

BROOKLINE
DRISCOLL SCHOOL EXPANSION

School Building Committee
November 1, 2018



Agenda

1. Approval of Minutes
2. Summary of Community Feedback
3. Update on Educational Program and Space Summary
4. Traffic Report – Preliminary Findings
5. Revised Design Alternatives
6. Evaluation Matrix and Discussion
7. Upcoming Meetings

Agenda

1. Approval of Minutes

Agenda

1. Approval of Minutes
2. Summary of Community Feedback



Recap of Meetings



- **June 21:** Neighborhood Community Forum
- **June 22:** Neighborhood Community Forum
- **September 11:** Driscoll Staff Meeting and Presentation
- **September 18:** Focus Groups with Driscoll Staff
- **September 22:** Educational Visioning Session with Driscoll Staff and Families
- **September 25:** Neighborhood Community Forum
- **October 2:** Advisory Committee - Capital and Schools Subcommittees
- **October 4:** Building Committee
- **October 4:** School Committee
- **October 9:** Parks and Recreation Commission
- **October 9:** Select Board
- **October 16:** Advisory Committee - Capital and Schools Subcommittees
- **October 18:** Building Committee
- **October 25:** School Committee
- **October 29:** Neighborhood Community Forum



Summary - Educational Visioning



Priorities from Driscoll families and Driscoll Staff

- Flexible, creative spaces that invite collaboration within classrooms, within grades, across grades, and among educators
- Design a building that can serve as a dynamic community resource hub, used and appreciated by all
- Make sure it is a welcoming space that helps build community, is accessible to all, celebrates diversity and allows all students to feel safe, welcome, and recognized
- Organize school into smaller learning communities that foster belonging, curiosity, and inspiration
- Foster indoor/outdoor connections and provide areas for autonomous, age-appropriate movement and play



Summary - Staff and Community Input



- Keep the sense of community, class size, conservatory program, and unique programming (Art, Chinese, etc.) so Driscoll will continue to be as strong as it is today.
- Maintain or increase play space, make it better organized and more useable
- Create a stronger middle school model, with many more opportunities for hands-on, project based, and applied learning.
- Make sure educator voice are at the center of the new design. Trust that they know what is needed.
- The new Driscoll renovations should be as ecologically friendly as possible; make greater use of passive solar and other sustainable energy options.
- Make fiscally responsible decisions that addresses town-wide problems
- The Coolidge Corner School is the new standard for Brookline. Make it like Coolidge Corner, but not as big.



Educator and Staff Input



Educational Programming

- Classroom size restricts teaching methods
 - Cannot provide small group instruction; Some students forced to work in hallway
 - Small gym size limits Physical Education and Health curriculum
- Environment is not conducive to learning - frequent distractions and noise level is generally too loud
- School building and learning being together, not building vs. learning
 - Classroom flow and routines disrupted with spaces carved out from storage spaces
 - Nowhere to put lab materials for science, instruments for music
- Minimal spaces for collaboration or inclusion
 - Sometimes students and groups can feel very isolated



Educator and Staff Input



Safety, Health, and Physical Plant

- “Second gym” space was previously a woman’s showering area
- Bathrooms are unpleasant areas and create privacy challenges
- Science classrooms not meeting minimum safety guidelines
- Need dedicated Safe Spaces for students to de-escalate
- Overall humidity, lack of ventilation and air-conditioning
 - Heat is held inside the classrooms
- Entry into the building is very awkward
 - People don’t know where to find the main office
- Lack of small spaces in Nurse’s office for private conversations with parents
- Triangular space behind the tennis courts is awkward
- Drainage after inclement weather is a problem in some areas



Community Feedback



Design

- Clarify how much of the project is renovation vs. expansion
- The Coolidge Corner School is the new standard for Brookline. Make it like Coolidge Corner, but not as big.
- Building should allow opportunities for developing the school community involvement (e.g. Playspaces that invites families to hang around after school, spaces that can be used by the community)
- Make fiscally responsible decisions that addresses town-wide problems
- Design can inadvertently create longer walks within the building and disconnection

Communications and Outreach

- Need Comparisons between current Driscoll projects to other schools
- Be clearer about the problems that PSB needs to solve
- Provide greater context and background on any numbers/projections made



Community Feedback



Traffic

- Continues to be serious concern about how the existing traffic will be impacted by the school's renovation
- Concern about narrow existing streets and drop-off opportunities
- 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.

Parking and Access

- Study and recommendations need to be thorough and consider all alternatives (e.g. Underground staff parking, Designated spaces for visitors and families)
- Should be comparable or aligned with the approach at existing schools
- All crossings and sidewalks need to do be made safe and consider winter conditions



Survey Responses



In what ways would you like to see the Driscoll academic program and school community grow and evolve over the next 10 years?

- I hope the sense of community, class size, conservatory program, and unique programming (Art, Chinese, etc.) will continue to be as strong as it is today.
- I would love a stronger middle school model, with many more opportunities for hands-on, project based, and applied learning.
- There needs to be an increased diversity of learning options for children in the lower grade.
- There needs to be an expansion of pre-K and after-school options.
- The environment of the school needs to be designed to be more community-friendly.



Survey Responses



How do you see the design of a renovated and/or new Driscoll facility supporting the school's growth and evolution?

- The outdoor space needs more shading options for parents, staff, and children. The outdoor space is widely used by the community - some seating should be provided that makes socializing and face-to-face interaction more possible.
- The new Driscoll renovations should be as ecologically friendly as possible; make greater use of passive solar and other sustainable energy options.
- It should include adaptations for children with disabilities (improved speakers, graduated lighting schemes, better signage).
- It would be good to have outdoor classrooms, a roof garden, a maker space, an energy efficient building and lots of natural light.



Survey Responses



What are the three most important things Jonathan Levi Architects need to know about as they move forward with design development?

- Make sure educator voice is at the center of the new design. Trust that they know what is needed!
- Green design, handicapped accessible (not just mobility - vision, hearing, and sensory too), community-focused, with multiple options for seating and shade outdoors.
- Community ownership is essential.



Summary of Building Committee Discussions



Design

- Consider a 4-story design option to make the footprint smaller and create more open space.
- Recognized that a renovation option is more disruptive to students in phasing and use of modular units. Both renovation and new options would be impacted with lack of access to open space during construction.

Parking

- Consider locating structured parking underneath the building for economy of construction and to maximize open space.

Costs

- Recognized that cost estimates for renovation and new options are more than previously anticipated.
- Clarification if swing space, structured parking, and new field were included in previous projections and plans to provide more accurate comparisons.

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4. Traffic Report – Preliminary Findings

Proposed Driscoll Expansion Brookline, Massachusetts

Preliminary Transportation Impact Assessment

Prepared by:

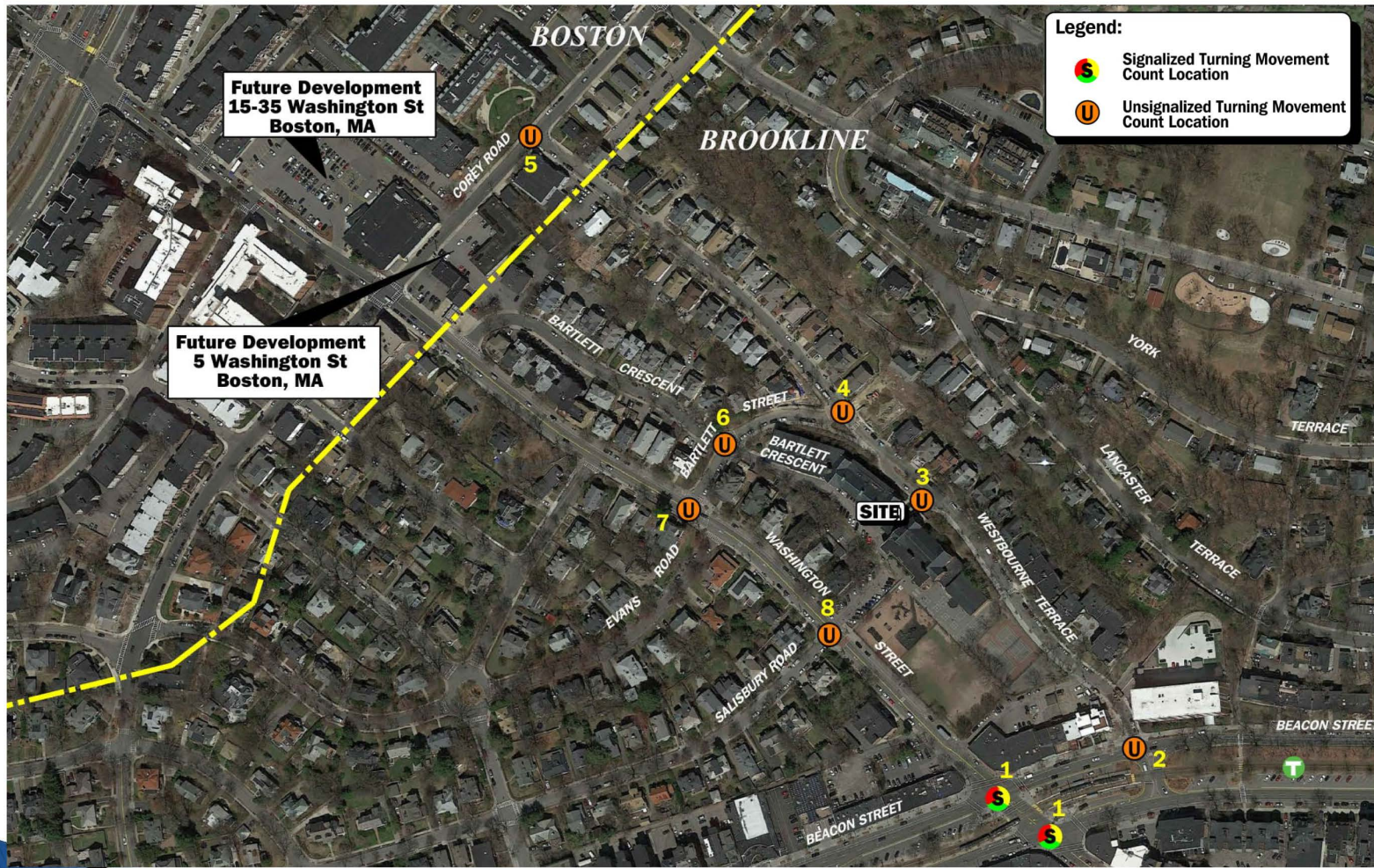


November 1, 2018

Traffic Agenda Items

- Area of Study
- Existing Conditions
- Traffic Generation
- Preliminary Recommendations
- Next Steps

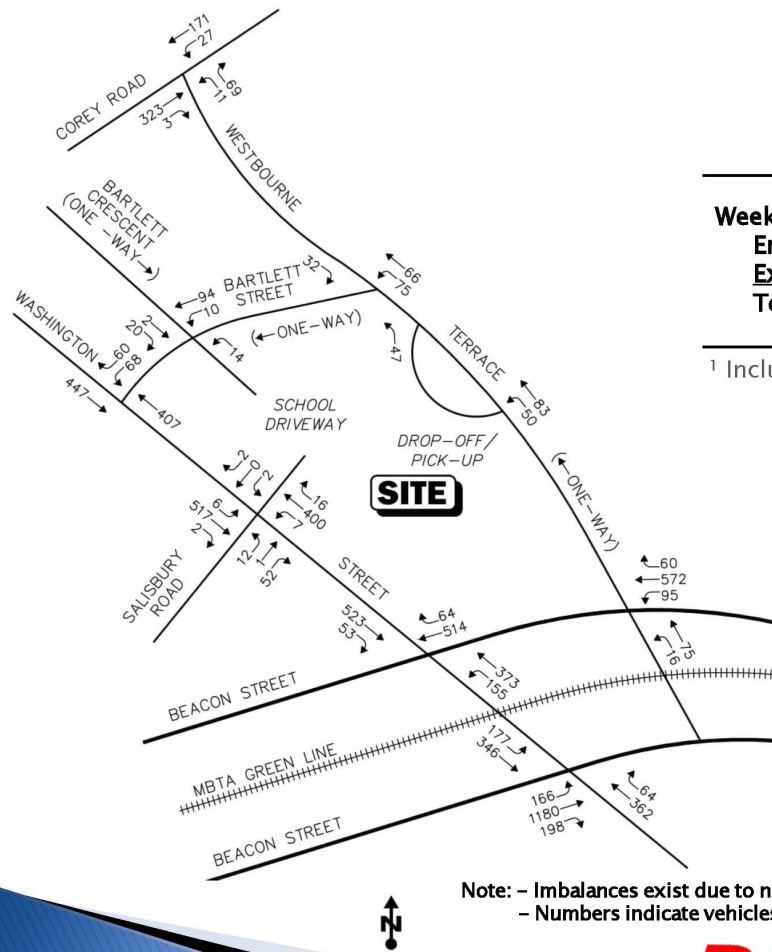
Site Location and Study Area Map



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Vai Vanasse & Associates, Inc.
Transportation Engineers & Planners
35 New England Business Center Drive
Suite 140
Andover, MA 01810-1066

2018 Existing Conditions – Weekday Morning School Peak Hour Traffic Volumes (7:30-8:30 AM)



School Driveways		
Time Period	Westbourne Terrace Driveway	Bartlett Street Driveway and Washington Street Driveway ¹
Weekday Morning Peak Hour:		
Entering	50	35
Exiting	47	18
Total	97	53

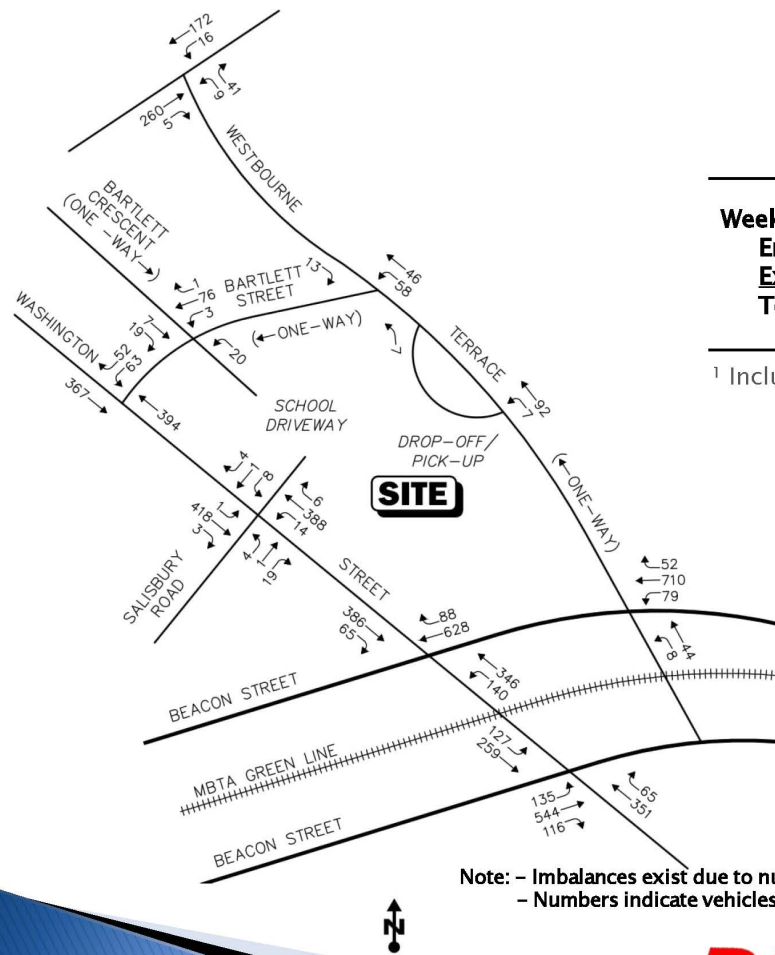
¹ Includes some residential traffic.

Note: – Imbalances exist due to numerous curb cuts and side street that are not shown.
 – Numbers indicate vehicles at intersections during a one hour period.

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 Transportation Engineers & Planners
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2018 Existing Conditions – Weekday Afternoon School Peak Hour Traffic Volumes (2:00-3:00 PM)



School Driveways		
Time Period	Westbourne Terrace Driveway	Bartlett Street Driveway and Washington Street Driveway ¹
Weekday Afternoon Peak Hour:		
Entering	7	18
Exiting	7	33
Total	14	51

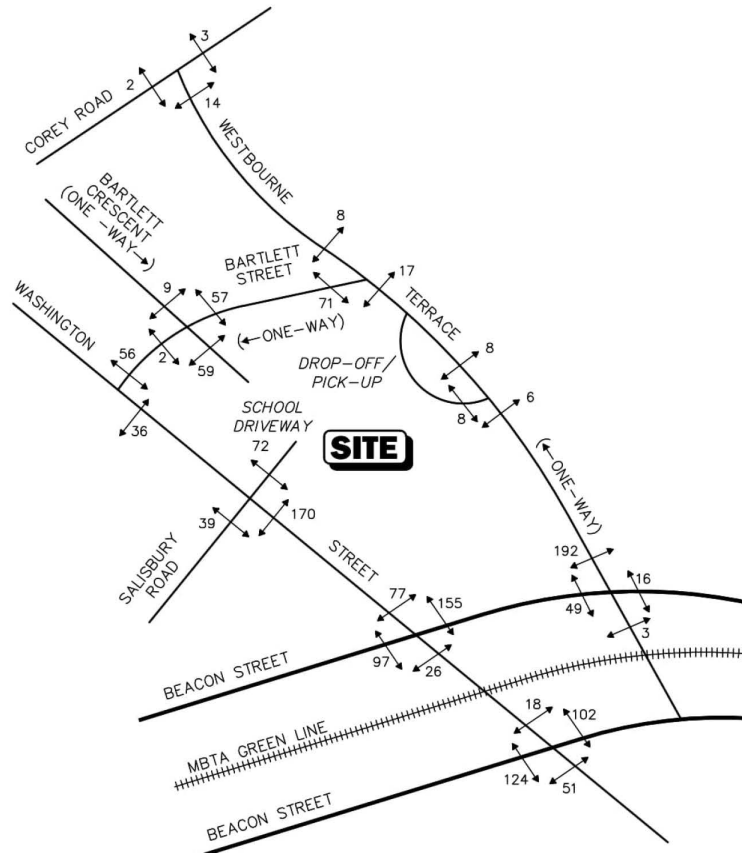
¹ Includes some residential traffic.

Note: - Imbalances exist due to numerous curb cuts and side street that are not shown.
 - Numbers indicate vehicles at intersections during a one hour period.

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2018 Existing Conditions – Weekday Morning School Peak Hour Pedestrian Volumes (7:30-8:30 AM)

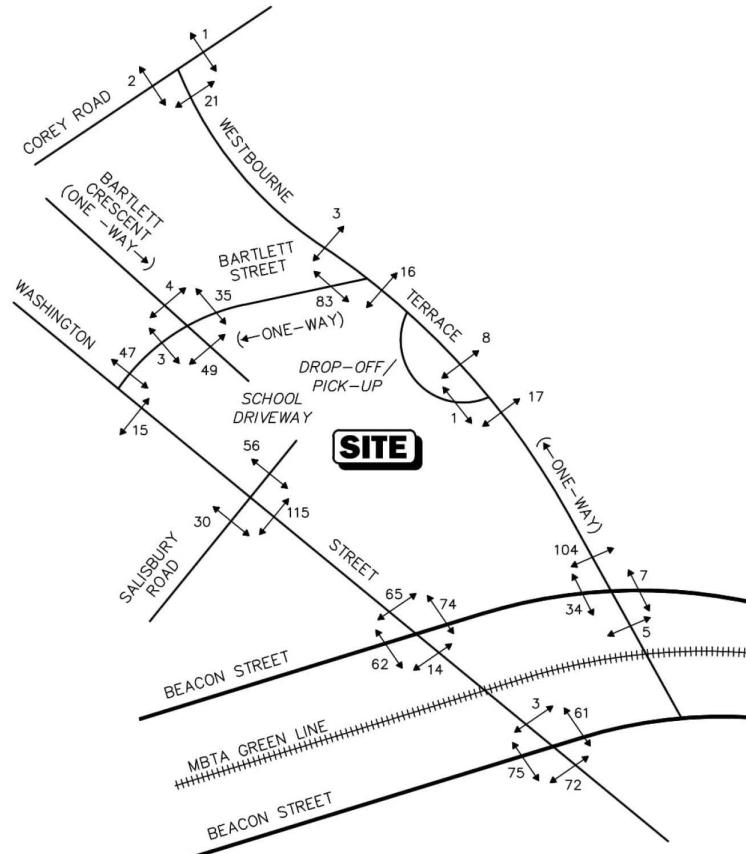


Note: Numbers indicate both school and non school pedestrians during a one hour period.

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2018 Existing Conditions – Weekday Afternoon School Peak Hour Pedestrian Volumes (2:00-3:00 PM)



Note: Numbers indicate both school and non school pedestrians during a one hour period.

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Trip Generation Summary

Time Period	Existing Condition						Total Trips (632 Students) ¹	New Trips 800 Students ²	Increase ³
	School Driveways		On-Street Parking Drop-Off/ Pick-Up						
	Westbourne Terrace Driveway	Bartlett Street Driveway and Washington Street Driveway	Washington Street	Bartlett Street	Westbourne Terrace	Staff			
Weekday Morning Peak Hour:									
Entering	50	35	25	21	15	45	191	248	57
Exiting	47	18	25	21	15	0	126	164	38
Total	<u>97</u>	<u>53</u>	<u>50</u>	<u>42</u>	<u>30</u>	<u>45</u>	317	412	95
Weekday Afternoon Peak Hour:									
Entering	7	18	11	13	26	0	75	98	23
Exiting	7	33	11	13	26	10	100	130	30
Total	<u>14</u>	<u>51</u>	<u>22</u>	<u>26</u>	<u>52</u>	<u>10</u>	175	228	53

¹ Numbers Represent - Staff, Buses and Parent Vehicles.

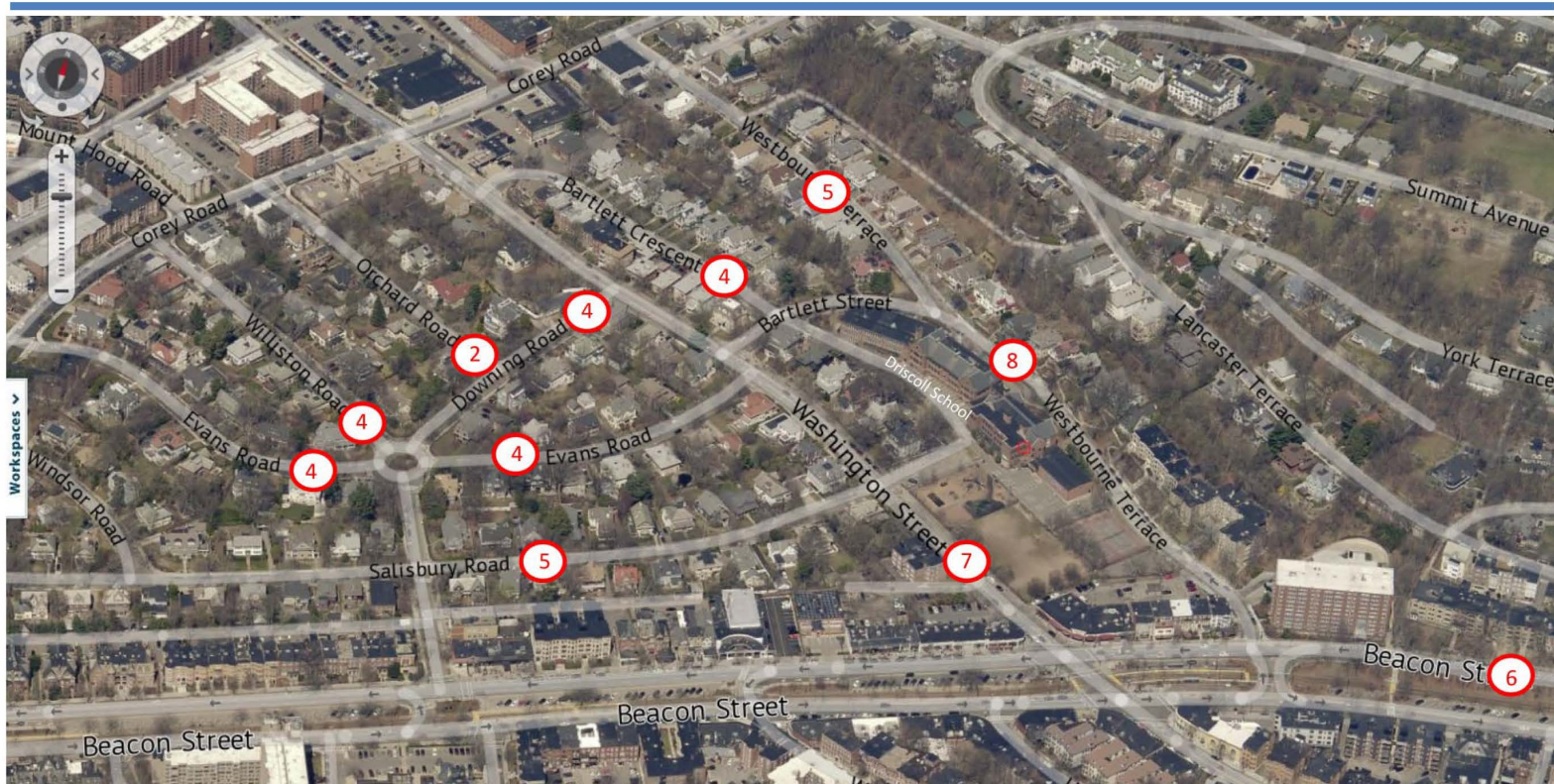
² Note: 26% increase in Students. Assume 30% increase in Traffic.

³ Increase includes staff and student drop-off/pick up.

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Teachers On-Street Parking - Existing



Driscoll School

7/19/2018 - Parking

Approve by
Transportation Board

52 Parking Lot Spaces

53 Approved TBoard Parking Spaces

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Preliminary Recommendations

Site Plan

- Washington Street Bus Drop-Off Area.
- Designated Student Drop-Off/ Pick-Up Area between Westbourne Terrace and Washington Street.
- Westbourne Terrace Parent Drop-Off / Pick-Up Area.

Next Steps

Finalize Traffic Study

- Existing Conditions
- Projected Conditions
- Recommendations
 - Project Access
 - Pedestrian Improvements
 - School Drop-Off/ Pick-Up Plan
 - School Signage
 - Traffic Monitoring

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Preliminary Concept Design Options



OPTION A.1
"Code Renovation with East Addition
- Off site swing space/temporary gym"



Option C.1
"Code Renovation with South Addition
- Off site swing space/temporary gym"



Option E
"Star - New construction/occupied site/temporary gym"



Option F
"Magnet - New construction/occupied site/temporary gym"



Option G
"Shoal - new construction/occupied site/temporary gym"



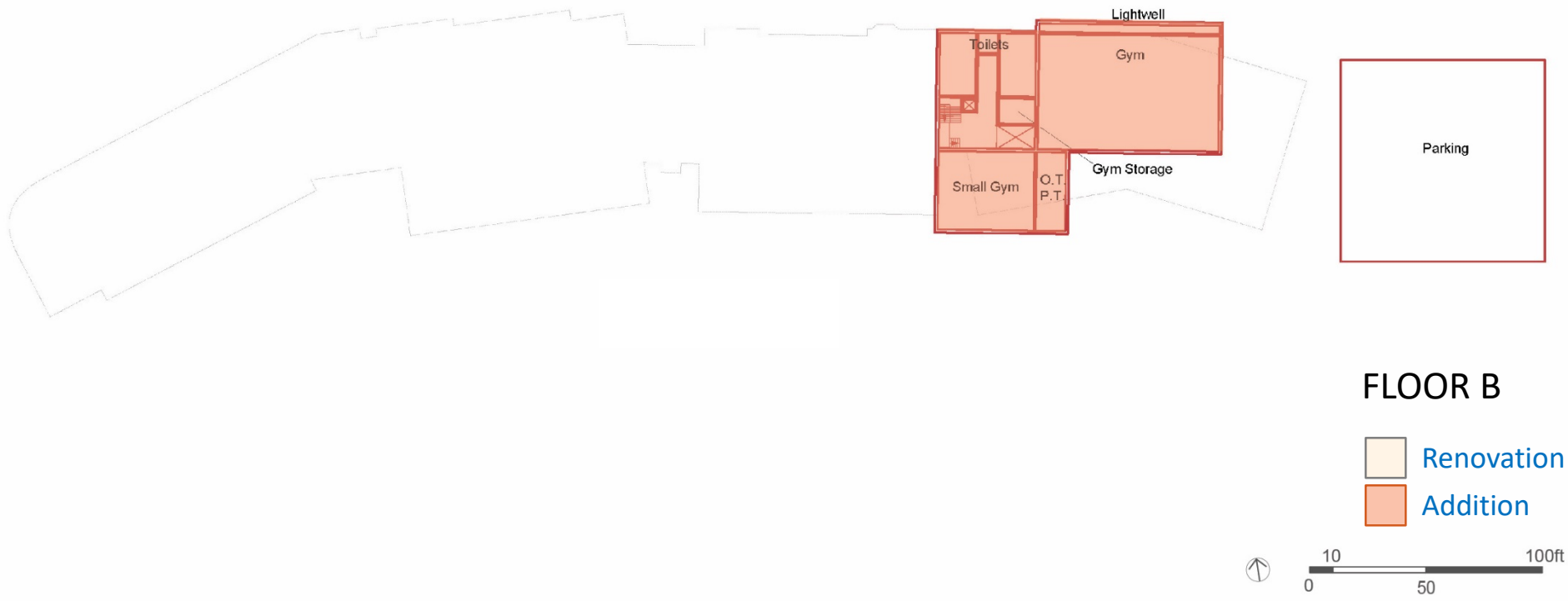
Option H
"Modified Star - new construction"

Preliminary Concept Design Options



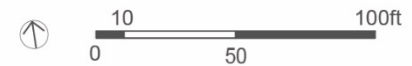
Option **A.1** – ‘Code Renovation with East Addition’

Further Developed Renovation Floor Plan – A.1



FLOOR B

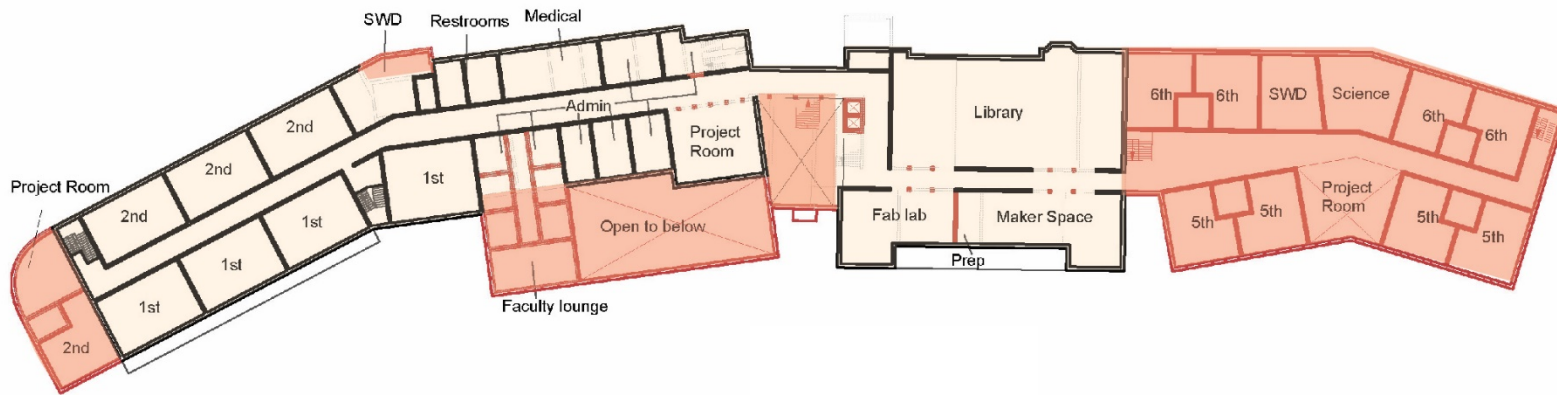
- Renovation
- Addition



Further Developed Renovation Floor Plan – A.1

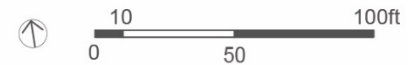


Further Developed Renovation Floor Plan – A.1

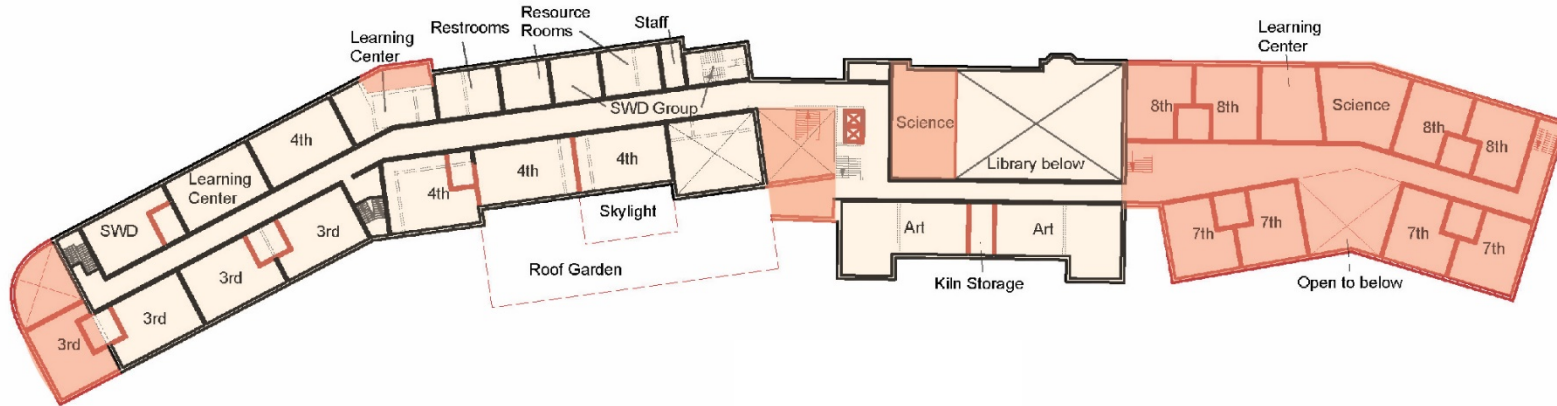


FLOOR 2



- Renovation
- Addition

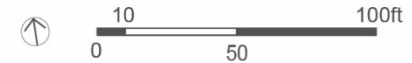


Further Developed Renovation Floor Plan – A.1

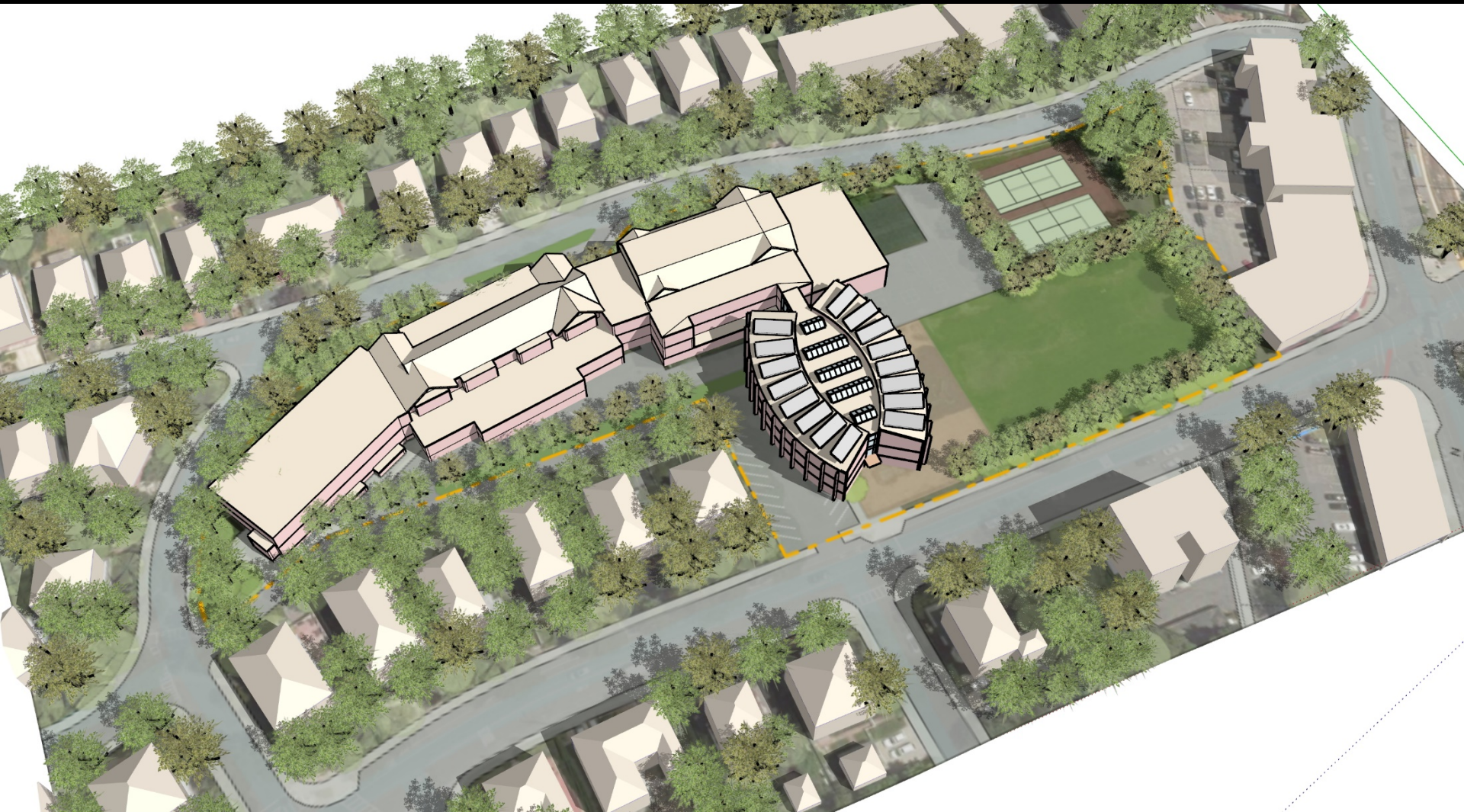


FLOOR 3

-  Renovation
-  Addition



Preliminary Concept Design Options



Option **C.1** – ‘Code Renovation with South Addition’

Preliminary Concept Design Options



Option E – 'Star' with massing

Preliminary Concept Design Options



Option **E** – ‘Star’ with sketch floor plan

Preliminary Concept Design Options



Option **F** – ‘Magnet’ with massing

Preliminary Concept Design Options



Option **F** – ‘Magnet’ with sketch floor plan

Preliminary Concept Design Options



Option G – 'Shoal' with massing

Preliminary Concept Design Options



Option **G** – 'Shoal' with sketch floor plan

Preliminary Concept Design Options



Option H – 'Modified Star' with Massing

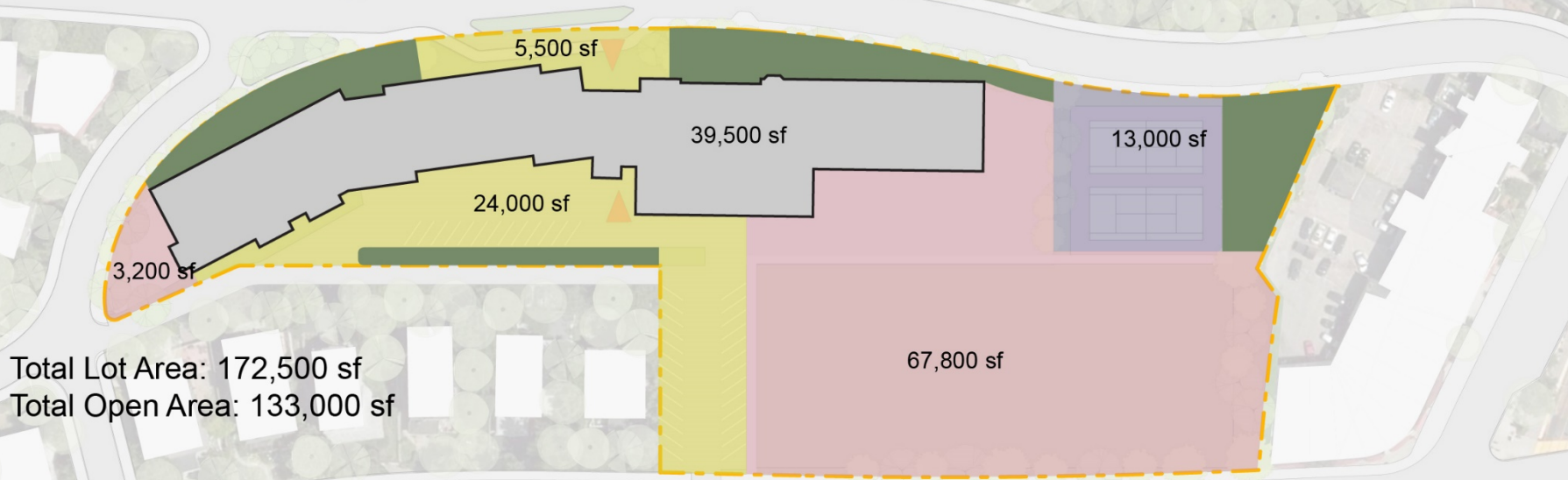
Preliminary Concept Design Options



Option H – 'Modified Star' with sketch floor plan

Open Space Evaluation

ORIGINAL



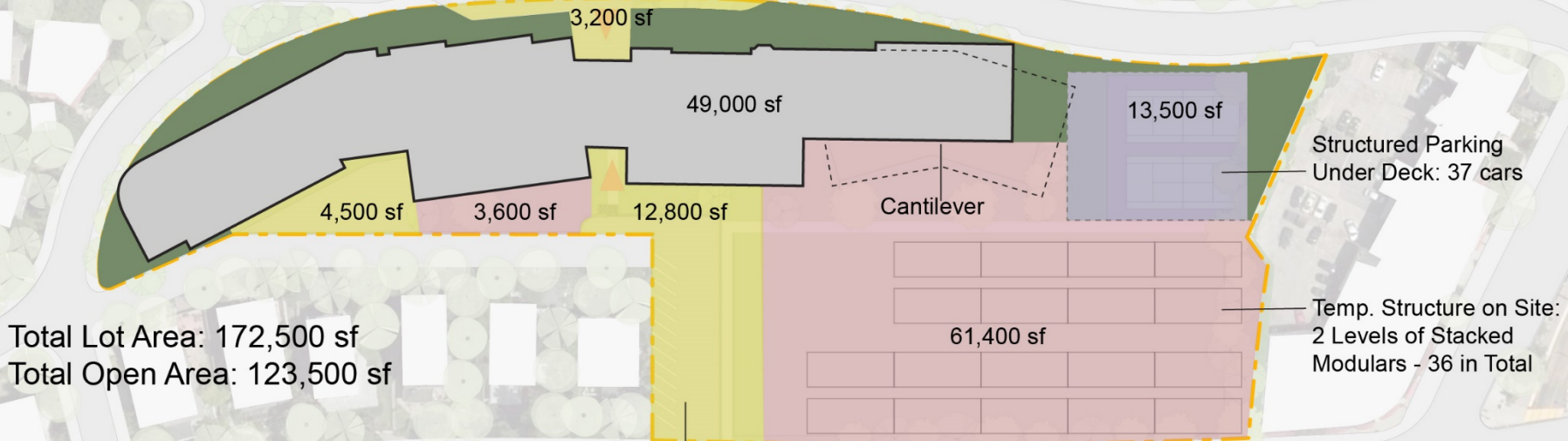
Total Lot Area: 172,500 sf
Total Open Area: 133,000 sf

- Footprint 39,500 sf
- Useable Play 71,000 sf
- Tennis 13,000 sf
- Vehicle / Ped. 29,500 sf
- Unutilized 19,500 sf



Open Space Evaluation

A.1 -RENO.+EAST ADDN.



Total Lot Area: 172,500 sf
Total Open Area: 123,500 sf

- Footprint 49,000 sf
- Useable Play 65,000 sf
- Tennis 13,500 sf
- Vehicle / Ped. 20,500 sf
- Unutilized 24,500 sf

Surface Parking:
30 cars

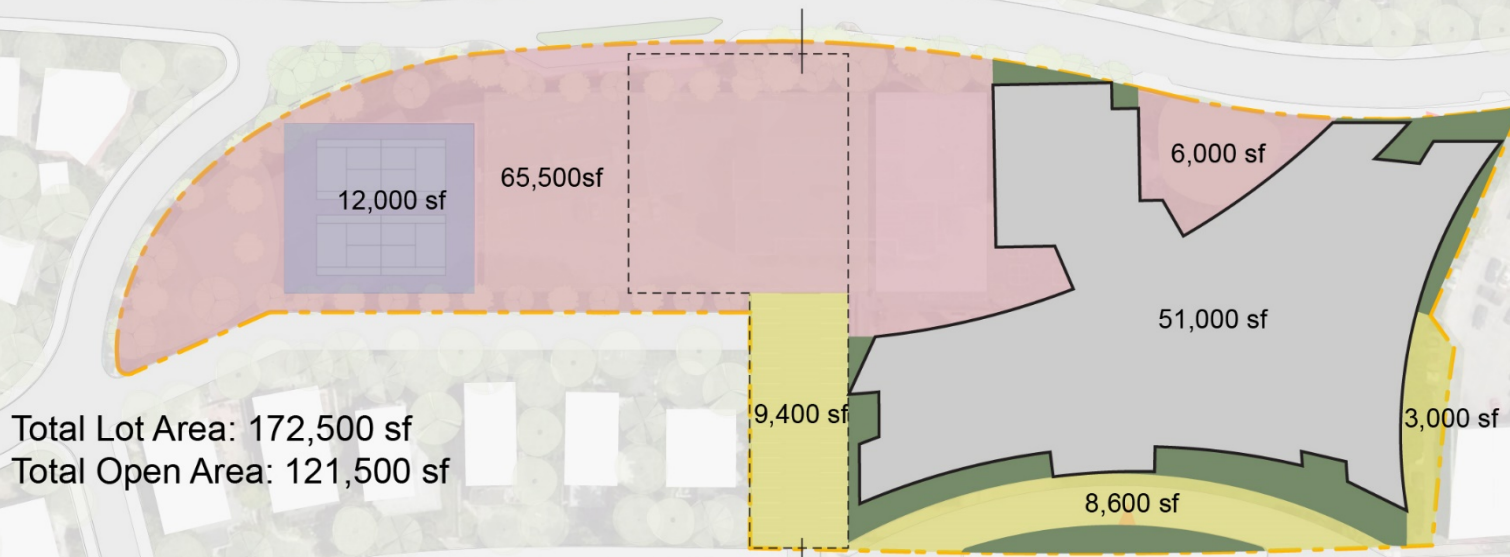
Structured Parking
Under Deck: 37 cars

Temp. Structure on Site:
2 Levels of Stacked
Modulares - 36 in Total

Open Space Evaluation

G - SHOAL

Structured Parking :
44 cars



Total Lot Area: 172,500 sf
Total Open Area: 121,500 sf

Surface Parking:
34 cars

- Footprint 51,000 sf
- Useable Play 71,500 sf
- Tennis 12,000 sf
- Vehicle / Ped. 21,000 sf
- Unutilized 17,000 sf

Open Space Evaluation

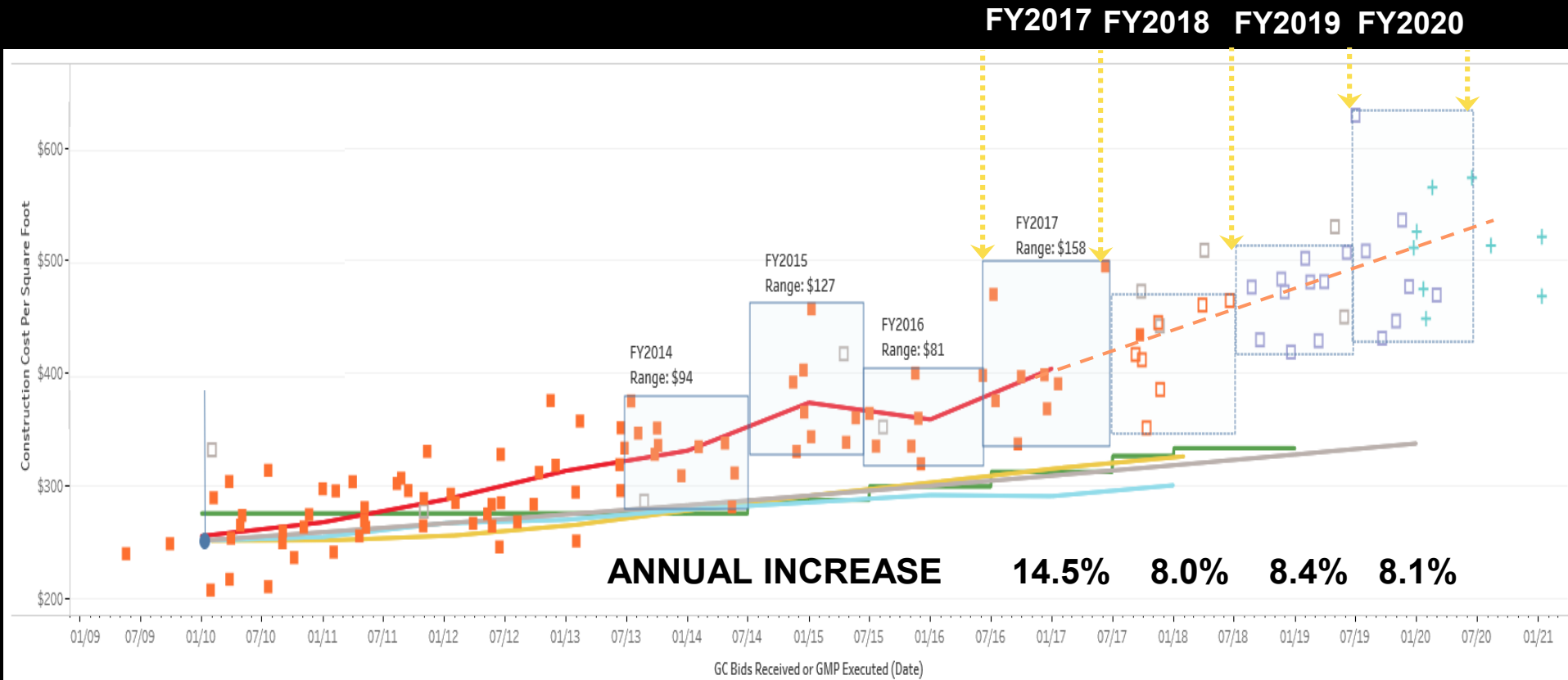
H - MODIFIED STAR



Open Space Comparison

Concept Alternative	LOT	BUILDING		OPEN SPACE				
	Total Lot Area	Building GSF	Building Footprint	Total Open Area	Usable Play Area	Vehicle / Pedestrian	Tennis Courts	Unutilized Area
Existing	172,500 SF	97,000 SF	39,500 SF	133,000 SF	71,000 SF	29,500 SF	13,000 SF	19,500 SF
A.1 - Reno + East Add'n	172,500 SF	154,500 SF	49,000 SF	123,500 SF	65,000 SF	20,500 SF	13,500 SF	24,500 SF
C.1 - Reno + South Add'n	172,500 SF	154,500 SF	49,000 SF	123,500 SF	65,000 SF	20,500 SF	13,500 SF	24,500 SF
E - Star	172,500 SF	154,500 SF	51,000 SF	121,500 SF	71,500 SF	21,000 SF	12,000 SF	17,000 SF
F - Magnet	172,500 SF	154,500 SF	51,000 SF	121,500 SF	71,500 SF	21,000 SF	12,000 SF	17,000 SF
G - Shoal	172,500 SF	154,500 SF	51,000 SF	121,500 SF	71,500 SF	21,000 SF	12,000 SF	17,000 SF
H - Modified Star	172,500 SF	154,500 SF	40,000 SF	132,500 SF	91,000 SF	10,000 SF	12,000 SF	19,500 SF

Cost Escalation of Recent Middle School Projects



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)

Project Cost Comparison



Option A.1

Code Renovation with East Addition

\$95M – 105M



Option C.1

Code Renovation with South Addition

\$ 95M – 105M



Option E

Star – New Construction

\$97M – 105M



Option F

Magnet – New Construction

\$101M – 109M



Option G

Shoal – New Construction

\$103M – 111M



Option H

Modified Star – New Construction

\$91M – 96M

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Evaluation Matrix Topics

Project Viability Issues

- Total Project Cost
- Schedule
- Traffic
- Risk

Site

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

Long-Term Costs

- Long-Term Maintenance and Repair Costs
- Operating Costs

Teaching and Learning

- Educational Program Accommodation
- Flexibility-Fixed Classroom Count per Cohort
- STEM Enhancement-Visible learning

Building Environment

- Flexibility-Building Systems
- Security
- Natural Light and Views
- LEED / Sustainability

Other Topics Recommended by the Building Committee

- Pedestrian and Vehicular Circulation
- Disruption to Families

Evaluation Matrix

DRISCOLL SCHOOL
Concept Options Evaluation Matrix

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RATINGS:



Very Disadvantageous



Disadvantageous



Neutral



Advantageous

PROJECT EVALUATION CRITERIA	Option A.1 Renovation with East Addition	Option C.1 Renovation with South Addition	Option E 'Star' - New Const.	Option F 'Magnet' - New Const.	Option G 'Shoal' - New Const.	Option H 'Modified Star' - New Const.	Comments
Project Viability Issues							
1 Total Project Cost							See costs below.
2 Schedule							Multi proj. areas/phasing=add. construction time. Swing space req. additional time
3 Traffic							New allows untangling of drop off/bus/service. Reno. may need use of Bartlett Cresc.
4 Risk							Unforeseen conditions. Phasing conflicts
Site							
5 Construction Impact to Education							Swing space will be disruptive. Loss of gym, cafeteria, library. Reno. constr. near kids
6 Construction Impact to Neighbors							New construction separated from residences.
7 Open Space /Building Massing / Footprint							Greater open space quant. and adjacencies for H
8 Community Use							Clearer zoning of public use portions of building for new.
Long-Term Costs							
9 Long Term Maintenance and Repair Costs							Unforeseen future issues with remaining 90 year old construction
10 Energy Costs							Reno. building envelope inherently underperforming.
Teaching and Learning							
11 Educational Program Accommodation							Reno. does not fit program sizes or adjacencies.
12 Flexibility-Fixed Classroom Count per Cohort							
13 STEM Enhancement-Visible Learning							New affords planned connectivity.
Building Environment							
14 Flexibility-Building Systems							
15 Security							Long travel distances and sight lines for reno.
16 Natural Light and Views							
17 LEED / Sustainability							New construction configured for sustainability. Existing roof incompatible with PV
Other							
18 Pedestrian and Vehicular circulation							Safety improved with newly separated circulation systems.
19 Disruption to Families							Phasing and limited access potential for reno. with impacted site.
Total GSF	154,500	154,500	154,500	154,500	154,500	154,500	
Swing Space Cost							
Order of Magnitude Project Cost (\$Million)	\$95-105	\$95-105	\$97-105	\$101-109	\$103-111	\$91-96	

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Upcoming Public Meetings

PUBLIC SCHOOLS of
BROOKLINE



- **November 15:** Building Committee Meeting at Town Hall, 7:30 a.m.
- **November 26:** Neighborhood Community Forum at Driscoll School Library, 6:30 p.m.
- **December 6:** Building Committee Meeting at Town Hall, 7:30 a.m.
- **December 13:** Town Meeting at Brookline High School, 7:00 p.m.

Additional meetings will be added with various Town Boards and Commissions throughout the process and leading up to the December Town Meeting

Appendix





On-site Parking at PSB Schools



	<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



Existing PSB Staff Parking Plans



	<u>Total # of Staff Parking Spaces</u>	<u># of Staff Parking Spaces on School Property</u>	<u># of Staff Parking Spaces on Town Streets</u>	<u>Estimated Longest Walk for staff (mi)</u>	<u>% of Staff Parking On-Site</u>	<u>% of Staff Parking on Town Streets</u>
Baker	132	64	68	0.5	48%	52%
Coolidge Corner	175	65	110	0.5	37%	63%
Driscoll	105	52	53	0.3	50%	50%
Heath	68	32	36	0.3	47%	53%
Lawrence	102	0	102	0.3	0%	100%
Lincoln	102	69	33	0.2	68%	32%
Pierce	135	85*	50	0.2	63%	37%
Runkle	120	0	120	0.3	0%	100%



Size of K-8 General Education (Core) Classrooms



	<u>Largest Room (in Square Feet)</u>	<u>Smallest Room (in Square Feet)</u>
Baker	1090	630
Coolidge Corner	1174	800
Driscoll	955	630
Heath	900	748
Lawrence	935	751
Lincoln	1119	815
Pierce	1400	625
Runkle	850	850