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EASTERN MIDDLE SCHOOL FEASIBILITY STUDY

Community Engagement Meeting No. 1

March 4, 2025, 7:00pm



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STAKEHOLDER MEETING NO. 1

Agenda

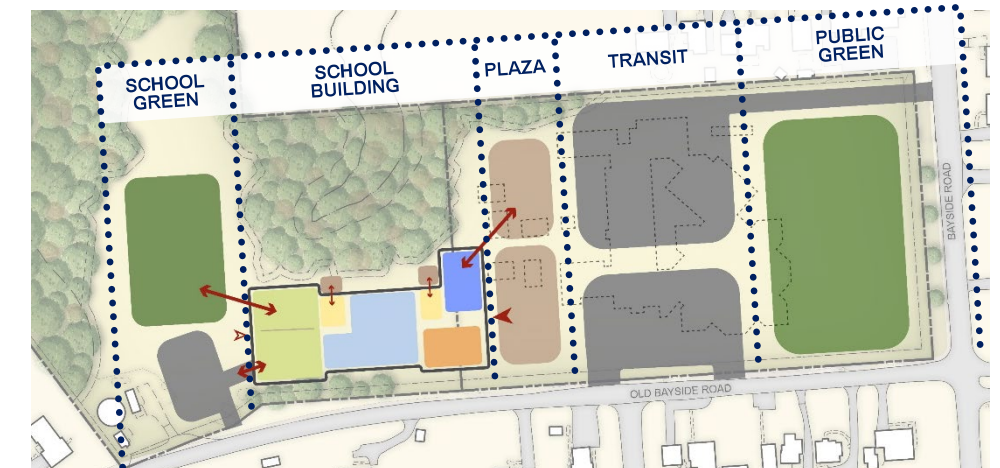
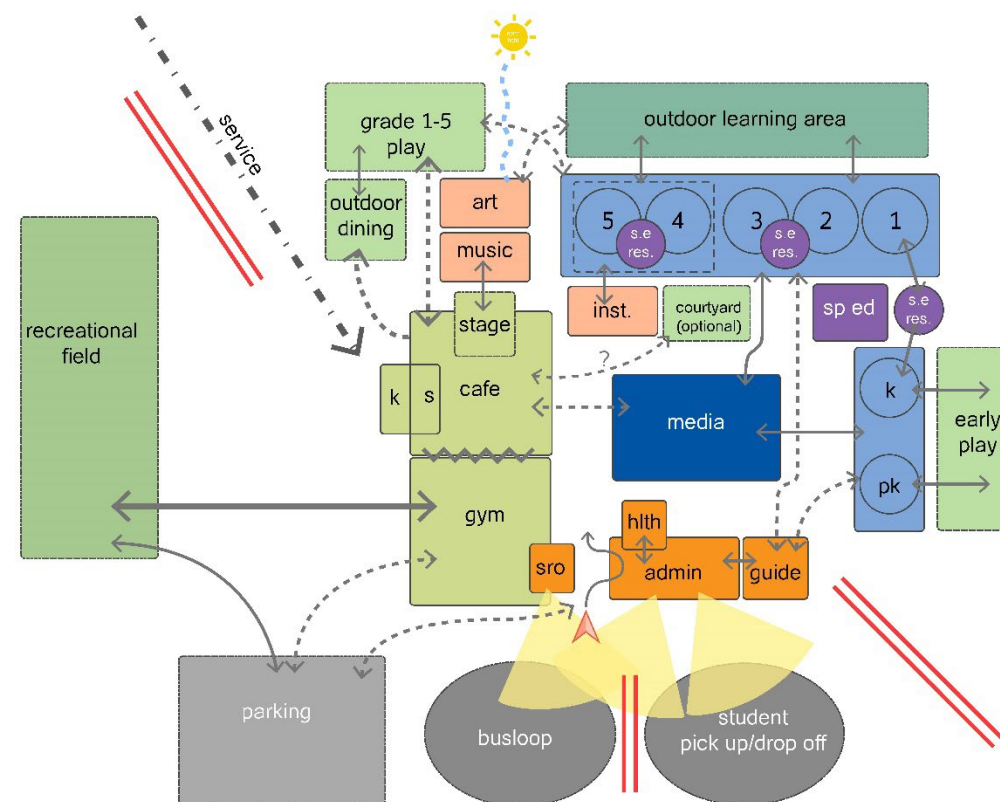
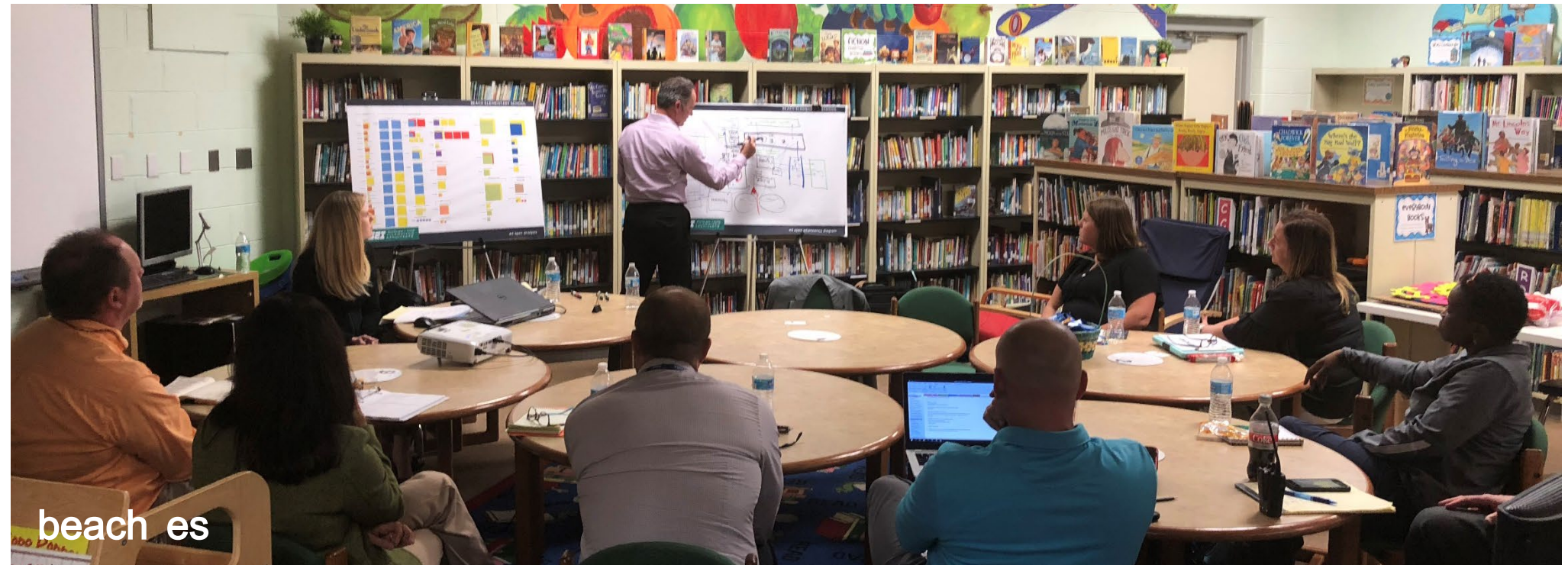
- Feasibility Study
- Potential Approach Types
 - Revitalization
 - Modernization
 - Replacement
- Four Step Process
- Existing Conditions Analysis
- Educational Specification (Ed Spec) Analysis
- Project Considerations
 - Safety and Security
 - Sustainability
 - Next Generation Learning
- Visioning Session



FEASIBILITY STUDY

Goals

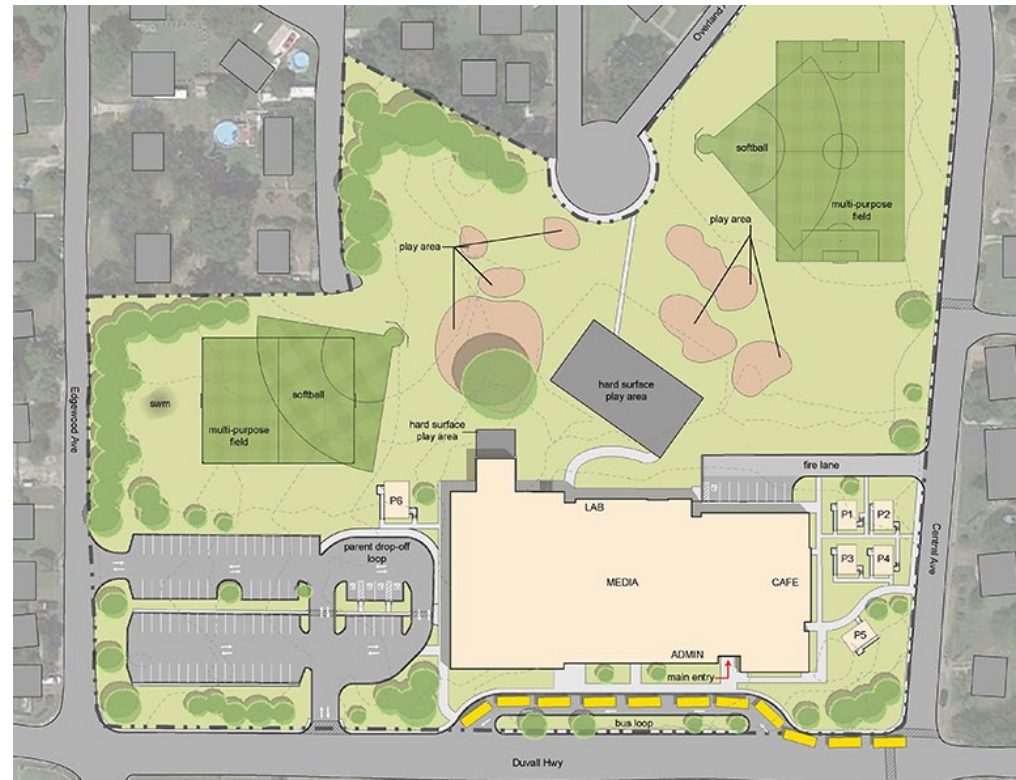
- Determine the appropriate approach to achieving a project's goals
 - Program
 - Cost / Value / Life Cycle
 - Schedule & Phasing
 - Code Compliance
 - Sustainability
- Four Step Process
 - Information Gathering & Evaluation
 - Concept Design
 - Development of Plan Options
 - Technical Report Preparations
- Study result is NOT a design



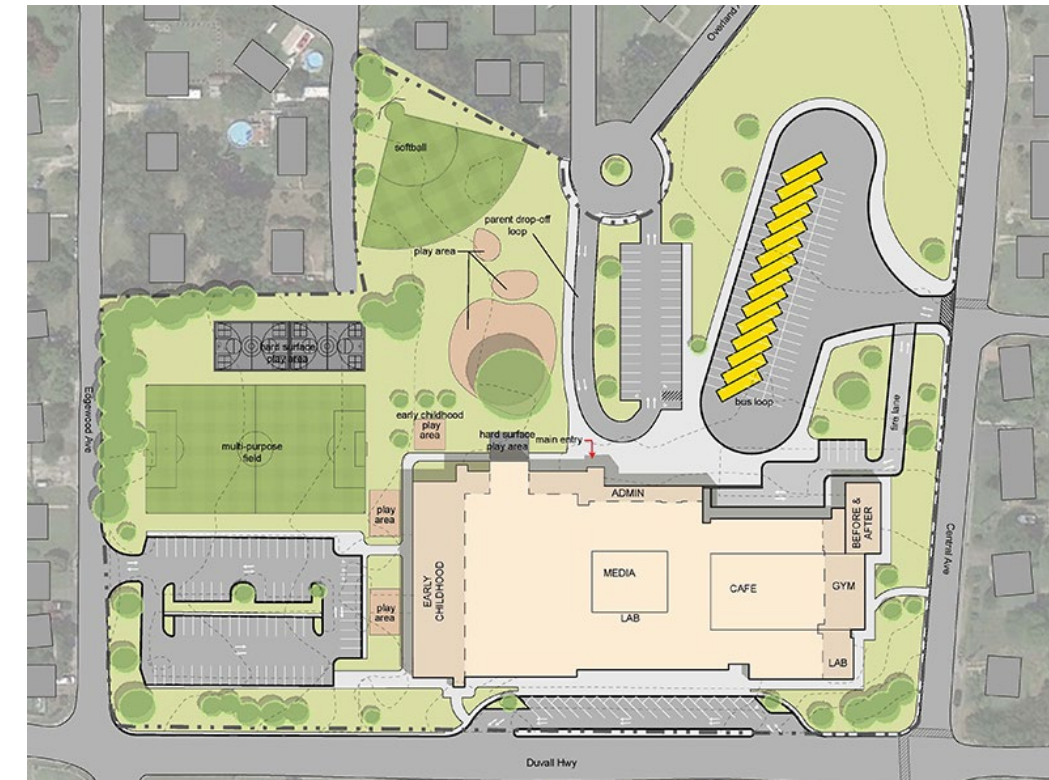
POTENTIAL APPROACH TYPES

Three Approaches – High Point ES Example

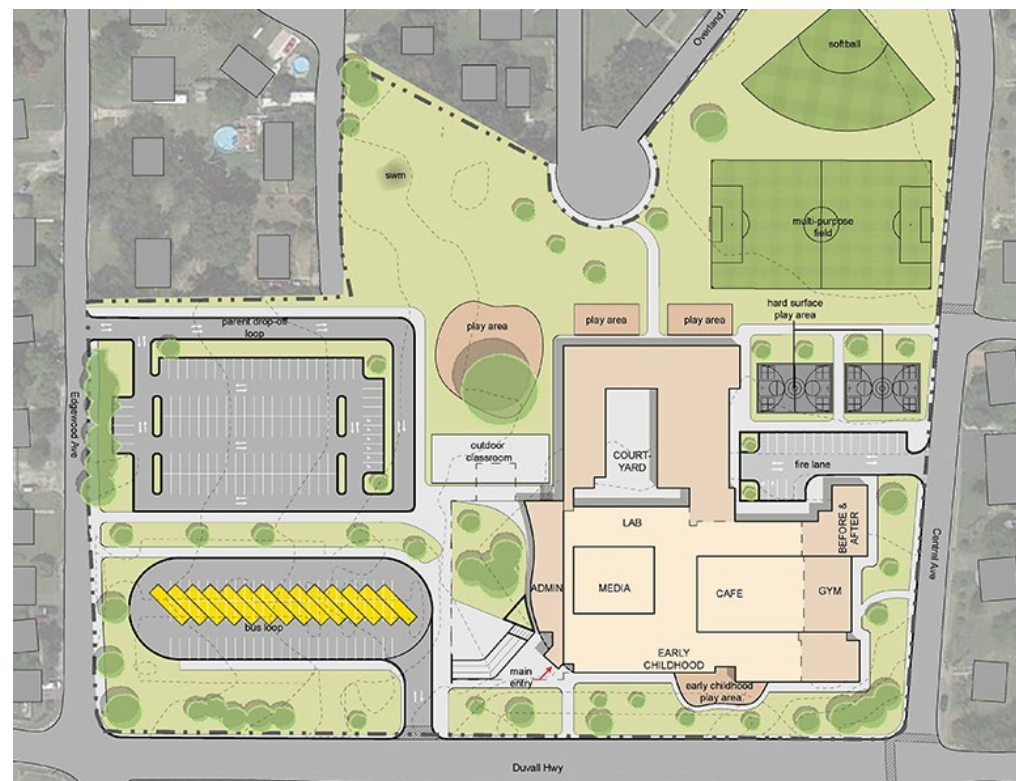
- Three levels of intervention
- All options will provide a 'like new' Eastern Middle School
- All options will be built via phased while occupied construction



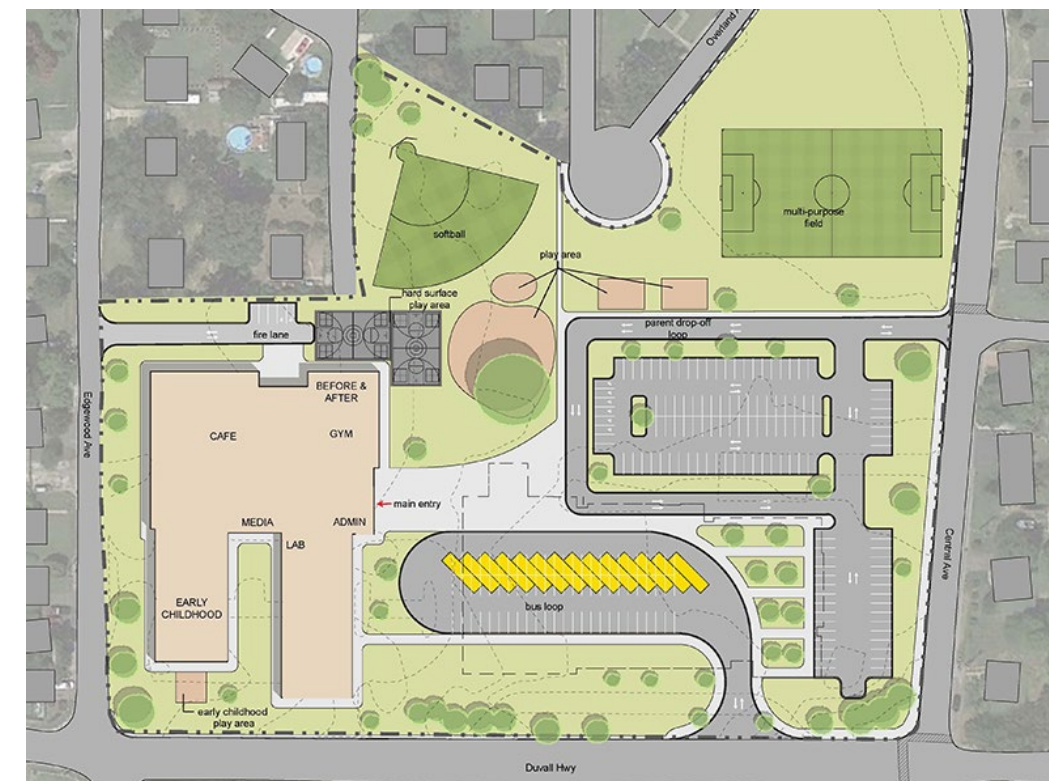
Existing High Point Elementary School



Revitalization



Modernization



Replacement

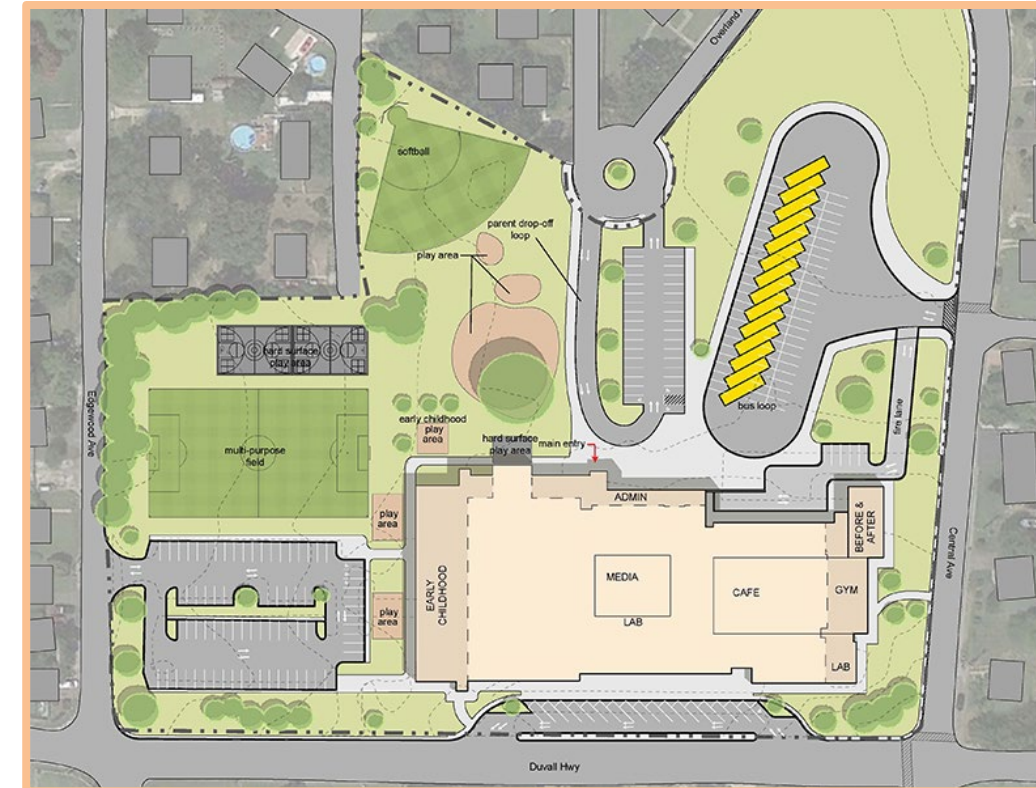
POTENTIAL APPROACH TYPES

Approach 1: Revitalization

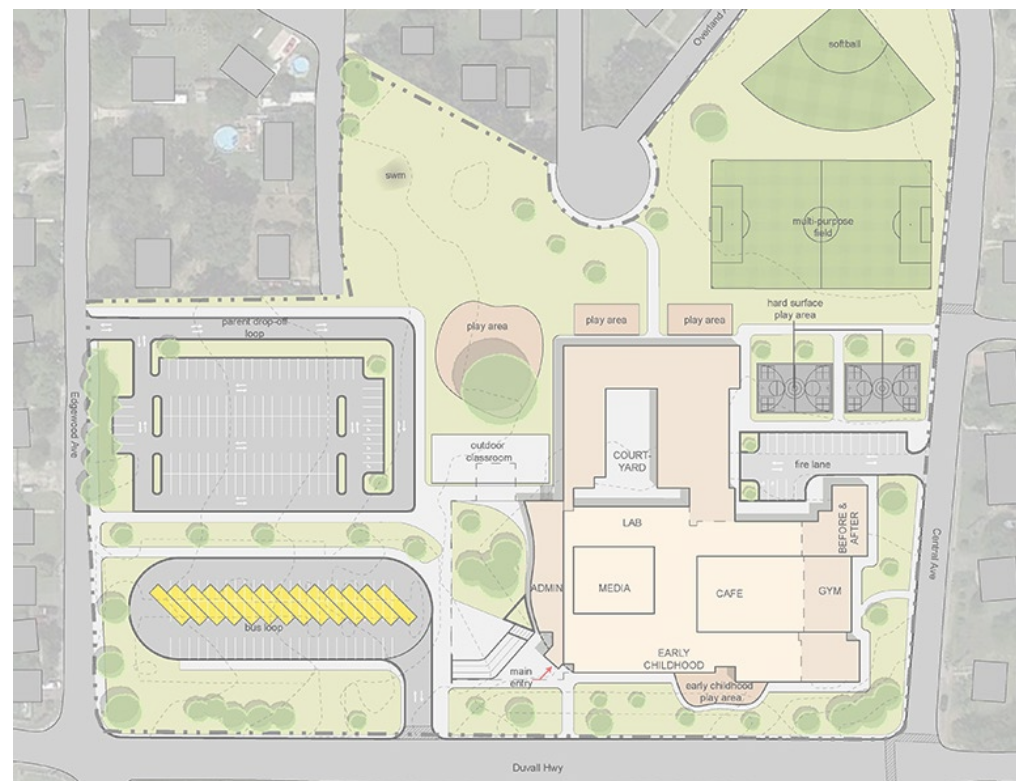
- Maintain corridor alignments
- Targeted additions
- Full renovation of all existing spaces
 - “Gut” renovation
 - Replace partition walls
 - All new HVAC
 - All new IT & Classroom Tech
 - All new equipment & finishes
 - Address exterior envelopes
- Reuse existing specialized large volume spaces
 - Cafeteria
 - Auditorium
 - Gymnasium
- Phased while occupied construction



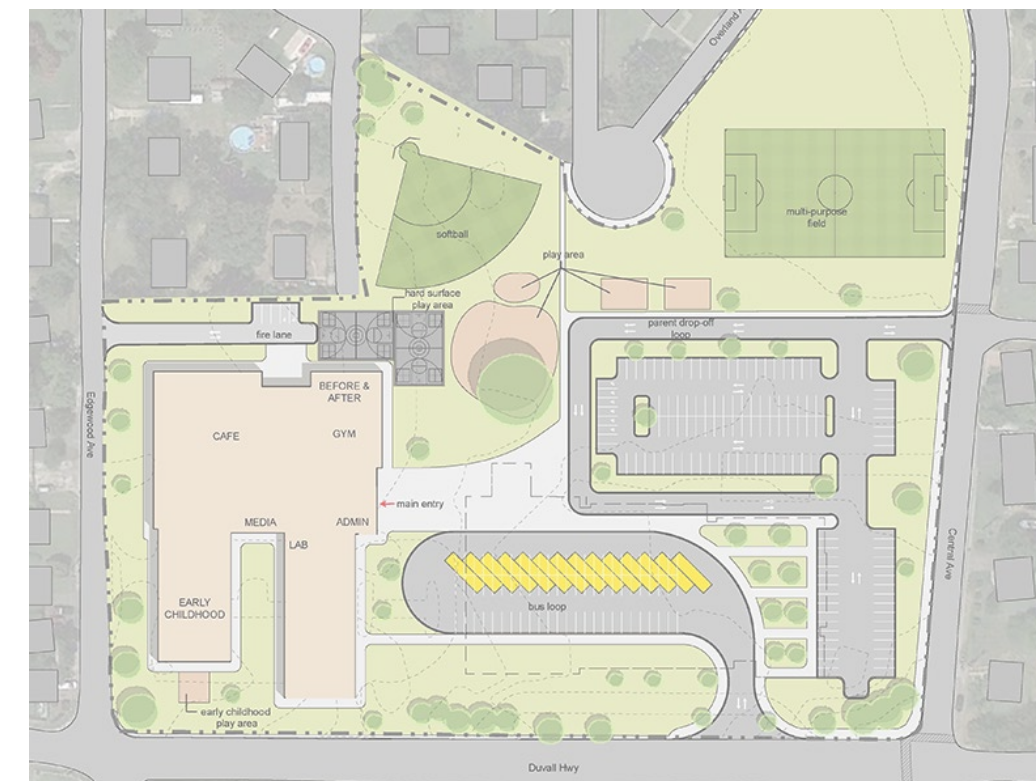
Existing High Point Elementary School



Revitalization



Modernization



Replacement



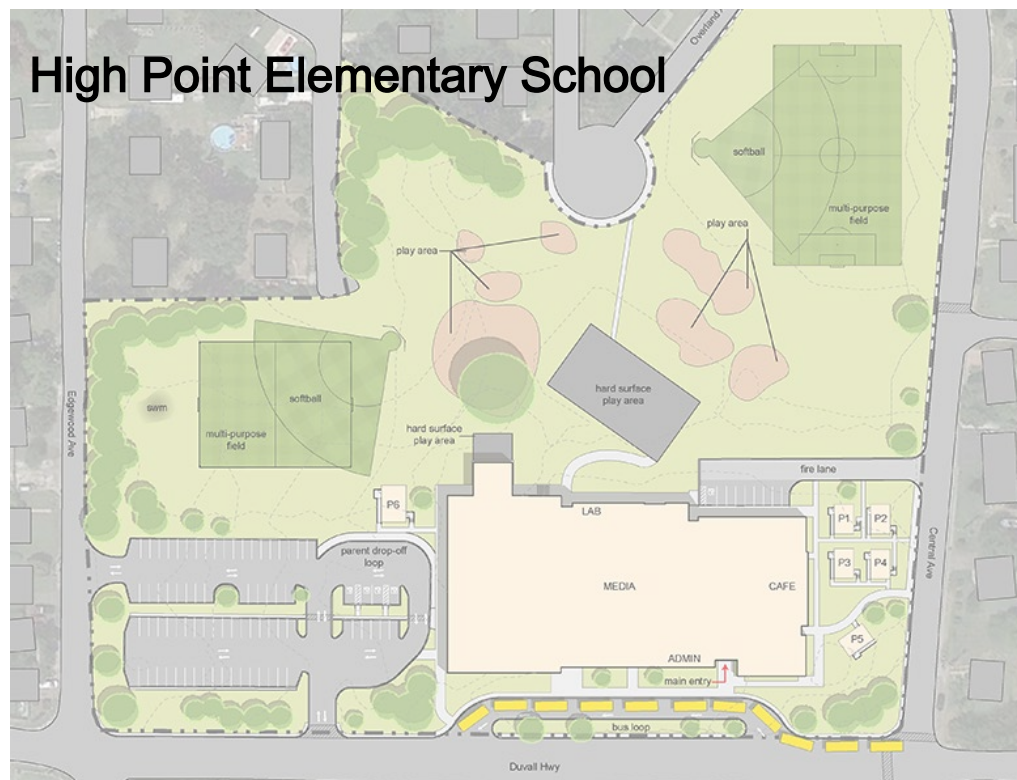
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POTENTIAL APPROACH TYPES

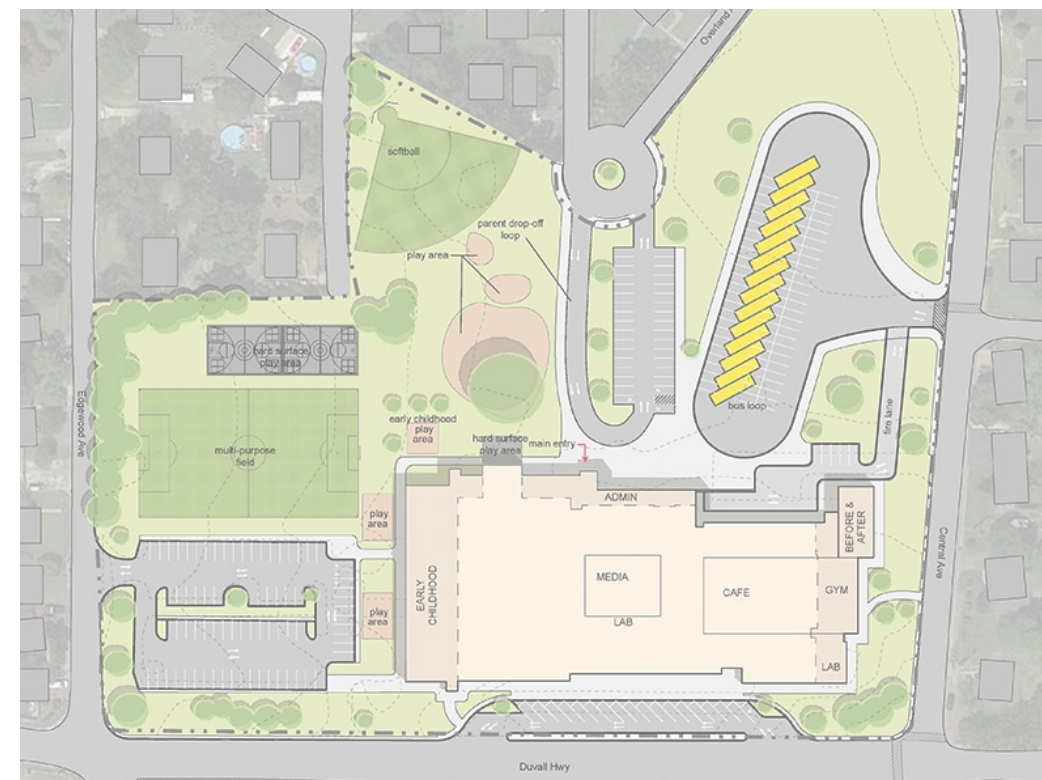
Approach 2: Modernization

- Rework corridor alignments where appropriate
- Moderate level of demolition and reconstruction
- Full renovation of all existing spaces
- Reuse existing volume spaces where appropriate
- Phased while occupied construction

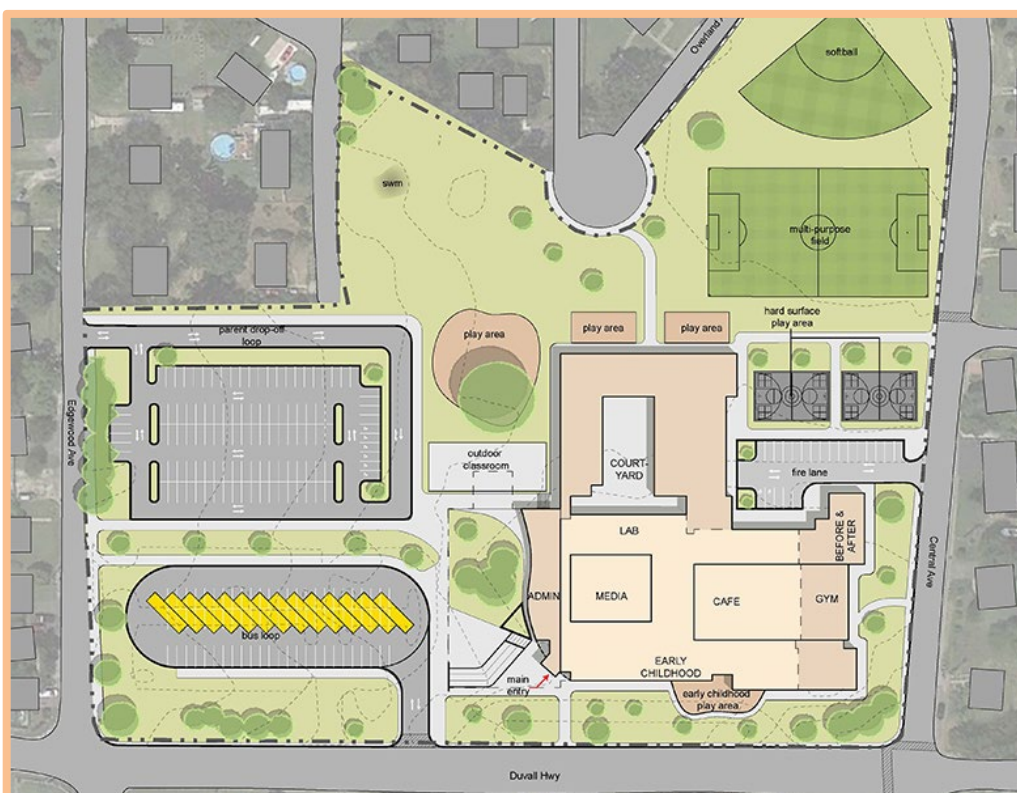
High Point Elementary School



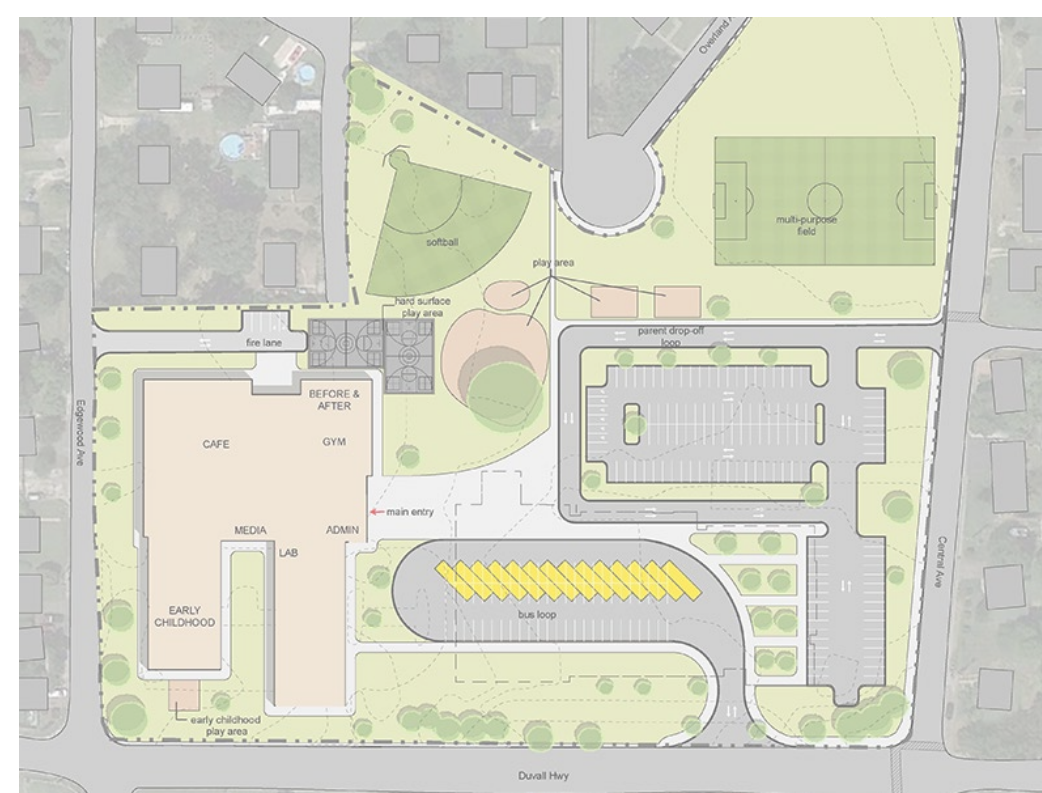
Existing High Point Elementary School



Revitalization



Modernization



Replacement

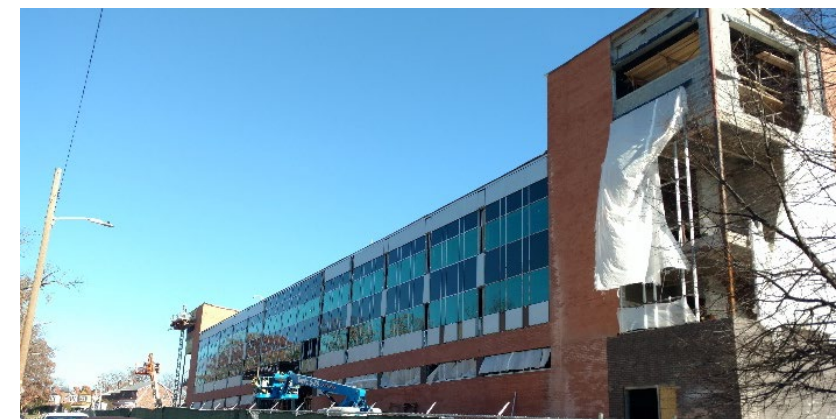
POTENTIAL APPROACH TYPES

Approaches 1 & 2: Building Envelope Strategies

- Wall and roof insulation
- Wall cavities and drainage
- Air & Vapor barriers
- High-performance glazing
- Increase classroom daylighting
- Refresh building appearance



Forest Park High School



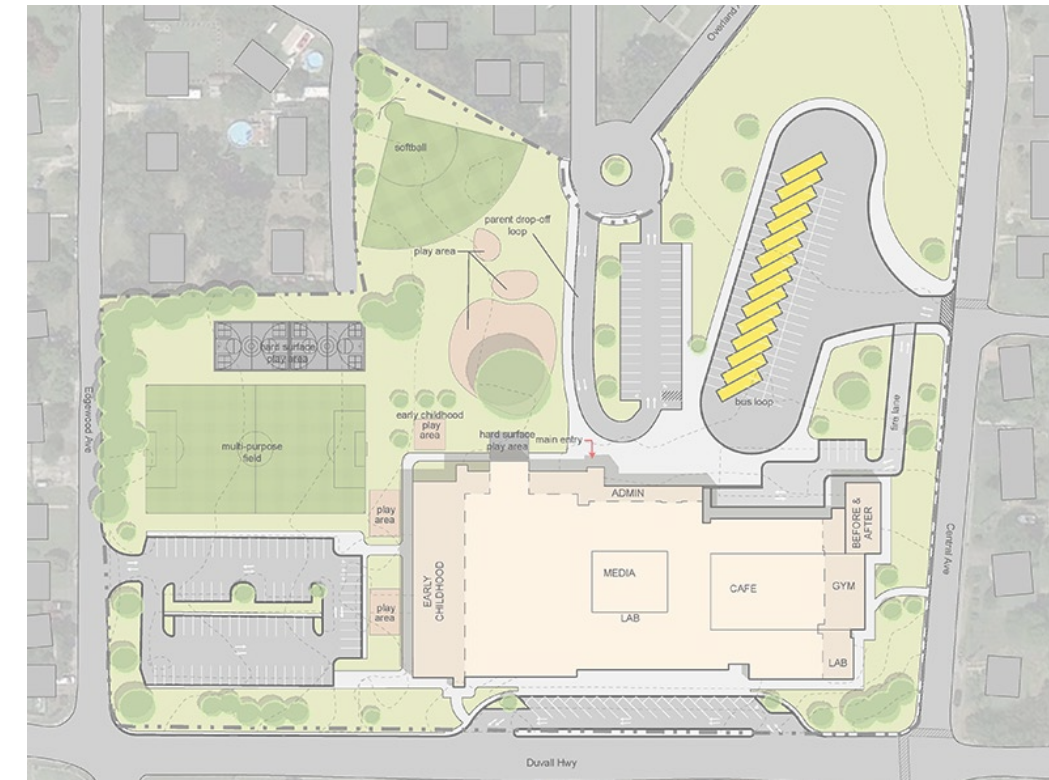
POTENTIAL APPROACH TYPES

Approach 3: Replacement

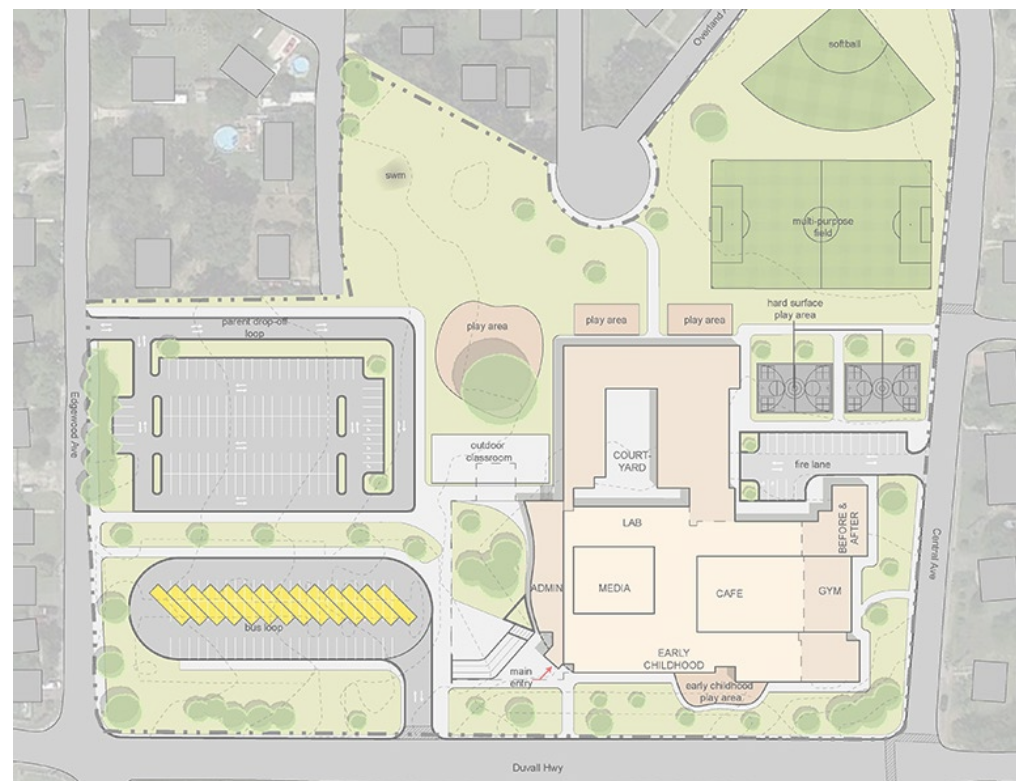
- Construct replacement facility
- Existing building remains operational while new school is built
- Demolish existing building after moving into new school
- Limited playfield use during construction
- Phased while occupied construction



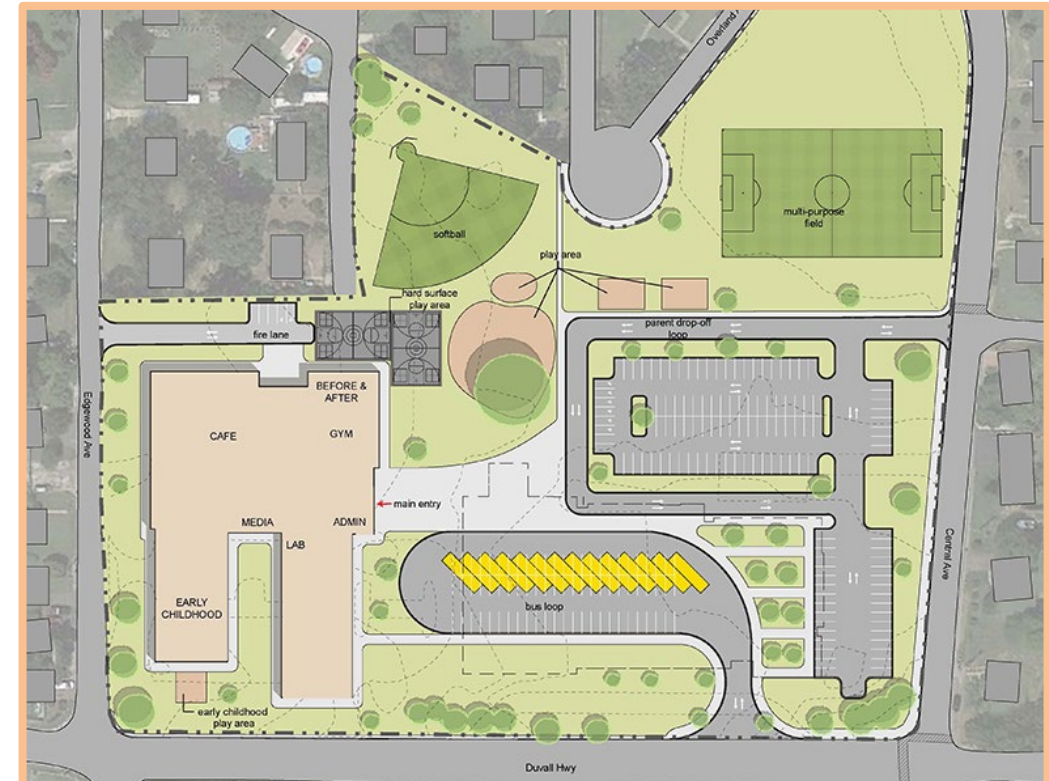
Existing High Point Elementary School



Revitalization



Modernization



Replacement



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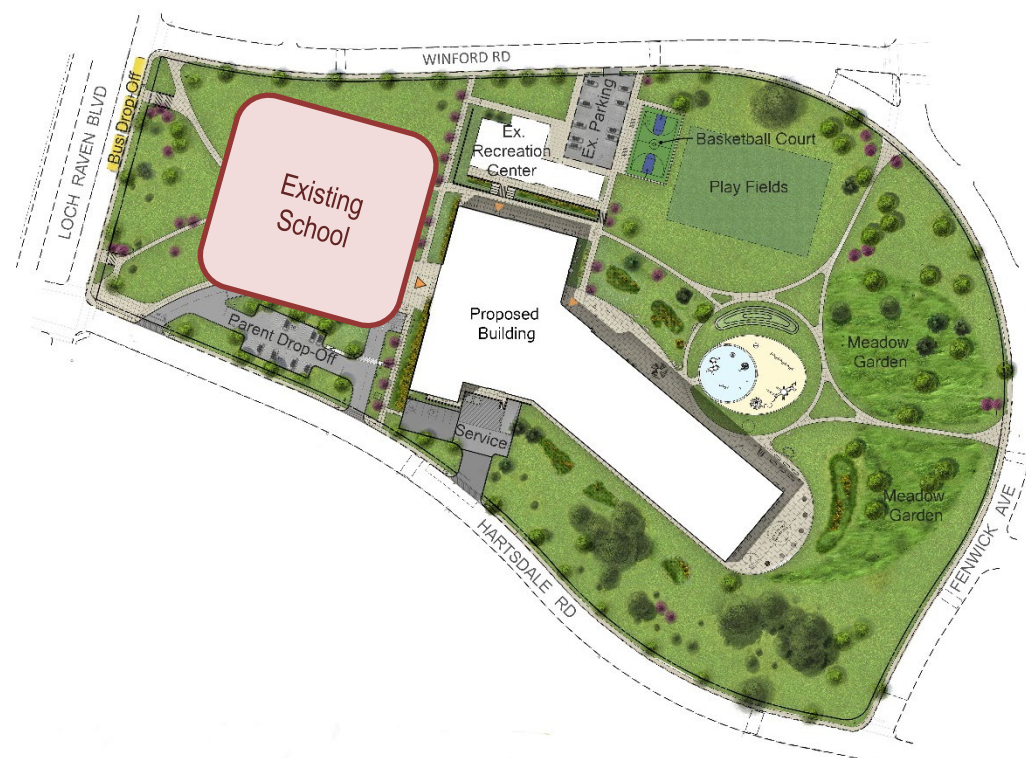
POTENTIAL APPROACH TYPES

Approach 3: School Within a Park

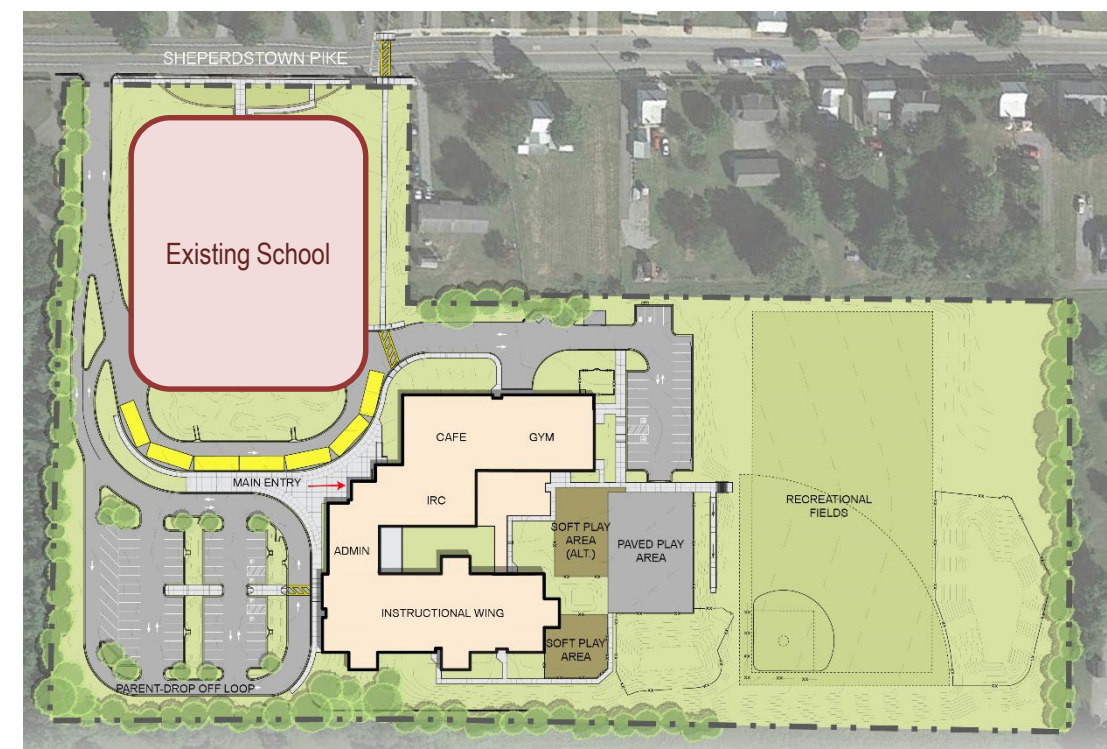
BEACH ES



NORTHWOOD ES



SHARPSBURG ES





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POTENTIAL APPROACH TYPES

Approach 3: School Within a Park

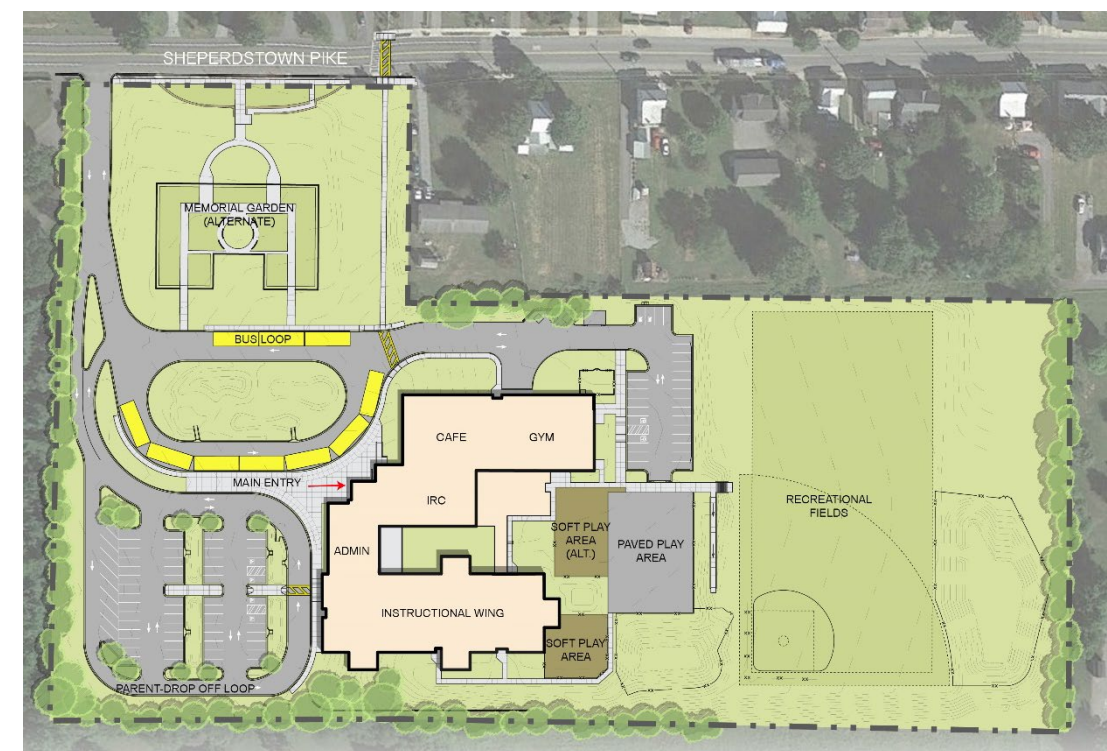
BEACH ES



NORTHWOOD ES



SHARPSBURG ES





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EXISTING CONDITIONS

Site Plan

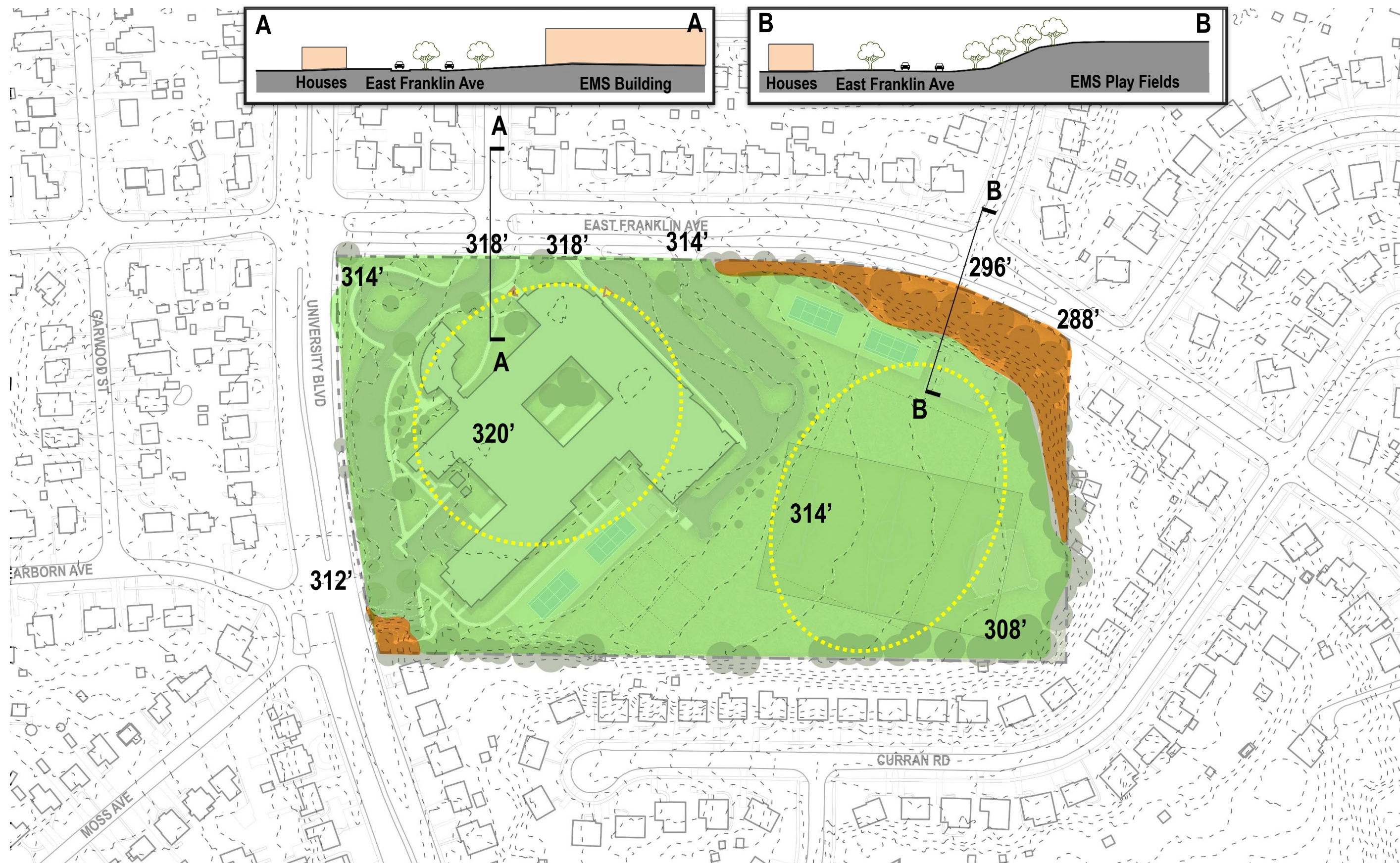




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EXISTING CONDITIONS

Topography





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EXISTING CONDITIONS

Visibility





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EXISTING CONDITIONS

Site Circulation

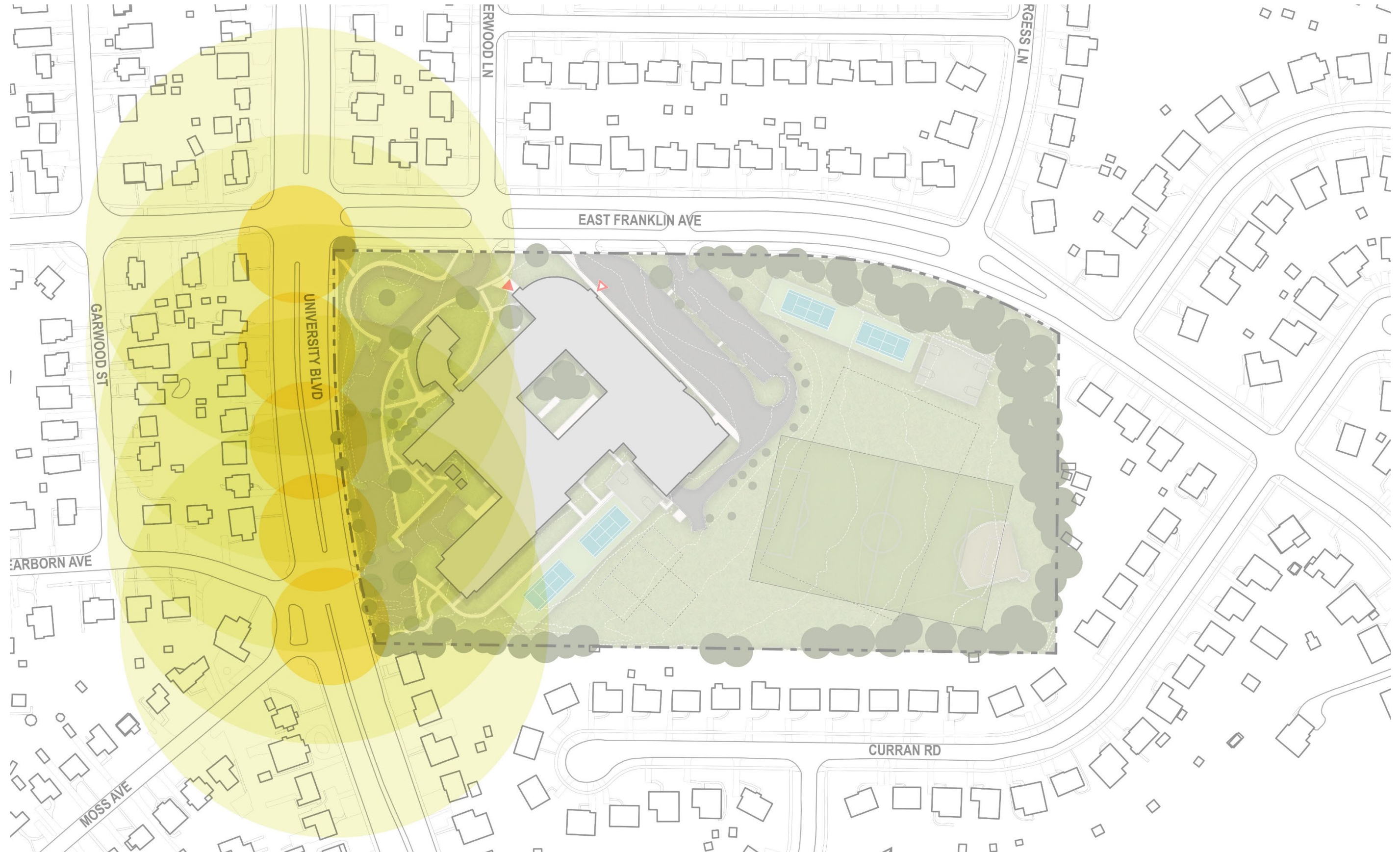




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EXISTING CONDITIONS

Noise Diagram





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EXISTING CONDITIONS

Potential Expansion

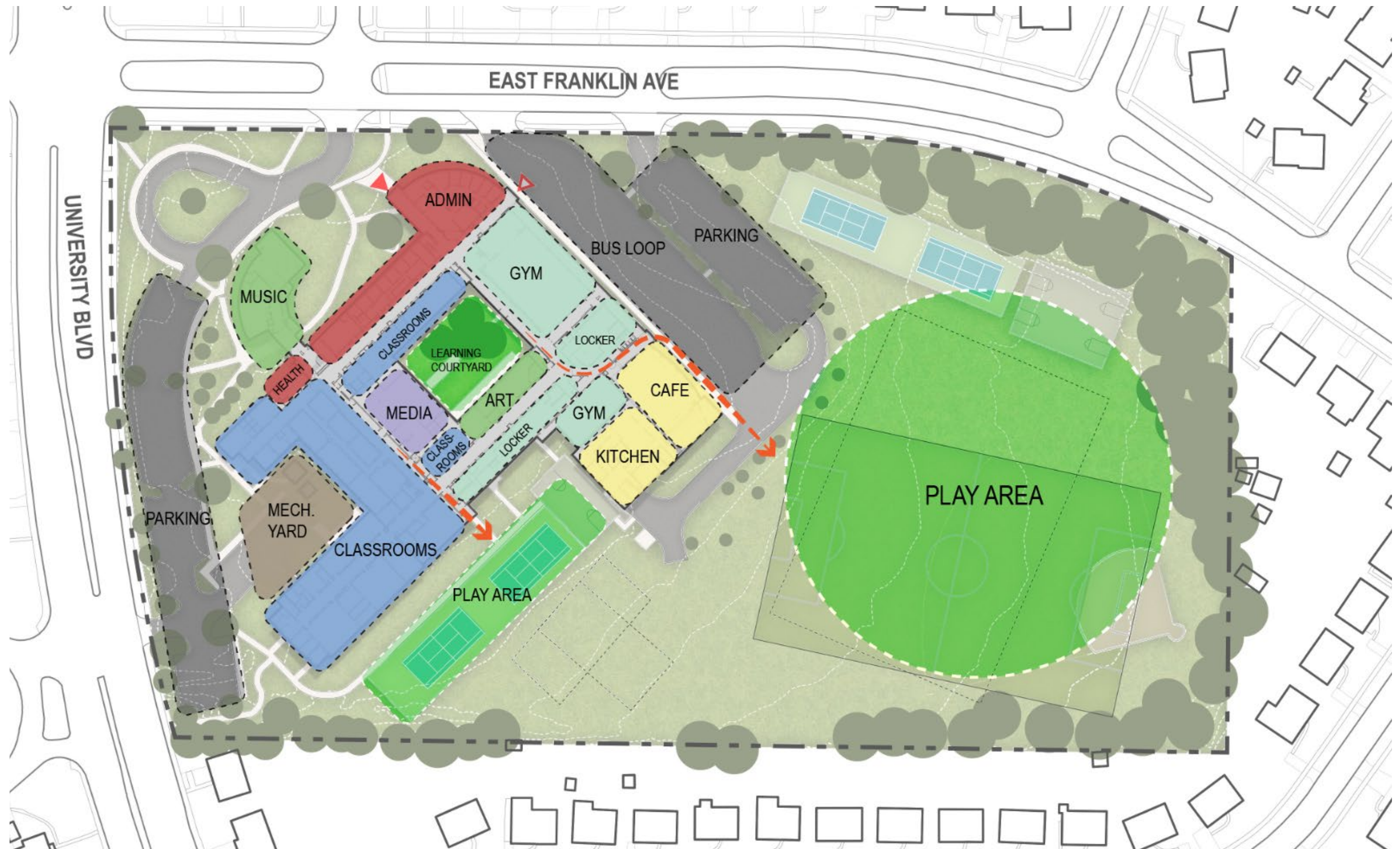




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EXISTING CONDITIONS

Site and Building Programming

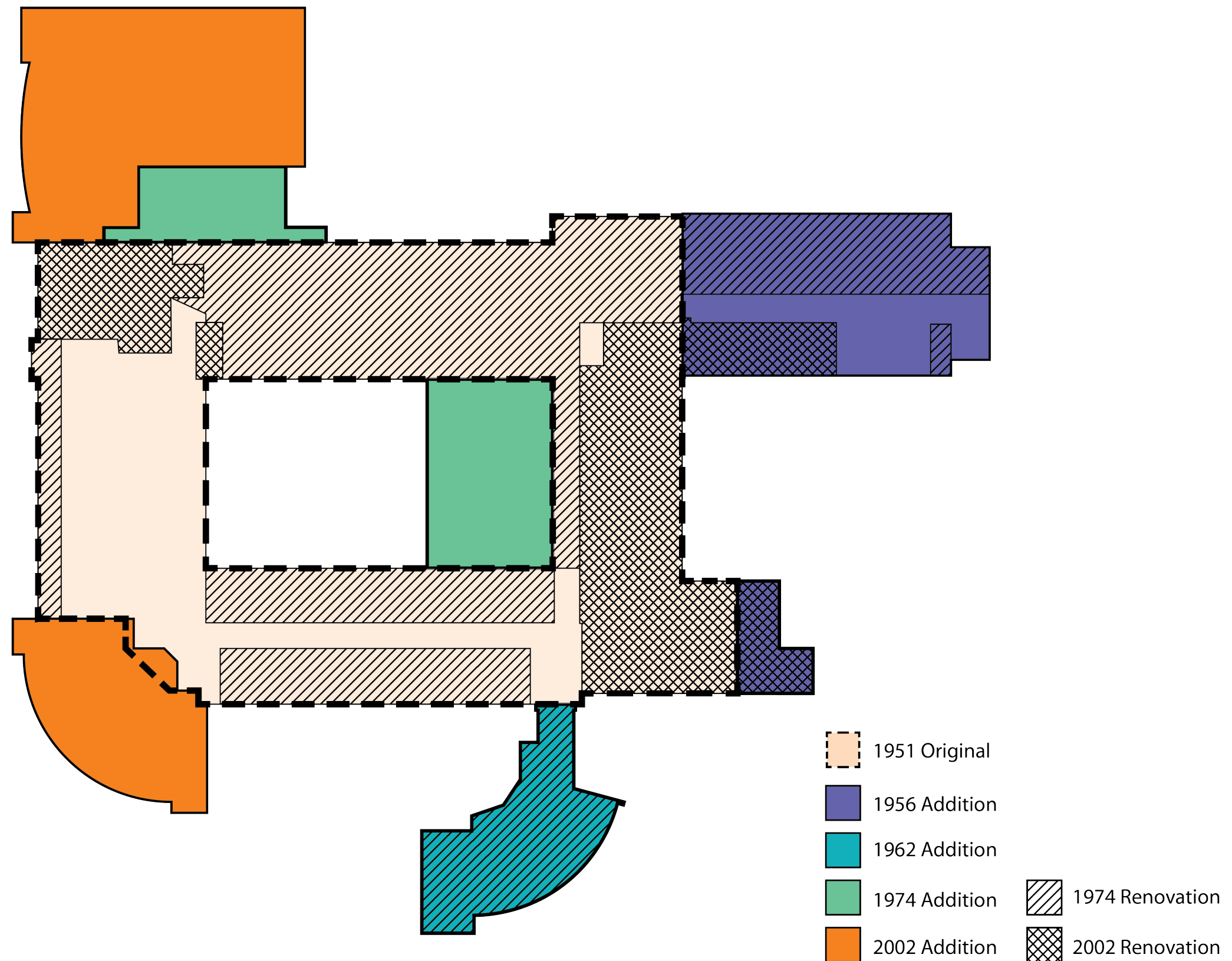




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EXISTING CONDITIONS

Building History





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EXISTING CONDITIONS

Civil Engineering Observations

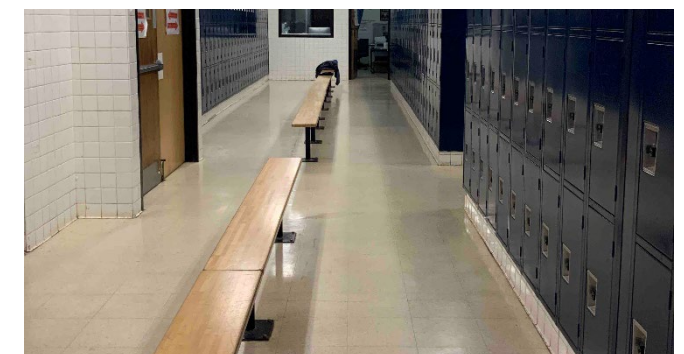
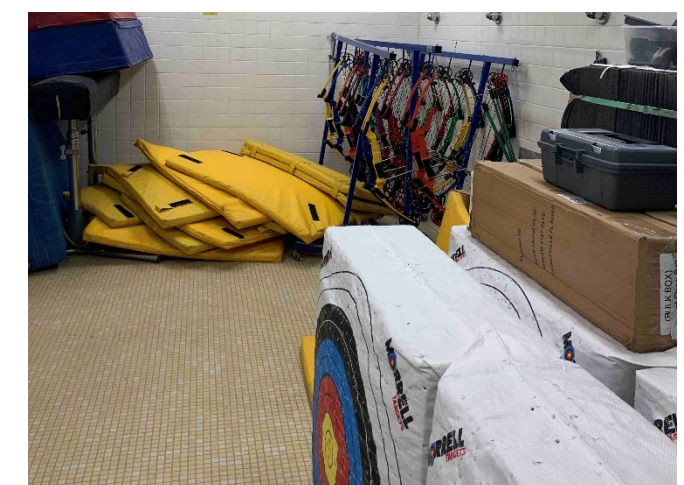
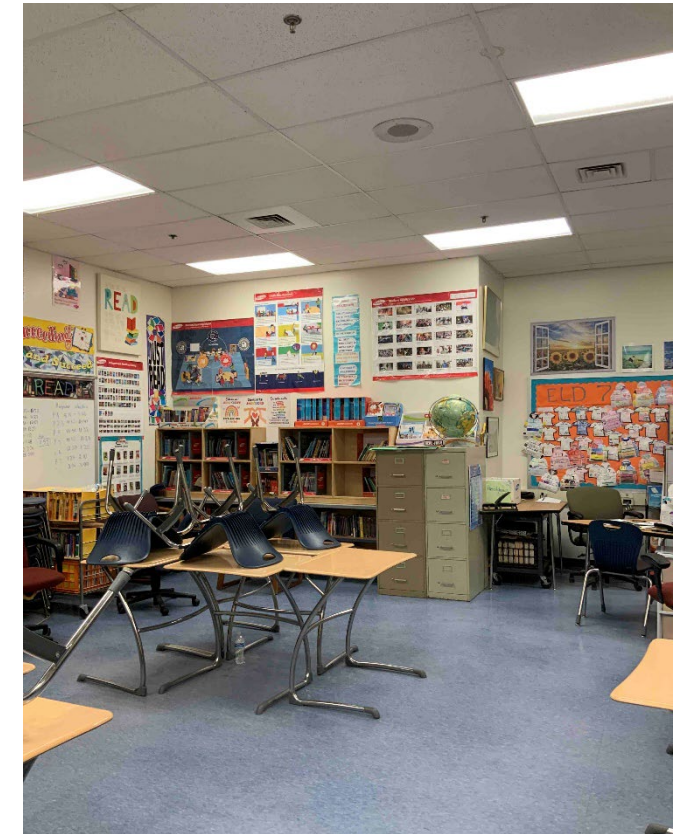
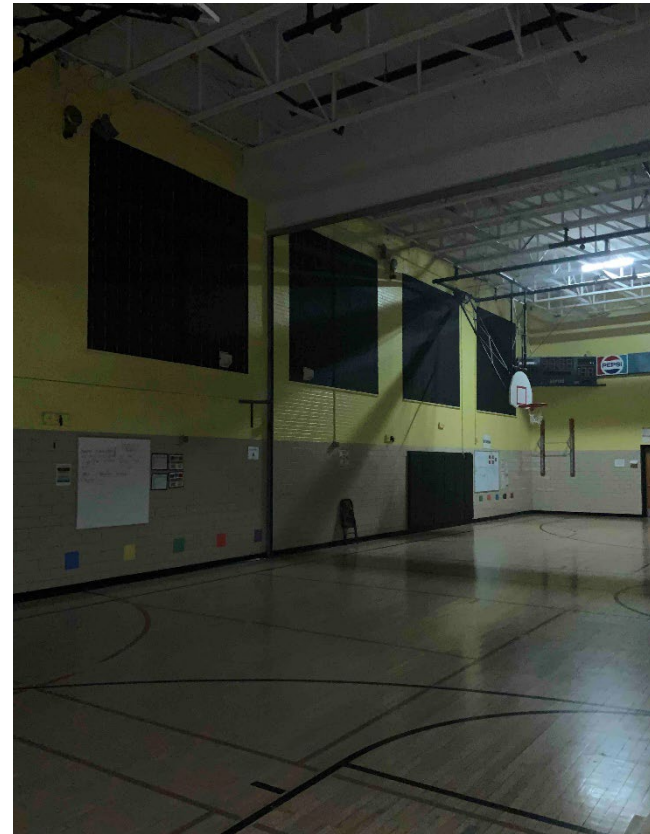
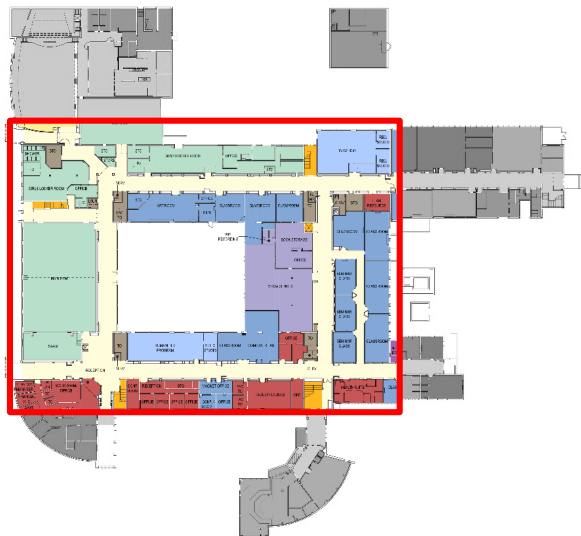
- Minor asphalt fatigue noticed throughout much of the site
- ADA parking areas and access to some exterior doors is non-compliant
- One surface sand filter and two subsurface infiltration trenches. Sand filter appears in good condition
- Basketball courts in fair to poor shape. Tennis courts in moderate shape
- Sidewalk generally in good condition
- Surface evidence of water, sanitary, storm, and gas
- Runoff from grass play fields and southwestern tennis/basketball courts drain towards adjacent residential properties



EXISTING CONDITIONS

Architectural Observations – 1951 Building

- ADA accessibility issues
- Limited daylighting and exterior views in teaching spaces
- Acoustic concerns
- Inadequate storage and finishes for PE program
- Lack of program space for Magnet program
- Lack of exterior insulation
- Lack of breakout spaces
- Institutional corridors



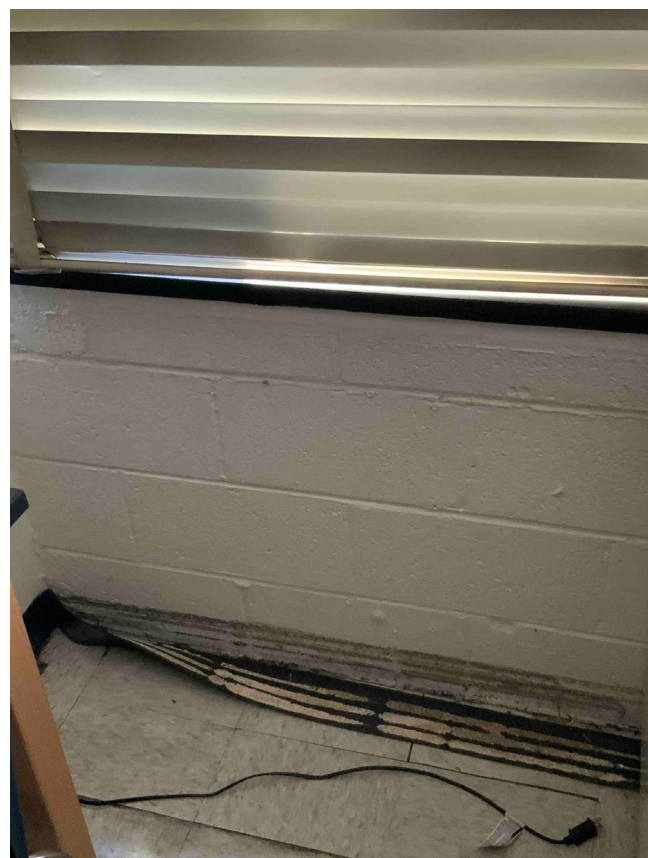
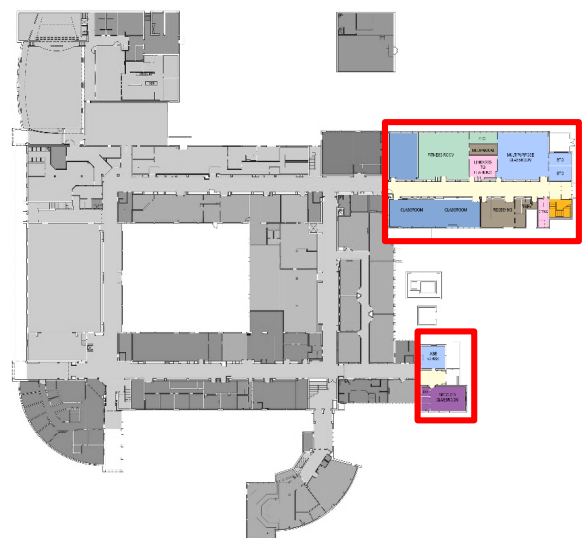
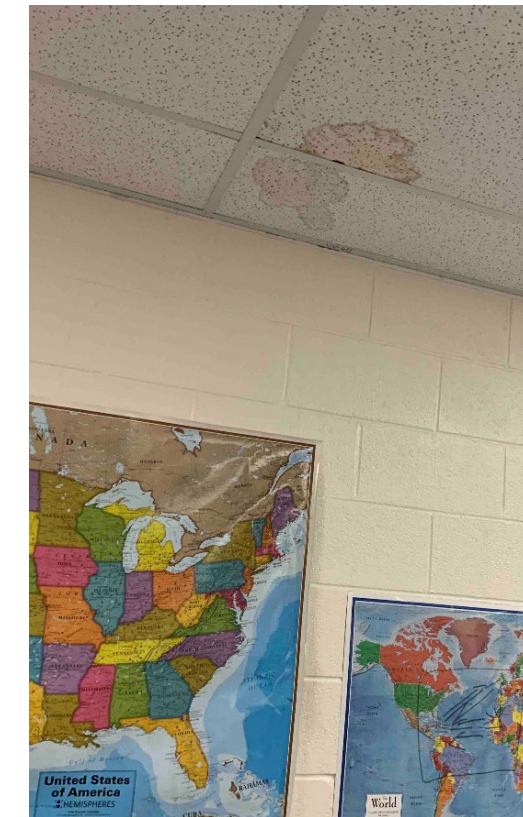


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EXISTING CONDITIONS

Architectural Observations – 1956 Addition

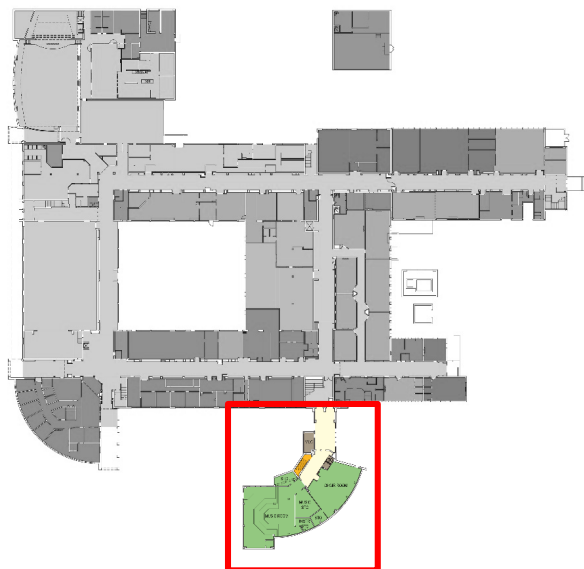
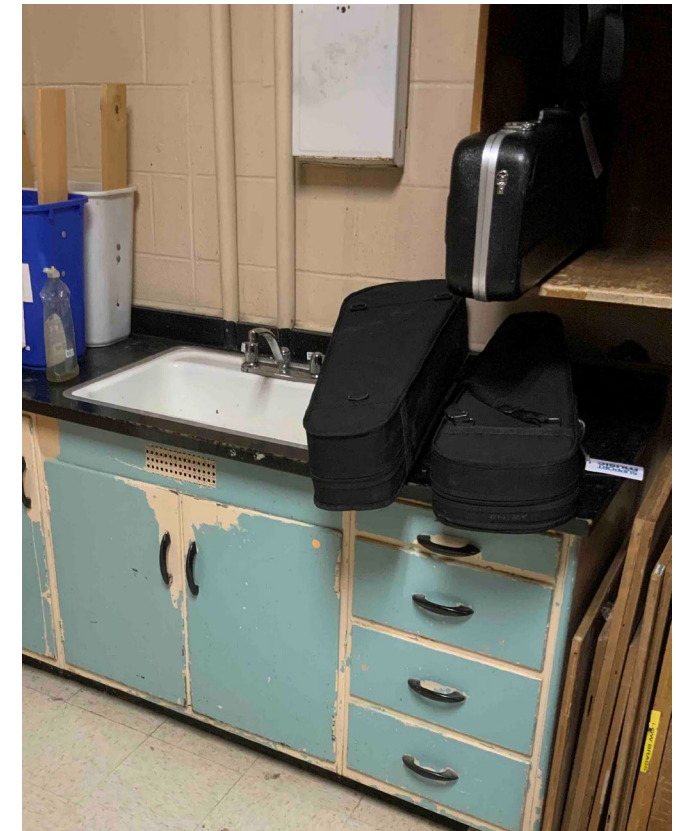
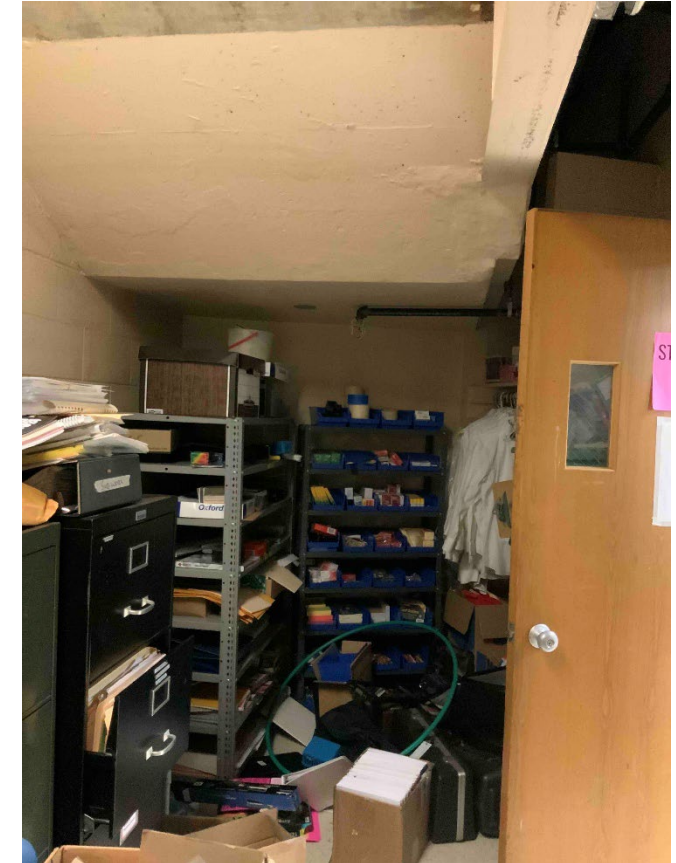
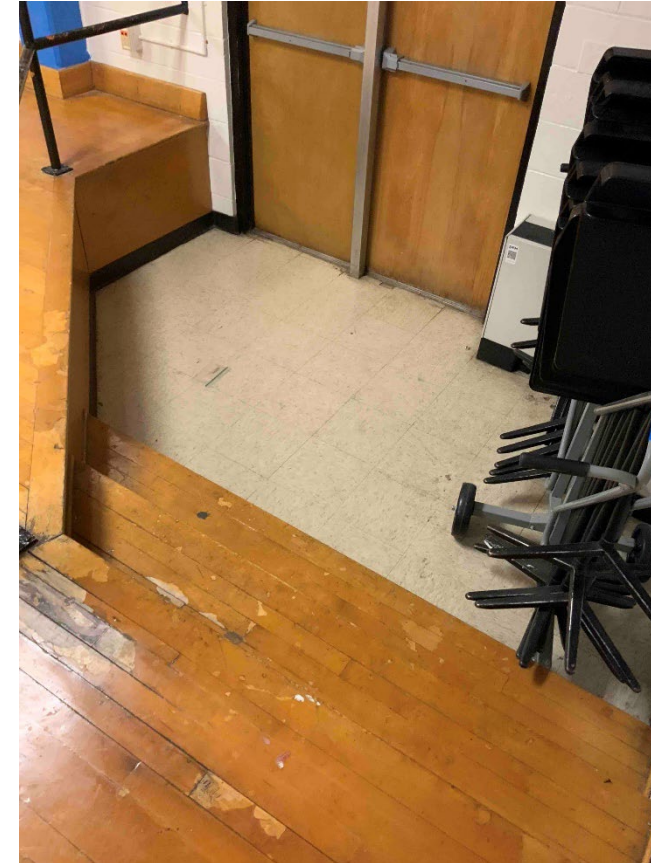
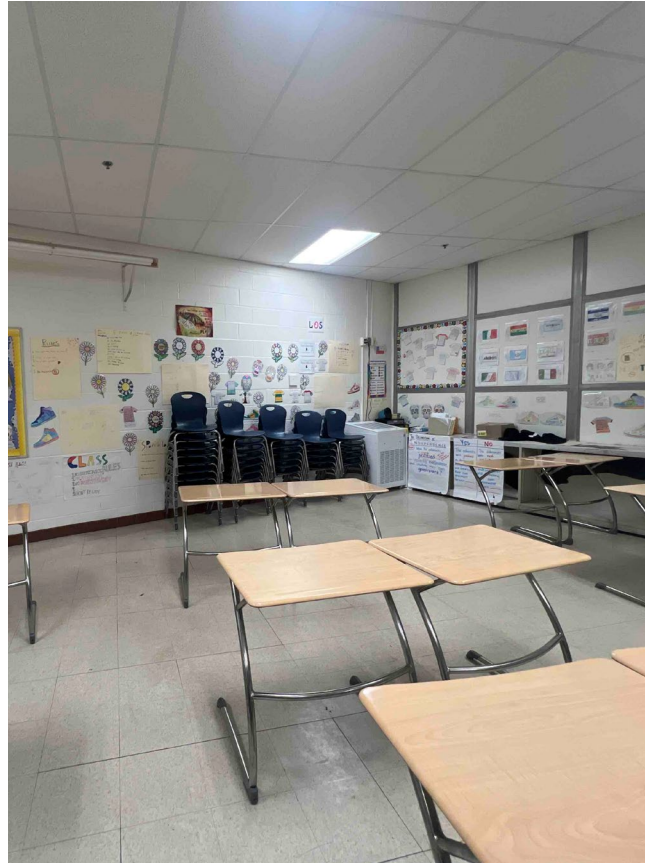
- Deteriorating classroom finishes
- Visible ceiling leaks
- Signs of water infiltration
- Water ponding on roof



EXISTING CONDITIONS

Architectural Observations – 1962 Addition

- No access to daylight
- Accessibility concerns
- Inadequate storage
- Outdated systems
- Casework in poor condition
- Signs of water infiltration



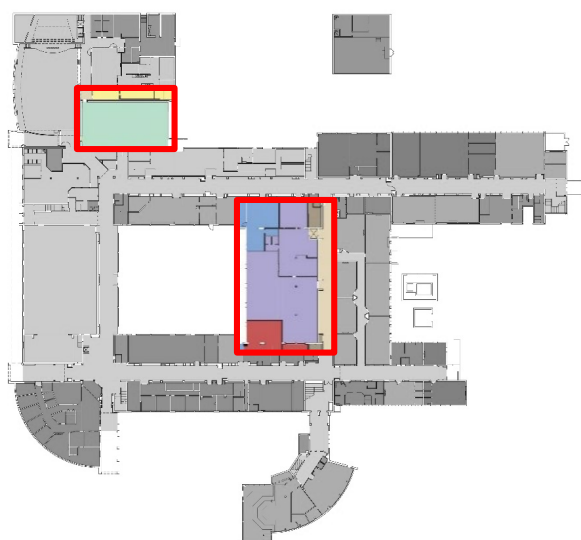
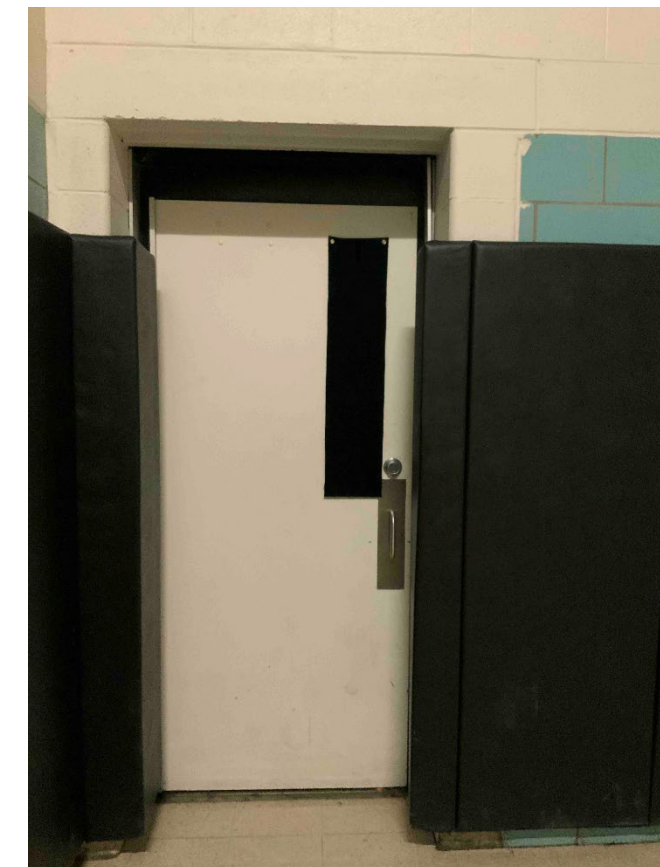
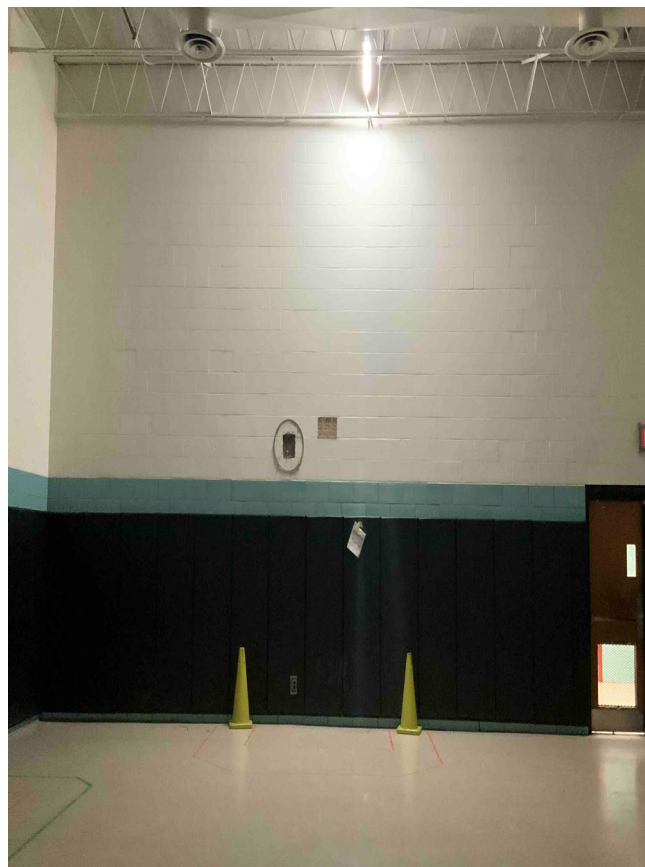


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EXISTING CONDITIONS

Architectural Observations – 1974 Addition & Renovation

- No daylighting in Aux Gym
- Minimal daylighting in Media Center
- Signs of moisture above ceiling
- Secluded Media Center
- Signs of water infiltration



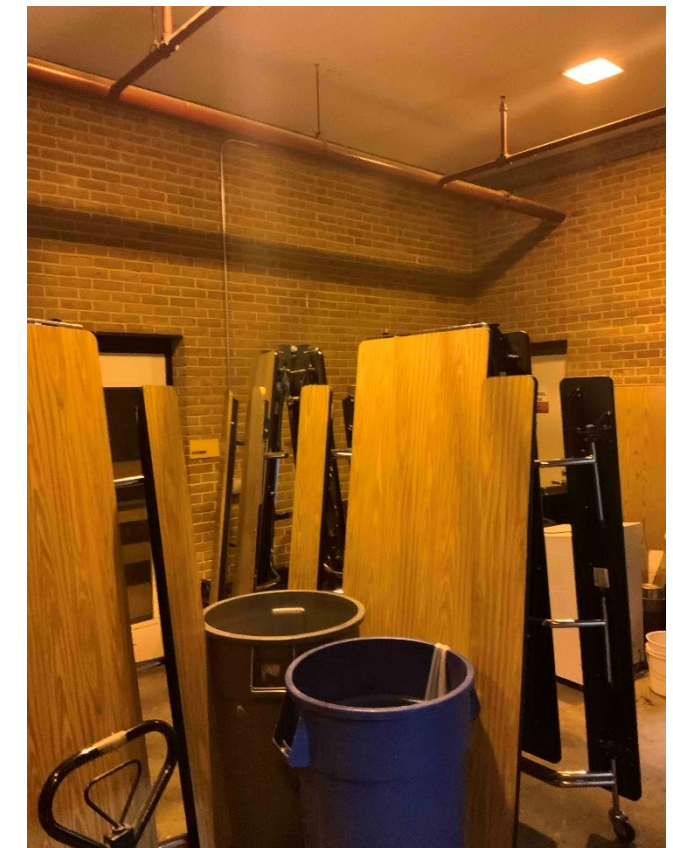
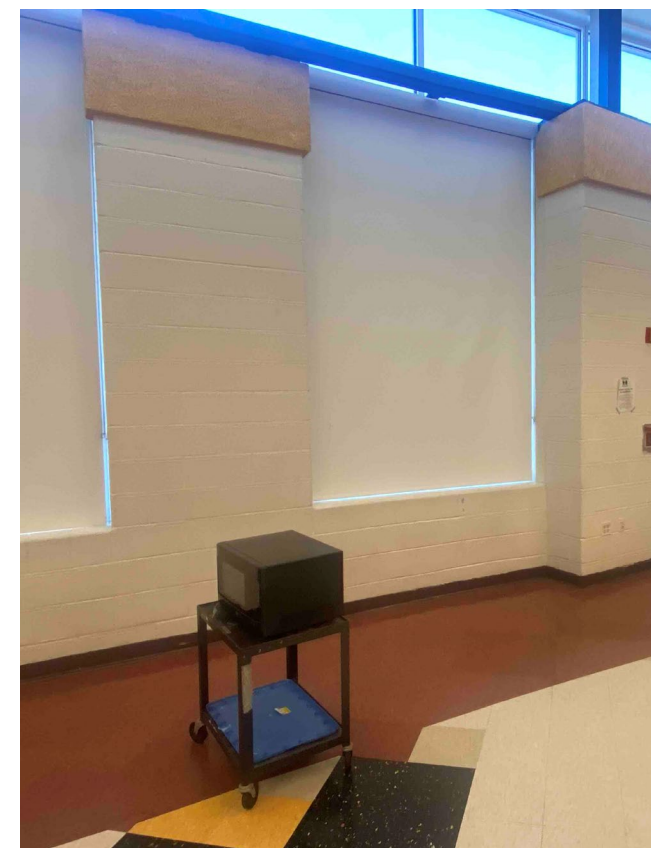
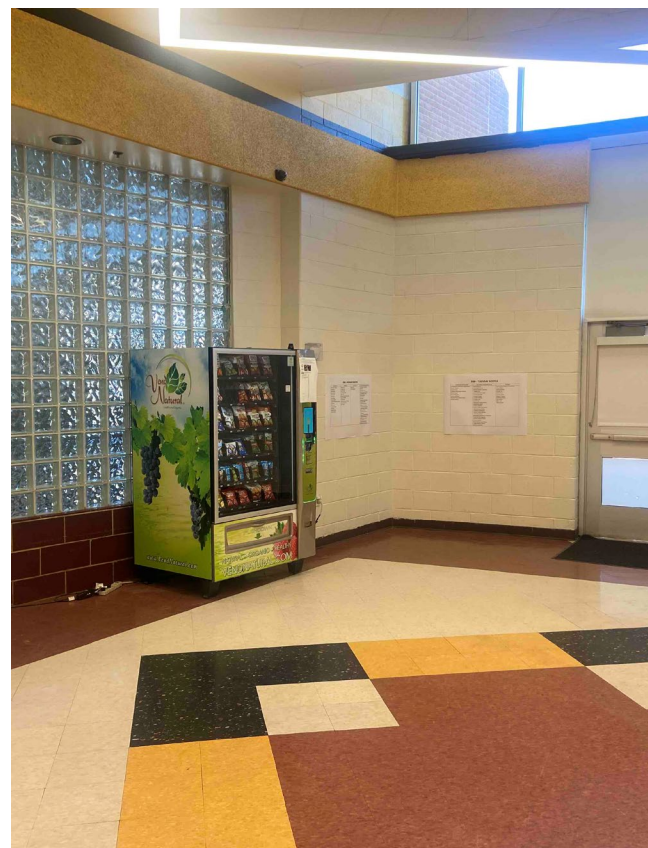
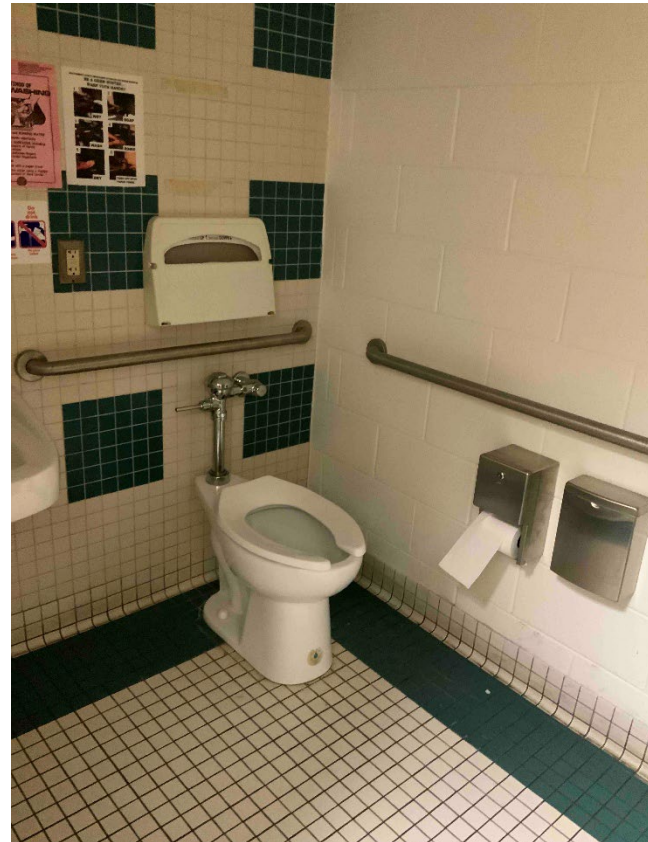


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EXISTING CONDITIONS

Architectural Observations – 2002 Addition and Renovation

- Inadequate storage
- Has access to plenty of daylight
- Easy access to play areas
- Multiple entrances, primary entrance not prominent
- Signs of water infiltration



EXISTING CONDITIONS

Structural Observations

• Exterior Observations

- Deterioration of the continuous steel bent plate supporting brick
- Stair stepping cracks in brick
- Displacement of brick
- Deterioration of Concrete Areaway
- Significant Displacement and Damage to the exterior sill / masonry wall
- Deterioration of Masonry at Loading Dock

• Interior Observations

- Evidence of water infiltration along exterior walls
- First floor concrete framing over crawl space inhibits ability to reorganize corridors
- Second floor slab on form deck inhibits ability to reorganize corridors
- Limited data available on foundations of 1951 building





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EXISTING CONDITIONS

Mechanical Observations

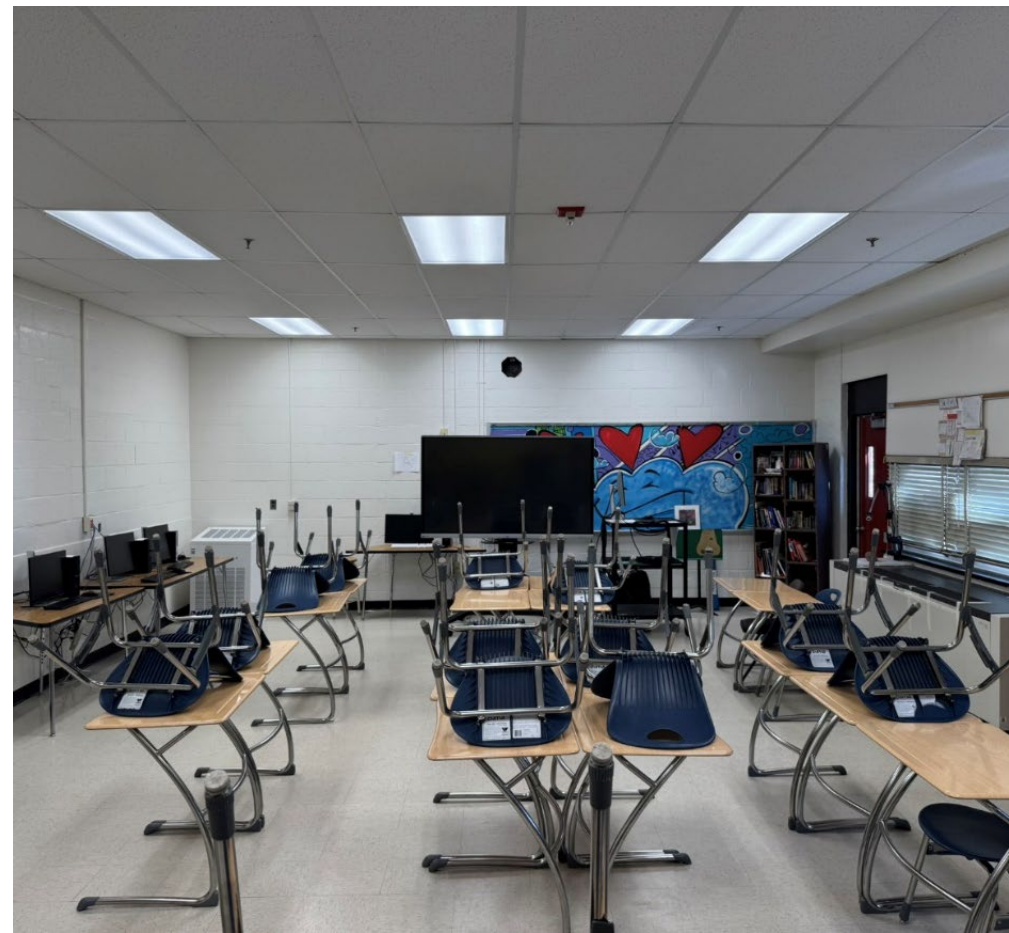
- Central plant equipment (boilers, chiller, cooling tower, and associated pumps) have reached or are approaching their expected useful service life
- Majority of space conditioning and ventilating equipment (air handling units, fan coil units, and unit ventilators) have reached or are approaching their expected useful service life
- The existing 2 -pipe heating/cooling configuration is not ideal for space conditioning and humidity control



EXISTING CONDITIONS

Electrical Observations

- Existing service room conditions leave little room for additional equipment.
- A new main electrical room is recommended for the new main service switchboard.
- The switchboard has minimal space and provisions remaining to add new circuit breakers.
- The existing roof is flat and relatively free of large mechanical equipment; however, the existing structure is not designed to carry the additional load of photovoltaic (PV) panels.
- Interior lighting fixtures typically utilize fluorescent lamps.
- Fire alarm system is outdated. Will require new fire detection and alarm system for the project





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ED SPEC ANALYSIS

Existing Site Program Analysis

• Ed Spec Site Programming

- Playfields requirements
- 400'x400' Play Field
- 300'x300' Play Field
- 4 Soft ball fields
- Long Jump pit
- 60 Yard - 6 lane track
- 3 basketball courts
- 55'x110' paved play area
- 6 – Tennis courts
- 12'x16' Storage Shed
- 125 parking spaces

• Site Topics

- Lack of playfield supervision
- Drainage concerns
- Prominent location for Mechanical/Electrical equipment
- Student drop off loop capacity





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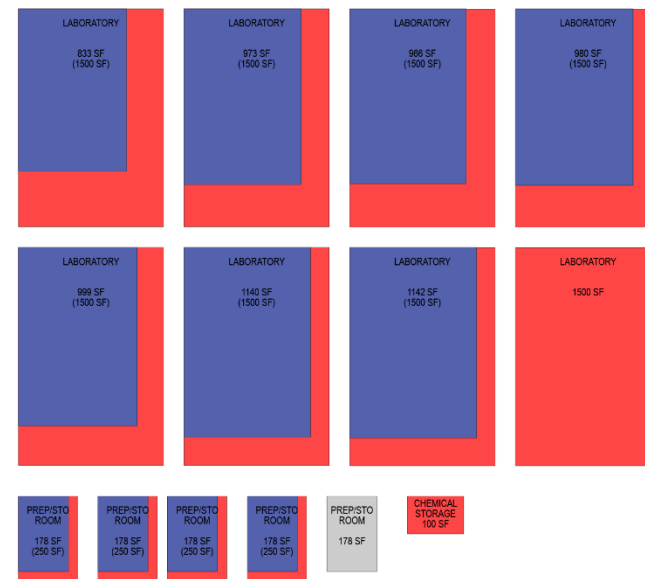
ED SPEC ANALYSIS

Existing Program vs. Ed Spec

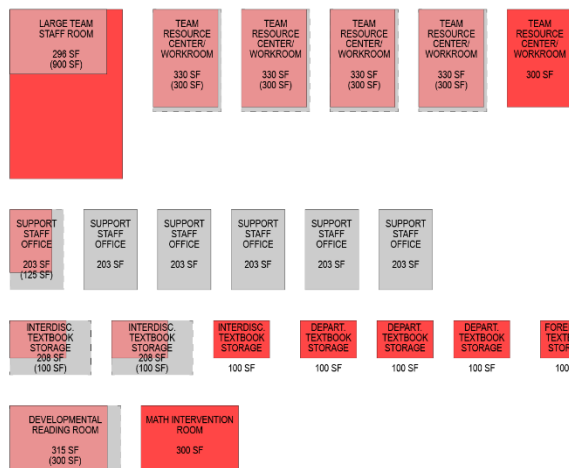
GENERAL CLASSROOMS Total SF 23,520; Existing SF 28,830 (120.9%)



SCIENCE Total SF 13,100; Existing SF 7,925 (60.5%)



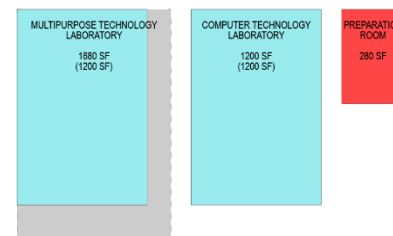
OTHER INSTRUCTIONAL SUPPORT AREAS Total SF 3,825; Existing SF 3,565 (93.2%)



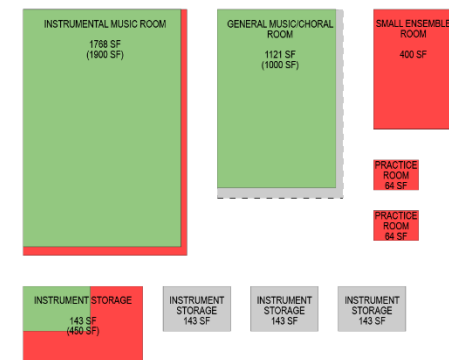
SPECIAL EDUCATION Total SF 4,200; Existing SF 972 (23.2%)



MULTIPURPOSE TECHNOLOGY LABORATORY Total SF 2,680; Existing SF 2,880 (107.5%)



MUSIC SUITE Total SF 3,878; Existing SF 3,460 (89.2%)



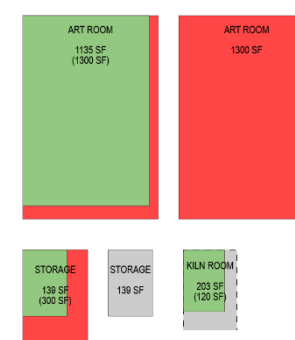
ELD CLASSROOMS Total SF 3,810; Existing SF 2,908 (76.4%)



MULTIPURPOSE LABORATORY Total SF 1,780; Existing SF 2,036 (114.4%)



VISUAL ARTS SUITE Total SF 3,020; Existing SF 1,616 (53.5%)



STUDENT ACTIVITIES Total SF 260; Existing SF 74 (28.3%)



STAFF Total SF 700; Existing SF 1,079 (154%)



GROSS SQUARE FOOTAGE

Existing: 152,030
Ed Spec: 162,676

COLOR LEGEND:

- SF DEFICIENCY
- SF OVERAGE
- ADMIN/STAFF SUPPORT
- CORE INSTRUCTION
- SPECIAL EDUCATION
- SPECIALTY INSTRUCTION
- MUSIC/ARTS
- LINKAGES TO LEARNING
- PHYSICAL EDUCATION
- FOOD SERVICES/CAFE
- MEDIA CENTER
- BUILDING SERVICES
- CIRCULATION
- VERTICAL CIRCULATION

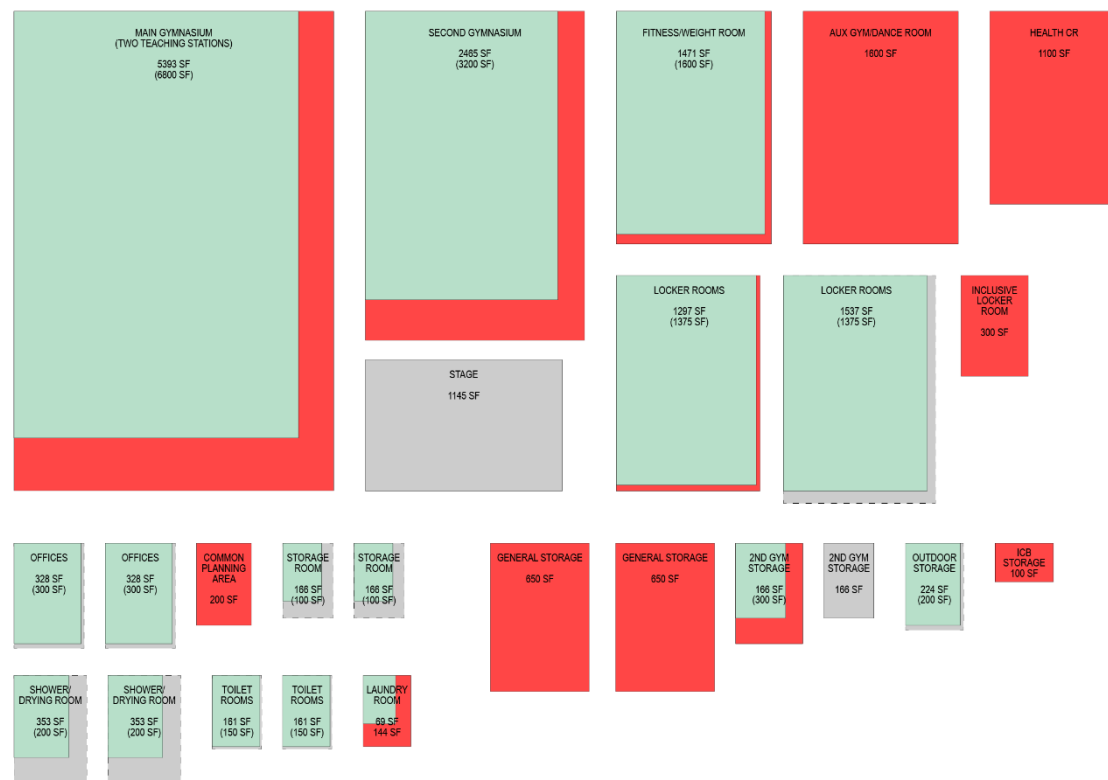


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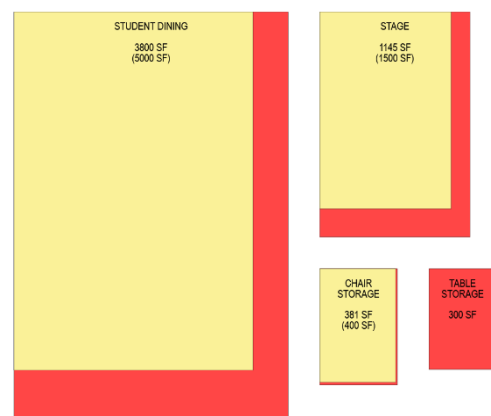
ED SPEC ANALYSIS

Existing Program vs. Ed Spec

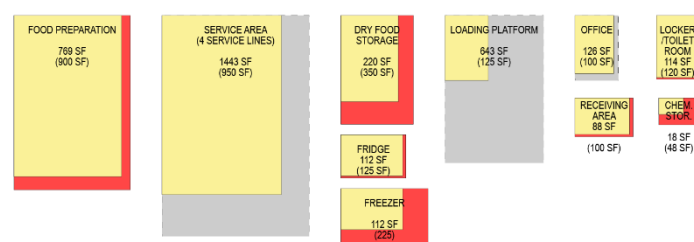
PHYSICAL EDUCATION Total SF 21,100; Existing SF 14,805 (70.2%)



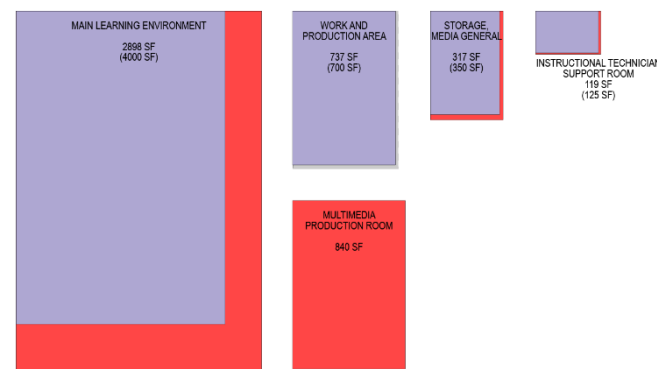
STUDENT DINING Total SF 7,200; Existing SF 6,472 (89.9%)



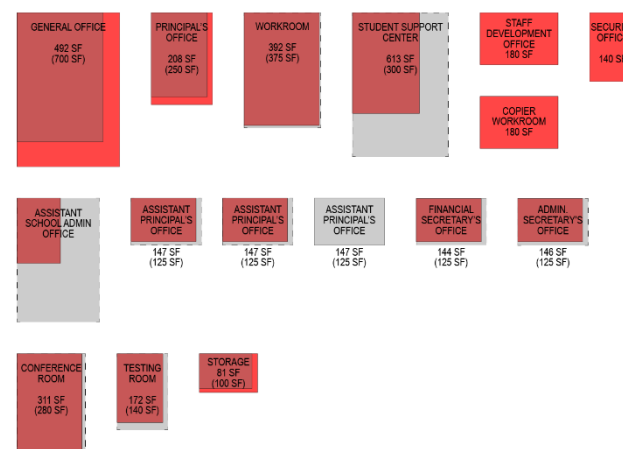
KITCHEN AREA Total SF 3,043; Existing SF 3,646 (119.8%)



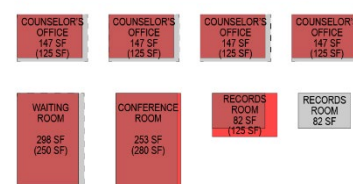
LIBRARY MEDIA CENTER Total SF 6,015; Existing SF 4,071 (67.7%)



ADMINISTRATION SUITE Total SF 3,270; Existing SF 3,453 (105.6%)



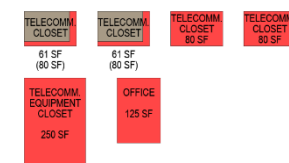
GUIDANCE SUITE Total SF 1,155; Existing SF 1,302 (112.7%)



HEALTH SUITE Total SF 765; Existing SF 719 (94%)



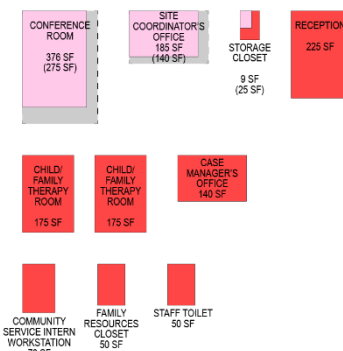
COMPUTER SUPPORT Total SF 695; Existing SF 121 (17.4%)



BUILDING SUPPORT FACILITIES Total SF 2,025; Existing SF 2,535 (125.2%)



LINKAGES TO LEARNING Total SF 1,325; Existing SF 570 (43%)



GROSS SQUARE FOOTAGE

Existing: 152,030
Ed Spec: 162,676

COLOR LEGEND:

SF DEFICIENCY
SF OVERAGE

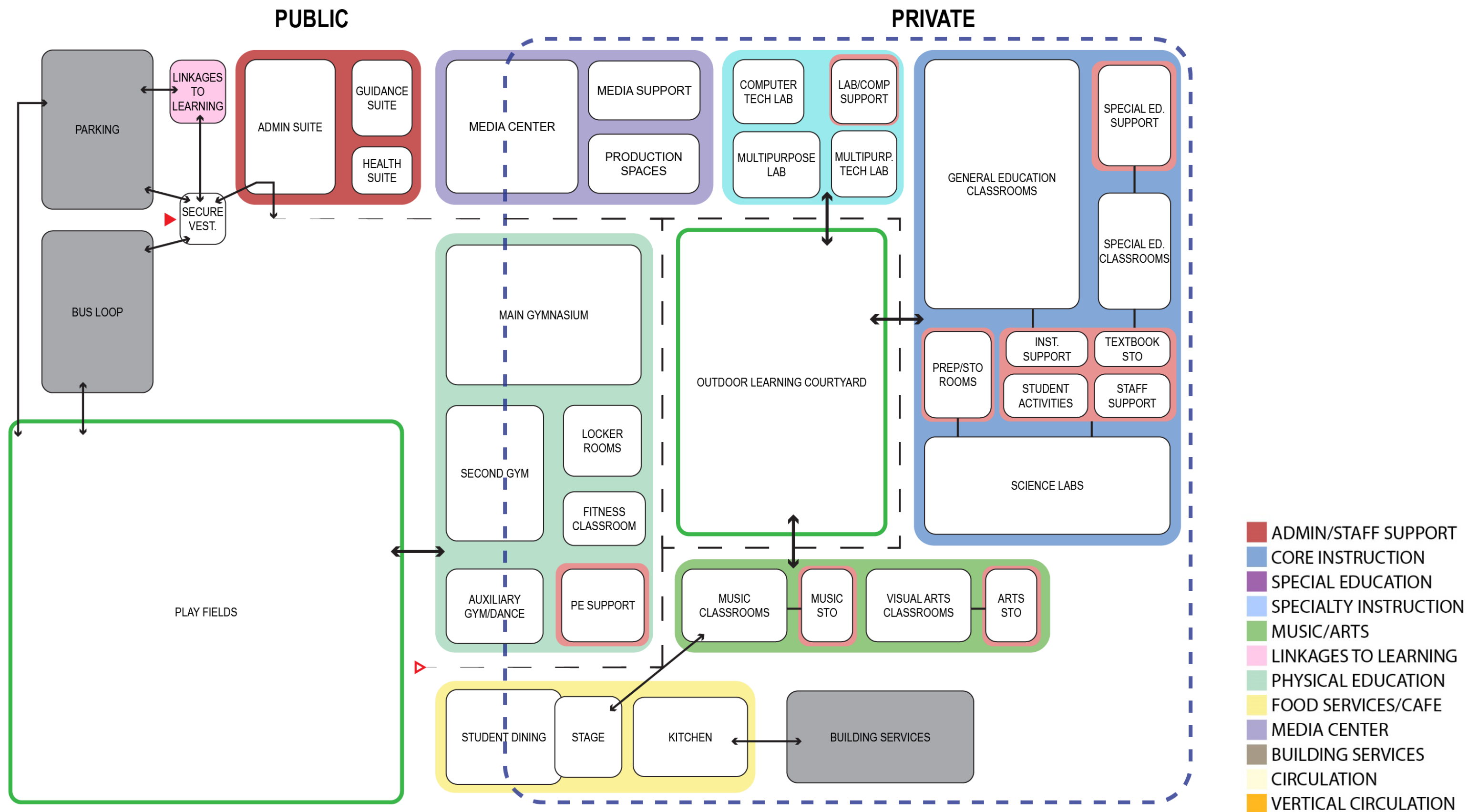
ADMIN/STAFF SUPPORT
CORE INSTRUCTION
SPECIAL EDUCATION
SPECIALTY INSTRUCTION
MUSIC/ARTS
LINKAGES TO LEARNING
PHYSICAL EDUCATION
FOOD SERVICES/CAFE
MEDIA CENTER
BUILDING SERVICES
CIRCULATION
VERTICAL CIRCULATION



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ED SPEC ANALYSIS

Adjacency Diagram





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PROJECT CONSIDERATIONS

Safety & Security

CPTED

- **Natural Surveillance**
 - Admin with clear view to site entry
 - Visibility to breakout spaces
- **Access Management**
 - Clear Main Entrance with guided security vestibule
- **Territoriality**
 - Prominent building oversees site with pride
 - Supervisable fields & courts
- **Physical Maintenance**
 - Attractive, durable and low maintenance materials
- **Activity Support**
 - Eliminate hidden areas

A4LE

- **Infrastructure**
 - Vestibules & Security Cameras
 - High Security Keying System
 - Bollards, Lighting, Fencing

Consider Student's Perception of Safety





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• ILKOVITCH
ARCHITECTS

PROJECT CONSIDERATIONS

Sustainability

REGULATORY OBLIGATIONS

- Montgomery County Building Energy Performance Standards
- International Green Construction Code (IgCC) 2021
- Maryland High Performance Building Act
- Green Globes, 2 Globe Rating

POTENTIAL STRATEGIES

- Net Zero Ready
- High efficiency HVAC systems
- Electrical load management
- High performance envelope
 - R 25 wall assemblies
 - Eliminate Air & Vapor barrier gaps
 - Optimize glazing VLT to SHGC
- Low embodied carbon materials
- Enhanced commissioning

Harriet Tubman ES
3 Green Globes, IgCC

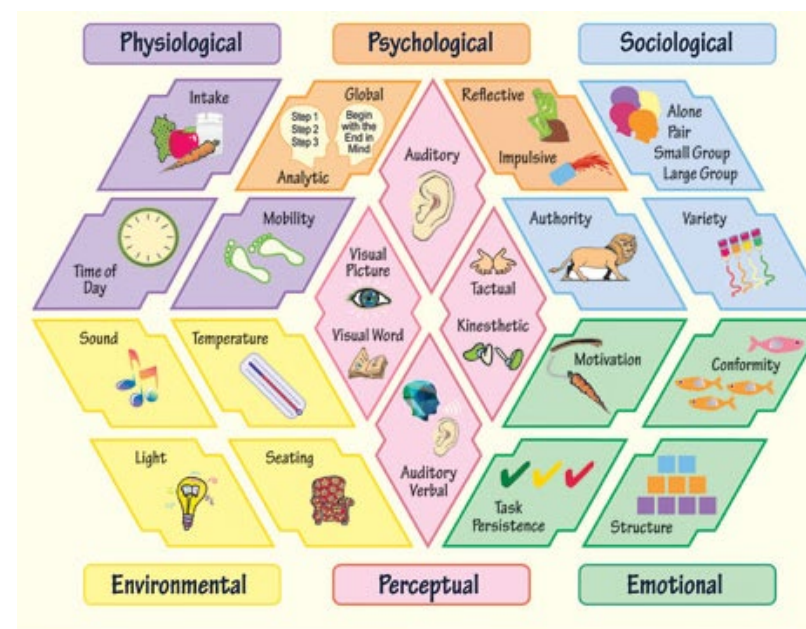
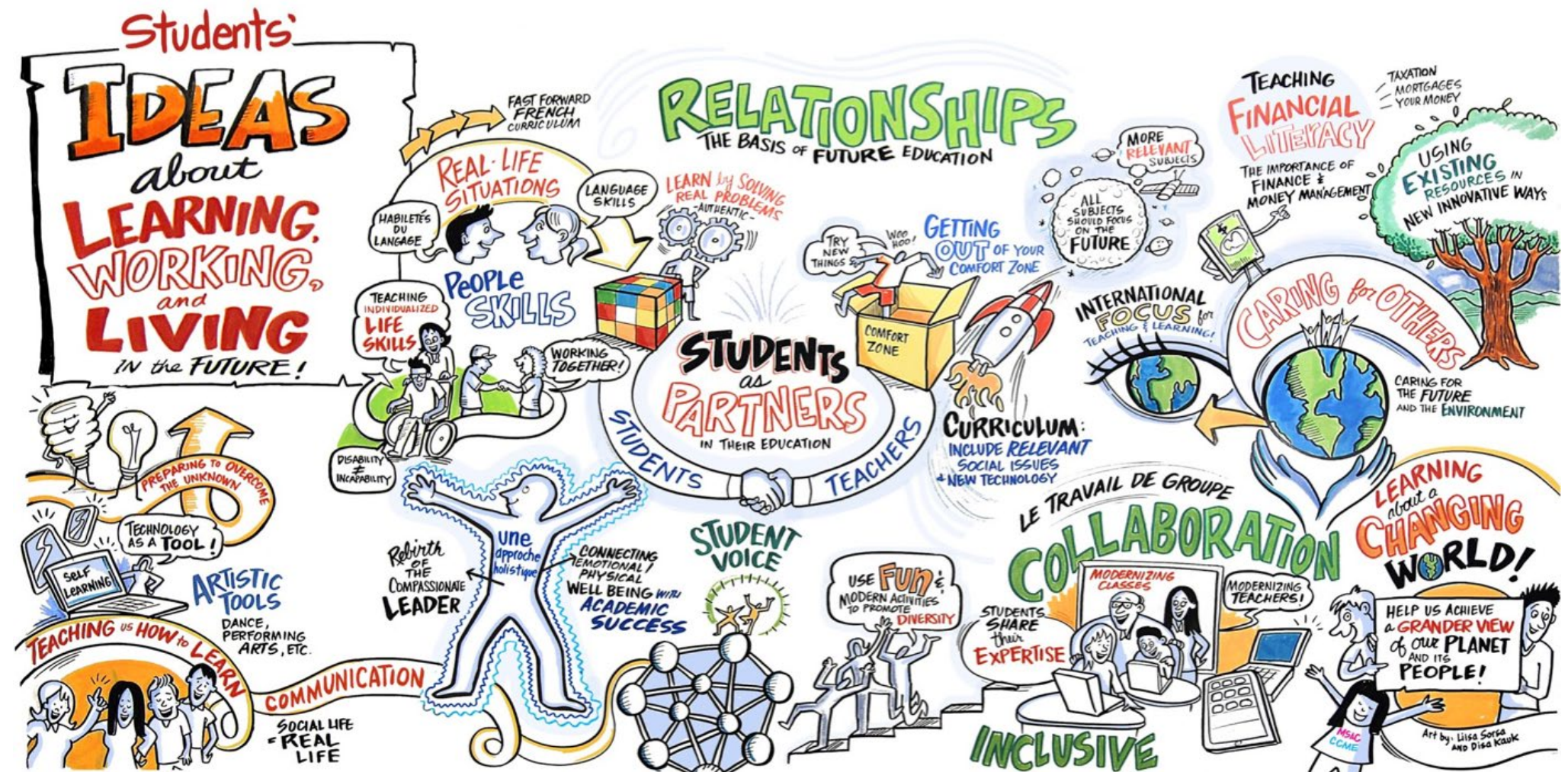


Stonegate ES
2 Green Globes, IgCC



Next Generation Learning

- **Fourth Industrial Revolution: Artificial Intelligence**
 - Knowledge at your Fingertips allows for Personalization of Learning
- Students need to become problem solvers
- Teachers need to become facilitators & mentors
- One size fits all approach to education is not universally effective
 - Students all learn differently





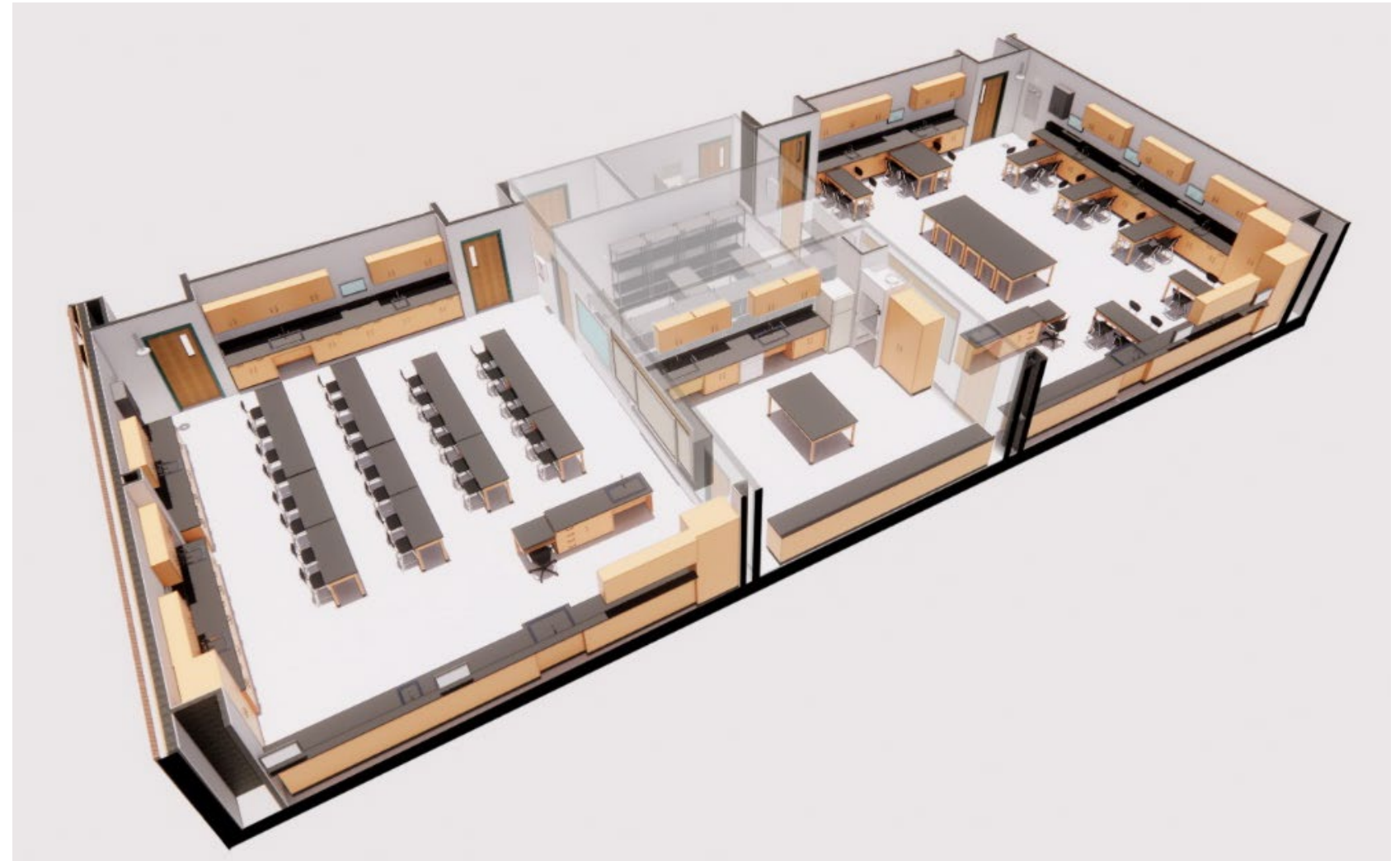
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PROJECT CONSIDERATIONS

Next Generation Learning



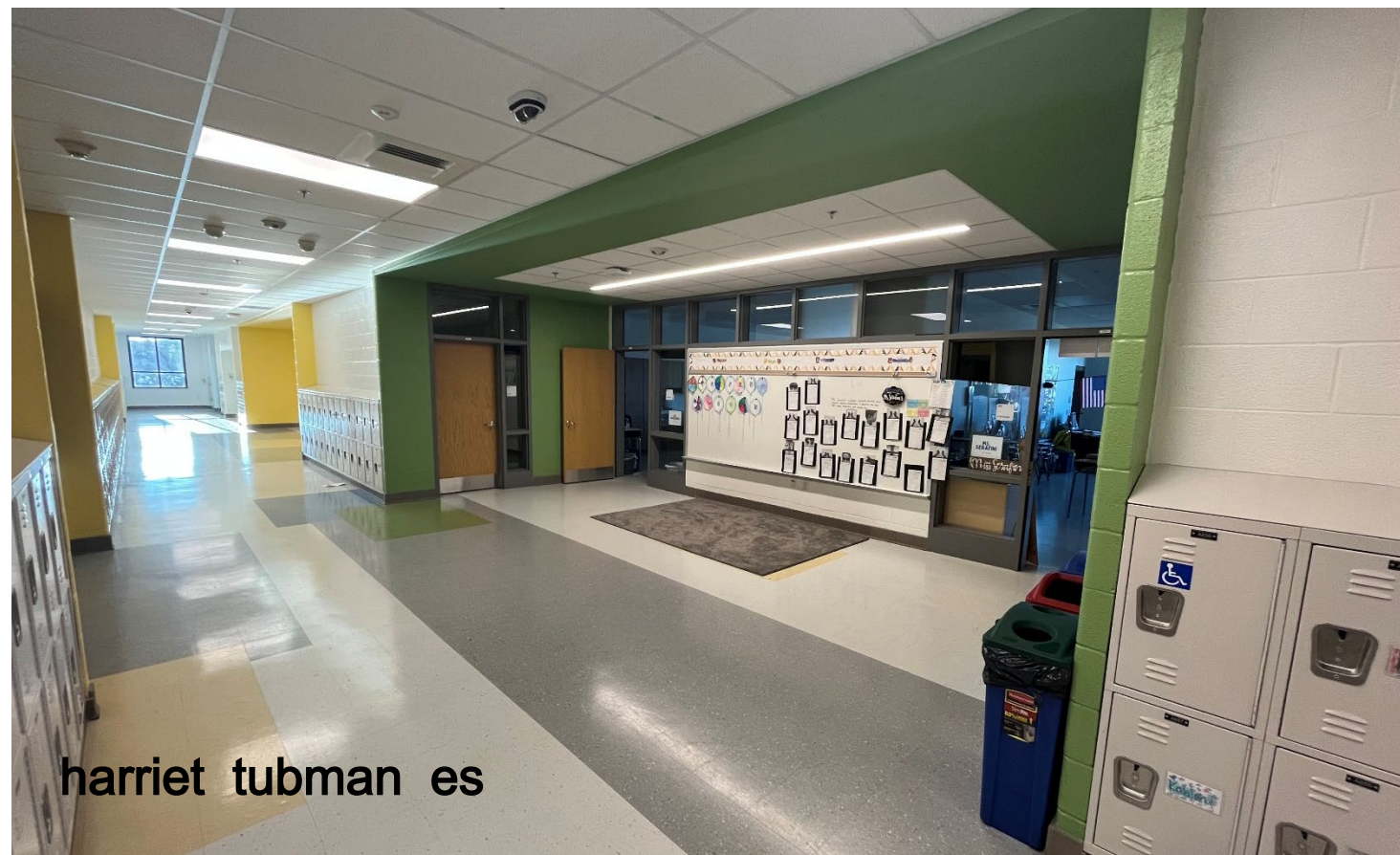
Diversity of learning environments



Flexibility within individual spaces

PROJECT CONSIDERATIONS

Collaboration & Breakout Spaces



PROJECT CONSIDERATIONS

S.T.E.A.M.



PROJECT CONSIDERATIONS

Outdoor Learning Spaces

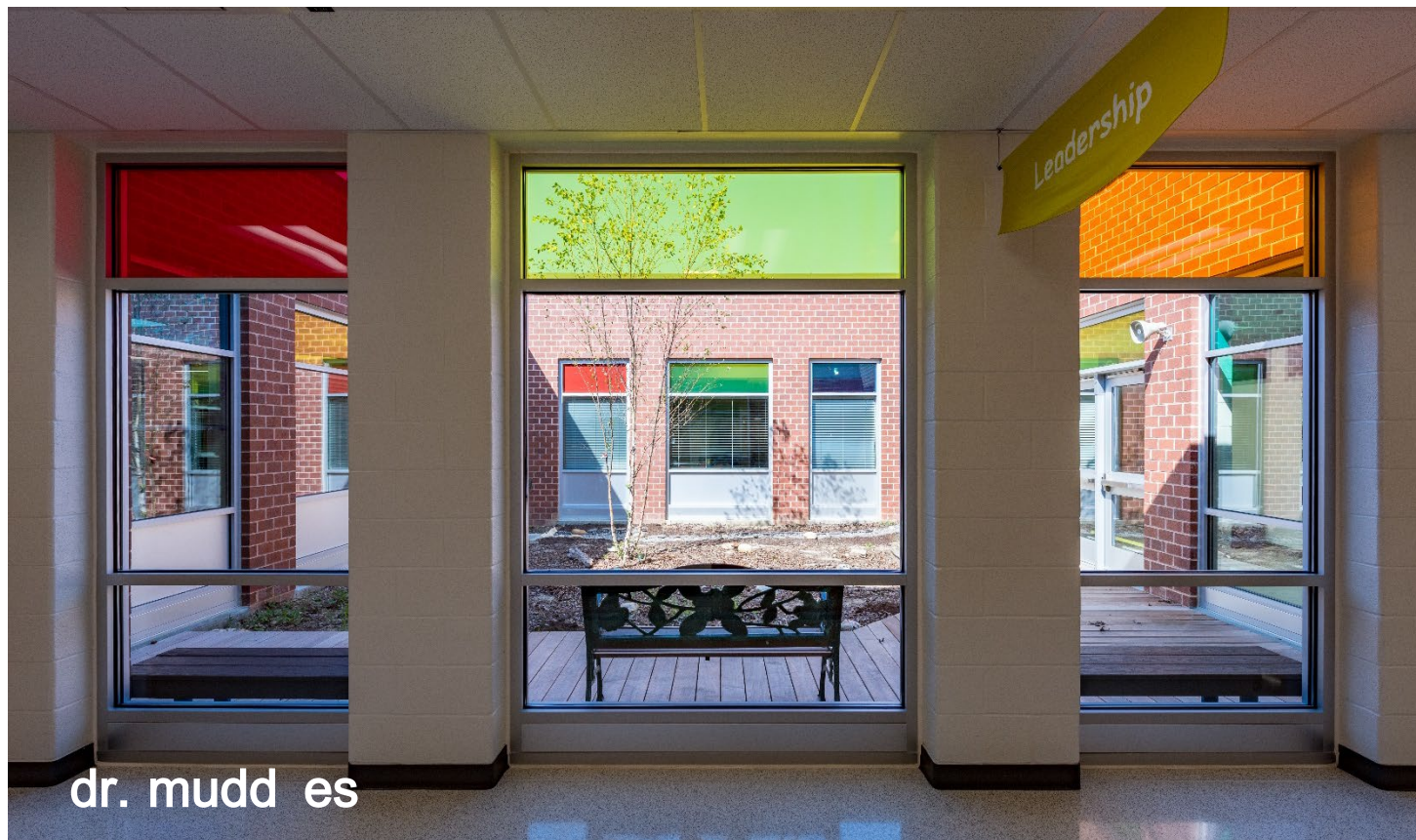
takoma park ms



eva turner es



dr. mudd es



northwood es





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VISIONING SESSION

Notecard Prompts – White Card

**What are your
main priorities for a reimagined
Eastern Middle School?**

**e.g., education, social/emotional development,
community access, specialty programs,
performances, athletics**



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VISIONING SESSION

Notecard Prompts – Pink Card

What attributes of the Eastern Middle School Community should guide the design?

e.g., emotions, attitudes, vibes, signature events, places, objects, subject matter, traditions



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VISIONING SESSION

Notecard Prompts – Yellow Card

What three words best describe the future Eastern Middle School?

