

NewCAL Design Review Committee

Feasibility Update

November 18, 2020





Owner's Project Manager

Architect

Existing Conditions Assessment and Findings

Existing Conditions Studies Performed to Date

- Hazardous materials survey
- Structural assessment
- Geotechnical assessment
- Land survey
- Traffic and parking assessment

Hazardous Materials

- Presence of lead paint and asbestos detected
- Abatement cost estimate is \$250,000
- Abatement required with both demolition and renovation

Structural

- No existing steel reinforcing in mass masonry walls
- Install seismic through-wall anchors at roof level only
- Replacement of steel masonry lintels that are rusted
- Removal of existing slate roof and gypsum plank roof system due to lack of support from gypsum plank;
 replace with metal deck, new roof will be required
- Installing a new seismic system at least near center, all to replace portion removed
- Carrying a \$200k allowance for seismic retrofit work (before markups and burdens)
- Carrying an allowance for general structural repairs
- New elevator hoistway depth must be considered relative to existing footings due to undermining or pressure on foundation wall

Mechanical, Electrical, Plumbing and Fire Protection

- Total replacement of all systems will be required, therefore a detailed study of existing equipment is not of value
- Building and energy codes have changed and new requirements make reuse of existing system impractical

Existing Conditions Assessment and Findings

Geotechnical & Foundation Notes

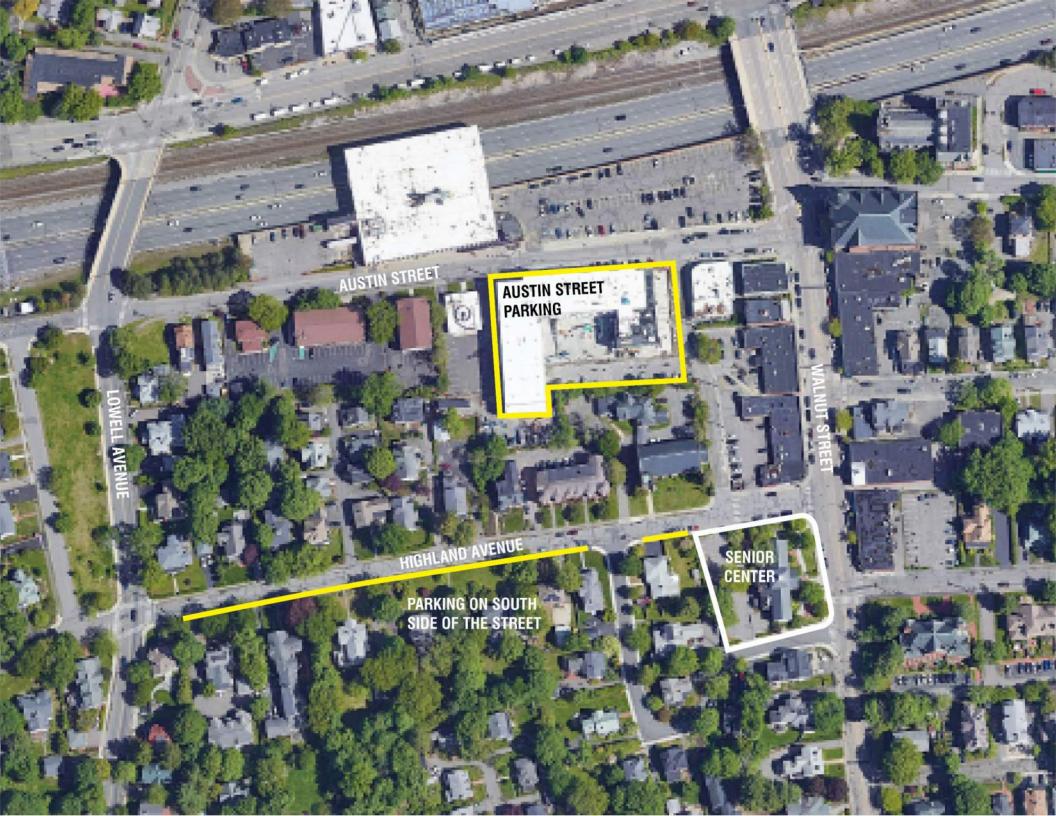
- The site consists of 3 to 8 feet of fill on top of sandy and gravelly soil; excavate and replace this fill with compacted structural fill
- Slope of excavation 1:1 or sheet piling required at edges (shoring)
- Concrete Slabs may be designed as grade supported slabs but cracking may occur
- Recommend removing fill at slabs as well
- Groundwater not encountered or expected
- New footings must bear on structural fill. Some existing fill is likely suitable for reuse
- It is anticipated that conventional footings can be used for new construction

Land Survey

A dimensional survey of the property has been completed

Traffic and Parking Notes

- Parking for 70 cars is recommended for typical day-to-day activities
- Parking for 97 cars is recommended for peak demand during large events
- Trip generation rates for senior centers relatively low, compared to other land users
- Larger amount of traffic for special events but these have minor impact, due to non-peak hours
- Trips are mostly outside of peak commuter hours
- Single point access/egress and one-way circulation to minimize internal conflict
- Slight distances assessed viewed as adequate for the speeds of Highland Avenue
- Expansion not anticipated to impact safety along roadway network
- Turning sightlines at Walnut Street and Highland Avenue are adequate for a parking entrance/exit on Highland Avenue, while close to the street corner, turning speeds are generally slower



Retain Existing Building + New Addition

Option A (keeping both wings and the central cupola) Advantages

- Existing building keeps with the scale of the neighborhood fabric along Walnut street
- Existing building brick façade is charming
- Existing building has a large setback with generous greenery/garden along Walnut Street
- Large windows and high ceilings at existing building wings and tower



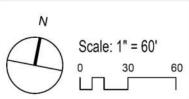
Challenges

- Remaining site is very tight for new construction in order to keep the existing building
- Awkward circulation in the senior center in order to keep existing building spaces accessible
- Potential compromise required to accommodate all desired new senior center program
- Challenging onsite loading and unloading, trash removal, very limited back of house functions
- Very restricted parking on site
- Very tight accommodation of large, multiple function spaces and associated commercial kitchen at the ground floor of new addition
- Existing Building front door can no longer serve as the front entrance to the senior center therefore rendering an awkward relationship to the new addition and new entry
- Constructability challenges with building a new addition tight to existing building
- Potentially cost premiums to integrate the existing building into the new addition and to bring into code compliance

Newtonville Retain Existing Building: INITIAL LAYOUT

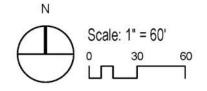


Site Plan: 33,000 sf building

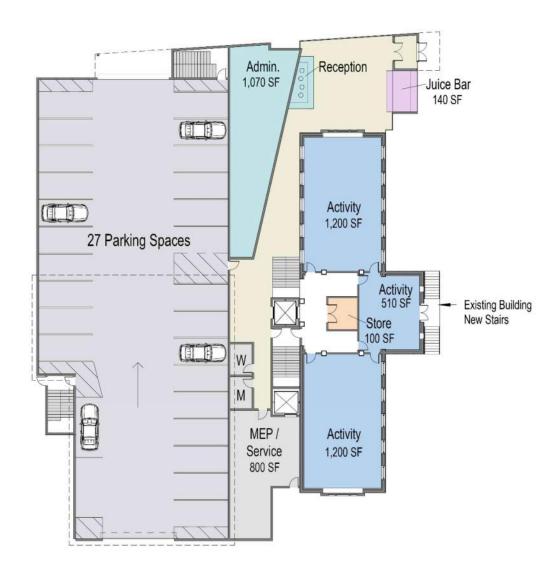




Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Newtonville Retain Existing Building: INITIAL LAYOUT



First Floor Plan: 8,000 sf Garage Area: 9,000 sf \bigcup_{N}



First Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

 \bigcup_{N}



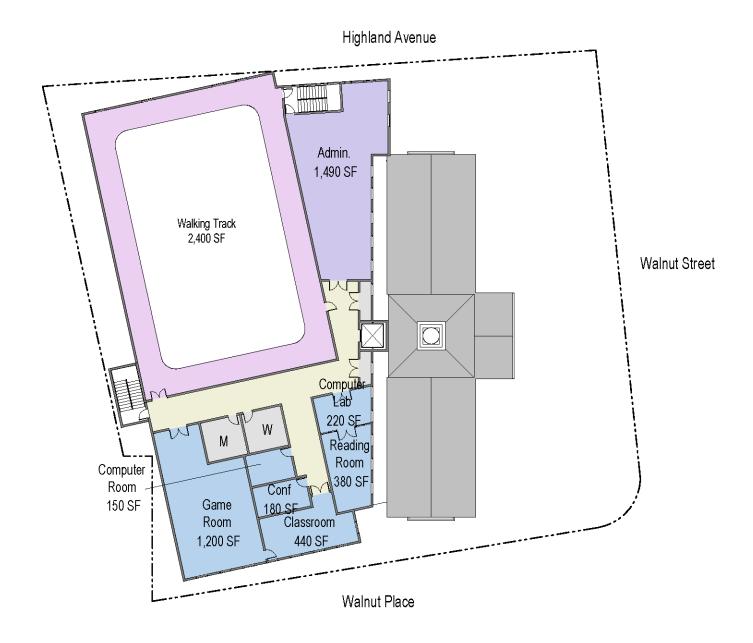
First Floor Plan Entry From Walnut Place



Second Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

Ν



Third Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

 \bigcup_{N}



NewCAL Newtonville Option A - Existing Building + New Addition (3 Story)

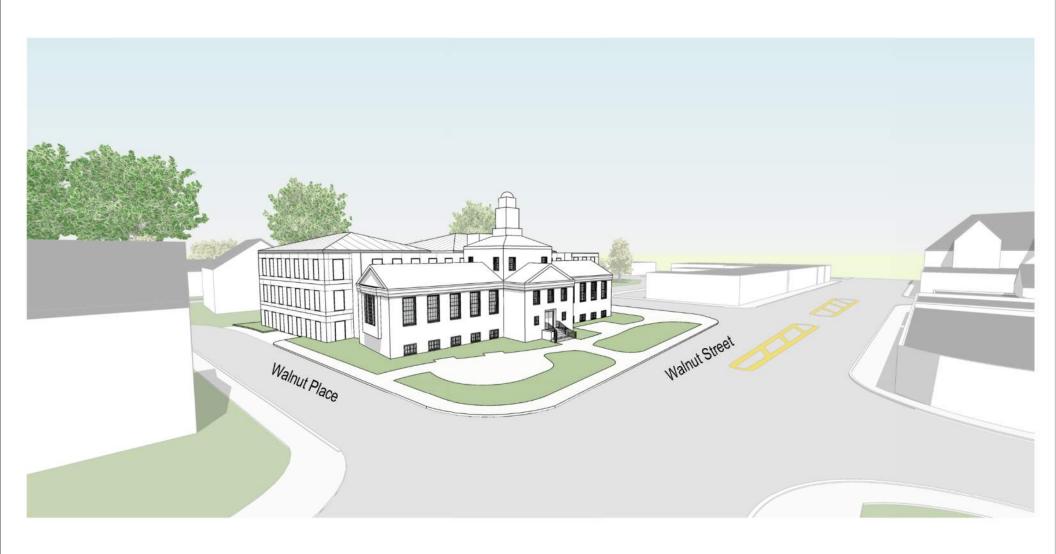
Aerial View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



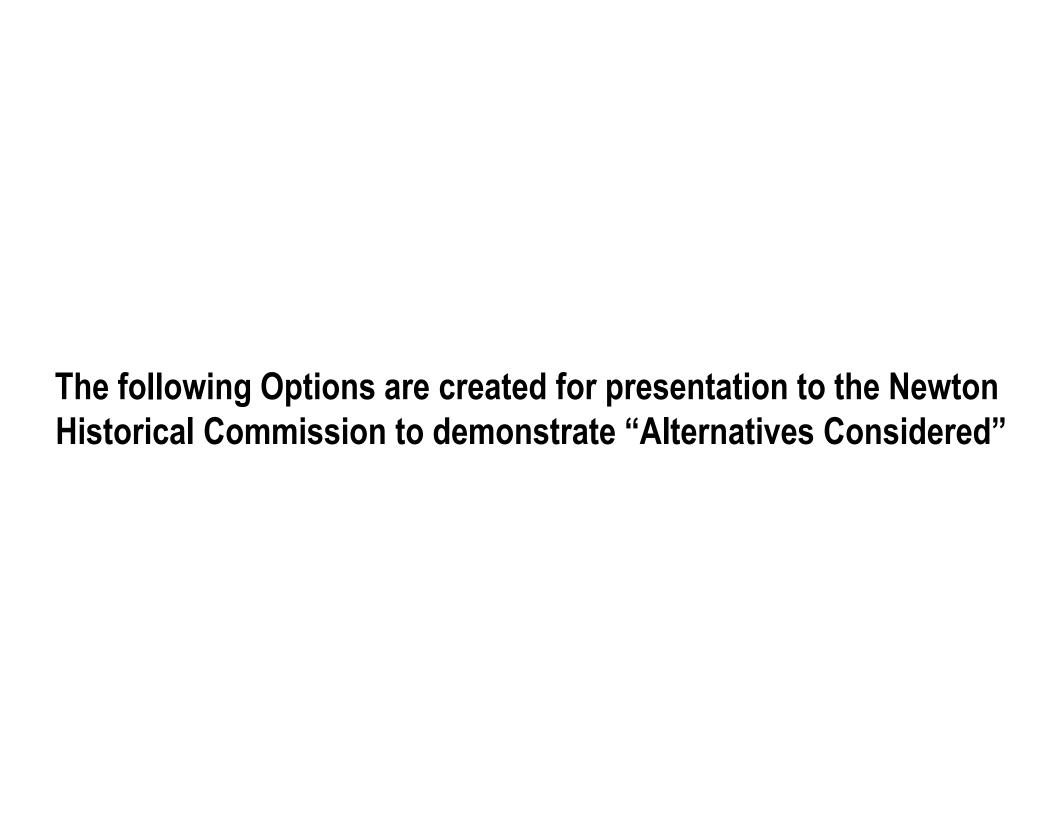
Street View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Street View from Southeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Retain Existing Building + New Addition

Option B (keeping south wing and the central cupola) Advantages

- The new north wing can better accommodate first floor senior center large functional spaces and commercial kitchen; better relationship with front entrance
- The new north wing spaces can ease the senior center building program at upper floors
- The upper program spaces are better proportioned and more flexible for use



Challenges

- The loss of north wing makes the existing masonry building asymmetrical and awkward visually from Walnut Street
- Awkward circulation in the senior center in order to keep existing building spaces accessible
- Potential compromise required to accommodate all desired new senior center program
- Very restricted parking on site
- Existing building front door can no longer serve as the front entrance to the senior center therefore rendering an awkward relationship to the new addition and new entry



Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

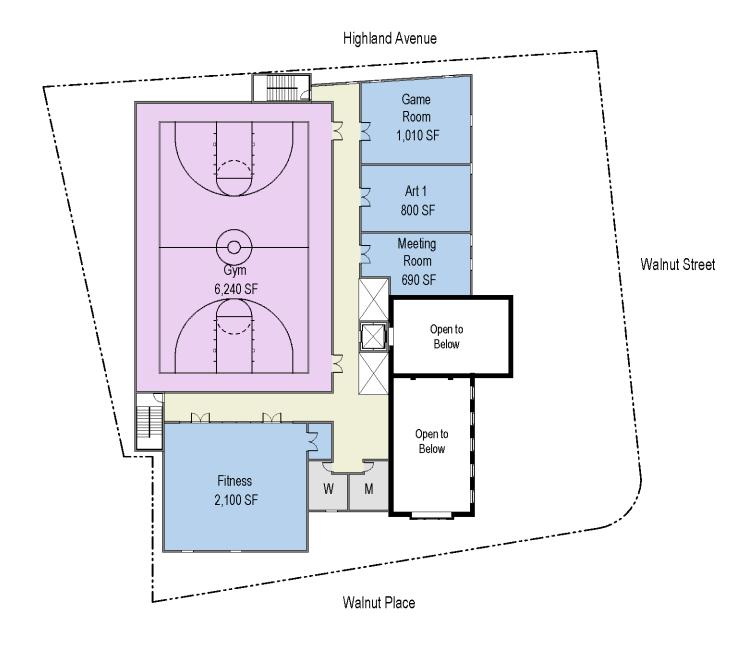
Scale: 1" = 60'

0 30 60

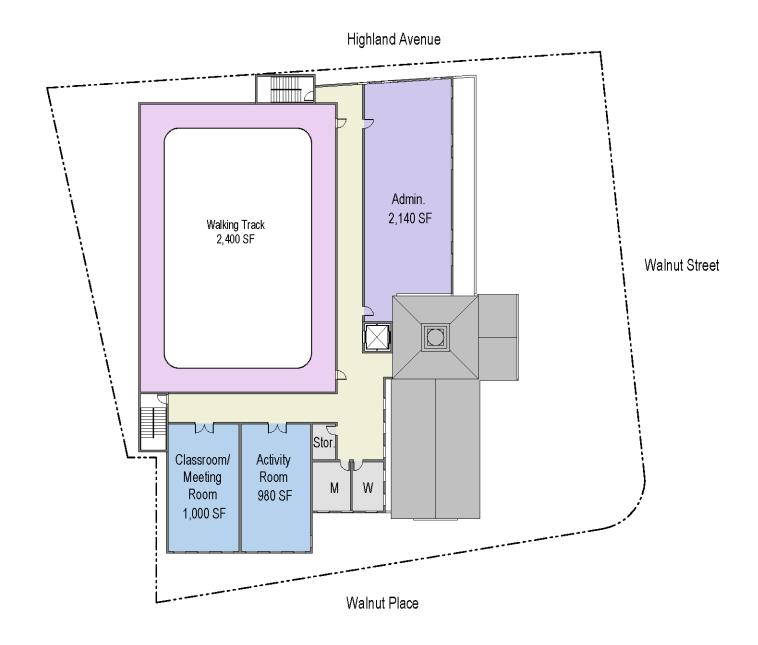
Ν



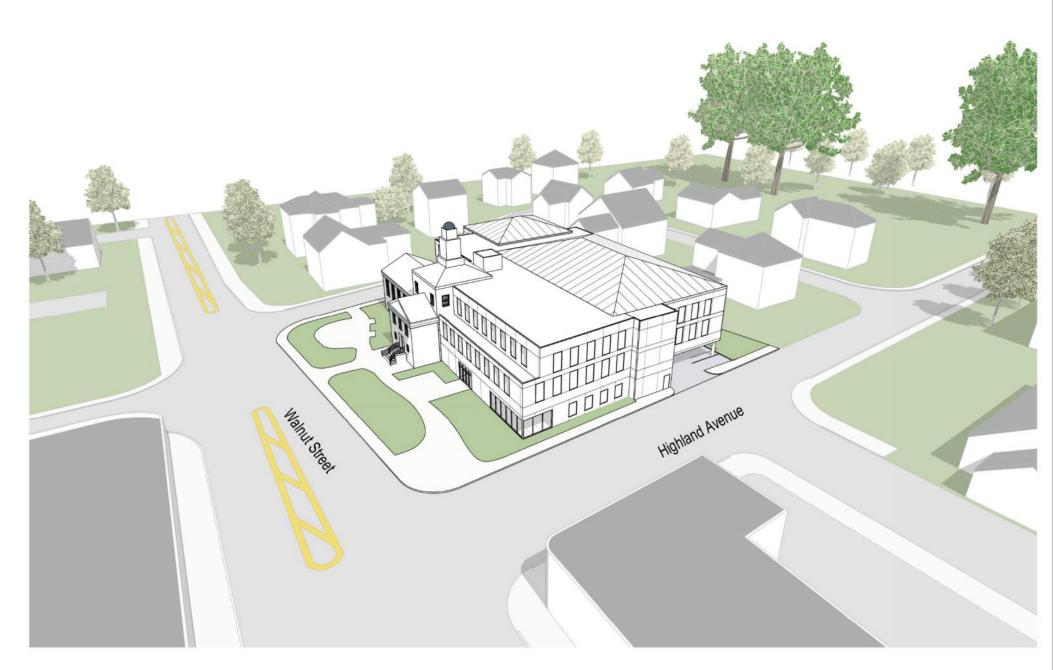
First Floor Plan



Second Floor Plan



Third Floor Plan



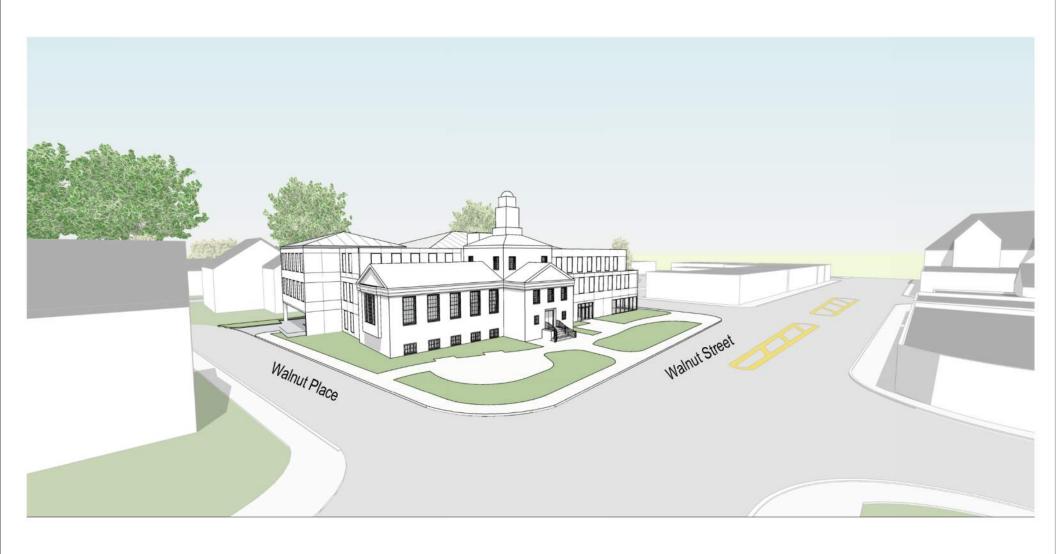
Aerial View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Street View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Street View from Southeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

"Alternatives Considered" Number Two Retain North Wing and Central Atrium

Retain Existing Building + New Addition

Option C (keeping north wing and the central cupola) Advantages

- Keeping the north wing of existing building and cupola presents the same historic façade at the more prominent corner of the site at Walnut Street and Highland Avenue
- The new south wing can better accommodate first floor senior center large functional spaces and commercial kitchen; better relationship with front entrance
- The new south wing spaces can ease the senior center building programs at upper floors
- The upper space programs are better proportioned and more flexible for use



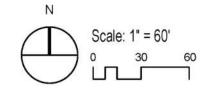
Challenges

- The lost of south wing make the existing masonry building asymmetrical and awkward visually from Walnut street
- Awkward circulation in the senior center in order to keep existing building spaces accessible
- Potential compromise required to accommodate all desired new senior center programs
- Very restricted parking on site
- Existing building front door can no longer serve as the front entrance to the senior center therefore rendering an awkward relationship to the new addition and new entry



Site Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



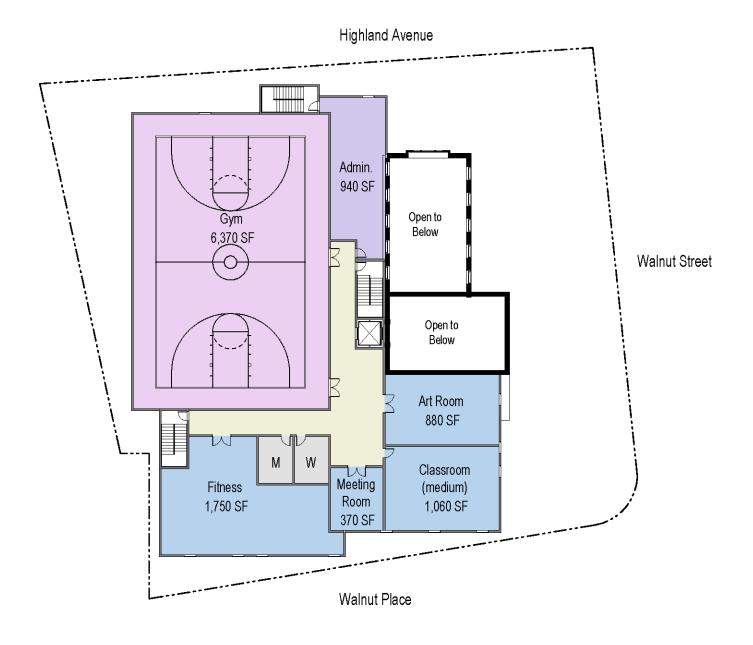


First Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

P:\3399 Newton Community Center\dwg\Revit\3399 Newton Community Center_345 Walnut St.rvt

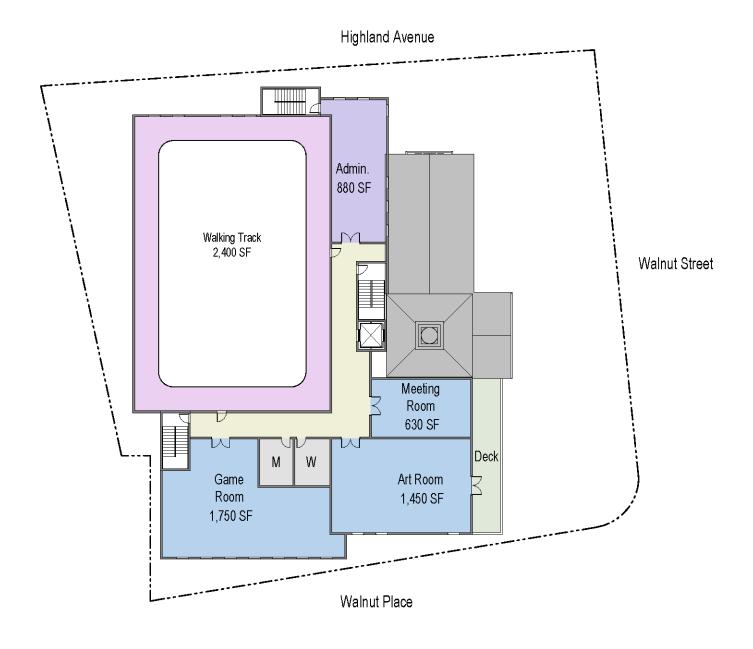




Second Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

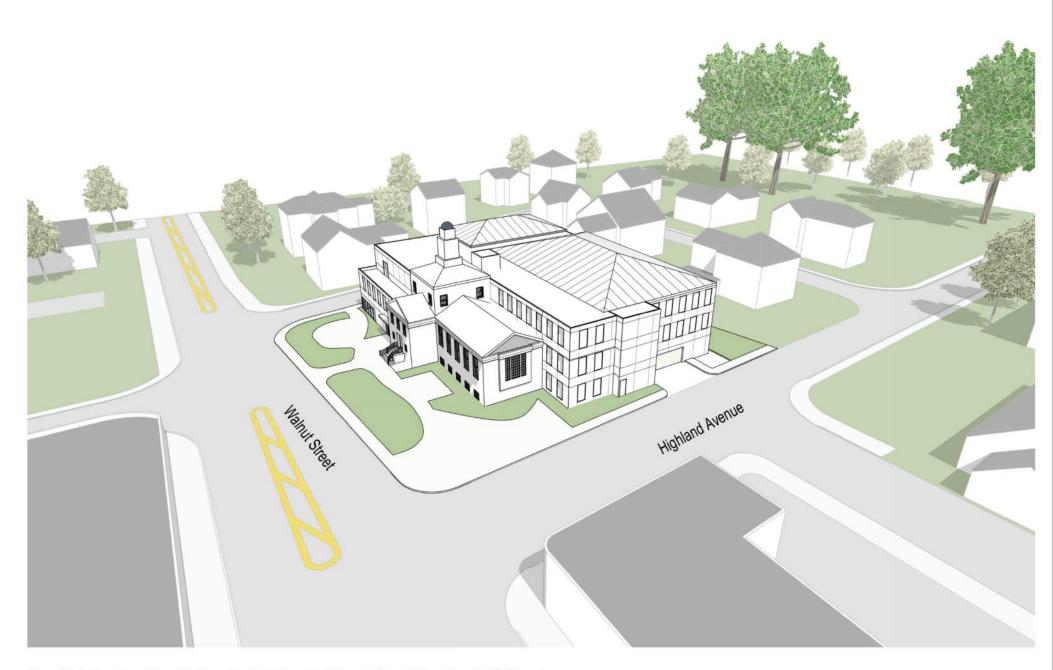
Ν



Third Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

Ν



Aerial View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Street View from Northeast



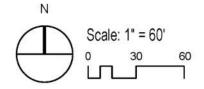
Street View from Southeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

"Alternative Considered" Number Three Retain only the Center Atrium Section



NewCAL Newtonville Option D - Existing Center Tower + New Addition (3 Story) Site Plan



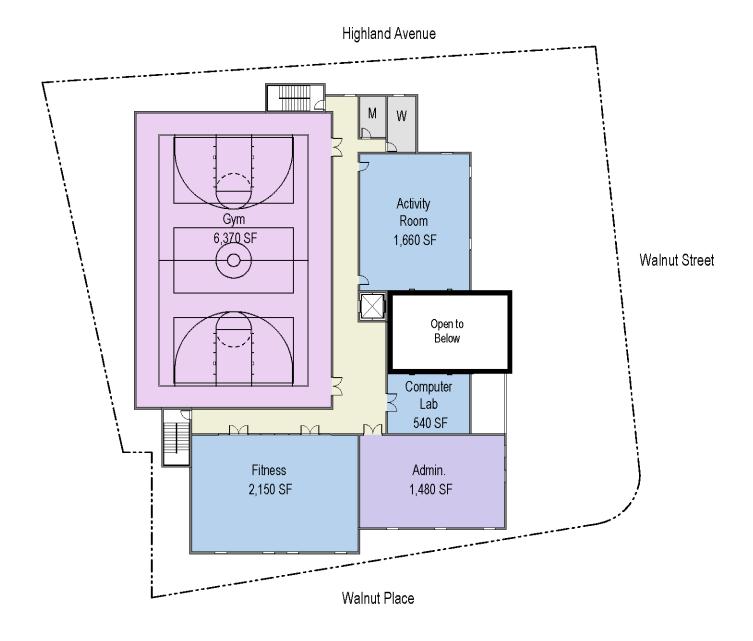


NewCAL Newtonville Option D - Existing Center Tower + New Addition (3 Story)

First Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



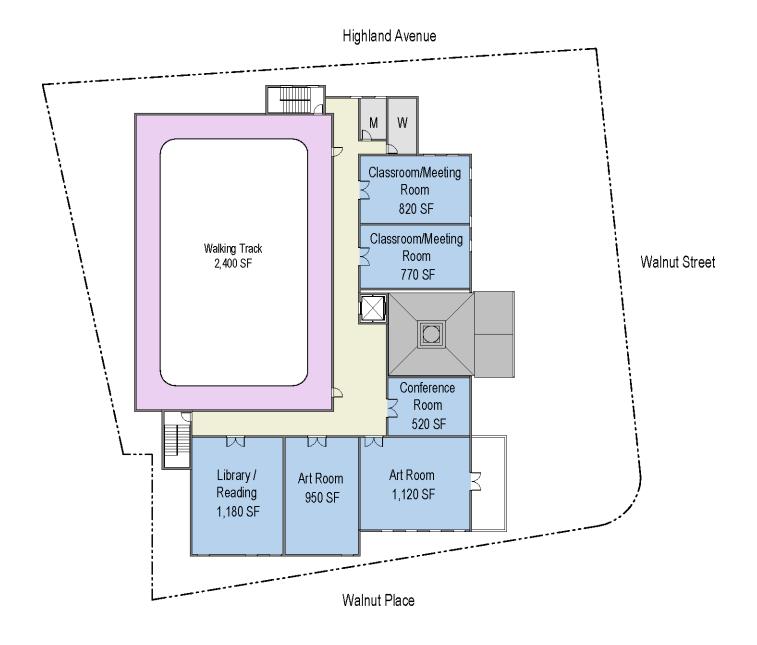


Second Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

 $\left(\right)$

Ν



Third Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020





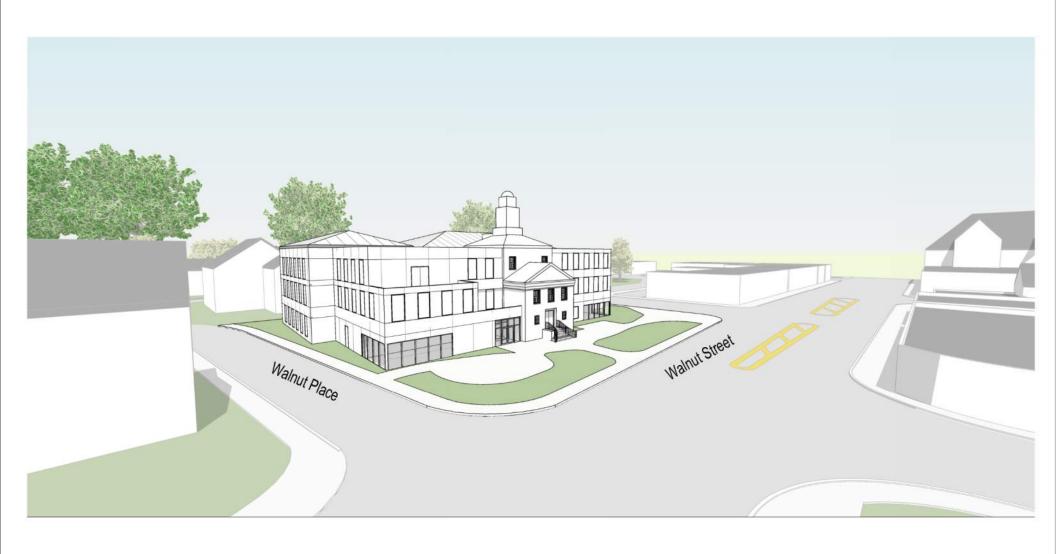
Aerial View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Street View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Street View from Southeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

The following is the New Building Alternative

New Building

Option C (New 4 story Bar Building) Advantages

- Accommodates all proposed senior center programming with room for future expansion, if needed
- Can have more on-site parking and drop-off
- More flexibility in building siting, landscape, traffic, loading/unloading and parking

Challenges

- Removal of a long familiar building in the community
- Fitting a large 4-story height, 25,000+sf
 building into a 2/3-story residential neighborhood



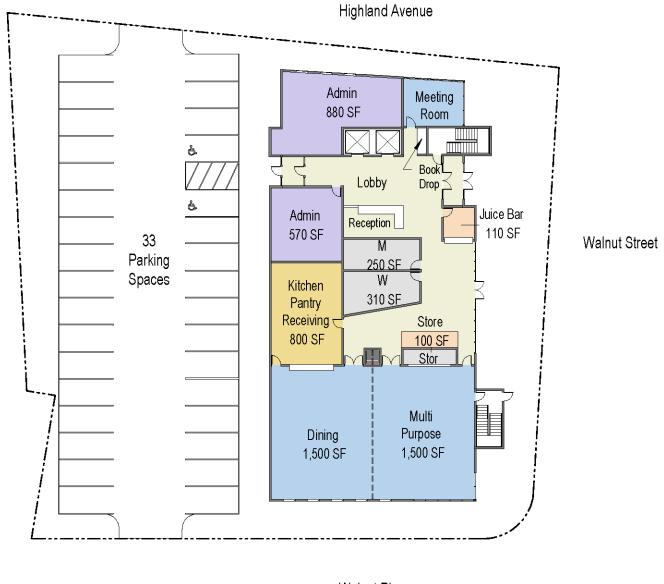


Site Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

Scale: 1" = 60'

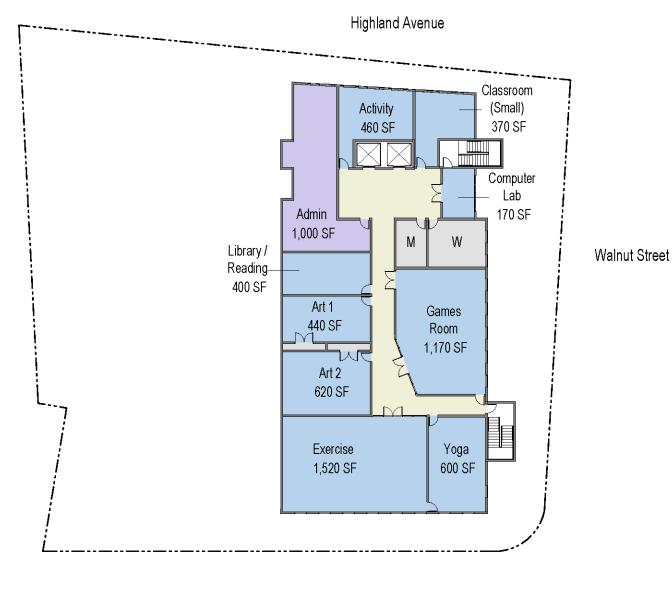
Ν



NewCAL Newtonville Option E - New Building (4 Story)

First Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

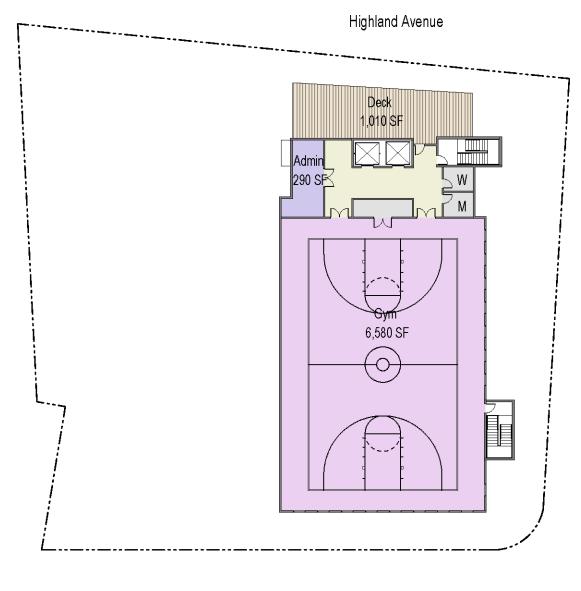


New CAL Newtonville Option E - New Building (4 Story)

Second Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

 \bigcup_{N}



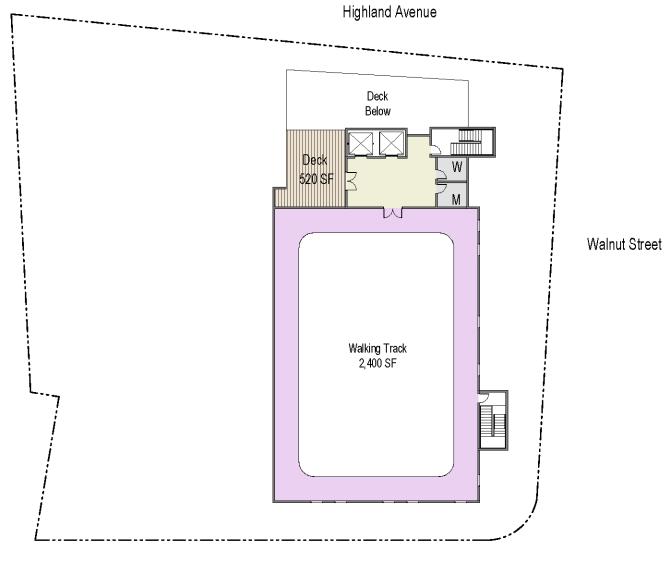
NewCAL Newtonville Option E - New Building (4 Story)

Third Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

 \bigcap^{N}

Walnut Street



NewCAL Newtonville Option E - New Building (4 Story)

Fourth Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

 \bigcup_{N}



Aerial View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



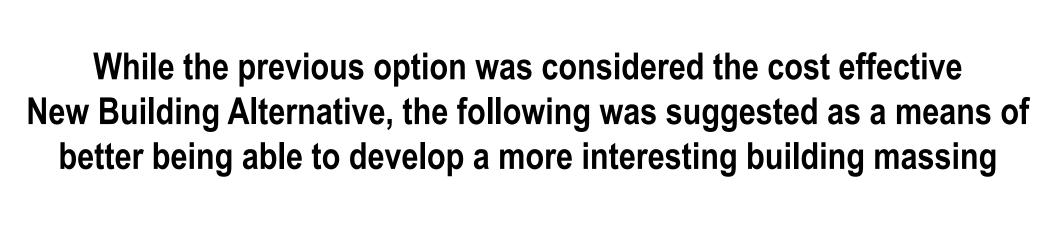
Street View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Street View from Southeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



New Building

Option E1 (New 4 story L-Shaped Building) Advantages

- Span the gym horizontally over the parking reduces building mass along Highland Ave.
- Accommodates all proposed senior center programming with room for future expansion, if needed
- Can have more on-site parking and drop-off
- More flexibility in building siting, solar orientation, landscape, traffic, loading/unloading and parking
- Can add a Roof deck or additional programming to the building



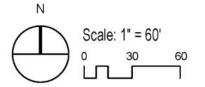
Challenges

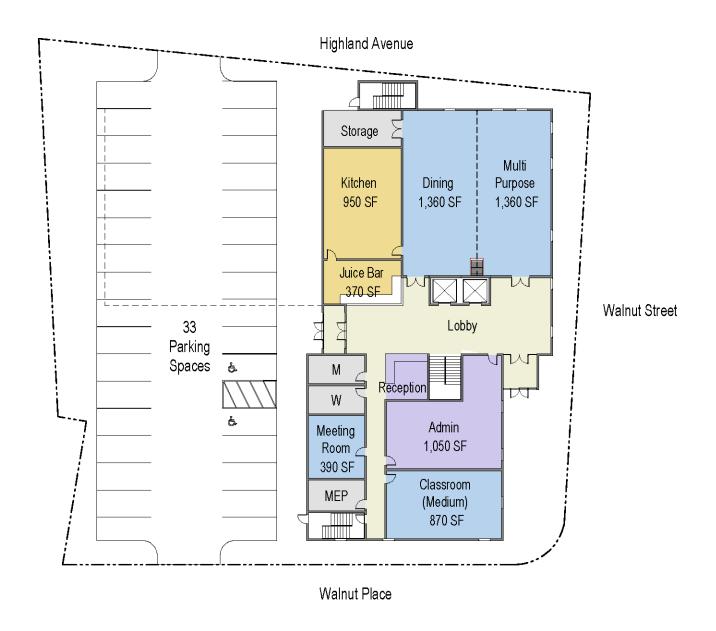
- Removal of a long familiar building in the community
- Fitting a 4-story height, 25,000+ sf building into a 2/3 story residential neighborhood



Site Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

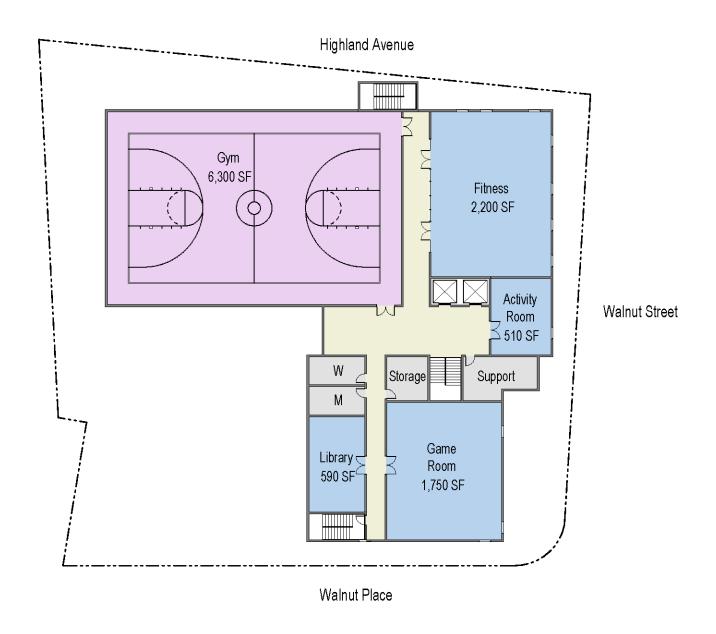




First Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



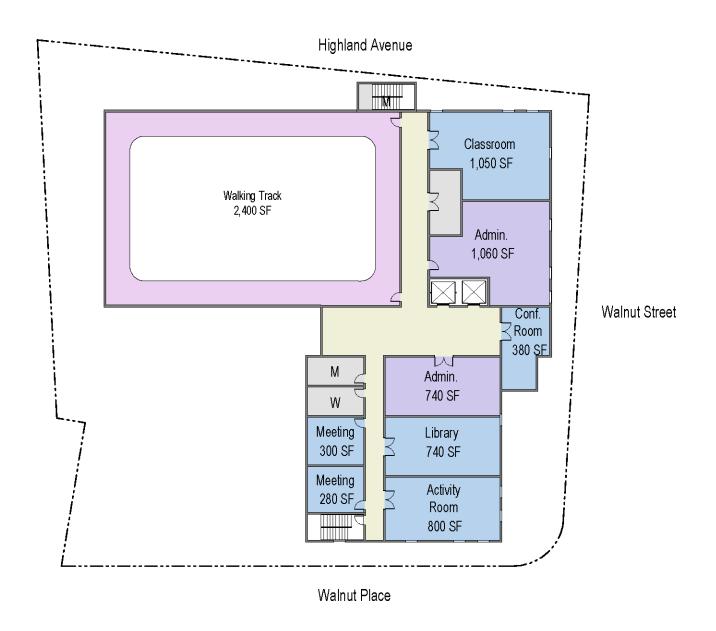


Second Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020

P:\3399 Newton Community Center\dwg\Revit\3399 Newton Community Center_345 Walnut St.rvt

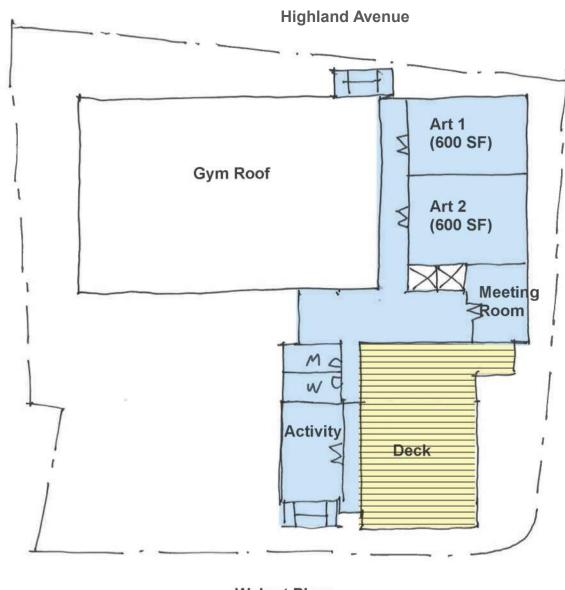




Third Floor Plan

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020





Walnut Street

Walnut Place

NewCAL Newtonville - Option E1A - New Building L Shape (4 Story) Fourth Floor Plan



Aerial View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



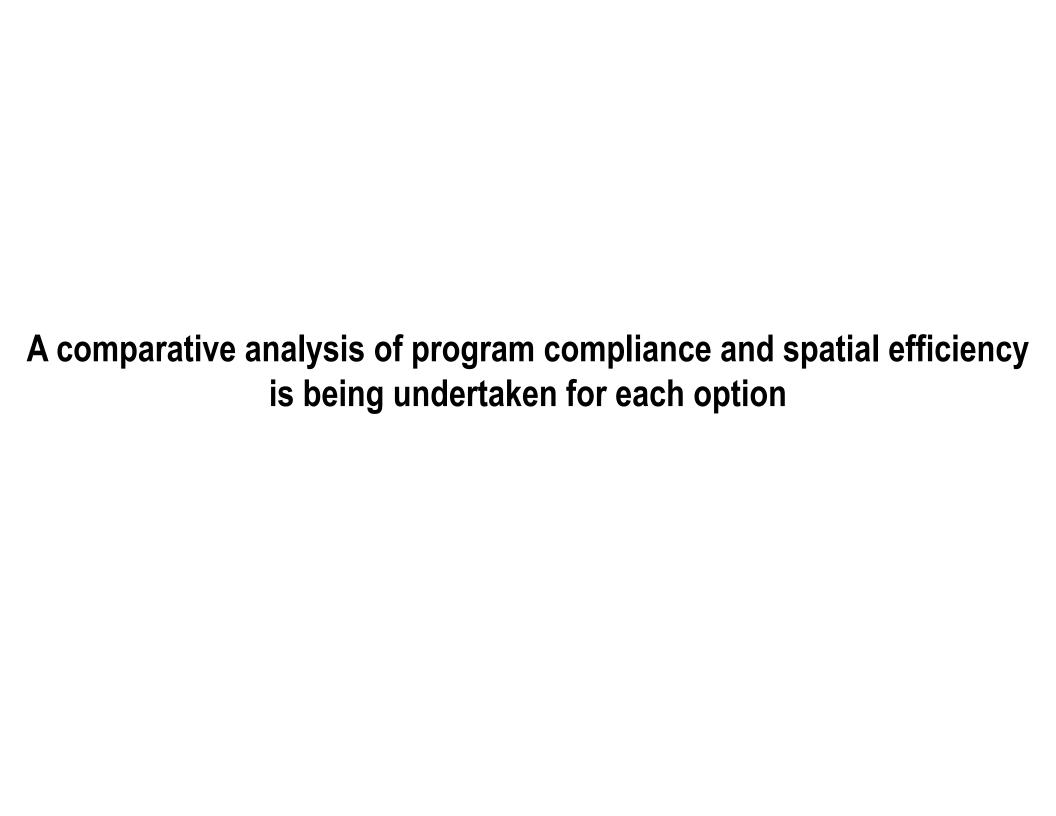
Street View from Northeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Street View from Southeast

Bargmann Hendrie + Archetype 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 11/13/2020



Program Comparison

TOTAL NET SQUARE FOOTAGE

Grossing Factor 35%

TOTAL BUILDING GROSS SQUARE FOOTAGE

	Pro	Program		n to Existing	Option E New Building (4 Story)		
ewCAL Program Proposed Rooms/Spaces	Net SF	Sums	Net SF	Sums	Net SF	Su	
Multi-Purpose Activity Spaces							
Fitness/Exercise							
Exercise Equipment Room	1,500		1,500		1,520		
Yoga, Dance, Movement					600		
Multi-Purpose Suite							
Activity Room with coat alcove (shared moveable wall with Dining)	1,500		1,700		1,500		
Dining with coat alcove (shared moveable wall with Activity Room)	1,500		1,500		1,500		
Chair Table Storage	150		110				
Activity Room	400		500	5,310	460		
Games Room							
Ping Pong Room with coat alcove	600		1,200		1,170		
Billiards & Game Room	600						
Art Rooms							
Art Room 1 with coat alcove (shared moveable wall with Art Room 2)	300		350		440		
Art Room 2 with coat alcove (shared moveable wall with Art Room 1)	400		410		620		
Art Storage Room	60		60		60		
Classroom							
Library/Reading Room(s)	400		660		400		
Computer Lab Room / Meeting Use with coat alcove	160		270		170		
Classroom/Meeting Room med	450		650		300		
Classroom/Meeting Room small	150		260		370		
Conference Room / Meeting Room(s)	180		180		290		
General MP Storage	60		110		90		
Subt	otal	8,410 NSF		9,460 NSF		9,490 N	
Common Space							
Lobby /Lounge /Art & Cultural Displays	600		2,500		2,170		
Juice Bar/Café	200		200		110		
Vending	60	† 1	60	t	60		
Library Pick Up/Drop Off Area (sim size to conf table)	50	1	50		50		
Store	100	† 1	100		100		
Subt	otal	1,010 NSF		2,910 NSF		2,490 N	
(itchen				1			
Kitchen (commercial / teaching)	500		500		500		
	200	+	200		200		

25,500 NSF

32,368 BGSF

6,868

	35%			9,287			27%		
31,637 BGSF	35,662 BGSF								
Department of Senior Services Asst Program Coordinator									
Outreach & Engagement Coordinator									
Social Work									
Support Services: Shine, AARP Tax, Parking Stick., Art Community, etc.)									
Vol Coordinator + Visiting Staff									
Family Conference Room									
Health Room									
Durable Medical Equipment (DME)									
Copy Work Room									
Coat Closet						T			
Staff Lounge									
Subtota		2,100 NSF	IT		3,290 NSF			2,450 NS	
Support									
Toilet Rms - Accessible (2 per floor)	100			175			160		
Women's Room (2 stalls each floor)	240		П	150			250		
Men's Room (2 stalls + Urinal first floor)	240			150			250		
Family Toilet with Shower	90			90			90		
Staff Restroom	90		П	90		T	90		
Women's Shower/Dressing Room adj (near gym)	110		IT						
Men's Shower Room adj (near gym)	110		П						
Mech/Elec/Tel-Data/Sprinkler	800		П	230			230		
Custodial Space	100		IT	100			100		
General Storage	500		П						
Subtotal		2,380 NSF			985 NSF			1,170 NS	
Gymnasium									
Gym (may be used for more than one activity at a time)	6,300		Ιſ	6,330			6,580		
Gym Walking Track (second Floor)	1,800		ΙÍ	2,400			2,400		
Gym Storage	300		П	200			120		
Subtota		8,400 NSF	ΙŢ		8,930 NSF			9,100 NS	
TOTAL NET SQUARE FOOTAGE		23,490 NSF			26,375 NSF			25,500 NS	
Grossing Factor	35%	8,147		35%	9,287	7	27%	6,86	
TOTAL BUILDING GROSS SQUARE FOOTAGE		31,637 BGSF			35,662 BGSF			32,368 BGS	