

# Coakley Middle School

Norwood Public Schools

## Middle School Building Committee

September 13, 2021

## Agenda

August 9, 2021

- ◆ Review PSR decisions
- ◆ VOTE on MSBA PSR submission

September 13, 2021

- ◆ PSR & FAS update
- ◆ Schedule update
- ◆ Public Forum #5
- ◆ ZNE update
- ◆ Floor & Site Plan update
- ◆ Exterior update

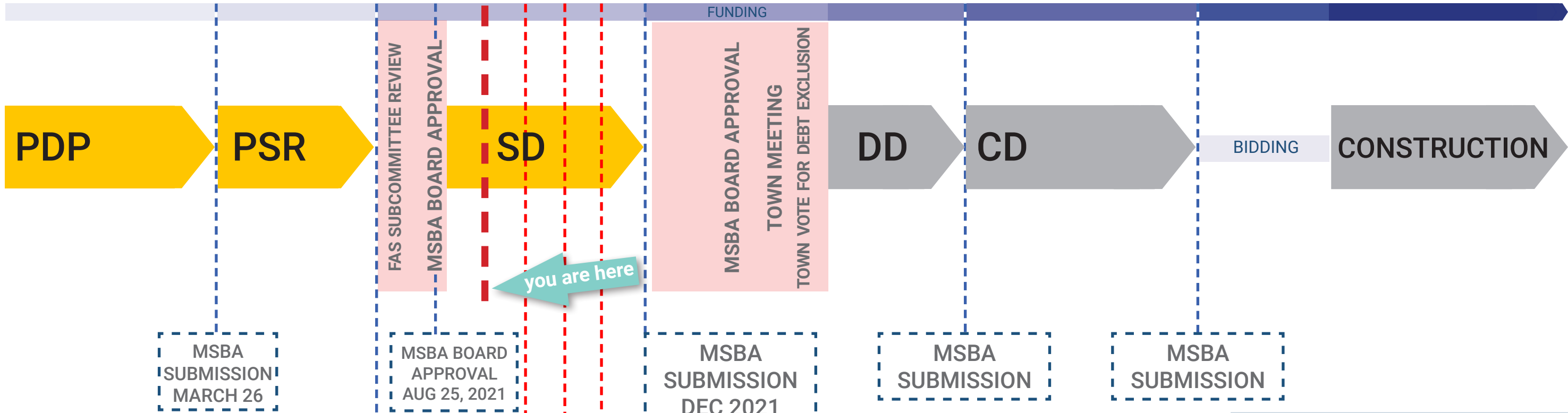


Ai3 Architects, LLC  
Compass Project Management

# Project Schedule

Feasibility Study

2020 NOV 2021 JAN MAR MAY JUL SEP NOV 2022 JAN MAR MAY JUL SEP NOV 2023 JAN MAR



you are here

PDP = Preliminary Design Program  
 PSR = Preferred Schematic Report  
 SD = Schematic Design  
 DD = Design Development  
 CD = Construction Documents



# Community Forum #5

Coakley Middle School

## Agenda

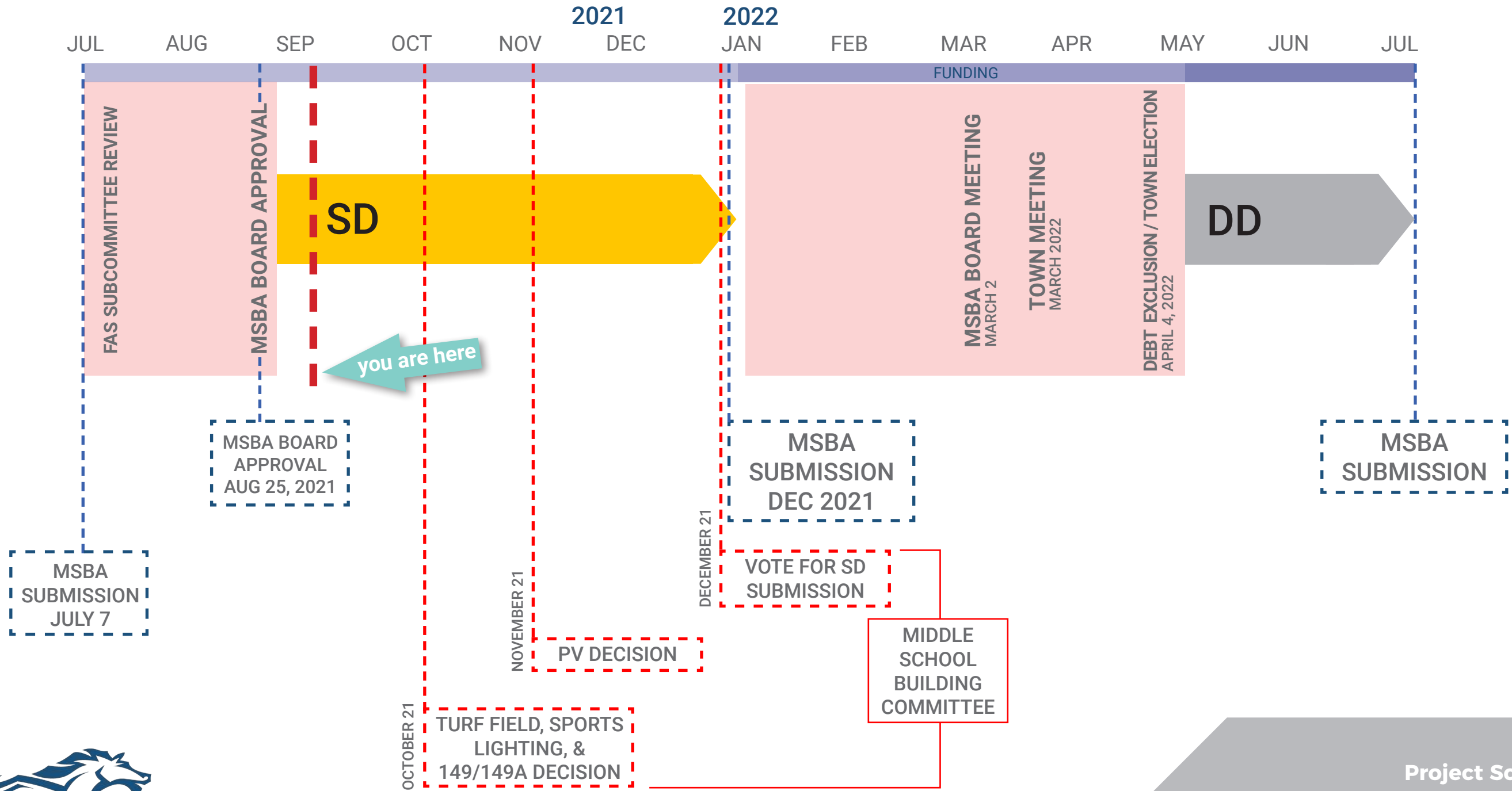
September 23, 2021

- ◆ **Introductions**
- ◆ **Agenda**
- ◆ **Project Schedule & Next Steps**
- ◆ **Design update**
  - ◇ Floor Plans
  - ◇ Site Plan
  - ◇ Exterior Renderings
- ◆ **Questions & Answers**



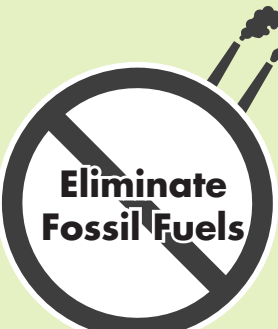
# Project Schedule


## TOWN MEETING & DEBT EXCLUSION VOTE



# NET ZERO & SUSTAINABLE DESIGN

## PATH TO NZE

**1**  **Eliminate Fossil Fuels** Design an all electric building

**2**  **Reduce Demand** Target a low EUI

**3**  **Produce Electricity On-Site**

New **Coakley Middle School** anticipated annual energy consumption:

**1,376,400 kWh**

### Required PV to offset building use

- Approximately 30,000 sf of panels on the roof
- Approximately 30,000 sf of panels over parking spaces



# SCHEMATIC DESIGN (SD)

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#### A. DESE Submission

*OPM DESE Review Cover Letter*  
*Special Education Delivery Methodology*  
*Signed Education Space Summary*  
*Special Education Adjacency Table*  
*Preliminary Floor Plans*

#### B. MA Historical Commission Submission

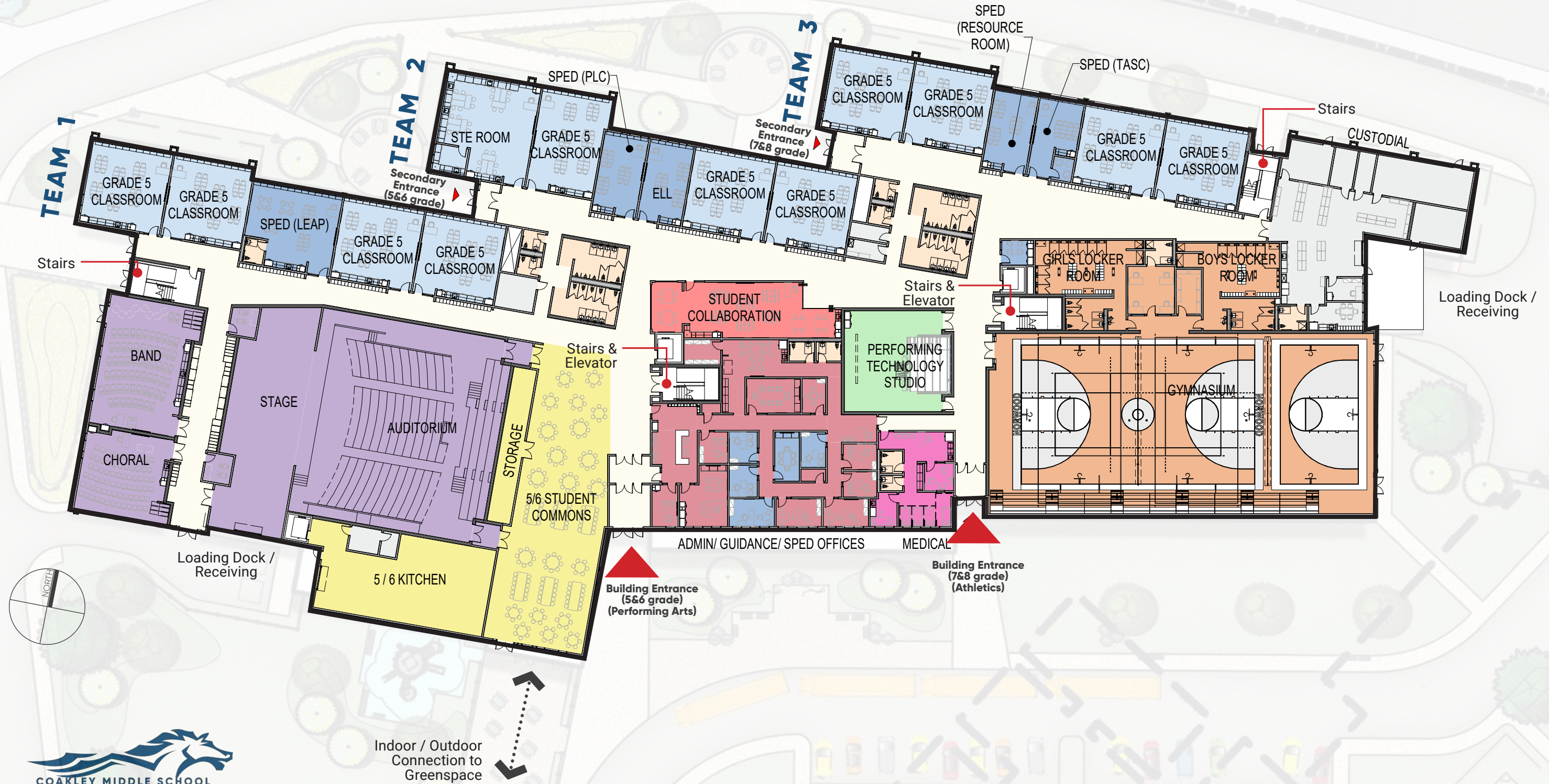
*Dark Gray - Items related to the Building Option that is required for submission*

*Light Gray - Items submitted in previous PSR report that are required to be submitted again*



# FLOOR 1

GRADE 5



Indoor / Outdoor  
Connection to  
Greenspace

# FLOOR 2

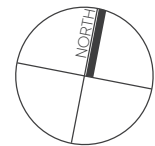
GRADE 6





# FLOOR 3

GRADE 7



# FLOOR 4

GRADE 8





BIG BLOCK WALLS

STONE VENEER WALL

ATHLETIC STORAGE

STONE VENEER WALL

RAIN GARDEN

PATH TO FIELDS

RAIN GARDEN

SERVICE

BERM

5TH GRADE PLAYGROUND

SIGN

LARGE SHADE TREE

BUS PARKING

ATHLETIC STORAGE

GREENSCREEN FENCING  
SERVICE

OVERFLOW PARKING

DECORATIVE PAVEMENT  
RAIN GARDEN

GREENSCREEN FENCING

DECORATIVE PAVING

FLAG POLE  
ORNAMENTAL BENCH

STUDENT COMMONS PLAZA

BERM

MEDIUM SHADE TREE  
ORNAMENTAL BENCH

ATHLETIC STORAGE

BUFFER PLANTING

SIGN

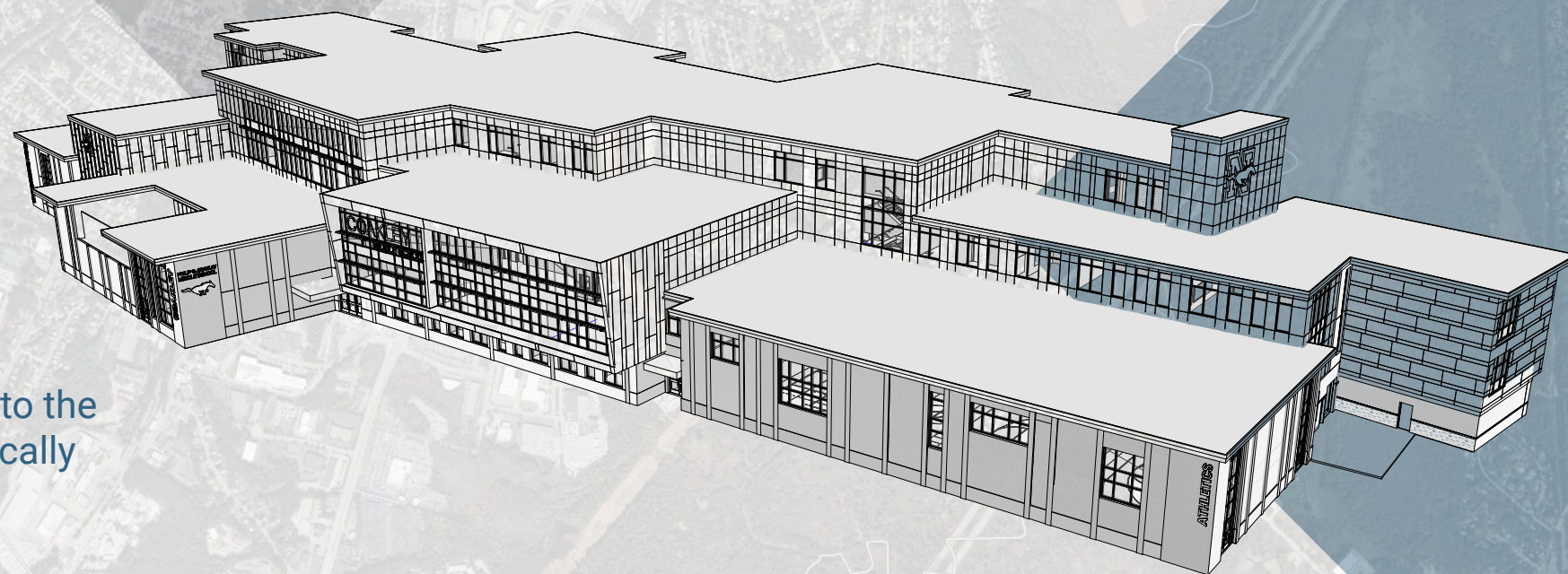
SIGN



# Design Overview

This presentation will:

- ◆ Describe the **UNIFYING** elements of the new Coakley Middle School design and their importance in the history of Norwood.
- ◆ Reflect on existing buildings within the community to establish **DESIGN PARAMETERS**. These parameters will be used to redefine the limits of traditional architecture to establish the Coakley Middle School as a 21st Century learning environment.
- ◆ Review massing, materials, textures, and colors and how these critical **BUILDING ELEMENTS** are integrated into the design.
- ◆ Discuss how taking cues from the past, while looking ahead to the future materializes into a 21st Century Middle School specifically **TAILORED TO THE NORWOOD COMMUNITY**.



# Unifying Element

Industrialization -> Mill Buildings

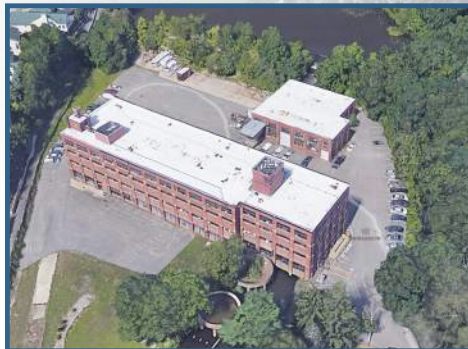
“The industrialization of Norwood is the most significant and distinctive feature of its history. Beginning in the mid-19th century, local tanneries, printing presses, ink manufacturers and other industries helped transform Norwood into a booming and ethnically-diverse industrial town.” *Norwood Historical Society*



NORWOOD HIGH SCHOOL



THE NEW COAKLEY MIDDLE SCHOOL



BALCH ELEMENTARY SCHOOL





COAKLEY MIDDLE SCHOOL





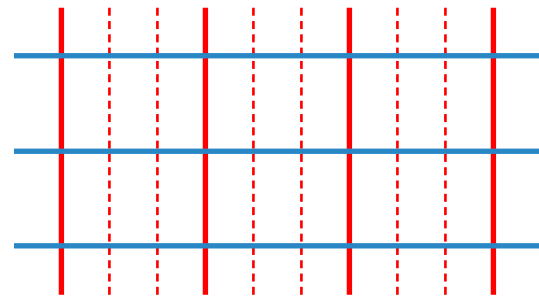


# Existing Building Reflection

Patterns & Repetition



WHAT IS THE STRUCTURAL GRID AND BAY SPACING AND WHY?

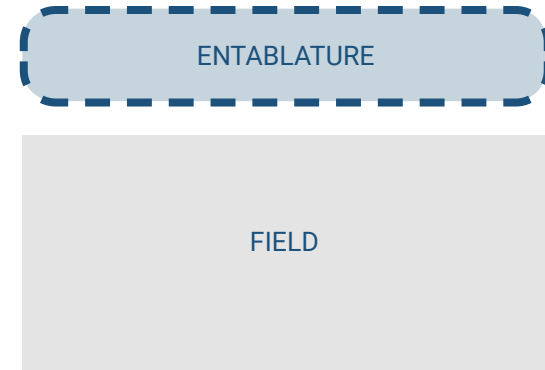


Structural Grid - Then vs. Now

# Existing Building Reflection

Penthouse | Roof Monitor | Addition

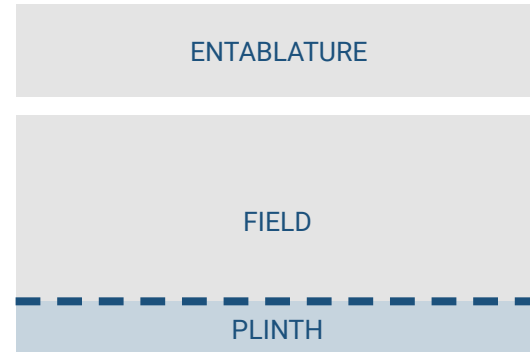
HOW ARE THE ELEMENTS AT THE TOP OF THE BUILDING TREATED?



# Existing Building Reflection

Treatment of base of building | Connection to ground

HOW DOES THE BUILDING INTERACT WITH THE GROUND?



BUILDING STORY INTEGRATION



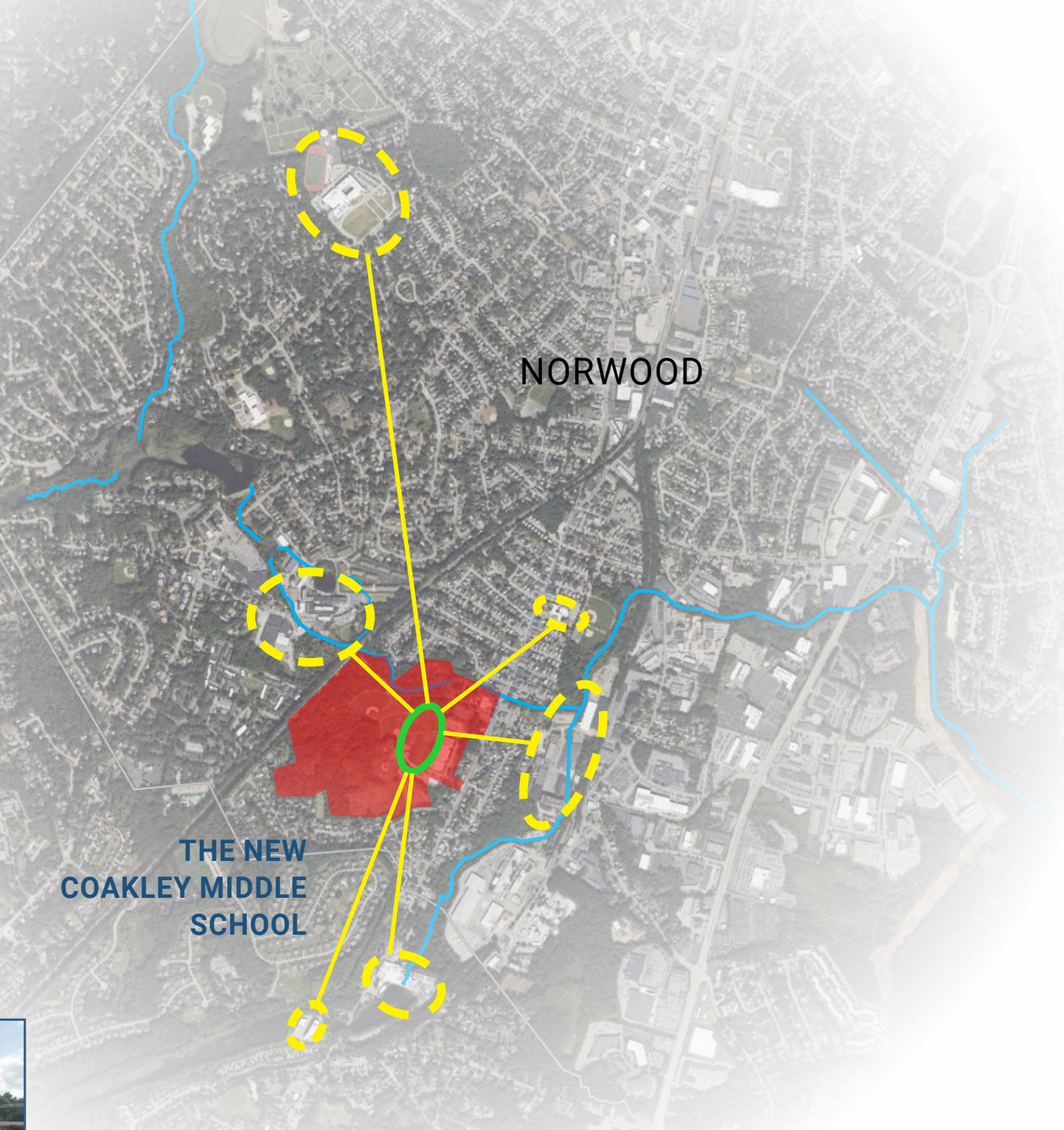
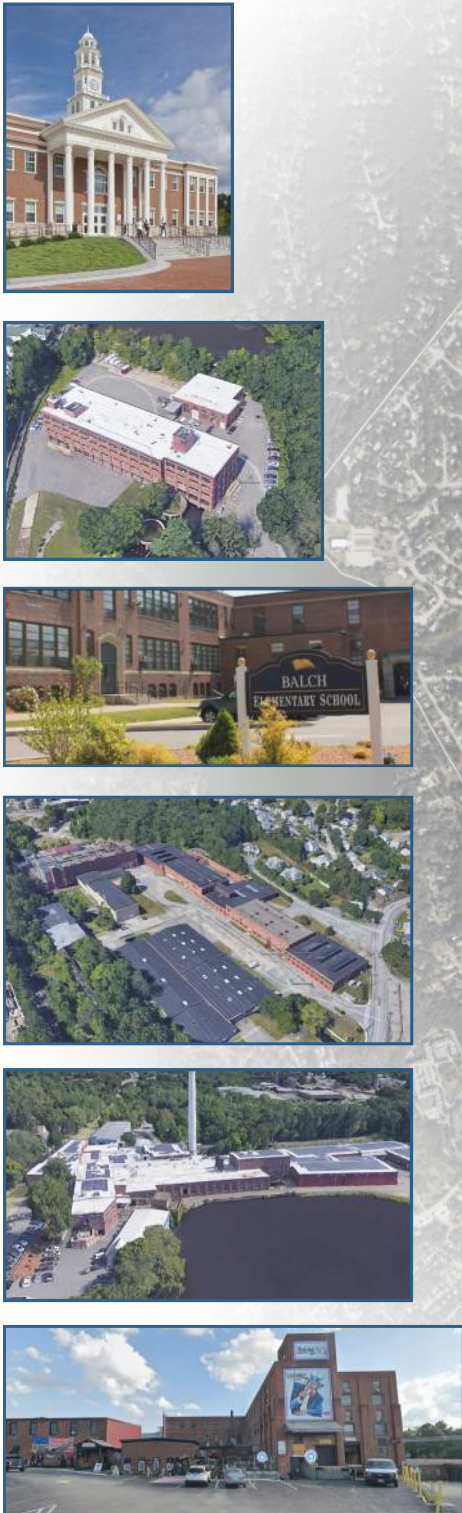
BUILDING INSET PANELS

BRICK CONTINUATION



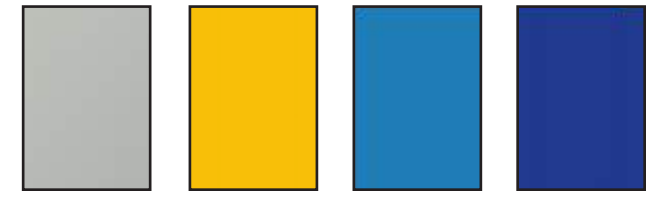
# Massing - Materials - Textures - Color

## COAKLEY MIDDLE SCHOOL MATERIALS PALETTE



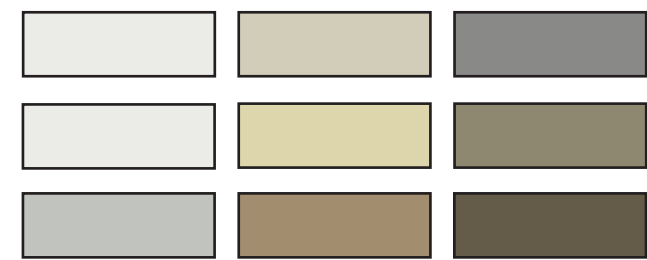
ACCENT

\$\$\$ Metal panel cladding



FIELD

\$ Fiber Cement panels

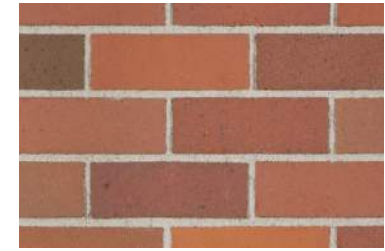


\$\$ Brick

Brick Accent



Brick Field



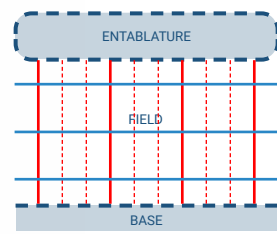
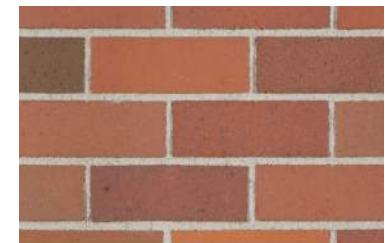
BASE

\$\$

Split-face CMU



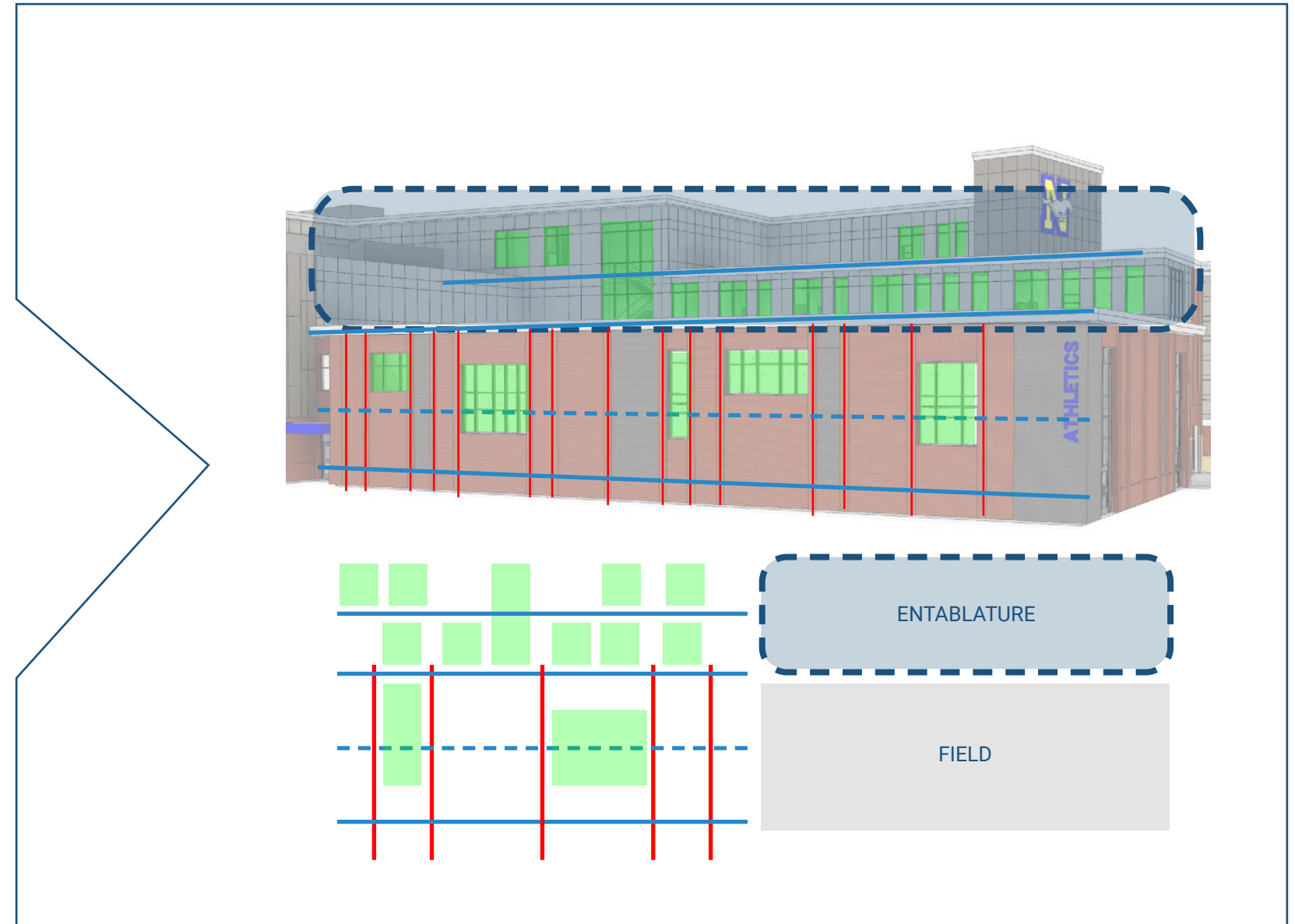
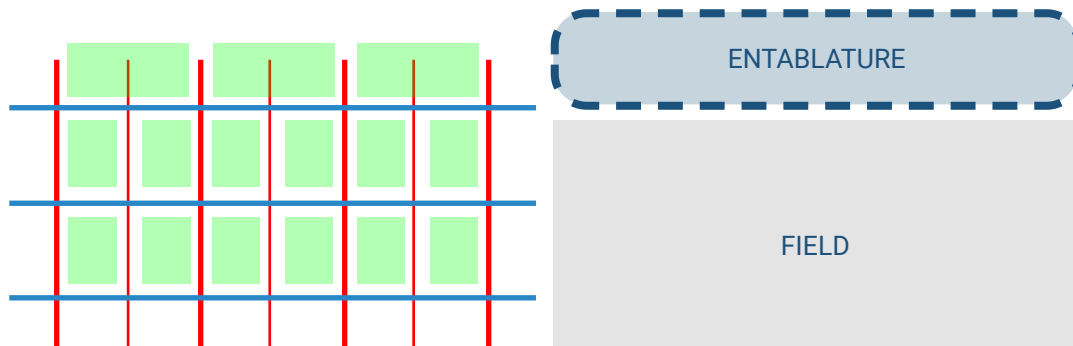
Brick



- UTILIZE DURABLE MATERIALS
- PROVIDE IDENTIFIABLE ENTRY POINTS
- HIGHLIGHT SPECIFIC BUILDING ELEMENTS
- REDUCE BUILDING SCALE & MASSING
- RELATE BUILDING AND MATERIALS TO SURROUNDING SITE & TOWN
- PROVIDE BRANDING & IDENTITY FOR STUDENTS
- DESIGN FOR SUSTAINABILITY

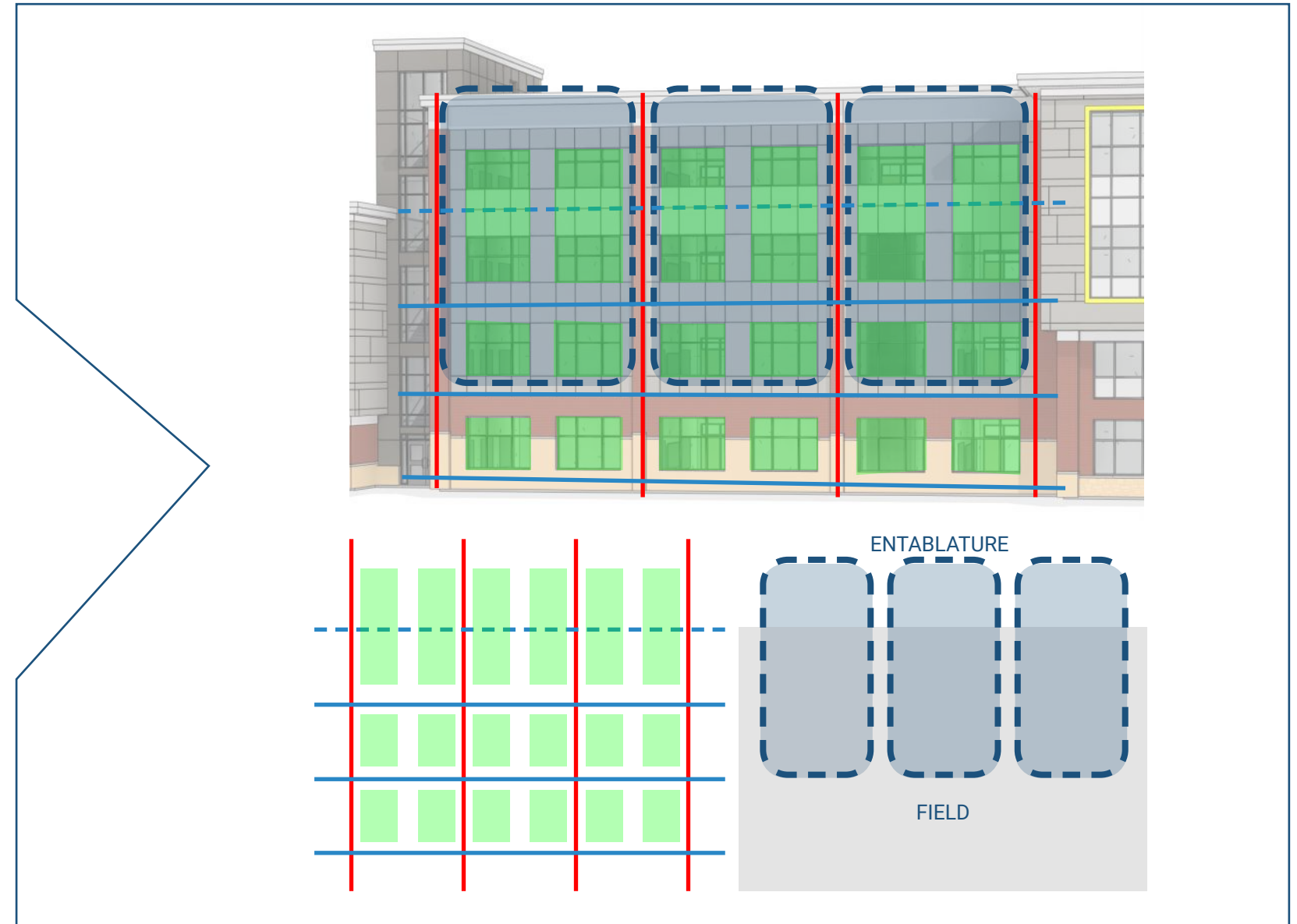
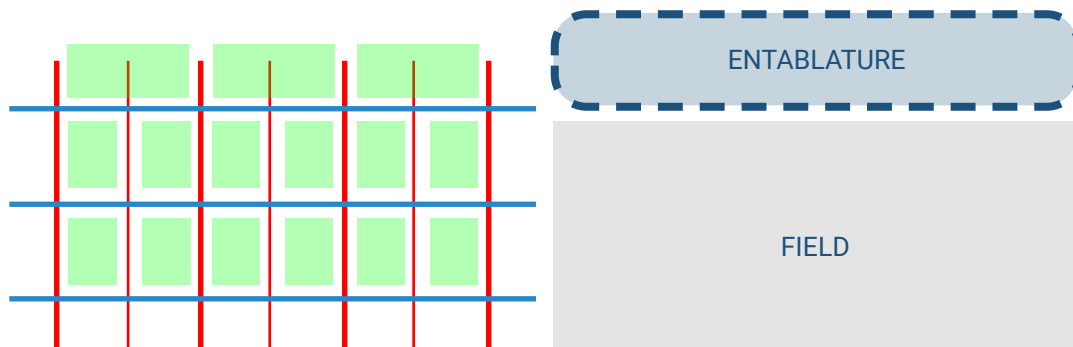
# Taking the traditional ..... and redefining the limits

South facade of the building



# Taking the traditional ..... and redefining the limits

North facade of the building



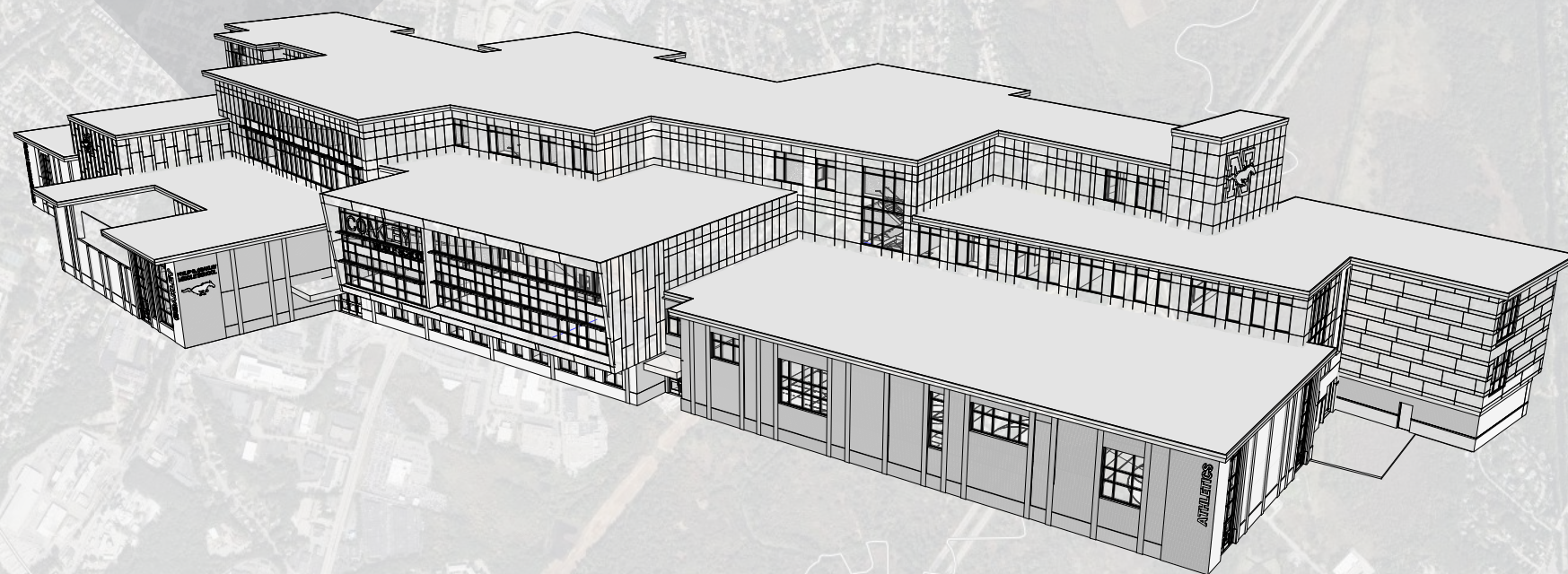


# Design Summary

The new Coakley Middle School reflects on references and themes prevalent in the Historical American Mill Buildings throughout the Norwood Community.

The design of the new Coakley Middle School organizes these elements into a modern interpretation of the influential mill building.

The new Coakley Middle School will create a 21st century learning environment that propels the students and staff of Norwood forward; just like the mill buildings propelled the Town forward in the 19th Century.



Performing Arts

Student Commons

Admin / Guidance / Nurse & Media Center

Athletics



Indoor / Outdoor Connection to Greenspace

Building Entrance (5&6 grade) (Performing Arts)

School Branding

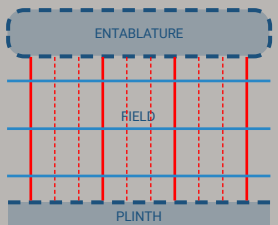
Building Entrance (7&8 grade) (Athletics)



CAMERA LOCATION



- UTILIZE DURABLE MATERIALS
- PROVIDE IDENTIFIABLE ENTRY POINTS
- HIGHLIGHT SPECIFIC BUILDING ELEMENTS
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Performing Arts

Student Commons

Admin / Guidance /  
Nurse & Media Center

Athletics



Building Entrance  
(7&8 grade)  
(Athletics)

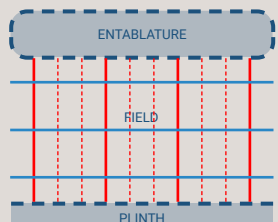
School Branding / Wayfinding

Indoor / Outdoor  
Connection to  
Greenspace

CAMERA LOCATION



- UTILIZE DURABLE MATERIALS
- PROVIDE IDENTIFIABLE ENTRY POINTS
- HIGHLIGHT SPECIFIC BUILDING ELEMENTS
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- PROVIDE BRANDING & IDENTITY FOR STUDENTS
- DESIGN FOR SUSTAINABILITY



Art &  
Language

Team 3

Team 2

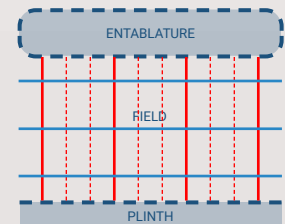
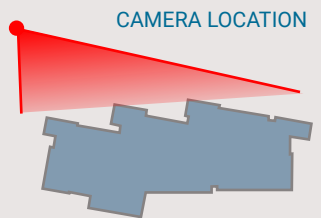
Team 1

Performing Arts



  
 Secondary  
 Entrance  
 (7&8 grade)

  
 Secondary  
 Entrance  
 (5&6 grade)



- UTILIZE DURABLE MATERIALS
- PROVIDE IDENTIFIABLE ENTRY POINTS
- HIGHLIGHT SPECIFIC BUILDING ELEMENTS
- REDUCE BUILDING SCALE & MASSING
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Art & Language

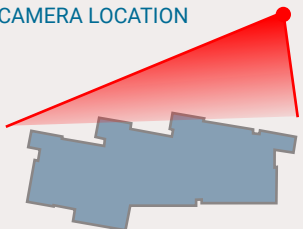
Team 3

Team 2

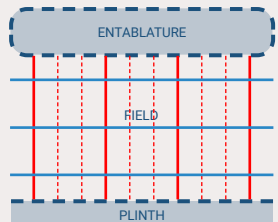
Team 1



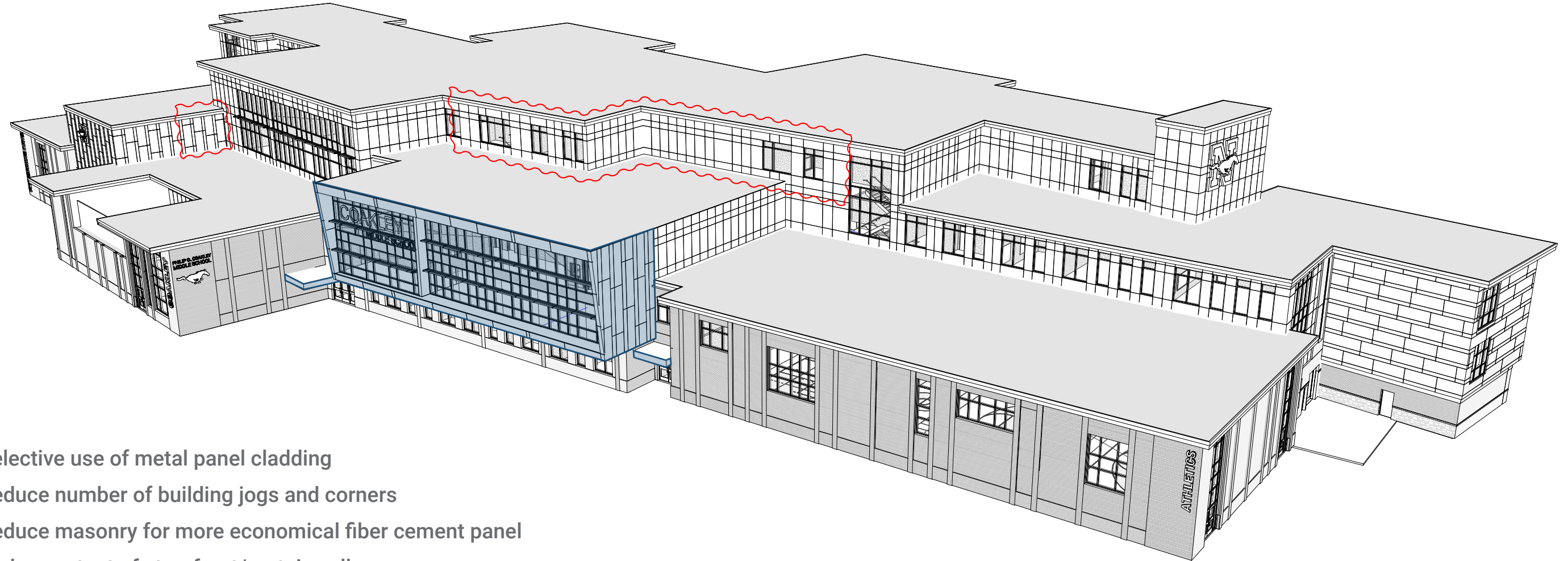
CAMERA LOCATION



- UTILIZE DURABLE MATERIALS
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# Cost Control



- Selective use of metal panel cladding
- Reduce number of building jogs and corners
- Reduce masonry for more economical fiber cement panel
- Reduce extent of storefront/curtainwalls  
target 25% window/wall ratio

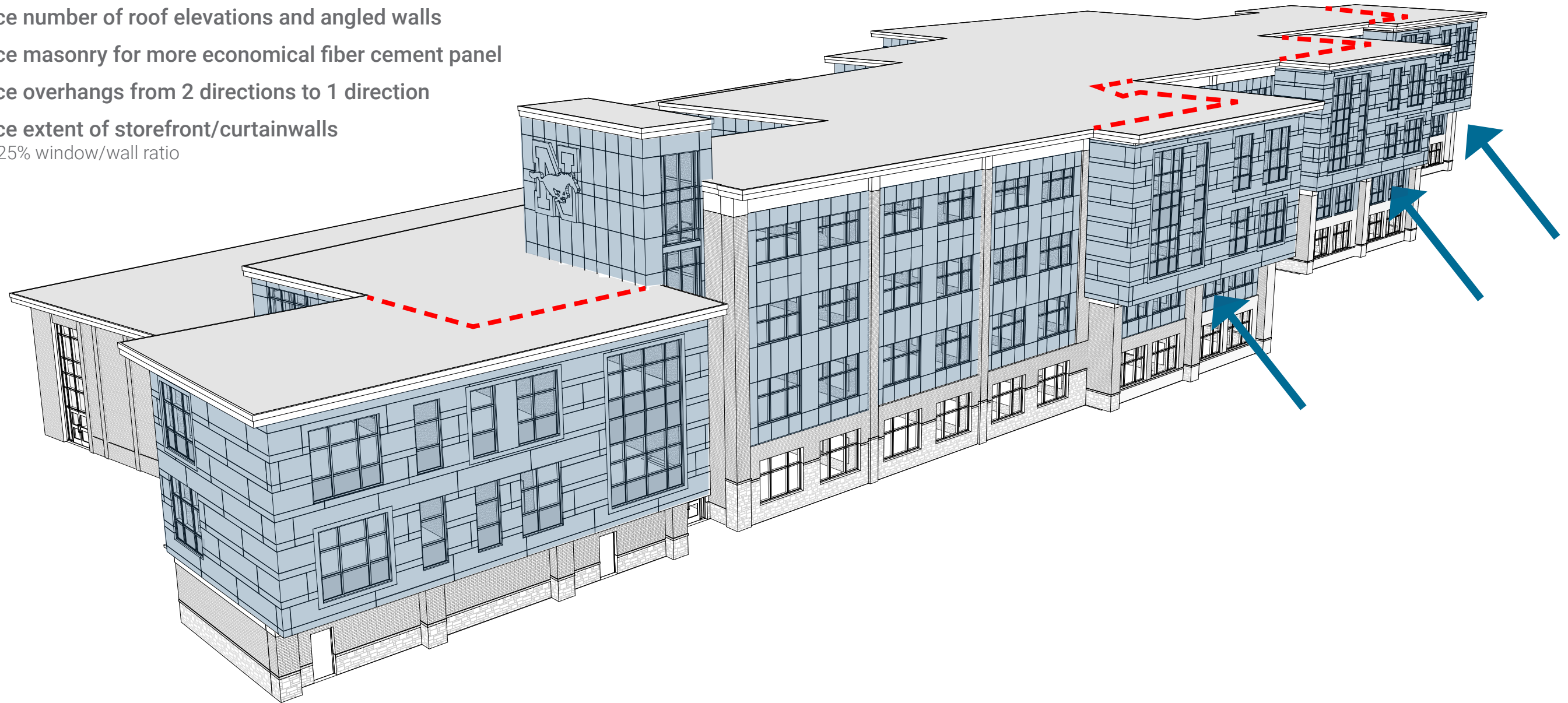
**South Facade**



**Cost Control**  
building geometry & material selection

# Cost Control

- Reduce number of roof elevations and angled walls
- Reduce masonry for more economical fiber cement panel
- Reduce overhangs from 2 directions to 1 direction
- Reduce extent of storefront/curtainwalls  
target 25% window/wall ratio



**North Facade**



**Cost Control**  
building geometry & material selection

# Questions/Discussion

