CITY OF CAMBRIDGE

TOBIN MONTESSORI AND VASSAL LANE UPPER SCHOOLS PROJECT 01/16/2020

PERKINS— EASTMAN

Human by Design

COMMUNITY MEETING



AGENDA

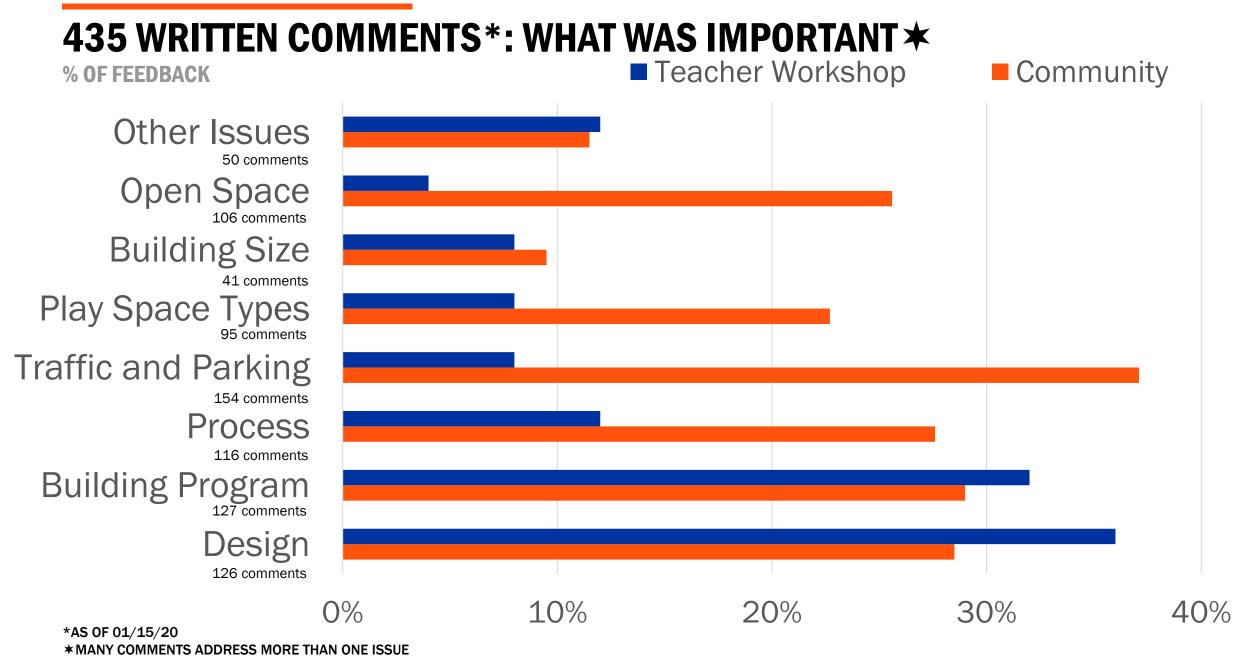
16 JANUARY 2020

6:30 - 7:00 pm Presentation

- Initial Feedback
- Educational Program
- Process
- Traffic & Parking
- Design Revisions
- Open Space Thoughts

7:00 - 8:30 pm Discussion





PERKINS EASTMAN TOBIN MONTESSORI/VASSAL LANE SCHOOLS PROJECT

WHOWEARE



ONE BUILDING, TWO SCHOOLS

WHO WE ARE

- Age 3 to grade 5 Tobin Montessori School.
- Grade 6 to 8 Vassal Lane Upper School
- Both schools have separate principals and staff.
- In Cambridge, upper schools correspond to typical middle school grades in other districts.
- Both schools draw students from throughout Cambridge. Like all Cambridge Public Schools, they are not neighborhood schools.

SPECIAL PROGRAMS

WHO WE ARE

- In addition to its general education classrooms, the Vassal Lane Upper School houses the District's Sheltered English Immersion (SEI) program for grades 6-8. Students in SEI are students whose first language is not English.
- The Upper School also houses students in substantially sub-separate special education classrooms.
- The Tobin currently has one special start classroom for students age 3-4 who have been identified as requiring Special Education services due to a disability.

WHO WE ARE

SPECIAL PROGRAMS WITHIN THE CURRENT BUILDING

- The Tobin houses a JK/K classroom for students with Autism Spectrum Disorder (ASD), that needs to grow as children age up to higher grades.
- The King Open, Fletcher Maynard and Cambridge Street Upper Schools also house ASD programs.
- Several other schools house special start classrooms as well

UPPER SCHOOL NETWORKS

WHO WE ARE

VASSAL LANE

- Graham & Parks School
- Haggerty School
- Tobin Montessori School

RINDGE AVE

- Baldwin School School
- Peabody School

PUTNAM AVE (opened 2016)

- Kennedy Longfellow School
- King School
- Morse School

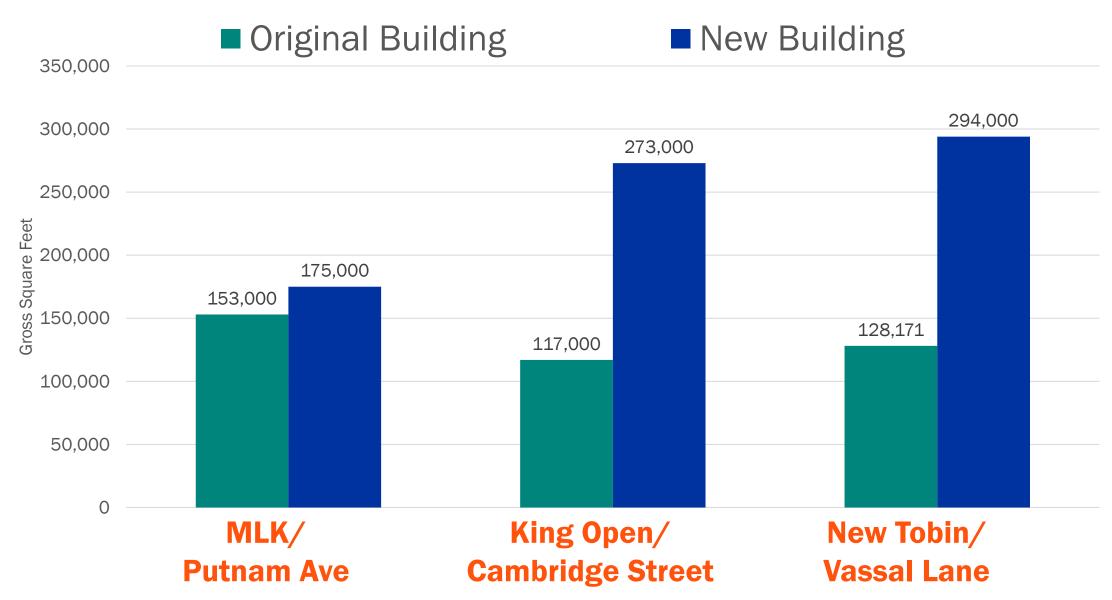
CAMBRIDGE STREET (opened 2019)

- King Open School
- Cambridgeport School
- Fletcher Maynard Academy

AMIGOS SCHOOL

- The Amigos School is a two way Spanish Immersion K-8 School.

SCHOOL SIZE



PROGRAM



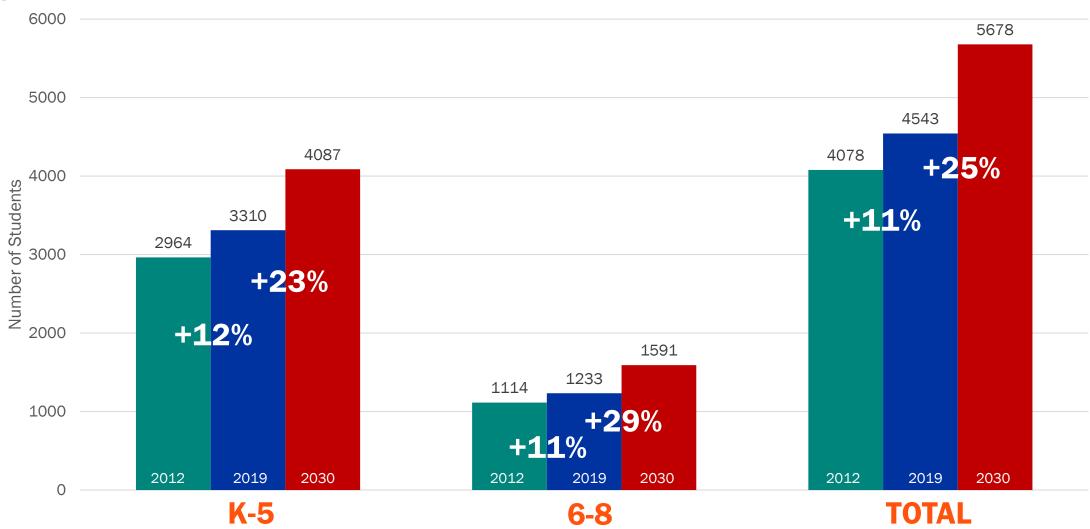
PROJECT GOALS

- Maintain Tobin Montessori
 School in current location
- 2. Upper School to meet increased enrollment needs
- 3. Meet ¼ of additional citywide preschool need
- 4. Equitable assignment of resources across city



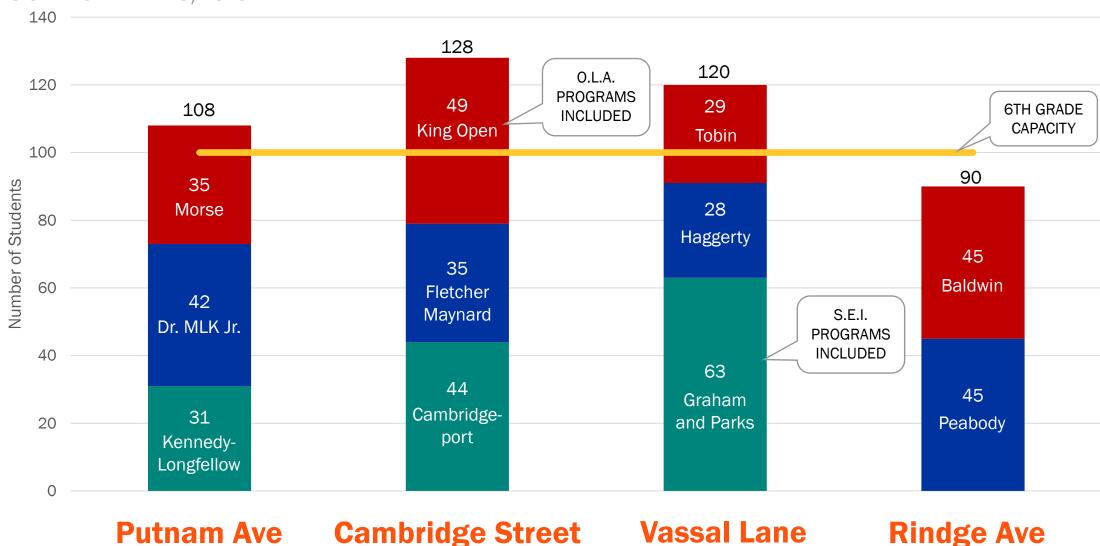
DISTRICT ENROLLMENT



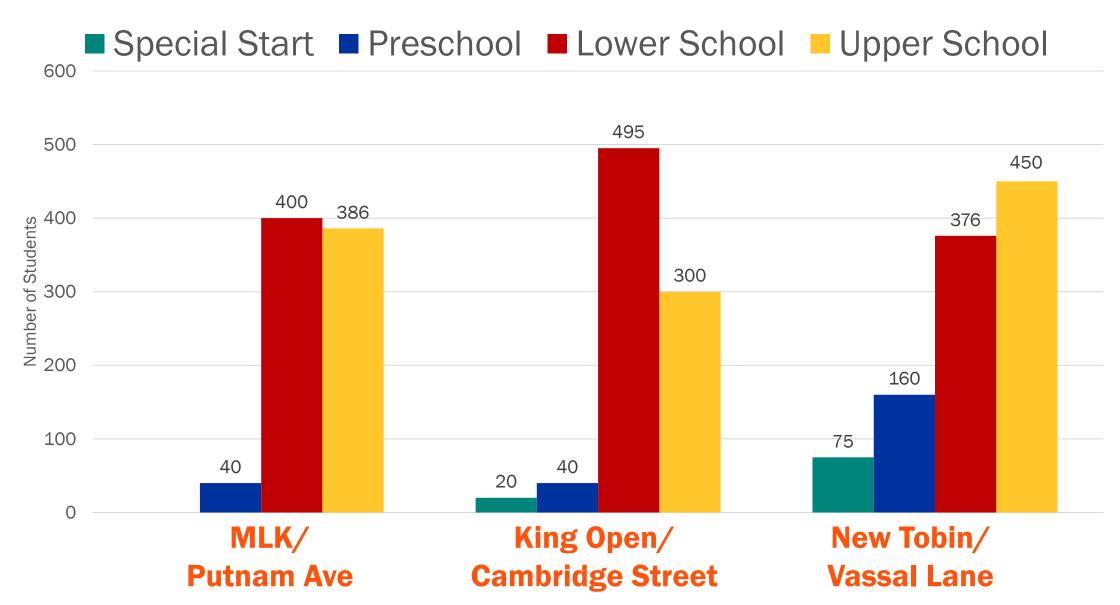


5TH GRADE ENROLLMENT

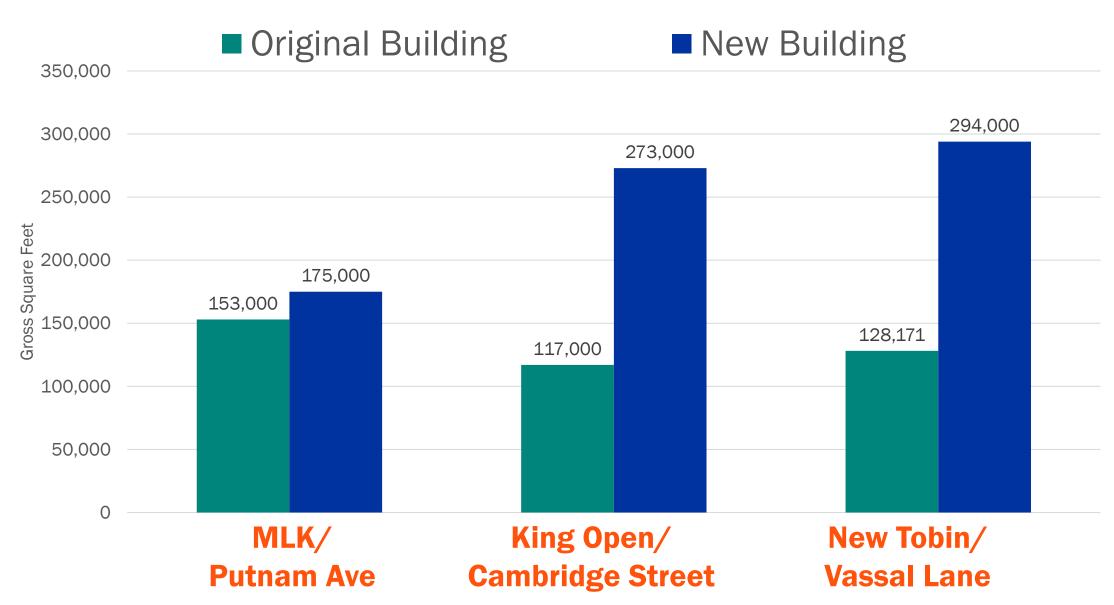
AS OF DECEMBER 13, 2019



SCHOOL CAPACITY



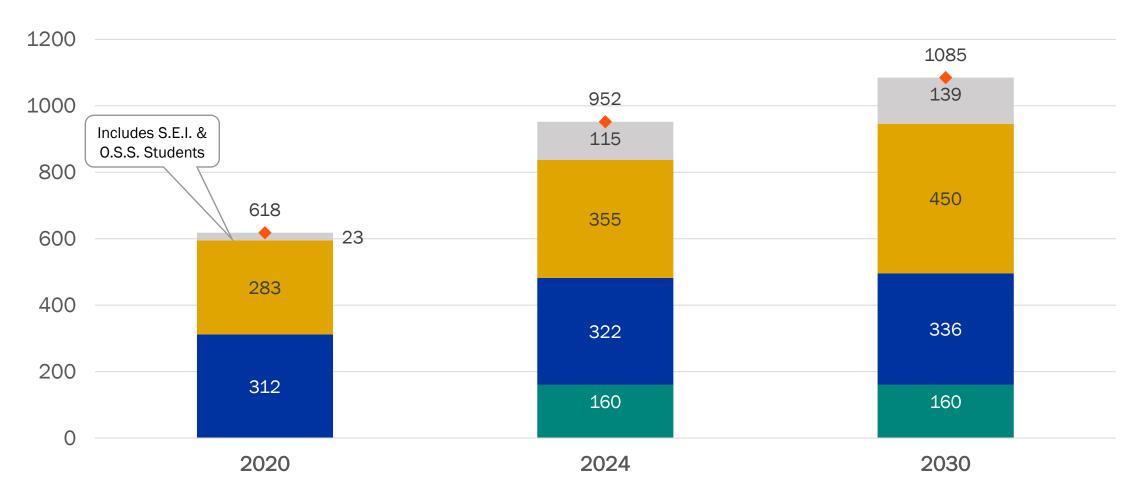
SCHOOL AREA



STUDENT ENROLLMENT

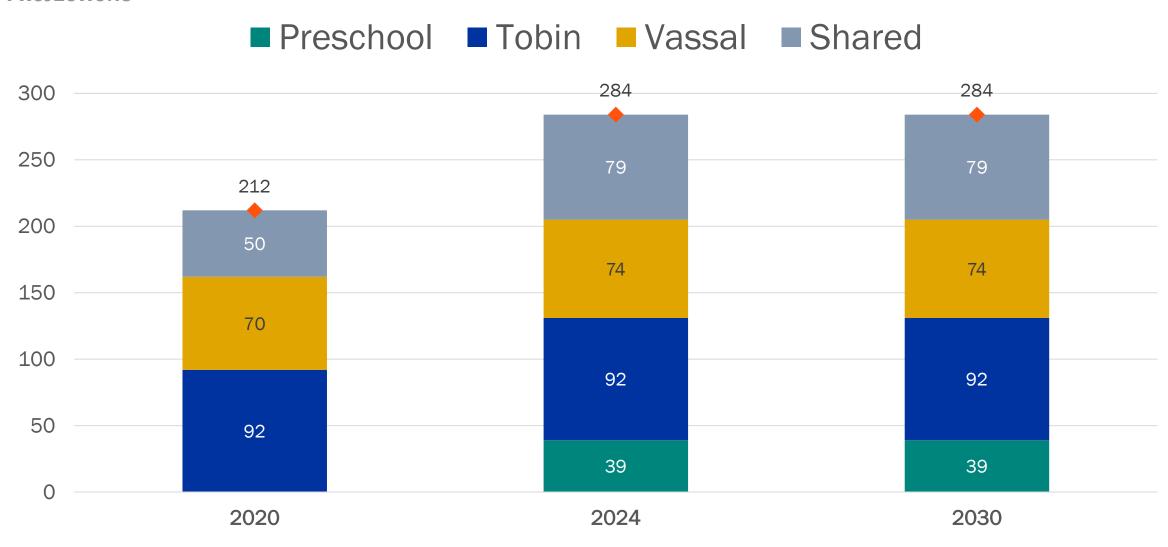
PROJECTIONS





ADULT POPULATION

PROJECTIONS

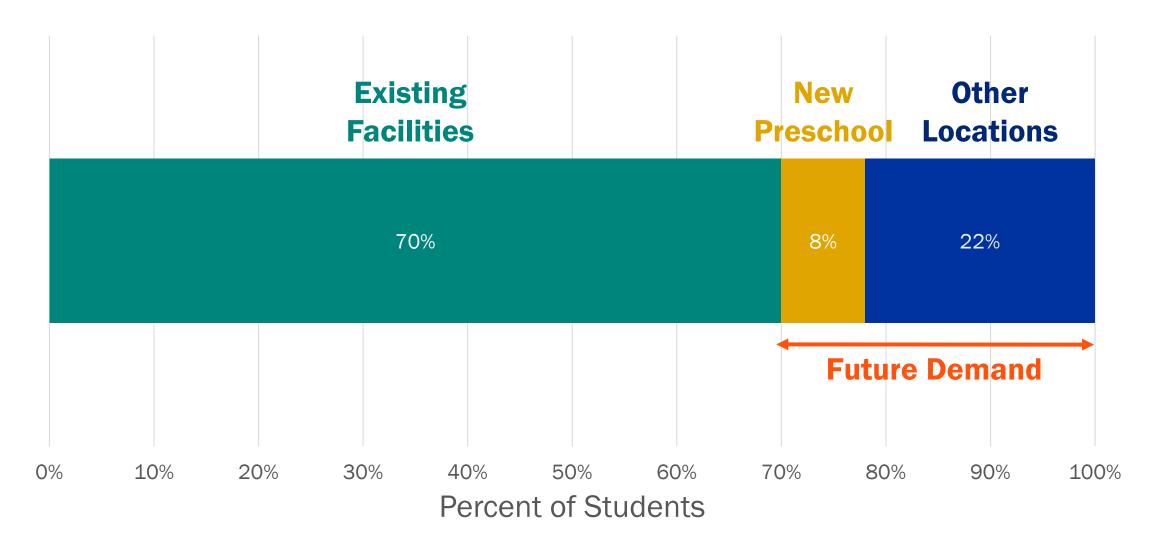


EARLY CHILDHOOD EDUCATION

- The City has committed to universal pre-K for 4 year olds
- 4 year olds likely served through combination of schools, City programs and community based programs.
- Existing programs can serve about 700 of the 1000 4-year olds

4-YEAR OLDS IN CAMBRIDGE

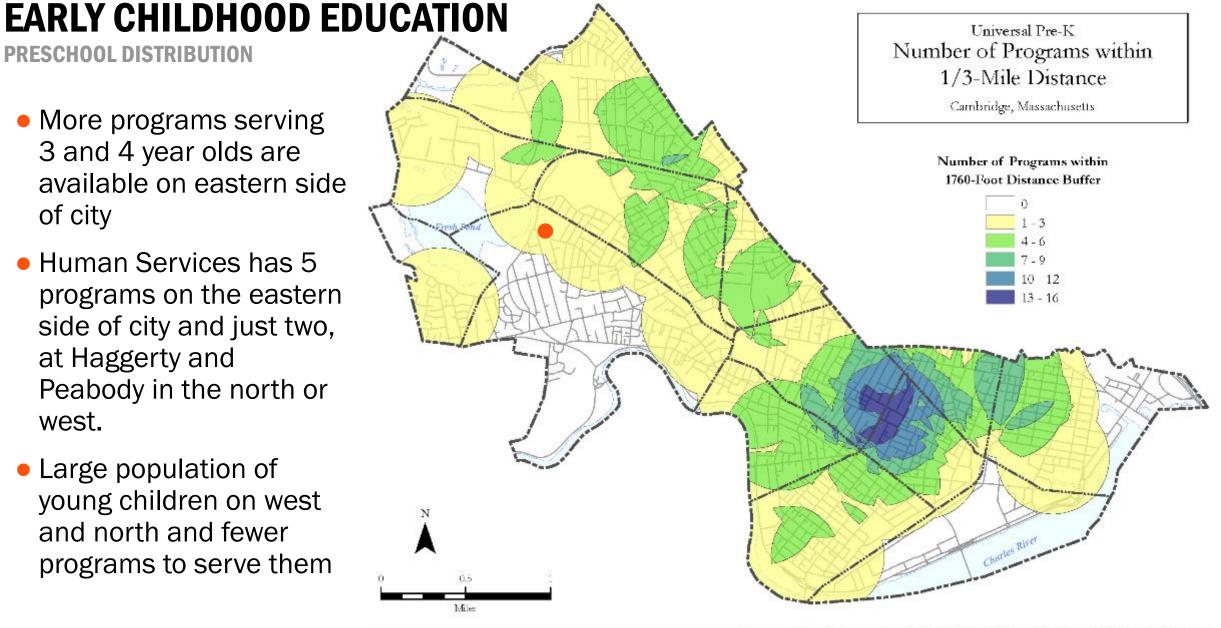
NEW PRESCHOOL MEETS 26% OF FUTURE DEMAND



PRESCHOOL DISTRIBUTION

More programs serving 3 and 4 year olds are available on eastern side of city

- Human Services has 5 programs on the eastern side of city and just two, at Haggerty and Peabody in the north or west.
- Large population of young children on west and north and fewer programs to serve them



PROCESS



DESIGN PROCESS

10 MONTHS*

Schematic

Design

6 MONTHS

Design Development

6 MONTHS

10 MONTHS

Feasibility Study

- Establish Program
- Establish Building Organization & Form

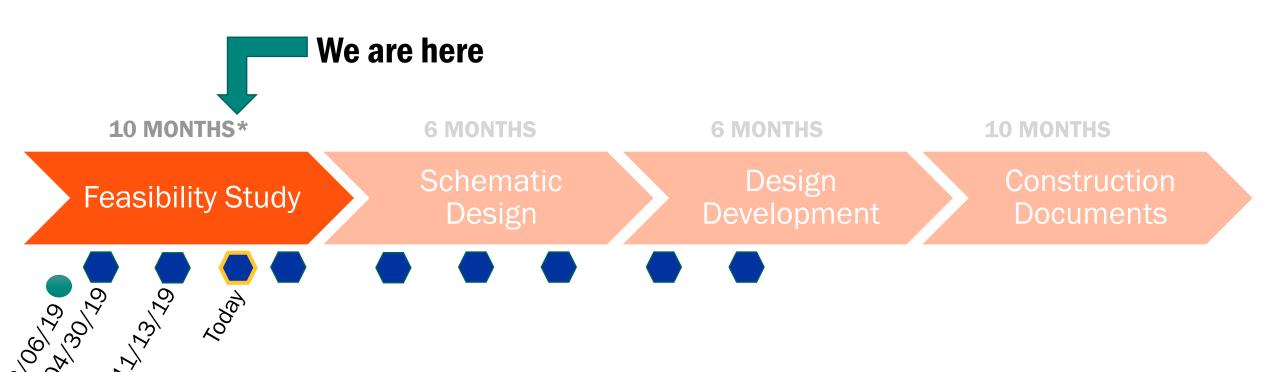
- Begin Building & Site Design
- Choose Structure & Mechanical Systems

- Refine Design
- Choose Products
- Begin Details

- Construction Documents
- Document Design
- Create Construction Details

^{*} Schedule extended to allow for additional community input

DESIGN PROCESS



- Proposed Community Meetings
- Special Meetings as needed

^{*} Schedule extended to allow for additional community input

PREFERRED OPTION

PROCESS

- What it is
 - Selection of building location
 - Selection of building scale
 - General configuration
- What it is Not
 - Actual building design
 - Final choice of site elements
 - Final choice of traffic and parking solution

STRATEGIES BASED ON COMMUNITY INPUT

PROCESS





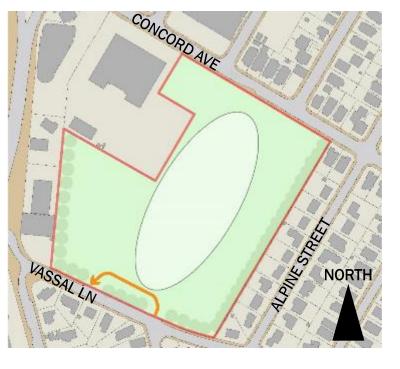
SITE CIRCULATION - BUSES

OPTIONS









OPTION A

Enter on Concord Shared use lane on east side of site Exit on Vassal

OPTION B

Enter and exit on Concord
Bus loop at north end of building
(least preferred option)

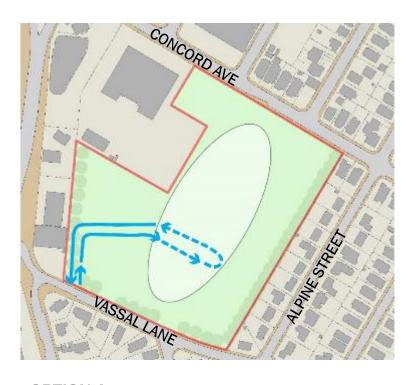
OPTION C

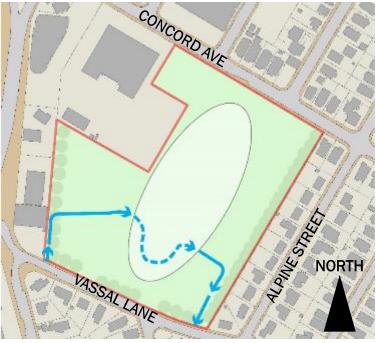
Enter and exit on Vassal Bus loop at south end of building

SITE CIRCULATION - CARS

OPTIONS







Pros for Underground Parking

- More green space
- Covered drop-off

OPTION A

Cars off Vassal Lane Enter AND exit at southwest corner Circulation below building **OPTION B**

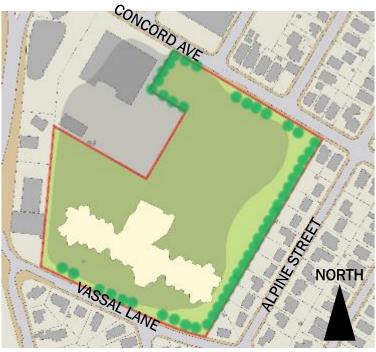
Cars off Vassal Lane
Enter at southwest corner
Circulation below building
Exit at southeast corner

SITE CIRCULATION – UNDERGROUND PARKING

OPTIONS







EXTENT OF CONTAMINATED FILL

Cons for Underground Parking

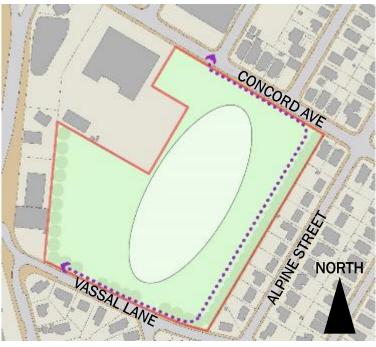
- High water table + flood zone
- More contaminated fill to remove
- High cost premium
- May not curb neighborhood parking
- Increase in dedicated space for vertical building entrance

SITE CIRCULATION - COMMUNITY PATH

OPTIONS







OPTION A

Enter near Fern Street at north Travel along west side Enter near Lakeview at south

OPTION B

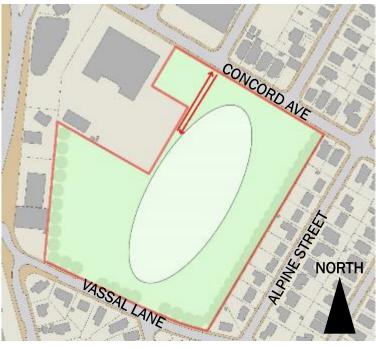
Enter near Fern or Corporal Burns at north Travel along east side Enter near Standish at south

SITE CIRCULATION - SERVICE

OPTIONS







OPTION A

Access from Vassal Lane
Enter and exit in Southwest corner

OPTION B

Access from Concord
Enter and exit across from Fern St

DES GN REVISIONS











































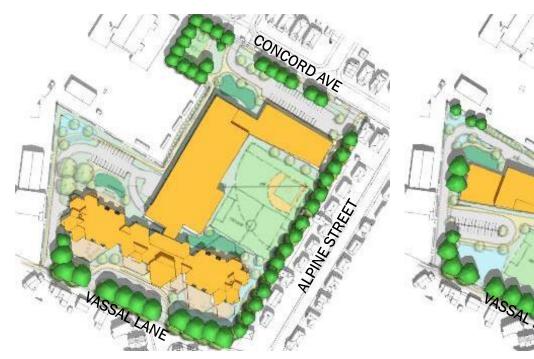








DESIGNS IN NOVEMBER



CONCORD AVE



RENOVATION / ADDITION

- Re-uses existing building
- Buses on Vassal Lane
- Cars on Concord Ave
- Service and parking at site interior
- Playing fields on east side

WINGS

- All new building
- On-site drive aisle for buses and cars
- Service and parking at site interior
- Playing fields on south side

PAVILIONS

- All new building
- On-site drive aisle for buses and cars
- Service and parking at site interior
- Playing fields on west side

INTERIM DESIGN REVISIONS



OPTION 1A: REPLACEMENT V1

- New building instead of Addition/Renovation
- Tshape



OPTION 3: PAVILIONS V2

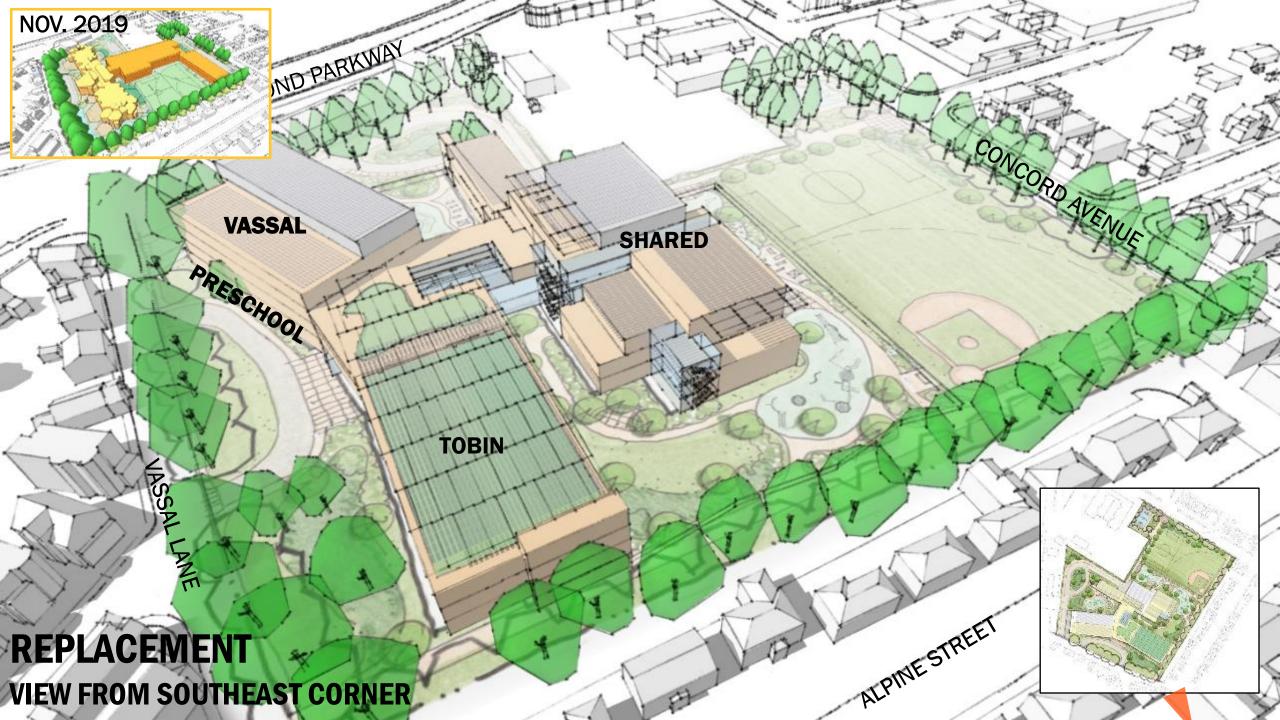
- Eliminated interior courtyards
- Reduced building footprint
- Increase in open area

OPTION 1A: REPLACEMENT V2

NEW BUILDING INSTEAD OF ADDITION/RENOVATION

- More compact shape
- Playing fields on north side
- Community path on both sides
- Cars enter and exit on Vassal in SW corner of site
- Bus loop on Vassal
- Service entry on Vassal



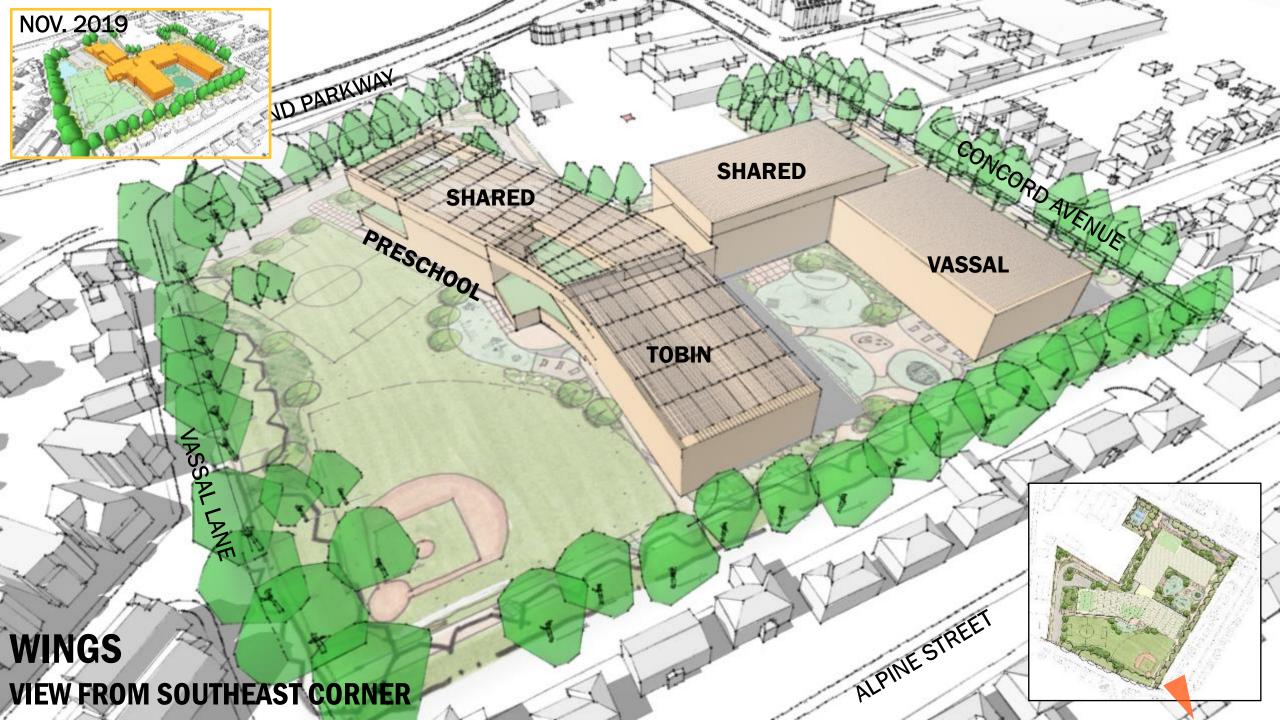


OPTION 2: WINGS V2

BUILDING ORIENTED AROUND A COURTYARD

- No significant form changes
- Playing fields on south side
- Community path on both sides
- Cars enter and exit on Vassal in SW corner of site
- Bus loop on Concord (other options under consideration)
- Service entry on Vassal

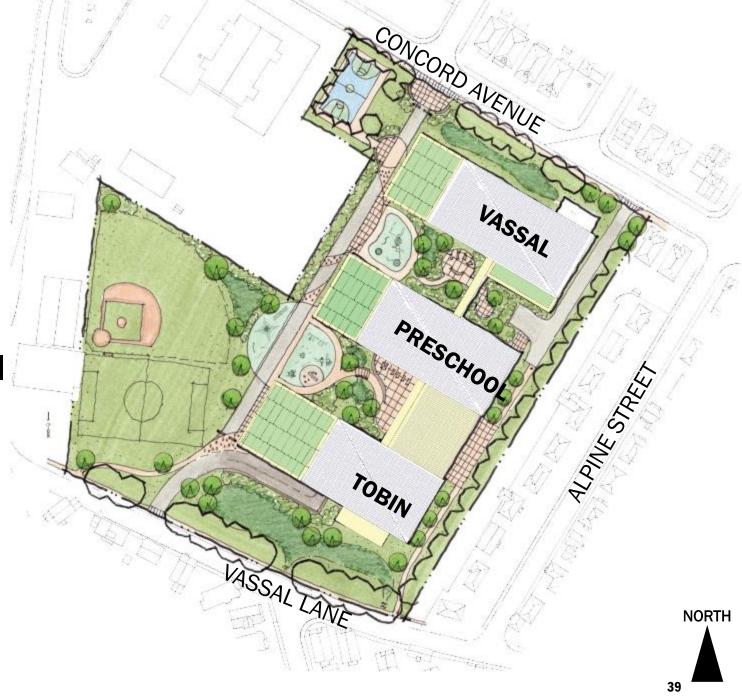


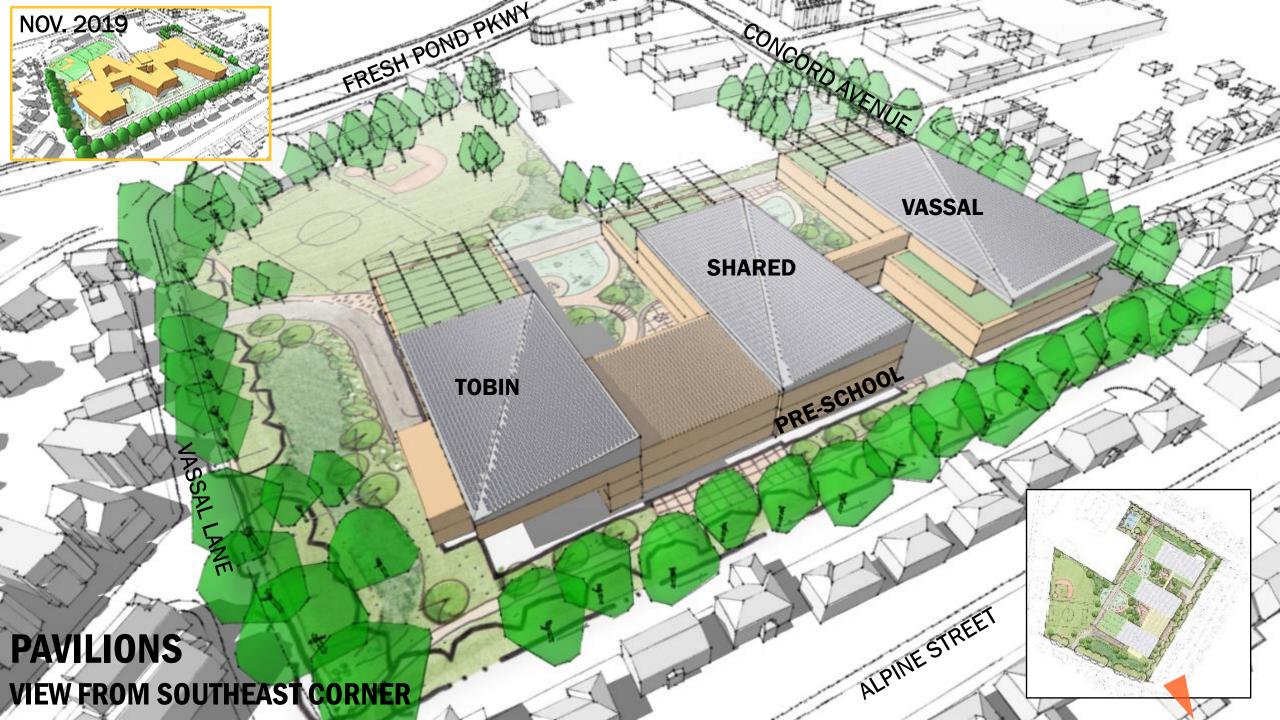


OPTION 3: PAVILIONS V3

SCHOOLS CONNECTED BY COMMON SPACE

- Simplified building form
- Playing fields on west side
- Community path on both sides
- Cars enter and exit on Vassal near center of site
- Bus lane from Vassal to Concord
- Service entry on Concord

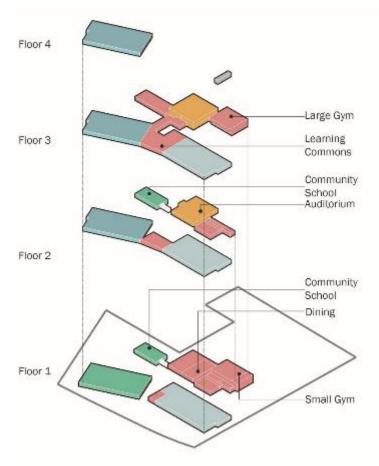


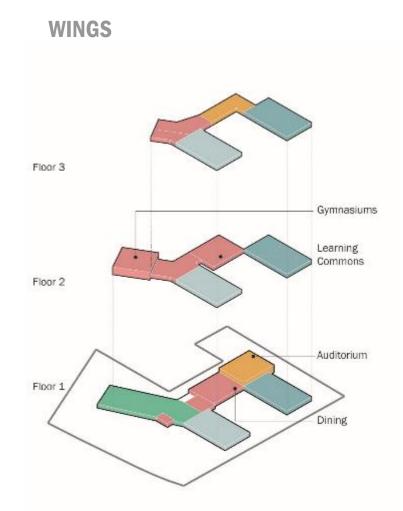


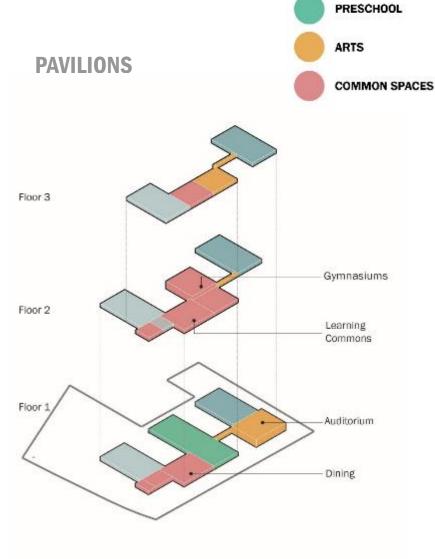
STACKING DIAGRAMS

DESIGN REVISIONS

REPLACEMENT





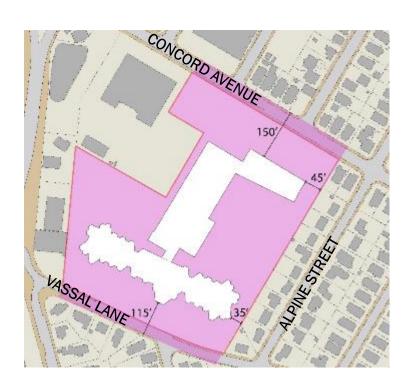


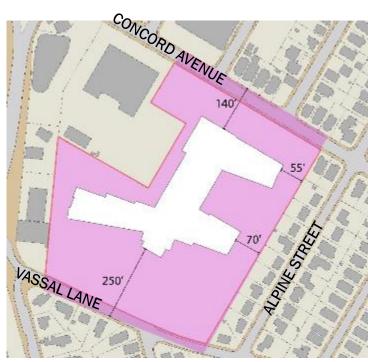
NOTE: Mechanical penthouses and rooftop terraces not shown PERKINS EASTMAN TOBIN MONTESSORI/VASSAL LANE SCHOOLS PROJECT VASSAL LANE

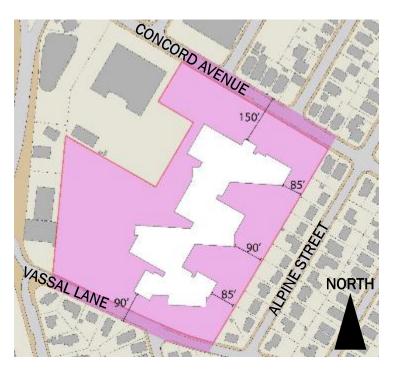
TOBIN

SETBACK FROM PROPERTY LINE

NOVEMBER DESIGNS







RENOVATION / ADDITION

WINGS

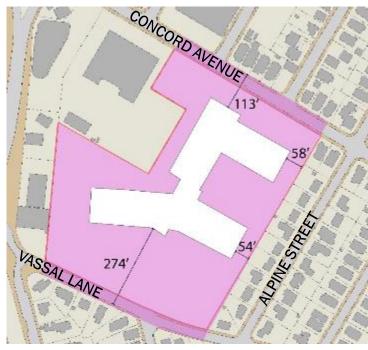
PAVILIONS

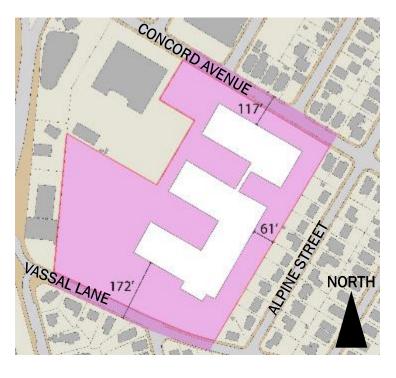
Note: previous presentation incorrectly showed existing setback on Vassal Lane as 90'

SETBACK FROM PROPERTY LINE

DESIGN REVISIONS







REPLACEMENT

WAS:

115' from Vassal (+22') 35' from Alpine (-10') 150' from Concord (+233')

WINGS

WAS:

250' from Vassal (+24') 55' from Alpine (-1') 140' from Concord (-27')

PAVILIONS

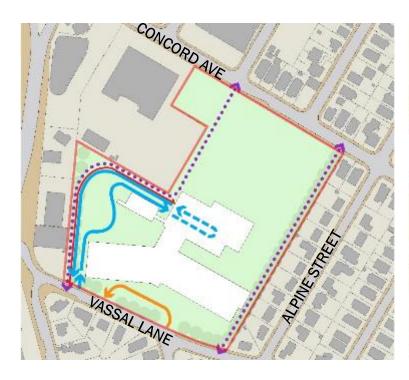
WAS:

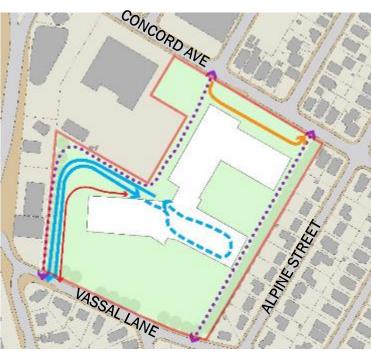
90' from Vassal (+82') 85' from Alpine (-24') 150' from Concord (-33')

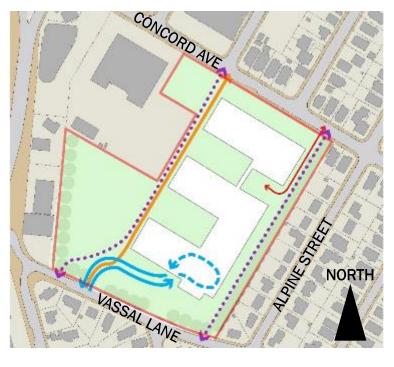
SITE CIRCULATION

POSSIBLE COMBINATIONS









COMBINATION 1

Shown on Replacement

Also works with Pavilions

COMBINATION 2

Shown on Wings

Also works with Replacement

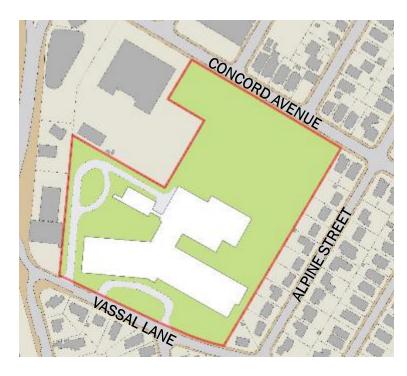
COMBINATION 3

Shown on Pavilions

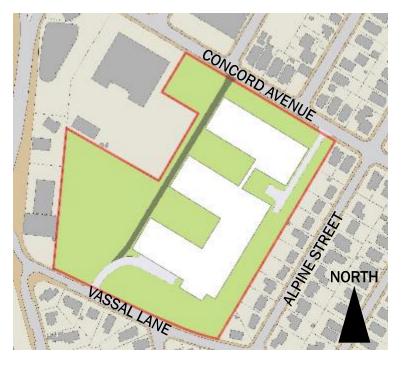
Also works with Wings

OPEN AREA

DESIGN REVISIONS







REPLACEMENT: 6.3 ACRES + 0.4 ACRES GREEN ROOF

Building: 2.2 acres Roads: 0.6 acres

WINGS: 6 ACRES + 0.4 ACRES GREEN ROOF

Building: 2.5 acres Roads: 0.6 acres **PAVILIONS: 5.8 ACRES**

+ 0.5 ACRES MULTI-USE LANE

+ 0.8 ACRES GREEN ROOF

Building: 2.5 acres Roads: 0.3 acres

TOTAL FOOTPRINT SIZE

DESIGN REVISIONS

Building Footprint	November (square feet)	Current (square feet)	Change (square feet)
Existing		62,162	
Renovation + Addition	117,000		20 500
Replacement		96,500	- 20,500
Wings	106,500	108,000	+ 1,500
Pavilions	109,000	106,500	- 2,500

Open Area	November (acres)	Current (acres)	Change (acres)
Existing		6.6	
Renovation + Addition	5.4		L O 9
Replacement		6.3	+ 0.8
Wings	5.4	6	+ 0.4
Pavilions	5.2	5.8	+ 0.6

OPEN SPACE IDEAS







WINGS

PAVILIONS

PLAY SPACE EXAMPLES – PRESCHOOL & ELEMENTARY





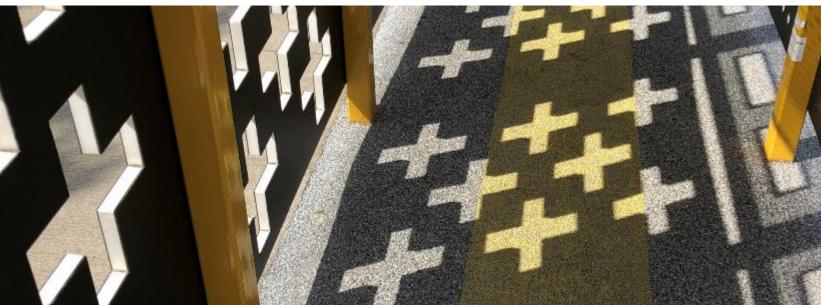




PLAY SPACE EXAMPLES – UPPER SCHOOL









LEARNING GARDEN EXAMPLES









COMMUNITY PATH EXAMPLES









OPTION 1A: REPLACEMENT

- Community use on all sides
- Play spaces segregated by age
- Contiguous, separated sports fields
- Community path on east and west
- Bioswale at Southeast corner
- Most play area near fields
- Gardening and outdoor learning



OPTION 2: WINGS

 Community use on all sides

Vehicular Access

- Large central play area for all age groups
- Contiguous, separated sports fields
- Community path on east and west
- Bioswale near Vassal
- Some play area near fields
- Gardening and outdoor learning



OPTION 3: PAVILIONS

Community use on all sides

 Smaller play areas in "pocket parks" segregated by age

Shared-use lane on west

Contiguous, separated sports fields

Community path on east and west

Bioswale near Vassal

More play area near fields

Gardening and outdoor learning

