

Brookline

BALDWIN SCHOOL EXPANSION

School Building Committee
October 25, 2018



Agenda

1. Summary of Community Feedback
2. Program Summary
3. Traffic Update
4. Revised Alternative Designs and Discussion
5. Cost Estimates

SBC Meeting Designer Agendas

9/27/18

- Existing Conditions Progress Report
- Building Program, Space Summary Status Report

10/11/18

- Refined Building Program and Bubble Diagram
- Alternative Design Strategies

10/25/18

- Refined Alternative Design Strategies
- Traffic Report Preliminary Findings
- Cost Estimates

11/8/18

- Recommend Preferred Design Alternative

11/29/18

- Revised Preferred Design Alternative
- Updated Cost Estimate
- Approve Preferred Alternative to proceed to Schematic Design

1. Summary of Community Feedback





Summary of Community Feedback

PUBLIC SCHOOLS of
BROOKLINE



Public Meetings held since the establishment of the Building Committee:

- **September 27:** Building Committee
- **October 2:** Capital and Schools Subcommittees
- **October 4:** School Committee
- **October 9:** Select Board
- **October 11:** Building Committee
- **October 15:** Transportation Board Meeting
- **October 16:** Capital and Schools Subcommittees
- **October 17:** Neighborhood Community Forum
- **October 18:** School Committee

In addition the Building Committee chairs have been meeting with abutters



Summary of Community Feedback

PUBLIC SCHOOLS of
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Design

- As a district, Brookline's school facilities have fallen behind Newton, Wellesley and other surrounding districts - Think Big!
- No more expand-in-place, a new building is needed
- The Coolidge Corner School raises the bar for Brookline. Make it like Coolidge Corner, but keep it small
- Great opportunity to have a small school in Brookline
- Building needs to reinforce a cohesive, small-school atmosphere
- Building should allow opportunities for developing the school community involvement (e.g. a playground that invites families to hang around after school, spaces that can be used by the communi)
- Make fiscally responsible decisions that addresses town-wide problems
- Design can inadvertently create longer walks within the building and disconnection



Summary of Community Feedback

PUBLIC SCHOOLS of
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Traffic

- Continues to be serious concern about how the existing traffic will be impacted by the school opening again as a PK-8
- Back ups at Heath and Hammond intersection are of a particular concern
- Concern about narrow existing streets
- Experience at our other schools shows that impact of school traffic is limited to 15-20 minutes in the morning and then it's gone.



Summary of Community Feedback



Parking and Access

- Study and recommendations need to be thorough and consider all alternatives
 - Underground staff parking
 - Designated spaces for visitors and families
 - Other properties in the area that can be purchased to alleviate need
- On-street parking will narrow streets and increase congestion
- Street parking is the most economically feasible
- Should be comparable or aligned with the approach at existing schools
- Must consider conditions in the winter
- All crossings and sidewalks need to do be made safe
- Currently insufficient sidewalks in the area
- Minimize crossing of Route 9
- Hammond St is unsafe to cross currently; more needs to be done to make it walkable and safe



Summary of Community Feedback

PUBLIC SCHOOLS of
BROOKLINE



Process, Communication and Outreach

- Need Comparisons between Baldwin projects to other schools
 - Baldwin neighborhood should be given more consideration
 - Need to have a Precinct 15-only meeting
 - Be clearer about the problems that PSB needs to solve
-
- Provide greater context and background on any numbers/projections made
 - Where will Baldwin students come from, and how will they get there?

 - Process needs to be considerate of neighboring residents and non-PSB programs
 - Noise and traffic concerns during construction period
 - What happens to Winthrop House, Staff Day Care, and early education at the Soule Recreation Center?



Baldwin School

10/02/2018 – Parking

Proposed for School
Committee and
Transportation Board

xx Parking Lots Spaces

86 Requested TBoard Parking Spaces

2. Program Summary

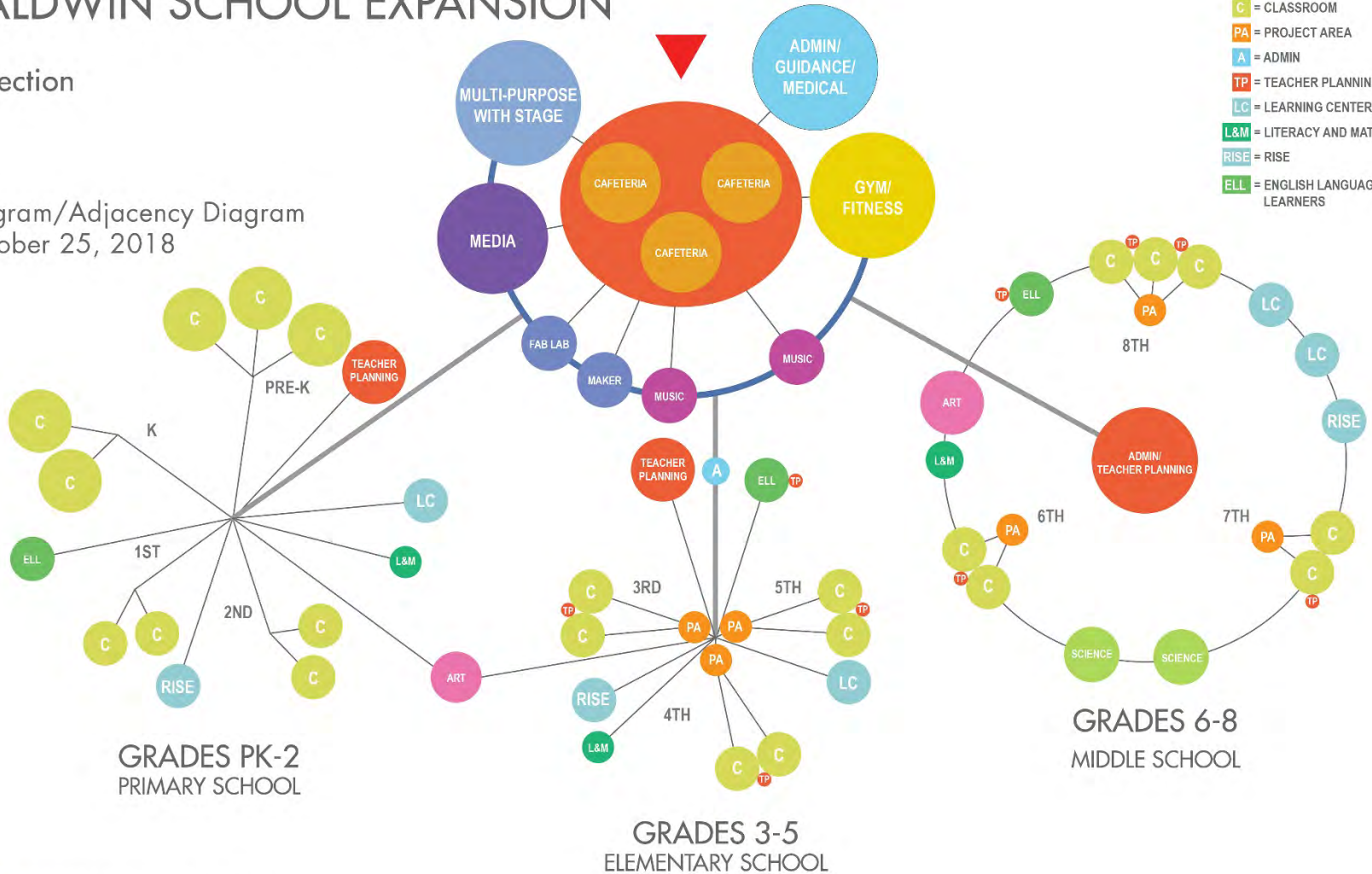
Educational Program Diagram

BALDWIN SCHOOL EXPANSION

2 Section

Program/Adjacency Diagram
October 25, 2018

- LEGEND**
- C = CLASSROOM
 - PA = PROJECT AREA
 - A = ADMIN
 - TP = TEACHER PLANNING
 - LC = LEARNING CENTER
 - L&M = LITERACY AND MATH
 - RISE = RISE
 - ELL = ENGLISH LANGUAGE LEARNERS



1. Summary of Community Feedback
2. Program Summary
3. Traffic Update





On-site Parking at PSB Schools

PUBLIC SCHOOLS of
BROOKLINE

	<u>Staff</u>	<u>Families</u>	<u>Visitors</u>
Baker	On Site + Street	None	Limited to Circle
Coolidge Corner	On Site + Street	None	Limited to Circle
Driscoll	On Site + Street	None	None
Heath	On Site + Street	None	Limited to small off street lot
Lawrence	Street	None	None
Lincoln	On Site + Street	None	Limited to Circle
Pierce	On Site + Street	None	None
Runkle	Street	None	None
Brookline High	On Site + Street	None	None
BEEP	On Site + Street	None	None
Baldwin (Proposed)	Street	None	On-Site

Proposed Baldwin 2 Section PK-8 School Brookline, Massachusetts

Preliminary Transportation Impact Assessment

Prepared by:



October 25, 2018

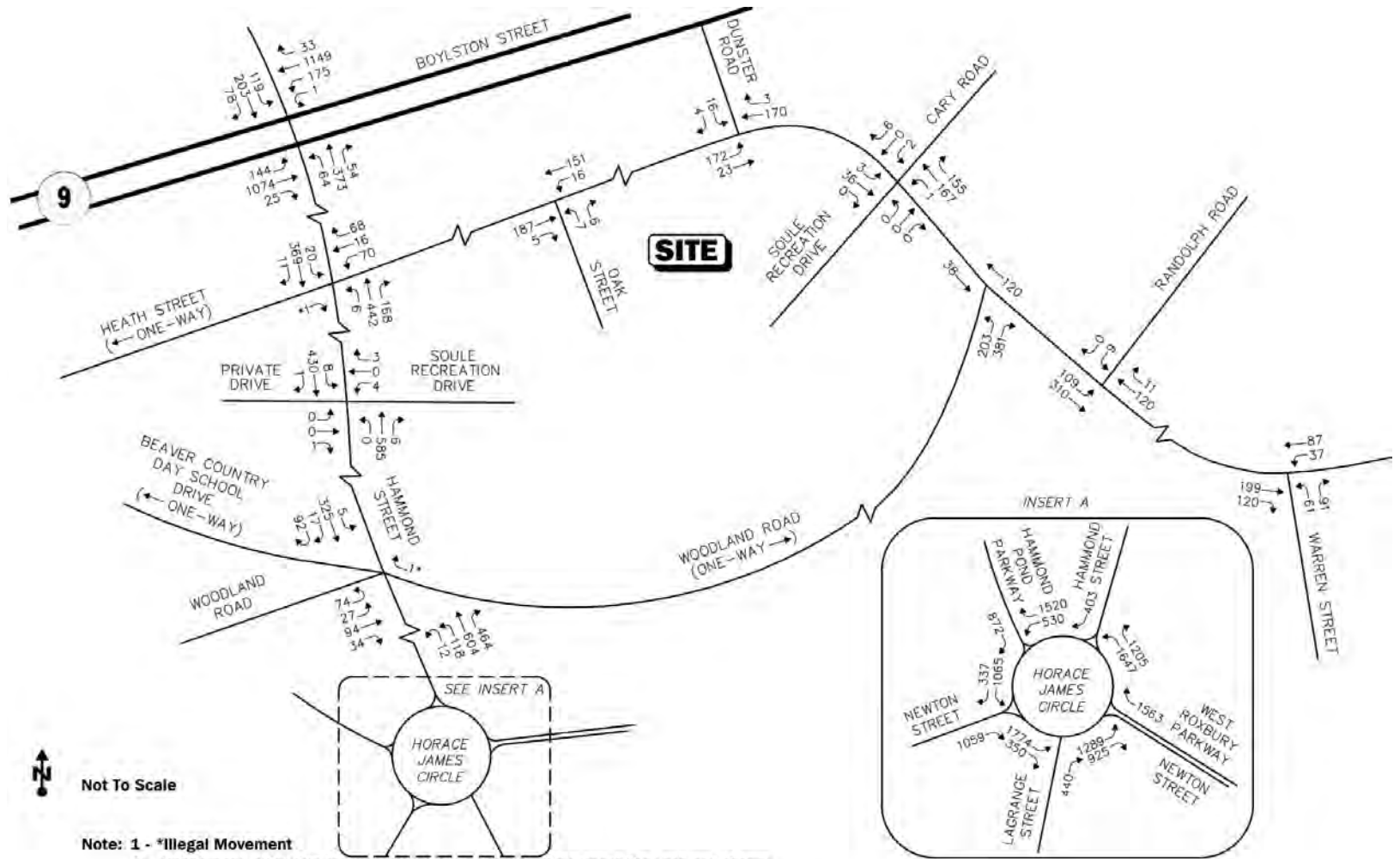
Traffic Agenda Items

- Area of Study
- Existing Condition Data Gathered
- Projected Conditions
- Recommendations
- Conclusions

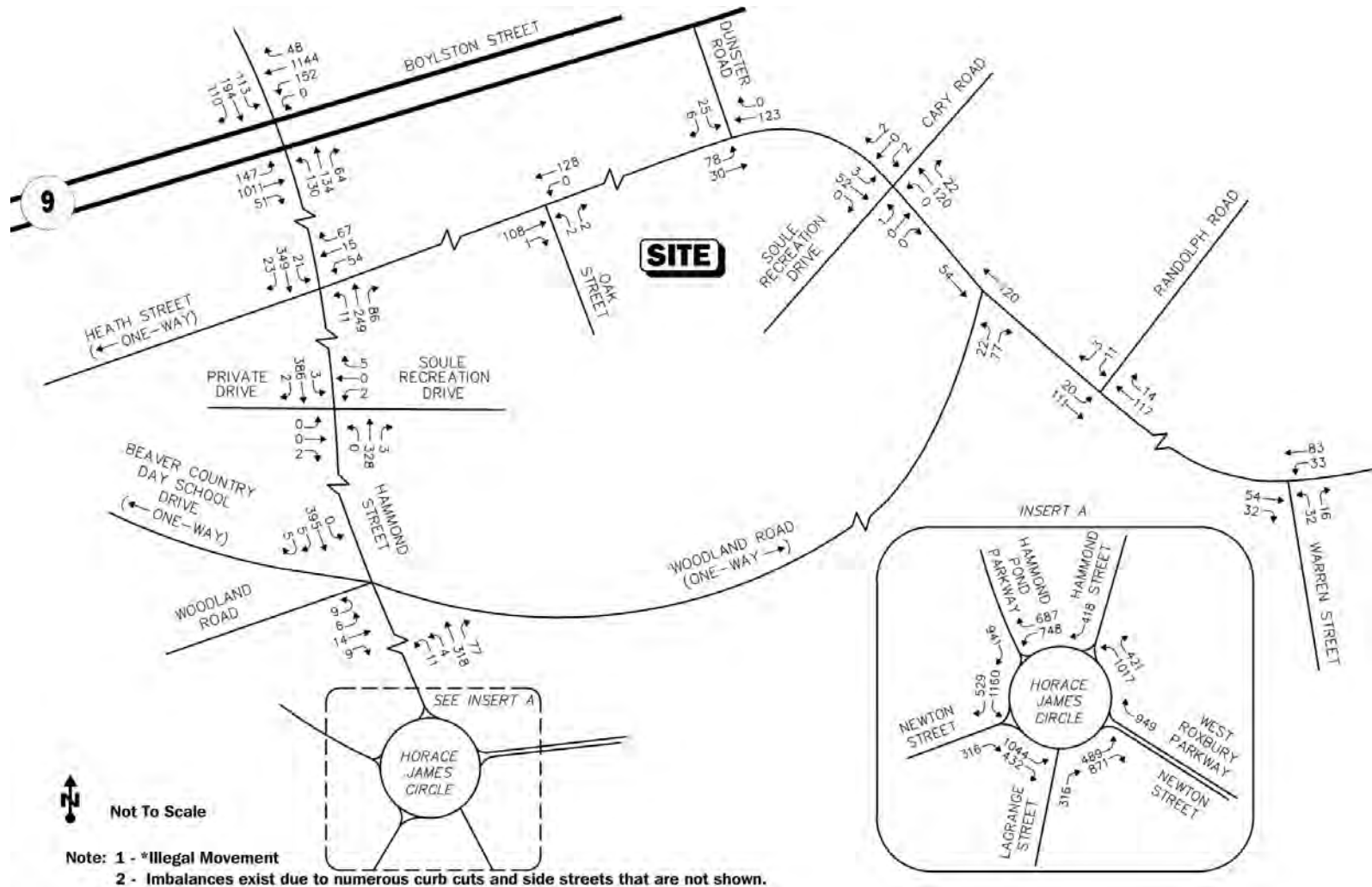
Site Location and Study Area Map



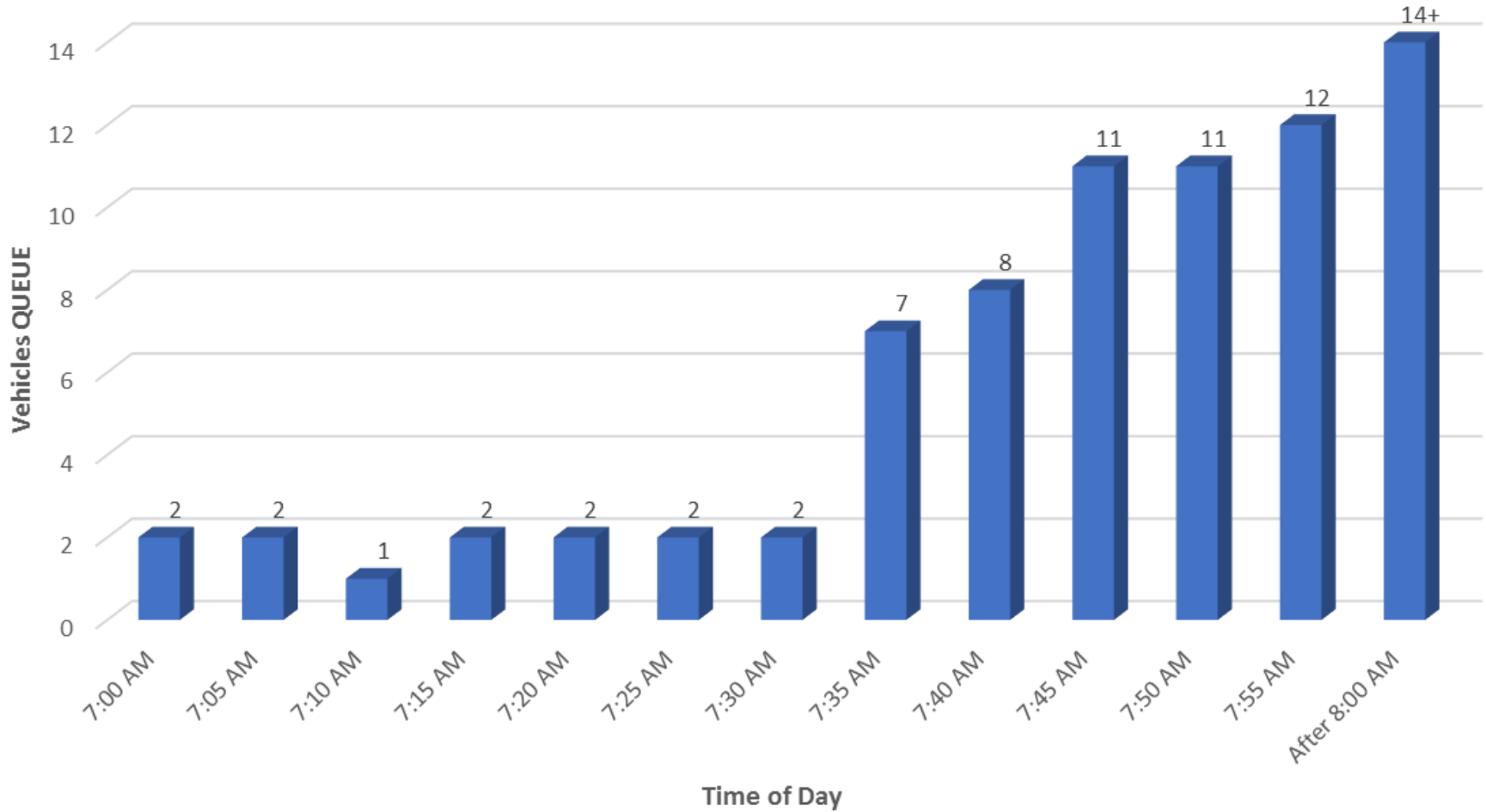
2018 Existing Conditions – Weekday Morning School Peak Hour Traffic Volumes (7:00-8:00 AM)



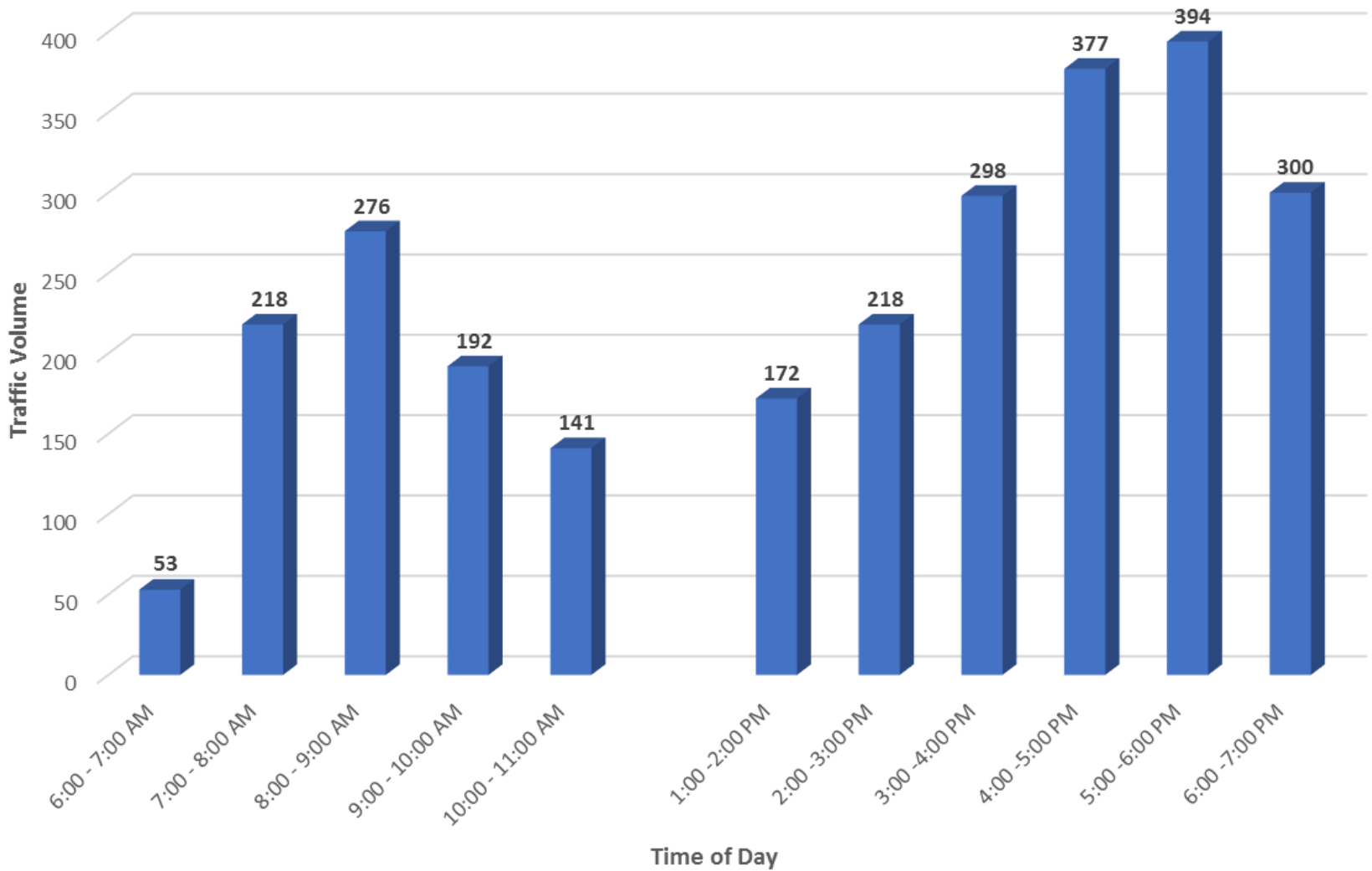
2018 Existing Conditions – Weekday Evening School Peak Hour Traffic Volumes (1:30-2:30 PM)



Vehicle Queues on Heath Street Weekday Morning, October 16, 2018



Existing Heath Street Traffic Count



Trip Generation Summary

ASSUMPTIONS

- 453 Students
- 86 Staff (74 arrive in peak hour 1.0 staff per car)
- 4% Daily absenteeism
- 25 students bus with METCO (Arriving by Bus)
- 30 RISE students (9 Vans)
- 45 Brookline Early Education Program students (Arrive after 8:00 AM)
- 120 students bus (2 Buses)
- 50 students walk¹
- Student car occupancy of 1.45 student/car

¹ This is a conservative estimate. 195 K-8 children live within 0.5 miles of the site, so the number of children who walk to school when it opens will be higher.

Result: 121 Cars in the morning, 70 Cars in the Afternoon

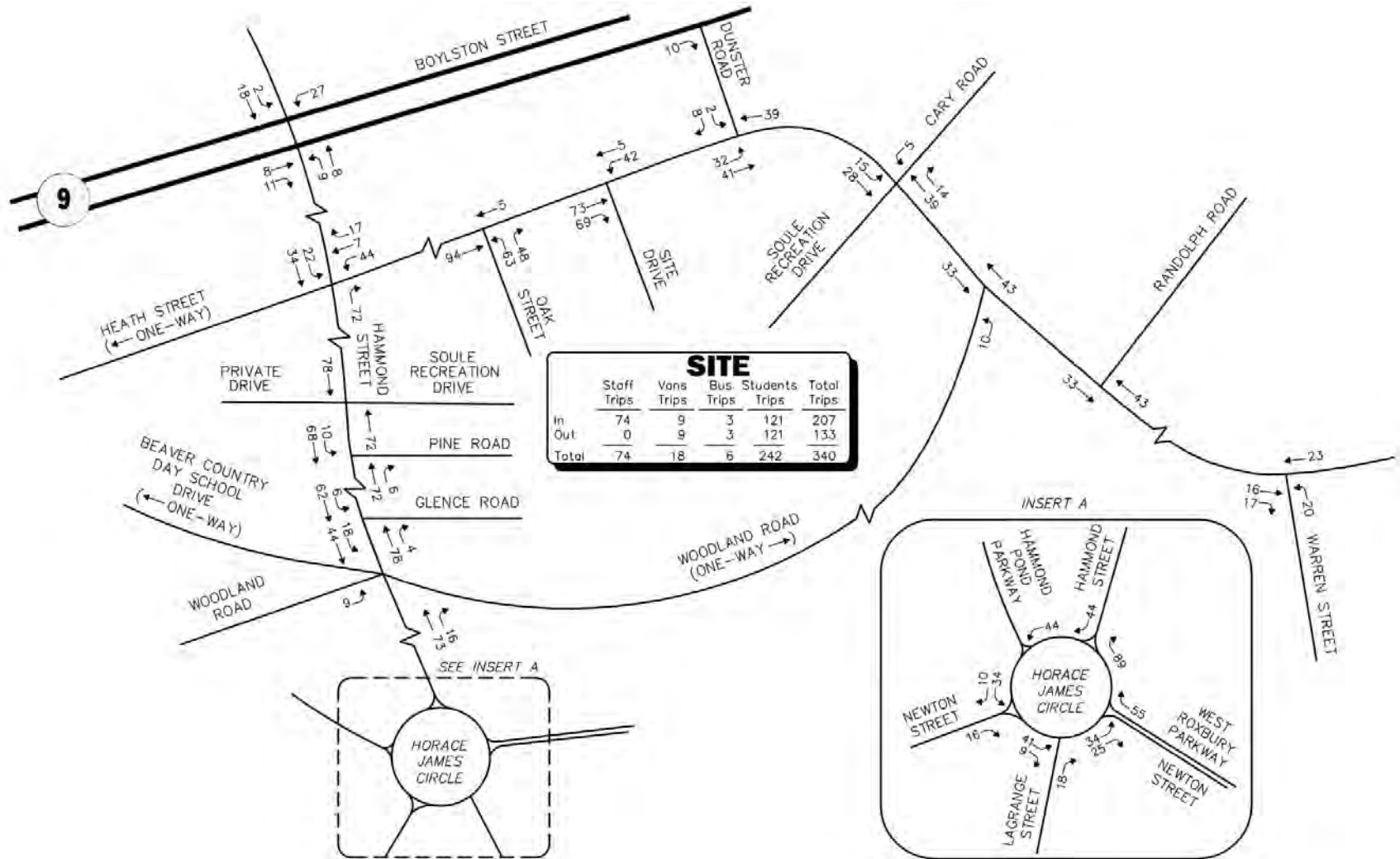
Car Drop-Off Trip Generation Comparison

Time Period	Car Drop-off (800 Students)	Car Drop-off (600 Students)	Car Drop-off (453 Students)
Weekday Morning Peak Hour:			
Entering	330	232	121
Exiting	<u>330</u>	<u>232</u>	<u>121</u>
Total	660	464	242

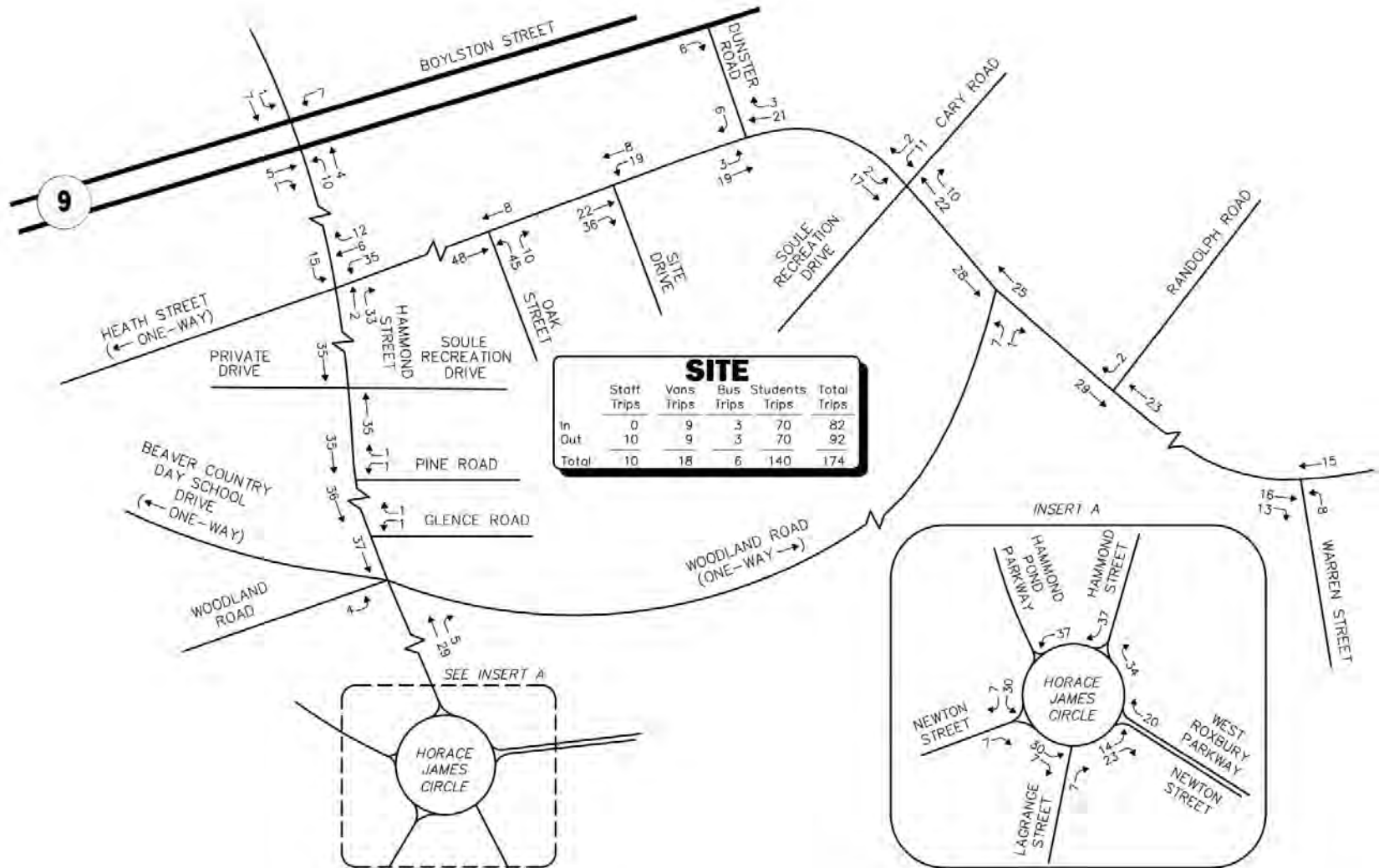
Trip Generation Summary

Time Period	Staff	Vans	Buses	Car Drop-off/ Pick-up	Total Trips
Weekday Morning Peak Hour:					
Entering	74	9	3	121	207
Exiting	<u>0</u>	<u>9</u>	<u>3</u>	<u>121</u>	<u>133</u>
Total	74	18	6	242	340
Weekday Afternoon Peak Hour:					
Entering	0	9	3	70	82
Exiting	<u>10</u>	<u>9</u>	<u>3</u>	<u>70</u>	<u>92</u>
Total	10	18	6	140	174

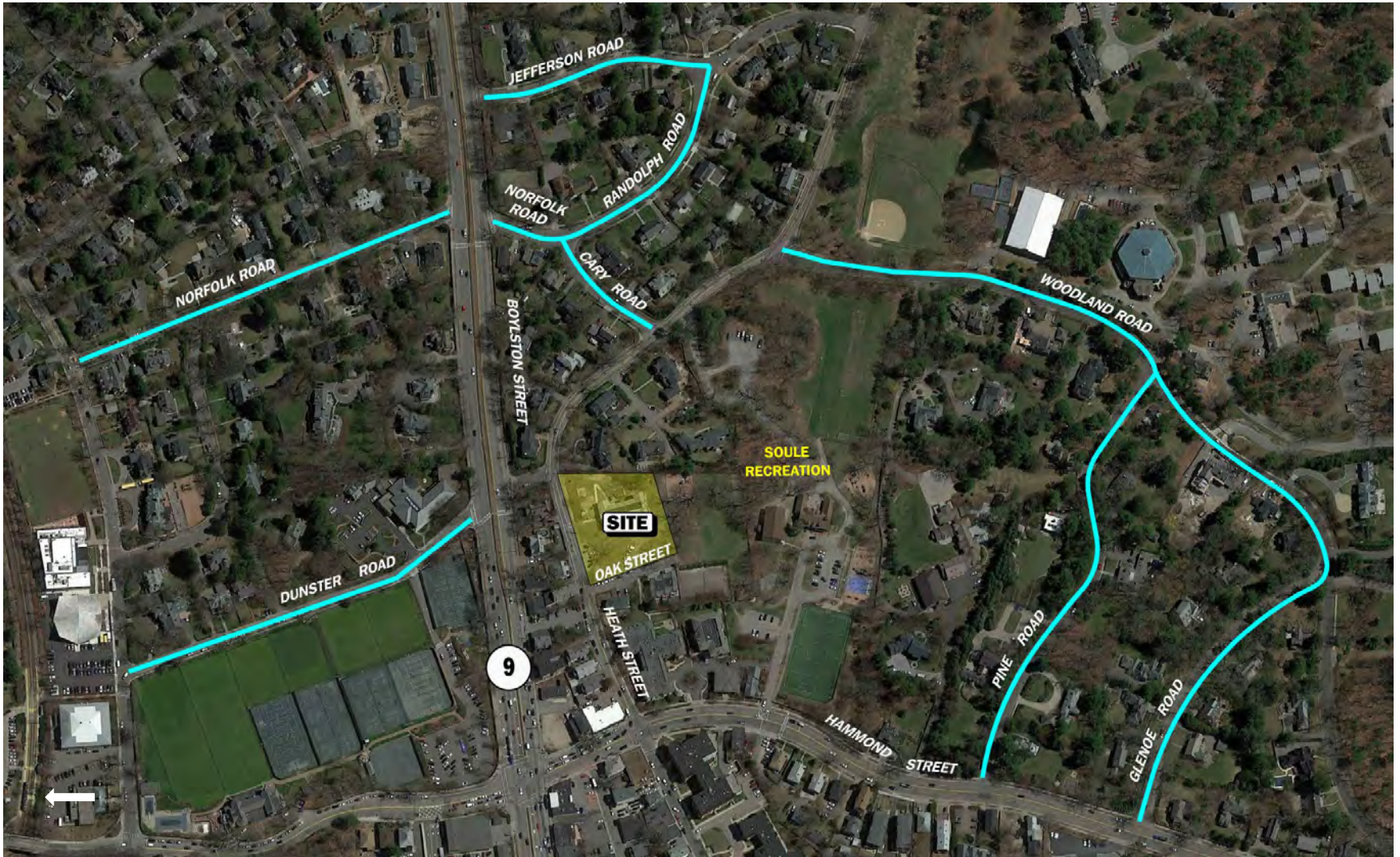
Projected Trip Generation – Weekday Morning



Projected Trip Generation – Weekday Evening



Teachers On-Street Parking



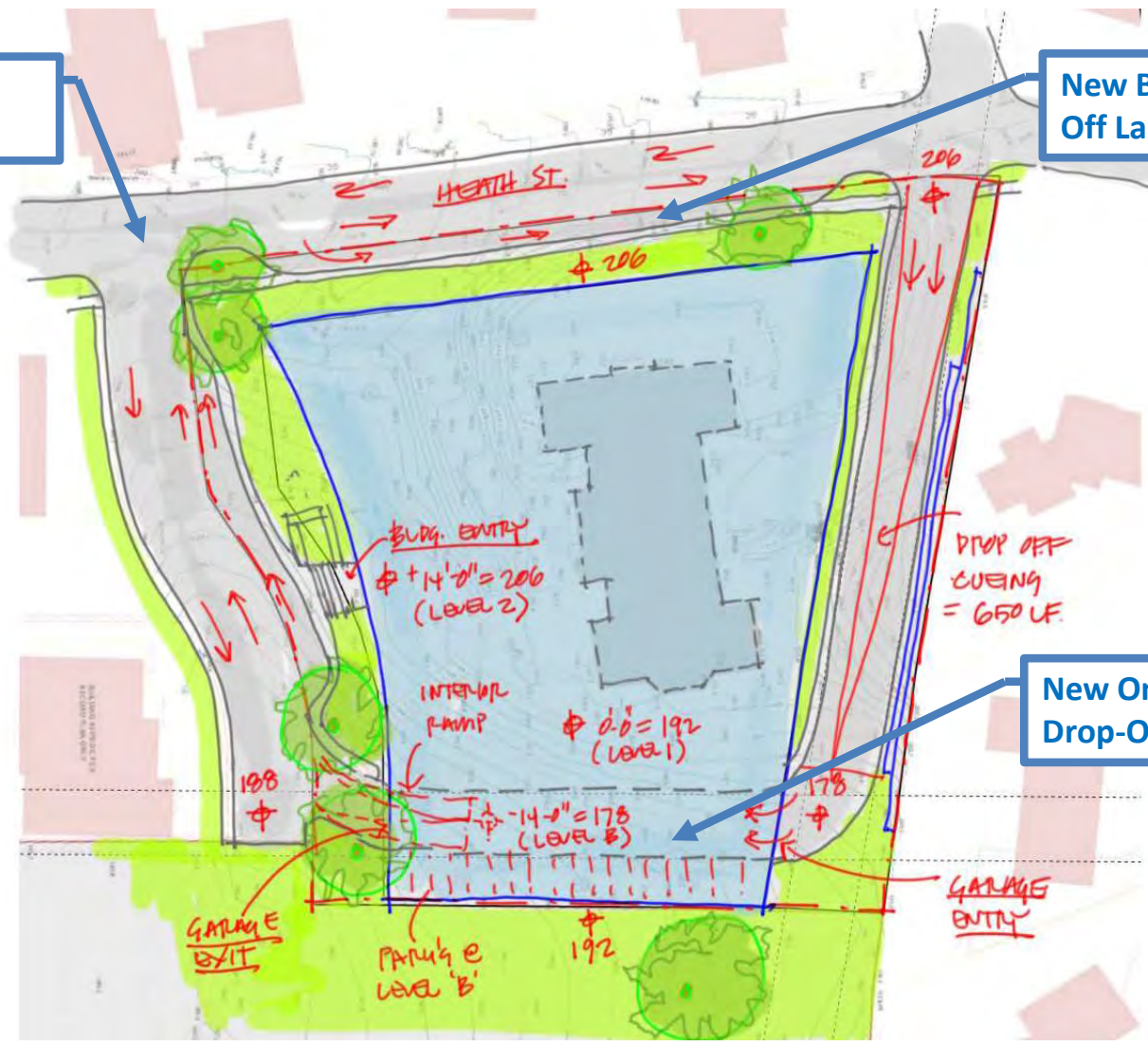
Parent On-Street Parking



Site Plan

Police Crossing Guard

New Bus Drop-Off Lane



New On-Site Parent Drop-Off

Site Comparison

Lincoln School
Driscoll School
Runkle School

Similar Characteristics

- Police details
- Parent Drop-Off/Pick-ups
- On-Street parent Drop-Off/Pick-ups
- On-Street teacher parking
- 15-20 minutes of increased activity

Baldwin Site

- Off-Street queue area (650 ft)
- Dedicated visitor parking

Recommendations

Project Area Access

- The Main Driveway Off Heath Street
- A Bus Drop-off Area is Proposed on Site Off Heath Street
- Earlier Start Time

Off-Site

Hammond Street at Route 9 and Hammond Street at Heath Street

- This Intersection Should Be Retimed and Coordinated with Route 9 Signal

Police Control

- Heath Street at Oak Street (School Exit)
- Hammond Street At Heath Street

School Drop-Off and Pick-Up Traffic Management Plan

Note: This is what is happening today at Coolidge Corner School with great success

- Police Detail Officer
- School Staff Should Be Stationed at The Drop-off
- A Designated Drop-off/Pick-up Area
- A Lane Along the Entryway Will Remain Unobstructed
- Parents and Caregivers Will Be Given Information on School Drop-off and Pick-up Times and Procedures

Recommendations

Pedestrian Improvement

New crosswalks

- Heath Street
- Hammond Street

Sidewalks entering the site

- Heath Street

Rectangular Rapid Flashing Beacon

- Hammond Street Near Soule School
- Route 9 at Dunster Road

Busing/ Vans

- 120 Students (2 Buses)
- 25 METCO Students (1 Bus)
- 30 RISE Students (9 Vans)

Bicycle Considerations

Bicycle Racks Should Be Provided

- Bicycle Consideration By the Town:
 - Heath Street
 - Woodland Road

Recommendations

Transit Usage

- Promote staff usage

Traffic Monitoring

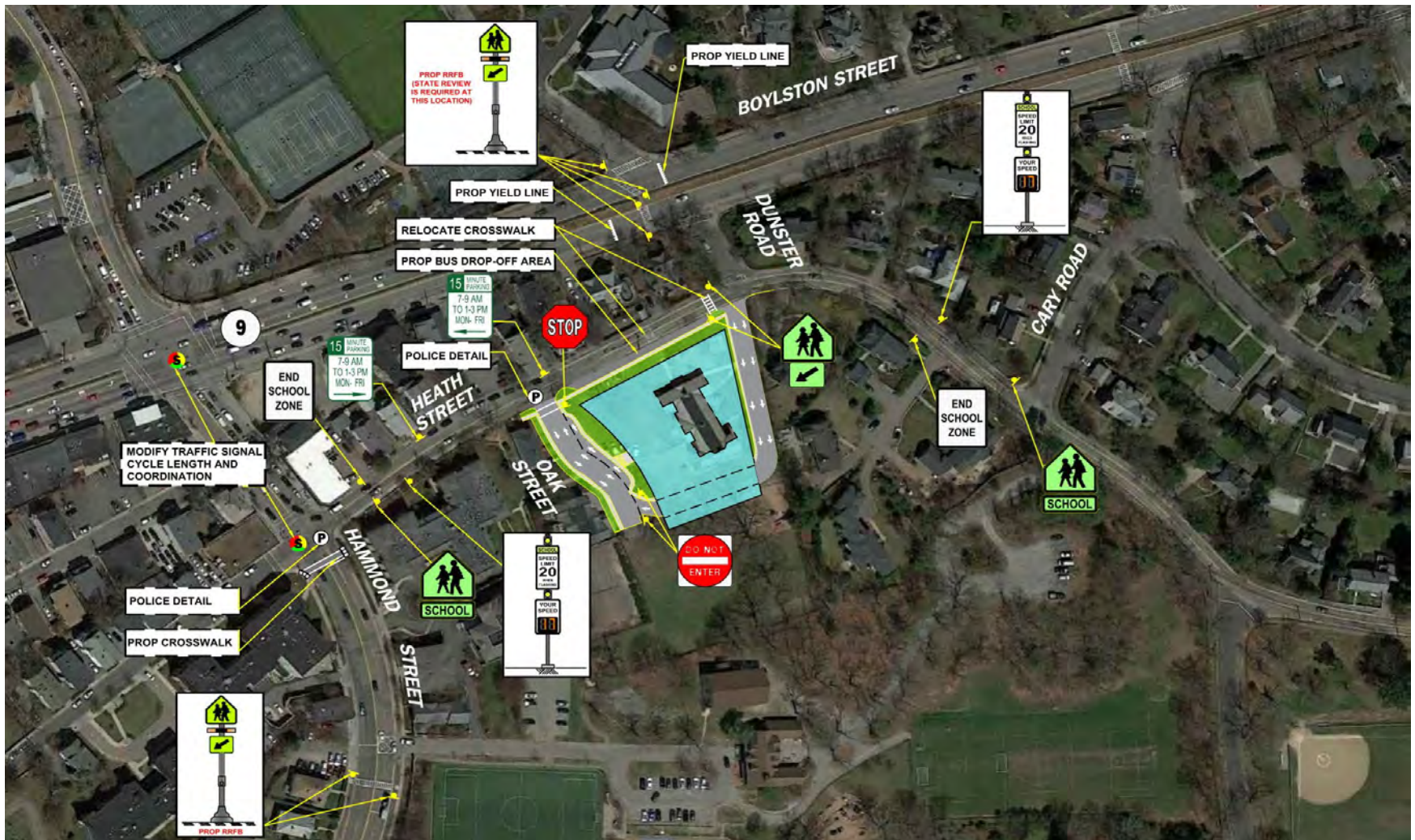
Within three months after school opening and annually

- Pedestrian safety
- Crossing guards
- Police detail
- Level of student busing

Construction Management Plan

A detailed Construction Management Plan should be prepared and reviewed by the Town

Recommendations Pedestrian Access and School Signage Plan



Summary

SUMMARY

- Safe Environment Can Be Maintained
- Delays and Queues - Limited to Short Periods (15-20 Minutes)
- School Traffic Before Existing Peak
- Traffic Conditions Will Be Manageable

Qualitative Assessment: Good Site for New School

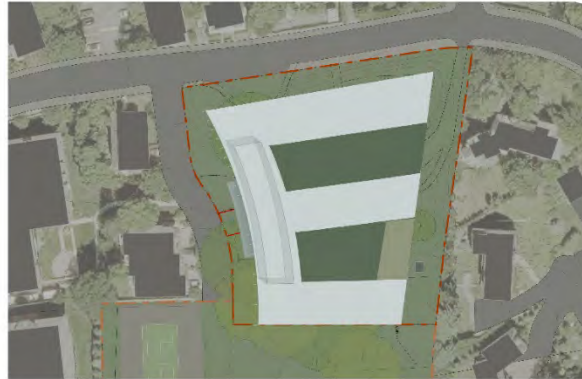
Neighborhood Impact: Comparable to Existing Schools

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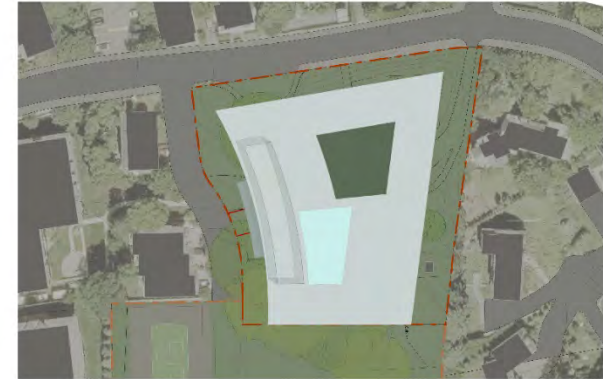
Preliminary Concept Design Alternatives



Option A
"Quadrangle"

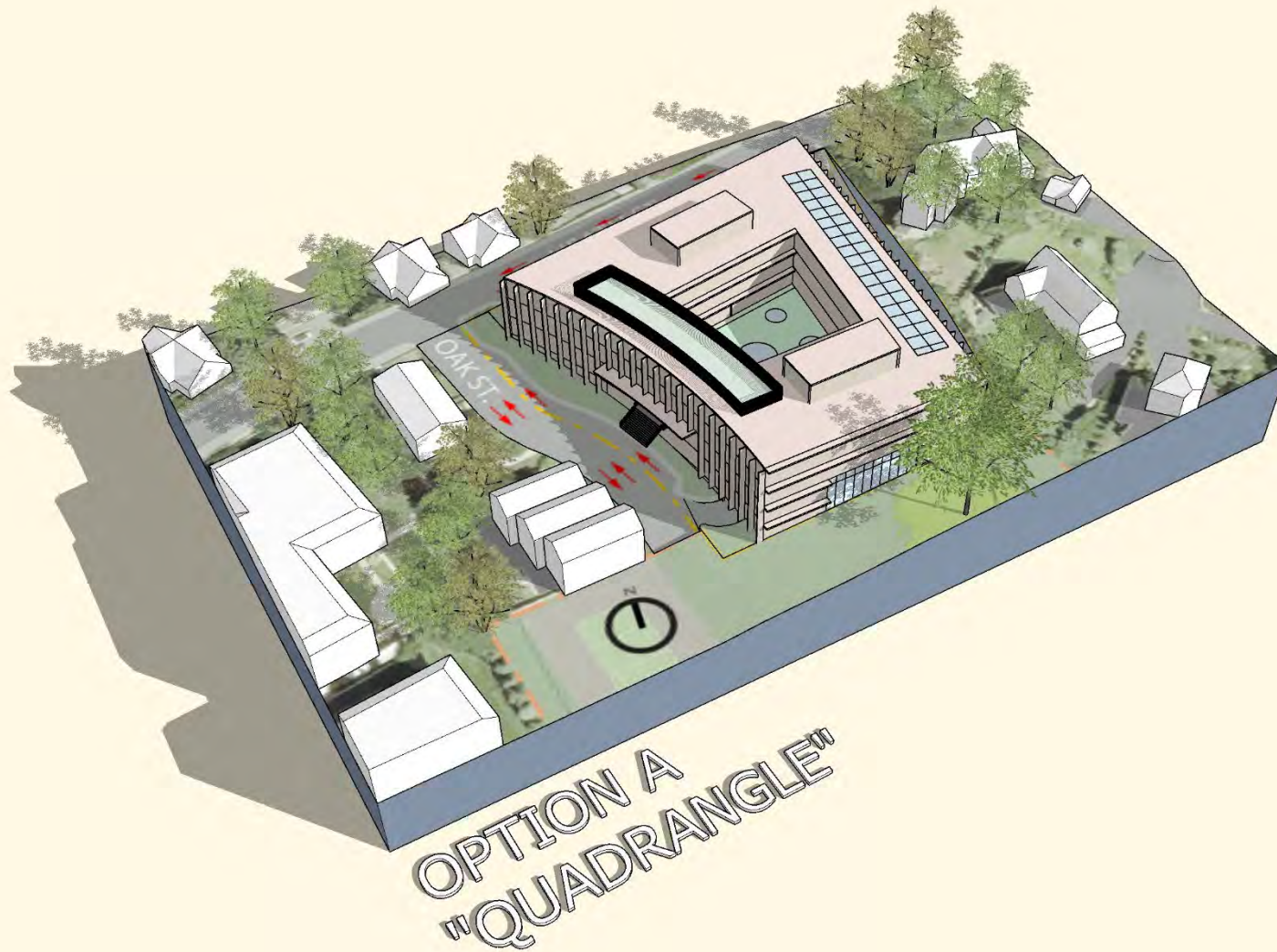


Option B
"Solar Harvest"

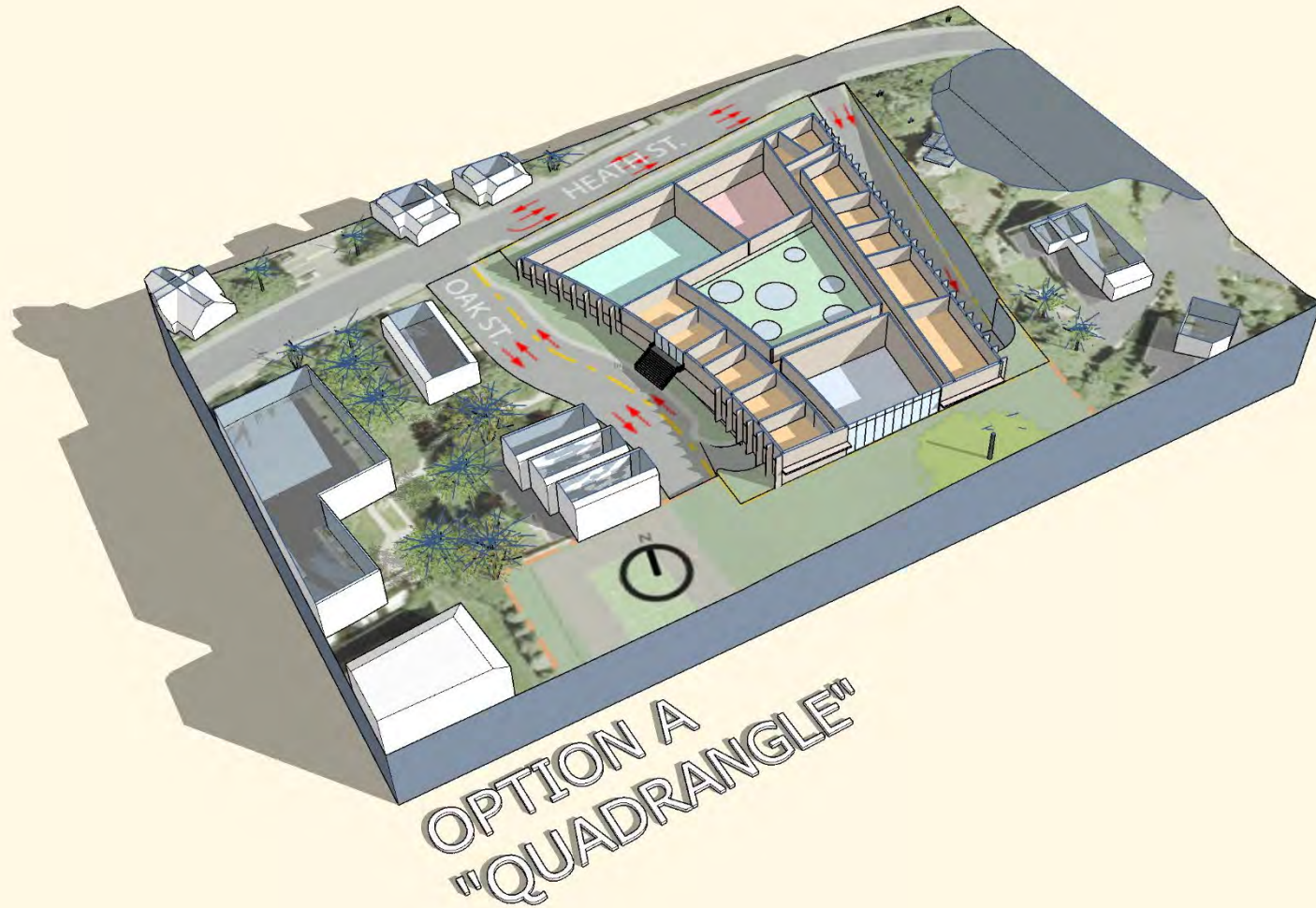


Option C
"Twin Court"

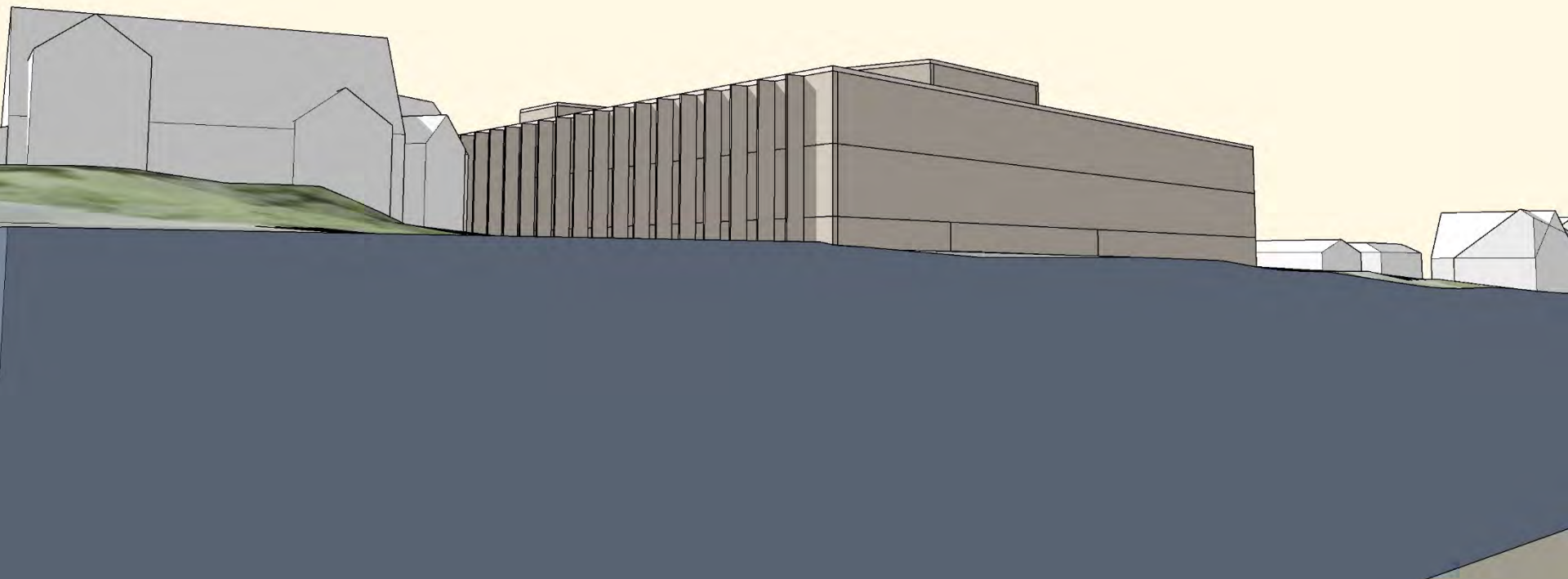
Preliminary Concept Design Alternatives



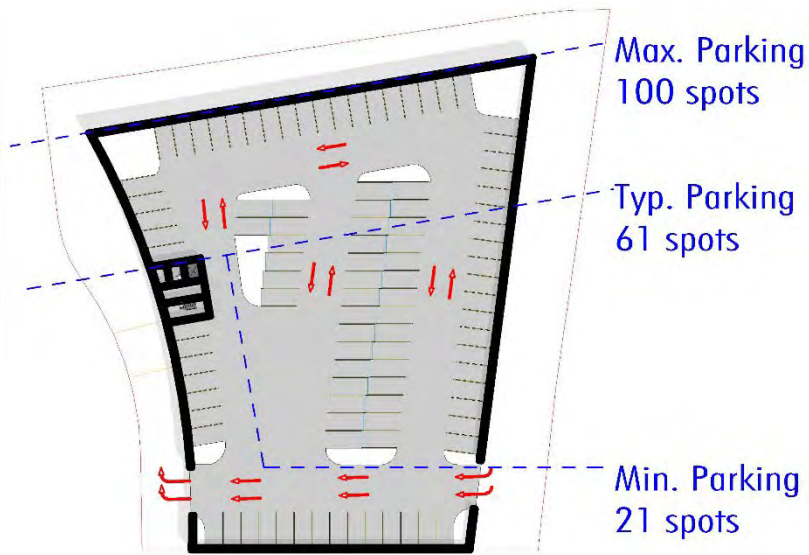
Preliminary Concept Design Alternatives



Preliminary Concept Design Alternatives



Option A - Quadrangle

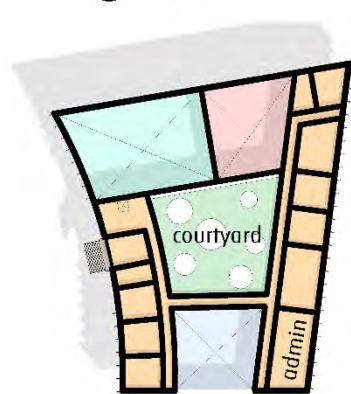


1 -1 GARAGE - OPTION A
1" = 50'-0"

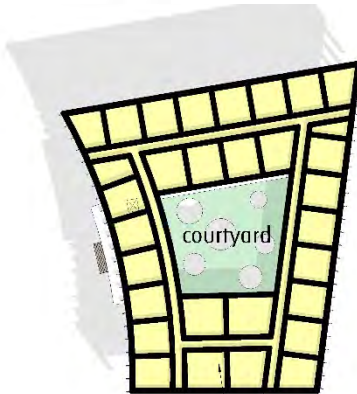


2 FIRST FLOOR PLAN - OPTION A
1" = 50'-0"

JLA
Jovanitch Law Architecture
266 BEACON STREET



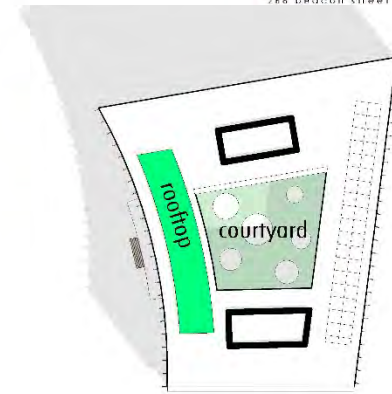
3 SECOND FLOOR PLAN - OPTION A
1" = 50'-0"



4 THIRD FLOOR PLAN - OPTION A
1" = 50'-0"

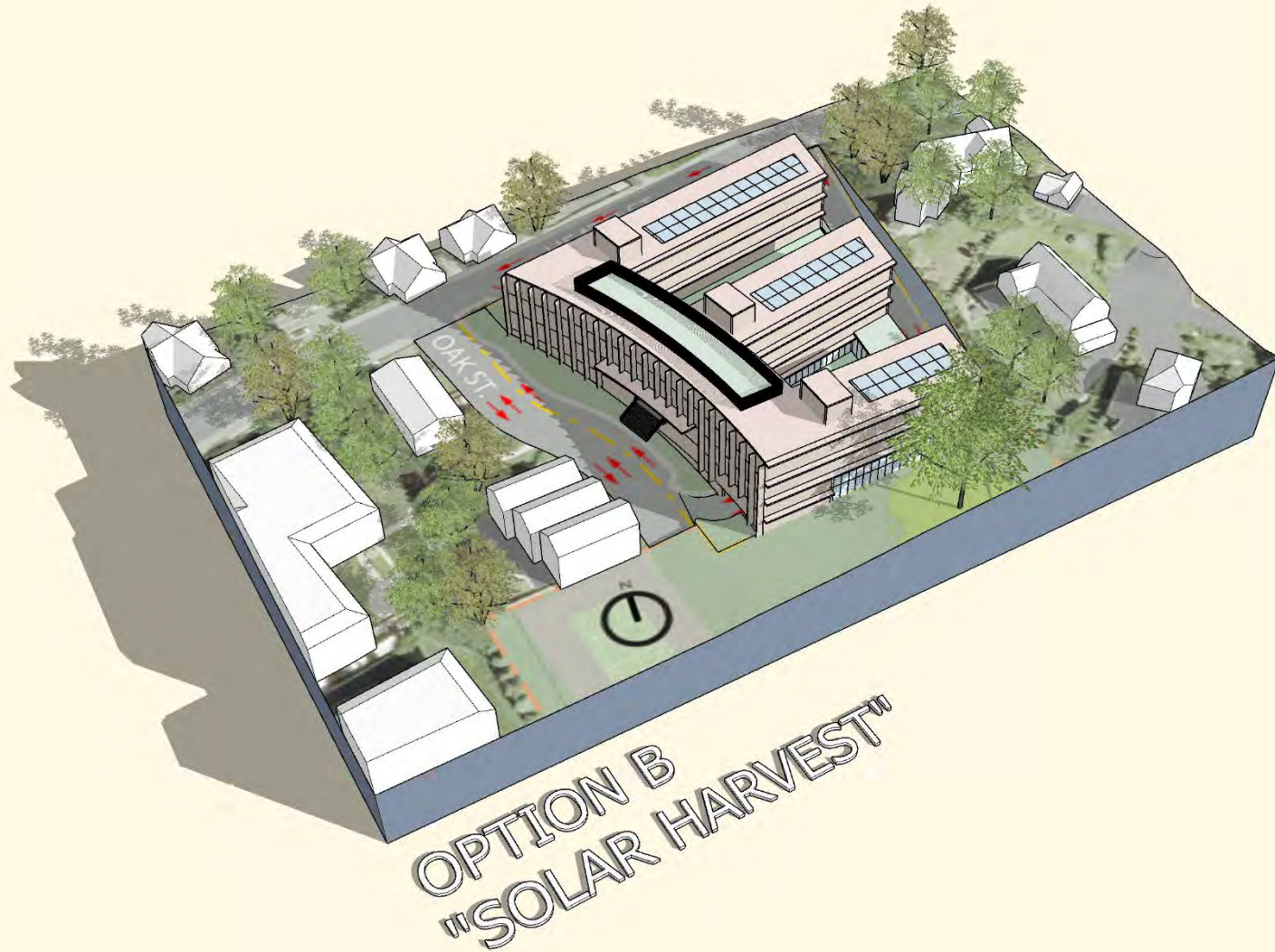


5 FOURTH FLOOR PLAN - OPTION A
50'-0"

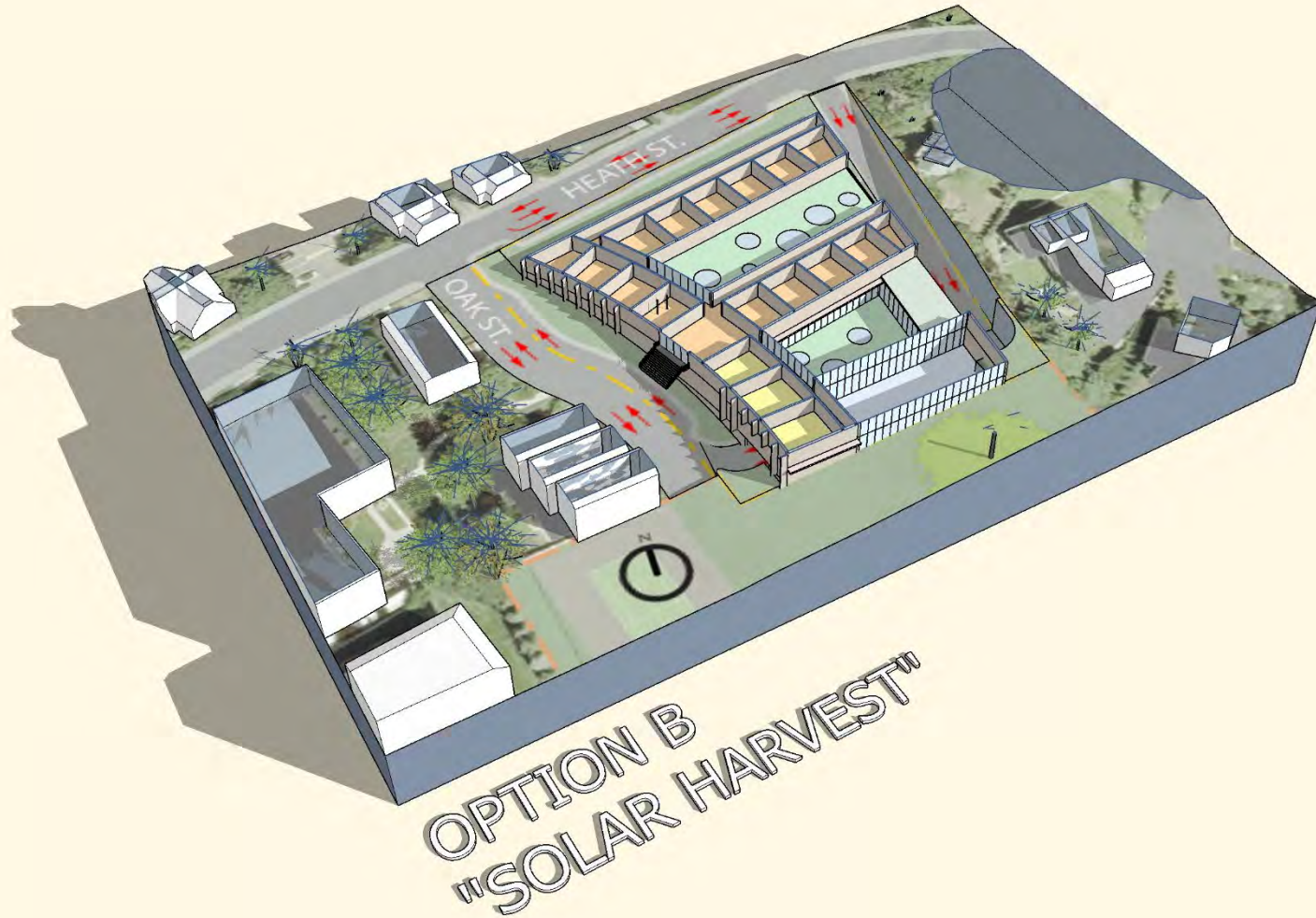


6 ROOF PLAN - OPTION A
1" = 50'-0"

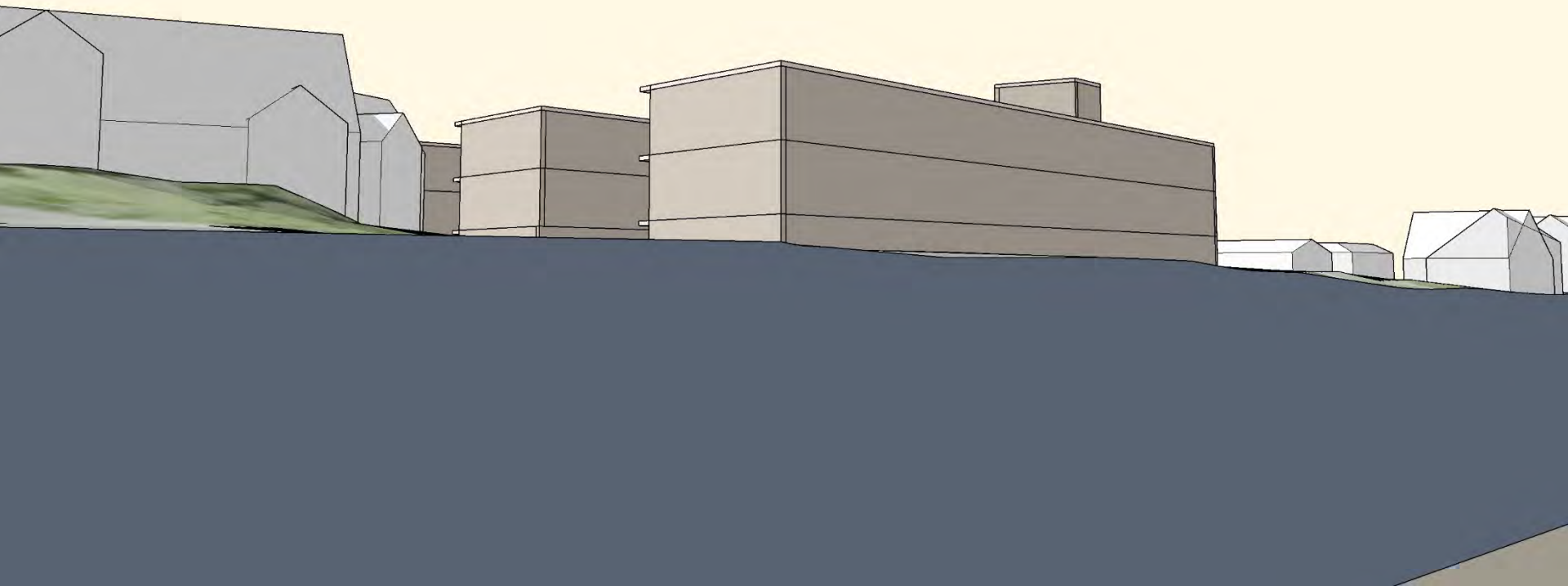
Preliminary Concept Design Alternatives



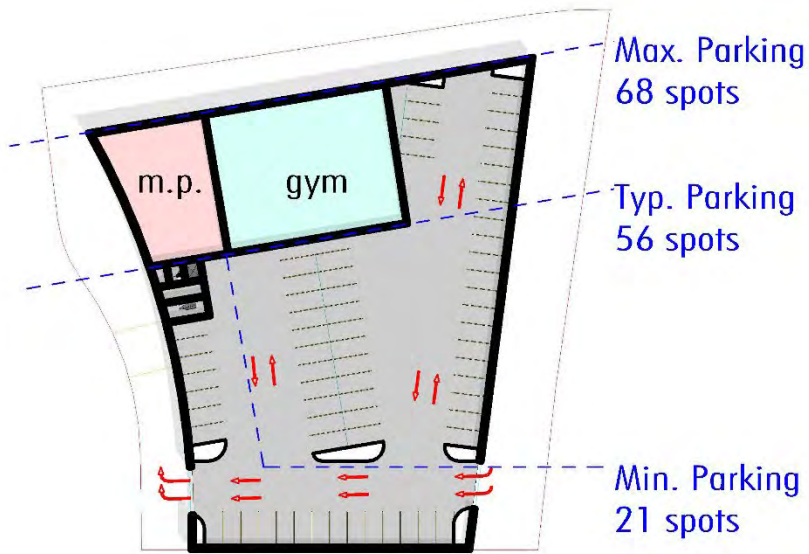
Preliminary Concept Design Alternatives



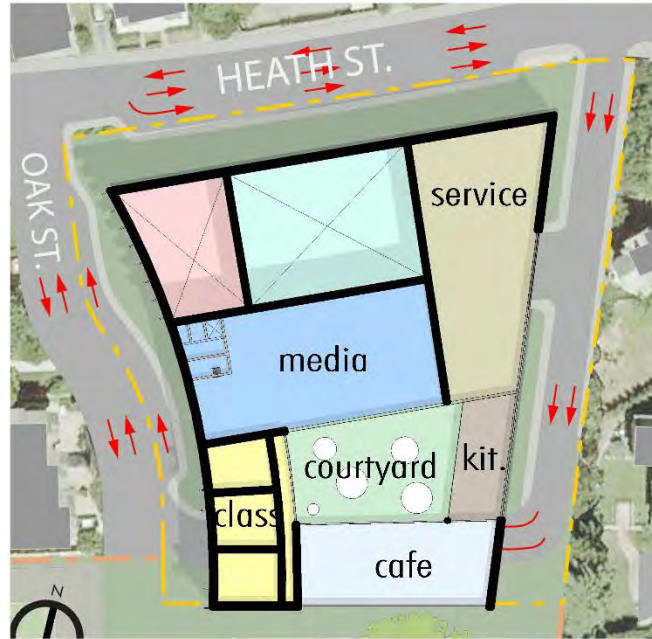
Preliminary Concept Design Alternatives



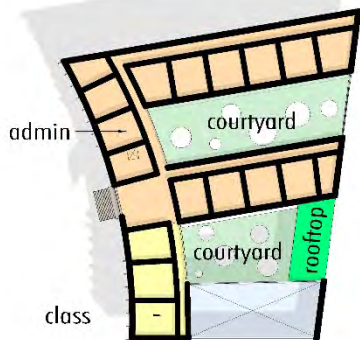
Option B – Solar Harvest



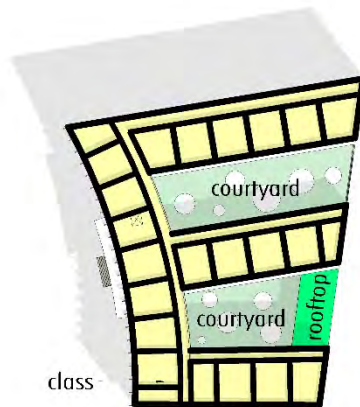
1 -1 GARAGE - OPTION B
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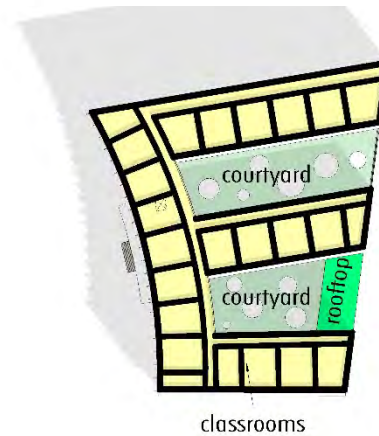
2 FIRST FLOOR PLAN - OPTION B
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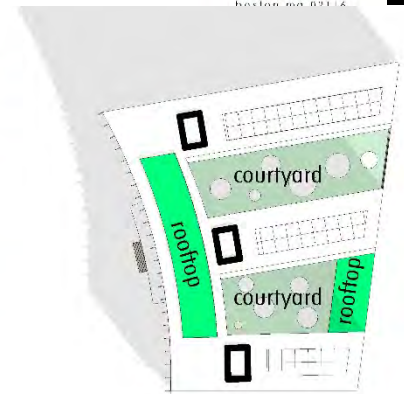
3 SECOND FLOOR PLAN - OPTION B
1" = 50'-0"



4 THIRD FLOOR PLAN - OPTION B
1" = 50'-0"



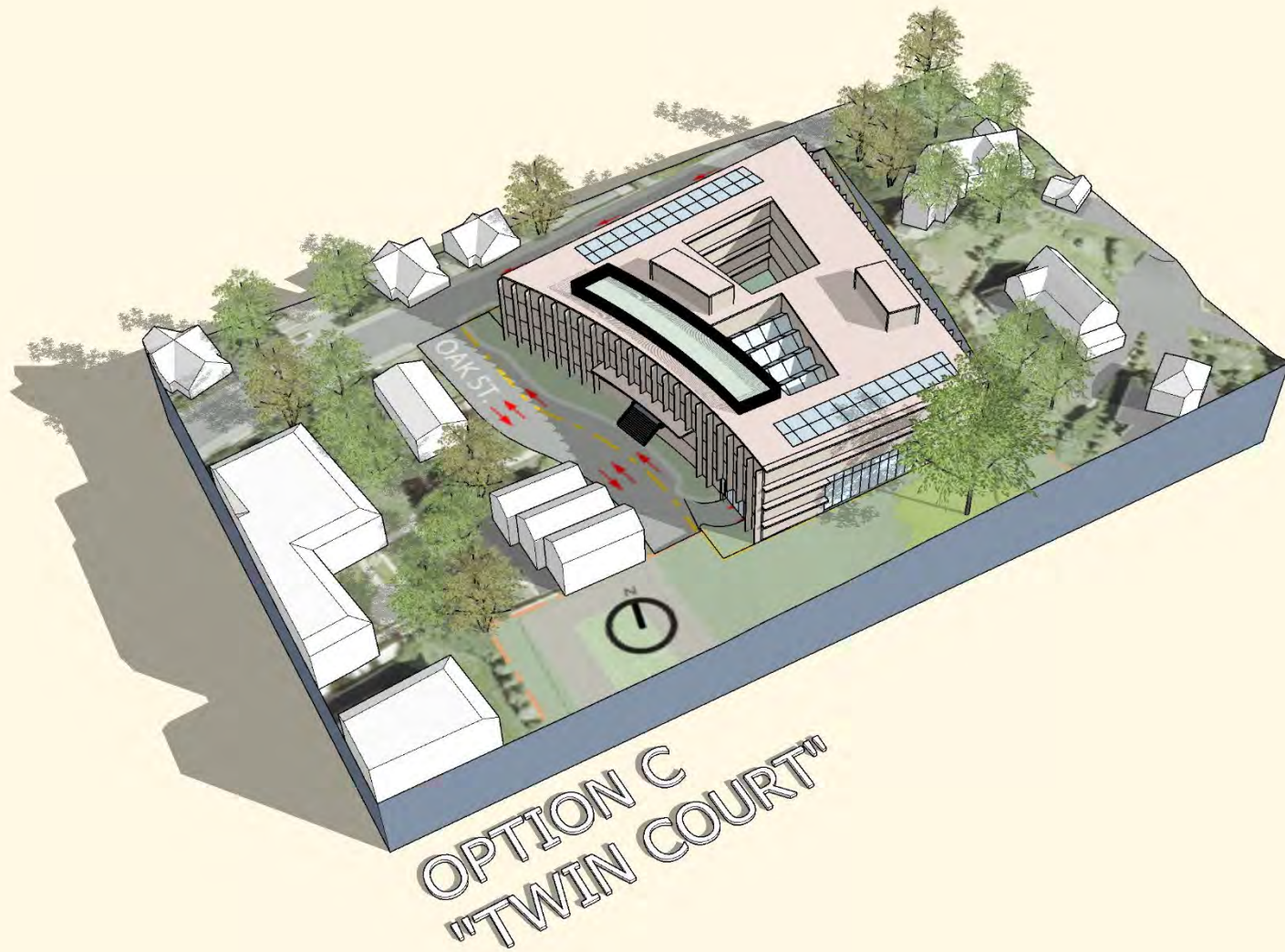
5 FOURTH FLOOR PLAN - OPTION B
1" = 50'-0"



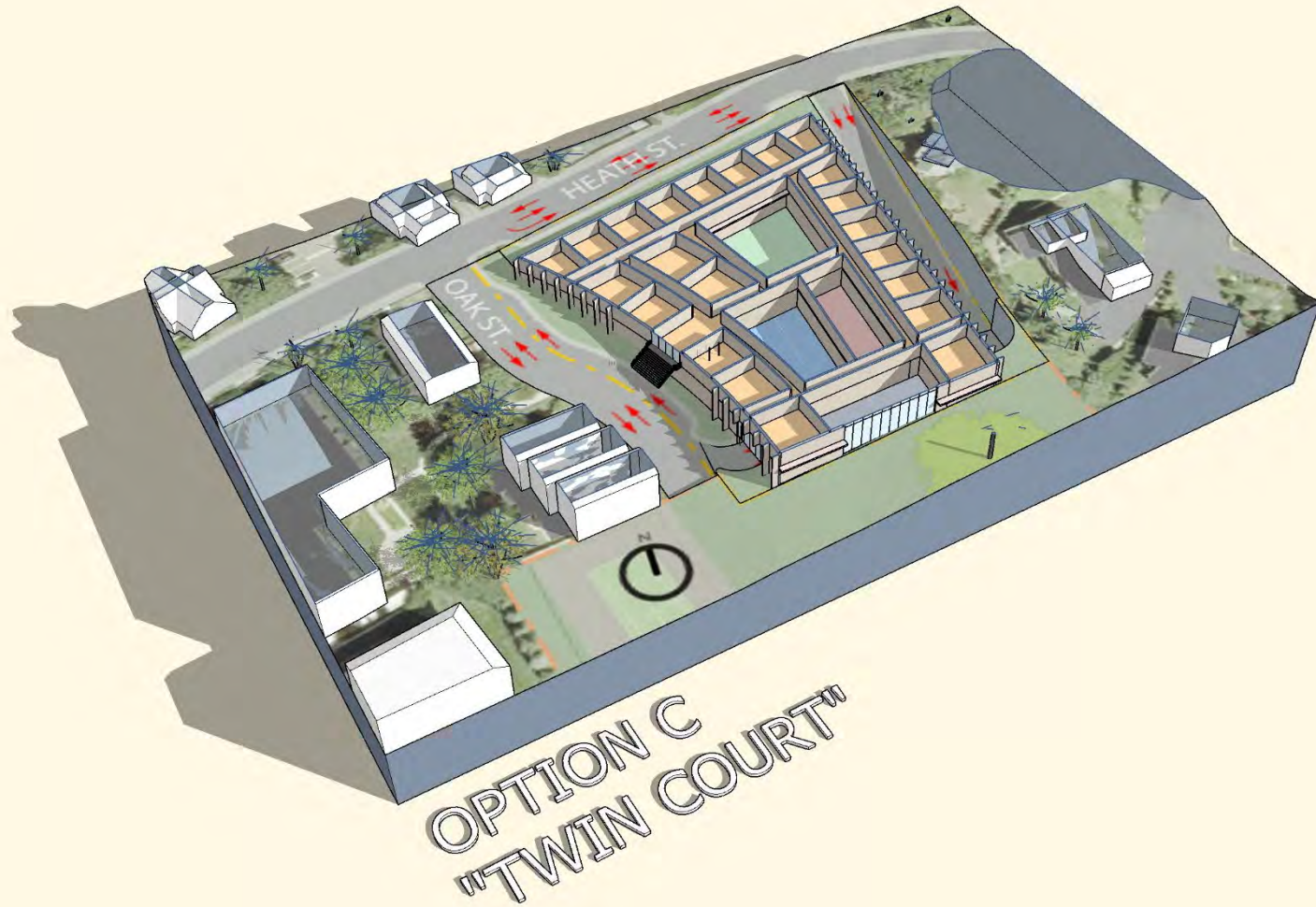
6 ROOF PLAN - OPTION B
1" = 50'-0"



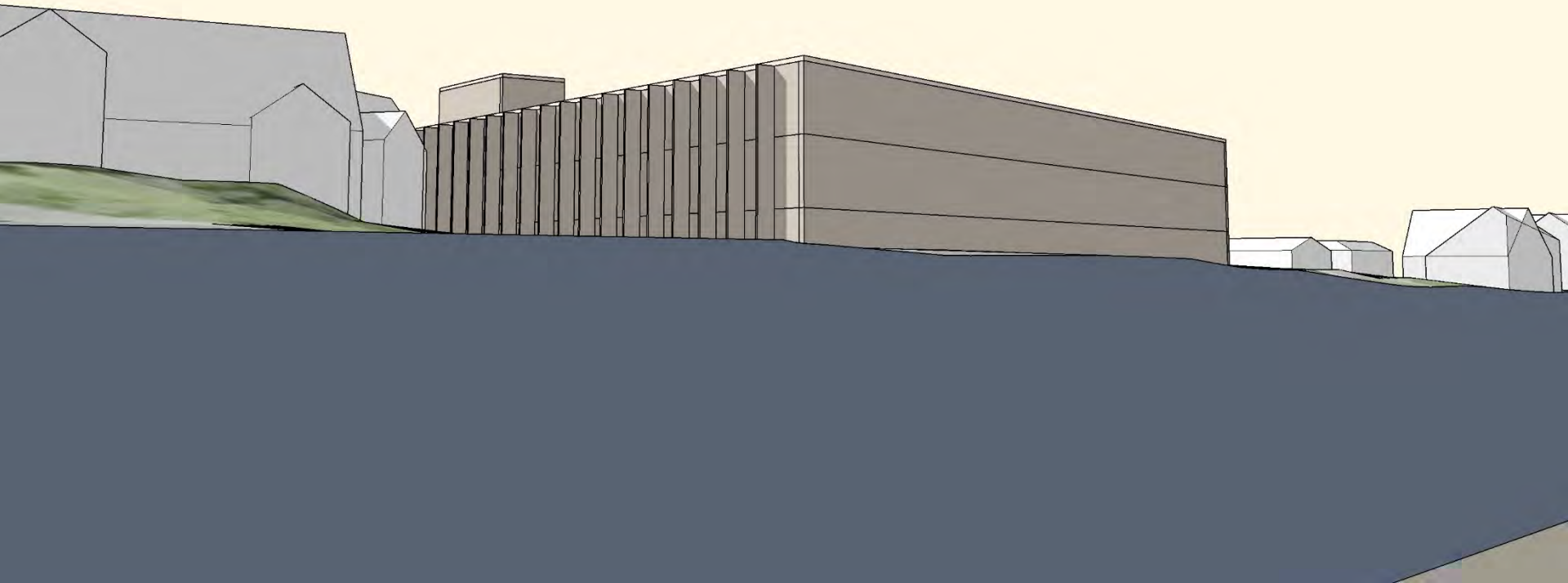
Preliminary Concept Design Alternatives



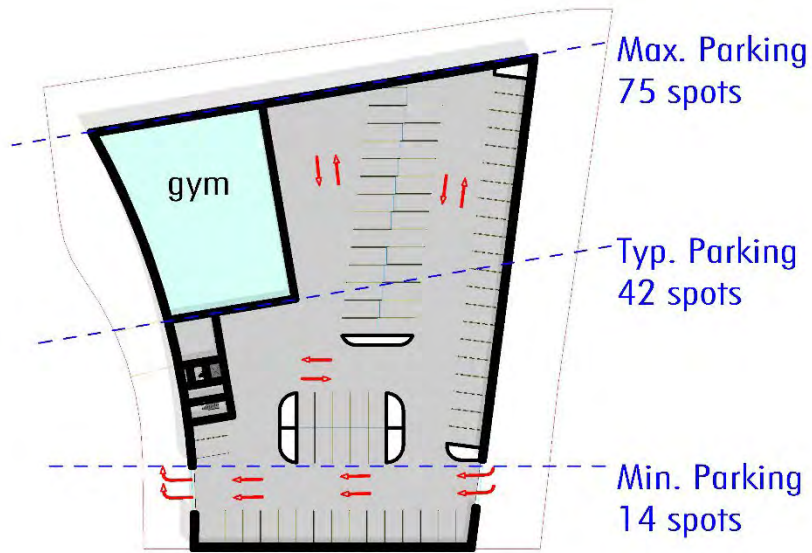
Preliminary Concept Design Alternatives



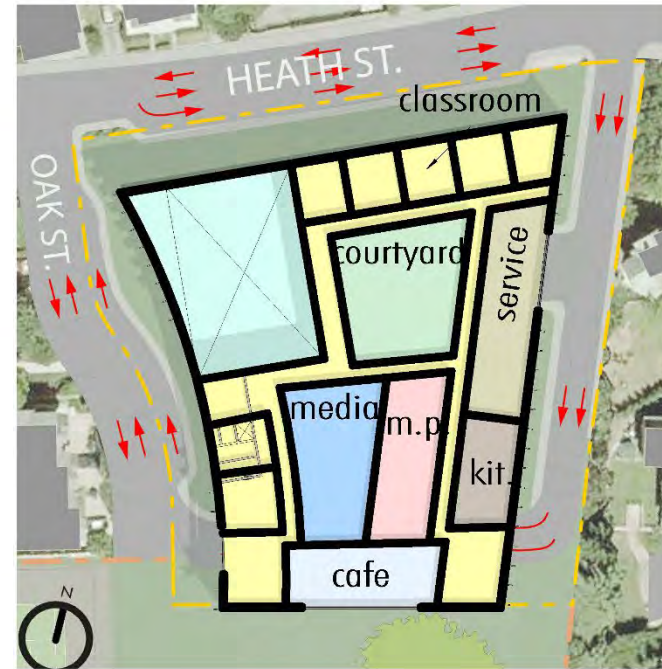
Preliminary Concept Design Alternatives



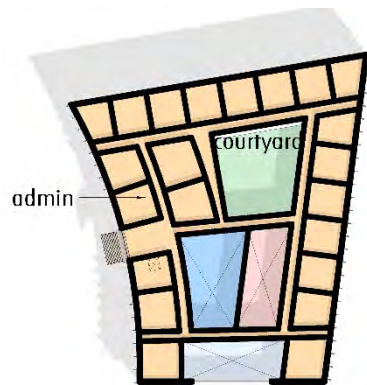
Option C – Twin Court



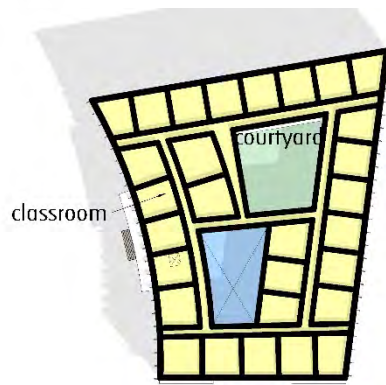
1 -1 GARAGE - OPTION C
1" = 50'-0"



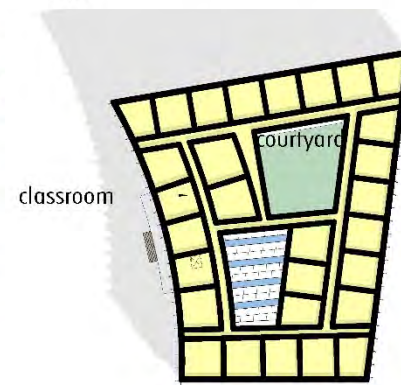
2 FIRST FLOOR PLAN - OPTION C
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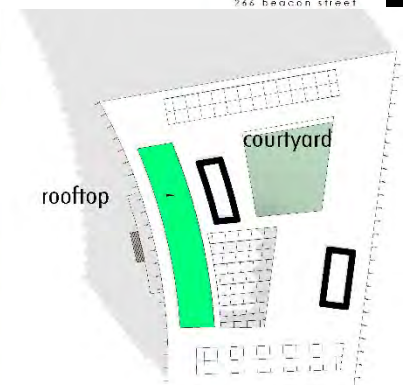
3 SECOND FLOOR PLAN - OPTION C
1" = 50'-0"



4 THIRD FLOOR PLAN - OPTION C
1" = 50'-0"



5 FOURTH FLOOR PLAN - OPTION C
1" = 50'-0"



6 ROOF PLAN - OPTION C
1" = 50'-0"



Evaluation Topic Categories

1. Project Viability Issues
2. Site
3. Teaching and Learning
4. Building Environment
5. Long Term Costs

Evaluation Topics – Project Viability Issues

1. Total Project Cost
2. Schedule
3. Traffic
4. Risk

Evaluation Matrix Topics - Site

1. Construction Impact to Neighbors
2. Open Space /Building Massing / Footprint
3. Community Use



Evaluation Matrix Topics – Teaching and Learning

1. Educational Program Accommodation
2. Flexibility-Fixed Classroom Count per Cohort
3. Collaborative / Project Based Learning
4. RISE

Evaluation Matrix Topics – Building Environment

1. Flexibility-Building Systems
2. Security
3. Natural Light and Views
4. LEED / Sustainability

Evaluation Matrix Topics – Long Term Costs

1. Long Term Maintenance and Repair Costs
2. Operating Costs

Evaluation Topic Categories

Project Viability Issues

- Total Project Cost
- Schedule
- Traffic
- Risk

Site

- Construction Impact to Neighbors
- Open Space /Building Massing
- Community Use

Teaching and Learning

- Educational Program Accommodation
- Flexibility-Fixed Classroom Count per Cohort
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Building Environment

- Flexibility-Building Systems
- Security
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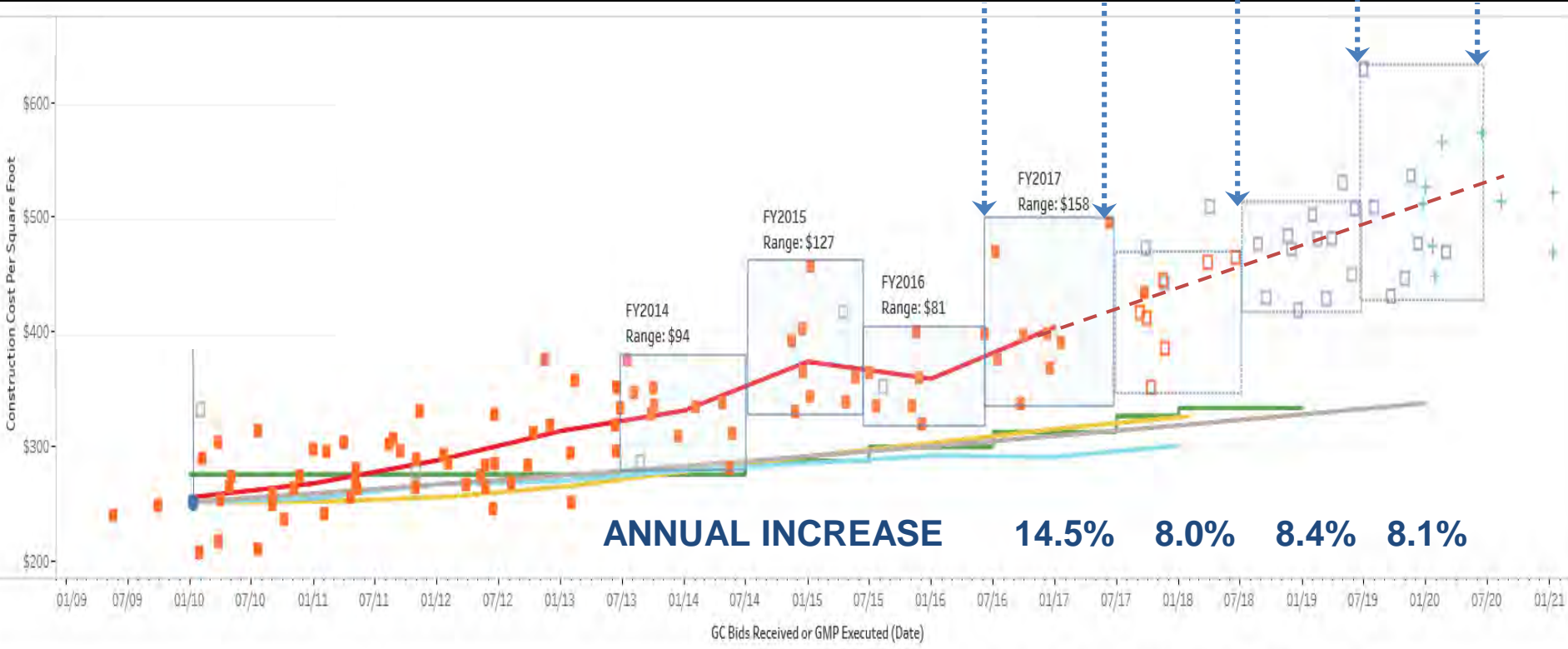
Long Term Costs

- Long Term Maintenance and Repair Costs
- Operating Costs

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5. Preliminary Cost Estimates

COST ESCALATION OF RECENT MIDDLE SCHOOL PROJECTS

FY2017 FY2018 FY2019 FY2020



The information and data contained in this chart is based on the MSBA's review of construction cost estimates, contracts and other documentation provided by cities, towns, and regional school districts. This information and data is intended for informational purposes only. The data may have changed based on actual construction bids or contract amendments, for example, and the MSBA shall have no responsibility or duty to update any of the information. Please contact the Districts for the most current information. The MSBA hereby disclaims any and all liability and responsibility that may arise in connection with the information contained in this chart. (Updated August 2018)

Preliminary Project Cost Comparison

Includes 10 Parking Spaces under Building (1.8M)

Includes \$1M for sidewalk improvements



Option A
Quadrangle

\$74M – 78M



Option B
Solar Harvest

\$76M – 80M



Option C
Twin Court

\$77M – 81M