



HORACE MANN SCHOOL

NEWTON EARLY CHILDHOOD PROGRAM
687 WATERTOWN STREET

DESIGN REVIEW COMMITTEE

Newton Public Schools
Newton, Massachusetts

February 13, 2019

ARROWSTREET
10 POST OFFICE SQUARE
SUITE 700N
BOSTON, MA 02109
617.623.5555

www.arrowstreet.com

Hill International
75 SECOND AVENUE
SUITE 300
NEEDHAM, MA 02494
617.778.0900

www.hillintl.com

Agenda

- » Status Update
- » Preliminary Site Concept Options
- » NECP Fit Plan
- » Existing Building Conditions

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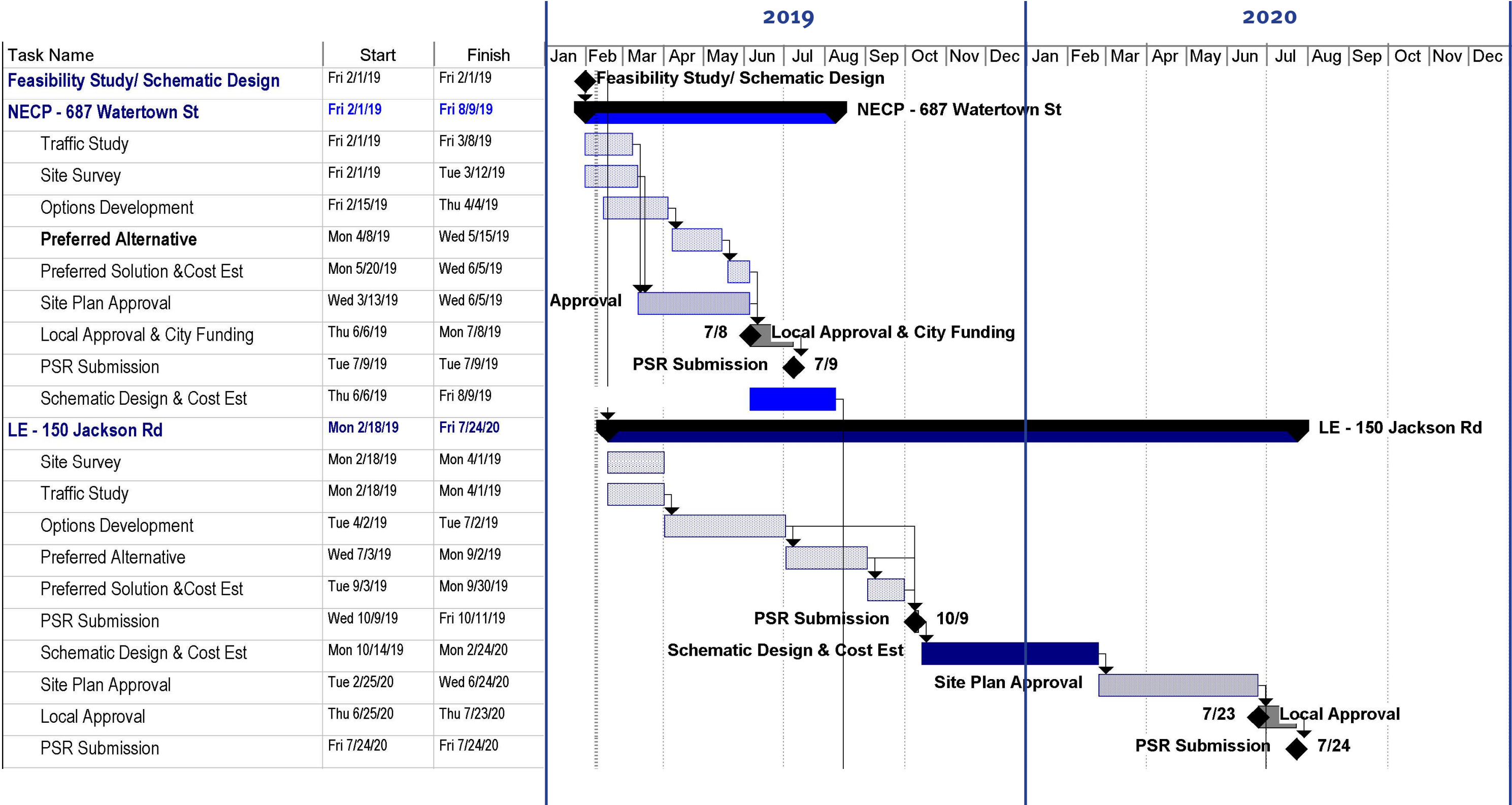
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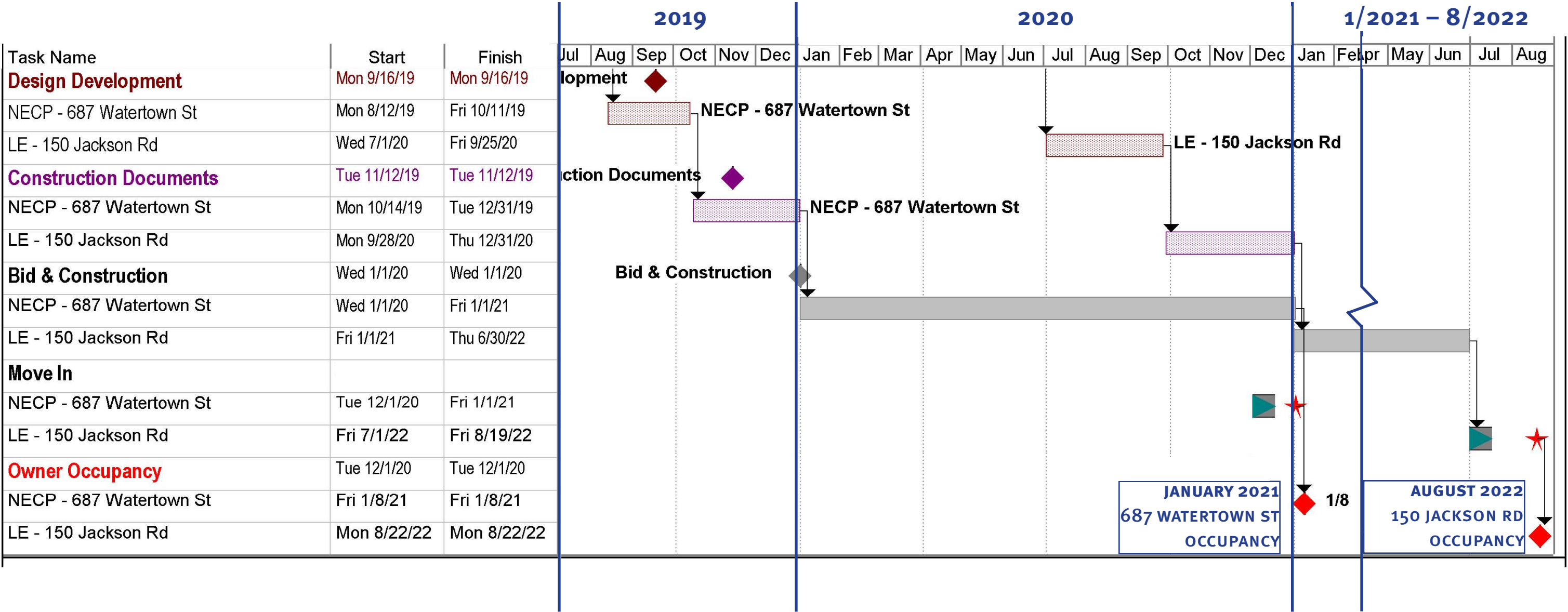
Newton Early Childhood Program and Lincoln-Eliot / Preliminary Design

- » Existing conditions analysis
- » Visioning sessions
- » Educational programming
- » Space summary matrix

Newton Early Childhood Program and Lincoln-Eliot / Project Workplan Schedule



Newton Early Childhood Program and Lincoln-Eliot / Project Workplan Schedule



687 Watertown Street



687 Watertown Street / Existing Site



687 Watertown Street / Existing 1-Foot Contours



687 Watertown Street / Wetlands



687 Watertown Street / Site Circulation



2017-18 Drop-off, Pick up, and Parking at existing NECP

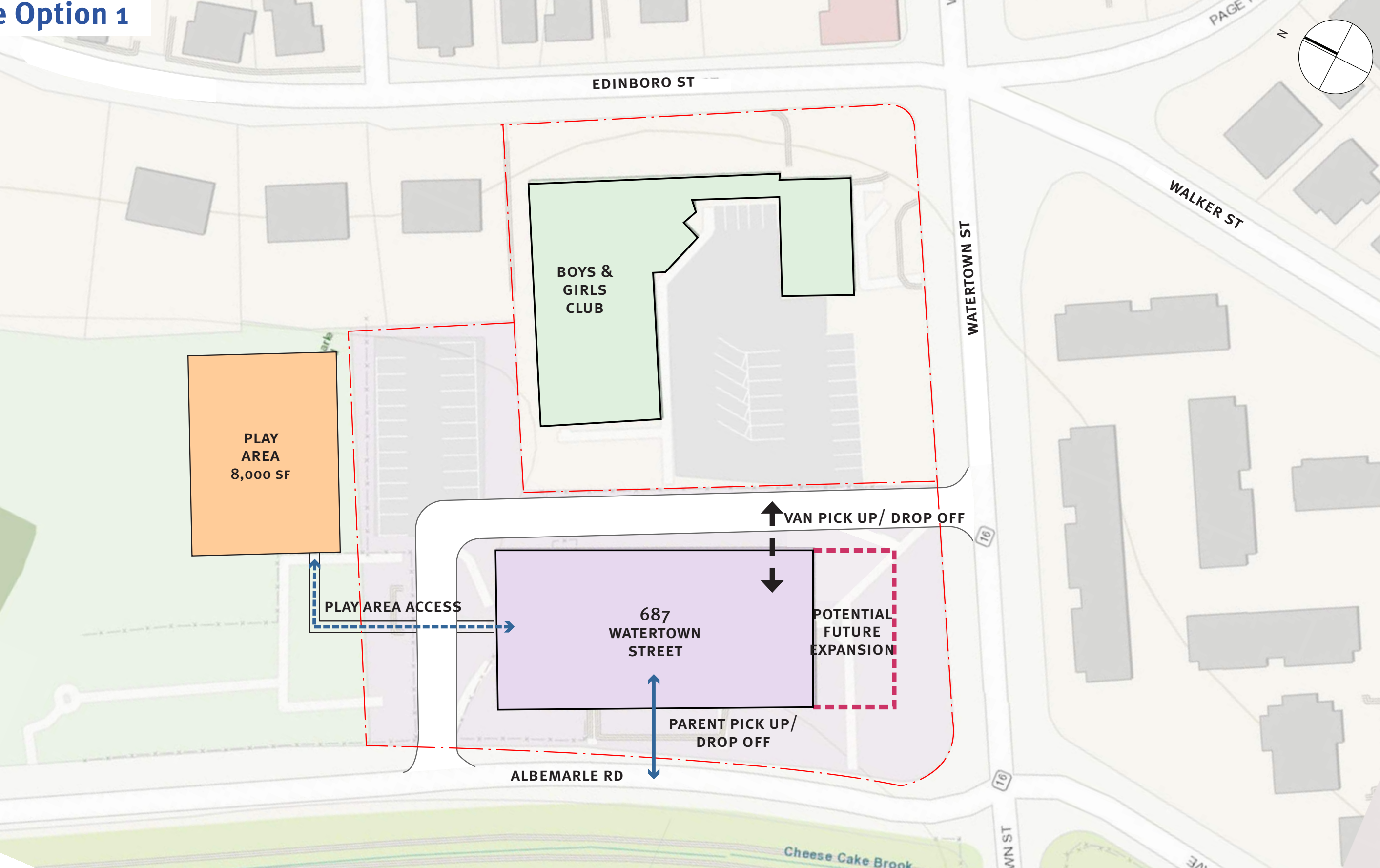
Parent Drop Off	
8:30	16 -20 Parent Cars In
9:00	75 Parent Cars In
Noon	50 - 60 Parent Cars Out
12:30	10 - 15 Parent Cars In
2:00	40 Parent Cars Out
2:30	20 Parent Cars Out

Vans	
8:30	5 Vans In
9:00	10 - 12 Vans In
Noon	10 - 12 Vans Out (15 on Tues.)
12:30	4 Vans Out
1:30	5 - 6 Vans Out
2:00	4 Vans Out
2:30	5 - 6 Vans Out

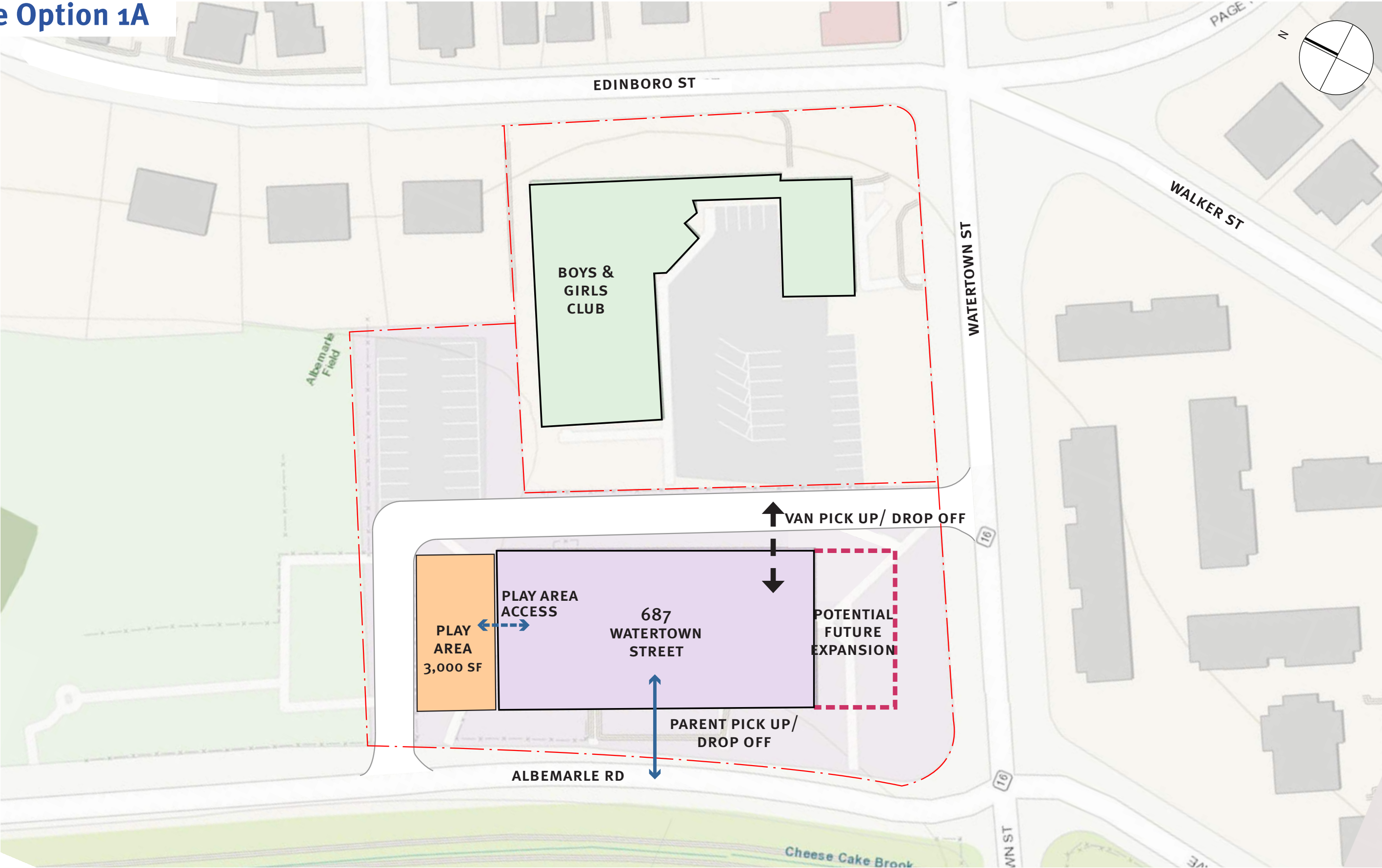
Preschool Staff Parking		
Full-time Equivalency (FY19)	FY19 # Staff	# Spots Proposed
Full-time	35	35
Part-time	38	38
Proposed Full and Part-time	8	8
TOTAL PERSONNEL	81	81

* Part-time staff typically might be expected to share parking spaces, but scheduling does not allow that at NECP because the majority of staff all work during the main program morning hours.

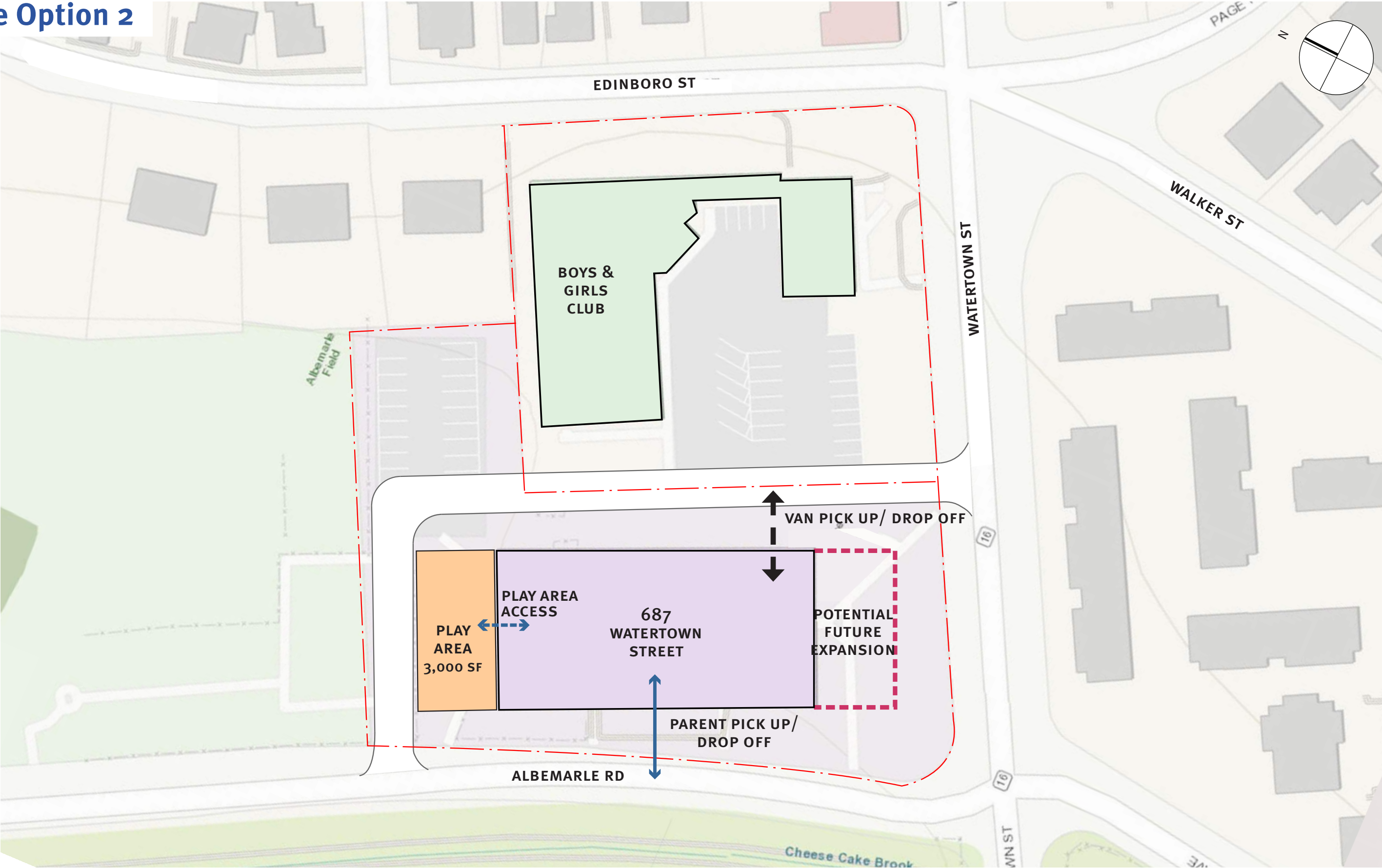
Site Option 1



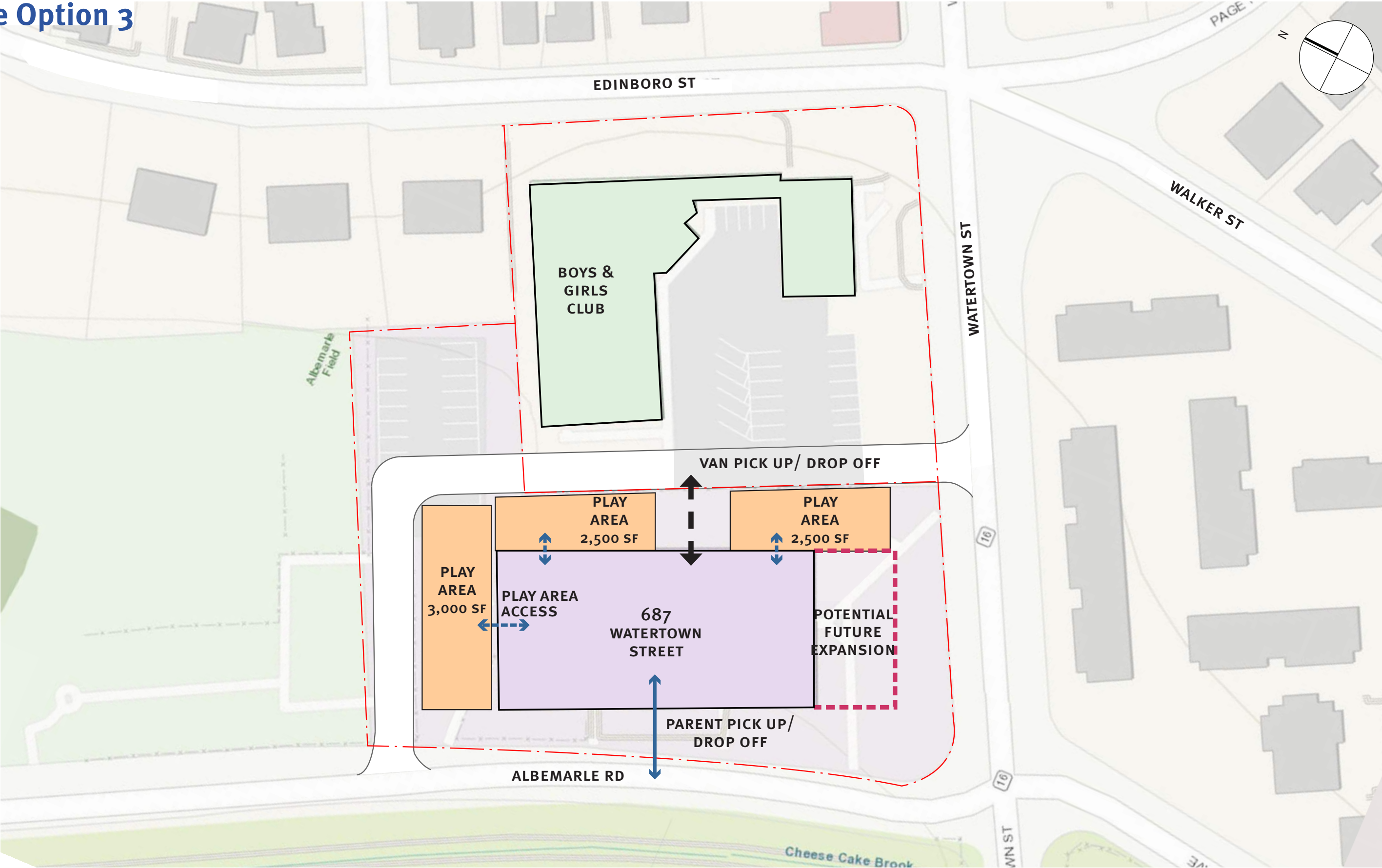
Site Option 1A



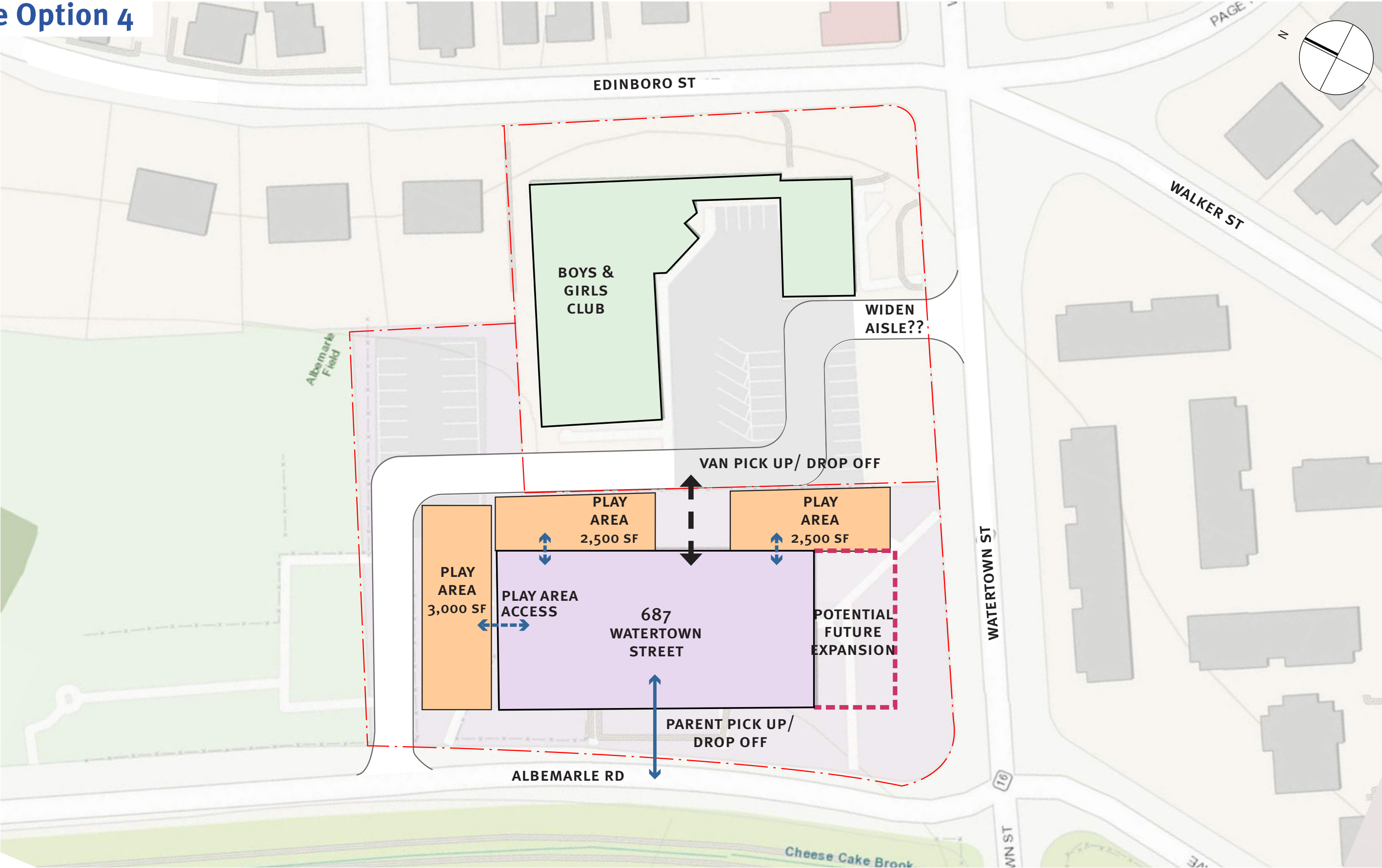
Site Option 2



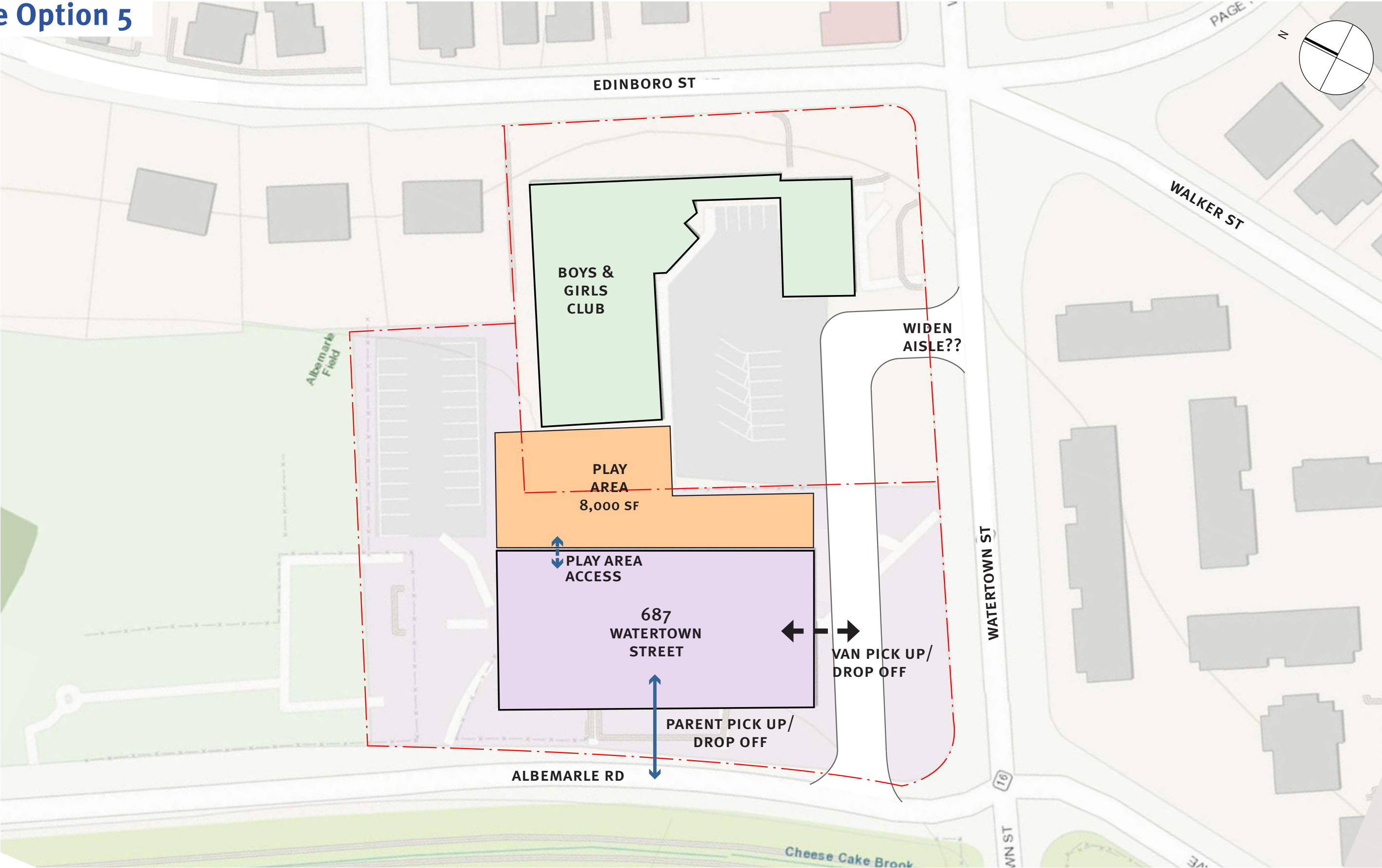
Site Option 3



Site Option 4



Site Option 5



NECP Space Planning Summary

NECP	Existing (11/1/2018) Conditions for NECP at Jackson Road		
	ROOM NFA ¹	# OF RMS	area totals
CORE ACADEMIC SPACES			0
(List classrooms of different sizes separately)			
Integrated Pre-Kindergarten w/ toilet		9	
Integrated Pre-Kindergarten w/ toilet		2	
STRIDE Pre-Kindergarten w/ toilet		2	
SPECIAL EDUCATION			0
(List rooms of different sizes separately)			
Applied Behavior Analysis (ABA) Classrooms		2	
Safe Space/ Quiet/ Mindful Room		2	
Small Group/ 1:1 support/ pull out spaces (per 2 CR)		7	
PT Room		1	
OT Room/ Motor Skills Room		1	
Team Specialists		1	
Therapist Office (OT/ PT/ Speech)		1.5 CR	
Speech and Language Testing			
OT Testing Room			
Psychologist (office + testing +1 student)		1	
Social Worker		1	

PROPOSED			
NECP (Target Program) 17 Classrooms			104 students with special needs 90 students who are typically developing 111 students receiving related services
ROOM NFA ¹	# OF RMS	area totals	Comments
	17	12,760	
720	13	9,360	Room SF for 16 students at 45 SF per student (720 SF). Toilets adjacent to and shared by classroom pairs, accounted in Grossing factor (100SF per classroom pair)
850	2	1,700	Medically fragile
850	2	1,700	STRIDE
		6,450	
425	2	850	Used throughout the day. Adjacent to each other, near safe space
100	2	200	One per classroom floor
			For morning use; dedicated classroom pull out spaces adjacent to classroom pairs. For afternoon use; small group support space in afternoon. Also located on ground level for morning use.
200	9	1,800	
1,000	1	1,000	
1,000	1	1,000	
200	1	200	Individual office with separate conference table for 6, adjacent to director
50	16	800	16 therapists in one large space at 50 SF per person
100	3	300	
100	1	100	
150	1	150	
50	1	50	

NECP Space Planning Summary

NECP	Existing (11/1/2018) Conditions for NECP at Jackson Road		
	ROOM NFA ¹	# OF RMS	area totals
HEALTH & PHYSICAL EDUCATION			
Storeroom			
PE Space/Indoor/ Multipurpose		1	
DINING & FOOD SERVICE			
Staff lunch room		1	
MEDICAL			
Medical Suite Toilet			
Nurses' Office / Waiting Room		1	
Examination Room / Resting			
Lactation Room			
ADMINISTRATION & GUIDANCE			
Director's Office		1	
Reception / Waiting Room			
Front Office (for parent walk-in)		1	
Conference rooms		2	
Duplicating Room/ Storage			
Records Room / Teachers' Mail and Time Room		1	
IEP Conference Room (up to 15 people)		1	

PROPOSED			104 students with special needs 90 students who are typically developing 111 students receiving related services
NECP (Target Program) 17 Classrooms			
ROOM NFA ¹	# OF RMS	area totals	Comments
		1,950	
250	1	250	
1,700	1	1,700	Dedicated PE Space
		400	
400	1	400	
		610	
60	1	60	
250	1	250	
100	2	200	
100	1	100	For staff use
		2,400	
200	1	200	
150	1	150	Toilet with changing table, Lactation Room for community use
500	1	500	
250	1	250	
100	2	200	One per floor, separate from the records, but adjacent
200	1	200	Needs to be separate from the main office. Table for layout space
450	2	900	

NECP Space Planning Summary

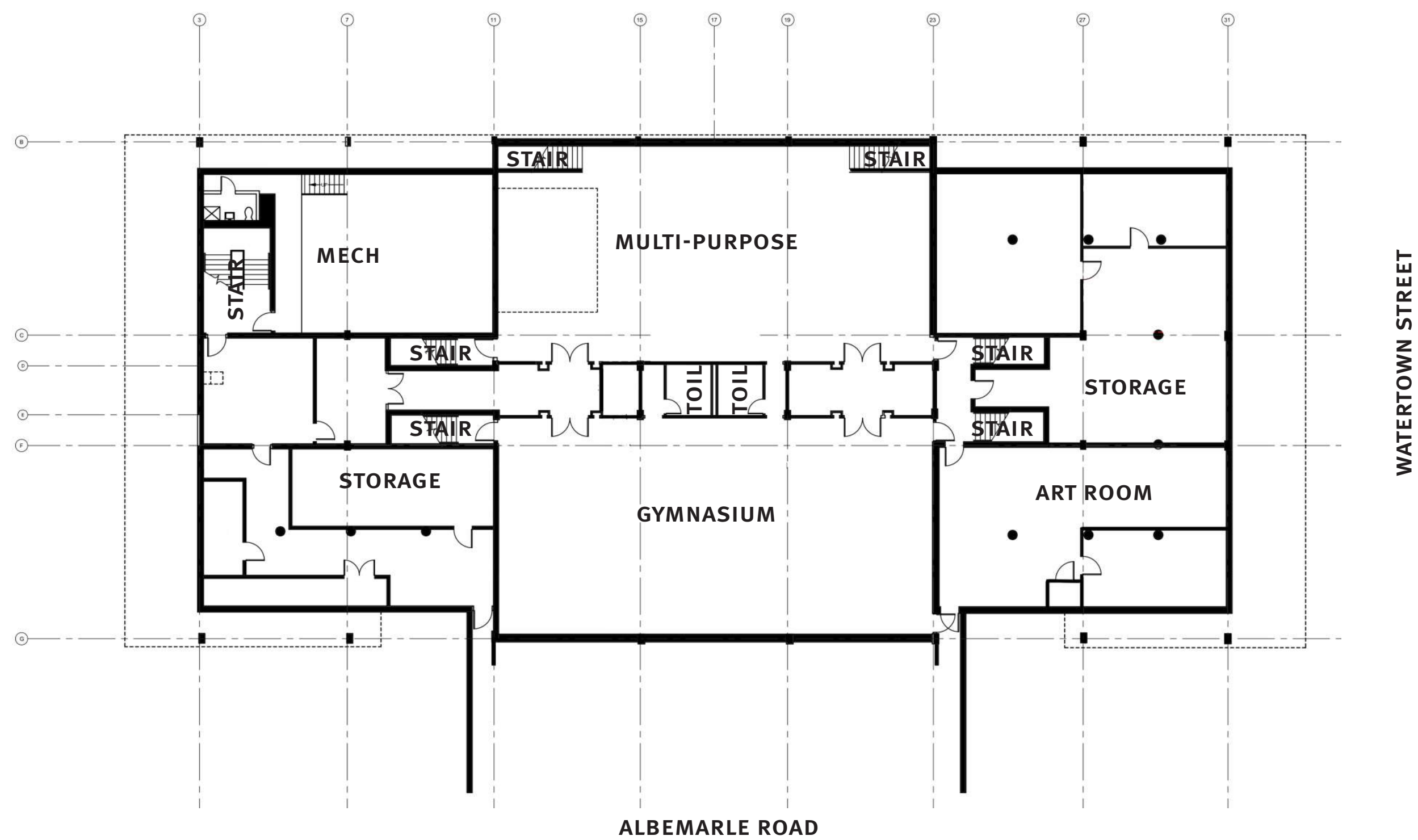
NECP	Existing (11/1/2018) Conditions for NECP at Jackson Road		
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals
CUSTODIAL & MAINTENANCE			0
Custodian's Office		1	
Custodian's Workshop/ Storeroom for materials		1	
Custodian's Storage			
Recycling Room / Trash			
Network / Telecom Room			
Total Building Net Floor Area (NFA)			
Proposed Student Capacity / Enrollment			
Total Building Gross Floor Area (GFA)			
Grossing factor (GFA/NFA)			

Extended Day/ After School			0
Dedicated Extended Day classrooms			
Potential Extended Day Capacity			
Other (specify)			

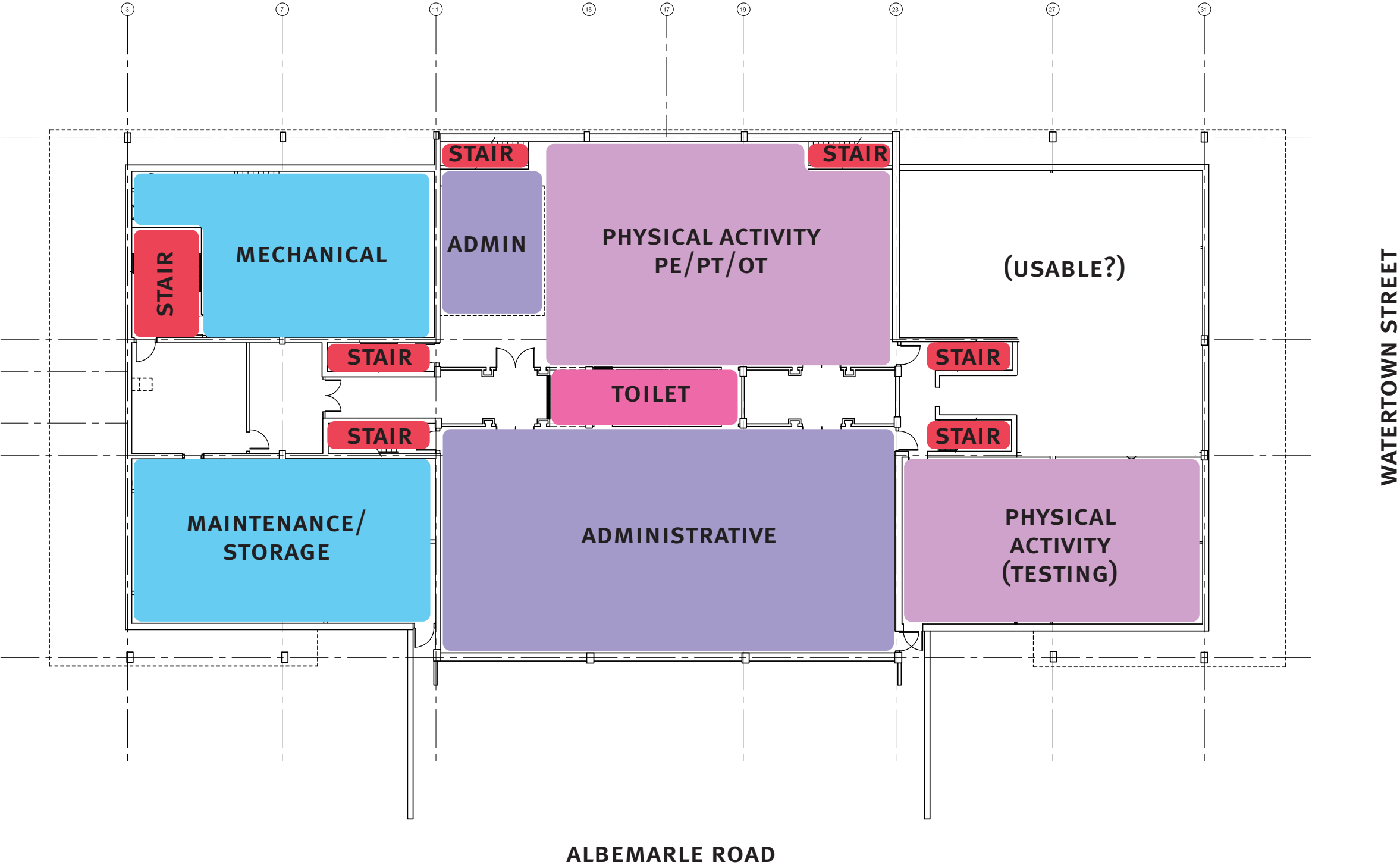
PROPOSED			104 students with special needs 90 students who are typically developing 111 students receiving related services
NECP (Target Program) 17 Classrooms			
ROOM NFA ¹	# OF RMS	area totals	Comments
		1,150	
150	1	150	
500	1	500	
100	2	200	slop sink and storage per floor for machine
100	1	100	Not currently in existing program; may not be needed
200	1	200	
		25,720	
		310 - 375	Enrollment increases throughout the year
		38,580	
		1.50	

		4,000	
1,000	4	4,000	Potentially 3 - 4 Extended Day Classrooms
		60 - 80	

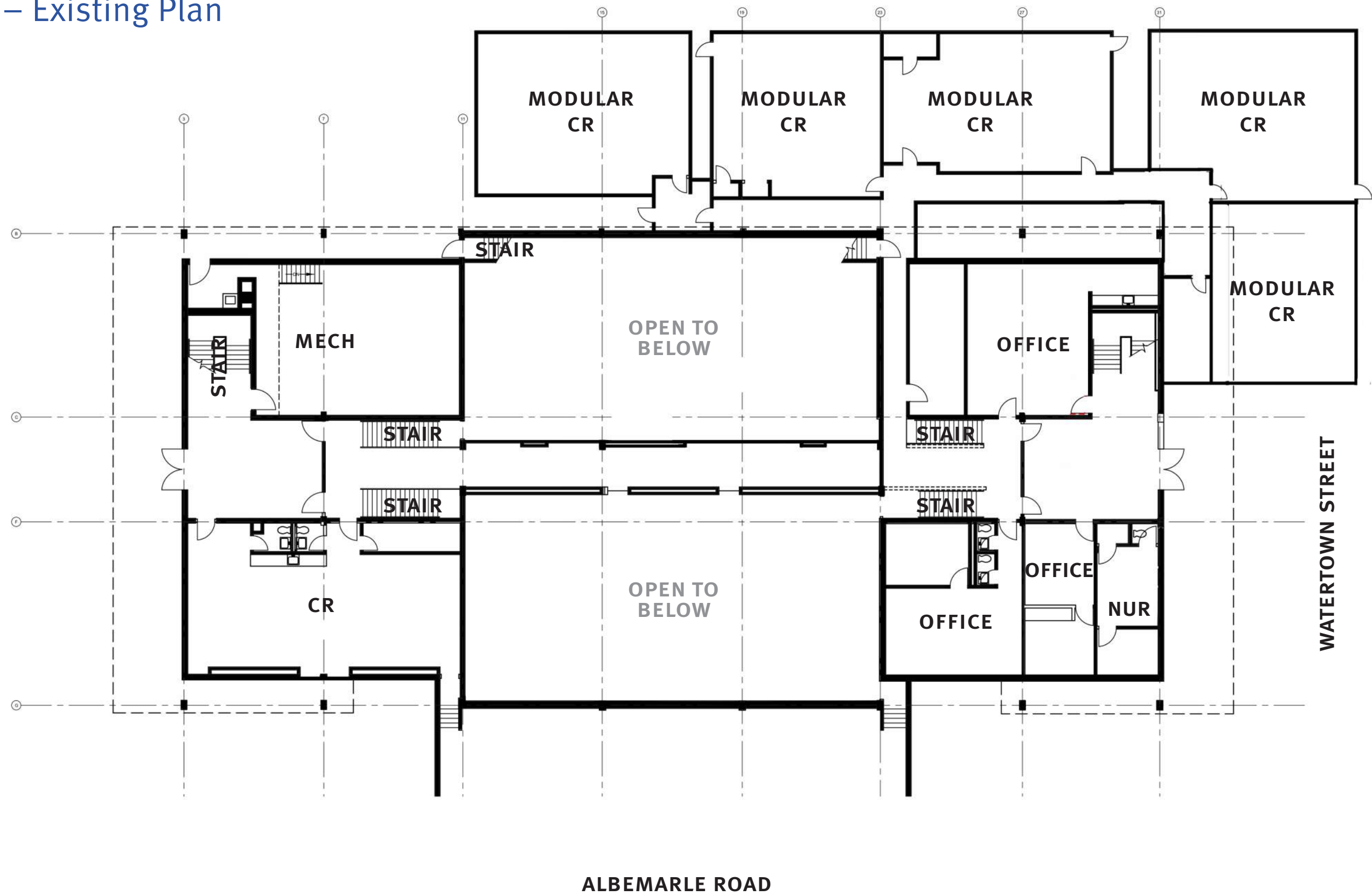
687 Watertown Street / Lower Level – Existing Plan



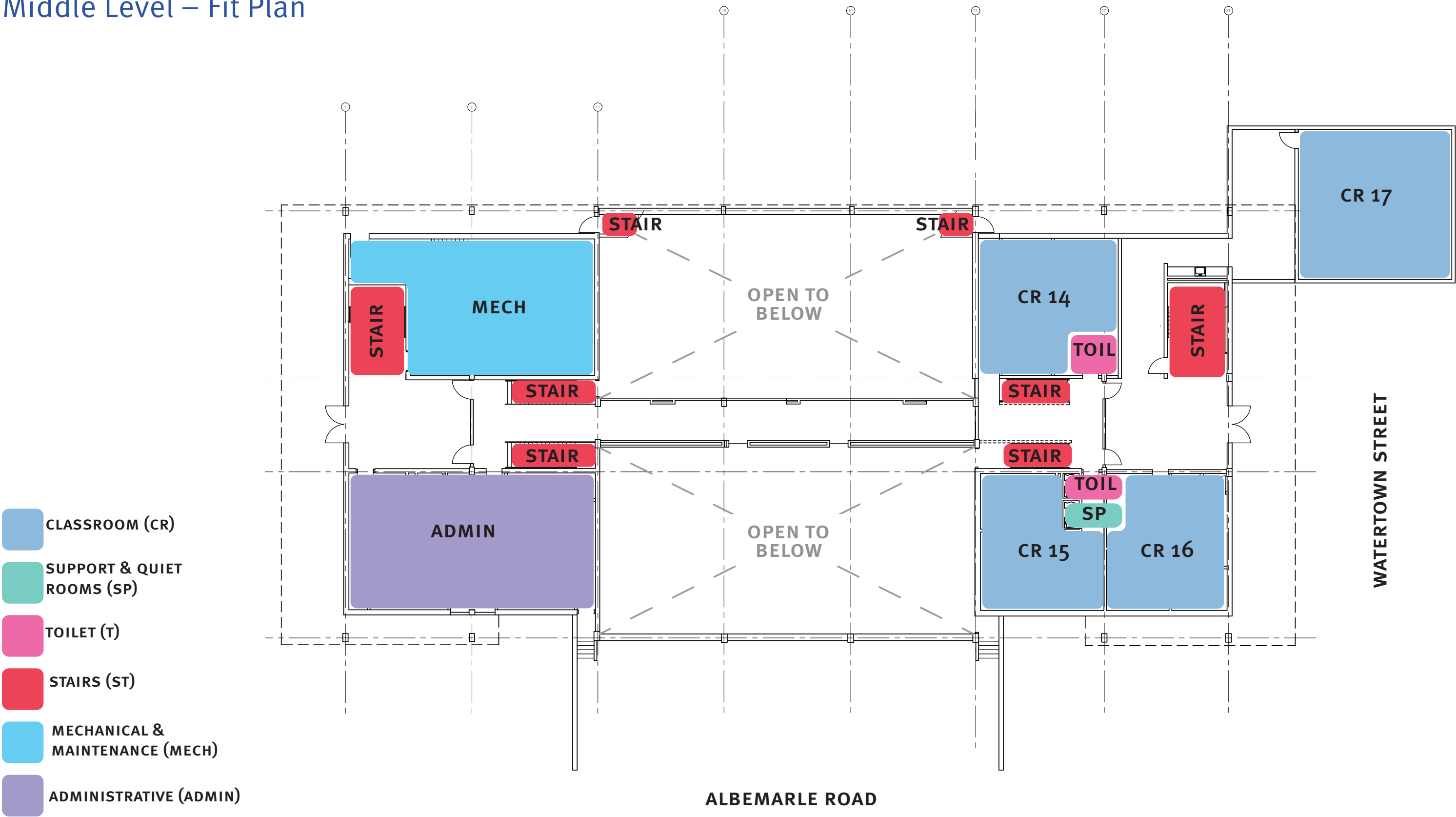
Newton Early Childhood Program / Lower Level – Fit Plan



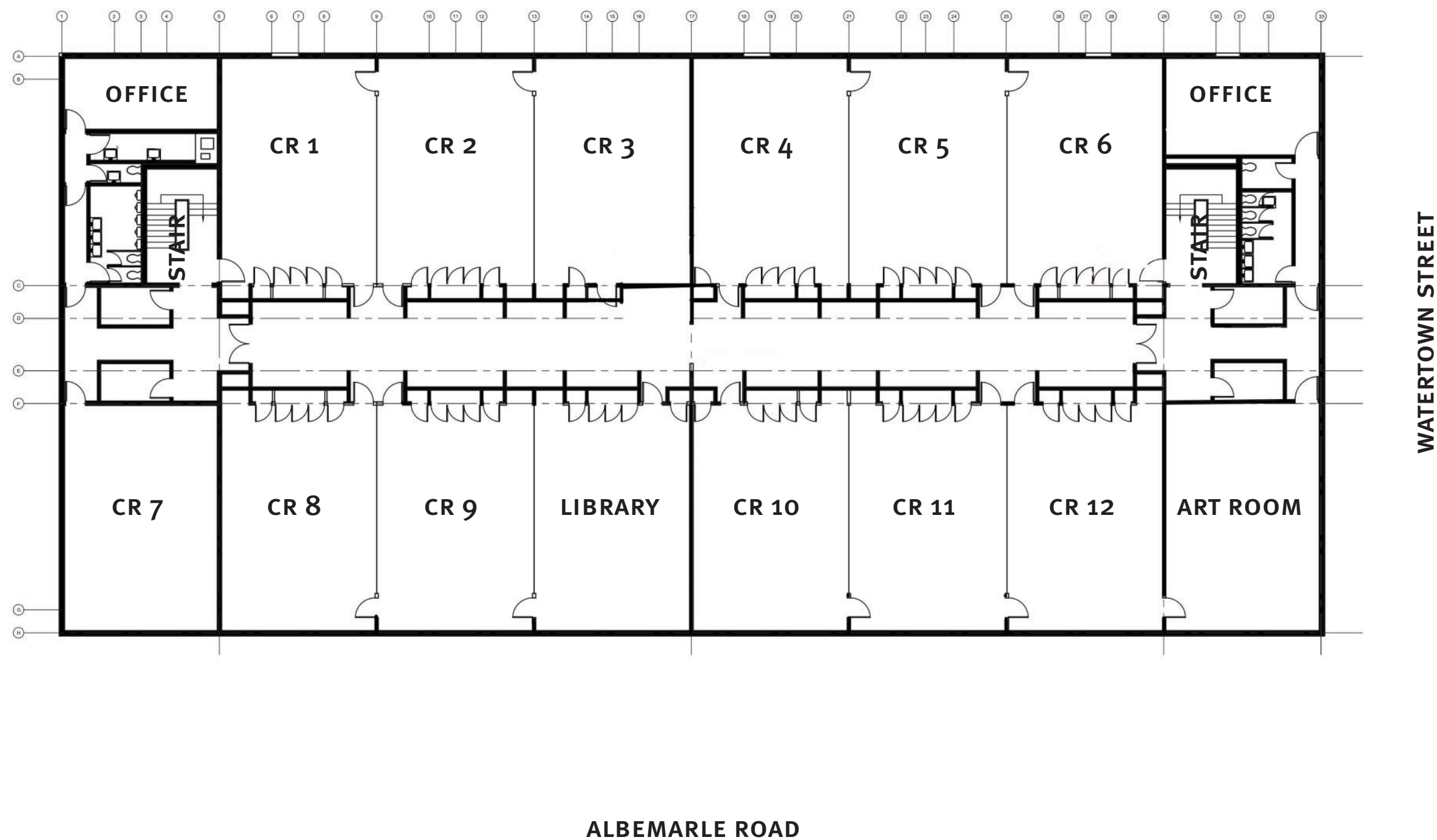
687 Watertown Street /
Middle Level – Existing Plan



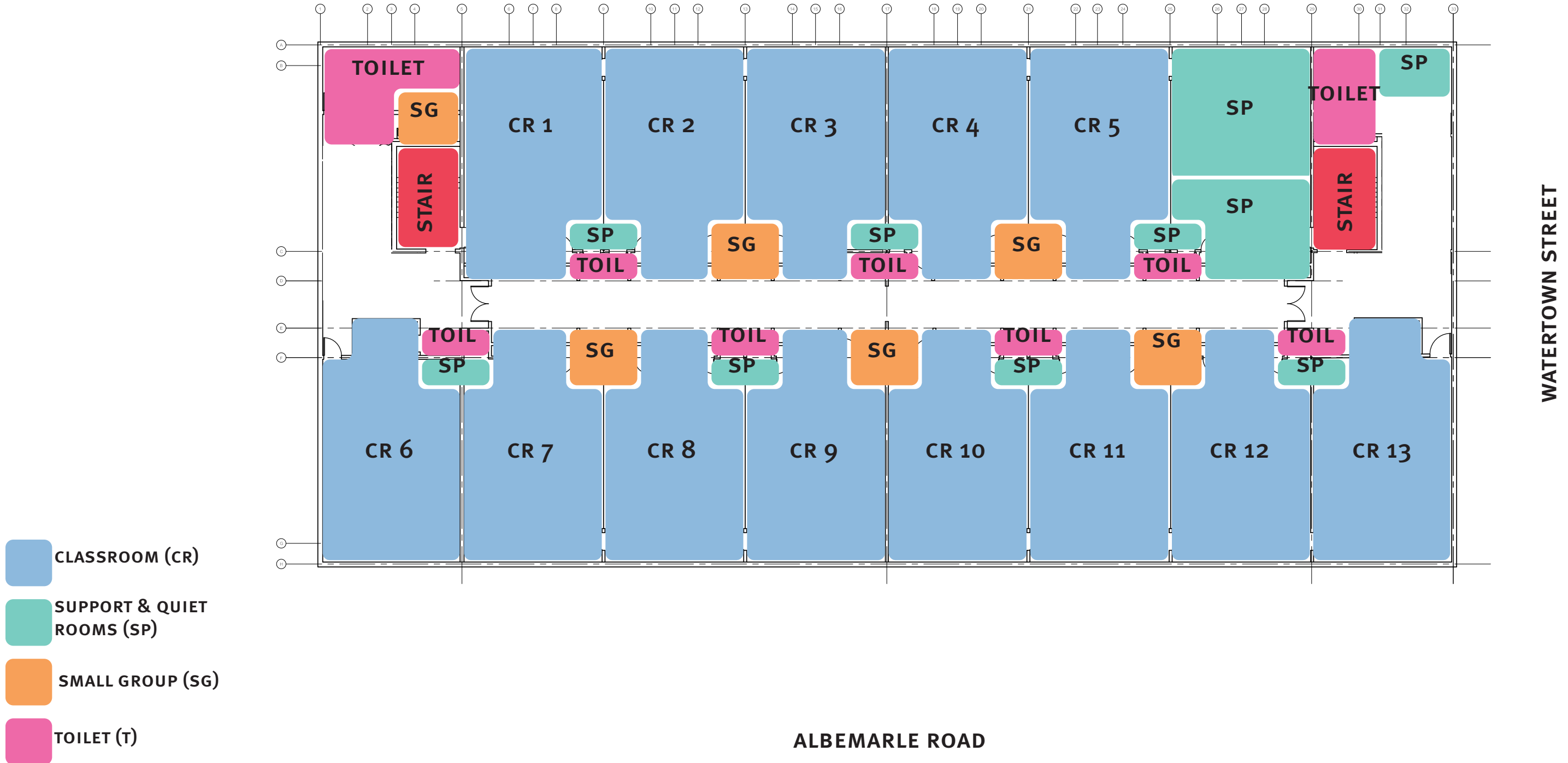
Newton Early Childhood Program/ Middle Level – Fit Plan



687 Watertown Street /
Upper Level – Existing Plan



Newton Early Childhood Program/ Upper Level – Fit Plan



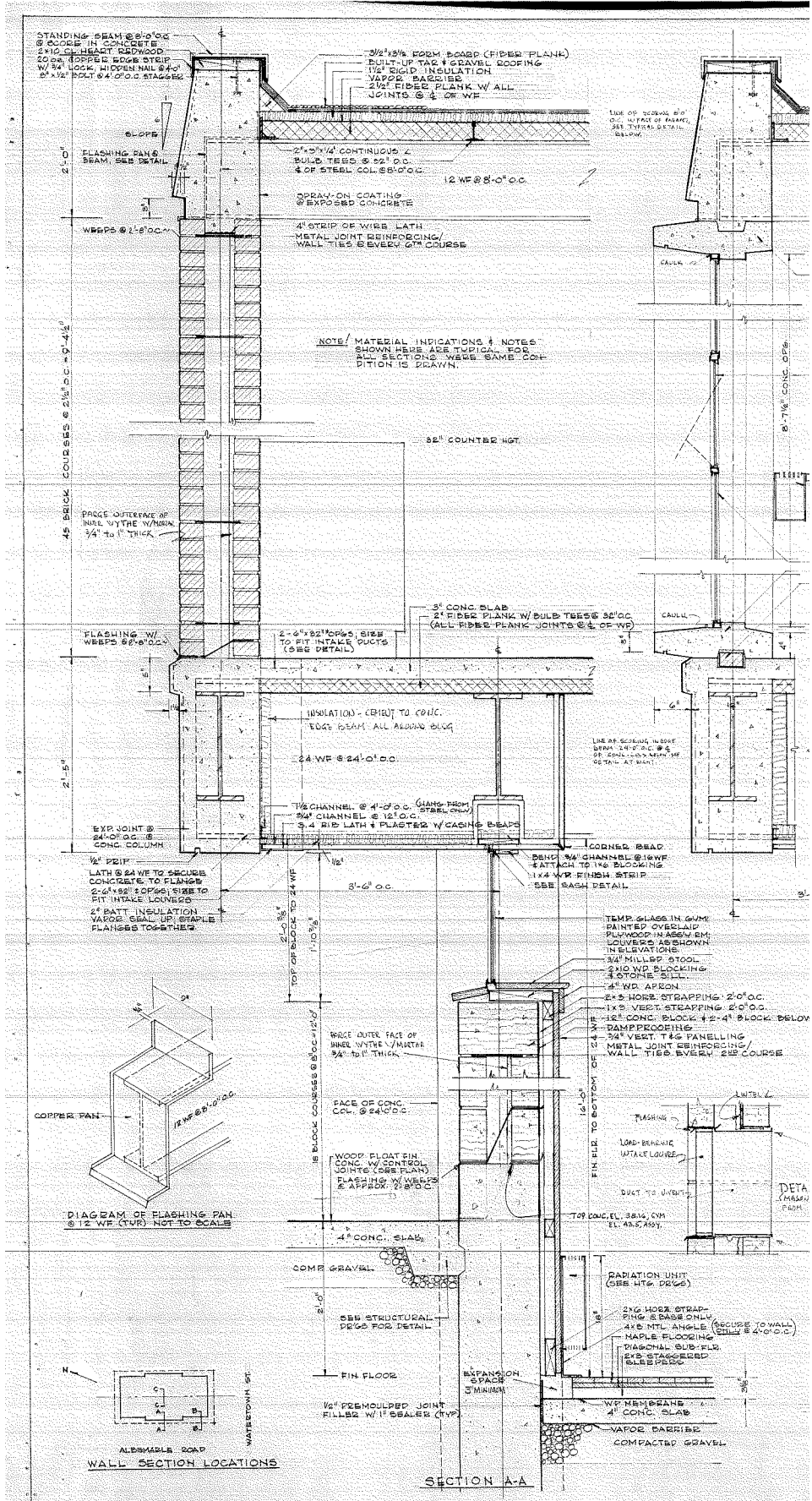
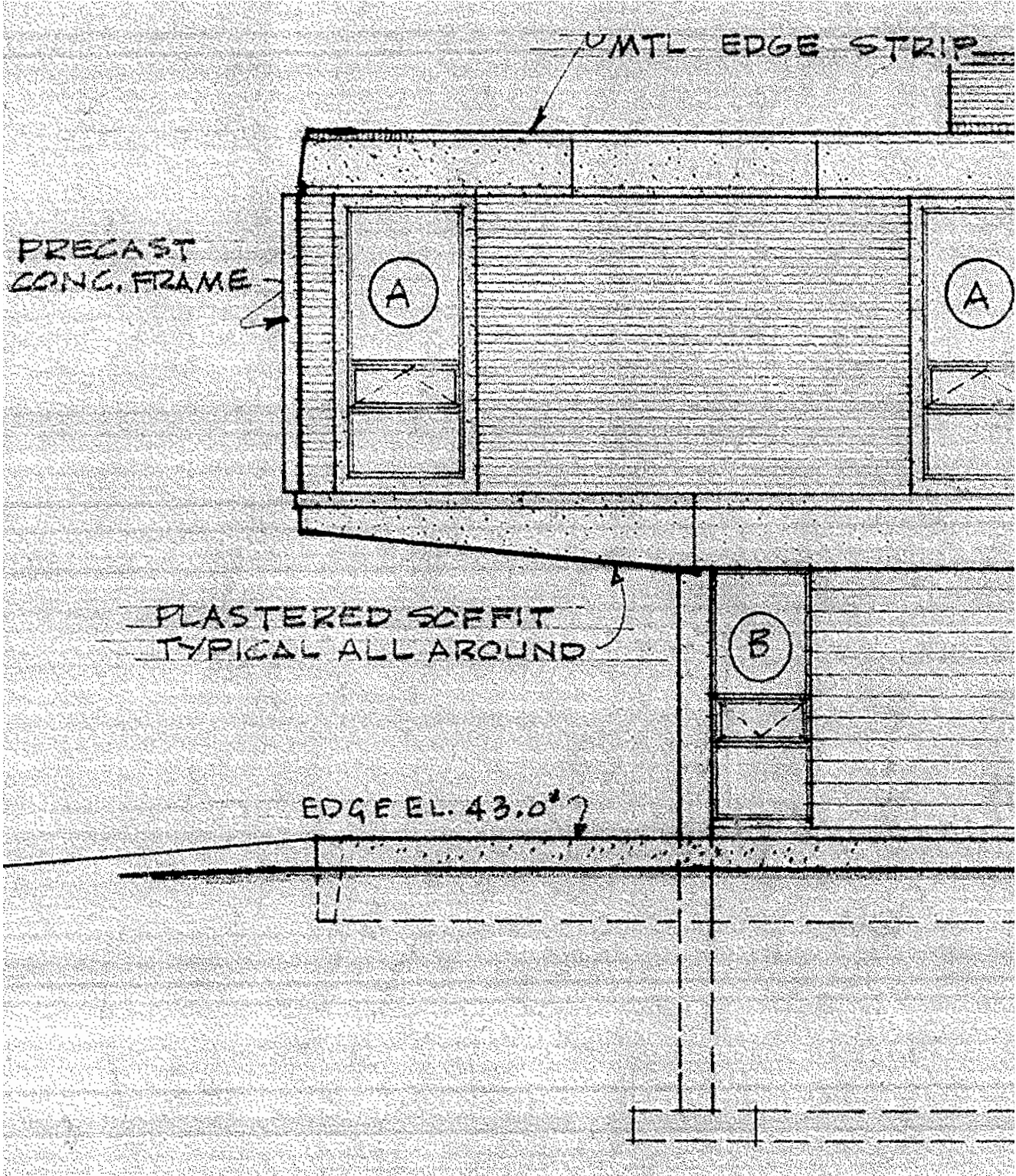
Building Design and Construction Sustainability Guidelines

Existing conditions considerations to study

- » Building envelope insulation
- » Mechanical system efficiency
- » Use of renewable resources
- » Evaluation of building controls, management, monitoring and display functions
- » Lighting approach and potential grants

Existing Exterior Building Wall Section

Building envelope insulation and roof assembly



Existing Exterior Building Wall Section

Building envelope insulation



EXTERIOR FACADE



INTERIOR ELEVATION

Existing Mechanical System

Alternate HVAC options

- » Repair/ replace in-kind unit ventilators (not recommended, loud, no cooling, minimal ventilation)
- » Remove unit ventilators, provide hot water radiant heat ceiling panels. Install new ventilation system.
- » New variable refrigerant flow (VRF) heating, cooling, and ventilation



Discussion

www.newtonma.gov/gov/building/capital_projects

www.lincolneliot-necp-projects.com

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