



ARROWSTREET

# NEARY ELEMENTARY SCHOOL

FACILITIES ASSESSMENT SUBCOMMITTEE MEETING

SOUTHBOROUGH, MA  
SEPTEMBER 25, 2024

PREPARED FOR

NEARY BUILDING COMMITTEE / MSBA FAS SUBCOMMITTEE





# EDUCATIONAL PROGRAM

“At the core of the Public Schools of Southborough’s educational philosophy is a commitment to empowered learners. This commitment is evident in the approaches to teaching and learning that permeate every aspect of the District’s curriculum and pedagogical practices.”

## CREATE GRADE-LEVEL LEARNING NEIGHBORHOODS

- CREATE A CLOSE KNIT ATMOSPHERE
- SUPPORT SENSE OF COMMUNITY
- ENHANCE EDUCATIONAL EXPERIENCES
- ALIGN WITH VALUES OF COMMUNITY

## CLASSROOM DESIGN

- PRIORITIZE FLEXIBILITY
- ACCOMMODATE DIVERSE GROUPINGS OF STUDENTS
- SUPPORT DIFFERENTIATED INSTRUCTION
- CREATE COLLABORATIVE LEARNING PROJECTS

## SMALL GROUP BREAKOUT ROOMS

- PROXIMATE TO CLASSROOMS TO PROMOTE EASE OF ACCESS
- SUPPORT COLLABORATIVE GROUP WORK
- PROVIDE INDIVIDUAL LEARNING INSTRUCTION & ACADEMIC INTERVENTION

## LEARNING COMMONS

- CREATE BREAKOUT SPACES FOR SCIENCE, TECH, ENGINEERING & MEDIA LESSONS
- PROVIDE GATHERING SPACE FOR LARGER GROUPS OF STUDENT ACTIVITIES

## MEDIA CENTER / LIBRARY

- FOSTER 21ST CENTURY MEDIA LITERACY SKILLS
- BECOME THE HEART OF THE SCHOOL
- HUB FOR INNOVATION, LEARNING AND DISCOVERY
- COLLOCATED WITH ART ROOM TO ALLOW TECHNOLOGY, ART, AND DIGITAL LITERACY PROJECTS

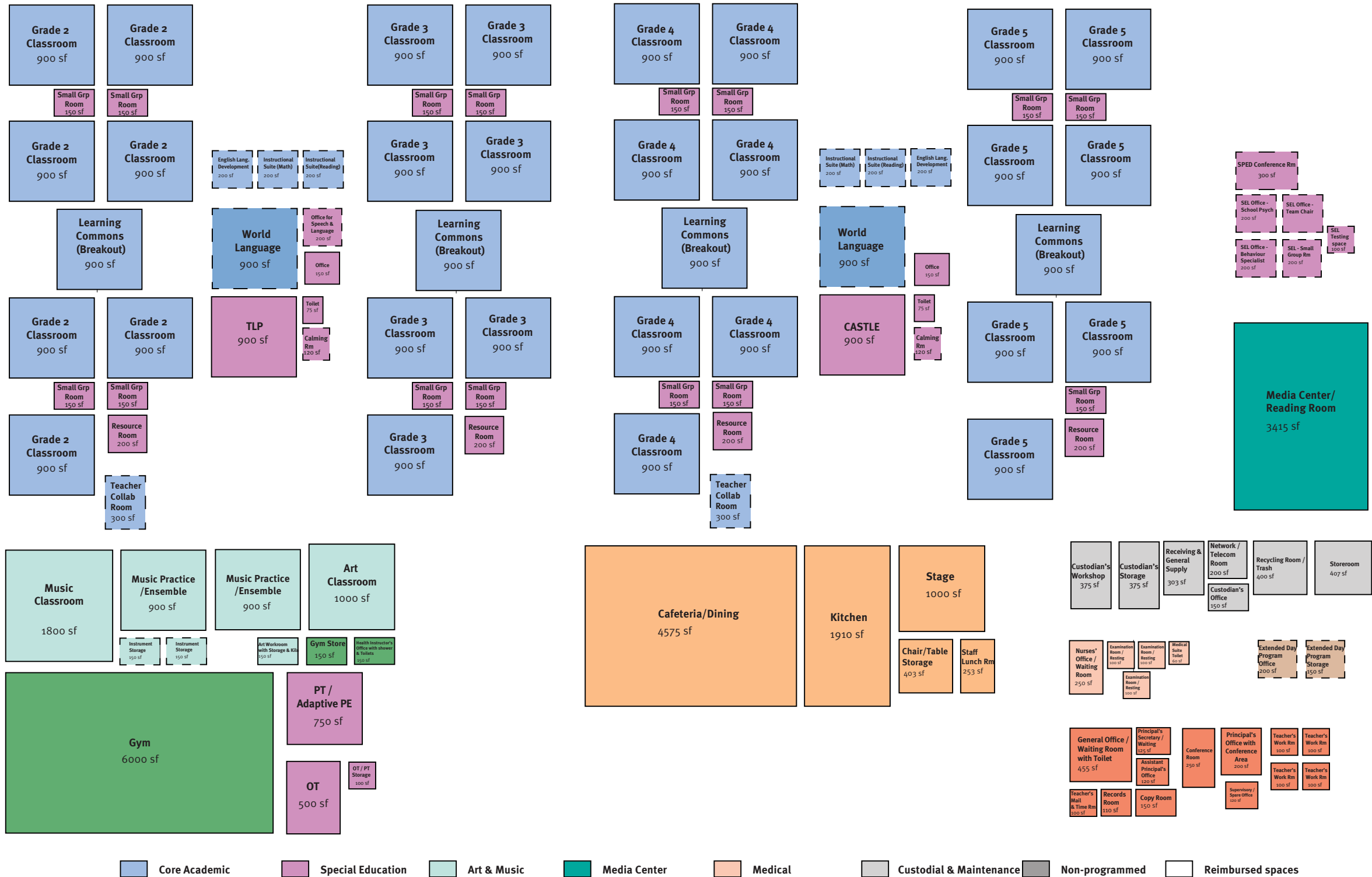
## MUSIC & PERFORMANCE

- SUPPORT THE DISTRICT’S EXTENSIVE BAND & CHOIR PROGRAMS



# EDUCATIONAL PROGRAMMING

## MSBA SPACE SUMMARY BLOCK PROGRAM



**PROPOSED SCHOOL:**  
**66,376 NET SF**  
**99,564 GROSS SF**

### NON-PROGRAMMED SPACES INCLUDE:

- MEP spaces
- Storage rooms
- Toilet rooms
- Corridors, stairs, elevators
- Walls and shafts
- Instrument storage
- Extended Day Program storage

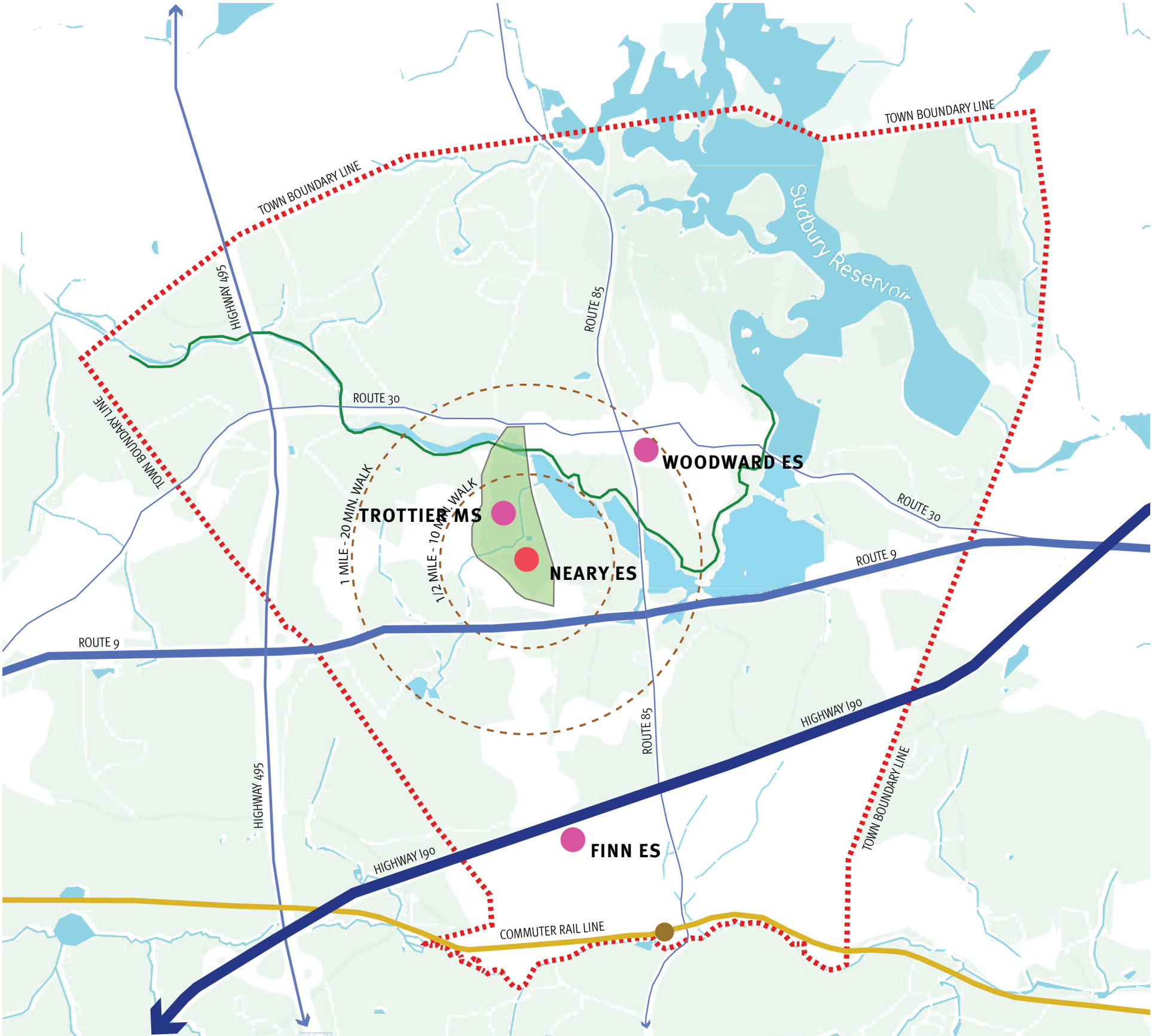
\*Spaces not described in MSBA Space Summary Template shown with dashed outlines

EDUCATIONAL PROGRAMMING  
MSBA SPACE VARIANCE

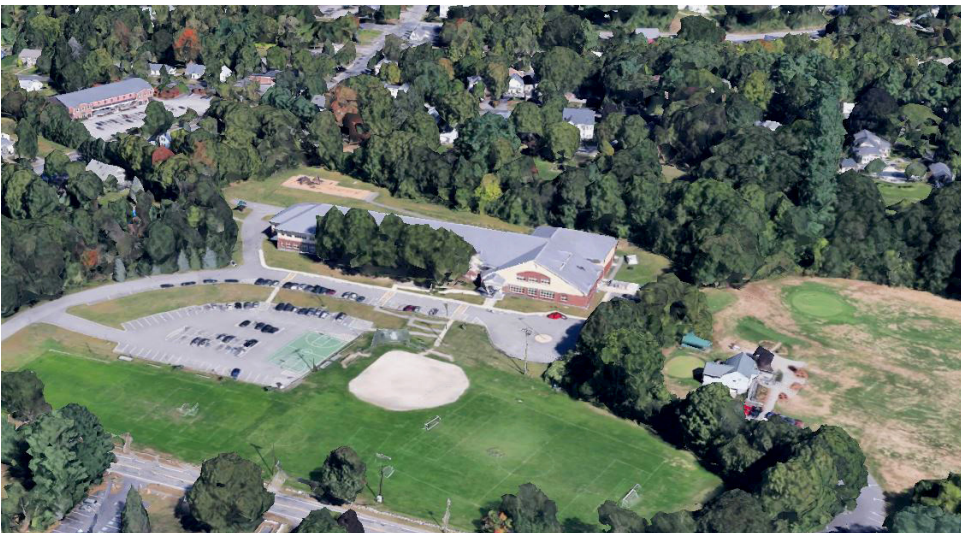
VARIANCE FROM MSBA GUIDELINES:

- Classrooms are 900 sf (450 sf)  
Small group and project based learning to be in shared Learning Commons
- Additional spaces:
  - » Learning Commons 4 @ 900 sf (1 per grade)
  - » English Language Development Office 2 @ 200 sf
  - » Instructional Suite (Reading, Math) 4 @ 200 sf
  - » World Language classroom 2 @ 900 sf
  - » Teacher Collaboration 2 @ 300 sf
- Special Education program spaces (910 sf)
- Art: 2 rooms in lieu of 3 (1,000 sf)
- Music: total of 3 rooms to accommodate robust music program
  - » Music Classroom (1,800 sf) 600 sf
  - » Music Ensemble rooms 2 @ 900 sf
- Principal’s office does not have conference space (175 sf)
- Teachers Work Rooms 4 @ 100 sf (1 per grade) = (55 sf total)





EXISTING SCHOOL LOCATIONS IN SOUTHBOROUGH



WOODWARD ES (GRADES 2-3)



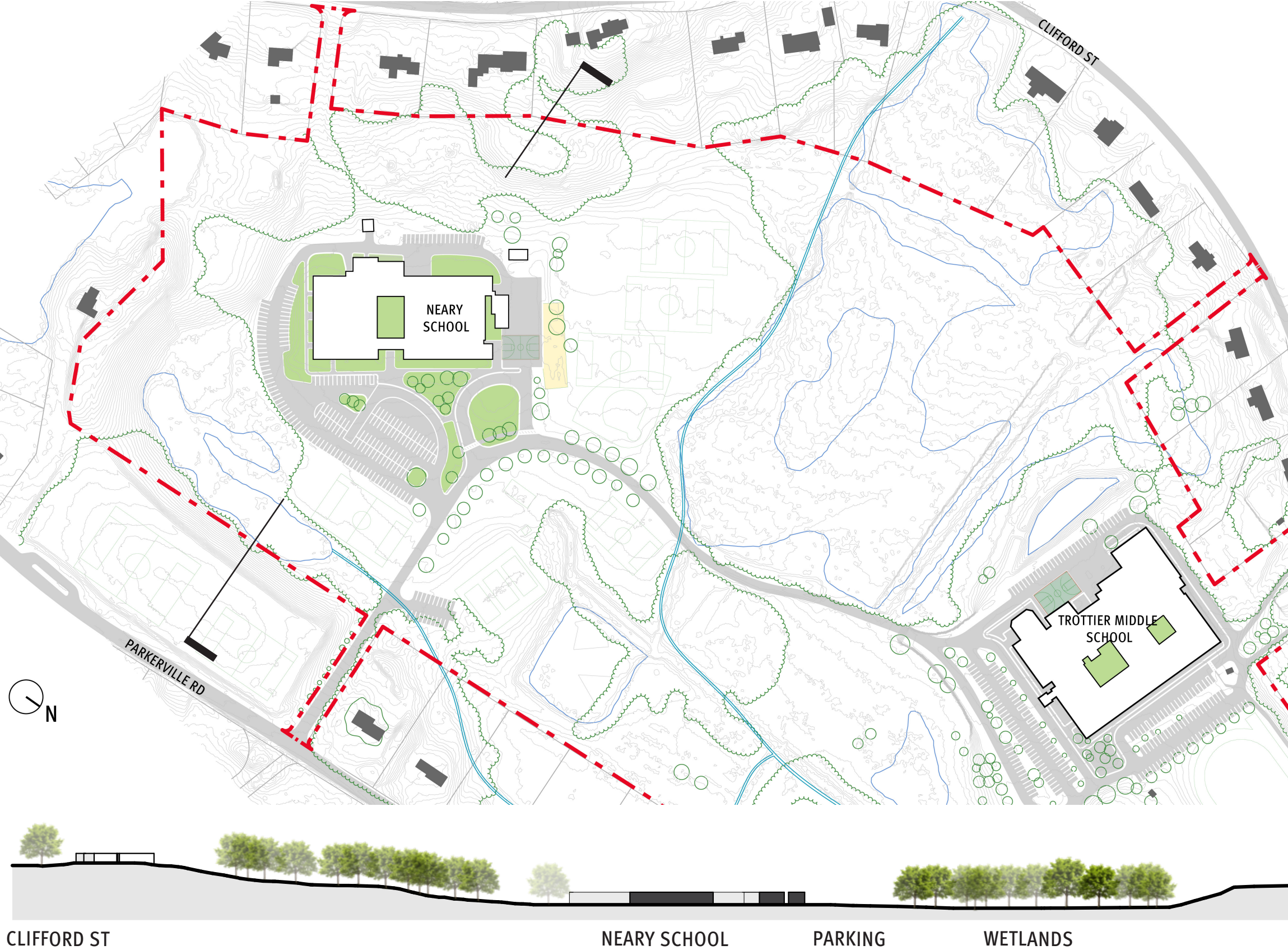
NEARY ES (GRADES 4-5)



FINN ES (GRADES PRE-K, K-1)

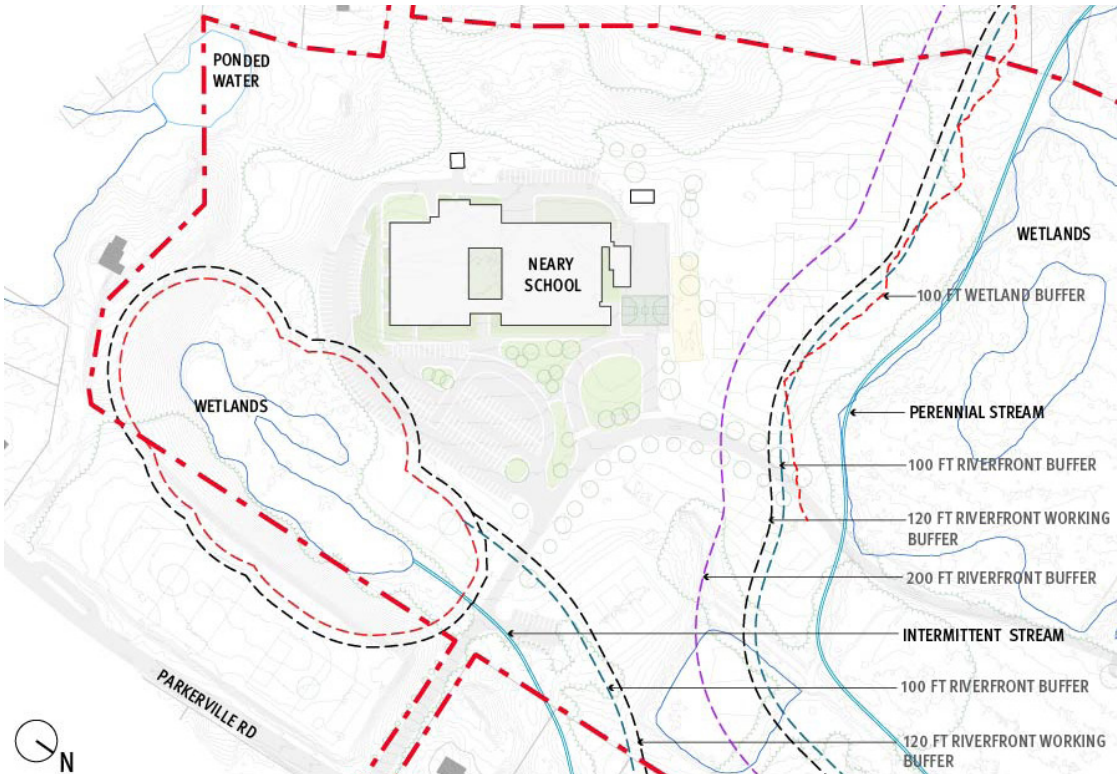


EXISTING SITE PLAN & SECTION

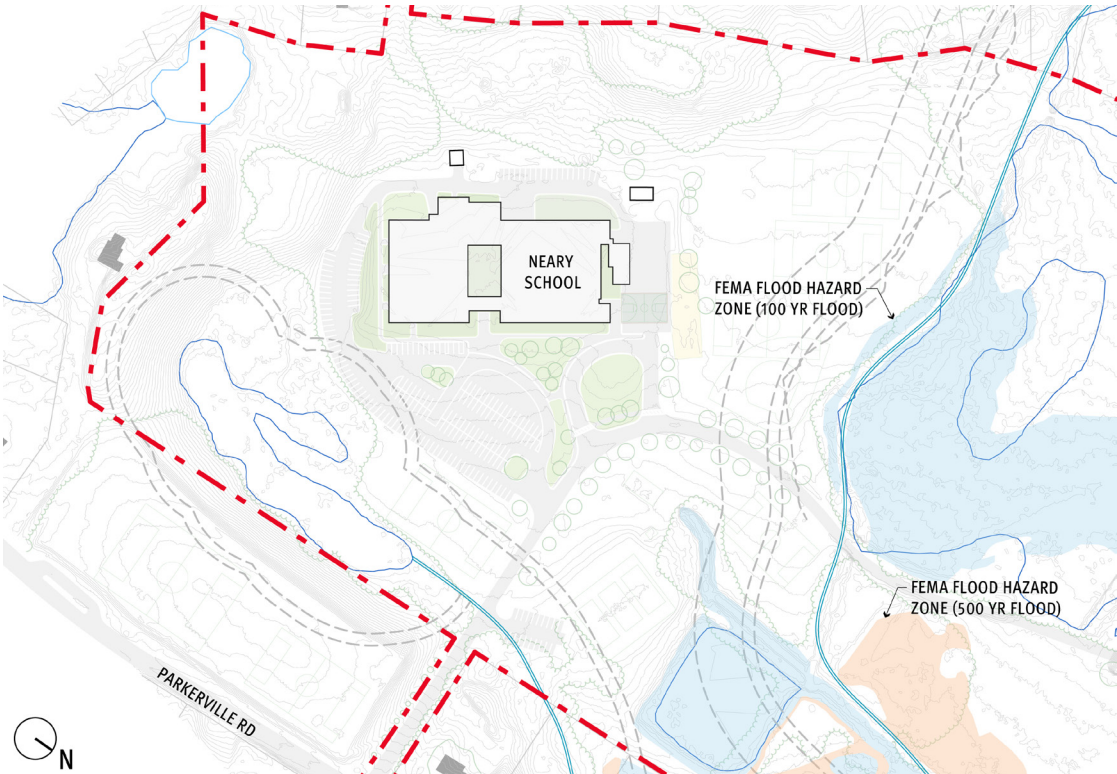




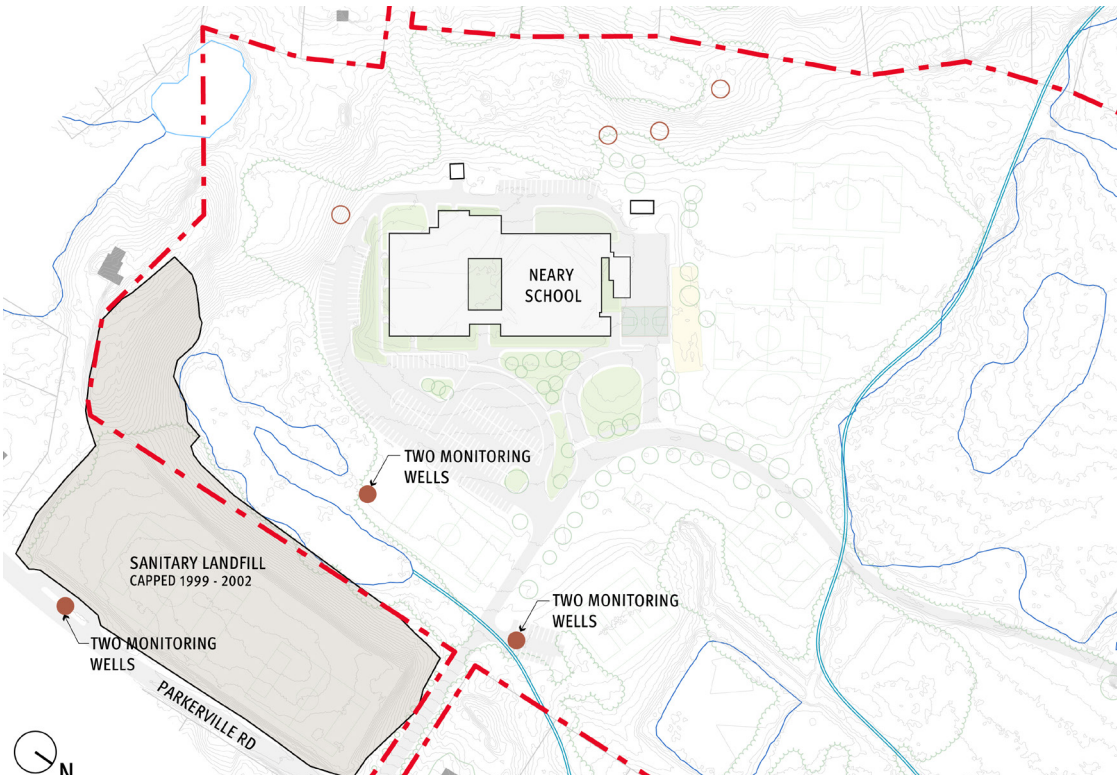
# EXISTING SITE CONSTRAINTS



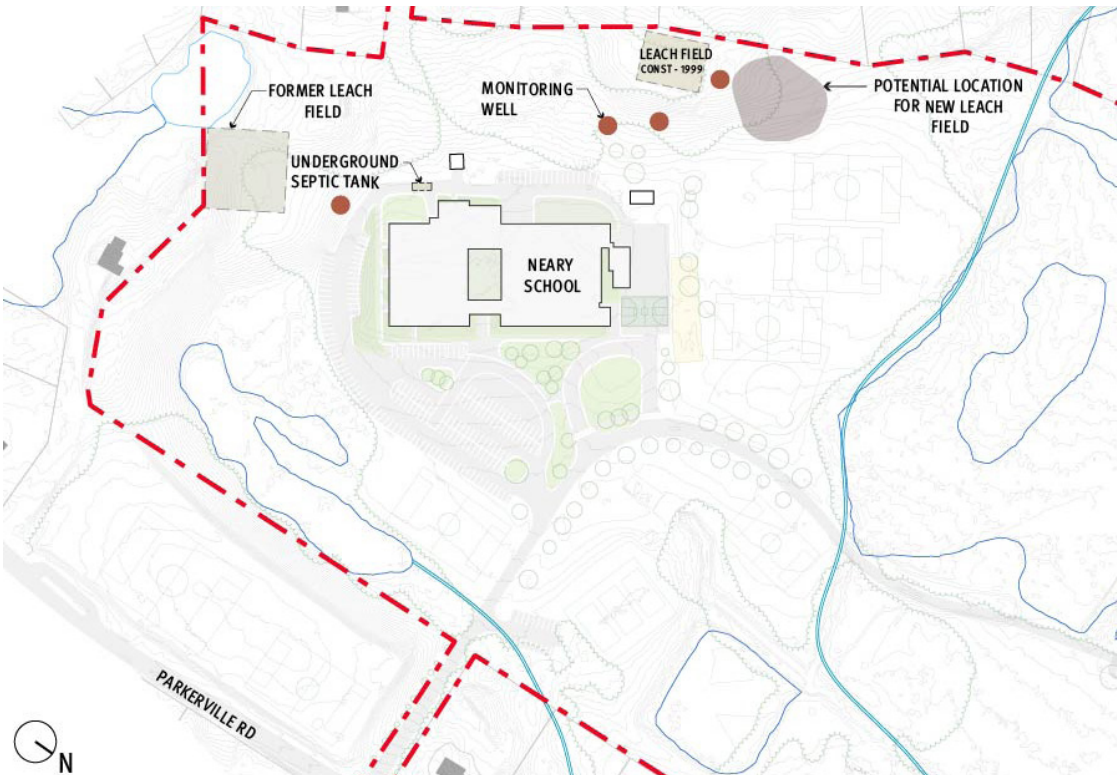
WETLANDS & RIVERFRONT SETBACKS



FLOOD ZONES



EXISTING LANDFILL



EXISTING & PROPOSED SEPTIC SYSTEM

## EXISTING SITE CONSTRAINTS

- Riverfront and wetlands setbacks along northern and southeast boundaries
- 100 Yr Flood Hazard Zone along stream at northern boundary of the site
- Existing landfill (capped 1999-2002) adjacent to southeast corner of the site
- Existing and former septic system and leaching fields along western site boundary
- High Groundwater Table



# SITE CIRCULATION

The school site is shared with the Trotter Middle School. There is a single entrance drive from Parkerville Road. The access drive will remain open during construction and will continue to serve both schools after construction is complete.

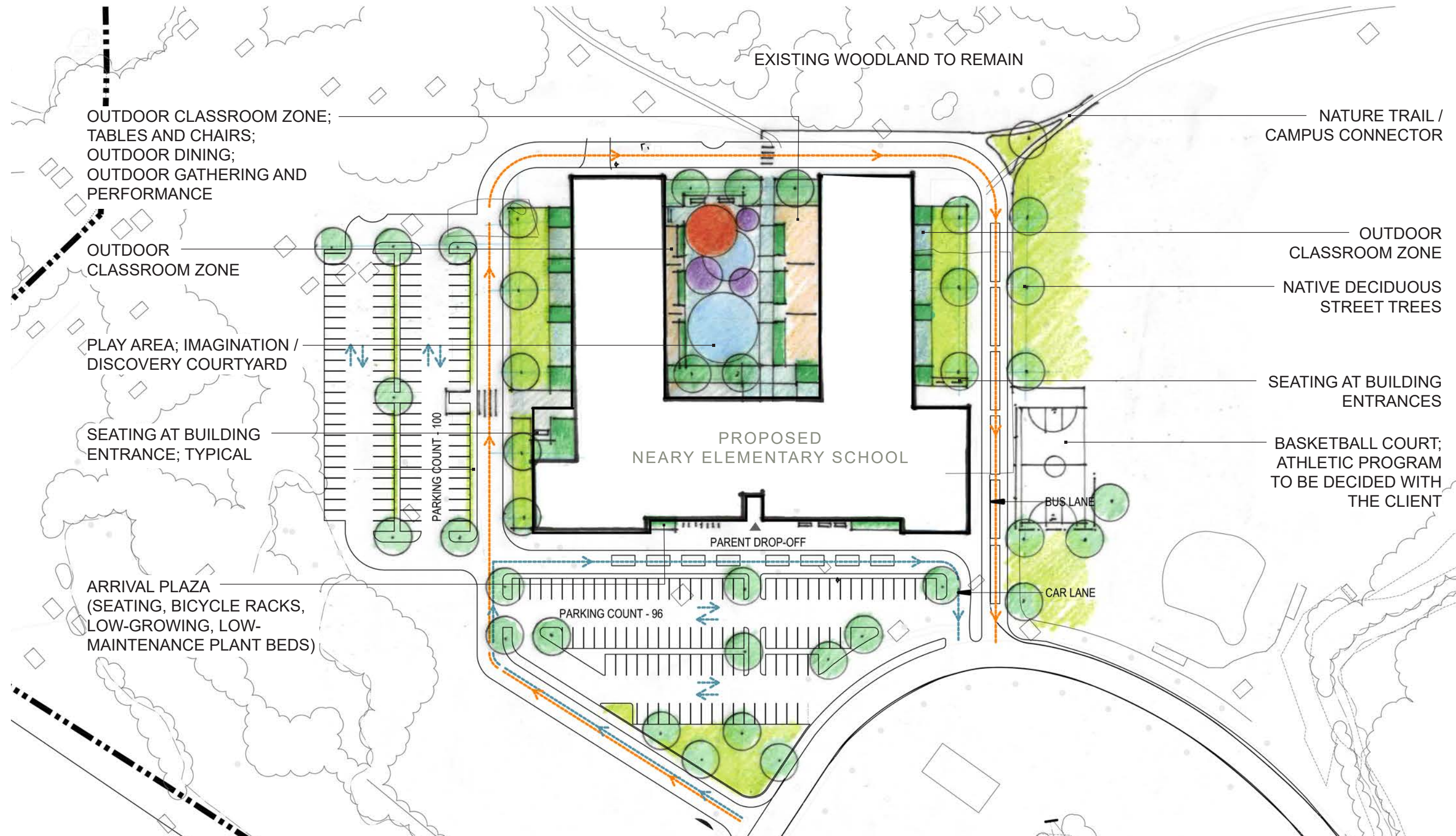
New site circulation includes the following features:

- Main entrance visible upon entry to the campus.
- Buses circle behind the building and queue separately from passenger cars.
- New queuing pattern allows for passenger cars to line up in front of the school for drop-off and pick-up.
- Visitor and community parking located at the front of the building close to the main entrance.
- Staff parking located to the south side of the building



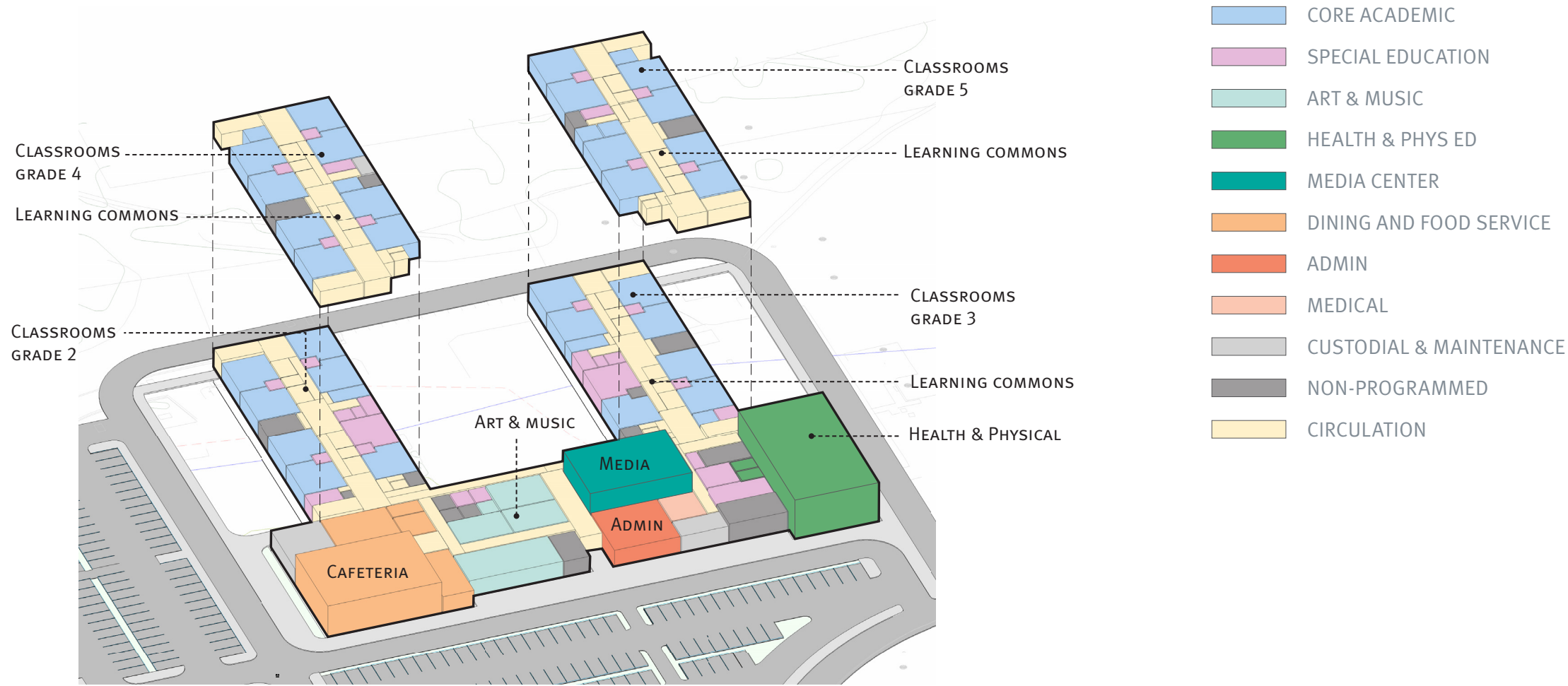


# LANDSCAPE CONCEPT PLAN

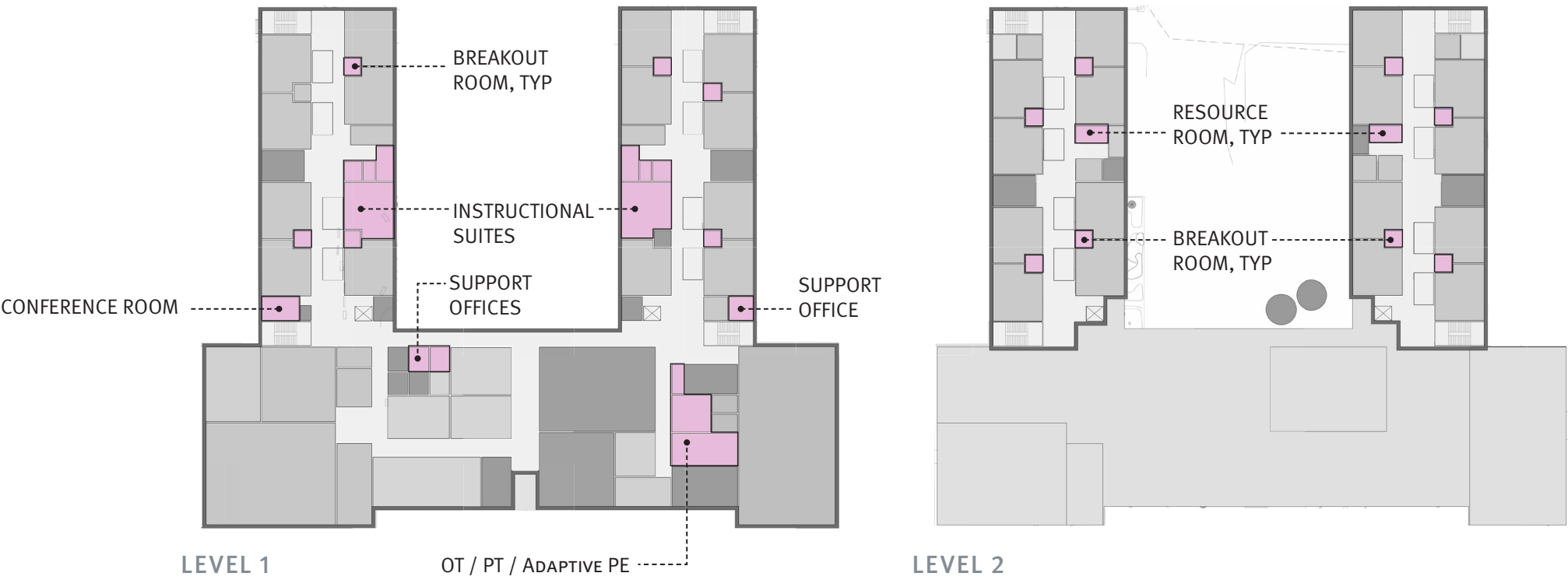


# BUILDING ORGANIZATION

## KEY ADJACENCIES

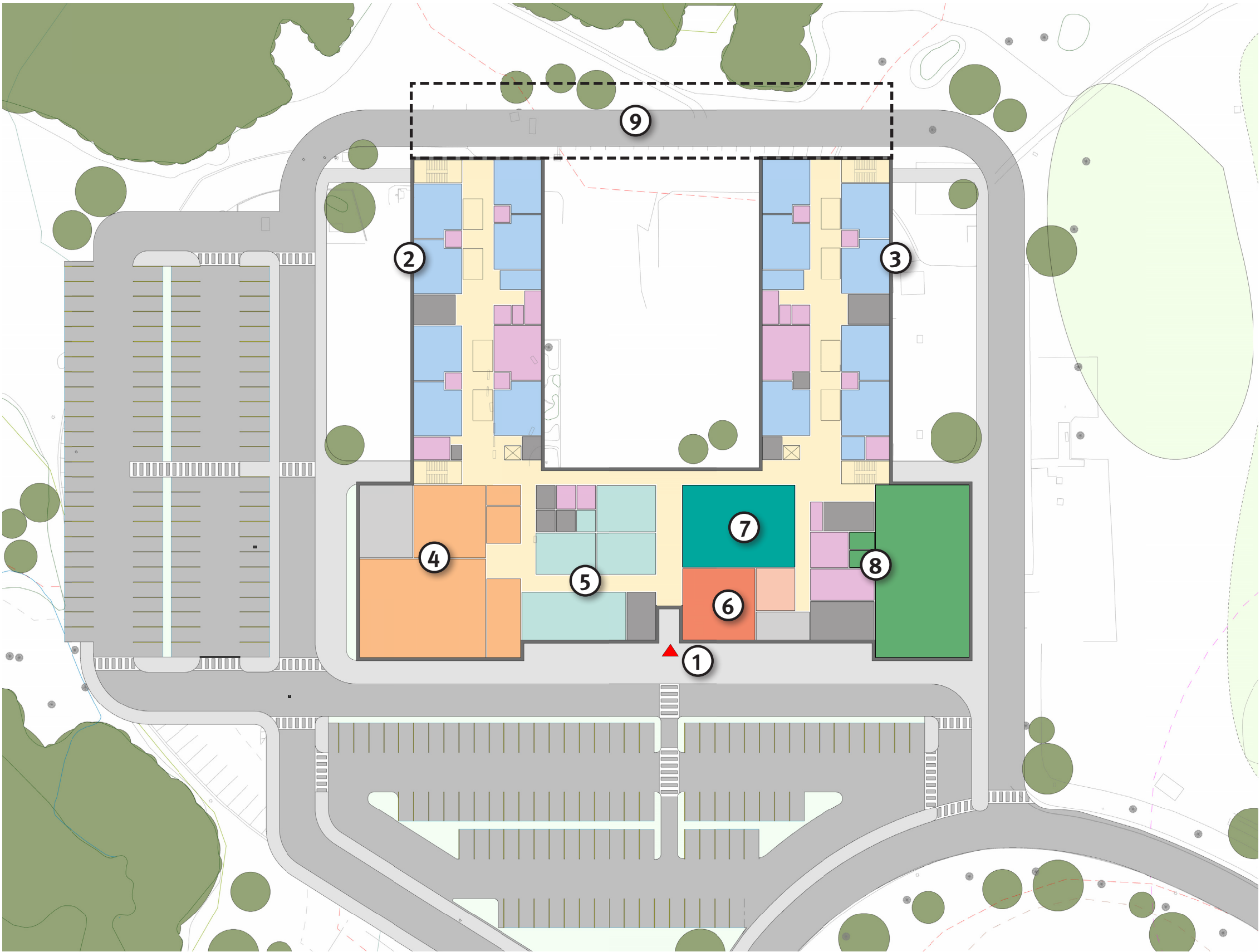


## SPECIAL EDUCATION SPACES





FLOOR PLAN LEVEL 1

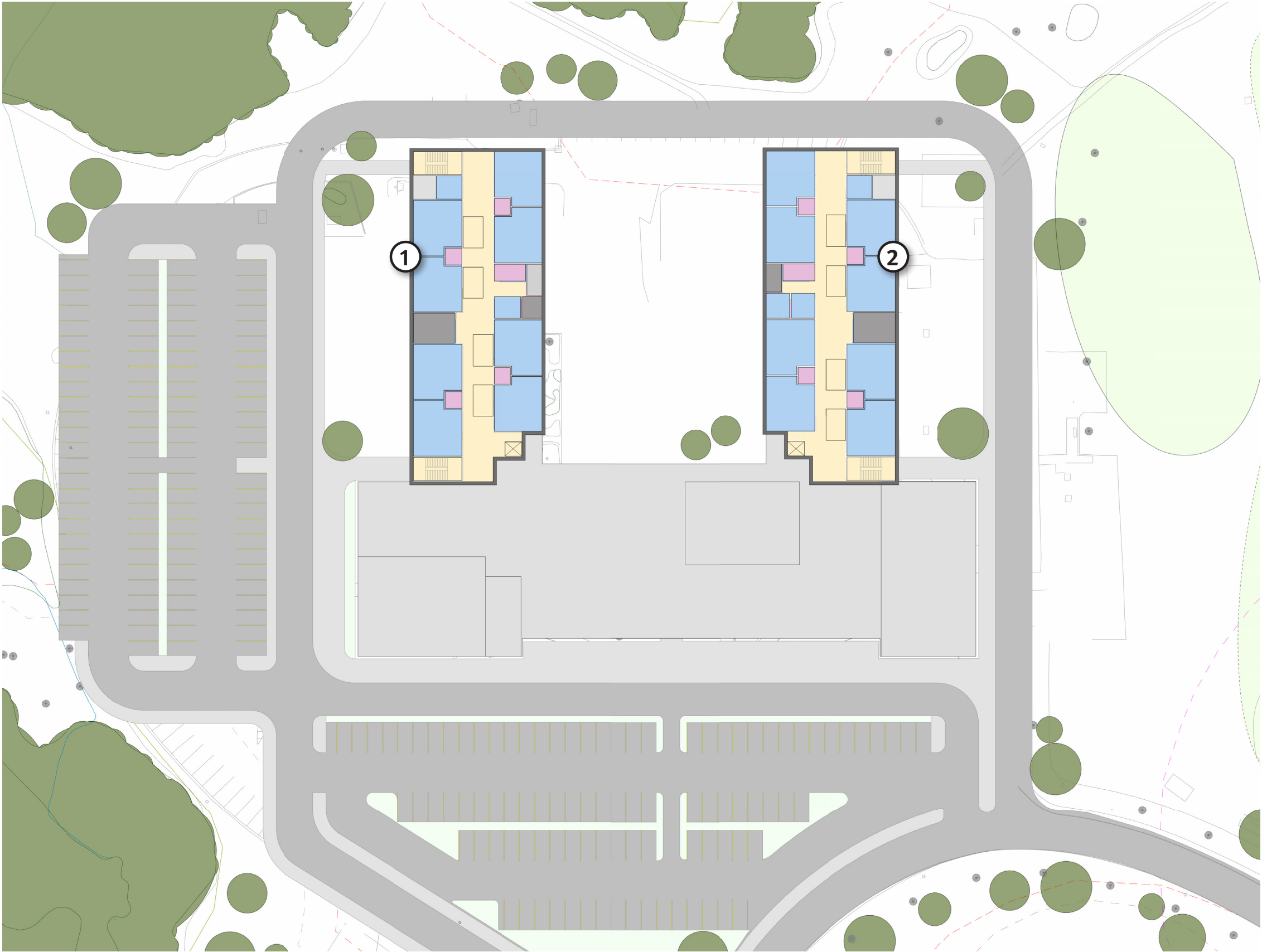


- CORE ACADEMIC
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYS ED
- MEDIA CENTER
- DINING AND FOOD SERVICE
- ADMIN
- MEDICAL
- CUSTODIAL & MAINTENANCE
- NON-PROGRAMMED
- CIRCULATION

KEY PROGRAM AREAS:

- 1. MAIN ENTRY
- 2. SECOND GRADE WING
- 3. THIRD GRADE WING
- 4. CAFETORIUM & KITCHEN
- 5. ART & MUSIC
- 6. MAIN OFFICE & ADMIN
- 7. MEDIA CENTER
- 8. GYMNASIUM & OT/PT
- 9. AREA FOR POTENTIAL FUTURE EXPANSION (6-8 CLASSROOMS)

FLOOR PLAN LEVEL 2



- CORE ACADEMIC
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYS ED
- MEDIA CENTER
- DINING AND FOOD SERVICE
- ADMIN
- MEDICAL
- CUSTODIAL & MAINTENANCE
- NON-PROGRAMMED
- CIRCULATION

- KEY PROGRAM AREAS:**
- 1. THIRD GRADE WING
  - 2. FOURTH GRADE WING



**BUILDING DESIGN**  
INTERIOR DESIGN PRINCIPALS



DAYLIGHTING AND VENTILATION IMPROVE CLASSROOM LEARNING ENVIRONMENT



MULTI-PURPOSE ART ROOM ALLOWS SCIENCE, ART & TECH PROJECT INVESTIGATIONS



MEDIA CENTER AS THE HUB OF LEARNING



CORE CLASSROOMS DESIGNED TO PROVIDE FLEXIBLE LEARNING SPACES



MUSIC ROOM SIZED TO MEET SOUTHBOROUGH'S EXTENSIVE BAND & CHOIR PROGRAM



BREAKOUT ROOMS, LEARNING COMMONS, AND GRADE-LEVEL NEIGHBORHOODS CREATE A SENSE OF COMMUNITY AND BELONGING



**BUILDING EXTERIOR STUDY**  
MASSING STUDIES



VIEW OF ENTRANCE FROM SOUTHEAST



VIEW OF COURTYARD FROM NORTHWEST



**BUILDING DESIGN**  
EXTERIOR DESIGN STRATEGIES



CONNECT MAJOR SPACES (CAFETERIA), TO OUTDOOR LEARNING AREAS



MASONRY DETAIL & A VARIETY OF MATERIALS ADD VISUAL INTEREST



SIMPLE BUILDING MASSING



GLAZED CIRCULATION SPINE ACTIVATES COURTYARD

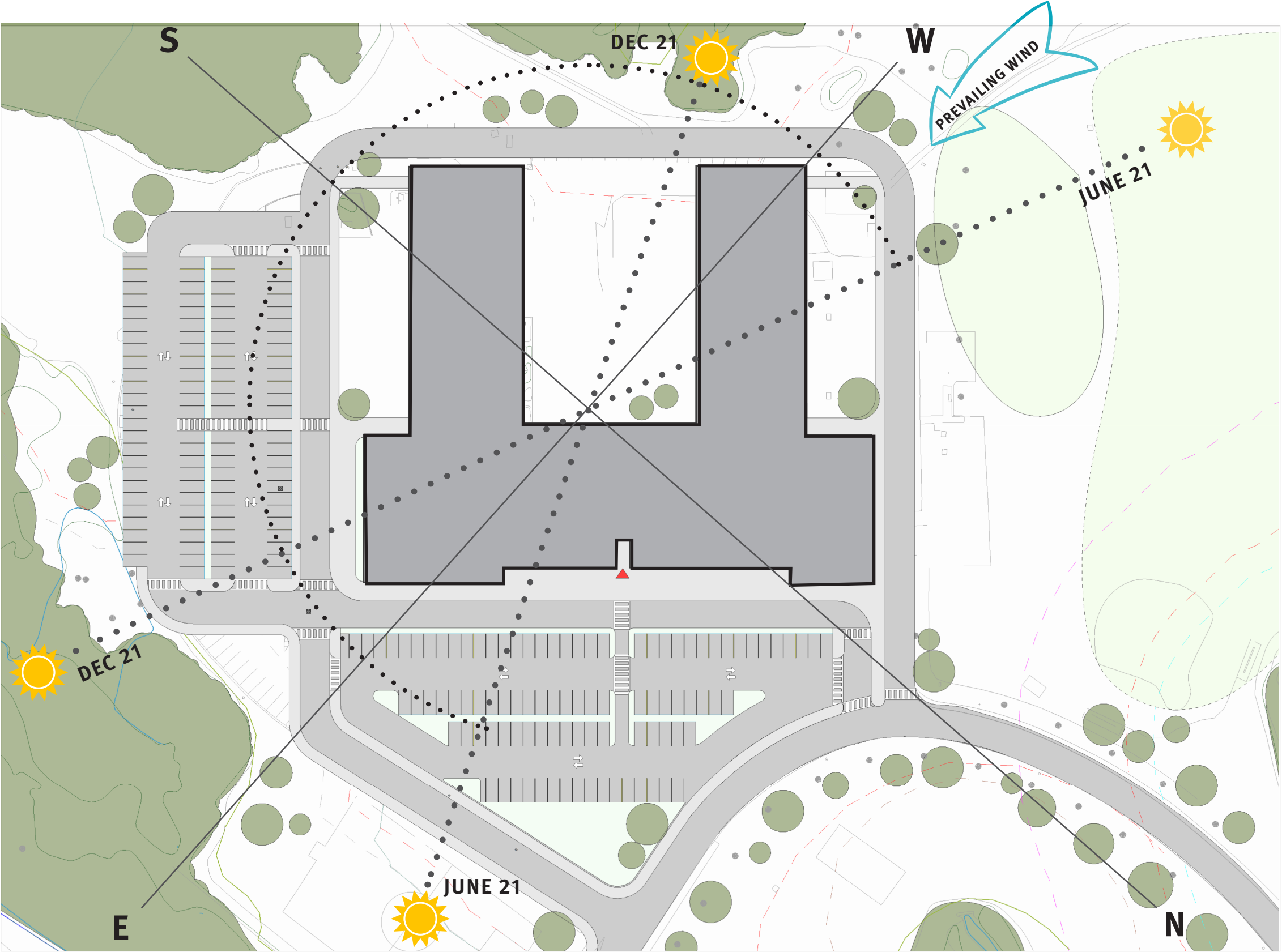


MASONRY DETAILS & PATTERNS ENLIVEN FACADE



# SUSTAINABILITY

- LEED v4 BD+C Schools
- Green Schools Program
- Goals were identified for the project:
  - Healthy indoor environment
  - Connection with nature
  - Low energy use building
- Planning for solar photovoltaic array
- High performing thermal building envelope
- All electric building
- Exploring Net Zero Energy with MassSave and Federal Incentives
- Exploring Geothermal/Groundsource heat pump system





PRELIMINARY DESIGN PRICING

Preliminary Design Pricing Table - Margaret A. Neary Elementary School

= Formula do not edit

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (\$*/SF)	Square Feet of New Construction (\$*/SF)	Site, Building Takedown, Haz Mat Etc. (\$*)	Estimated Total Construction** (\$*)	Estimated Total Project Costs (\$)
A.1 - Base Repair/Code Upgrade (Neary) (305 Enrollment)	62,756 sf	62,756 sf \$ 632.06 \$/sf	- sf \$ - \$/sf	\$ 5,890,915	\$ 45,556,472 \$ 725.93 \$/sf	\$ 63,000,000
A.2 - Base Repair/Code Upgrade (Woodward) (450 Enrollment)	68,400 sf	68,400 sf \$ 626.50 \$/sf	sf \$/sf	\$ 3,176,866	\$ 46,029,731 \$ 672.95 \$/sf	\$ 58,000,000
B.4 - Add/Reno (610 Enrollment)	103,392 sf	60,285 sf \$ 683.64 \$/sf	43,107 sf \$ 683.64 \$/sf	\$ 18,850,617	\$ 89,533,224 \$ 865.96 \$/sf	\$ 113,600,000
C.1 - New Construction (305 Enrollment)	63,305 sf	- sf \$ - \$/sf	63,305 sf \$ 777.45 \$/sf	\$ 17,043,041	\$ 66,259,233 \$ 1,046.67 \$/sf	\$ 83,100,000
C.2 - New Construction (450 Enrollment)	85,574 sf	- sf \$ - \$/sf	85,574 sf \$ 786.39 \$/sf	\$ 17,893,329	\$ 85,187,701 \$ 995.49 \$/sf	\$ 105,376,038
***C.4 - New Construction (610 Enrollment)	99,564 sf	- sf \$ - \$/sf	99,564 sf \$ 742.67 \$/sf	\$ 17,893,329	\$ 91,836,569 \$ 922.39 \$/sf	\$ 113,400,000

\* Marked Up Construction Costs

\*\* Does not include Construction Contingency

\*\*\* **District’s Preferred Schematic**

## COMMUNITY OUTREACH

PUBLIC FORUMS WERE HELD WITH THE COMMUNITY ON THE FOLLOWING DATES:

1. February 29, 2024 at 6:00 pm (Live meeting. Recording posted on website)  
In person at Trottier School Auditorium
2. April 11, 2024 at 6:00 pm (Live meeting. Recording posted on website)  
In person at Trottier School Auditorium
3. May 7, 2024 at 7:30 pm (Virtual meeting. Recording posted on website)
4. June 25, 2024 at 8:00 pm (Virtual meeting. Recording posted on website)



# THANK YOU!