

Hamilton County Department of Education
Facilities Committee Meeting
November 12, 2024 5:00 PM
3074 Hickory Valley Road
Chattanooga, TN 37421

I. Call to Order

II. Discussion of Clifton Hills Project

III. Discussion of Gateway Project

IV. Discussion of Next Steps

V. Discussion of Capital Projects for Current Schools

VI. Adjourn

COMPARISON OF IMPROVEMENT OPTIONS FOR
CLIFTON HILLS ELEMENTARY SCHOOL

HAMILTON COUNTY SCHOOLS

LEWIS GROUP ARCHITECTS

TABLE OF CONTENTS

Introduction

Option 1A: Clifton Hills Elementary School Additions & Renovations **12.5:1** Student: Teacher Ratio

- Description of Planning Approach
- Option 1A+1B Existing Site Conditions
- Demolition + Phasing Options
- New Construction
- Project Data

Option 1B: Clifton Hills Elementary School Additions & Renovations **22.5:1** Student: Teacher Ratio

- Description of Planning Approach
- Demolition + Phasing Options
- New Construction
- Project Data

Comparison of Options

- Pros & Cons

INTRODUCTION

Lewis Group Architects was asked to study solutions for providing permanent classrooms with a capacity of 800 students for Clifton Hills Elementary School (CHES). As part of this study, some existing conditions of the school's unique facilities and operations had to be understood and are outlined below.

Current Enrollment CHES: 740 students (Pre-K through 5)

Capacity of Existing CHES Facility (excluding portables): 468 (according to Hamilton County Schools Utilization Report)

Target Capacity or Growth for CHES: 800 students

Grades Served at CHES: Pre-Kindergarten through 5th

Existing Number of Classrooms in CHES Permanent Structures (non-portable structures): 25 (not including existing teacher work area)

Number of Portable Classrooms in Use at CHES: 25

Current Student: Teacher Ratio at CHES: 12.5:1

Average Student: Teacher Ratio in Tennessee: 22.5:1

Finish Floor Elevation at CHES: 660.8' (not including portables or cafeteria and kitchen)

Elevation of Existing 100' Flood Zone on the CHES Site: 656' and below

Lowest Elevation of the CHES Site: +/-650' not including drainage channel (The majority of the site is within the flood zone.)

Parking Spaces Provided at CHES: 70+ (not including on-street or off-site parking)

Student Transportation at CHES: Very High Level of Pedestrians

Nearby County Elementary Schools: Eastside Elementary School, East Lake Elementary School

OPTION 1A: CLIFTON HILLS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS 12.5:1 STUDENT: TEACHER RATIO

DESCRIPTION OF PLANNING APPROACH

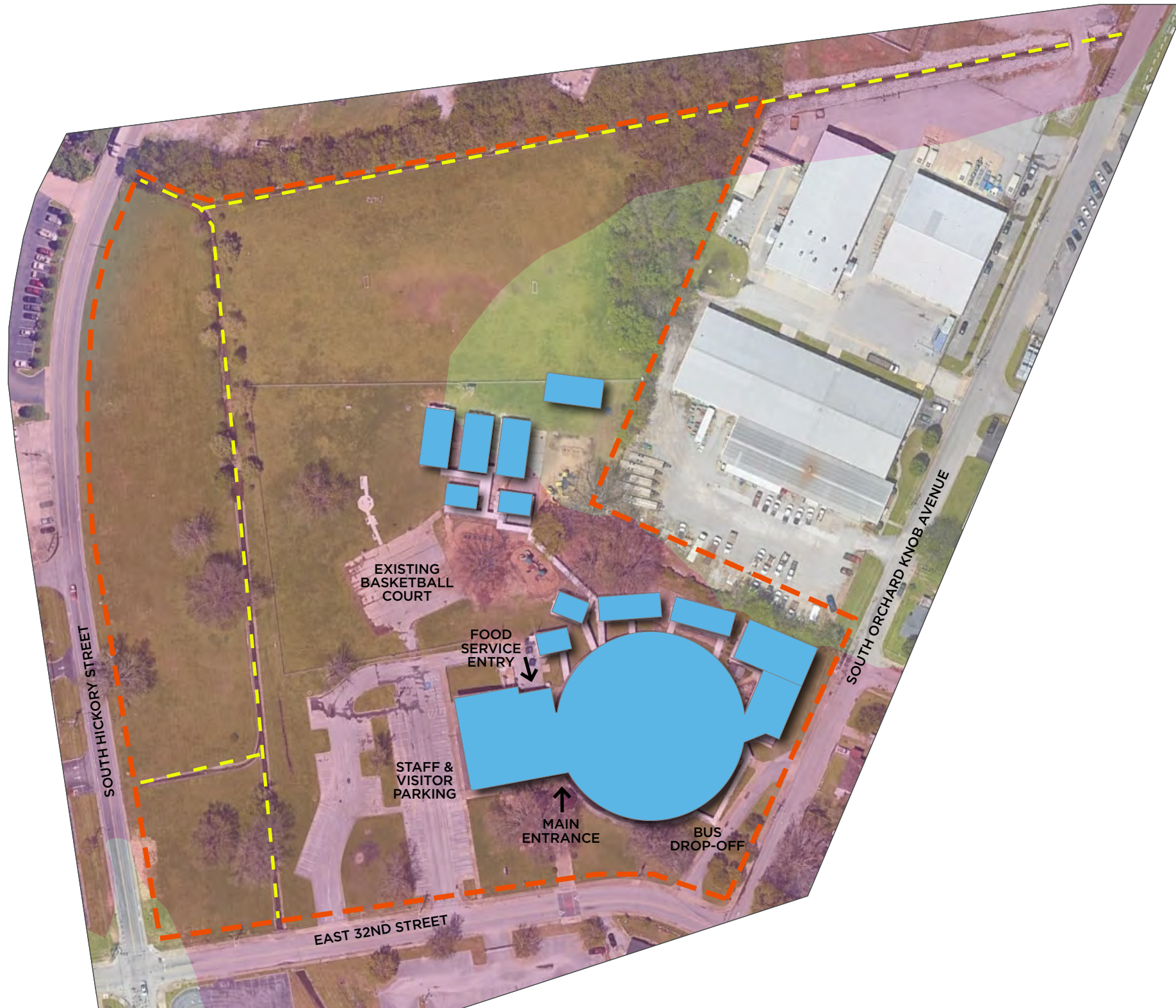
In this approach to the expansion of CHES, LGA considered a total replacement of the existing portable classrooms with a permanent new classroom wing, an addition that expands the core services of the school (administration, dining, specials, etc.), and some renovations to the existing school. This option would require a phased approach during construction. This option uses the same Student: Teacher Ratio in use currently at the school. Because the majority of the site is in a flood zone, this option seeks to minimize the footprint of the addition by reducing the typical classroom size in accordance with the low Student: Teacher Ratio and by locating the classrooms on 2 levels rather than one.

This option proposes the following:

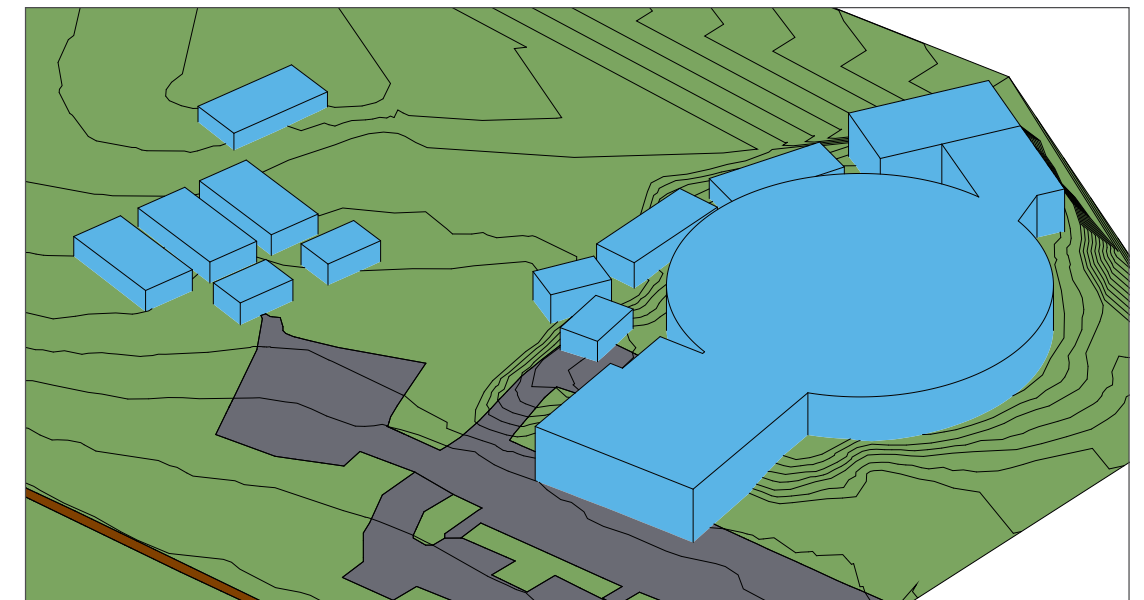
- Addition of bar-shaped, 2-story classroom wing adjacent to the existing L-shaped classroom wing on the north, higher elevation side of the site
- Renovation of one portion of the existing L-shaped classroom wing and one classroom in the original school to create connectors to the new wing
- Addition near existing entry including new secure entry, new administration suite, cafeteria seating expansion, and other education support spaces
- Renovation of former administration areas as educational support area (functions to be assigned by school as needed)
- Moderate renovations of existing school for sprinkler system, window and door replacement, cleaning, painting, new interior finishes, and other as needed
- Potential design of storm shelter in new classroom wing if directed by Owner (not currently included in project cost estimates)
- Option to combine pairs of classrooms into larger classrooms in the future if the Student: Teacher Ratio increases
- Temporary relocation of student classrooms currently in portables through phased approach. (See options outline on Demolition + Phasing Sheet.)
- Site improvements to vehicular flow and parking
- Restoration of remaining unused land to landscaping

OPTION	1A		# OF CLASSROOMS	CAPACITY
Student: Teacher Ratio	12.5	Existing School	25	313
Typical Classroom Size	500-570 sf	New Classroom Wing	39	487
(typical classroom could include toilet)		TOTAL	64	800

OPTION 1A+B: CHES ADDITIONS & RENOVATIONS - EXISTING SITE CONDITIONS



SITE PLAN



MASSING VIEW

LEGEND

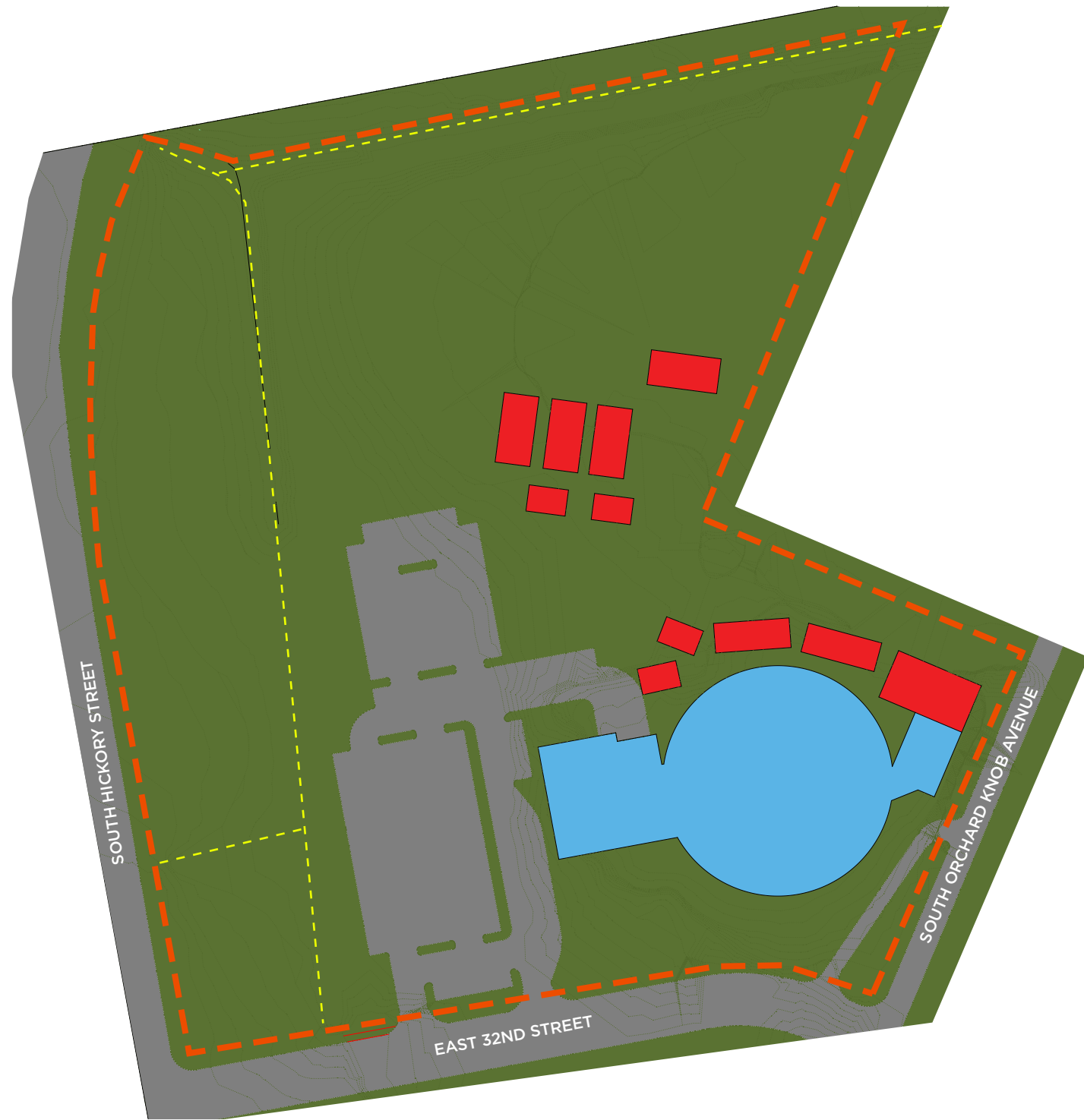
- Existing to Remain with Renovations
- New Construction
- Demolition or Removal
- Pavement
- Soft Landscaping
- 100 Year Flood Zone
- Approximate Property Line
- Existing Drainage Channels



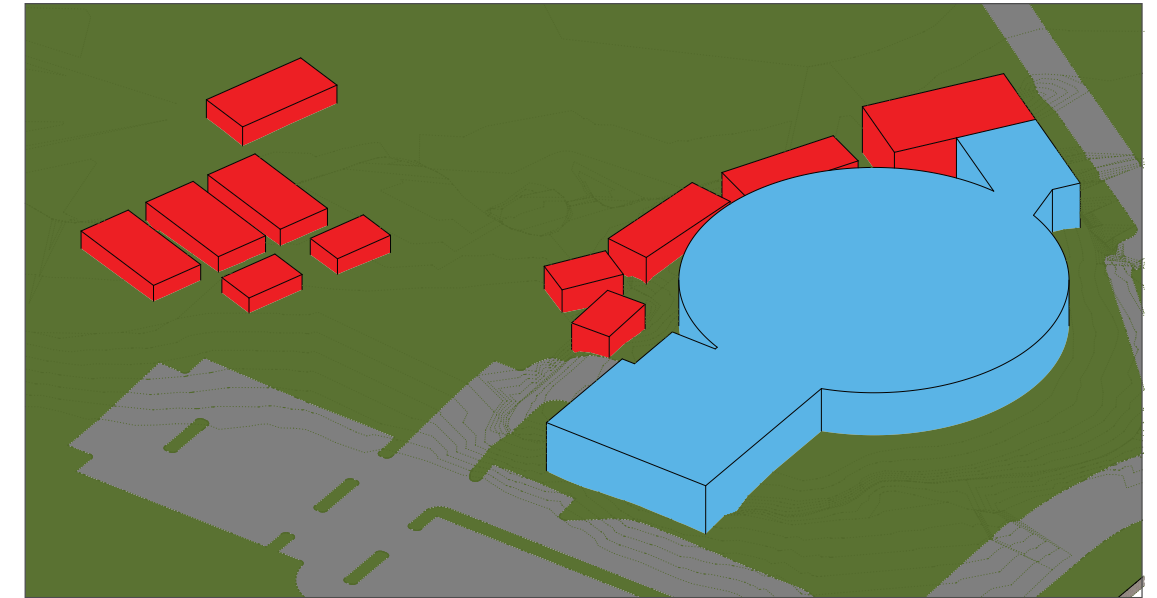
COMPARISON OF IMPROVEMENT OPTIONS FOR CLIFTON HILLS ELEMENTARY SCHOOL

11.01.2024

OPTION 1A: CHES ADDITIONS & RENOVATIONS 12.5:1 STUDENT: TEACHER RATIO - DEMOLITION + PHASING



SITE PLAN



MASSING VIEW

PHASING OPTIONS:

Construction will require the phased removal and/or relocation of the portable classrooms until the new classroom wing is completed. Some options for relocation of students during construction are listed as follows:

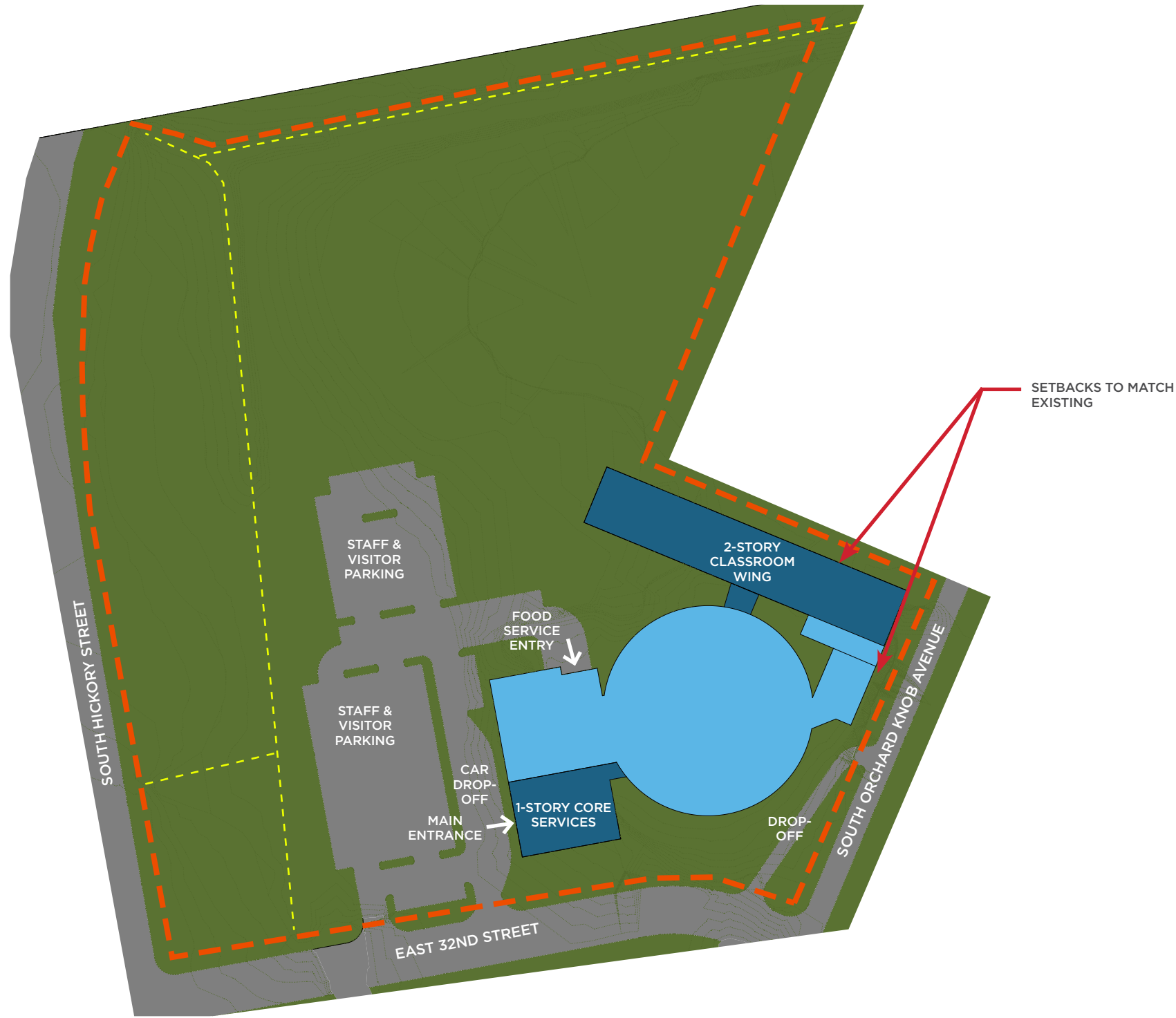
- A. Operate the school at a higher Student: Teacher Ratio during construction so that the student body (740) can be housed in the existing, permanent structures until construction is complete. Using the maximum ratio allowed by the state for each grade level, the 25 existing classrooms can house approximately 625 students. Temporary classrooms can be set up in large spaces like the media center or other areas to house the remaining students. Minimal cost would be incurred to set up temporary classrooms inside existing spaces.
- B. Temporarily rezone student to another school until construction is complete. This is a difficult option due to the lack of capacity at nearby schools and the potential negative impacts of rezoning.
- C. Relocate the portable classrooms to an area of the site which will not conflict with construction and staging. This could include the existing school parking lot. Staff and visitor parking may need to be relocated to another area (possibly off-site) to allow for relocation of portables. A significant cost would be incurred to relocate the portables and related utilities to another area of the site and possibly to keep the portables elevated out of the flood zone. The site access for construction is made more difficult by the remainder of the portables even in another location on the site. Accessible access between portables and the existing school would be required. This is the least desirable phasing option.

LEGEND

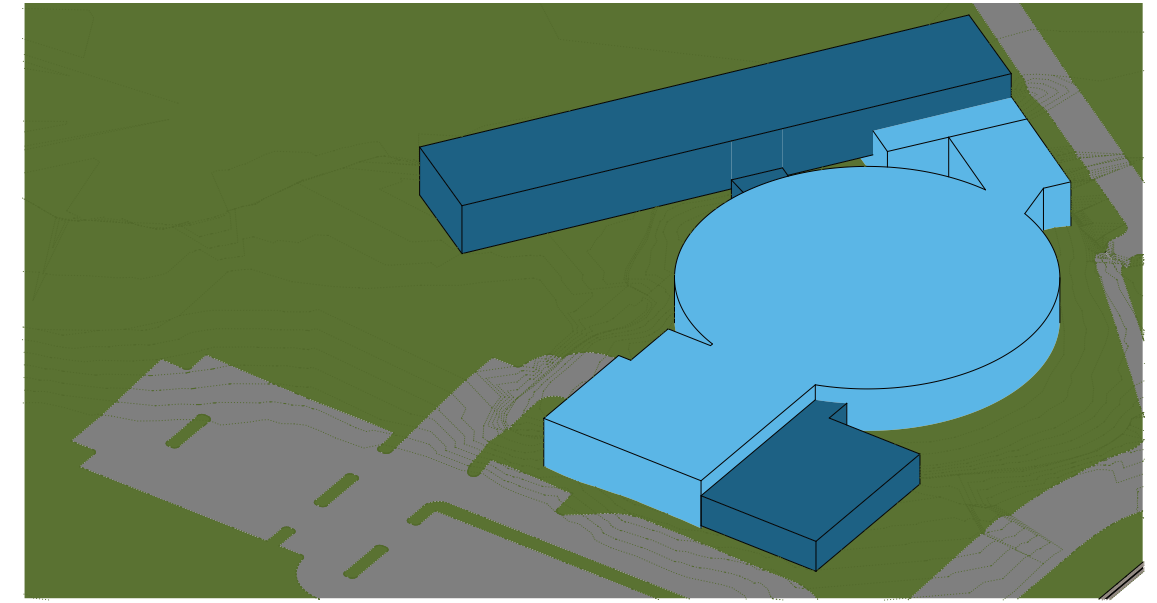
- Existing to Remain with Renovations
- New Construction
- Demolition or Removal
- Pavement
- Soft Landscaping
- 100 Year Flood Zone
- - - Approximate Property Line
- - - Existing Drainage Channels



OPTION 1A: CHES ADDITIONS & RENOVATIONS 12.5:1 STUDENT: TEACHER RATIO - NEW CONSTRUCTION



SITE PLAN



MASSING VIEW

LEGEND

	Existing to Remain with Renovations
	New Construction
	Demolition or Removal
	Pavement
	Soft Landscaping
	100 Year Flood Zone
	Approximate Property Line
	Existing Drainage Channels



OPTION 1A: CHES ADDITIONS & RENOVATIONS 12.5:1 STUDENT: TEACHER RATIO - PROJECT DATA

SCOPE OF WORK	EST. SQUARE FOOTAGE (SF)	ESTIMATED COST	
		LOW / SF	HIGH / SF
New Construction		\$300	\$335
2 story classroom wing (Classrooms + Connector + Building Support)	39,600 SF	\$11,880,000	\$13,266,000
Administration/Core Services Addition	8,000 SF	\$2,400,000	\$2,680,000
Moderate Renovation		\$150	\$200
Lighting, Ceiling Tiles, Flooring(as needed), Sprinkler, window replacement, door replacement	51,651 SF	\$7,747,650	\$10,330,200
Light Renovation		\$100	\$150
	0	\$0	\$0
Demolition			
*Demo/Relocation of existing portable classrooms	0	\$0	\$0
Site Costs	Moderate	\$1,000,000	\$3,000,000
Sub-total		\$23,027,650	\$29,276,200
Contingency (10%) Due to complexity of construction phasing & site constraints		\$2,302,765	\$2,927,620
Total Estimated Cost		\$25,330,415	\$32,203,820

* Cost not yet determined associated with Demo/Relocation of existing portables.

** Does not include soft costs such as (Furniture, Fixtures, and equipment, Survey, Geotechnical, Architectural & Engineering Fees, Third Party testing, Permits, etc.)

OPTION 1B: CLIFTON HILLS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS 22.5:1 STUDENT: TEACHER RATIO

DESCRIPTION OF PLANNING APPROACH

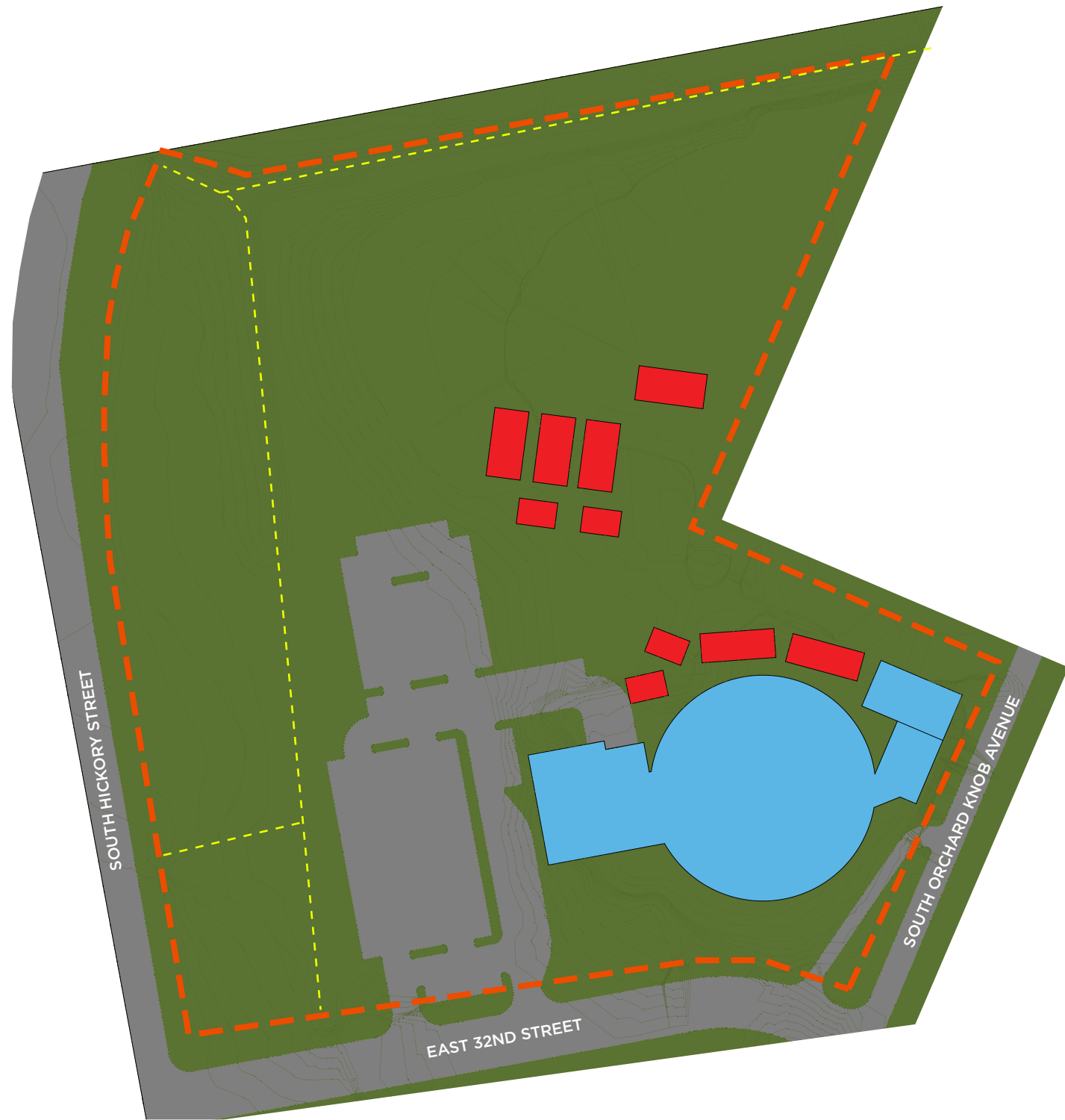
In this approach to the expansion of CHES, LGA considered a total replacement of the existing portable classrooms with a permanent new classroom wing, an addition that expands the core services of the school (administration, dining, specials, etc.), and some renovations to the existing school. This option would require a phased approach during construction. Because the majority of the site is in a flood zone, this option seeks to minimize the footprint of the addition by proposing the use of a larger Student: Teacher Ratio than currently in use at the school - allowing the existing school to house more students and requiring fewer additional classrooms than Option 1A.

This option proposes the following:

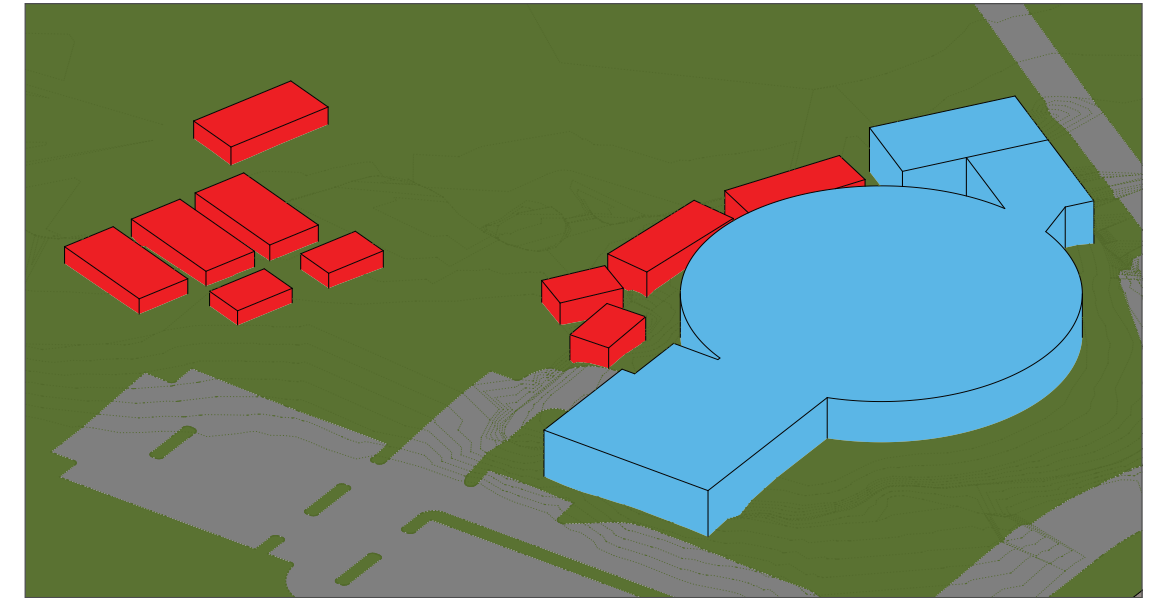
- Addition of bar-shaped, 1-story classroom wing adjacent to the existing L-shaped classroom wing on the north, higher elevation side of the site
- Renovation of one portion of the existing L-shaped classroom wing and one classroom in the original school to create connectors to the new wing
- Addition near existing entry including new secure entry, new administration suite, cafeteria seating expansion, and other education support spaces
- Renovation of former administration areas as educational support area (functions to be assigned by school as needed)
- Moderate renovations of existing school for sprinkler system, window and door replacement, cleaning, painting, new interior finishes, and other as needed
- Potential design of storm shelter in new classroom wing if directed by Owner (not currently included in project cost estimates)
- Temporary relocation of student classrooms currently in portables through phased approach. (See options outline on Demolition + Phasing Sheet.)
- Site improvements to vehicular flow and parking
- Restoration of remaining unused land to landscaping

OPTION	1B		# OF CLASSROOMS	CAPACITY
Student: Teacher Ratio	22.5	Existing School	25	563
Typical Classroom Size	900-970 sf	New Classroom Wing	11	247
(typical classroom could include toilet)		TOTAL	36	810

OPTION 1B: CHES ADDITIONS & RENOVATIONS 22.5:1 STUDENT: TEACHER RATIO - DEMOLITION + PHASING



SITE PLAN



MASSING VIEW

PHASING OPTIONS:

Construction will require the phased removal and/or relocation of the portable classrooms until the new classroom wing is completed. Some options for relocation of students during construction are listed as follows:

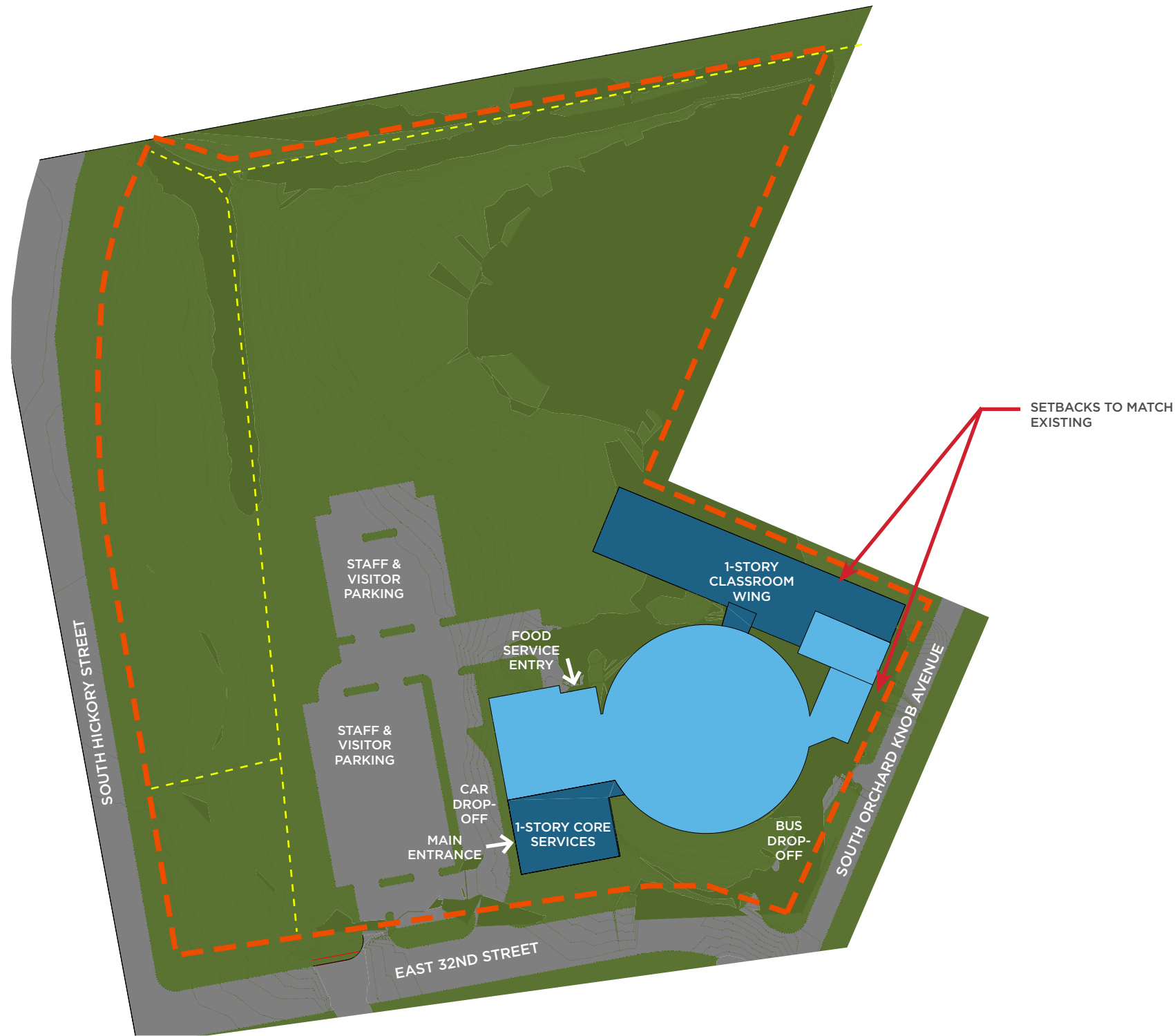
- A. Operate the school at a higher Student: Teacher Ratio during construction so that the student body (740) can be housed in the existing, permanent structures until construction is complete. Using the maximum ratio allowed by the state for each grade level, the 25 existing classrooms can house approximately 625 students. Temporary classrooms can be set up in large spaces like the media center or other areas to house the remaining students. Minimal cost would be incurred to set up temporary classrooms inside existing spaces.
- B. Temporarily rezone student to another school until construction is complete. This is a difficult option due to the lack of capacity at nearby schools and the potential negative impacts of rezoning.
- C. Relocate the portable classrooms to an area of the site which will not conflict with construction and staging. This could include the existing school parking lot. Staff and visitor parking may need to be relocated to another area (possibly off-site) to allow for relocation of portables. A significant cost would be incurred to relocate the portables and related utilities to another area of the site and possibly to keep the portables elevated out of the flood zone. The site access for construction is made more difficult by the remainder of the portables even in another location on the site. Accessible access between portables and the existing school would be required. This is the least desirable phasing option.

LEGEND

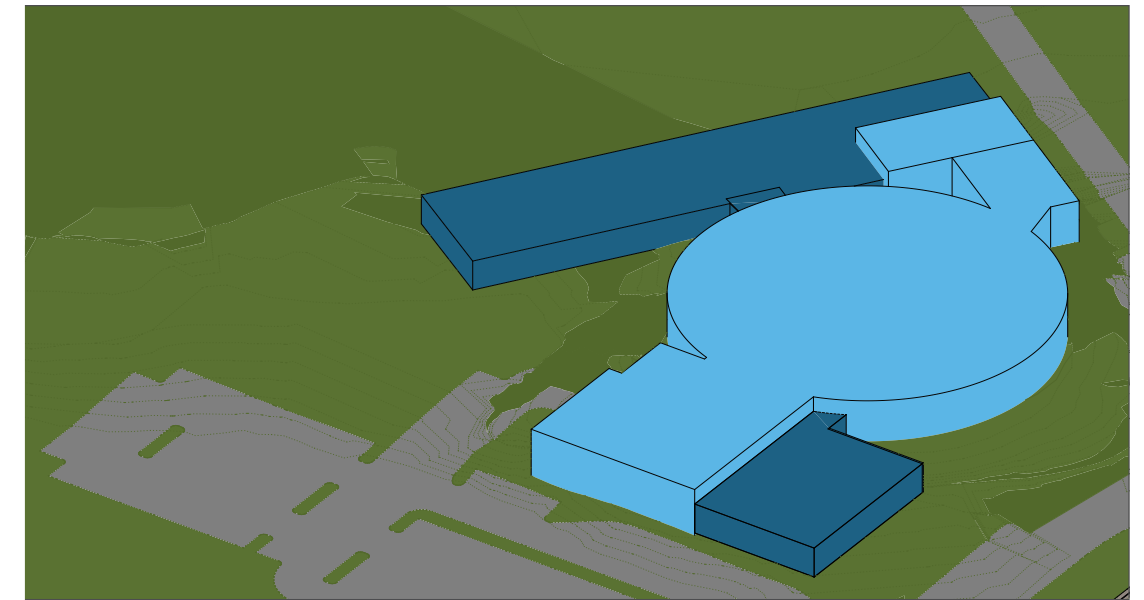
- Existing to Remain with Renovations
- New Construction
- Demolition or Removal
- Pavement
- Soft Landscaping
- 100 Year Flood Zone
- - - Approximate Property Line
- - - Existing Drainage Channels



OPTION 1B: CHES ADDITIONS & RENOVATIONS 22.5:1 STUDENT: TEACHER RATIO - NEW CONSTRUCTION



SITE PLAN



MASSING VIEW

LEGEND

- Existing to Remain with Renovations
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COMPARISON OF IMPROVEMENT OPTIONS FOR CLIFTON HILLS ELEMENTARY SCHOOL

11.01.2024

OPTION 1B: CHES ADDITIONS & RENOVATIONS 22.5:1 STUDENT: TEACHER RATIO - PROJECT DATA

SCOPE OF WORK	EST. SQUARE FOOTAGE (SF)	ESTIMATED COST	
		LOW / SF	HIGH / SF
New Construction		\$300	\$335
1 story classroom wing (Classrooms + Connector + Building Support)	20,400 SF	\$6,120,000	\$6,834,000
Administration/Core Services Addition	8,000 SF	\$2,400,000	\$2,680,000
Moderate Renovation		\$150	\$200
Lighting, Ceiling Tiles, Flooring(as needed), Sprinkler, window replacement, door replacement	51,651 SF	\$7,747,650	\$10,330,200
Light Renovation		\$100	\$150
N/A	0	\$0	\$0
Demolition			
*Remove Portables	0	\$0	\$0
Site Costs	Moderate	\$1,000,000	\$3,000,000
Sub-total		\$17,267,650	\$22,844,200
Contingency (10%) Due to complexity of construction phasing and site constraints		\$1,726,765	\$2,284,420
Total Estimated Cost		\$18,994,415	\$25,128,620

* Cost not yet determined associated with Demo/Relocation of existing portables.

** Does not include soft costs such as (Furniture, Fixtures, and equipment, Survey, Geotechnical, Architectural & Engineering Fees, Third Party testing, Permits, etc.)

COMPARISON OF OPTIONS

Use of a 12.5 Student: Teacher Ratio

Pros:

- Maintain operational + educational method by using same Student: Teacher Ratio
- Potential for designing with smaller typical classroom size

Cons:

- Requires more classrooms to reach the same capacity than using a larger ratio
- Results in larger overall scope of project
- Requires more human resources and operational costs

Use of a 22.5 Student: Teacher Ratio

Pros:

- Ratio consistent with the State of TN average
- Reduce human resource + operational costs with larger Student: Teacher Ratio
- Design with typical, larger classroom size
- Reduces overall scope of project

Cons:

- Less individualized teaching with larger ratio
- Change in the way education is delivered at CHES

Additions at Clifton Hills Elementary School

Pros:

- Continuity of school location for neighboring community
- Avoids the need to rezone elementary schools in the area

Cons:

- Difficult phasing required to relocate students temporarily during construction
- Potential for longer construction schedule due to phasing
- Complexity of designing new construction above flood zone and the premium costs associated with such construction
- Large addition triggers renovations and code compliance items at existing school
- Addition of students requires increased core services and educational support areas
- Limited potential for expandability
- Limited separation of construction from existing school increasing safety concerns
- Constraints on options for vehicular traffic patterns

COMPARISON OF IMPROVEMENT OPTIONS FOR
CLIFTON HILLS ELEMENTARY SCHOOL
AT EASTSIDE ELEMENTARY SCHOOL

HAMILTON COUNTY SCHOOLS

LEWIS GROUP ARCHITECTS

TABLE OF CONTENTS

Introduction

Option 2A: Eastside Elementary School Additions & Renovations **12.5:1 Student: Teacher Ratio**

- Description of Planning Approach
- Option 2A+2B Existing Site Conditions
- New Construction
- Project Data

Option 2B: Eastside Elementary School Additions & Renovations **22.5:1 Student: Teacher Ratio**

- Description of Planning Approach
- New Construction
- Project Data

Comparison of Options

- Pros & Cons

INTRODUCTION

Lewis Group Architects was asked to study solutions for providing permanent classrooms with a capacity of 800 students for Clifton Hills Elementary School (CHES). Because the existing conditions and phasing options at Clifton Hills Elementary School (CHES) are complex and difficult, LGA explored options in which the student population that could not be housed in the existing, permanent, non-portable structures of CHES could be rezoned to a different school. LGA looked for schools in which there was already sufficient capacity or where there was available open site to add capacity with a classroom addition. According to the Hamilton County Schools Utilization Report, neither of the nearest schools (Eastside and East Lake) had enough capacity to absorb the CHES students in the existing schools. However, Eastside Elementary School (EES) has favorable site conditions for a classroom addition. As part of this study, some existing conditions of the schools' unique facilities and operations had to be understood and are outlined below.

Current Enrollment: 740 CHES students, 597 EES students

Capacity of Existing Facility (excluding portables): 468 students at CHES, 639 students at EES (according to Hamilton County Schools)

Target Capacity or Growth for CHES: 800 students

Grades Served at CHES and EES: Pre-Kindergarten through 5th

Existing Number of Classrooms in CHES Permanent Structures (non-portable structures): 25 (not including existing teacher work area)

Number of Portable Classrooms in Use at CHES: 25

Current Student: Teacher Ratio at CHES: 12.5:1

Average Student: Teacher Ratio in Tennessee: 22.5:1

OPTION 2A: EASTSIDE ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS 12.5:1 STUDENT: TEACHER RATIO

DESCRIPTION OF PLANNING APPROACH

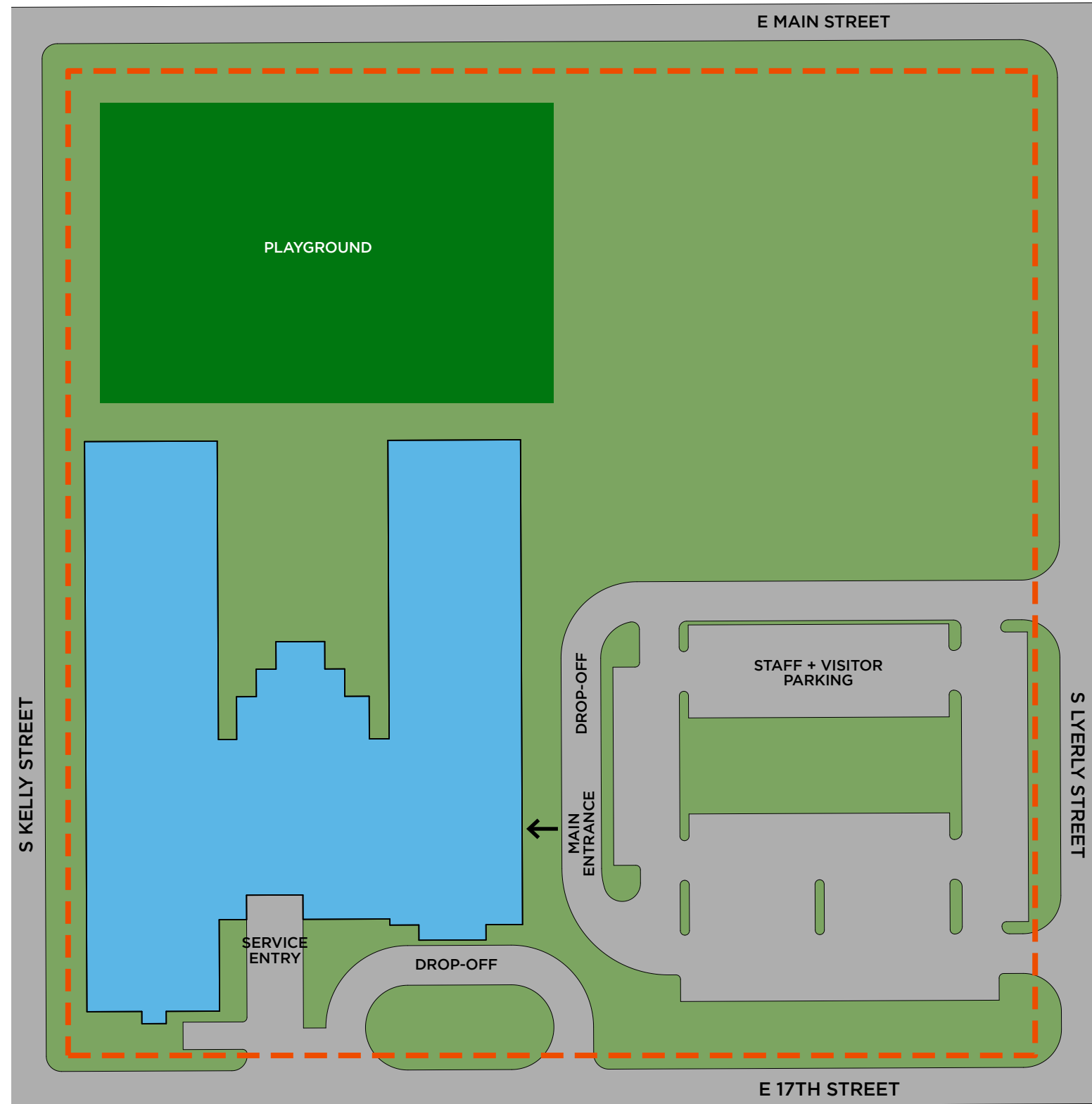
In this approach to expansion of CHES, LGA considered a total replacement of the existing portable classrooms with a permanent new classroom wing at EES using a Student: Teacher Ratio of 12.5 at both CHES and the EES addition. The addition of classrooms and students to EES would likely require an expansion of core services including educational support spaces such as resource rooms, RTI rooms, ESL classrooms, or other. It also includes larger spaces such as food service, media center, and physical education. Without further study into the existing programming at EES, it is difficult to know exactly what the scope of that expansion would be. We have included an area of 8,000 s.f. for some core services for the addition, but more study would need to be completed to establish a more detailed scope. Renovations to the existing schools (both CHES and EES) would also be determined by further study.

This option proposes the following:

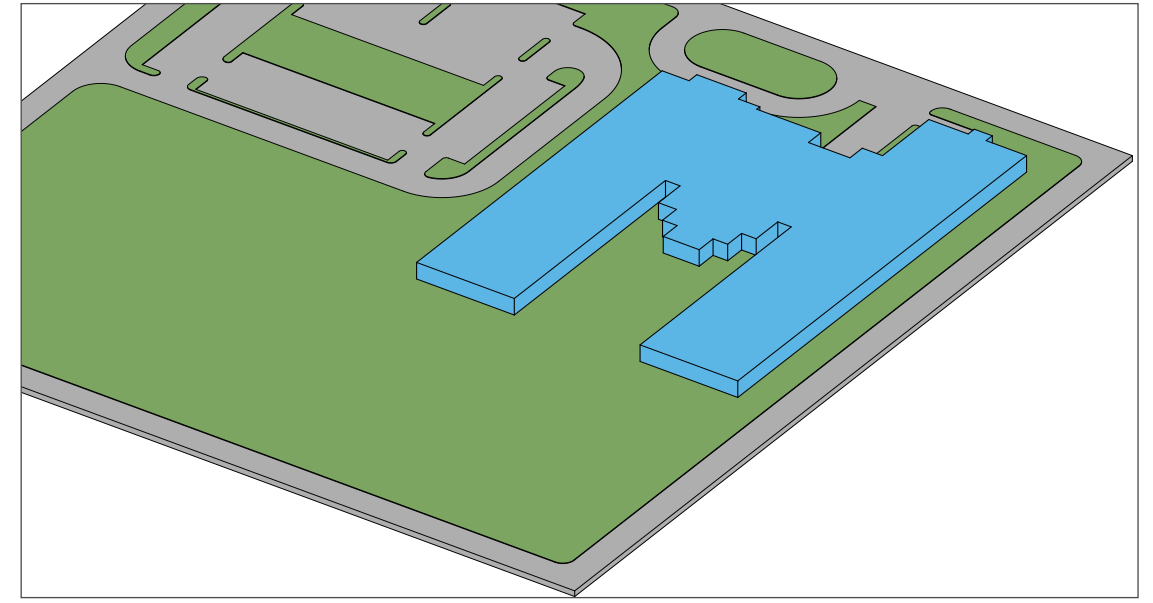
- Addition of T-shaped, 2-story classroom wing and core services suite on the north side of the site
- Minimal connectors at the ends of the 2 existing classroom wings of the existing school, facilitating ease of construction without complexity of phasing
- Potential to organize EES grade levels into primary and intermediate schools with some separate core services and separate entrances
- Inclusion of storm shelter in new classroom wing if directed by owner (not included in project data)
- Option to combine pairs of classrooms into larger classrooms in the future if the Student: Teacher Ratio increases
- Demolition/ relocation of portable classrooms at CHES after completion of construction at EES
- Optional moderate renovations at CHES determined by owner (Scope of possible renovations at EES requires further study.)
- Site improvements to vehicular flow and parking at EES
- Restoration of remaining unused land at CHES to landscaping

OPTION	2A		# OF CLASSROOMS	CAPACITY
Student: Teacher Ratio	12.5	Existing CHES	25	313
Typical Classroom Size	500-570 sf	New EES Classroom Wing	39	487
(typical classroom could include toilet)			TOTAL	800

OPTION 2A+B: EES ADDITIONS & RENOVATIONS - EXISTING SITE CONDITIONS



SITE PLAN

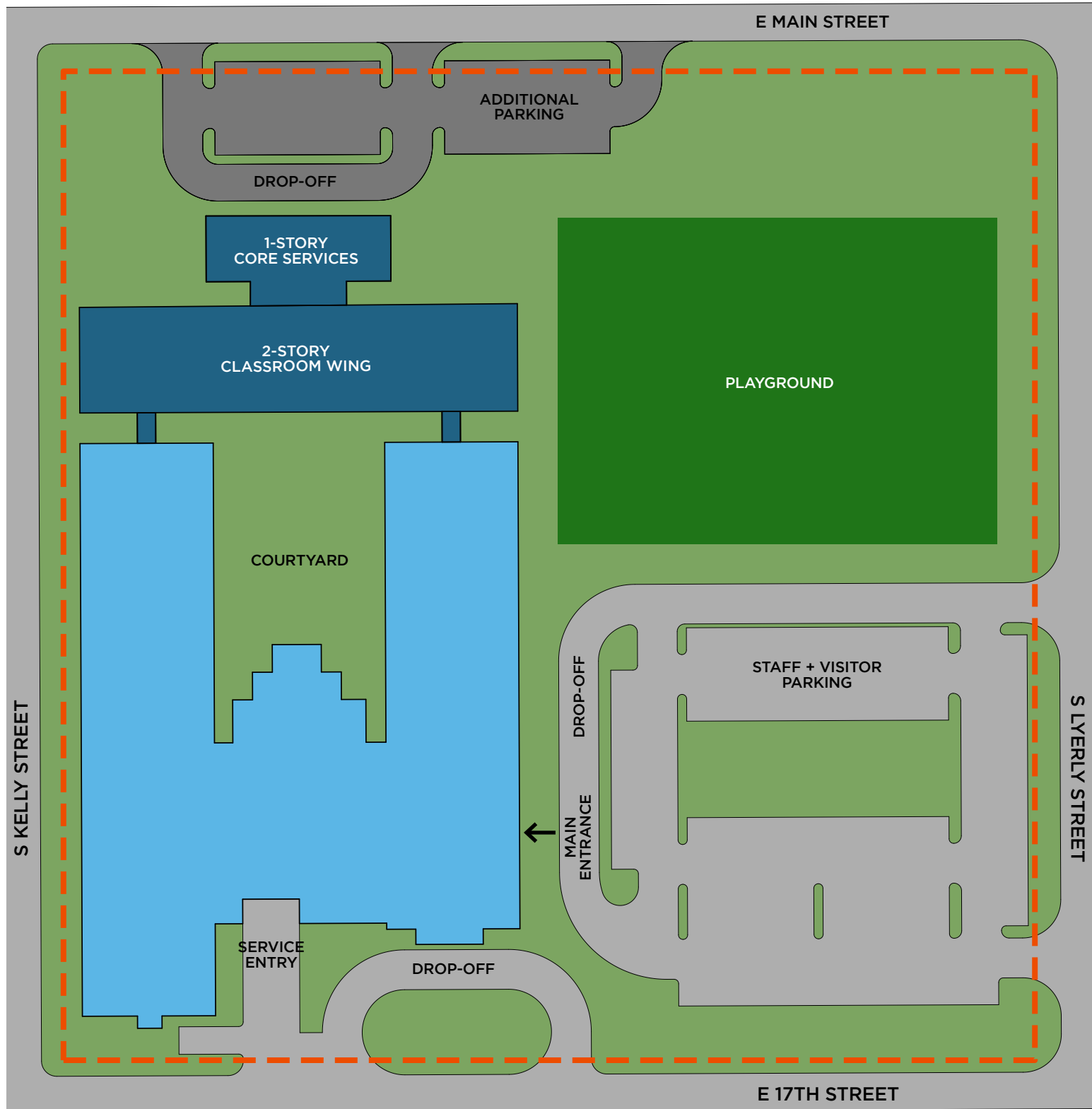


MASSING VIEW

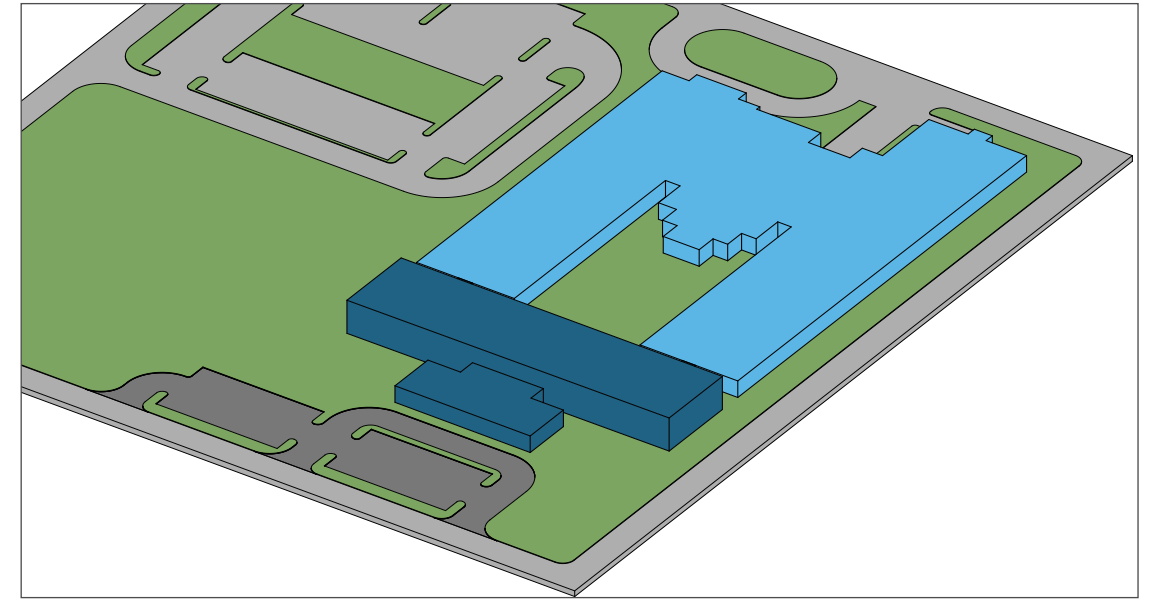
LEGEND

- Existing to Remain with Renovations
- New Construction
- Demolish
- Pavement
- Soft Landscaping
- Playground
- Property Line

OPTION 2A: EES ADDITIONS & RENOVATIONS 12.5:1 STUDENT: TEACHER RATIO - NEW CONSTRUCTION



SITE PLAN



MASSING VIEW

LEGEND

- Existing to Remain with Renovations
- New Construction
- Demolish
- Pavement
- Soft Landscaping
- Playground
- Property Line

OPTION 2A: EES ADDITIONS & RENOVATIONS 12.5:1 STUDENT: TEACHER RATIO - PROJECT DATA

SCOPE OF WORK	EST. SQUARE FOOTAGE (SF)	ESTIMATED COST	
		LOW / SF	HIGH / SF
New Construction		\$300	\$335
2 story classroom wing (Classrooms + Connector + Building Support)	38,300 SF	\$11,490,000	\$12,830,500
Administration/Core Services Addition	8,000 SF	\$2,400,000	\$2,680,000
Moderate Renovation		\$150	\$200
	0	\$0	\$0
Light Renovation		\$75	\$125
	0	\$0	\$0
Demolition			
*Remove Portables	0	\$0	\$0
Site Costs	Low	\$500,000	\$1,500,000
Sub-total		\$14,390,000	\$17,010,500
Contingency (5%)		\$719,500	\$850,525
Total Estimated Cost		\$15,109,500	\$17,861,025

* Cost not yet determined associated with Demo/Relocation of existing portables at CHES.

** Does not include soft costs such as (Furniture, Fixtures, and equipment, Survey, Geotechnical, Architectural & Engineering Fees, Third Party testing, Permits, etc.)

*** Further investigation is needed to determine if additional core services would be required. (Food Service, Media Center, Physical Education)

Optional Improvements:

Moderate Renovation to Clifton Hills Elementary		\$150	\$200
Renovation to CHES: Lighting, Ceiling Tiles, Flooring(as needed), Sprinkler, window replacement, door replacement	51,651 SF	\$7,747,650	\$10,330,200

OPTION 2B: EASTSIDE ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS 22.5:1 STUDENT: TEACHER RATIO

DESCRIPTION OF PLANNING APPROACH

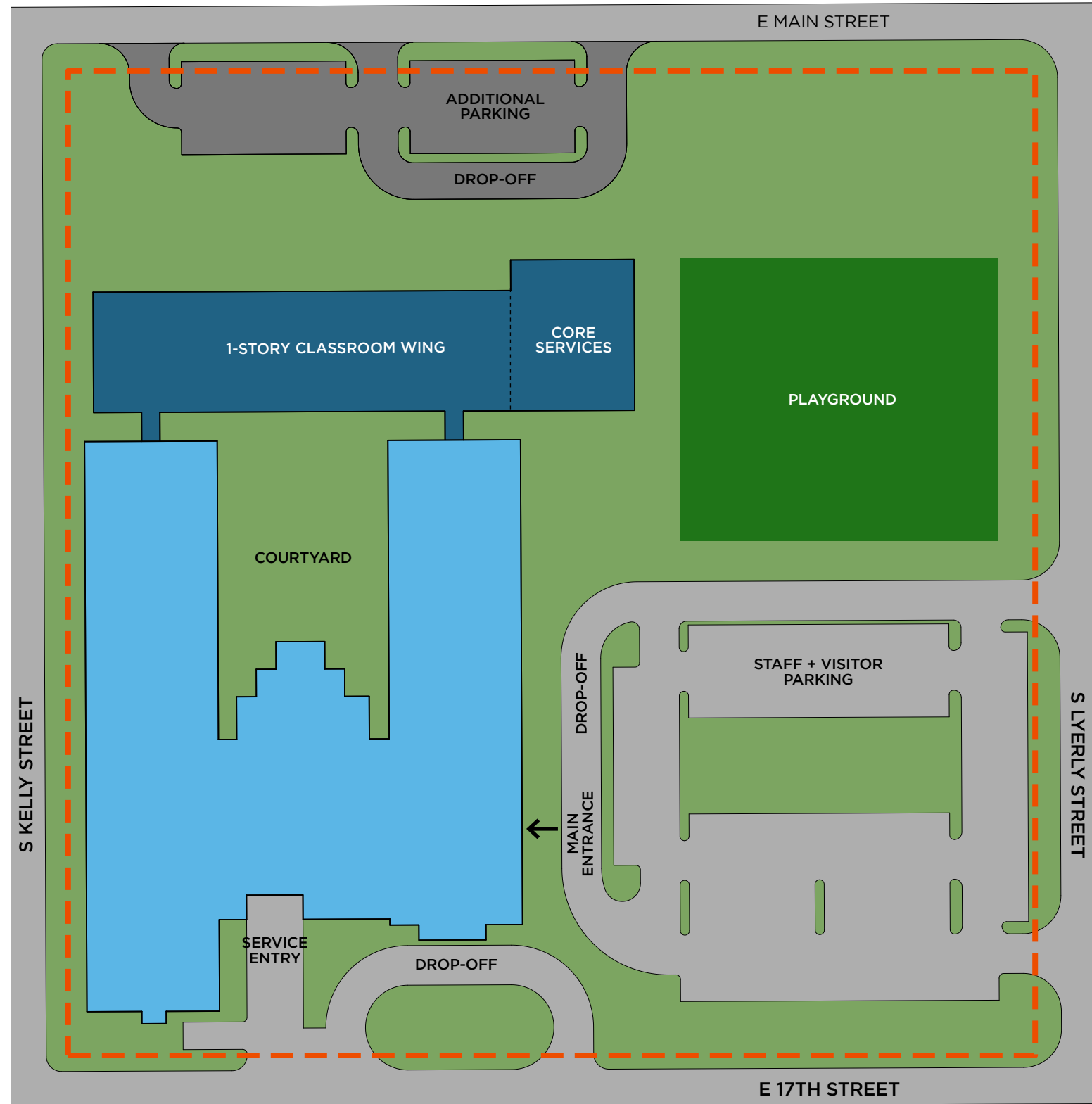
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This option proposes the following:

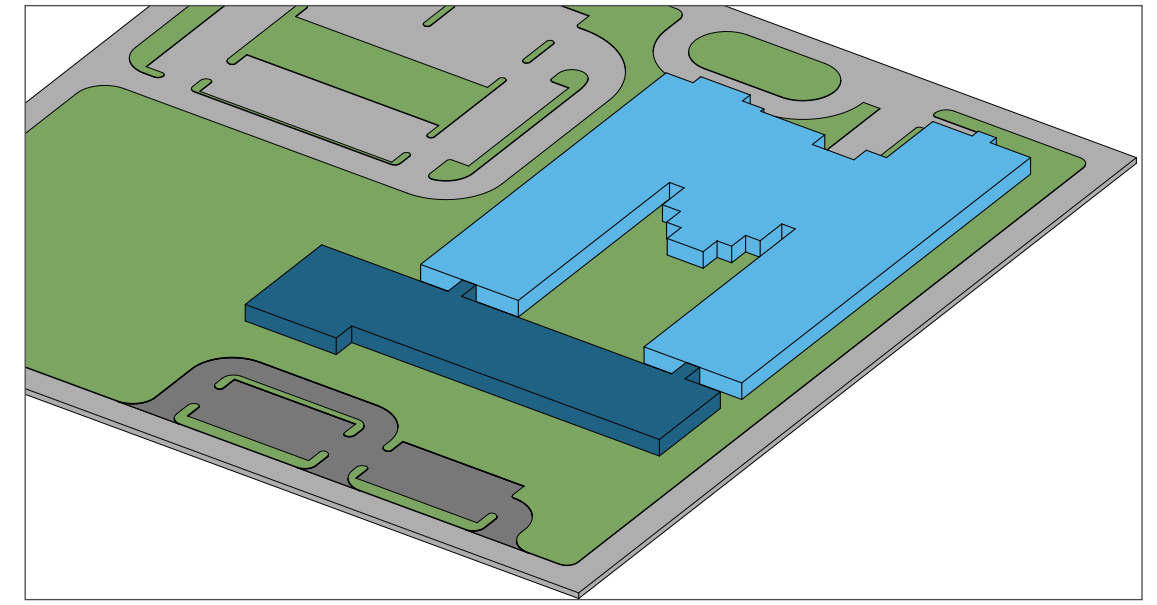
- Addition of bar-shaped, 1-story classroom wing and core services suite on the north side of the site
- Minimal connectors at the ends of the 2 existing classroom wings of the existing school, facilitating ease of construction without complexity of phasing
- Potential to organize EES grade levels into primary and intermediate schools with some separate core services and separate entrances
- Inclusion of storm shelter in new classroom wing if directed by owner (not included in project data)
- Demolition/ relocation of portable classrooms at CHES after completion of construction at EES
- Optional moderate renovations at CHES determined by owner (Scope of possible renovations at EES require further study.)
- Site improvements to vehicular flow and parking at EES
- Restoration of remaining unused land at CHES to landscaping

OPTION	2B		# OF CLASSROOMS	CAPACITY
Student: Teacher Ratio	22.5	Existing CHES School	25	563
Typical Classroom Size	900-970 sf	New EES Classroom Wing	11	247
(typical classroom could include toilet)		TOTAL	36	810

OPTION 2B: EES ADDITIONS & RENOVATIONS 22.5:1 STUDENT: TEACHER RATIO - NEW CONSTRUCTION



SITE PLAN



MASSING VIEW

LEGEND

- Existing to Remain with Renovations
- New Construction
- Demolish
- Pavement
- Soft Landscaping
- Playground
- Property Line

COMPARISON OF IMPROVEMENT OPTIONS FOR CLIFTON HILLS ELEMENTARY SCHOOL AT EES

11.01.2024

OPTION 2B: EES ADDITIONS & RENOVATIONS 22.5:1 STUDENT: TEACHER RATIO - PROJECT DATA

SCOPE OF WORK	EST. SQUARE FOOTAGE (SF)	ESTIMATED COST	
		LOW / SF	HIGH / SF
New Construction		\$300	\$335
1 story classroom wing (Classrooms + Connector + Building Support)	22,100 SF	\$6,630,000	\$7,403,500
Administration/Core Services Addition	8,000 SF	\$2,400,000	\$2,680,000
Moderate Renovation		\$150	\$200
	0	\$0	\$0
Light Renovation		\$75	\$125
	0	\$0	\$0
Demolition			
Remove Portables from CHES	0	\$0	\$0
Site Costs	Low	\$500,000	\$1,500,000
Sub-total		\$9,530,000	\$11,583,500
Contingency (5%)		\$476,500	\$579,175
Total Estimated Cost		\$10,006,500	\$12,162,675

* Cost not yet determined associated with Demo/Relocation of existing portables at CHES.

** Does not include soft costs such as (Furniture, Fixtures, and equipment, Survey, Geotechnical, Architectural & Engineering Fees, Third Party testing, Permits, etc.)

*** Further investigation is needed to determine if additional core services would be required. (Food Service, Media Center, Physical Education)

Optional Improvements:

Moderate Renovation to Clifton Hills Elementary		\$150	\$200
Renovation to CHES: Lighting, Ceiling Tiles, Flooring(as needed), Sprinkler, window replacement, door replacement	51,651 SF	\$7,747,650	\$10,330,200

COMPARISON OF OPTIONS

Use of a 12.5 Student: Teacher Ratio

Pros:

- Maintain operational + educational method by using same Student: Teacher Ratio
- Potential for designing with smaller typical classroom size

Cons:

- Requires more classrooms to reach the same capacity than using a larger ratio
- Results in larger overall scope of project
- Requires more human resources and operational costs

Use of a 22.5 Student: Teacher Ratio

Pros:

- Ratio consistent with the State of TN average
- Reduce human resource + operational costs with larger Student: Teacher Ratio
- Design with typical, larger classroom size
- Reduces overall scope of project

Cons:

- Less individualized teaching with larger ratio
- Change in the way education is delivered at CHES

Addition at Eastside Elementary School

Pros:

- Ease of construction on the EES site due to open site area and access points
- Eliminates the need for temporary relocation of student classrooms at CHES to a different site during construction
- Reduces construction schedule due to ability to continue construction during school operation
- Conventional construction possible with no previously known constraints such as flood zones
- Avoids triggers in International Existing Building Code for renovations at the older CHES facility

Cons:

- Expansion of core services and educational support areas at EES are likely due to increase in student population
- Renovations at EES might be triggered by International Existing Building Code due to additions

GATEWAY

Facility Report

MAY 28, 2024

For:



Hamilton County Property Management

4005 Cromwell Road, Chattanooga, TN 37421

Phone: 423-209-7960

By:

MTa
ARCHITECTURE & PLANNING

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TABLE OF CONTENTS

Pg 1	TOC
Pg 2	Purpose of the Report
Pg 3	Executive Summary
Pg 4 - 11	Task I
Pg 12 - 15	Task II
Pg 16	Task III, Task IV, Task V
Pg 17	Appendix

PURPOSE OF THE REPORT

MTa was hired to perform a report that includes the following:

1. Task I - Defining issues impacting the remodeling of the existing buildings.
 - a. The report will include a narrative of issues such as:
 - i. Redevelopment issues that will impact cost, such as:
 1. Change of Occupancy issues
 2. ADA / ICC 117.1 accessibility issues.
 3. City Ordinances.
 4. Current Building Code and Energy Code issues.
 5. Storm Shelter required by City and County codes.
2. Task II – Defining issues of how the existing building may impact a particular building program.
 - a. What limitations does MTA see in the existing site:
 - i. Easements and overall site constraints
 - ii. Parking
 - iii. Bus circulation
 - iv. Athletic fields or green space
 - v. Security
 - b. What limitations do we see in the “systems” that may have consequences for the space to operate as intended? i.e.:
 - i. Will the existing structural system allow certain program elements?
 - ii. Is the existing HVAC system currently configured in an acceptable way to be modified for its new use? Are there issues with controlling it in its new use?
3. Task III – Provide a listing of material serviceability concerns.
 - a. During our site visits, we will list building materials that we feel need to be improved during any future remodel. i.e. roofing, pavement, door hardware, etc.
4. Task IV – Provide a listing of additional research, reports, or surveys required to minimize any delays to design or construction.
5. Task V – Provide a schematic test fit, or layout, showing how a “Technical school” and an “Art’s based school” curriculum may coexist on this site.

Special Notes to consider:

1. *All financial costs noted in this report are indicated in today’s cost. No inflation factor has been added to any cost.*
2. *MTa assumes that the valuation of the buildings (for replacement cost) / and building construction cost would escalate in an equal fashion.*
3. *This report is limited and did not include:*
 - b. *Survey or detailed as-built documentation of the existing layouts.*
 - c. *Geotechnical, Historical, or separate Environmental studies.*
6. *The construction industry continues to experience escalations of cost and shortages of materials. The cost defined in this report will be based on historical information and information provided by local contractors. MTA did have the cost reviewed and vetted by a local contracting firm but this does not guarantee the accuracy of this information beyond the date of issuance.*
7. *All financial quantities listed in this project are without any contingency.*

EXECUTIVE SUMMARY

The possible liabilities for this project are summarized throughout this report. This Executive Summary is meant to highlight just the most significant issue in each of our project tasks.

Code:

The most significant issue provided in the building code is what the State of Tennessee expects to occur for this "Business" occupancy to be transformed into an "Educational" occupancy. The greatest liability in both cost and schedule consequence is the requirement to have a full Structural report accomplished on this 59-year-old group of buildings. The requirement to change "Occupancies" on this building is our largest concern as it applies to both design and construction cost.

Program:

The most significant issue provided in "possible building programs" is the request to place a full auditorium with an orchestra pit and full working stage within this existing structure. As noted in the diagram in section Task 2, Building notes 1b and 1c, there is no existing area on any of the 4 levels to place an auditorium with a working stage or a competition gymnasium due to ceiling height requirements.

Serviceability:

The most significant issue as it applies to the existing building materials or systems is the age and type of mechanical system currently serving the existing facility. Currently, 56 rooftop HVAC units serve the building, and an estimated half of those units are 20 years old. A cost/benefit review of this system should be commissioned prior to renovating the school with this existing system in place.

Additional Reports:

Finally, we believe the following reports will be required to proceed with any large school project:

1. A structural report will be required. As noted previously this report will be the keystone on which the requests for the "Change of Occupancy" will rest.
 - a. Within this report a geotechnical report may be required to specifically define the seismic site classification of this property.
2. A Traffic Study will be required with City permitting.
3. Asbestos testing did not occur during the Phase 1 ESA. A separate study will be required before demolition will be permitted by the Chattanooga / HC Air Pollution Control Board.
4. ADA review of the existing elevators and lifts.
5. It is possible the City of Chattanooga may require a tree survey as the basis of improvements to the site due to the change of occupancy.

TASK I - DEFINING ISSUES IMPACTING REMODELING

The existing facility was built in 1965 per the Hamilton County Assessor of Property. As constructed, the building is a conglomeration of several buildings that total 189,456 SF. Sitting on 11.18 acres, the parking lot is configured to park 480 vehicles. The property is zone C-3. The property is within the limits of the Urban Overlay zone but is not within the limits of the form-based code. The property is also within the Short-term vacation rental zone.

The building is a steel-framed building with both masonry and metal stud infill. The exterior finish is primarily masonry veneer. We would expect that this building would be considered by Authorities Having Jurisdiction (AHJ) as a Business Occupancy. In our research, it appears that the West Buildings (called the Gateway Strip) were constructed as a Construction Type IVB – unprotected. Separated from the West Building by a 4-hour firewall, the East buildings should be considered a Construction Type 2B - unprotected. The existing building is sprinkled.

The existing facility has not been condemned or decommissioned. Nor are there any official code-related complaints towards it with the City Building or State Fire Marshal's office that we could determine. This 59-year-old building still has an active "Certificate of Occupancy" however it should be noted that many of the existing systems may have exceeded their standard lifespans.

Early in our study, it became clear that a few issues were going to drive any future work on this facility. There are at least 4 significant considerations that need to be considered when reviewing possible code-driven scope upgrades.

1. **Change of Occupancy.** There are mandated upgrades that will be required when this building is changed from a "Business occupancy" to an "Educational occupancy". All these requirements are explained within Chapter 10 of the 2012 International Existing Building Code and are based on the higher "risk category" as defined by Table 1604.5 of the IBC.

The State of Tennessee requires this building to change occupancy if it is to serve K-12 students. All the requirements to change the "Occupancy" are required, without limits on cost or schedule.

*The State is currently working to update its codes to the 2021 International Building Code. The current proposal has an exception that won't mandate the Storm Shelter requirement for all schools until July 1, 2026.

2. Based on the 2012 International Existing Building Code (Tennessee Fire Marshal Adopted Code). This project would be considered a Level 3 alteration. This code doesn't mandate a full upgrade to the current code but does impact design decisions. The main concerns to be addressed would be:
 - a. Revising accessibility
 - i. None of the restrooms are ADA accessible, as well as none of the doors have the required clearances to meet current ADA. The stairwells are too narrow for the occupancy load.
 - b. A Structural analysis of the building.
 - i. Will be required to show that current structural systems are performing at the required design loads.
 - c. Adding "Fresh Air" supplies to all the spaces.
 - d. Revising all of the Fire Alarm systems.
 - i. The new system will be required to meet current codes, including horns and strobes.

3. Based upon a City of Chattanooga Ordinance – Sec 17-3.6.1 – if a building remodel cost is over 30% of the replacement cost, one must upgrade the building to meet current codes (ADA, Energy, and Building). This concept is important knowing that full upgrades to different systems could require more cost than desired.

Based on the remaining two known issues, we considered that the City's code was going to be most stringent and defined the "replacement cost of the facility" per Code section 101.4.7.1. (attached below).

The 2023 RS Means defines this type of space to have a cost per Square Foot (\$/SF) cost of \$226.40. This figure would make the city-approved replacement cost **\$42,892,800**. 30% of that cost is **\$12,867,800**. That sum is the financial limit placed by the City to keep this project from requiring full building code updates if expended in a single phase.

MTa believes the replacement cost of this facility is closer to **\$56,836,000**. We are using the numbers provided by public information noted in the City Code to evaluate the replacement cost for this report. In the last 3 years, the replacement cost of all buildings has increased significantly due to the substantial increase in building construction costs.

4. Current City issues impacted by Energy Codes – while we believe this issue provides the least amount of liability for this project – the Existing HVAC units may be impacted by the Energy code. Also, none of the existing entries have vestibules (or air locks) which is required by the current code.
5. Based on the occupancy of this structure (educational), and the current building code in the City of Chattanooga, MTA believes this Change of Occupancy will require the addition of a Storm shelter (IBC 423.4 & ICC 500). When Hamilton County and the City of Chattanooga upgraded their building codes to the 2018 International Building Codes (IBC) this became the rule.

Below is a link to the 2018 IBC section 423.4:

<https://up.codes/viewer/knoxville/ibc-2018/chapter/4/special-detailed-requirements-based-on-occupancy-and-use#423>

Below is a link to the Highlights on Storm Shelters & ICC 500:

https://www.fema.gov/sites/default/files/documents/fema_ICC-500-2020-highlights_publication_082021.pdf

Below is a link to the standard ICC 500:

https://codes.iccsafe.org/content/ICC5002020P1/chapter-1-application-and-administration#ICC5002020P1_Ch1_Sec104

Not knowing the ultimate scope of the project, MTa considered possibilities towards scope to determine how they would fair against the City's limiting cost of \$12,867,800 (30% of Replacement Cost). We ended up exploring 6 possible construction scopes. For this exercise, we populated construction costs based on assumed scopes of work & allowances. These scopes may be revised during further programming and design work, but they are a good starting point for further discussions.

It is important to recognize the existing building area per floor to understand how each scenario is derived. The existing building has four floors and lays out in this configuration, starting on the lowest level (facing downtown):

1 st floor	59,300 SF
2 nd floor	78,779 SF
3 rd floor	29,577 SF
<u>4th floor</u>	<u>21,800 SF</u>
Total area	189,456 SF

It was not assumed that every SF of the existing area would be effectively used in any of these remodels. That is why, for instance, we only use 33,000 SF of the 59,300 SF indicated on the lowest level.

HCDE has provided MTa with a preliminary building program for CCA. This program was used in the development of scenario No. 3. The total of the program area was 155,450 SF for the 6th -12th School for the Arts. MTa added an additional area to the theater area making out a new CCA Program Area 156,700 SF.

In the development of most of these scenarios, exterior work was excluded. In the two new school scenarios (Nos. 4 & 5), the new buildings obviously received new exteriors. In scenario No. 6, the buildings received a new school entry.

In Scenarios Nos. 3, 4, & 5, a new 20,000 SF Auditorium was constructed. This production theater is significantly more expensive than any surrounding "educational" construction and has been tallied separately for transparency. The CCA request for this program element included a full working stage with curtains and rigging, an acoustic shell and acoustical clouds, and an orchestra pit with pit fillers allowing the stage to be extended.

Scenario No. 1 – Minimal work for Technical School on the first level. This includes:

1. The work required to upgrade as required by the State to change occupancy.
 - i. Structural Modifications. Fire Alarm, and other requirements of the Existing Building Code.
2. The adding of a storm shelter per the City of Chattanooga building code requirements for change of occupancy.
3. The modification of 33,000 SF (of the 59,300 SF) on the first level only.
4. The remainder of the building is to be unimproved and will be used "as-is".
5. Only a Catering kitchen is provided in this scenario.
6. The cost of equipment (i.e. saws, dust collection, air compressors, etc.) is not included in this costing scenario.
7. The interior of the Construction Career Center (Mary Ann Garber) is the level of expectation for this work.
8. Assumed the Existing HVAC system would remain.

Gateway Development Scenario No. 1				
Building Revisions Required for Occupancy Change				
189,456	\$15	per SF	\$2,841,840	Allowance for Structural, Fire Alarm revisions (overall building - 4 floors)
Addition of Exterior Modular Storm Shelter				
2	\$374,417	each	\$748,834	Allowance based on Occupant load of 200
Site Revisions for Technical school				
1	\$500,000	AI	\$500,000	Allowance for Fire Line modifications storm shelter placement and site adjustments for traffic modifications
Building Revisions for Technical school program				
33,000	\$200	per SF	\$6,600,000	Allowance for Technical School program revisions
			\$10,690,674	Sub-total for Scenario No. 1
			\$1,069,067	GC OH&P
			\$11,759,741	Total Construction Cost for Scenario No. 1 (under the 30% Replacement cost threshold of \$12,867,800)
			7.3897%	Designer's Fee percentage
			\$869,010	Designer's Fees
			Unknown	Furniture, Fixtures, Equipment
			Unknown	Special inspections
			\$12,628,752	Project Cost

Scenario No. 2 – Minimal work for Technical School on the first level and the minimal work required to cost-effectively start a High School program without any athletic programs. This includes:

1. The work required to upgrade as required by the State to change occupancy and to upgrade the full existing building as required by the City of Chattanooga code.
2. The modification of 161,000 SF (189,456 SF total) on all 4 levels.
3. A full kitchen is provided in this scenario.
4. Exterior precast storm shelters for 800 occupants are provided.
5. A gymnasium space will be provided for PE, but not for competitive sports.
6. The cost of equipment (i.e. saws, dust collection, air compressors, etc.) is not included in this costing scenario.
7. The interior of the Construction Career Center (Mary Ann Garber is the level of expectation for this work.)
8. Assumed the existing HVAC system would be replaced.

Gateway Development Scenario No. 2				
Building Revisions Required for Occupancy Change				
189,456	\$15	per SF	\$2,841,840	Allowance for Structural, Fire Alarm revisions
Kitchen and serving lines				
1	\$1,300,000	800 Occ	\$1,300,000	Kitchen with all new equipment
Addition of Exterior Modular Storm Shelter				
8	\$374,417	each	\$2,995,336	Allowance based on Occupant load of 800
Site Revisions for of High school				
1	\$750,000	AI	\$750,000	Allowance for Fire Line modifications storm shelter placement and site adjustments for traffic modifications
HVAC Revisions with new System				
189,456	\$62	per SF	\$11,746,272	Allowance for new HVAC systems
Building Revisions for Technical School program				
33,000	\$200	per SF	\$6,600,000	Allowance for Technical School program
Building Revisions for High school program				
128,000	\$185	per SF	\$23,680,000	Allowance for High School program
			\$49,913,448	Sub-total for Scenario No. 2
			\$4,991,345	GC OH&P
			\$54,904,793	Total Construction Cost for Scenario No. 2
		6.6392%		Designer's Fee percentage
			\$3,645,261	Designer's Fees
		Unknown		Furniture, Fixtures, Equipment
		Unknown		Special inspections
			\$58,550,053	Project Cost

Scenario No. 3 – Provide Minimal work for Technical School on the first level. Remodeling as required to host The Chattanooga School for Creative Arts program with a new production theater. This includes:

1. The work required to upgrade as required by the State to change occupancy and to upgrade the full existing building as required by the City of Chattanooga code.
2. The modification of 169,700 SF (189,456 SF total) on all 4 levels.
3. Programmatically this is the same as Scenario No. 3 except for Areas provided specifically for CCA's program of 156,700 SF.
4. The addition of a 20,000 SF Auditorium with a working stage. This space will provide the required storm shelter.
5. Assumed the existing HVAC system would be replaced.

Gateway Development Scenario No. 3				
Building Revisions Required for Occupancy Change				
189,456	\$15	per SF	\$2,841,840	Allowance for Structural, Fire Alarm revisions
Kitchen and serving lines				
1	\$1,700,000	1,100 Occ	\$1,700,000	Kitchen with all new equipment
Site Revisions for CCA				
1	\$2,000,000	Al.	\$2,000,000	Allowance for Fire Line modifications and site adjustments for traffic modifications
HVAC Revisions with new System				
189,456	\$62	per SF	\$11,746,272	Allowance for new HVAC systems
Building Revisions for CCA program				
136,700	\$185	per SF	\$25,289,500	Allowance for Specific Program revisions
Building Revisions for Technical program				
33,000	\$200	per SF	\$6,600,000	Allowance for Specific Program revisions
New Theater Addition for CCA program				
20,000	\$1,000	per SF	\$20,000,000	Allowance for theater and ancillary support spaces
			\$70,177,612	Sub-total for Scenario No. 3
			\$7,017,761	GC OH&P
			\$77,195,373	Total Construction Cost for Scenario No. 3
			6.4934%	Designer's Fee percentage
			\$5,012,619	Designer's Fees
			Unknown	Furniture, Fixtures, Equipment
			Unknown	Special inspections
			\$82,207,992	Project Cost

Scenario No. 4 – Provide Minimal work for Technical School on the first level. Remodel the 2nd level with the High School programmatic area. The two upper levels will remain mostly “as-is” and will continue to operate as a business occupancy. This includes:

1. The work required to upgrade as required by the State to change occupancy and to upgrade the full existing building as required by the City of Chattanooga code.
2. The modification of 111,000 SF (189,456 SF total) on the two lower levels.
3. Programmatically this school can hold up to 800 students but will be limited to providing trade-type electives on the lower level.
4. Assumed the existing HVAC system would be replaced on the lower two levels only.

Gateway Development Scenario No. 4				
Building Revisions Required for Occupancy Change				
189,456	\$15	per SF	\$2,841,840	Allowance for Structural, Fire Alarm revisions
Kitchen and serving lines				
1	\$1,300,000	800 Occ	\$1,300,000	Kitchen with all new equipment
Addition of Exterior Modular Storm Shelter				
8	\$374,417	each	\$2,995,336	Allowance based on Occupant load of 800
Site Revisions for of High school				
1	\$750,000	AI	\$750,000	Allowance for Fire Line modifications storm shelter placement and site adjustments for traffic modifications
HVAC Revisions with new System				
111,000	\$62	per SF	\$6,882,000	Allowance for new HVAC systems
Building Revisions for New Main Entry				
2,000	\$700	per SF	\$1,400,000	Allowance for new High School Entry with elevator
Building Revisions for Technical School program				
33,000	\$200	per SF	\$6,600,000	Allowance for Technical School program
Building Revisions for High school program				
78,000	\$185	per SF	\$14,430,000	Allowance for High School program
			\$37,199,176	Sub-total for Scenario No. 4
			\$3,719,918	GC OH&P
			\$40,919,094	Total Construction Cost for Scenario No. 4
			6.7704%	Designer's Fee percentage
			\$2,770,397	Designer's Fees
			Unknown	Furniture, Fixtures, Equipment
			Unknown	Special inspections
			\$43,689,491	Project Cost

Summary of Scenarios

As you can see the only Scenario that works within the limiting cost of \$12,867,800 (30% of Replacement Cost) is the first one. All other scenarios must be upgraded to meet the current Chattanooga Code which is the 2018 IBC or completed within a phased project.

Gateway Development Scenarios		
Scenario	Construction Cost	Project Cost
Scenario No. 1	\$11,759,741	\$12,628,752
Scenario No. 2	\$54,904,793	\$58,550,053
Scenario No. 3	\$77,195,373	\$82,207,992
Scenario No. 4	\$40,919,094	\$43,689,491

Special notes of clarification

In each of the first 3 scenarios, there is an allowance to upgrade the structure as will be required for the Change of Occupancy. This Allowance is just "a guess" until further exploration and structural evaluations are made.

The cost of "significant revision" to the existing HVAC system due to the age of the existing system is not included in scenario 1. In scenarios 2 and 3 the HVAC systems are to be replaced before the remodeled finish ceilings are installed. In scenario 4, only the lower two levels are replaced. The cost to replace the existing rooftop systems in favor of a more energy-efficient and maintenance-friendly system is \$62 / SF.

Project Cost includes estimated construction costs and estimated building design fees based on the State Fee Schedule. This cost does not include the following:

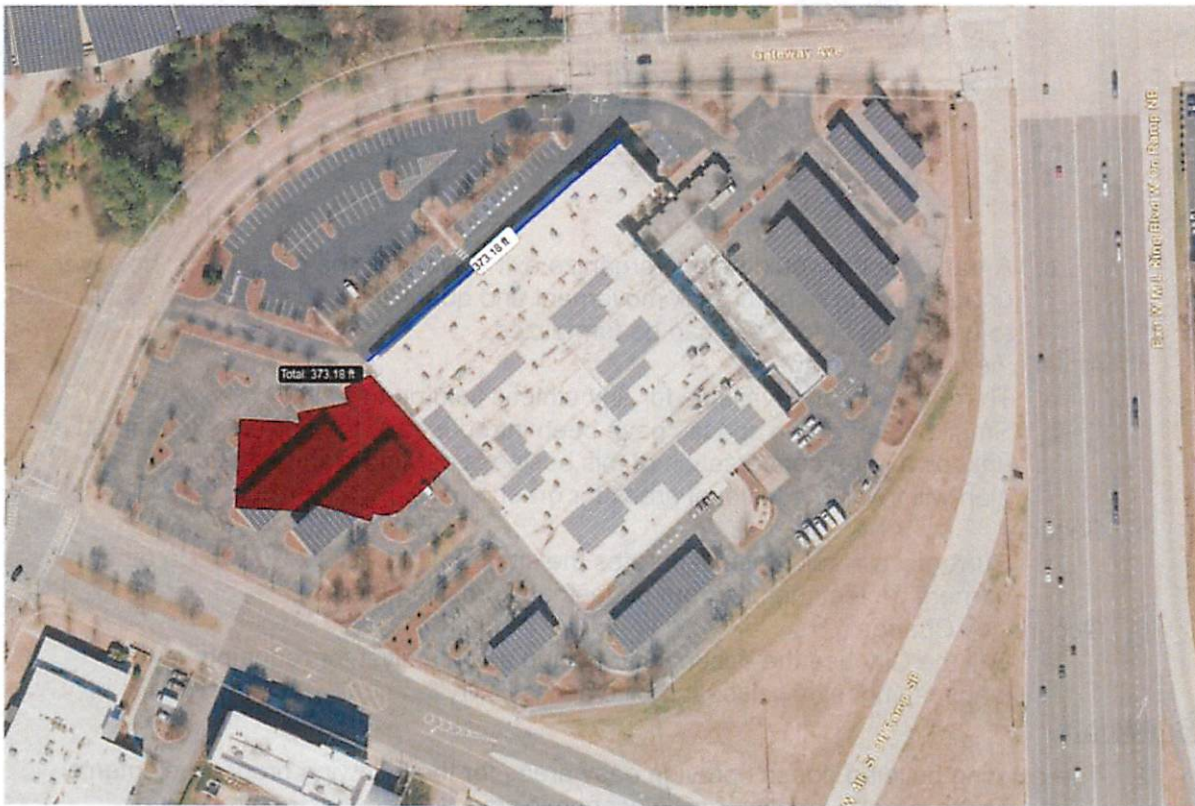
1. Civil Design fees.
2. Geotechnical Testing or report cost.
3. Asbestos testing and abatement documentation.
4. FFE (Furniture, Fixtures & Equipment) cost.
5. Permit review or permit fees.
6. Survey as-built documentation of existing construction.
7. Special inspections or construction material testing.
8. Cost of permitting.

TASK II - DEFINING ISSUES OF HOW THE EXISTING BUILDING MAY IMPACT A PARTICULAR BUILDING PROGRAM

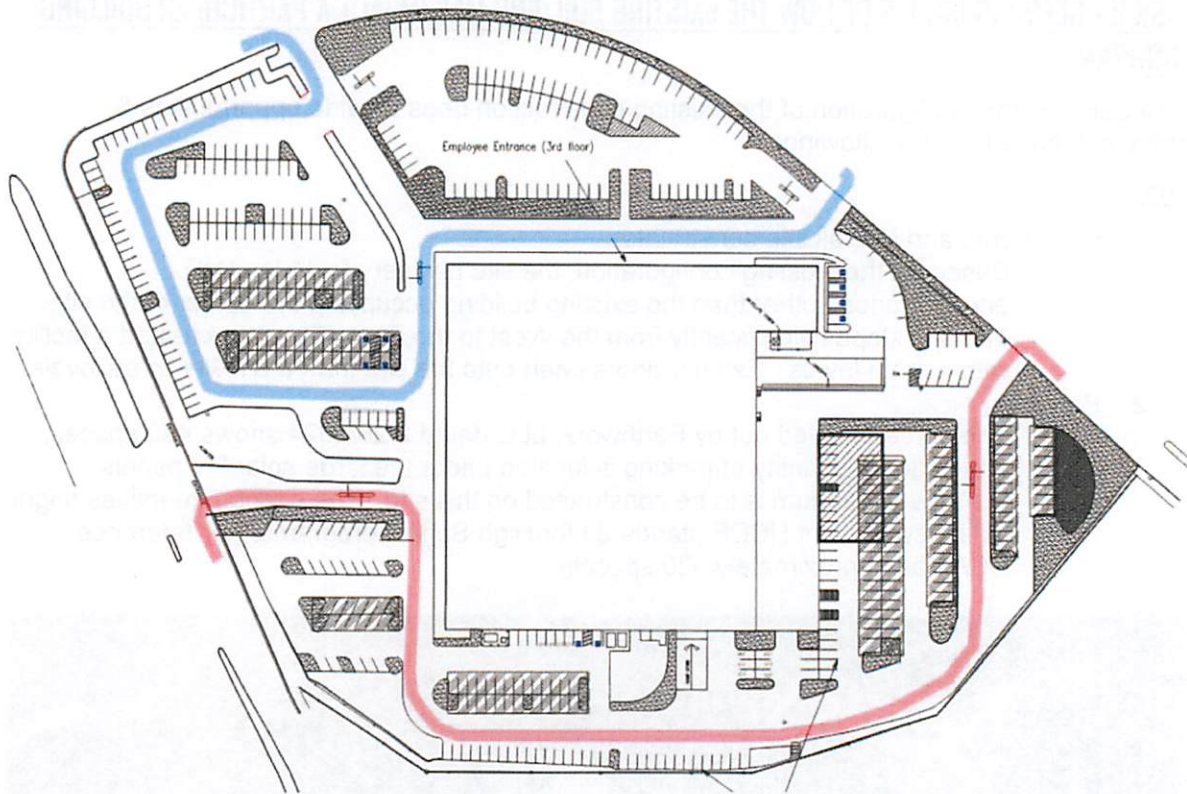
MTa believes the configuration of the existing construction does provide opportunities & limitations based on the following:

Site:

1. Easements and overall site constraints
 - a. Based on the existing configuration, the site has very few “deeded” encumbrances other than the existing building occupying the center of the site.
 - b. The site slopes significantly from the West to the East. This has created a facility with 4 main levels. Exterior doors open onto the site from the lower three levels.
2. Parking
 - a. The survey carried out by Earthworx, LLC dated 2/26/2024 shows 480 spaces.
 - b. A significant quantity of parking is located under the large solar PV panels.
 - c. If a new auditorium is to be constructed on this site. The parking quantities might fall below current HCDE standards for High School programs. (for reference - CCA has approximately 320 spaces).



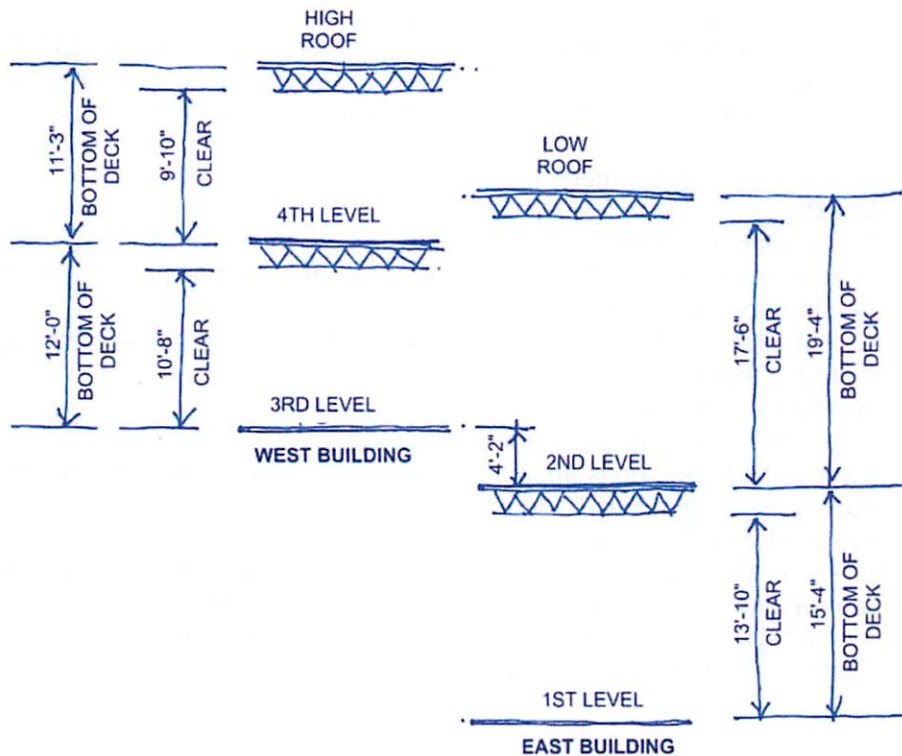
3. Bus circulation
 - a. It is currently unknown what the bus load will be for this school, however with the current configuration of 4 entries and exits – one could deduce that vehicular circulation will need to be reformatted to minimize conflicts with the car/ bus routes.



- b. A traffic report would help to organize exit ways onto the city streets; however, an understanding of both peak movement and quantities of cars and buses will need to be known before this can be formalized.
- 4. Athletic fields or green space
 - a. There is no room available for any athletic field on this site.
 - b. Small pocket green spaces have been introduced in the current site plan. It is unknown if the conversion of this business parking plan to an educational site plan will free up additional areas for green space.
- 5. Security
 - a. Currently a 4' tall fence separates the site from the TDOR ROW. No other barriers protect the site from pedestrians crossing the site.
- 6. Occupancy Change
 - a. Will the City use the occupancy change as a catalyst for requiring new landscaping, sidewalks, and bike accessibility?

Building:

- 1. The existing building doesn't provide easy areas for the following program elements:
 - a. There is not a location for an economic start on a chemistry lab:
 - i. Acid neutralization tank and chemical piping.
 - ii. Hoods and MUA/ Gas / Chemistry casework/ eyewashes/ EPO/ etc.
 - b. There is not a good location for a competition gymnasium area:
 - i. Any converted space will need to be reviewed for ceiling height and acoustical separation. It is currently assumed that this area will only allow PE activities to occur.



GENERAL FLOOR LEVEL SKETCH
NTS

- c. There is not an appropriate space for any production theater to occur (Height issues noted in last bullet 1b).
- d. There is not a cost-effective place to locate a kitchen.
2. Will the existing structural system allow certain program elements?
 - a. The current structural system must be evaluated further to ensure that it meets the requirements for an occupancy change (as noted in Task I, paragraph 1).
 - b. This review can also determine:
 - i. If modifying the existing structural system will allow a storm shelter to be housed in the existing building.
 - ii. What are the requirements to support large fresh air HVAC Units?
 - iii. Verify all egress paths are loaded for 100 lbs/ft.
 - iv. Verify if a geotechnical report is needed to confirm seismic restraints of hanging ceilings, gas piping, fire protection, and HVAC systems.
3. Firewalls
 - a. How will the delineation of the firewalls mandate awkward circulation patterns by controlling the location of existing rated openings?
 - b. What liabilities does the school have to the unknown level of penetrations in the existing firewalls?
4. Stairs
 - a. How will the existing vertical circulation (stairs) need to be modified to provide acceptable egress from each level?
 - b. Each stair will require evaluation of all aspects (handrail and guardrail configuration, landing, tread, and riser proportions, etc.).
5. A review of Sun Control devices (awnings, canopies, or shades) is necessary.

6. Access Control / Security systems will need to be vetted.
 - a. Access control is in place, classroom doors will need to be revised with intruder locksets.
 - b. Visitor vestibules and intruder-resistant glass film have not been used in the existing.
 - c. Need to discuss perimeter fencing.
7. Plumbing fixtures
 - a. Many will need to be replaced for new use.
 - b. A new grease interceptor will be required for the new kitchen. Existing to be decommissioned and removed.
8. HVAC - Is the existing HVAC system currently configured in an acceptable way to be modified for its new use?
 - a. Are there issues with controlling it in its new use?
 - b. Is it acceptable to reuse all existing ductwork?
 - c. 75% of the HVAC units appeared to be near the end of serviceable life. (a full survey needs to occur).
 - d. Fresh Air supply will need to be added.
9. Electrical – The existing electrical service on the lower level was sized to run BCBS printing operations. Will this suffice for technical school loading?
 - a. Lighting fixtures are not standard, some tubes / some LED.
 - b. Fire Alarm will need major revision.

TASK III – PROVIDE A LISTING OF MATERIAL SERVICEABILITY CONCERNS

During site visits, MTa reviewed miscellaneous building materials and systems and will list building materials that we feel need to be improved during any future remodel. i.e. roofing, pavement, door hardware, etc.

(List is attached to Appendix)

TASK IV – PROVIDE A LISTING OF ADDITIONAL RESEARCH, REPORTS, OR SURVEYS REQUIRED

MTa believes the following list of additional research, reports, or surveys should be considered to minimize any delays to design or construction.

6. Additional construction documents (especially anything that pre-dates 1997). The current list of known documents is:
 - a. Partial Preliminary Plans by Frank McDonald, 2/14/1997
 - b. Plans by Frank McDonald – Renovations to Gateway Plaza, 7/26/2002.
 - c. Plans by Artech – Exterior Revisions, 5/18/2009
 - d. Plans by Artech – Interior Renovation, 7/07/2009
 - e. Plans by Artech – Addition, 1/07/2004
7. **A structural report will be required. As noted previously this report will be the keystone on which the requests for the “Change of Occupancy” will rest.**
8. Having the PV energy sale contract and any particulars allowing the alteration of the existing system is needed. We assume at least one of these arrays will need to be modified in the future.
9. A Traffic Study will be required with City permitting.
10. Asbestos testing did not occur during the Phase 1 ESA. A separate study will be required before demolition will be permitted by the Chattanooga / HC Air Pollution Control Board.
11. ADA review of the existing elevators and lifts.
12. A Cost / Benefit analysis of the existing mechanical system would provide important decision-making information.

TASK V – PROVIDE A SCHEMATIC TEST FIT

1. In the test fit below, MTa shows how a “Technical school” and an “Art’s based school” curriculum may coexist on this site. A rough program (CCA Facilities Requirements) was provided by Hamilton County Department of Education and is the basis of this work.

(Test layouts are attached to the Appendix)

APPENDIX

All attachments are found at this link ([Gateway Report](#))

Supporting documents

1. Task III – Material Serviceability Concerns
2. Task V – Schematic Test Fit
3. City of Chattanooga Code of Ordinances – Section 101.4.7.
4. 2018 IBC – section 423.4 Storm Shelters
5. FEMA ICC 500 highlights
6. CCA Facilities Requirements
7. 2024 HCDE Initial Program for CCA

Plans and construction documents (most information delivered as hard copy)

1. Partial Preliminary Plans by Frank McDonald, 2/14/1997 (hard copy)
2. Plans by Frank McDonald – Renovations to Gateway Plaza, 7/26/2002 (hard copy)
3. Plans by Artech – Exterior Revisions, 5/18/2009 (hard copy)
4. Plans by Artech – Interior Renovation, 7/07/2009 (hard copy)
5. Plans by Artech – Addition, 1/07/2004 (hard copy)
6. Survey by EarthWorx, 2/26/2024.
7. Phase 1 ESA by S&ME, 1/09/2024