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STONEHAM HIGH SCHOOL FEASIBILITY STUDY

Community Forum 09

9.20.2021

SCHOOL BUILDING COMMITTEE MEMBERS

Marie Christie	Co-Chair	Jeanne Craigie	Town Moderator
David Bois	Co-Chair	Lisa Gallagher	Middle School Admin.
Raymie Parker	Chair Select Board	Kevin Yianacopolus	High School Facilities
Nicole Nial	School Committee Member	April Lanni	Town Procurement Officer
Cory Mashburn	Finance and Advisory Board	Douglas Gove	Community Member
Dennis Sheehan	Town Administrator	Stephen O'Neill	Community Member
John Macero	Superintendent of Schools	Josephine Thomson	Community Member
Bryan Lombardi	High School Principal	Sharon Iovanni	Community Member
David Pignone	Athletic Director	Paul Ryder	Community Member
Brian McNeil	Town Facilities Director		

ARCHITECT

Perkins&Will

OPM

Symmes Maini and McKee Associates

CONSTRUCTION MANAGER

Consigli Construction Co.

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AGENDA

1\ Introduction

2\ Benefits to Students & Community

3\ Project Design

4\ Schedule & Construction

5\ Project Cost

6\ Vote Information & Dates



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Benefits to Students & Community

Community Forum 09

Why do we need a new Stoneham High School?

- Stoneham High School is an aged facility that does not meet today's educational requirements. The existing building requires significant upkeep – spending which will not result in long-term educational benefits.
- Stoneham residents voted to approve a Feasibility Study and seek a grant from the MSBA to address these conditions at its May 6, 2019 Town Meeting.
- The MSBA receives approximately 120 grant applications for projects annually, of which 10 are approved per year.
- The MSBA has approved the Stoneham High School project for a grant of $49 million.

MSBA Board Approval

Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

James A. MacDonald
Chief Executive Officer

John K. McCarthy
Executive Director / Deputy CEO

August 25, 2021

Mr. Dennis Sheehan
Stoneham Town Administrator
Stoneham Town Hall
35 Central Street, Second Floor
Stoneham, MA 02180

Re: Town of Stoneham, Stoneham High School

Dear Mr. Sheehan:

I am pleased to report that the Board of the Massachusetts School Building Authority (the "MSBA") has voted to approve the Stoneham High School Project in the Town of Stoneham (the "Town") to replace the existing Stoneham High School with a new grades 9-12 facility on the existing site.

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Final Step in Twenty-Year Master Plan

2001 Completed South Elementary School

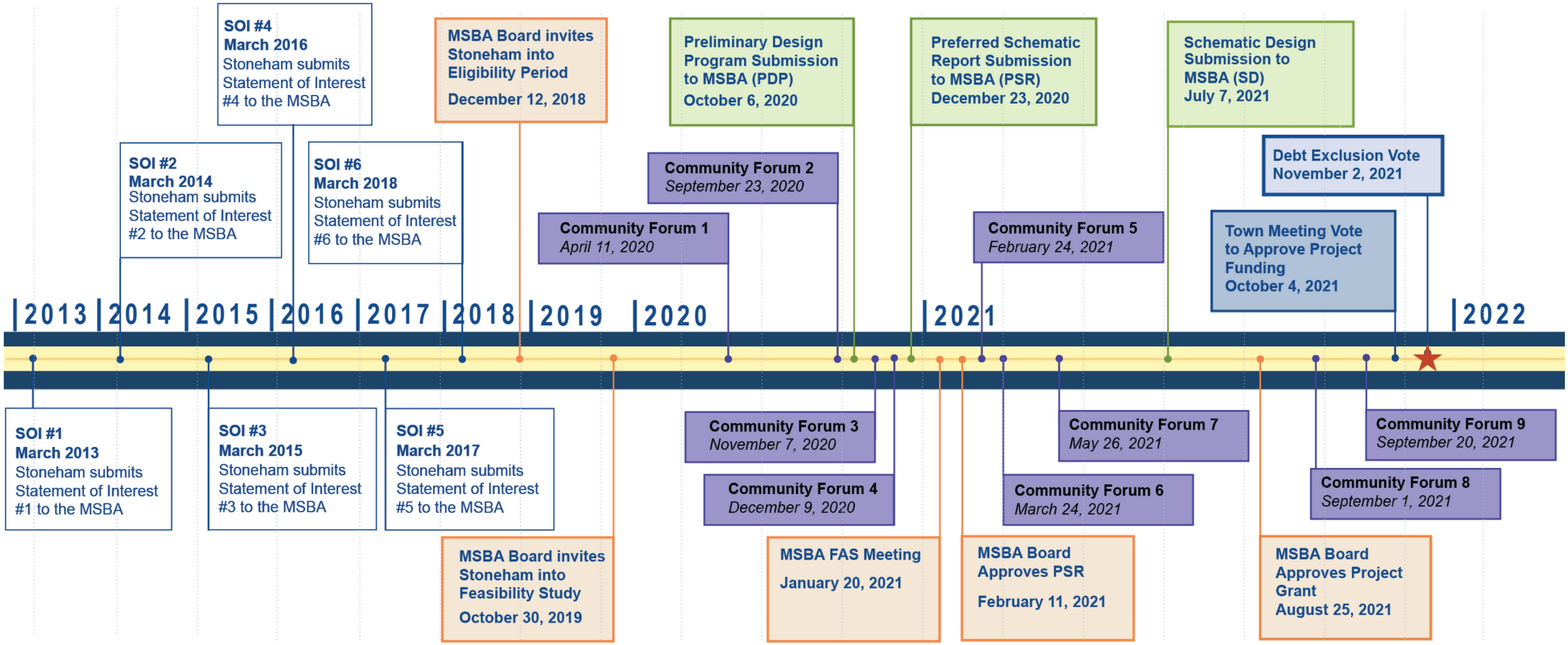
2003 Completed Robin Hood and Colonial Park Elementary Schools

2015 Completed Central Middle School

2024 Complete Stoneham High School

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8 Years of Planning



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Stoneham High School Project Goals

- Provide flexible, 21st Century educational spaces with learning communities that promote interdisciplinary, project-based learning
- Provide a school that is healthy, safe, code-compliant, and a place the Stoneham residents can be proud of
- Develop a long-term solution to our aging High School
- Engineer a school that is energy efficient and capable of operating at Zero Net Energy
- Develop outdoor classrooms, gathering spaces, healthy connections to nature, and athletic facilities
- Include a safe Pre-K Program environment for our growing Elementary School population
- Mitigate the effects the High School has on surrounding traffic challenges

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Stoneham High School Educational Program – Interior & Exterior

- Appropriately Sized Educational Spaces
- SPED, RISE and STRIDE Spaces
- STEAM Innovation Hubs
- Engineering and Technology Labs
- Maker Space and Fabrication Labs
- Music and Art Spaces
- Collaboration Spaces
- Interdisciplinary Project and Performance Room
- Library / Media Center
- Auditorium
- Gymnasium
- Town-Wide Pre-K Program
- District Offices
- Outdoor Learning Classrooms
- Three Synthetic Turf Fields with Lighting, One of which a New Stadium with Track and Bleachers
- Reconstructed Natural Turf Baseball and Softball Fields
- Reconstructed Tennis Courts
- Outdoor Locker Room, Toilet and Concession Building
- Access to Nature Trails
- Synchronized traffic signalization at Entry Drive and at Stevens Street

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Engaging the Community

Nine Community Forums

Six Community Information Flyers

Five Tri-Board Meetings

Four PTO Meetings

Rotary Club of Stoneham and Chamber of Commerce Meetings

Three Community Surveys

Press Releases:

- OPM Selection
- Designer Selection
- Community Forums
- SSBC Design Option Reviews
- PDP Submission
- PSR Submission
- Construction Manager Selection
- Schematic Design Submission

Social Media Posting

- Community Groups Facebook
- Stoneham Public Schools Facebook

Thirty-One School Building Committee Meetings all broadcast on Stoneham TV

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What are the Conditions of the Existing Stoneham High School?

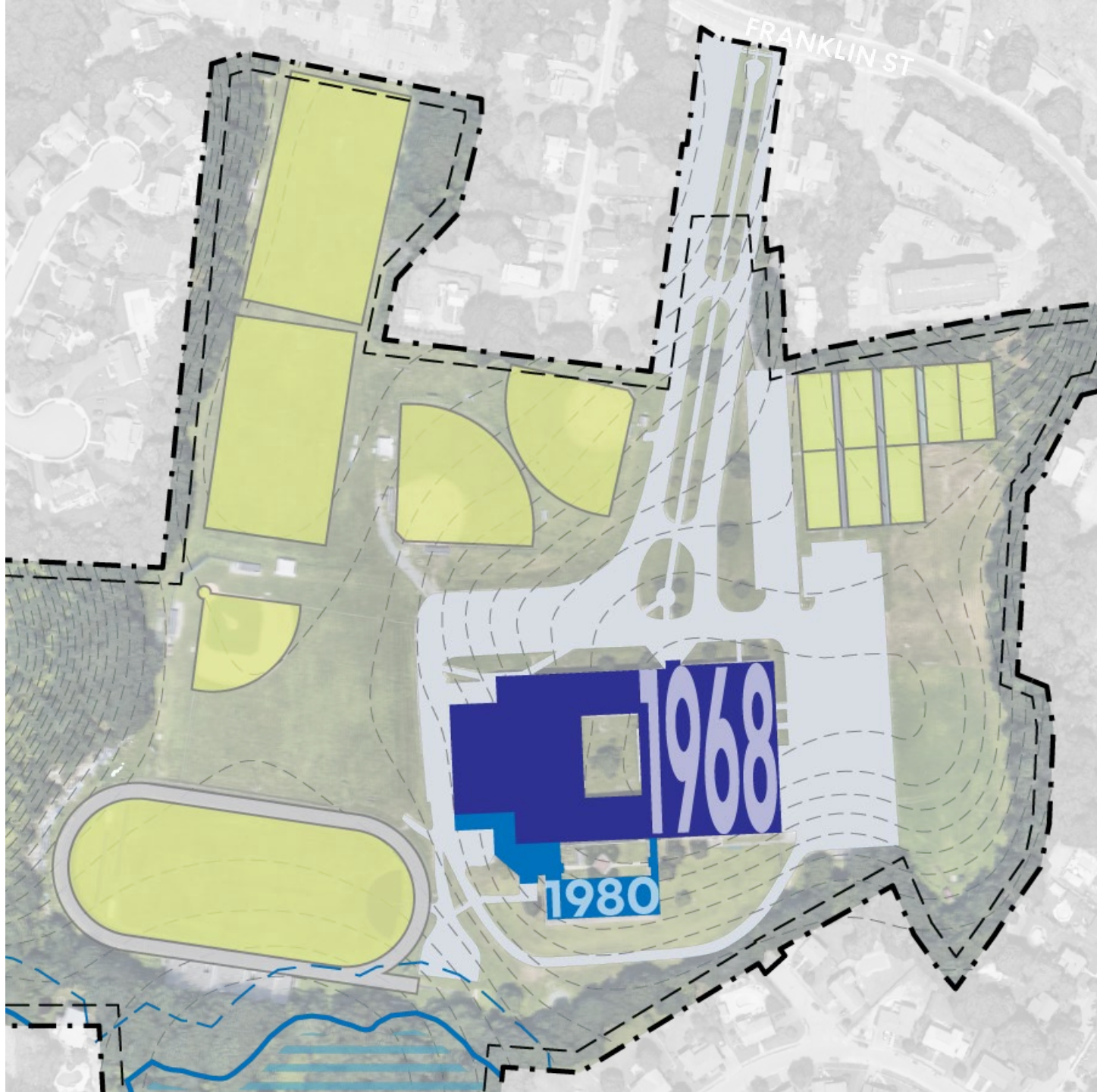
Current Campus

Junior High School (1968)

53 YEARS OLD

Senior High School (1980)

41 YEARS OLD



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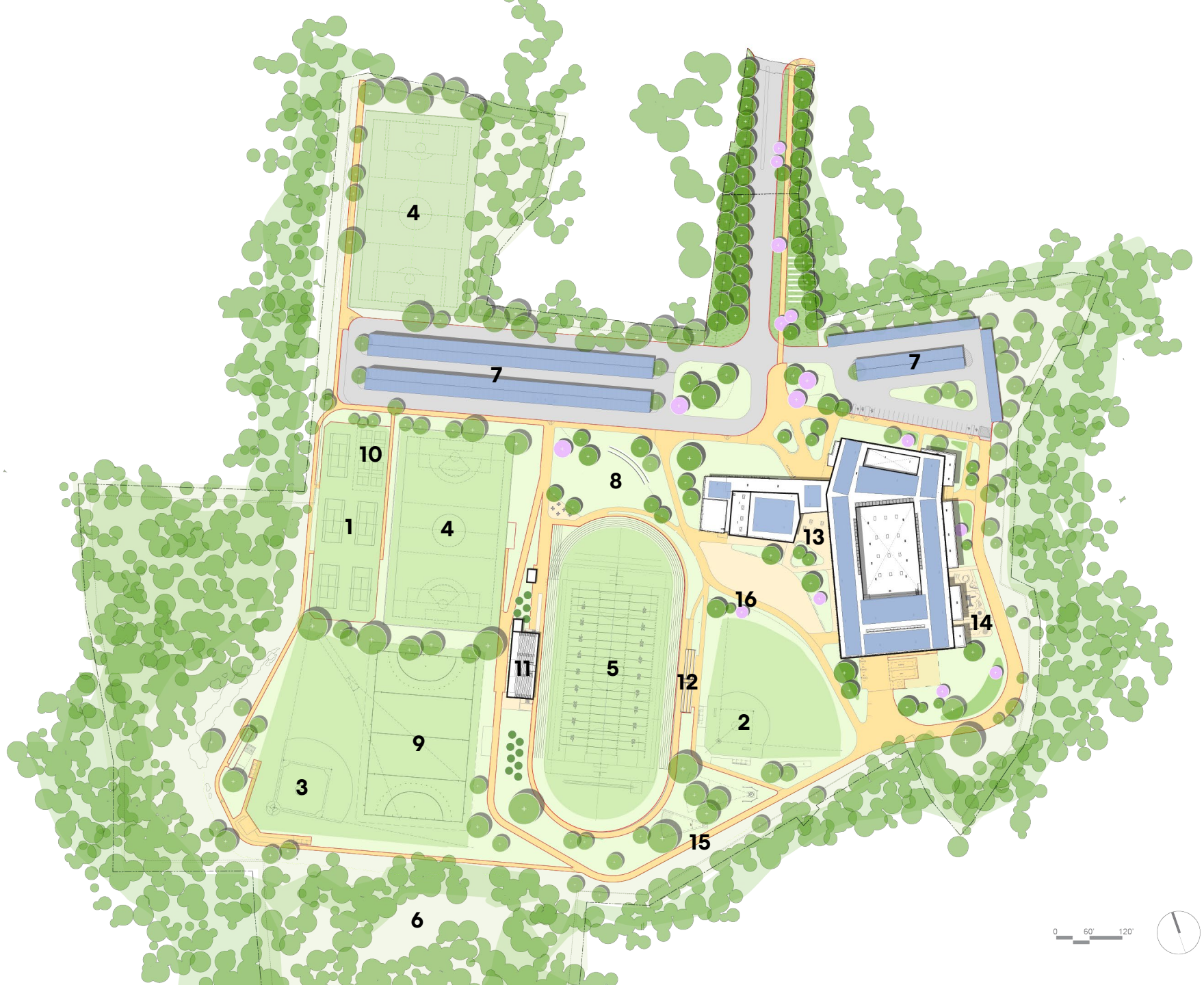
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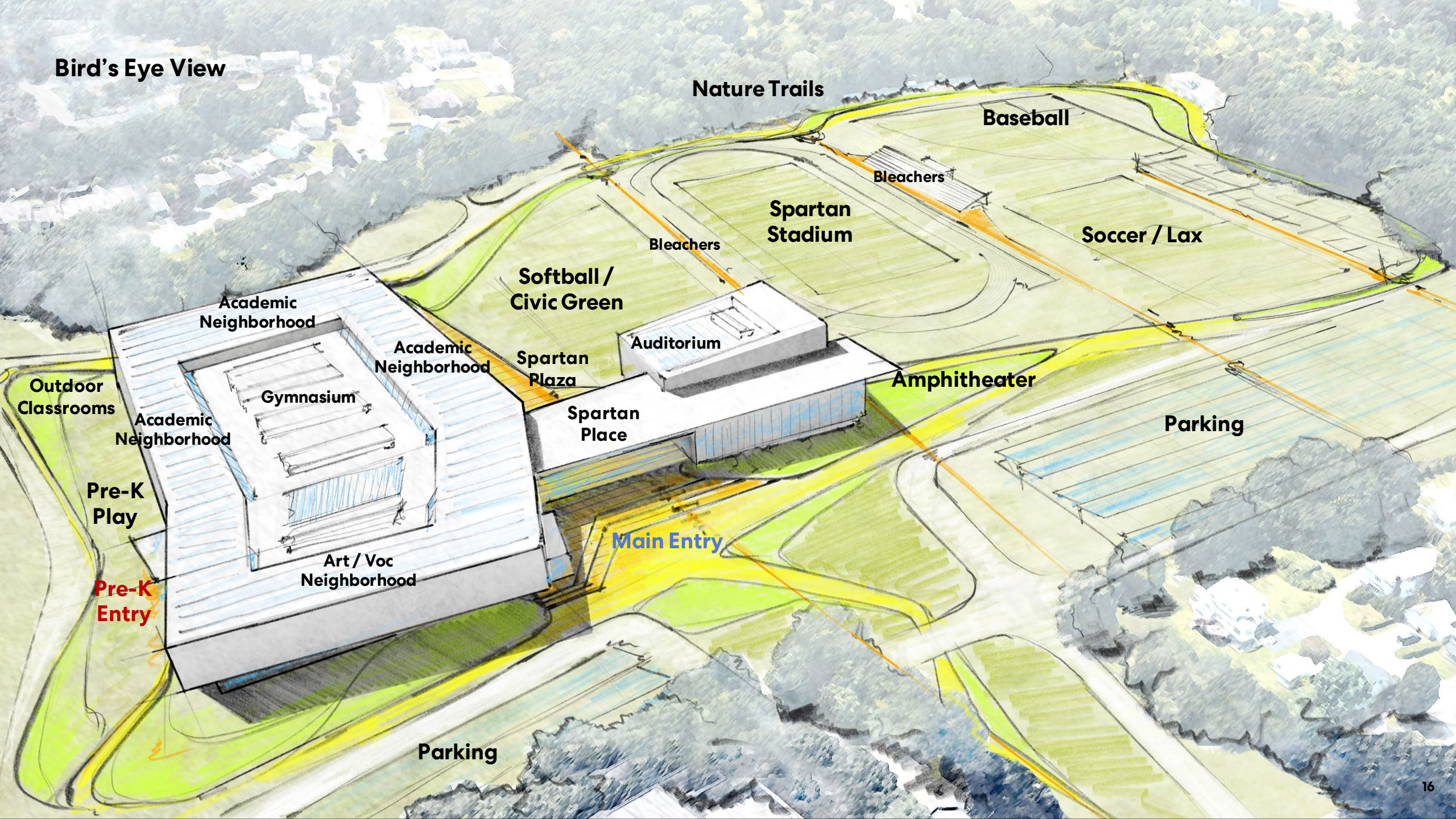
Project Design

Community Forum 09

Site Plan

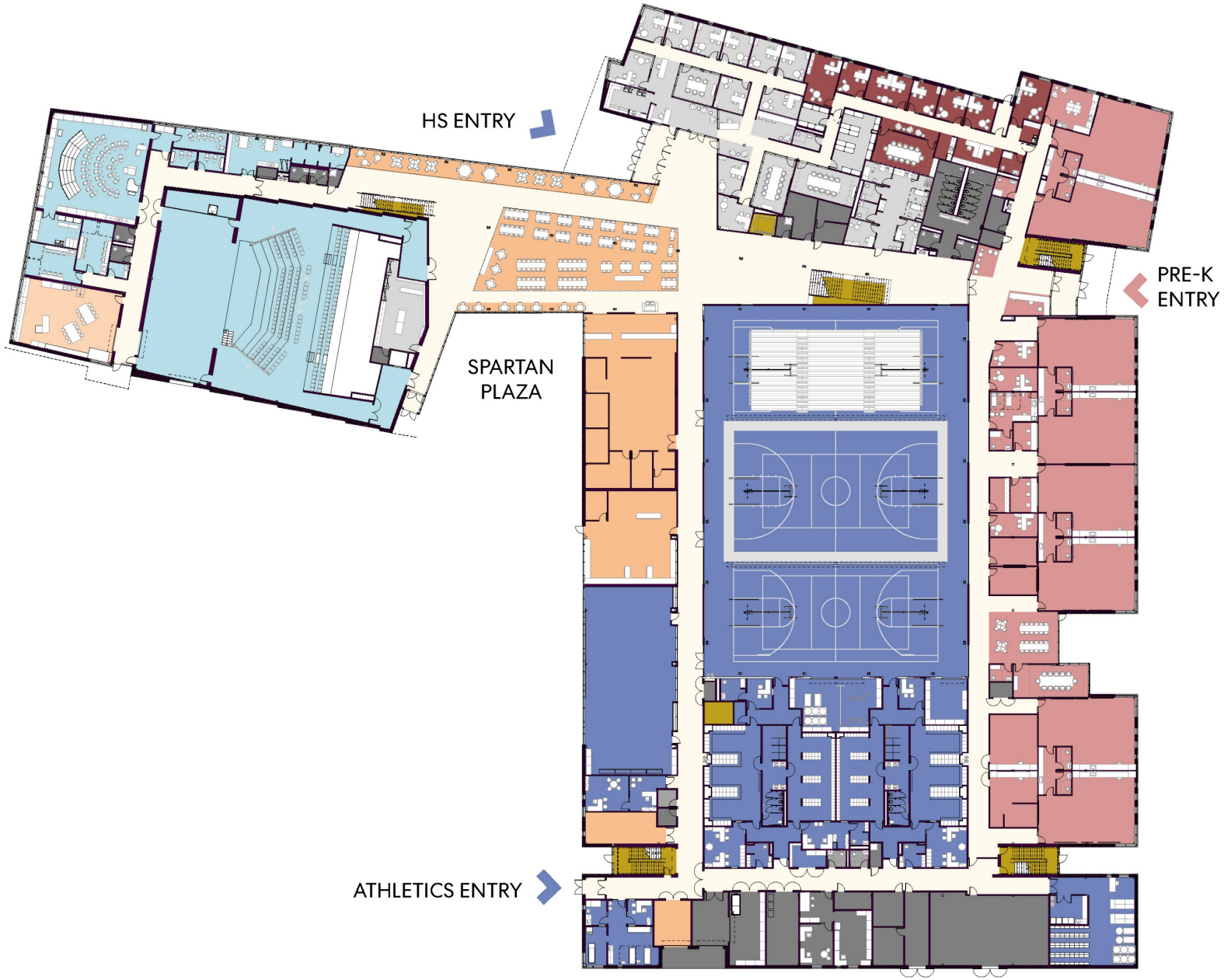
1 – TENNIS
2 – SOFTBALL
3 – BASEBALL
4 – SOCCER
5 – SPARTAN STADIUM
6 – WETLAND
7 – PARKING
8 – AMPHITHEATER
9 – FIELD HOCKEY
10 – PICKLEBALL
11 – HOME BLEACHERS
12 – VISITOR BLEACHERS
13 – SPARTAN PLAZA
14 – PRE-K PLAY
15 – LANDSCAPED PATH
16 – OUTDOOR CLASSROOM
PV ARRAY




Bird's Eye View
Nature Trails
Baseball
Bleachers
Spartan Stadium
Soccer / Lax
Bleachers
Softball / Civic Green
Academic Neighborhood
Academic Neighborhood
Auditorium
Spartan Plaza
Amphitheater
Outdoor Classrooms
Gymnasium
Academic Neighborhood
Spartan Place
Parking
Pre-K Play
Main Entry
Art / Voc Neighborhood
Pre-K Entry
Parking

FLOOR PLAN – LEVEL 1

- ADMINISTRATION, GUIDANCE & MEDICAL SUITE
- DISTRICT OFFICES
- PRE-K
- HEALTH & PHYSICAL EDUCATION (P.E.)
- DINING & FOOD SERVICE
- AUDITORIUM, DRAMA & MUSIC
- VOCATIONAL & TECHNOLOGY (PATHWAYS)
- CORE ACADEMICS
- BREAK-OUT / COLLABORATION
- SPECIAL EDUCATION
- MEDIA CENTER
- VERTICAL CIRCULATION
- RESTROOMS
- CUSTODIAL & MECHANICAL



0’ 25’ 50’ 100’ 150’

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FLOOR PLAN – LEVEL 2

- ADMINISTRATION, GUIDANCE & MEDICAL SUITE
- DISTRICT OFFICES
- PRE-K
- HEALTH & PHYSICAL EDUCATION (P.E.)
- DINING & FOOD SERVICE
- AUDITORIUM, DRAMA & MUSIC
- VOCATIONAL & TECHNOLOGY (PATHWAYS)
- CORE ACADEMICS
- BREAK-OUT / COLLABORATION
- SPECIAL EDUCATION
- MEDIA CENTER
- VERTICAL CIRCULATION
- RESTROOMS
- CUSTODIAL & MECHANICAL



0’ 25’ 50’ 100’ 150’

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FLOOR PLAN – LEVEL 3

- ADMINISTRATION, GUIDANCE & MEDICAL SUITE
- DISTRICT OFFICES
- PRE-K
- HEALTH & PHYSICAL EDUCATION (P.E.)
- DINING & FOOD SERVICE
- AUDITORIUM, DRAMA & MUSIC
- VOCATIONAL & TECHNOLOGY (PATHWAYS)
- CORE ACADEMICS
- BREAK-OUT / COLLABORATION
- SPECIAL EDUCATION
- MEDIA CENTER
- VERTICAL CIRCULATION
- RESTROOMS
- CUSTODIAL & MECHANICAL



0’ 25’ 50’ 100’ 150’

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Perspective – Main Entry



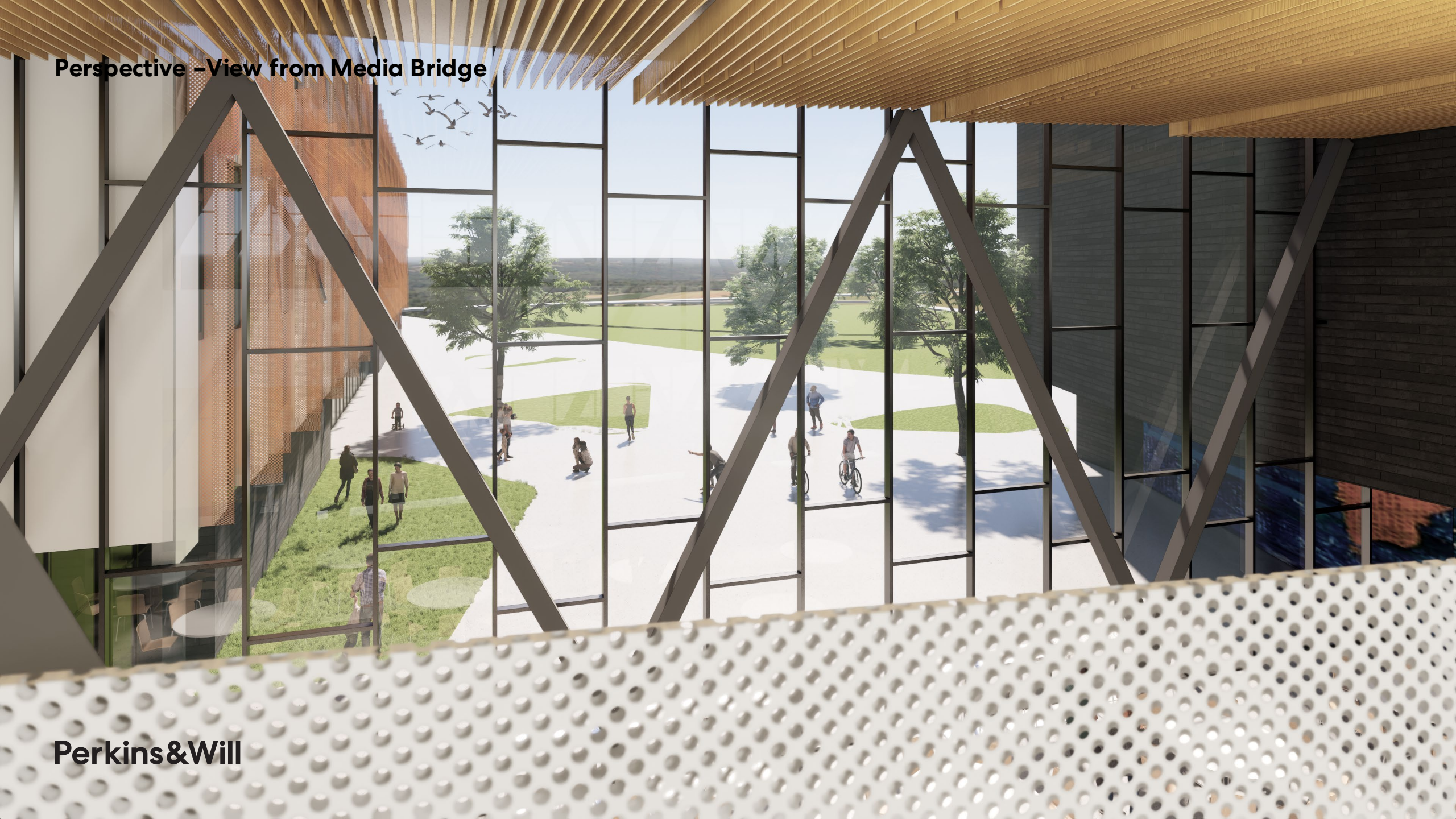
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Perspective – Interior View of Spartan Place



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Perspective –View from Media Bridge



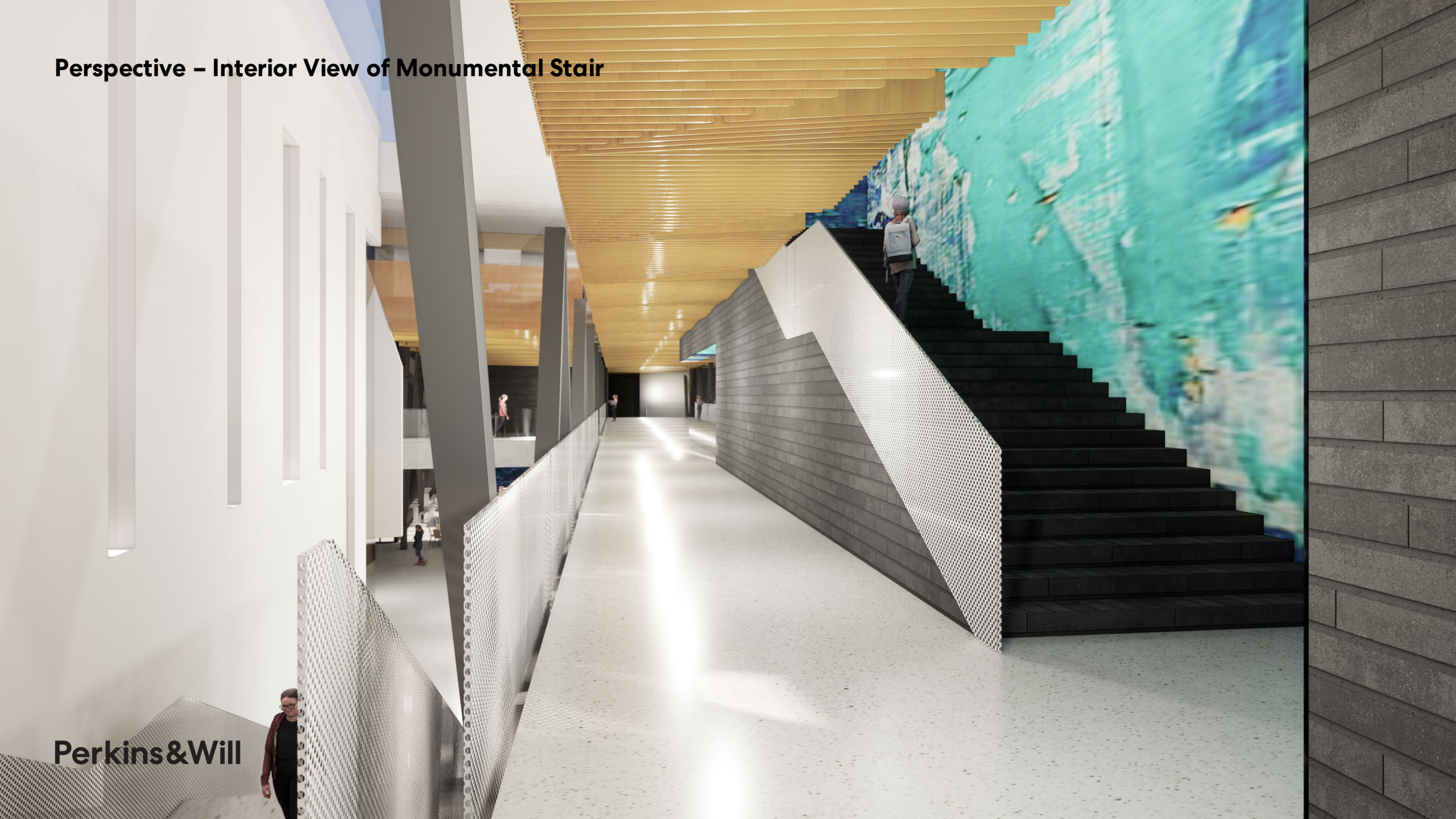
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Perspective – Interior View of Communicating Stair & Gym



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Perspective – Interior View of Monumental Stair



Perkins&Will

Perspective – Interior View of Breakout Space



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Perspective – Spartan Plaza



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Fly-Through Video
Click Here!

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Frequently Asked Questions

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How does the project support the Arts and Performing Arts Program?

- Academic Neighborhoods wrap around a Video Production suite and double-height Maker Space
- Arts & STEM Neighborhood caps the north end of the building, bringing multiple disciplines together and utilizing northern light: Media Center, Media Terrace, Visual Arts, History Lab, Interdisciplinary Performance Room, Bio-medical, & Computer Science
- New Auditorium with Orchestra Pit, accessed from Spartan Place
- Band/Chorus Room and supporting music program spaces are located behind the Auditorium for easy access to the stage and proximity to the athletic fields
- Scene Shop is located backstage of the Auditorium with overhead doors for transporting large set pieces
- Exterior loading door from Auditorium stage to Spartan Plaza for performance-related deliveries and easy access

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Why include the Pre-Kindergarten Program?

- **Efficiency of single central Pre-K Program**
- **Provides for greater collaboration with High School curriculum**
- **Accommodates Pre-K Program growth**
- **Frees up space in the elementary schools for expanding Grade K-4 population**
- **Pre-K classrooms are designed towards future flexibility, and could be used for High School classrooms in the future if population needs change**

Why include the Central Administration Offices?

- Central Administration Offices have been housed in the High School since 1981
- High School location is easily accessible to the Community
- Provides greater collaboration between the High School and Superintendent's office
- No other school, including the Middle School, has the capacity to house Central Offices
- No other Town space available
- Cost effective to include the Central Office space in the project
- If not located in the High School, an alternative location would need to be found. This would require either a new build or building acquisition & renovation, which would be more costly to the Town.

Why Three Synthetic Turf Fields?

- New design reduces fields from 7 to 5
- Provide for greater school and community playfield use
- Provide for equal playtime for all sports programs
- Allow for practice and game time use
- Keeps sports onsite with the benefit of support facilities and avoids travel
- Avoid having to stack practices deep into the evenings
- Accommodate increased youth sports use
- Synthetic turf fields are a safe alternative for year-round play. As-designed fields are specified with organic coconut husk fill and provide better drainage than grass fields.

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Why Three Synthetic Turf Fields?

- A turf field can provide up to 800 plays of use per year, while a grass field can provide up to 180 plays of use
- A turf field provides more usable days per year with uniformly safe conditions throughout variable weather
- High School use alone is over 500 plays of use for each field per year
- A grass field installed cost is approximately $400,000, while a turf field is approximately $900,000
- Environmentally friendly organic infill
- Annual maintenance costs for grass fields are higher than for turf fields
- The cost per play for grass fields is three times higher than for turf fields

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Why not renovate the existing school?

- The cost to bring the existing school up to Code is approximately $122 Million
- This option will not provide any improvements for educational purposes
- The Pre-K program will not fit within the existing school
- Requires multi-year phased construction with multiple student moves
- Four (4) years to renovate versus two (2) years to construct a new building
- Requires costly swing space (modulars) that provide academic challenges without contributing to the final project

What traffic improvements are included?

- Traffic improvements have been specifically designed by engineers to improve traffic flow on Franklin Street, both for the school and the community's benefit
- Expanded parent queuing drive to efficiently bring cars off Franklin Street
- Improved driveway and parking lot layout to improve traffic flow
- New traffic signal at High School entry drive
- New traffic signal at Stevens Street which will be synchronized with the High School entry signal to improve traffic circulation
- Adjusted traffic signalization and traffic details to reduce construction impact

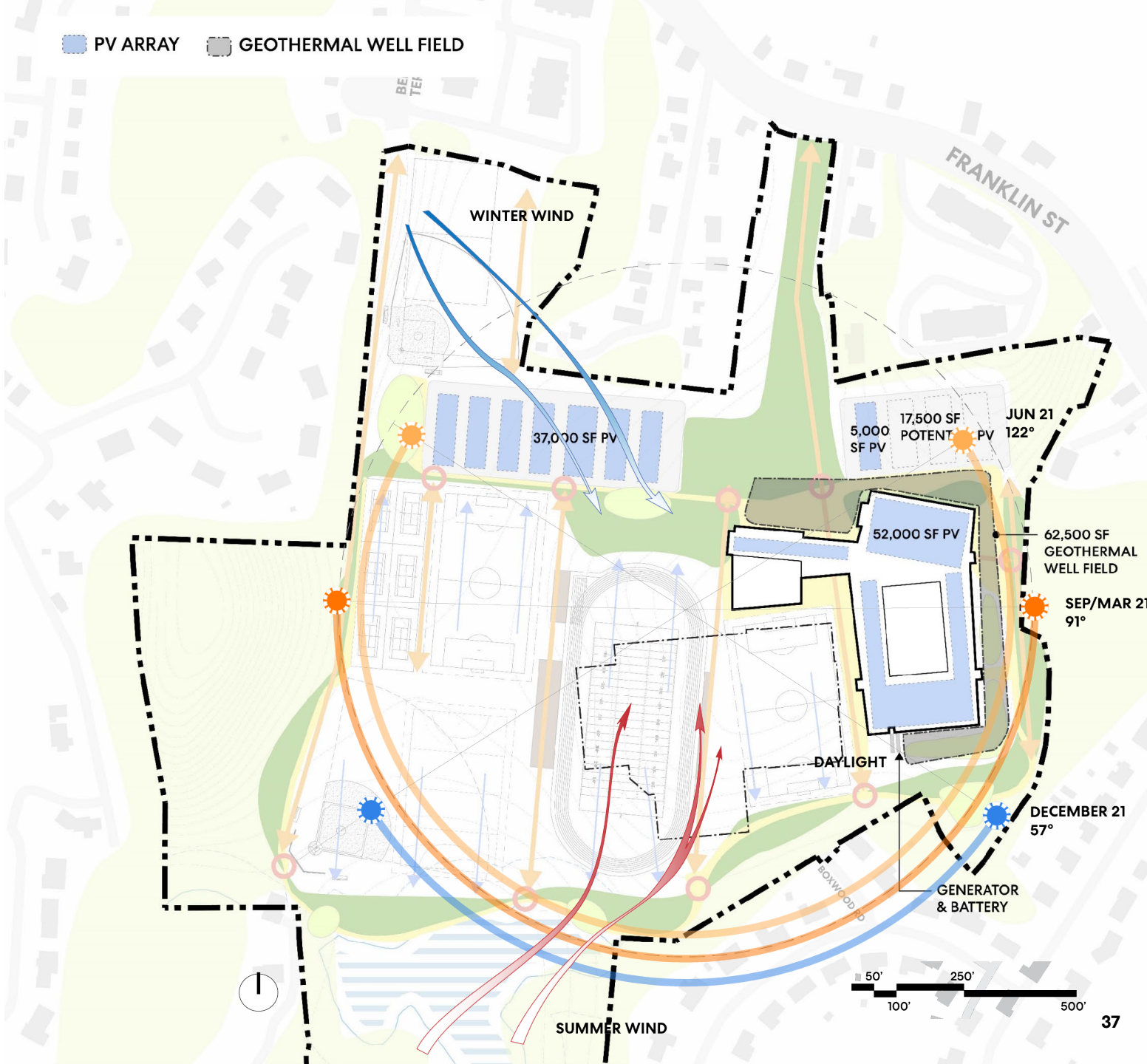
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Zero Net Energy Approach

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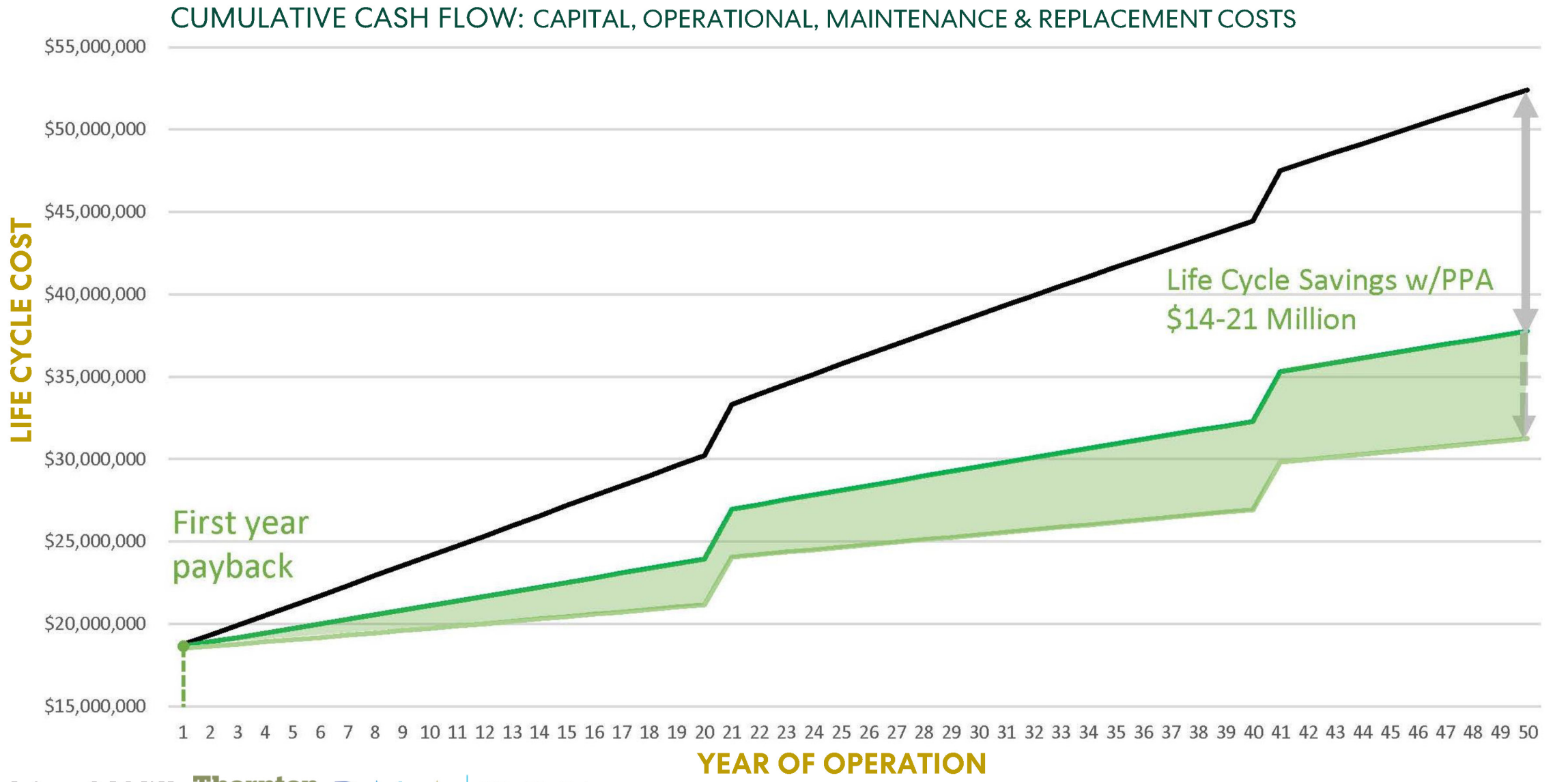
Sustainable Design Strategies

- Zero Net Energy Goal - Energy use intensity target (EUI) of 25
- No Fossil Fuels / all electric building
- Concise Massing / High Performance Windows
- Robust Envelope with Optimized Window to Wall Ratio (28%)
- Geothermal Heat Exchange System
- Planning for PPA Photovoltaic Array
- Planning for PPA Battery / Peak Demand Optimization
- Focusing on Low Carbon / Material Health
- Water-Use Reduction Target of 40%



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Life Cycle Cost Assessment



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Schedule and Construction

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Project Schedule

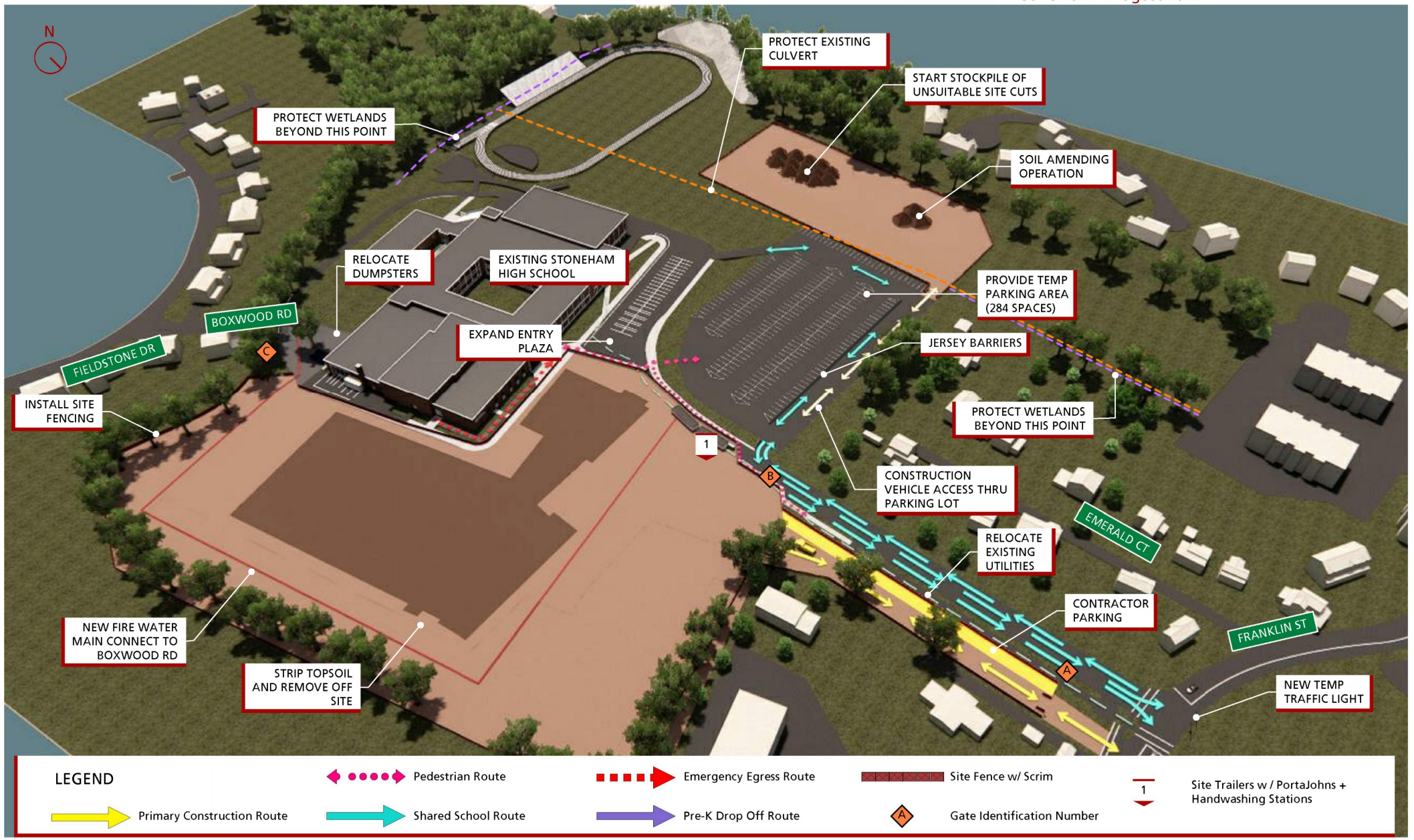
Detailed Design Start	**November 2021**
Construction Start	**Summer 2022**
School Building Completion	**Summer 2024**
Demolition / Playfields / Parking	**Late 2024 / Spring 2025**

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Stoneham High School

Phase 1A - Enabling

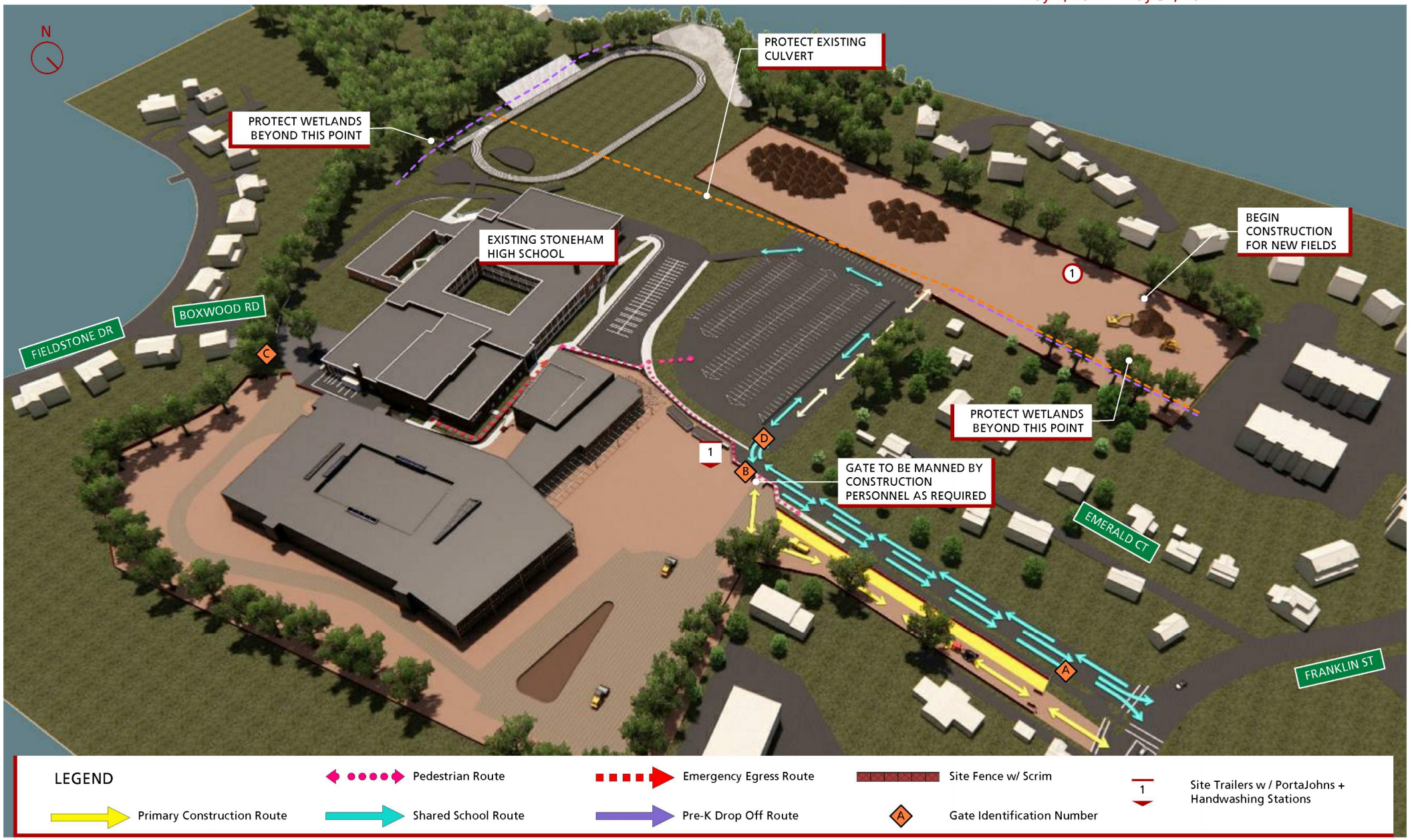
June 2022 - August 2022



Stoneham High School

Field Sequence 1

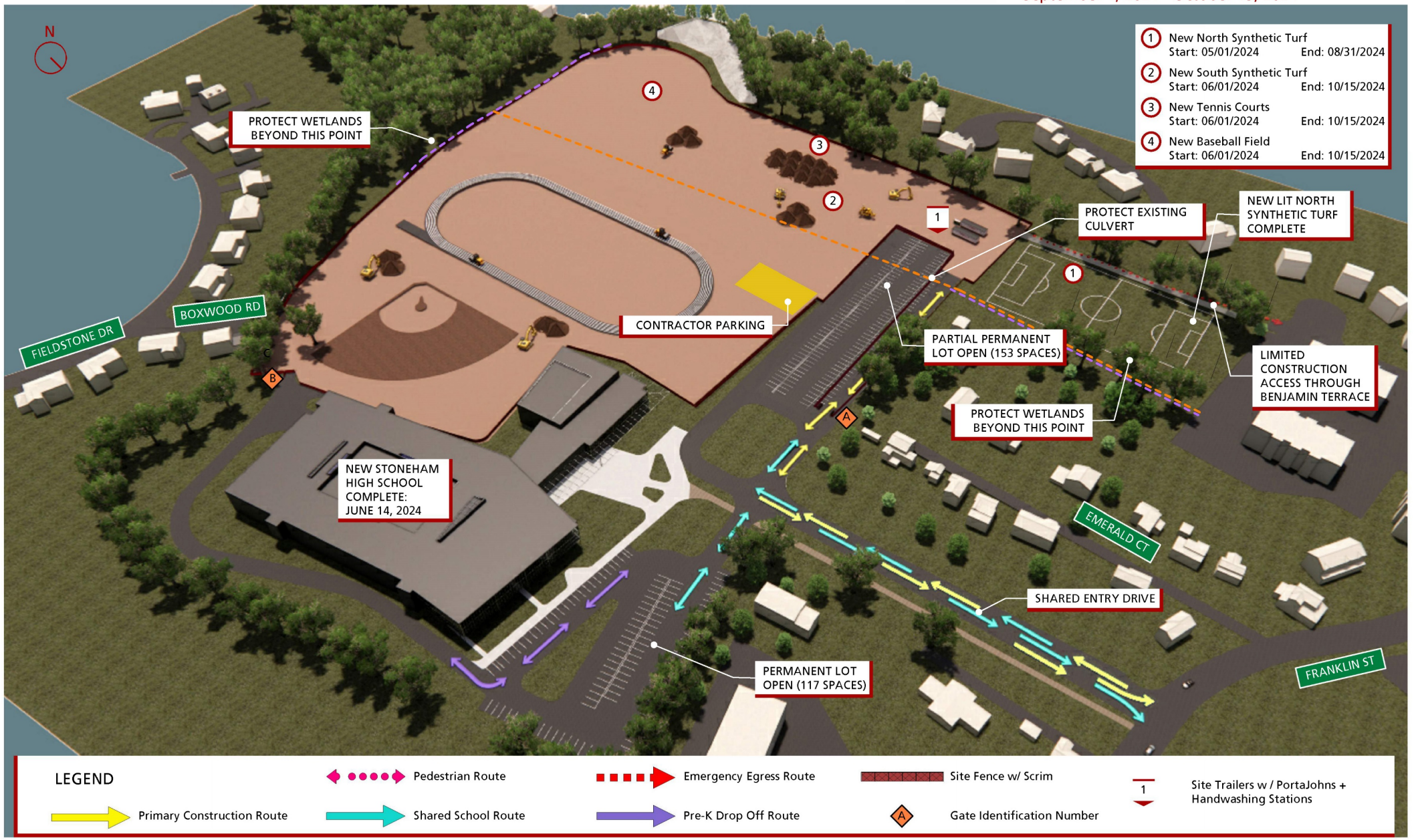
May 1, 2024 - May 31, 2024



Stoneham High School

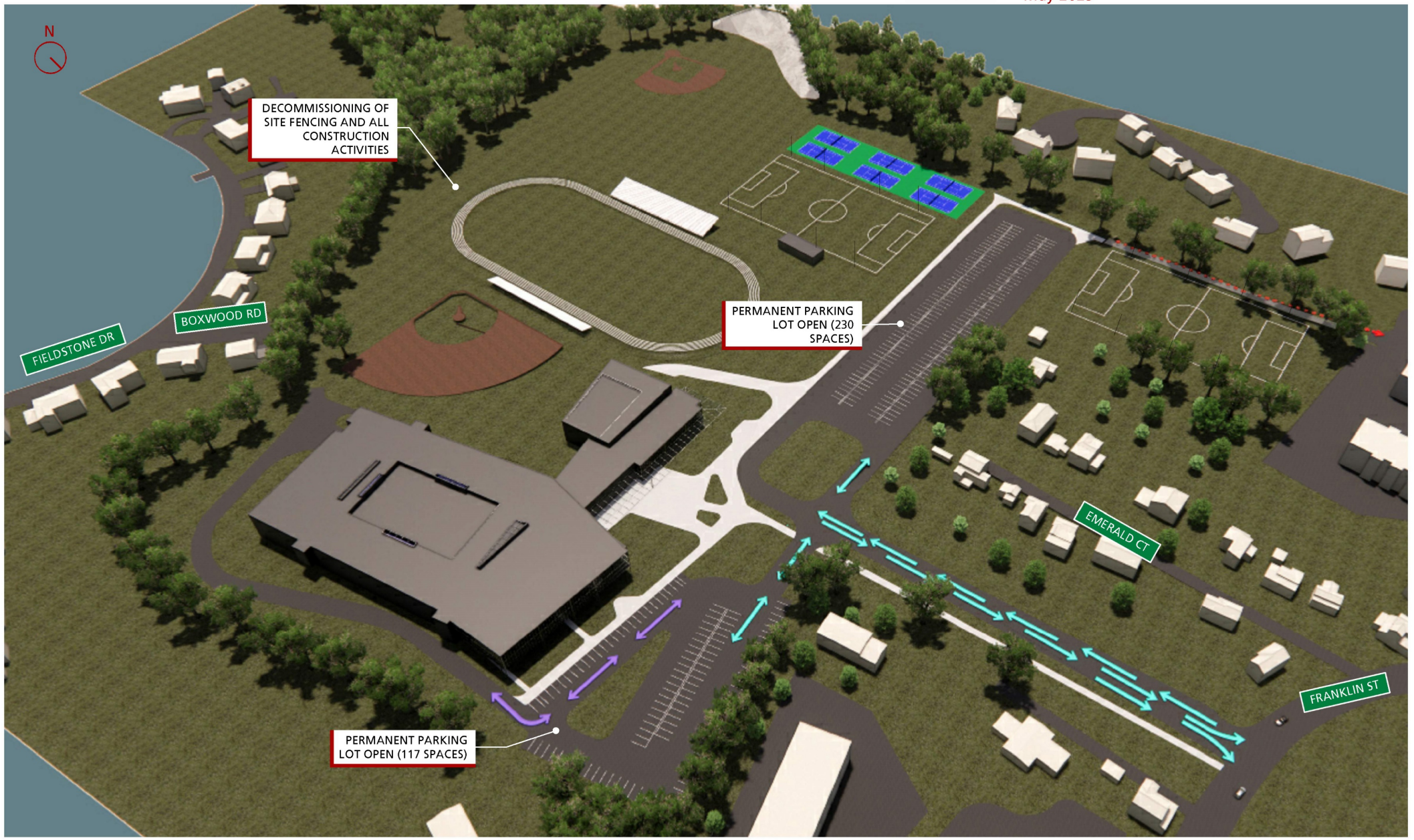
Field Sequence 3

September 1, 2024 - October 15, 2024



Stoneham High School

Complete
May 2025



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Project Cost

Community Forum 09

Total Project Cost

CONSTRUCTION COST (BUILDING + SITEWORK + MARKUPS)	**$153.4M**
FEES & EXPENSES	**$ 23.0M**
FURNITURE, FIXTURES AND EQUIPMENT	**$ 2.5M**
CONTINGENCIES	**$ 10.7M**
TOTAL	**$189.6M**

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What Will Be Stoneham's Share?

PROJECT COST	**$189.6M**
APPROXIMATE MSBA GRANT	**$ 49.0M**
APPROXIMATE COST TO STONEHAM	**$140.6M**

Per MSBA Board of Director's approval of August 25, 2021

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Preliminary Tax Impact Analysis

Community Forum 09

Preliminary Tax Impact Analysis

Stoneham Share	**$140.6M**

Estimated Average Cost/Year	
Average Residential Taxpayer	**$832**

Based on average home value of $577,700, 30-year bond at 3.0%

Finance terms are estimated and subject to change.

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Tax Impact Comparison

Assessed Value ($)	No Debt Exclusion Estimated Tax Bill ($)	New High School 30 Years 3.0% ($)	
1,200,000	13,597	15,326	1,728
1,150,000	13,030	14,687	1,656
1,100,000	12,464	14,048	1,584
1,000,000	11,331	12,771	1,440
900,000	10,198	11,494	1,296
800,000	9,065	10,217	1,152
700,000	7,932	8,940	1,008
600,000	6,799	7,663	864
577,195	**6,540**	**7,372**	**832**
500,000	5,665	6,386	720
400,000	4,532	5,109	576
300,000	3,399	3,831	432

Tax Impact Comparison / Surrounding Communities

Why average single family tax bill used as a basis of comparison?

1. **Variation in the level of assessment**
2. **Variation in percentage of Residential and Commercial classes**
3. **Variation in CIP Shift Percentages**

Town	FY20 Avg SF TB	FY23
Woburn	$4,677	$5,037
Peabody	$4,751	$5,116
Saugus	$5,368	$5,781
Burlington	$5,466	$5,886
Billerica	$5,522	$5,947
Stoneham w/ No Debt Exclusion	**$6,098**	**$6,540**
Danvers	$6,451	$6,947
Stoneham with New High School	**$6,098**	**$7,372**
Wilmington	$6,873	$7,401
Tewksbury	$6,921	$7,453
Melrose	$7,015	$7,554
Wakefield	$7,099	$7,645
Chelmsford	$7,362	$7,928
North Andover	$7,608	$8,193
Middleton	$8,585	$9,245
Reading	$8,748	$9,421
Lynnfield	$9,055	$9,751
Westford	$9,238	$9,948
North Reading	$9,381	$10,102
Bedford	$9,769	$10,520
Andover	$10,223	$11,009
Winchester	$14,298	$15,397
Lexington	$15,547	$16,742

What does this mean to the average homeowner?

$1.44 annual tax increase per $1,000 valuation

$832 per year, OR

$69.33 per month, OR

$2.28 per day

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Vote Information & Dates

Key Dates

- **September 20, 2021** – Community Forum No. 9
- **September 20, 2021** – Tri-Board Meeting No. 5
- **October 4, 2021** - Town Meeting Vote to Appropriate Project Funding
- **November 2, 2021** - Ballot Vote for Debt Exclusion

October 4, 2021 Town Meeting

Who: All eligible, registered Stoneham voters

Where: Stoneham High School

When: 7:00 pm

Two-Thirds Majority Vote Required to Pass article

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November 2, 2021 Ballot Question

Shall the Town of Stoneham be allowed to exempt from the provisions of Proposition two-and-one-half, so called, the amounts required to pay for the bonds issued in order to pay the costs of planning, designing, constructing, originally equipping and furnishing the New Stoneham High School located at 149 Franklin Street, Stoneham, Massachusetts?

Yes _____

No _____

Majority Vote Required to pass the ballot question

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Community Resources

SSBC Website:
https://www.Stoneham-Ma.Gov/hsbc

Project Email:
SSBC@Stoneham-Ma.gov



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Thank You

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