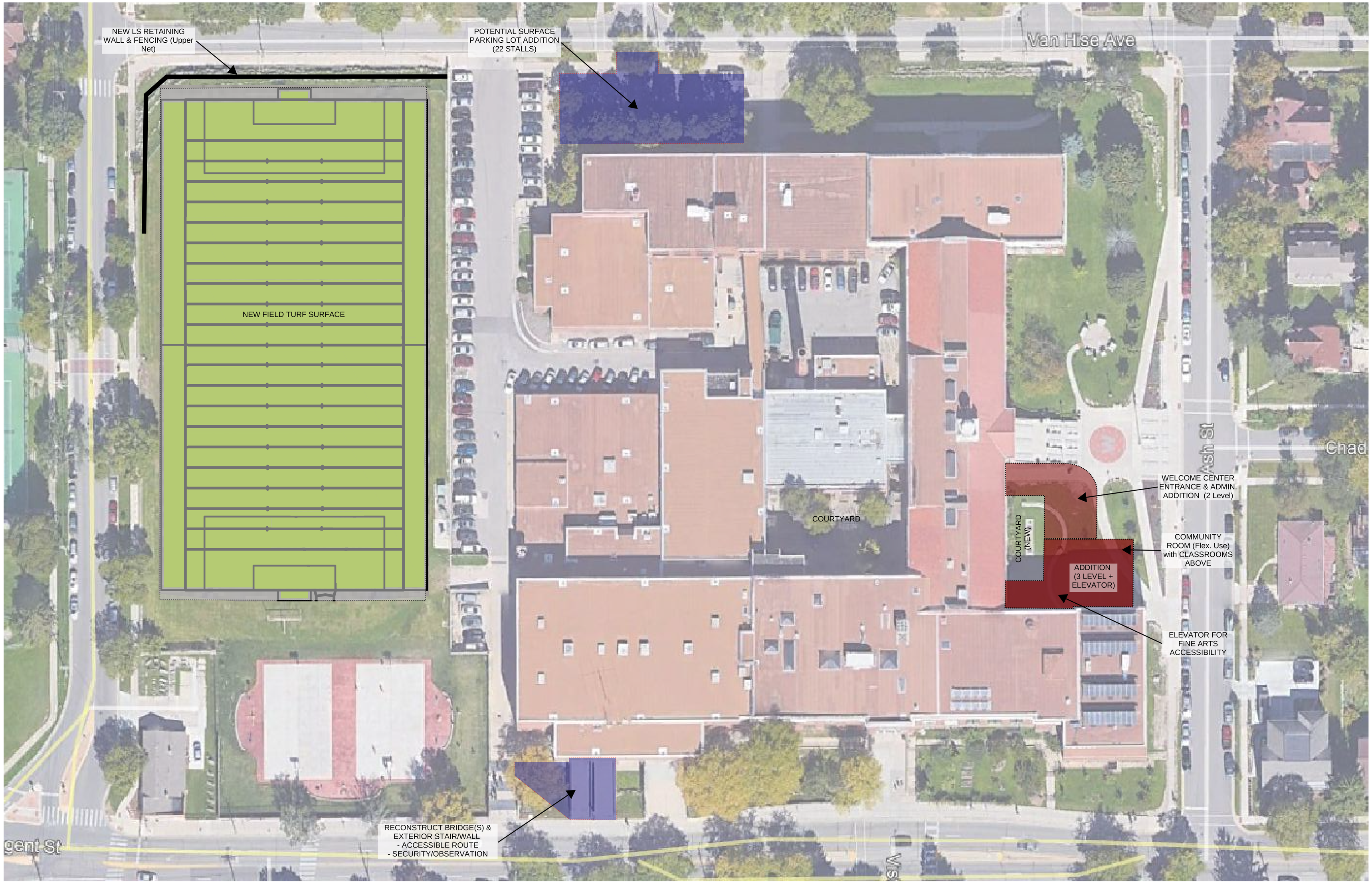
FOURTH FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




SITE PLAN

ZAS Project # 180125.00 | 05 - 01 - 2019

# Madison West High School

Ash St., Madison, WI

## MAINTENANCE OPTION

= NEW ADDITION (PROPOSED)


ZIMMERMAN ARCHITECTURAL STUDIOS, INC.

2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

# Renewal Option

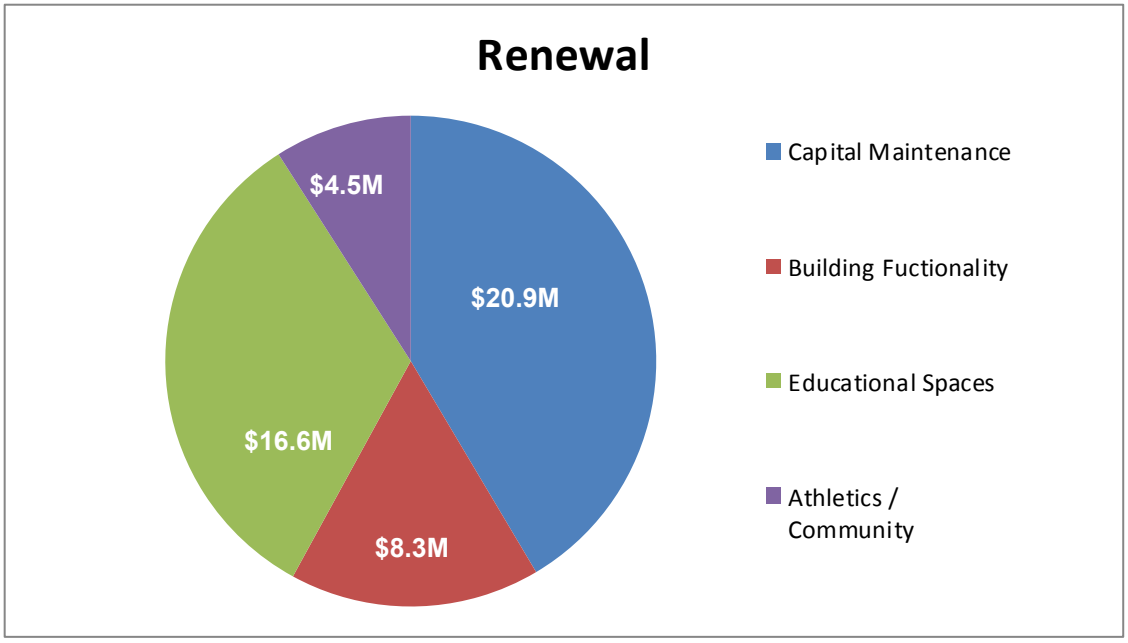
Everything in Maintenance +

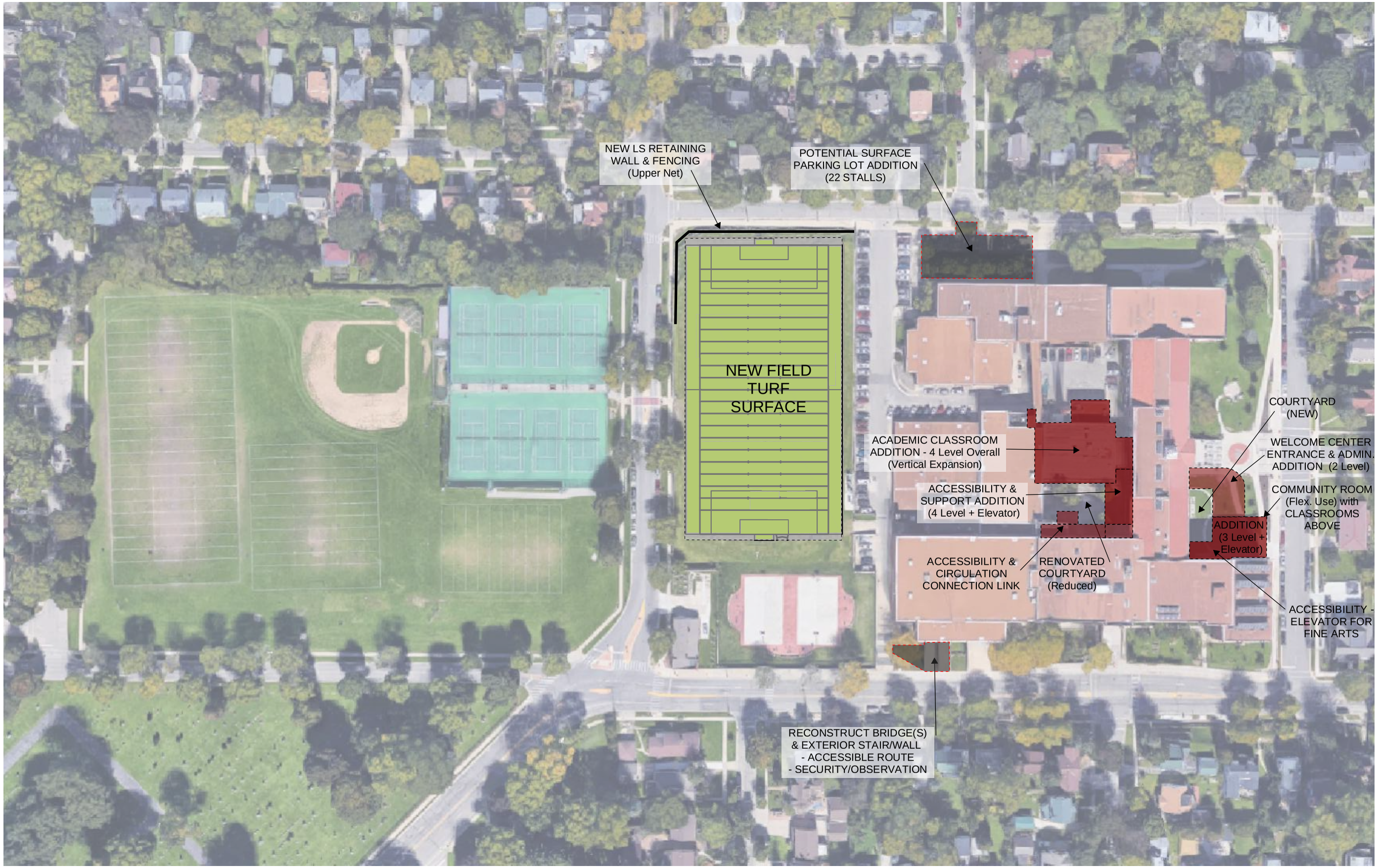
1. **Capital Maintenance**
   a. Rebuild/Repair Side Portico
   b. Upgrade Classroom Finishes

2. **Building Functionality**
   a. Fire Suppression
   b. Courtyard Improvements
   c. ADA Improvements

3. **Educational Spaces**
   a. Inner Courtyard Expansion
      i. Renovated LMC
      ii. New Open Collaborative Spaces
      iii. New Classrooms on 2 floors
      iv. New STEM/STEAM Classrooms
   b. Science Labs (Renovations)
   c. Special Needs Classrooms
   d. Theater Upgrades/Renovations

4. **Athletics & Community Space**
   a. Pool Renovation
   b. Baseball Field
      i. Replace backstop and fence
      ii. New Dugouts
      iii. Improve Grades
   c. Weight Room






SITE PLAN

ZAS Project # 180125.00 | 05 - 01 - 2019

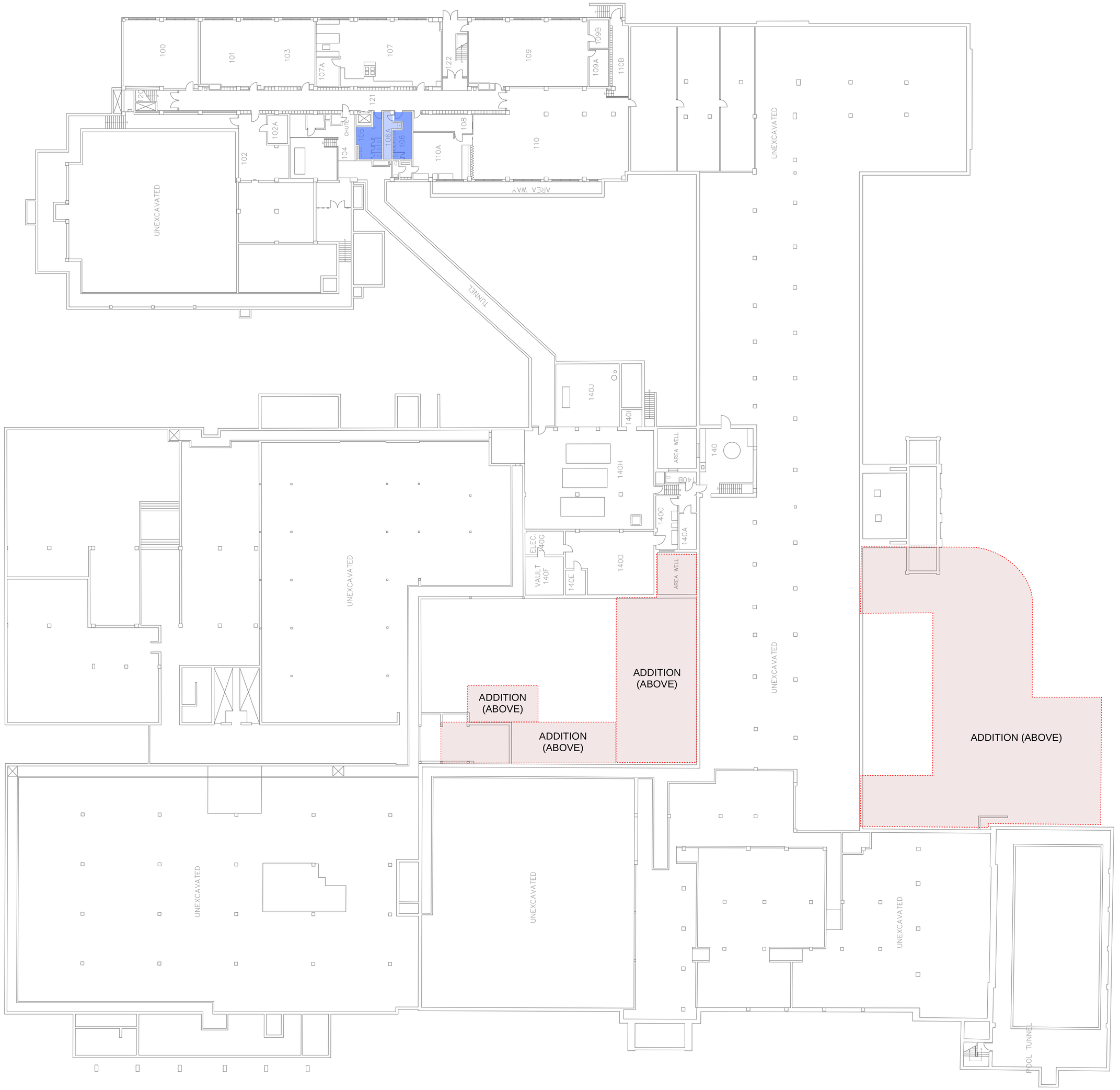
# Madison West High School

Ash St., Madison, WI

## RENEWAL OPTION

= NEW ADDITION (PROPOSED)

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




= EXISTING

= NEW ADDITION (PROPOSED)

= RENOVATION (per ADDITIONS)

= CAPITAL MAINTENANCE

= BUILDING FUNCTIONALITY

= EDUCATION SPACES

= ATHLETICS / COMMUNITY

# RENEWAL OPTION

BASEMENT PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.

2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




# RENEWAL OPTION

FIRST FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




= EXISTING
= NEW ADDITION (PROPOSED)
= RENOVATION (per ADDITIONS)

= CAPITAL MAINTENANCE
= BUILDING FUNCTIONALITY
= EDUCATION SPACES
= ATHLETICS / COMMUNITY

# RENEWAL OPTION

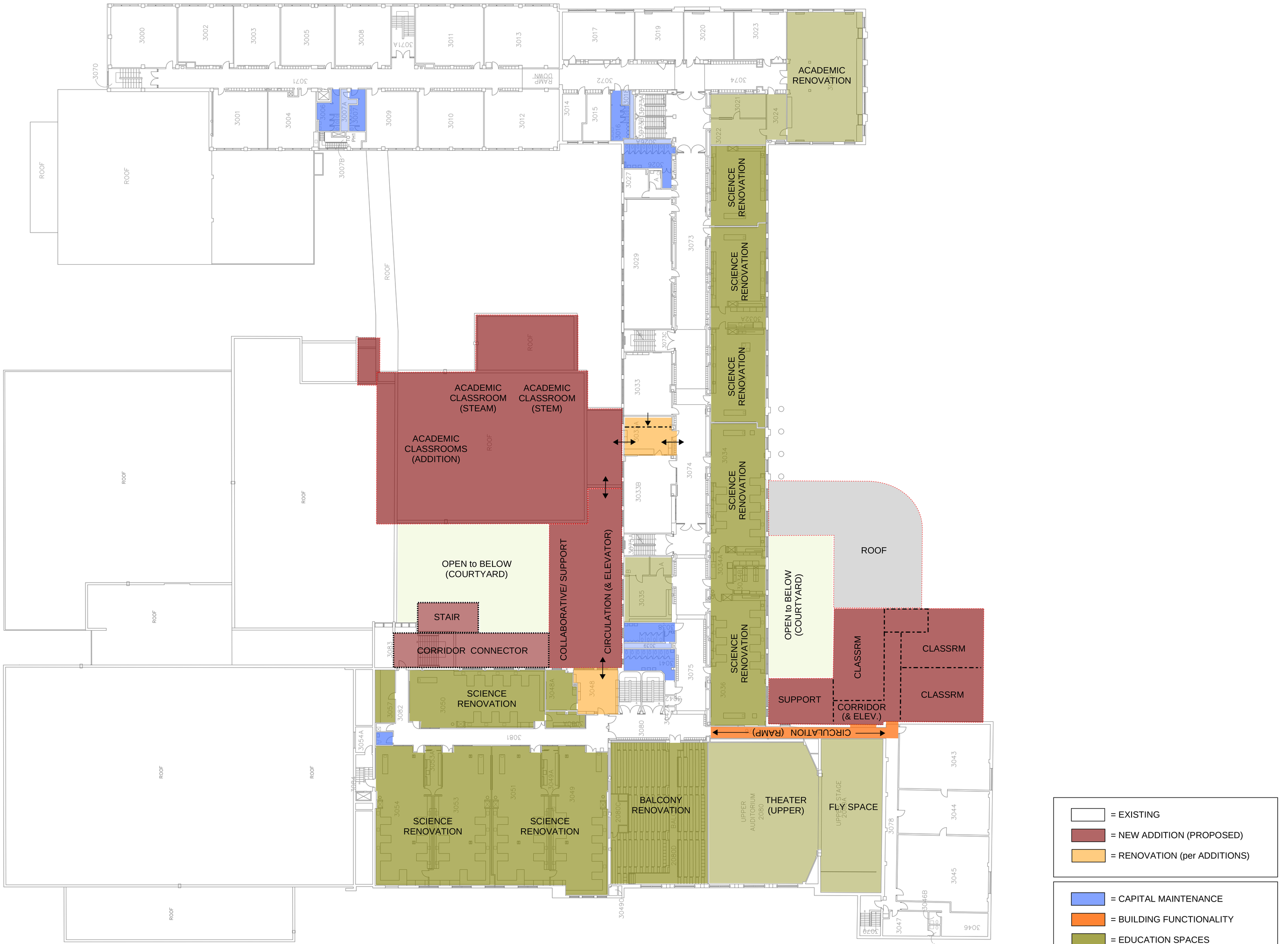
SECOND FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




# RENEWAL OPTION

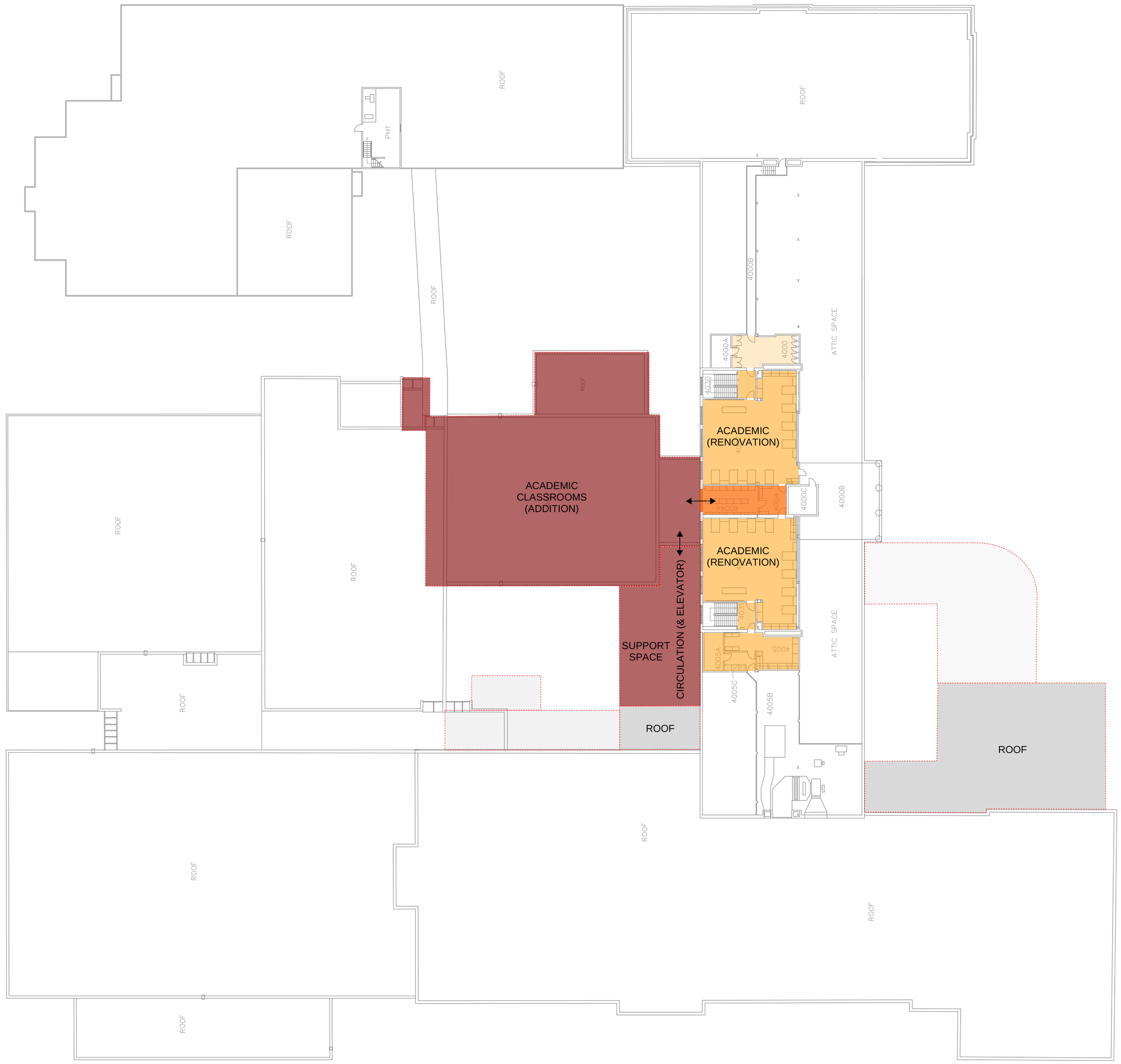
THIRD FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

zimmerman ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




# RENEWAL OPTION

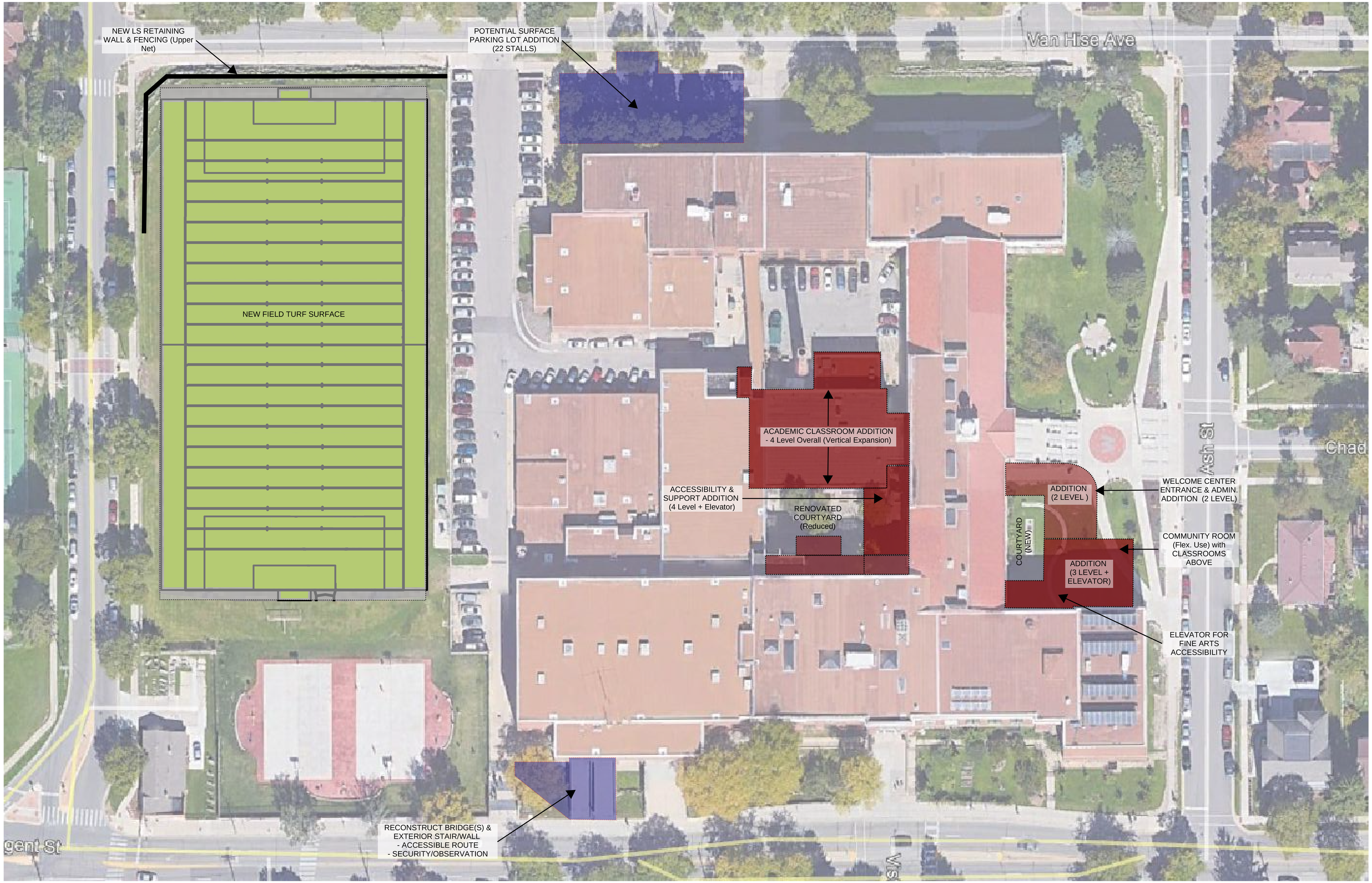
FOURTH FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




SITE PLAN

ZAS Project # 180125.00 | 05 - 01 - 2019

# Madison West High School

Ash St., Madison, WI

## RENEWAL OPTION

= NEW ADDITION (PROPOSED)


zimmerman ARCHITECTURAL STUDIOS, INC.

2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

# Aspire Option

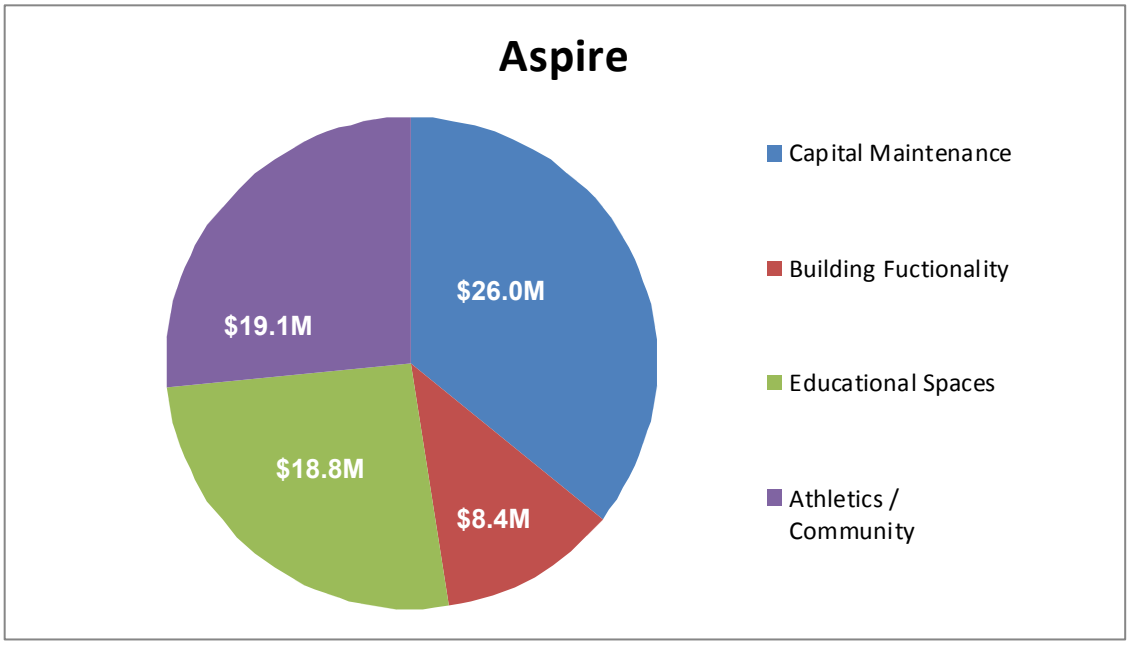
Everything in Maintenance +Renewal +

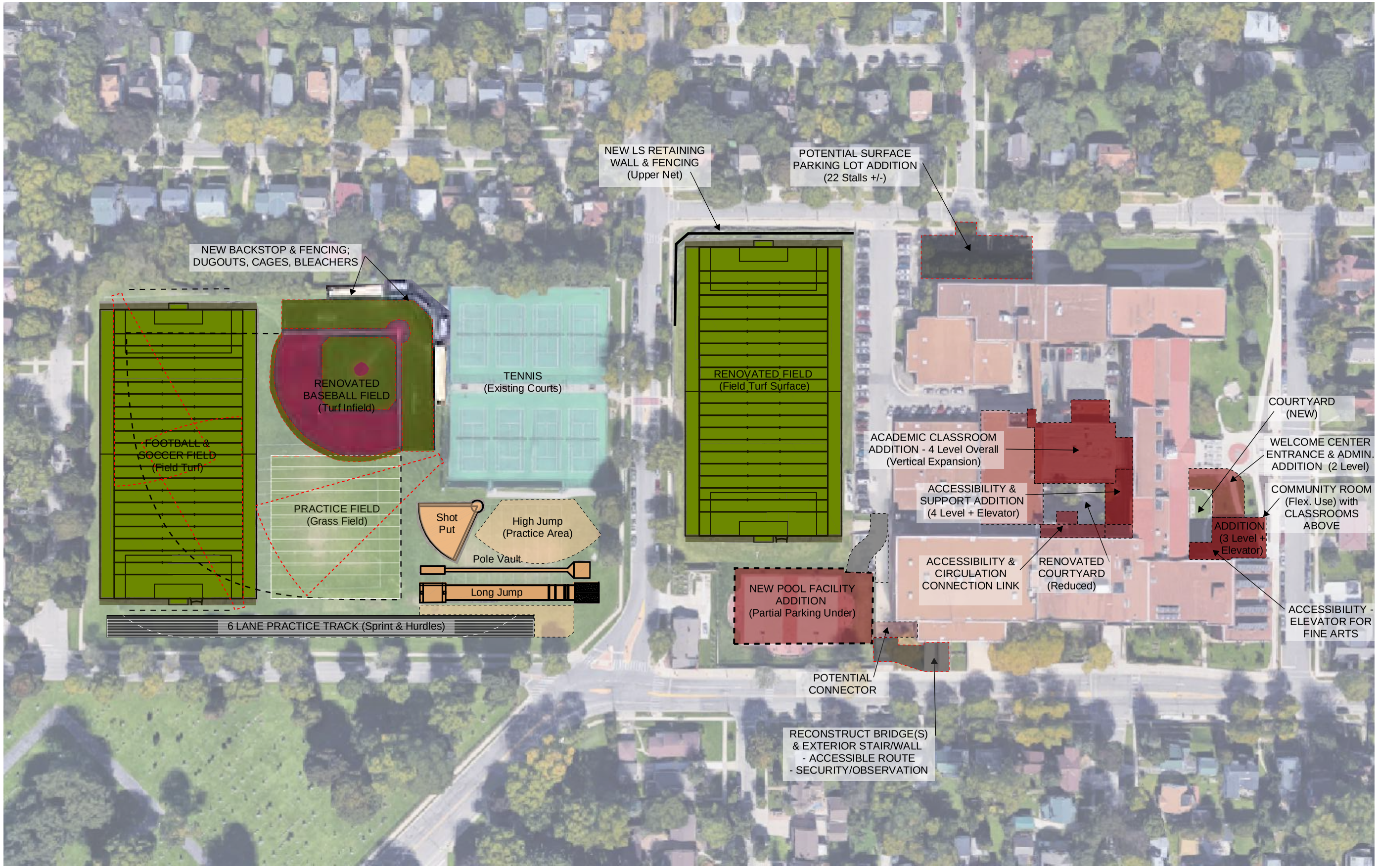
1. **Capital Maintenance**
   Parking within Pool Addition

1. **Building Functionality**
   a. Window Replacement
   b. ADA Improvements

2. **Educational Spaces**
   a. Relocate Fine Arts Rooms into old Pool
   b. Expanded Library/LMC
   c. Theater Upgrades

3. **Athletics & Community**
   a. Pool Addition
      i. New Pool
      ii. Locker rooms
      iii. Entry Lobby
   b. Turf Fields (practice field)
   c. Relocated Basketball Courts (Displaced by new Pool)
   d. Mansfield Improvements






SITE PLAN

ZAS Project # 180125.00 | 5 - 08 - 2019

Madison West High School

Ash St., Madison, WI

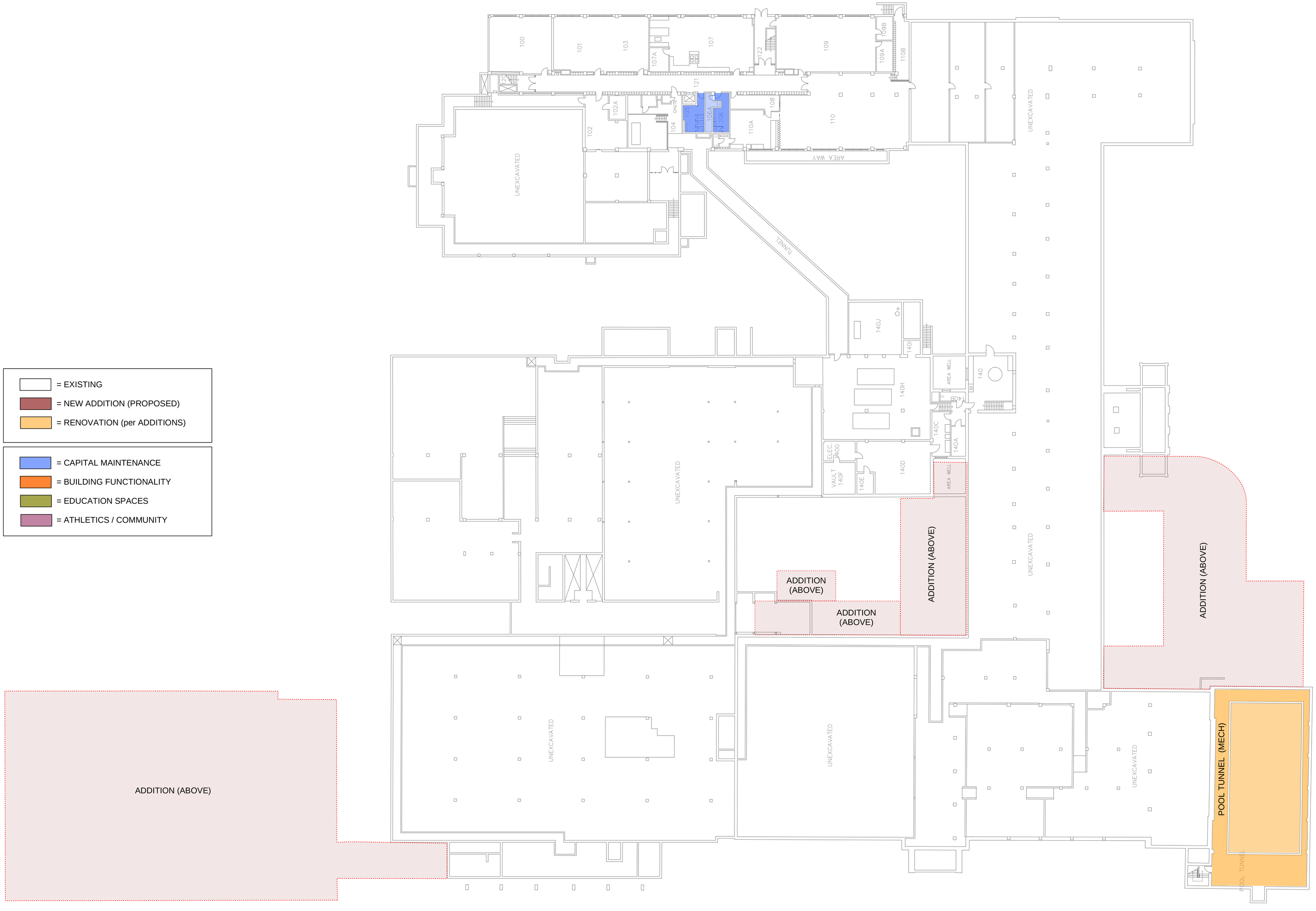
ASPIRE OPTION

= NEW ADDITION (PROPOSED)

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

= EXISTING
= NEW ADDITION (PROPOSED)
= RENOVATION (per ADDITIONS)

= CAPITAL MAINTENANCE
= BUILDING FUNCTIONALITY
= EDUCATION SPACES
= ATHLETICS / COMMUNITY




# ASPIRE OPTION

BASEMENT PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

= EXISTING
= NEW ADDITION (PROPOSED)
= RENOVATION (per ADDITIONS)

= CAPITAL MAINTENANCE
= BUILDING FUNCTIONALITY
= EDUCATION SPACES
= ATHLETICS / COMMUNITY

LOCKER ROOM
LOCKER ROOM
EXIST. PAVED COURTYARD (PARKING)
BUILDING SERVICES (RENOVATED PER VERTICAL EXPANSION)
CAFETERIA & SUPPORT SPACES RENOVATED (PER VERTICAL EXPANSION)
COURTYARD (RENOVATED)
STAIR
CORRIDOR CONNECTOR
COLLABORATIVE SPACE
CIRCULATION (& ELEVATOR)
RELOCATE TOILET ROOMS
ADMINISTRATION (RENOVATION)
ADMINISTRATION
WELCOME CENTER
COURTYARD (NEW)
SUPPORT
COMMUNITY (LGI / FLEX ROOMS)
FLEX ROOM
CIRCULATION (& ELEVATOR)
FACADE RENOVATION & WINDOWS (ADD)
FACADE RENOVATION
FINE ARTS
FINE ARTS
FINE ARTS
LOCKER ROOM(S) (RE-PURPOSED FOR FINE ARTS)
LOCKER ROOM RENOVATION
LOCKER ROOM
LOCKER ROOM
LOCKER ROOM
ACESS DRIVE
PARKING (2 Stalls)
PARKING (17 Stalls)
WALKWAY CONNECTOR TO STEPS (Reconstructed)
CONNECTOR (Above)
MECHANICAL
(POOL ABOVE)
MECHANICAL
STAIR
STORAGE (ATHLETIC)
STORAGE
STAIR
MECHANICAL
E

# ASPIRE OPTION

FIRST FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

zimmerman ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

= EXISTING
= NEW ADDITION (PROPOSED)
= RENOVATION (per ADDITIONS)

= CAPITAL MAINTENANCE
= BUILDING FUNCTIONALITY
= EDUCATION SPACES
= ATHLETICS / COMMUNITY




# ASPIRE OPTION

SECOND FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019


zimmerman ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

= EXISTING
= NEW ADDITION (PROPOSED)
= RENOVATION (per ADDITIONS)

= CAPITAL MAINTENANCE
= BUILDING FUNCTIONALITY
= EDUCATION SPACES
= ATHLETICS / COMMUNITY




# ASPIRE OPTION

THIRD FLOOR PLAN

## Madison West High School

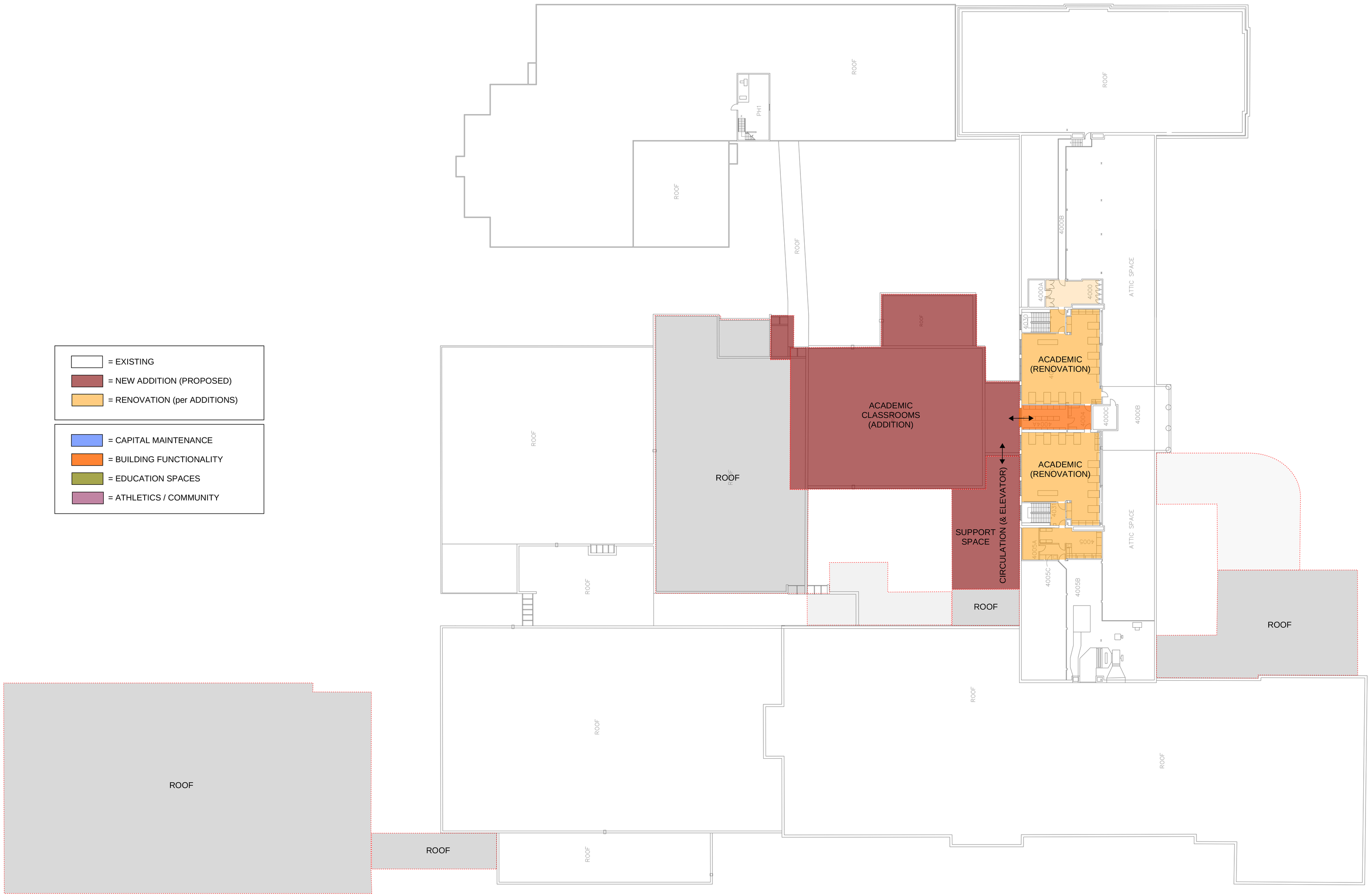
Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019


zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

= EXISTING
= NEW ADDITION (PROPOSED)
= RENOVATION (per ADDITIONS)

= CAPITAL MAINTENANCE
= BUILDING FUNCTIONALITY
= EDUCATION SPACES
= ATHLETICS / COMMUNITY




# ASPIRE OPTION

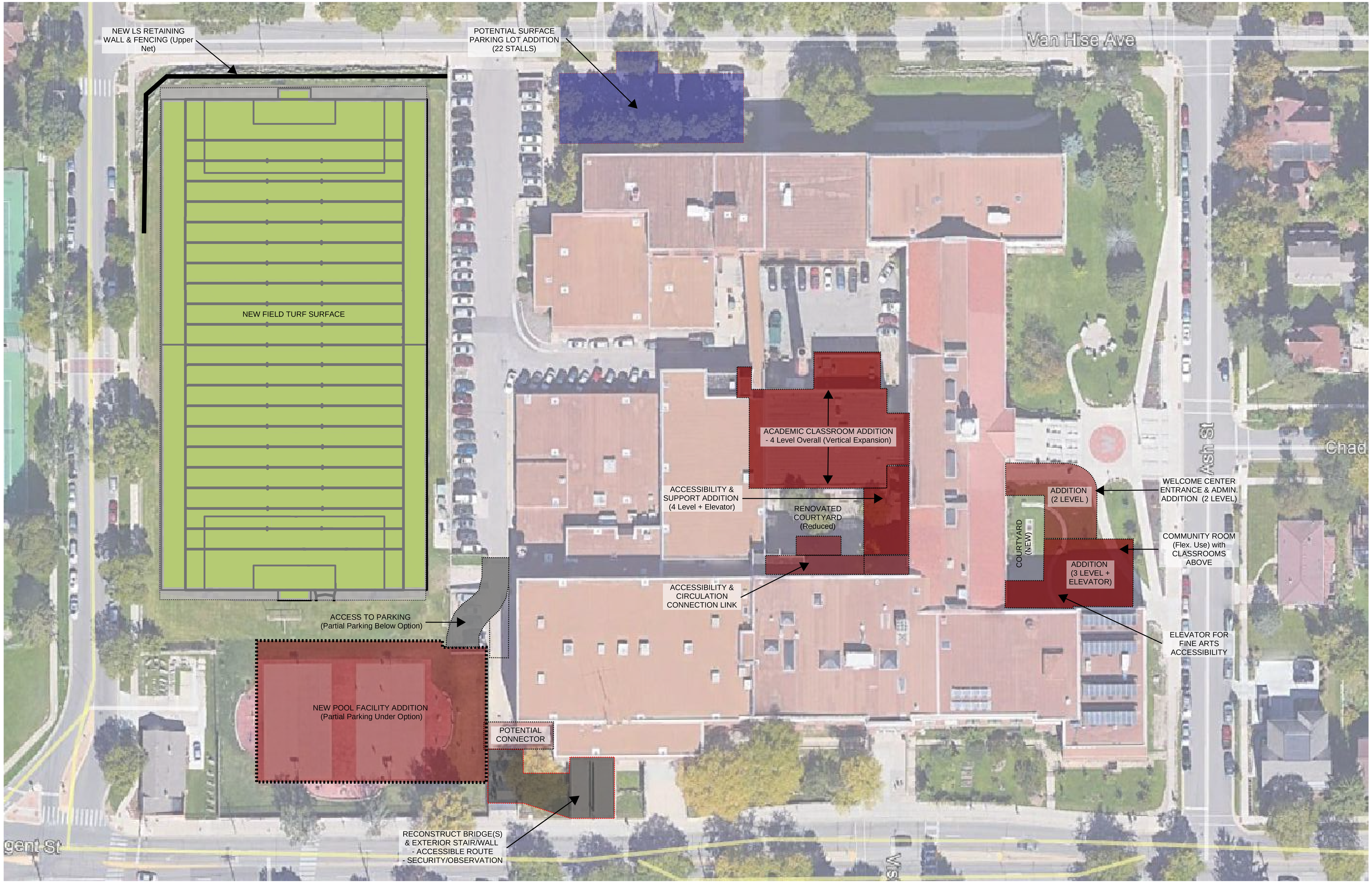
FOURTH FLOOR PLAN

## Madison West High School

Ash St., Madison, WI

ZAS Project # 180125.00 | 05 - 01 - 2019

zimmerman ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com




SITE PLAN

ZAS Project # 180125.00 | 04 - 01 - 2019

# Madison West High School

Ash St., Madison, WI

## ASPIRE OPTION

= NEW ADDITION (PROPOSED)

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 W. Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com

# Appendix – A Capital Improvement Cost Matrix

# CAPITAL IMPROVEMENT MATRIX
## ESTIMATE OF PROBABLE CONSTRUCTION COST

| | Capital Maintenance (Facility Condition Index) | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Site Improvements | | Exterior Building Improvements | | | | Interior Building Improvements | | | | | | | | | | |
| SCHOOL | Parking | Lighting | Roof & Fascia Replacement | Window Replacement | Tuckpointing | Door Replacement | Restroom Upgrades | Locker Room Upgrades | Classroom Floors, Walls Ceilings | Door Replacement | Terminal Equipment & Controls (HVAC) | Central Plant (HVAC) | Plumbing | Electrical Devices and Lighting | Electrical Main Distribution | Category Sub Totals | SCHOOL |
| **East High School** | | | | | | | | | | | | | | | | | **East High School** |
| Maintenance | $225,000 | $50,000 | $1,500,000 | $800,000 | $600,000 | $180,000 | $1,000,000 | $2,000,000 | $450,000 | $100,000 | $650,000 | $3,100,000 | $2,500,000 | $3,200,000 | $600,000 | $16,955,000 | Maintenance |
| Renewal | $300,000 | $65,000 | $2,100,000 | $1,250,600 | $750,000 | $250,000 | $1,400,000 | $2,600,000 | $1,000,000 | $200,000 | $850,000 | $6,200,000 | $5,000,000 | $3,400,000 | $750,000 | $26,115,600 | Renewal |
| Aspire | $300,000 | $75,000 | $2,700,000 | $2,800,000 | $1,000,000 | $350,000 | $1,800,000 | $2,700,000 | $1,500,000 | $350,000 | $1,050,000 | $7,200,000 | $6,500,000 | $6,800,000 | $850,000 | $35,975,000 | Aspire |
| **LaFollette High School** | | | | | | | | | | | | | | | | | **LaFollette High School** |
| Maintenance | $330,000 | $50,000 | $1,400,000 | $700,000 | $100,000 | $200,000 | $800,000 | $2,100,000 | $650,000 | $100,000 | $500,000 | $3,000,000 | $2,000,000 | $3,000,000 | $600,000 | $15,530,000 | Maintenance |
| Renewal | $700,000 | $55,000 | $1,800,000 | $1,000,000 | $200,000 | $250,000 | $1,100,000 | $2,300,000 | $1,100,000 | $200,000 | $750,000 | $5,000,000 | $4,500,000 | $4,250,000 | $700,000 | $23,905,000 | Renewal |
| Aspire | $900,000 | $60,000 | $2,300,000 | $1,400,000 | $400,000 | $350,000 | $1,250,000 | $2,650,000 | $1,750,000 | $350,000 | $1,000,000 | $6,500,000 | $6,750,000 | $6,500,000 | $800,000 | $32,960,000 | Aspire |
| **West High School** | | | | | | | | | | | | | | | | | **West High School** |
| Maintenance | $600,000 | $85,000 | $1,320,000 | $500,000 | $600,000 | $170,000 | $900,000 | $900,000 | $600,000 | $140,000 | $700,000 | $3,200,000 | $3,000,000 | $3,500,000 | $1,000,000 | $17,215,000 | Maintenance |
| Renewal | $600,000 | $85,000 | $2,000,000 | $700,000 | $800,000 | $190,000 | $1,100,000 | $1,600,000 | $1,000,000 | $210,000 | $850,000 | $3,300,000 | $3,500,000 | $4,000,000 | $1,000,000 | $20,935,000 | Renewal |
| Aspire | $1,500,000 | $85,000 | $2,580,000 | $700,000 | $1,000,000 | $200,000 | $1,300,000 | $2,700,000 | $1,000,000 | $320,000 | $1,000,000 | $3,500,000 | $4,000,000 | $5,000,000 | $1,200,000 | $26,085,000 | Aspire |
| **Memorial High School** | | | | | | | | | | | | | | | | | **Memorial High School** |
| Maintenance | $510,000 | $85,000 | $1,500,000 | $800,000 | $700,000 | $190,000 | $700,000 | $900,000 | $800,000 | $300,000 | $600,000 | $4,800,000 | $3,300,000 | $4,000,000 | $1,000,000 | $20,185,000 | Maintenance |
| Renewal | $510,000 | $90,000 | $2,100,000 | $800,000 | $800,000 | $190,000 | $1,000,000 | $1,100,000 | $1,000,000 | $400,000 | $600,000 | $4,800,000 | $3,700,000 | $4,000,000 | $1,100,000 | $22,190,000 | Renewal |
| Aspire | $510,000 | $95,000 | $2,700,000 | $800,000 | $1,000,000 | $190,000 | $1,200,000 | $1,300,000 | $1,200,000 | $500,000 | $600,000 | $5,200,000 | $4,200,000 | $5,500,000 | $1,100,000 | $26,095,000 | Aspire |

| | Building Functionality | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SCHOOL | Renovated Welcome Center | Safety / Security | Office Consolidation | Courtyard Improvements | ADA Improvements | Fire Suppression | New Elevators | School Identity, Signage & Branding | Commons/ Kitchen | | | | | | | Category Sub Totals | SCHOOL |
| **East High School** | | | | | | | | | | | | | | | | | **East High School** |
| Maintenance | $2,980,000 | $170,000 | $750,000 | | $300,000 | | $550,000 | $250,000 | $3,000,000 | | | | | | | $8,000,000 | Maintenance |
| Renewal | $2,980,000 | $170,000 | $750,000 | | $600,000 | $1,800,000 | $550,000 | $250,000 | $3,000,000 | | | | | | | $10,100,000 | Renewal |
| Aspire | $2,980,000 | $170,000 | $750,000 | | $900,000 | $1,800,000 | $550,000 | $250,000 | $3,000,000 | | | | | | | $10,400,000 | Aspire |
| **LaFollette High School** | | | | | | | | | | | | | | | | | **LaFollette High School** |
| Maintenance | $2,300,000 | $150,000 | $350,000 | $500,000 | $300,000 | | $180,000 | $250,000 | $1,600,000 | | | | | | | $5,630,000 | Maintenance |
| Renewal | $2,300,000 | $150,000 | $350,000 | $650,000 | $600,000 | $1,600,000 | $180,000 | $250,000 | $1,600,000 | | | | | | | $7,680,000 | Renewal |
| Aspire | $2,300,000 | $150,000 | $350,000 | $800,000 | $900,000 | $1,600,000 | $180,000 | $250,000 | $1,600,000 | | | | | | | $8,130,000 | Aspire |
| **West High School** | | | | | | | | | | | | | | | | | **West High School** |
| Maintenance | $2,500,000 | $180,000 | $700,000 | | $400,000 | | $500,000 | $250,000 | $1,200,000 | | | | | | | $5,730,000 | Maintenance |
| Renewal | $2,500,000 | $180,000 | $700,000 | $1,000,000 | $500,000 | $1,500,000 | $500,000 | $250,000 | $1,200,000 | | | | | | | $8,330,000 | Renewal |
| Aspire | $2,500,000 | $180,000 | $700,000 | $1,000,000 | $600,000 | $1,500,000 | $500,000 | $250,000 | $1,200,000 | | | | | | | $8,430,000 | Aspire |
| **Memorial High School** | | | | | | | | | | | | | | | | | **Memorial High School** |
| Maintenance | | $150,000 | | | $500,000 | | $90,000 | $250,000 | $600,000 | | | | | | | $1,590,000 | Maintenance |
| Renewal | $2,100,000 | $150,000 | $300,000 | $400,000 | $500,000 | $1,500,000 | $180,000 | $250,000 | $750,000 | | | | | | | $6,130,000 | Renewal |
| Aspire | $2,100,000 | $150,000 | $300,000 | $1,000,000 | $600,000 | $1,500,000 | $180,000 | $250,000 | $900,000 | | | | | | | $6,980,000 | Aspire |

May 8, 2019

# CAPITAL IMPROVEMENT
# ESTIMATE OF PROBABLE CONSTRUCTION COST

| | Educational Spaces | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SCHOOL | New / Renovated LMC | Collaborative / Flexible Spaces | Classroom Addition | Classroom Upgrades | STEM/STEAM Classrooms | Science Lab Upgrades | Pathways / Innovation | Theater Upgrades | New Theater | Music Classroom Upgrades | Fine Arts Classrooms | Furniture | | Category Sub Totals | | SCHOOL |
| **East High School** | | | | | | | | | | | | | | | | **East High School** |
| Maintenance | $150,000 | $250,000 | | $2,600,000 | $2,700,000 | $450,000 | $600,000 | | | $360,000 | $150,000 | $500,000 | | $7,760,000 | | Maintenance |
| Renewal | $350,000 | $500,000 | | $3,100,000 | $3,000,000 | $650,000 | $800,000 | | | $3,600,000 | $360,000 | $1,000,000 | | $13,360,000 | | Renewal |
| Aspire | $3,500,000 | $750,000 | | $5,000,000 | $3,700,000 | $850,000 | $1,000,000 | | | $4,500,000 | $420,000 | $1,500,000 | | $21,220,000 | | Aspire |
| **LaFollette High School** | | | | | | | | | | | | | | | | **LaFollette High School** |
| Maintenance | | $750,000 | | $1,600,000 | $600,000 | $650,000 | $500,000 | $3,000,000 | | | $150,000 | $500,000 | | $7,750,000 | | Maintenance |
| Renewal | $1,000,000 | $1,000,000 | | $2,500,000 | $1,500,000 | $850,000 | $750,000 | $3,000,000 | | | $360,000 | $1,000,000 | | $11,960,000 | | Renewal |
| Aspire | $2,500,000 | $1,500,000 | | $3,800,000 | $3,900,000 | $1,050,000 | $1,100,000 | $3,000,000 | | $2,600,000 | $420,000 | $1,500,000 | | $21,370,000 | | Aspire |
| **West High School** | | | | | | | | | | | | | | | | **West High School** |
| Maintenance | | | $2,500,000 | $2,000,000 | | $900,000 | | | | | | $500,000 | | $5,900,000 | | Maintenance |
| Renewal | $750,000 | $500,000 | $2,500,000 | $2,500,000 | $1,750,000 | $900,000 | $1,750,000 | $3,000,000 | | $1,500,000 | $500,000 | $1,000,000 | | $16,650,000 | | Renewal |
| Aspire | $1,200,000 | $1,000,000 | $2,500,000 | $2,500,000 | $2,000,000 | $900,000 | $1,750,000 | $3,000,000 | | $1,500,000 | $1,000,000 | $1,500,000 | | $18,850,000 | | Aspire |
| **Memorial High School** | | | | | | | | | | | | | | | | **Memorial High School** |
| Maintenance | | | | $1,400,000 | | $700,000 | | $3,000,000 | | $400,000 | $500,000 | $500,000 | | $6,500,000 | | Maintenance |
| Renewal | | $1,000,000 | | $1,700,000 | $700,000 | $800,000 | $1,000,000 | | $8,000,000 | $2,200,000 | $1,100,000 | $1,000,000 | | $17,500,000 | | Renewal |
| Aspire | $1,400,000 | $1,000,000 | $5,000,000 | $1,700,000 | $1,000,000 | $800,000 | $1,000,000 | | $8,000,000 | $2,600,000 | $1,900,000 | $1,500,000 | | $25,900,000 | | Aspire |

| | Athletics / Community | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bleacher Replacement | Mansfield Stadium / Lussier | Field Turf | Track Improvement | Athletic Field Improvement | Pool Renovation | New Pool | Gym Expansion / Fieldhouse | Outdoor Equipment Storage | Weight Room / Fitness | | | | Category Sub Totals | GRAND TOTAL | |
| **East High School** | | | | | | | | | | | | | | | | **East High School** |
| Maintenance | | | | | | | | | $50,000 | | | | | $50,000 | **$32,765,000** | Maintenance |
| Renewal | | | | | | | | | $55,000 | $1,750,000 | | | | $1,805,000 | **$51,380,600** | Renewal |
| Aspire | | $250,000 | $700,000 | | | | | | $60,000 | $1,750,000 | | | | $2,760,000 | **$70,355,000** | Aspire |
| **LaFollette High School** | | | | | | | | | | | | | | | | **LaFollette High School** |
| Maintenance | $300,000 | | $1,000,000 | | $250,000 | | | | $50,000 | $850,000 | | | | $2,450,000 | **$31,360,000** | Maintenance |
| Renewal | $300,000 | | $1,000,000 | | $300,000 | | | $3,500,000 | $55,000 | $1,100,000 | | | | $6,255,000 | **$49,800,000** | Renewal |
| Aspire | $300,000 | $500,000 | $1,000,000 | | $800,000 | | | $3,500,000 | $60,000 | $1,400,000 | | | | $7,560,000 | **$70,020,000** | Aspire |
| **West High School** | | | | | | | | | | | | | | | | **West High School** |
| Maintenance | $400,000 | | $1,000,000 | | | | | | | | | | | $1,400,000 | **$30,245,000** | Maintenance |
| Renewal | $400,000 | | $1,400,000 | | $400,000 | $1,500,000 | | | $70,000 | $800,000 | | | | $4,570,000 | **$50,485,000** | Renewal |
| Aspire | $400,000 | $3,100,000 | $2,000,000 | | $800,000 | | $12,000,000 | | $70,000 | $800,000 | | | | $19,170,000 | **$72,535,000** | Aspire |
| **Memorial High School** | | | | | | | | | | | | | | | | **Memorial High School** |
| Maintenance | $300,000 | | | $1,000,000 | $500,000 | | | | | | | | | $1,800,000 | **$30,075,000** | Maintenance |
| Renewal | $300,000 | | $1,000,000 | $1,000,000 | $500,000 | $1,500,000 | | | | | | | | $4,300,000 | **$50,120,000** | Renewal |
| Aspire | $300,000 | $9,100,000 | $1,000,000 | | $500,000 | $1,500,000 | | | | $500,000 | | | | $12,900,000 | **$71,875,000** | Aspire |

May 8, 2019


ZIMMERMAN
ARCHITECTURAL STUDIOS, INC.

# Appendix – A Capital Improvement Cost Matrix

# Appendix B: High School Input

## SUMMARY: WEST HIGH STAFF FACILITIES SURVEY

Staff surveys of individual high school facilities were conducted by MMSD in March of 2019 (see attached appendix document dated May 1, 2019). Included were the following four (4) common questions* asked for staff response / input:

1. What excites you about your school's plans?
2. What is essential to the building's plan?
3. What is missing?
4. What is unique about your school that could be amplified through building renovations?

(*Note that an initial question 'Q1' was asked on survey, but not provided per MMSD report.)

Included here for a more general summary are the most common responses provided from the staff surveys, grouped for general category themes, and in descending order of response frequency.

**Question 1** (Q2 on survey): **What excites you about your school's plans?** (general themes; prioritized)

- Parking: (16)
- Finishes upgraded/refreshed (floors, ceilings, walls, lighting) need to be refreshed. (13 responses).
- More educational space; flexible & collaboration space(s): (11)
- Accessibility of floors & spaces; Elevators: (7)
- Athletic Facilities; Locker rooms; Fitness; Fields: (7)
- Update/refresh all restrooms, develop all-gender restroom facilities (6).
- Education spaces updated; proper walls & spaces; (4)
- Welcome Center; Improved Safety & Security: (4)
- Pool upgrades/replacement: (4)
- Building envelope maintenance (masonry repairs, windows, roof membrane); Flooding: (3).
- Furniture & Equipment upgrades: (2)
- Science department upgrades: (2)
- Mechanical systems / HVAC (air quality, climate control, comfort, efficiency): (1).
- Fine Arts improvements; Music; Theater upgrades: (1)
- Arts department upgrades: (1)
- Technology upgrades; I.T.; Electrical: (0)
- Applied Technology / Trades upgrades: (0)

**Question 2** (Q3 on survey)**: What is essential to the building's plan?** (general themes; prioritized)

- More educational space; flexible & collaboration space(s): (13 responses)
- Parking: (12)
- Accessibility of floors & spaces; Elevators: (9)

- Education spaces updated; proper walls & spaces; (9)
- Welcome Center; Improved Safety & Security: (9)
- Finishes upgraded/refreshed (floors, ceilings, walls, lighting) need to be refreshed. (6).
- Athletic Facilities; Locker rooms; Fitness; Fields: (6)
- Mechanical systems / HVAC (air quality, climate control, comfort, efficiency): (6).
- Update/refresh all restrooms, develop all-gender restroom facilities (5).
- Pool upgrades/replacement: (4)
- Building envelope maintenance (masonry repairs, windows, roof membrane); Flooding: (3).
- Fine Arts improvements; Music; Theater upgrades: (2)
- Furniture & Equipment upgrades: (2)
- Technology upgrades; I.T.; Electrical: (2)
- Applied Technology / Trades upgrades: (1)
- Arts department upgrades: (1)
- Science department upgrades: (1)

**Question 3** (Q4 on survey)**: What is missing?** (summarized responses; **not** prioritized)

- Teachers need a central office/copy room, or more small copy rooms on each floor.
- Electrical needs for the upgraded and increased technology.
- A field house.
- Windows that open.
- Science areas need more storage and prep space.
- Small group areas near library, multi-use spaces.
- A focus on future pathways needing flexible classrooms; maker/fab learning spaces.
- Better usage of space in the weight room.
- Making a laundry room or closet for students that have significant needs.
- Defining "refresh" for current classrooms & hallways. If it's paint & floor wax that is being dishonest with the taxpayers.
- Addressing the lack of workable office space. Addressing the need for spaces for more copiers.
- Designated Special Ed bathrooms.
- Another elevator; a larger elevator.
- More staff parking.
- Student meeting space.
- Total asbestos removal.
- Renewable energy and energy efficiency maximization.
- New floors in the Building.
- Space for drumline equipment (instruments & equipment); Shelves.
- A stadium for athletics; turf fields.
- Depends on plan option (to be selected).
- Expansion of spaces without increased staffing (could be safety concern).
- Center rooms need better ventilation, lighting & space; cramped & not conductive to collaborative learning.
- West is overcrowded with insufficient parking; expansion will make problem worse. Consider new high school, or shifting population to other schools.
- Repurposed rooms for appropriate class sizes; education space.

- School based Health Center.
- Expanded weight room facilities, field house and track.
- A plan to rebuild the entire building to make safer; less crowded.
- Classroom & office space; Uniform system of entry.
- Proper ventilation & electrical systems.
- Appropriate furniture.
- The “basic” plans options don’t do much for needed spaces or added facilities.
- Ways to mitigate overcrowding.
- Expansion or Art rooms / spaces; support.

**Question 4** (Q5 on survey)**: What is unique about you school that could be amplified through building renovations?** (summarized responses; **not** prioritized)

- So dirty.
- Lack of field space; bussing students elsewhere for sports (money savings) just to practice!
- Increase student fitness opportunities through PE classes &additional aquatics classes.
- Wood paneling. Murals are nice; updated to show the multicultural aspect of the student population.
- All of student services should be grouped together rather scattered/detached.
- Stair cases should be rethought; Doors add a lot of character.
- LMC could be rethought (space use and purpose).
- West is known as a rigorous school for the arts. Creating an arts wing would strengthen program(s).
- We have so many talented students; need more creative, collaborative, hands on spaces for our students to work together, create, inquire, & explore. A maker's space or more lab based work areas.
- We don't have a lot of space due to being surrounded by a community. Making West's space continue through Highland St. to the fields could give us easy additional space.
- The only high school that has dance technique classes for PE credit. Having a dance space with mirrors & adequate floors would be fantastic; boost arts program. Better PE facilities would also help us to have our classes do the same thing as other schools do.
- Fixing the major issues in the auditorium would make it safer; help the acoustics & seating as well.
- West is the most crowded high school. Need more space for classes; sports facilities are inadequate.
- Extremely overcrowded! Solve the impossible math problem: 84 rooms, 7 periods, 144 teachers, 2251 students, 256 courses...give us a building that works to make it possible to teach and learn.
- Traditional & historical building capable of handling 21st century students; community.
- The wood work.
- The murals outside our school are neat. Could we get more of them, or highlight those we have?
- Should consider new ways to showcase our student talents.
- The exterior of our building is historic.
- The beautiful old woodwork and the BIG windows.
- Retain the character of the original building.
- Find ways to incorporate student artwork; former & current students.

- Parking!
- History of innovative automotive clubs, & winning STEM competitions. Tech Ed renovation needed.
- Beautiful woodwork & murals; painting dated.
- Wide variety of clubs & electives (student options); students & staff are priority.
- History & character of West's facilities (old pride); but many want newer "generic" facilities.
- Lots of club activities – need space(s) for non-sport extra-curricular.
- Beautiful historic building; large windows (generally).
- Building has character; open feel of hallways & wood trim.
- Building can be expanded (west), & continue to look impressive.
- Front entrance is striking (Ash St.); thoughtful planning for Welcome Center to enhance).
- Strong Arts, Athletics, & Clubs at West; amplify with appropriate facilities.
- Additional places for "at-risk" academic programming (HSED prep & GED prep – don't have now).
- Academic & Athletic success; find ways to celebrate/showcase student achievements.

# STUDENT FOCUS GROUP

Tuesday, March 5, 2019.
A group of 17 students asked the following questions:

1. **What Are You Excited About?**
   - Additional parking. This is “super important”.
   - A new pool, deep enough for the diving team to train in.
   - Better HVAC in the pool.
   - Upgraded classrooms and fine arts spaces.
   - A renovated theater like East HS recently completed.

2. **What is essential to the building plan?**
   - Improved and renovated restrooms.
   - Safe water, with drinking stations to fill water bottles.
   - Improved HVAC
   - Improved athletic facilities. The locker rooms are an embarrassment.
   - The pool ventilation must be high on the list.

3. **What is missing?**
   - The current cafeteria is too small and congested.
   - There is no “real” common space for us to meet and eat.”
   - Lack or athletic accommodations. Students do not feel like they have a home advantage.

4. **What is unique about your school that could be amplified through the building the renovation?**
   - The arts and athletics are extremely successful despite the conditions. Improved spaces will make West better,

# SCHOOL BASED LEADERSHIP TEAM

Friday, March 8, 2019.
A group of 7 team leaders were asked the following questions:

1. **What Are You Excited About?**
   - The plan for additional Parking. There is not enough parking for the staff, much less the students.
   - Added elevators for accessibility.
   - A true “Welcoming Center”.
   - Additional classrooms. Classrooms are at capacity and overcrowded.
   - Upgraded classroom finishes, not only the science labs.
   - New flexible furniture.

2. **What is essential to the building plan?**
   - More classroom Space
   - Renovated Restrooms.
   - Improved HVAC
   - Improved athletic facilities. The locker rooms are an embarrassment.
   - The pool must be rebuilt, or completely renovated.

3. **What is missing?**
   - Cafeteria. Needs to be larger and more open.
   - Staff collaboration space.
   - Large room for staff or community to gather in.
   - The need to remove the temporary walls, and replace them with permanent walls with better acoustic separation.
   - Lack or athletic accommodations. Many of the teams cannot practice on campus, let alone hold an actual “home” sporting event

4. **What is unique about your school that could be amplified through the building the renovation?**
   - The historic aesthetic of the building, both inside and out.
   - The amount of natural light.

# Day in the Life of Observations

On March 11th of 2019, representatives of Zimmerman Architectural Studios visited West High School to experience a “typical” full school day on site. The goals of the visit were multi-purpose to better understand what happens at West HS during a regular school day, and included:

- Observing traffic flow around West HS; parking & student drop-off
- Observing students entering building, circulation & start of school day; during school day
- Observations of students & staff during the day; interactions & space functions
- Casual discussion/interaction with staff & students (as approached /or offered comments)
- Observing end of school day; dismissal

The following are some of the key or notable observations made during the day spent at West HS.

Start: Arrived at West HS 7:00 am on Monday, March 11th.

- Parked in courtyard near cafeteria (facilities parking pass provided); let into building by staff.
- Welcome center closed; opened around 7:45 am; students arrive 7:00; school busy by 7:45 am
- Many student sit in hallways, singularly or in small groups, until 1st period start
- Ash St. and Regent St. entrances heavily used by students; Van Hise & courtyard lesser use.
- School staff/security manually locks down doors after school start.

Traffic:

- Regent St. is very busy main thoroughfare; Highland, Van Hise Ave, and Ash St. also busy.
- Ash St. traffic is a concern; heavy use for student drop off
- Two way traffic flow on Ash St. is a concern (safety); parents drop off in both directions
- Cars do drop-off U-turns on Ash St. at intersection of Chadbourne; use neighbor’s driveways
- Snow banks further restrict both parking and traffic flow around school; add to safety concerns.
- Chadbourne is not wide enough for two-way traffic with cars parked on north side, & snow banks.
- Highland Ave is reduced to almost single direction flow traffic with parked cars & snow banks.
- Intersection (irregular) of Regent St., Speedway Rd.& Highland Ave. is a concern (safety).
- No adequate designated drop-off area present; no student parking; inadequate staff parking.
- Visitor / short term parking (drop-off/pick-up) is not visible from Welcome Center.

Flow:

- Hallways very busy / congested between periods.
- Flow around building interior is restricted; few access route options from corners of building.
- Several corridors are not continuous; flow restricted & observation challenging.
- Many “blind spots” for students to hang out between periods.
- Restricted circulation options leads to crowded corridors; rushed students; tension(s).
- Some classrooms / areas are not along accessible routes (ADA).
- Only one (1) small elevator in building - Van Hise wing.
- Route to cafeteria (commons) space is too restricted; decreases use & function.
- Welcome center is not in a visible or welcoming space; poor location for function; supervision.
- Students observed hanging out in hallways during the day; moving & bypassing security patrols.

Several casual discussions were held in/for various departments during the day (casual interaction):

Theater and Dance; comments and needs:

- Dance studio/room with a “sprung floor” desired
- Accessibility to classrooms (elevator needed)
- Scene shop ; storage
- Appropriate size dressing rooms; monitors to see stage

Science:

- Upgrades to older lab spaces; storage
- Additional lab space; new classroom or 2 desired; currently full schedule for labs.
- Provisions for accessibility – classrooms and casework/furniture.

Athletics:

- Upgrades to locker rooms; Expanded weight room & fitness space
- Additional gym space desired; storage
- Improved department layout; offices & support spaces; supervision
- Athletic Boosters have been active on plans/funds for additional facilities at West

Applied Sciences:

- Wood shop undersized; lack space & turn away students; wait list for program(s)
- Dust collection system antiquated; poor condition; Hood over foundry doesn’t work.
- Auto shop undersized; only need 1 lift; small class size
- Paint booth& hoods don’t work properly – not used. Auto paint booth used for storage.
- Need/desire space for a Robotics lab; Clean lab; Expanded engineering classroom space
- Space for a Project Lead the Way program
- Sewing program space is underutilized; could/should be re-purposed/ reassigned space (only 2 periods a day, and 1 semester a year offered).
- Would like eight (8) welding booths – have only two (2) now (old/poor condition)..

Library:

- Windows wanted;  Lower west facing exterior windows (?)
- Concern over too much glass to corridor; safety/security
- No book drop access for after hours (only inside building)
- Dated space/feel; dated furniture; computer lab use phasing out (going 1 to 1 personal)
- Parents also use space time to time; registration & other; club/booster group use.

Special Needs Students/Dept.:

- Currently scattered throughout building
- Each student has own room assigned to them for “decompressing” or “chill space” as needed.
- Some “chill” rooms are 250-350 sf each as available (lot of designated individual sf)
- Consider needs & use for planning/repurposing spaces

Dept. Offices – 3rd floor (NE end – English & Foreign Language):

- Large “open” area used for joint department office use; temporary divider wall; partitions
- Cramped/crowded space; shelving units and desks (staff)
- Not enough power; no poser to center areas; extension cords heavily used (safety)
- English dept. staff have 12 +/- office desks; F.L. dept. has 15 +/- office desks
- Requests: More power; office & classrooms; Built-in casework: Renovated bathrooms; Parking

Fine Arts & Art (general):

- Original library space is nice; consider repurposing space (currently study hall & tutoring).
- “Black box” space wanted
- Small flexible use presentation space
- Display space(s)
- Place(s) for students to gather safely
- Upgraded instruction spaces; proper water, drains, power/data, ventilation & storage.
- Dark room wanted

Cafeteria:

- Current cafeteria size is inadequate for single lunch serving/number of students
- Highly utilized space; too small; poor access/circulation to
- Kids eat in small to large groups on floor in hallways; almost all hallways used for lunch
- Kids also leave school for lunch; local places; pizza truck (Ash St.); security concerns.
- Courtyard can only be utilized seasonally (infrequent use)

Security & Supervision:

- Supervision in building is a challenge; hiding spots & back-end corridors
- No large central space for students to gather; Cafeteria too small
- Kids hang out in hallways instead of class; Disturbances and fights are common.
- Open campus poses security challenges; kids come & go; let other kids/people in building.

ZIMMERMAN
ARCHITECTURAL STUDIOS, INC.

2122 West Mt. Vernon Avenue | Milwaukee, WI 53233 | zastudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582