

# Needham CATH Space Utilization Study

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FINAL



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**CENTER AT THE HEIGHTS (CATH)**

**COUNCIL ON AGING**

**DPW - BUILDING MAINTENANCE DIVISION**



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# SECTION 1 INTRODUCTION







### Introduction

This space utilization study by Bargmann Hendrie + Archetype, Inc. (BH+A) documents their observations and recommendations made to optimize the 20,000 sf Center at the Heights (the CATH) building. This study was authored for the Town of Needham's Department of Health & Human Services and the Permanent Public Building Committee (PPBC).

These observations and recommendations respond to information gathered from three sources:

- The 2020 planning study authored by the Center for Social and Demographic Research on Aging at UMASS Boston's McCormick School, referred to in this study as "the UMASS report,"
- The 2022 feasibility study looking at converting the "lay" kitchen to commercial kitchen authored by Socotec Architects, referred to in this study as "the Socotec report," and
- Multiple site visits, interviews, and meetings with the Aging Services Division Staff (CATH Staff), Council on Aging members, and CATH patrons.

Copies of these reports and meeting minutes can be found in this study's appendix.

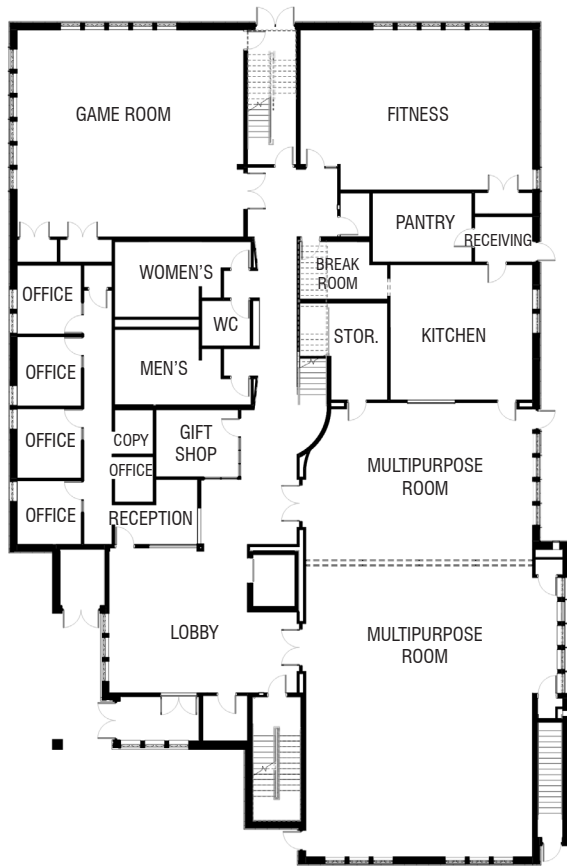


Figure 1.1: Multipurpose room filled with tables and chairs next to kitchen.

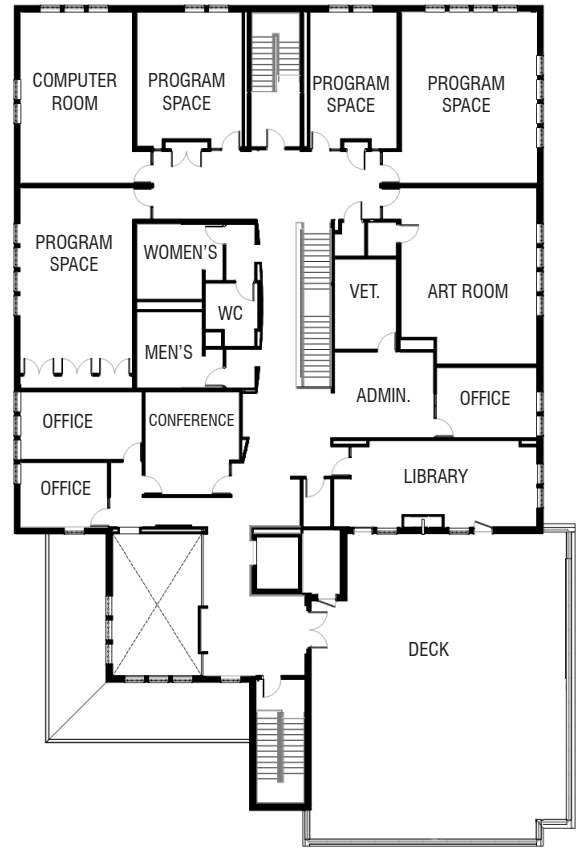


## INTRODUCTION

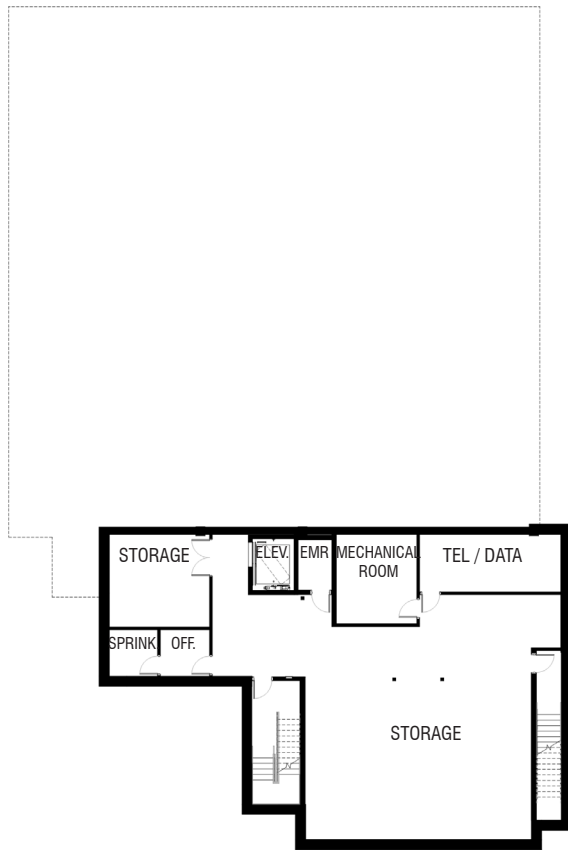
### Needham CATH Building Overview



First Floor



Second Floor



Basement







## SECTION 2

### EXECUTIVE SUMMARY







## Background

The Center at the Heights (CATH), the town of Needham's senior center, supports the health of senior citizens and their families via a variety of recreational, educational, and wellness programs by connecting patrons to social services in the community. The current CATH facility opened in 2014, having previously operated out of the basement of the Stephen Palmer Building.

This new CATH building reflects the town of Needham's commitment to its senior citizens. The center's original design responded to an increased need for services, programming, and the associated space required. With its opening in 2014, the CATH had more than threefold from approximately 6,000 to 20,000 sf.

The CATH was also designed to anticipate future needs, and this is the context within which this study is authored. While the 20,000 sf CATH facility has allowed for the expansion of programming and services, there are multiple challenges to optimizing this space so that the CATH can accommodate the present needs of its clientele.

Subsequent studies, including the UMASS and Socotec reports have returned to the issue of flexibility and ongoing improvement of the CATH facility.

BH+A vetted the recommendations from these reports and explored additional possible solutions recommended by the town's Department of Health and Human Services, Building Design and Construction Department, and Council on Aging. This vetting was done in consultation with CATH staff and patrons over a series of public meetings, focus groups, and interviews.

The intent is for this report to offer a "menu" of renovation alternates or options, and their associated costs. The town can then carry out any of these alternates as stand-alone projects or combine them into one large project. This report offers these renovation alternates in order of preference, to assist the town in prioritizing future work.



Figure 2.1: Patrons playing billiards in the game room.

EXECUTIVE SUMMARY

Observations

The space utilization study builds on the research presented in the 2020 UMASS report. This report included a resident survey, two focus groups, and two site visits. This complete study is included in the appendix to this report.

Key findings are summarized below:

- 75% of survey respondents valued the CATH and the services it offered.
- By 2030, the senior population (60+) in Needham is projected to increase by 33% from 7,500 residents to 10,000 residents.

Specific to programming and the building itself, patrons shared the following barriers to accessing programming and services:

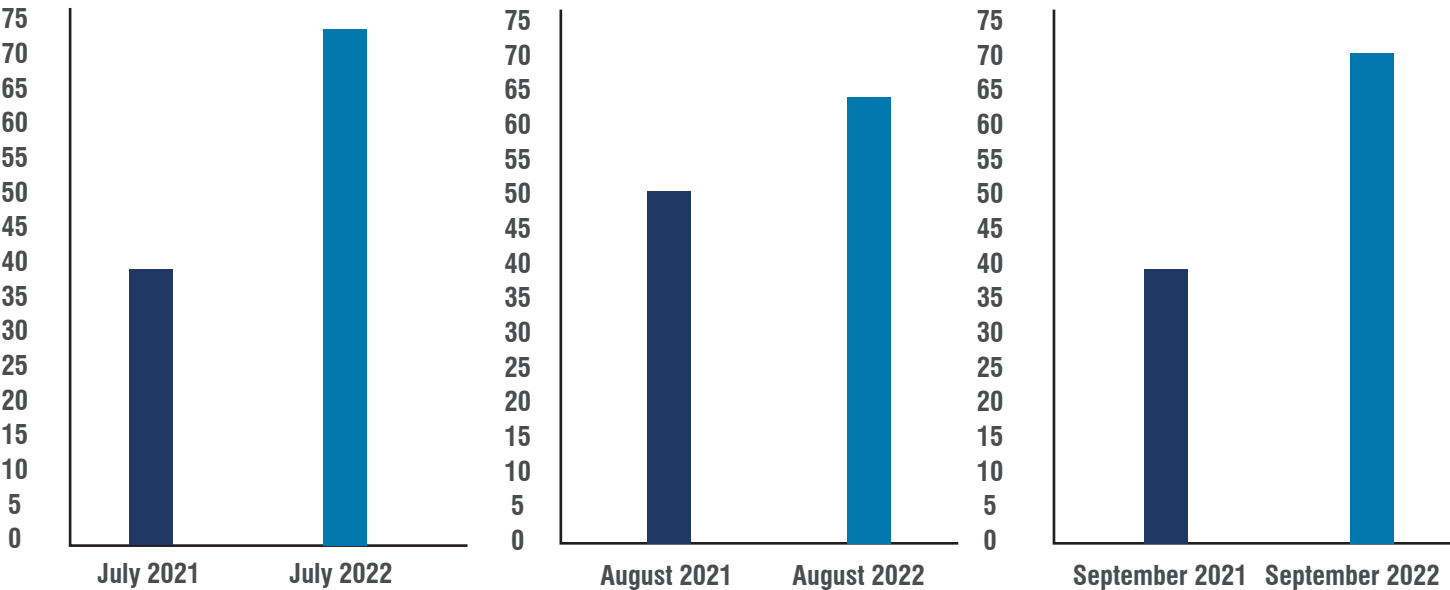
- Inconvenient parking.
- Inconvenient program schedules.
- Not enough space/offerings for physical fitness programming.
- Additional space for social services staff.
- Underused kitchen and roof deck.

Many of the UMASS report’s conclusions remain valid and BH+A’s own observations echo these findings. BH+A has organized these findings into two categories: challenges and barriers to programming at the CATH.

The following negatively impact the use of space at the CATH, putting pressure on limited programming space:

- **Increased Participation Post-COVID:** The CATH is attractive to Needham’s seniors, and is on track to recover post COVID. The UMASS study notes that pre-COVID, the center had 200 daily users on average and noted the senior population in Needham would continue to grow in years to come. Data collected in 2021 and 2022 show daily users increased from a low of 53 daily users to a peak of 205 daily users. Over this same time period, the number of general daily check-in patrons rose 50% from 27 to 42 patrons.

It should be noted that the accuracy of this data is limited by the configuration of the My Senior Center check-in system, which only records patrons who actively check-in at the front desk. Many patrons do not check-in or use the rear entrance to the multipurpose room which has no senior center check-in kiosk.



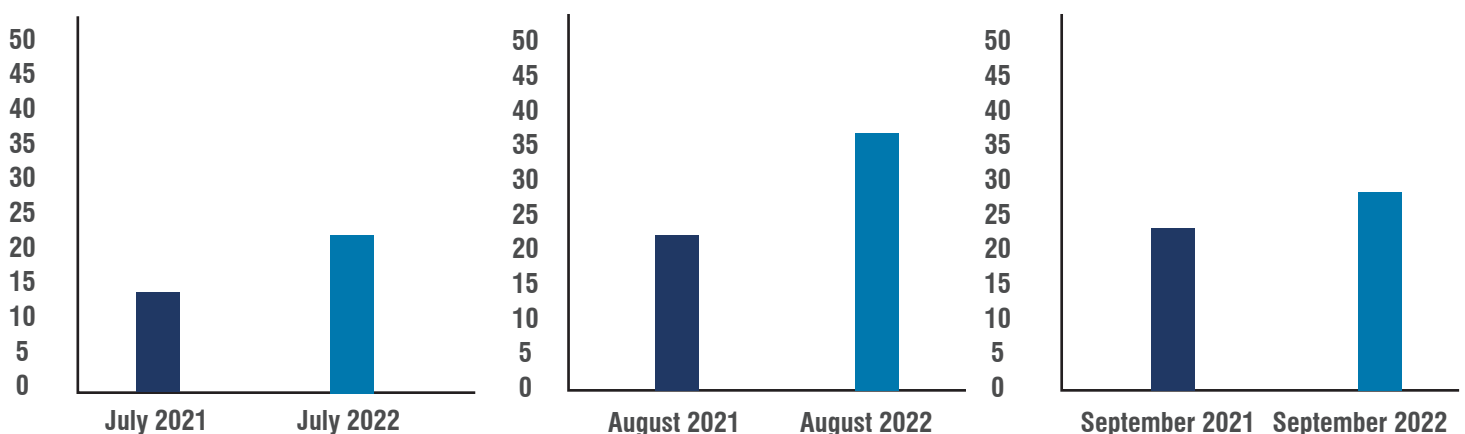
INCREASED GENERAL CHECK-IN PARTICIPATION POST-COVID

Figure 2.2: Daily participation numbers for 2021 and 2022.



## EXECUTIVE SUMMARY

- Popularity of Meals Programs:** The center's meals program is one of its most popular. The meals program serves 150 patrons a day. This program is hybrid; breakfast and lunch are served at the CATH and patrons can also opt to have two meals delivered to their home. Prior to COVID, only homebound patrons were eligible for meal delivery. This requirement was suspended during COVID and the CATH is transitioning to the pre-COVID requirement.
  - Limited Hours of Operation:** The CATH currently operates Monday through Friday 8:30- 5:00 PM. There are no regular activities on the weekends or evenings. In addition, the shuttle does not operate after 2:00 PM.
- As membership increases and in-person programming returns to pre-COVID levels, the scheduling of the most popular programs at the CATH will be increasingly challenging, specifically physical fitness activities that need a large space over 1,000 sf.*
- The meals program operates out of the smaller half of the center's multipurpose room.** There is limited time between breakfast and lunch programs and limited time after the lunch program to use this space for other programming. In addition, it is difficult to set up and break down the large tables and chairs in this room, further restricting its use. As a result, the full-size multipurpose room is generally unavailable for other programming.
  - Popularity of Physical Fitness Programs:** The CATH's physical fitness classes are equally popular, including use of the fitness room's equipment. These types of programs are also space-intensive as patrons require considerable room to allow their free range of movement. For example, a yoga class with 10 students would be difficult to fit in any of the second floor program rooms. By contrast, at 3,000 sf, the full-size multipurpose room could accommodate 40 yoga students. The larger half of the multipurpose room can currently accommodate 25 yoga participants when the smaller half of the multipurpose room is used as a dining room.



### INCREASED FITNESS PARTICIPATION POST-COVID

Figure 2.3: Daily participation numbers for 2021 and 2022.

## EXECUTIVE SUMMARY

The following help create programming spaces at the CATH:

- **Remote Learning:** There are two program rooms at the CATH that are equipped for hybrid learning: the arts & crafts room and program room. These rooms are both 600 sf. Hybrid technology accommodates patrons' schedules and allows for social distancing and does not require the same amount of space as traditional in-person learning. However, this class format does not promote social activity which is particularly important for seniors who can be isolated in their homes and cutoff from the community.
- **Remote Work:** According to the UMASS report, 71% of Needham seniors age 60-62 and 43% of seniors age 65-74 work. Post-COVID, these seniors are likely to be working remotely, and have the flexibility to participate in daytime CATH activities they might not have been able to prior to the pandemic. In addition, remote work has dramatically changed the parking situation at the CATH. While the CATH parking lot is frequently full, the abutting MBTA parking lot is relatively empty. Parking scarcity was the number one complaint of survey respondents in the UMASS report. This problem seems to have a readily available solution.
- **Increased Municipal Office Space:** The town of Needham has continued to invest in its municipal properties, renovating and expanding community and office space for various municipal departments. Of note, the Rosemary Recreation Complex, constructed in 2018, provided additional programming and office space for the town, freeing up space, such as the Veterans' Department Office, at the CATH. In addition, the Rosemary Pool Complex's multipurpose room is large enough to be used for a wide range of programming from fitness classes to vaccine clinics. This space can also be used as overflow space for CATH programming.
- **Neighboring Senior Centers:** Senior centers are open to all, and Needham seniors are welcome to partake in activities at any neighboring community's senior center. The town of Newton is currently planning a large multigenerational center, the Newton Center for Active Living (NewCAL). When complete, this center may attract Needham residents. Demand on the CATH's amenities and program may diminish.



Figure 2.4: Tables and chairs on the roof deck.



- **Potential Use of Outdoor Space:** Outdoor space, the center's front lawn, patio, and roof deck have great potential. The front lawn can be programmed with a bocce court or outdoor lounge seating. The roof deck can be used as overflow space for fitness activities or used for meal programs in lieu of the small multipurpose room. This outdoor space with natural ventilation is attractive to seniors to address concerns of COVID transmission.
- **Potential Use of Informal Gathering Spaces:** The CATH is designed with informal social spaces on the first and second floors: the lobby and the second floor waiting area outside of the roof deck. These spaces can also serve as alternative spaces for meals.



Figure 2.5: The upstairs reading area outside of the roofdeck doors is underused. It could be fitted out with a coffee bar and used for meals.



## EXECUTIVE SUMMARY

### Recommendations

The CATH's physical layout compliments the center's administrative policies. Though not the focus of this study, cultivating supportive policies will aid in the best use of the center's spaces. BH + A proposes the following for consideration:

- **Increase the CATH's Hours of Operation:** Expanding the hours of operation for programming and transportation will reduce pressures on available rooms, specifically the multipurpose room and the fitness room.
- **Incentivize In-Person Programming:** To encourage patrons to return from remote to in-person programming, consider offering incentives such as discounts and free food.
- **Create Social and Food-Friendly Spaces:** The CATH's current food policy, which allows food and drink in all spaces, should be promoted. Mobile "grab n' go" carts can be set up in the lobby and the space outside of the roof deck to encourage to activate these spaces and lessen the burden on the small multipurpose room.
- **Install Second My Senior Center Kiosk:** Setting up a My Senior Center kiosk will help the CATH get more accurate headcounts. It should be noted that even though using a second kiosk can capture who is visiting the CATH, patrons cannot use it to sign in for specific programming.



Figure 2.6: Patron checking in using the MySeniorCenter kiosk.

### Alternates

In addition to these administrative solutions, BH+A proposes the following space renovations and reconfigurations. These recommendations are proposed as stand-alone alternates and projects, which the town can carry out as funds become available. The alternates were reduced from a much larger pool of ideas after vetting by the town, Council on Aging, and CATH patrons. These recommendations are listed in order of preference and discussed in more depth under the Alternates section of this report:

- **Commercial Kitchen Conversion:** Convert the existing “lay” kitchen to a commercial kitchen for large-scale meal production.
- **Fitness Room Expansion:** Provide additional strength-training equipment by moving the fitness room to the current game room and move the game room to the former fitness room space.
- **Vestibule Addition & Accessible Parking:** Provide a second rear entrance, legitimizing the small multipurpose room’s egress door which is an unofficial entrance to the building. Equip this entrance with a My Senior Center kiosk. Provide accessible parking closer to both the existing main entrance on Hillside Avenue and the new rear entrance.
- **Basement Renovation:** Provide additional flexible and overflow program space by finishing out the CATH’s basement. Provide an accessible restroom at this level.
- **Roof Deck Renovation:** Provide new furniture, privacy screens and a shade structure to make this space more inviting. Equip this space with a mobile food cart to activate the space.
- **Café Lounge Reconfiguration:** As part of the commercial kitchen renovation, convert the existing fitness room into a café-lounge space. Café lounge spaces are becoming increasingly popular in senior centers and can help take pressure off of the small multipurpose room.
- **Office Reconfiguration:** In order to provide a more private office space for the social service staff, convert the current computer lab into an open office for the programming staff, and use the current private offices on the first floor for social services.



Figure 2.7: Volunteers working inside the kitchen.

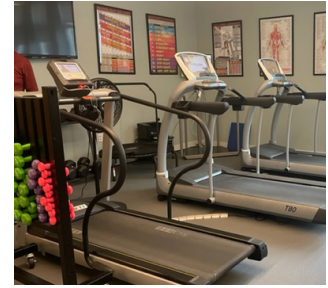


Figure 2.8: Gym equipment inside the fitness center.



Figure 2.9: Parking lot.



Figure 2.10: Basement space.



Figure 2.11: Roof deck.



Figure 2.12: Computer lab space.



Figure 2.13: Cafe/Lounge at Falmouth Senior Center.

## EXECUTIVE SUMMARY

### Community Engagement & Surveys

BH+A engaged CATH patrons and staff through presentations, focus groups, interviews, and questionnaires. Presentations and focus groups included (\* indicates minutes from these presentations are included in the appendix to this study):

- **Programming Staff Focus Group October 6, 2022:** This was a small in-person focus group with the programming staff at the CATH. Five staff members participated.
- **Social Services Staff Focus Group October 6, 2022:** This was a small in-person focus group with the social services staff at the CATH. Five staff members participated.
- **Transportation and Maintenance Staff Focus Group October 6, 2022:** This was a small in-person focus group with the transportation staff at the CATH. Two staff members participated.
- **Fitness Staff Interview October 13, 2022\*:** BH+A interviewed Stephen Cadigan, fitness instructor.
- **Council on Aging (CoA) Presentation, October 13, 2022 \*:** BH+A gave a preliminary design presentation to the CoA and open to the public. The meeting was hybrid.
- **Coffee Group Presentation 1, October 18, 2022:** BH+A gave an in-person preliminary design presentation to CATH patrons and distributed questionnaires.
- **Coffee Group Presentation 2, November 21, 2022:** BH+A gave an in-person preliminary design presentation to CATH patrons and distributed questionnaires.
- **Pool Users Focus Group, November 21, 2022:** BH+A met with CATH patrons who used the game room's pool tables frequently. Three patrons participated.
- **Permanent Public Buildings Committee (PPBC) Presentation 1 October 25, 2022\*:** BH+A presented preliminary findings and recommendations via ZOOM to the PPBC. This meeting was open to the public.
- **Permanent Public Buildings Committee (PPBC) Presentation 2 February 27, 2023:** BH+A presented follow-up findings and recommendations via ZOOM to the PPBC. This meeting was open to the public.

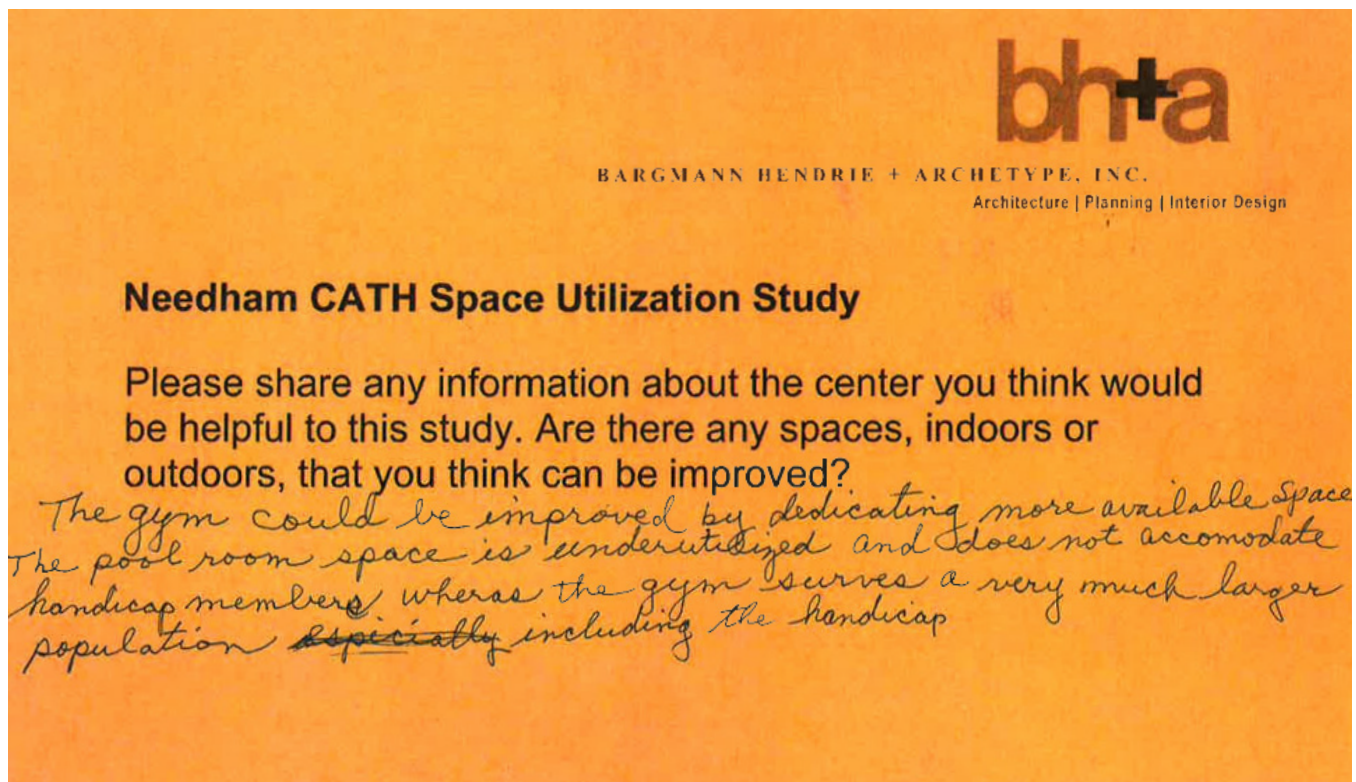


Figure 2.14: CATH Patron Questionnaire Response.



## EXECUTIVE SUMMARY

BH+A issued an open-ended questionnaire intended to solicit feedback on presentations and received 23 responses.

BH+A also referenced data collected from two earlier community surveys authored by UMASS Boston and the CATH. The UMASS community survey was conducted in Spring 2020 and received nearly 700 responses. The CATH conducted a “Getting Back to the CATH” follow-up survey in Winter 2021 and received almost 200 responses.

Some key findings from all three of these outreach efforts with citations:

- **Parking and class times were inconvenient:** CATH patrons could not participate in programs because of either inconvenient parking (33%) or inconvenient class times (15%) (UMASS survey).
- **Fitness programs are popular and fitness classes and space should be expanded.** CATH patrons primarily came to the center for its fitness programs (51%) and asked that additional fitness program be offered (17%) (CATH survey) and that the fitness room be expanded (43%) (BH+A questionnaire).
- **CATH hours should be expanded.** CATH patrons asked to have the center’s hours expanded to evenings and weekends.
- **CATH spaces should be more inviting.** CATH patrons asked for a more inviting space, such as “relaxing lounges” (UMASS survey).

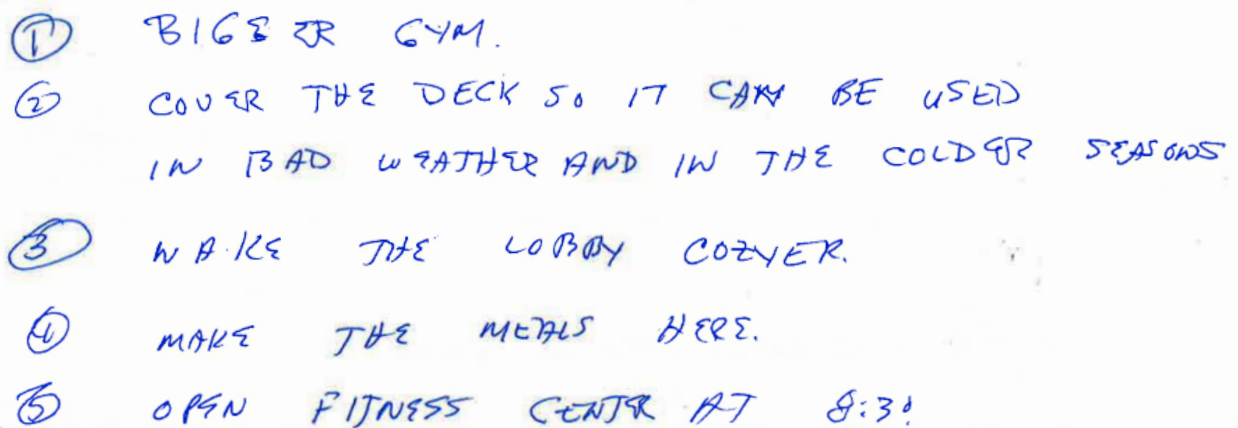
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- A handwritten list of five suggestions for CATH space improvements, numbered 1 through 5 in blue ink. The suggestions are: 1. BIGGER GYM. 2. COVER THE DECK SO IT CAN BE USED IN BAD WEATHER AND IN THE COLDER SEASONS. 3. MAKE THE LOBBY COZYER. 4. MAKE THE METALS HERE. 5. OPEN FITNESS CENTER AT 8:30.
- ① BIGGER GYM.
  - ② COVER THE DECK SO IT CAN BE USED IN BAD WEATHER AND IN THE COLDER SEASONS
  - ③ MAKE THE LOBBY COZYER.
  - ④ MAKE THE METALS HERE.
  - ⑤ OPEN FITNESS CENTER AT 8:30

Figure 2.15: CATH Patron Questionnaire Response.





## SECTION 3 ALTERNATES







### Alternates

After reviewing the recommendations in the UMASS study, and meeting with CATH staff, patrons, and the Council on Aging, BH+A presented a series of proposed renovation options in the Fall of 2022.

Based on feedback on these proposals, BH+A reduced these renovation options to twelve preferred options. PM&C estimated the costs of these preferred options as stand-alone projects. After reviewing these costs, the town's Department of Health and Human Services and Building Design and Construction Department reduced the options to the seven alternates below. These seven alternates were presented to the Public Building Commission in February 2023. These alternates are listed in order of preference.



Figure 3.1: Alternate Colored Plan Diagram.



### **Alternate 3.1: Commercial Kitchen Conversion**

The CATH currently partners with Beth Israel Deaconess Hospital to provide in-home meals. This program is run out of the hospital's commercial kitchen but it is anticipated this space will not be available in the near future. Therefore, an alternate commercial kitchen space needs to be located to continue this important program for seniors.

The existing kitchen is designed as a lay kitchen, designed for use by volunteers and used for light cooking and teaching. It was not designed as a commercial kitchen, capable of large-scale production. Needham's Public Health Division engaged Socotec Architects to study the requirements and costs associated with converting the lay kitchen to a commercial kitchen. BH+A assisted by providing a peer review and helping with value engineering.

### **Alternate 3.2: Fitness Room Expansion**

As noted in the UMASS study, physical fitness activities are extremely popular at the CATH and the existing Fitness Room is well-used. The space is undersized, and does not allow for several desired pieces of strength training fitness equipment. BH+A looked at gaining more space by either borrowing space from the adjacent kitchen, or relocating the fitness room to another location in the building, such as the existing game room or the basement. The alternate presented in this report looks at swapping the location of the fitness room and the game room.

### **Alternate 3.3A and 3.3B:**

#### **Vestibule Addition and Accessible Parking**

Presently, the front entrance is inconvenient due to its proximity to accessible parking. There is limited accessible parking, and it is located at the rear of the site. This parking is closer to the egress door to the small multipurpose room. Given the popularity of meals programs, this entrance is heavily used. However, because this door is intended as egress only, it is not equipped with an accessible push button or a My Senior Center kiosk. In addition, frequent use of this door allows unconditioned air to escape, making the small multipurpose room drafty in the winter months.

Alternate 3.3A looks at providing a vestibule at the rear of the CATH that can act as an airlock and house a My Senior Center kiosk.

Alternate 3.3B proposes providing additional accessible parking spaces near both the front and rear entrances.

### **Alternate 3.4: Basement Renovation**

As mentioned earlier in this report, the CATH building was designed to accommodate future growth by providing a large basement that can be converted from its current use as shared municipal storage into program space. The ceiling heights in this space are low, though satisfy code minimums. This alternate looks at the costs associated with finishing the basement and providing a bathroom at this level.

### **Alternate 3.5: Roof Deck Renovation**

The roof deck is underused but offers great potential to be used as both an overflow space for physical activities and a space for meals and informal gathering. BH+A first explored fully or partially enclosing the deck but did not pursue these options further as the associated costs were excessive. The renovation of this space will consist of providing additional furnishings that will help break up the large 2,000 sf space into zones: spaces for large and small groups. This will make this space feel more inviting and allow for it to be used for a variety of activities. Privacy screens will help shield views of the MBTA parking lot and limit train noise and also serve as planting beds for gardeners. A simple shade sail will limit harsh sun in the warmer seasons.

### **Alternate 3.6: Café/Lounge Reconfiguration**

Café lounges are increasingly popular at area senior centers; they provide a large informal gathering area that is used as a lobby, for meals and unprogrammed social activities. A café lounge would free up the smaller half of the multipurpose room which is currently used primarily as a dining room. The café lounge would be fit out with a combination of soft seating and café tables. It would also include a pass-through window to the kitchen so patrons could easily eat meals there.

### **Alternate 3.7: Office Reconfiguration**

Reconfiguring the office space is intended to address the needs of the social services staff and provide additional rooms for private consultations with patrons and their families. There are several available offices on the first floor in the current administration wing that is used by programming and transportation staff. These staff members do not need the private offices the social service staff require. This study proposes converting the existing computer lab to a shared open office for the programming staff. It would be fit out with new workstations, and take advantage of the existing tel-data and power infrastructure. Moving the programming staff to the former computer lab would then make two to three private offices on the first floor available for the social service staff to use. Converting the computer lab to office space would minimally impact current technology programs as laptops could be used in other program rooms in lieu of dedicated lab space.









## 3.1 COMMERCIAL KITCHEN CONVERSION







Figure 3.2: Existing kitchen with volunteers. Photo by Socotec AE Consulting.



Figure 3.3: Volunteers working in the kitchen.



## COMMERCIAL KITCHEN CONVERSION

## ALTERNATES

### Overview

Though not identified in the UMASS study, renovating the existing “lay” kitchen was also identified as a priority. Socotec AE Consulting and ColburnGuyette food service designers were the lead consultants on this endeavor. BH+A peer-reviewed their work and provided value engineering assistance in consultation with Needham School’s Nutritional Services director, Danielle Collins, and Crabtree McGrath foodservice designers.

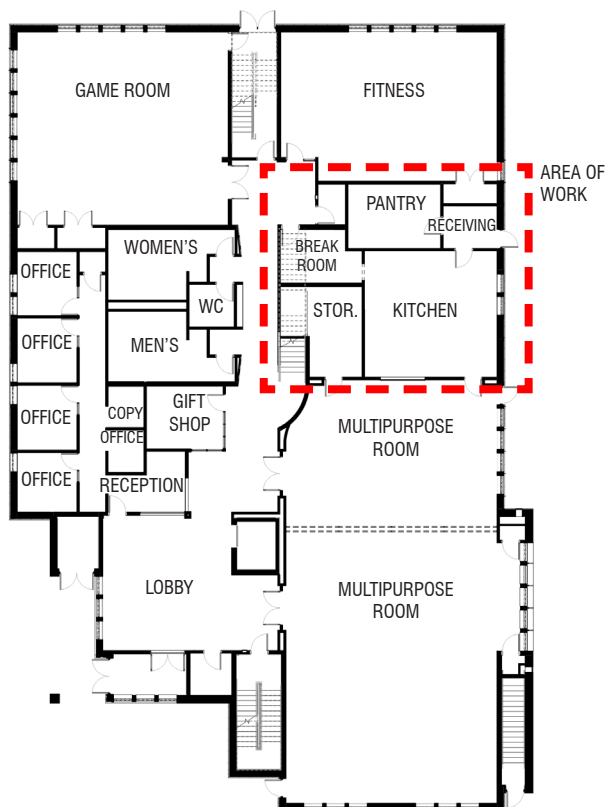
The CATH kitchen as originally designed is a “lay” kitchen, designed for light cooking and as a teaching kitchen.

The kitchen was fit out with a combination of residential-grade appliances and materials that untrained volunteers can operate easily, and specific commercial-grade equipment critical for a large lay kitchen to operate. For example, an undercounter dishwasher is used instead of a commercial dishwashing station. Existing commercial equipment includes a commercial hood and ANSUL system, two large commercial freezers provide bulk storage, and grease trap.

There is currently no head nutritionist or chef that oversees kitchen operations.

The existing kitchen is primarily used to support light meal programs in the adjacent multipurpose room. This space can also be used for cooking classes and can be rented out to community members.

The existing kitchen is not a commercial kitchen designed for bulk meal production. Currently, the home meal delivery program uses the Beth Israel Deaconess Hospital’s commercial kitchen to prepare food. It is uncertain how long the hospital will continue to provide this service. Therefore, it may be necessary to upgrade the CATH’s kitchen to a commercial kitchen.



Key Plan (First Floor)

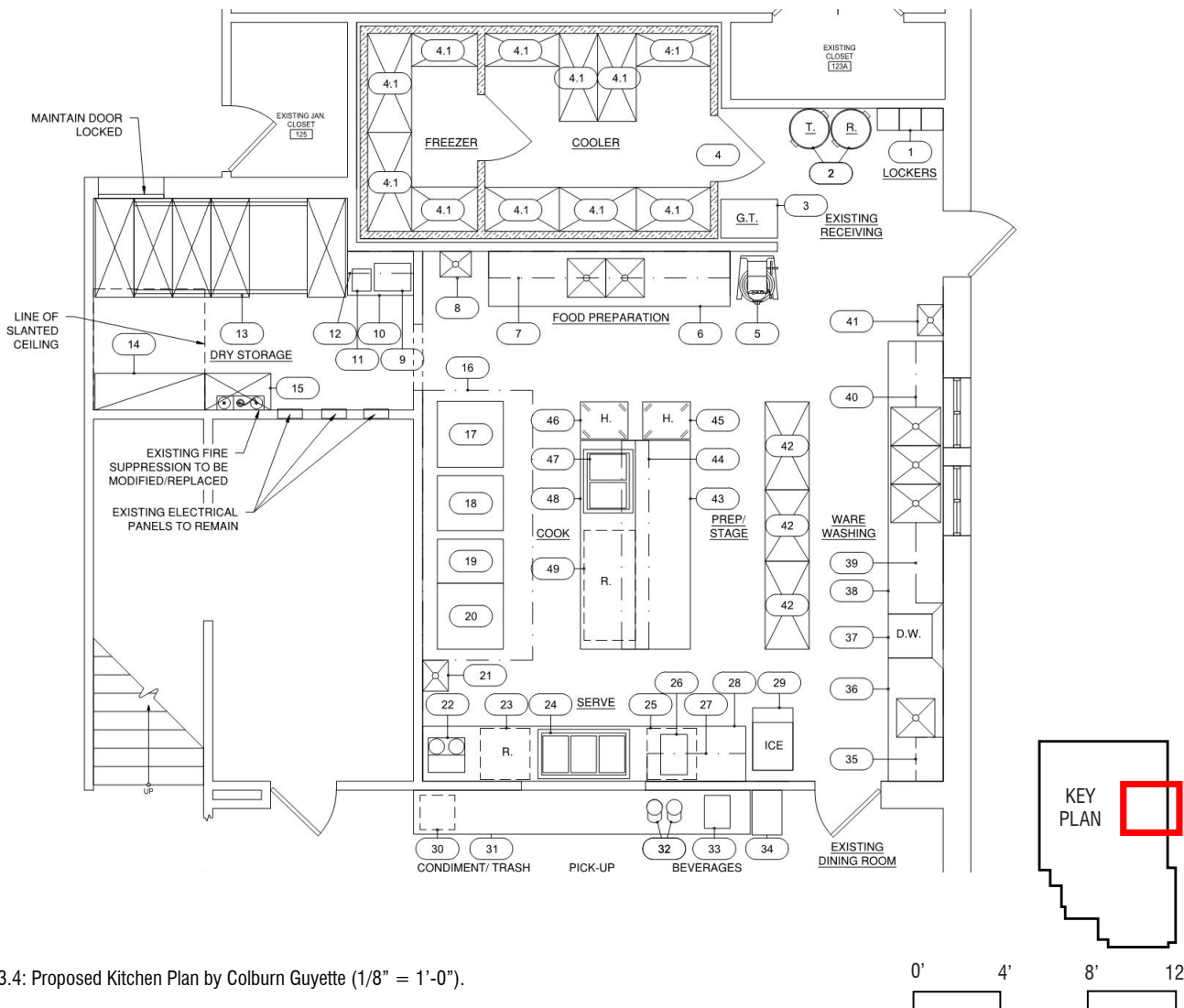


Figure 3.4: Proposed Kitchen Plan by Colburn Guyette (1/8" = 1'-0").

| EQUIPMENT LIST |                                     |                                               |
|----------------|-------------------------------------|-----------------------------------------------|
| ITEM NO.       | DESCRIPTION                         |                                               |
| 1              | LOCKERS                             | 17 COMBI OVEN (CONVECTION & STEAM) (ELECTRIC) |
| 2              | TRASH/RECYCLE                       | 18 BRAISING PAN/TILT SKILLET (ELECTRIC)       |
| 3              | GREASE TRAP (BY PLUMBER)            | 19 24" GRIDDLE (ELECTRIC)                     |
| 4              | WALK-IN COOLER/FREEZER              | 20 6-BURNER RANGE (ELECTRIC)                  |
| 3.1            | WALK-IN SHELVING                    | 21 HAND SINK                                  |
| 5              | 30 QT. MIXER                        | 22 COFFEE BREWER                              |
| 6              | PREP TABLE W/ SINKS                 | 23 UNDERCOUNTER REFRIGERATOR                  |
| 7              | WALL SHELF                          | 24 THREE-WELL HOT/COLD QUICKSWITCH FOOD WELL  |
| 8              | HAND SHELF                          | 25 UNDERCOUNTER TOASTER OVEN                  |
| 9              | MICROWAVE OVEN (EMPLOYEE BREAK USE) | 26 CONVEYOR TOASTER OVEN                      |
| 10             | WORK TABLE                          | 27 WALL SHELF                                 |
| 11             | COFFEE BREWER (EMPLOYEE BREAK USE)  | 28 SERVING COUNTER                            |
| 12             | WALL SHELF                          | 29 ICE MACHINE W/ BIN                         |
| 13             | HIGH-DENSITY DRY STORAGE SHELVING   | 30 TRASH BIN                                  |
| 14             | DUNNAGE RACK                        | 31 PICK-UP COUNTER (NEW)                      |
| 15             | DRY STORAGE SHELVING                | 32 COFFEE DISPENSERS                          |
| 16             | EXHAUST HOOD                        | 33 JUICE DISPENSER                            |
|                |                                     | 34 WATER/ICE DISPENSER                        |
|                |                                     | 35 GLASS RACK SHELF                           |
|                |                                     | 36 SOILED DISHTABLE                           |
|                |                                     | 37 VENTLESS DISHWASHER, DOOR-TYPE             |
|                |                                     | 38 CLEAN DISHTABLE W/ POT SINKS               |
|                |                                     | 39 WALL SHELF                                 |
|                |                                     | 40 WALL SHELF                                 |
|                |                                     | 41 HAND SINK                                  |
|                |                                     | 42 CLEAN POT/PAN STORAGE SHELVING             |
|                |                                     | 43 WORK TABLE                                 |
|                |                                     | 44 OVERSHELF/POT/UTENSIL RACK                 |
|                |                                     | 45 HEATED CABINET, MOBILE                     |
|                |                                     | 46 HEATED CABINET, MOBILE                     |
|                |                                     | 47 TWO-WELL HOT FOOD WELL                     |
|                |                                     | 48 WORK TABLE                                 |
|                |                                     | 49 UNDERCOUNTER REFRIGERATOR                  |

Figure 3.5: Table of the equipment list as noted in Colburn Guyette's proposed kitchen plan.



**SOCOTEC AND COLBURN GUYETTE COMMERCIAL KITCHEN RENOVATION PLAN**

Socotec and ColburnGuyette recommended completely renovating the kitchen to convert it from a lay kitchen to a commercial kitchen. The new kitchen would allow for bulk meal production with larger commercial grade appliances and bulk food storage. Larger pots, pans and trays could be washed and stored in a commercial-grade sinks and dishwashing station. Residential finishes like laminate cabinets would be replaced with easy-to-clean stainless steel.

Key features of their proposed design included:

- Replacing all floor and ceiling finishes.
- Replacing all residential grade cabinets and counters to commercial grade stainless steel.
- Converting the existing pantry to a walk-in cooler/freezer.
- Converting the staff breakroom to a pantry.
- Replacing all residential-grade appliances with commercial-grade appliances.
- Relocating plumbing infrastructure in support of the above.
- Increasing the capacity of the commercial hood in support of the above.

## ALTERNATES

## ALTERNATE 3.1

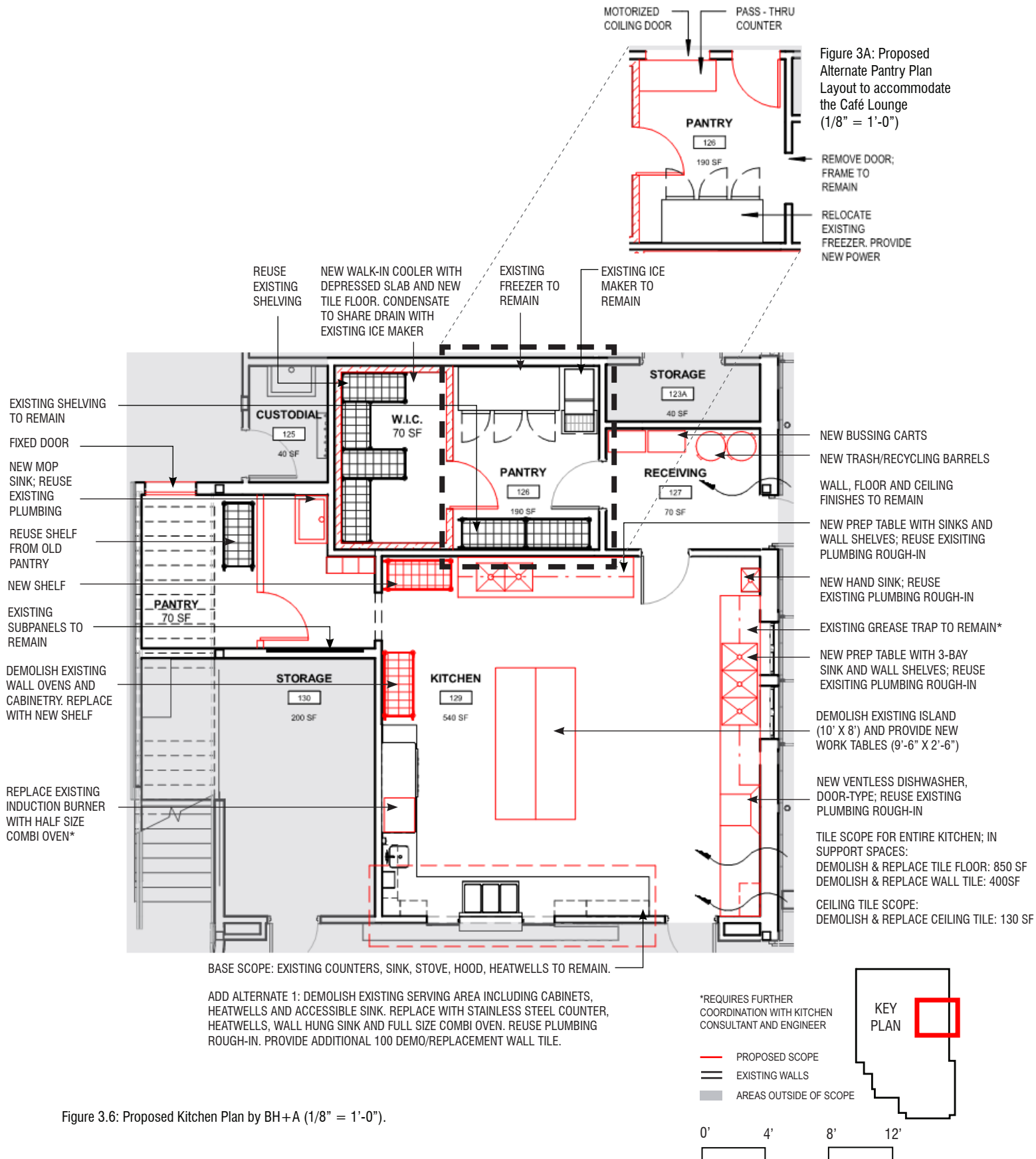


Figure 3.6: Proposed Kitchen Plan by BH+A (1/8" = 1'-0").



**BH+A COMMERCIAL KITCHEN RENOVATION PLAN**

BH+A reviewed the kitchen renovation design Socotec and ColburnGuyette proposed. In order to reduce costs, but still have a functional commercial kitchen, BH+A proposed a design that reused:

- Existing infrastructure to the greatest extent possible,
- Any existing commercial equipment already in place, and
- Commercial-appropriate finishes where appropriate.

Significant cost savings were realized by reusing the existing commercial hood and rooftop fan, grease trap, icemaker, commercial freezers, heatwells, and sneezeguard.

In addition, all new plumbing reused existing rough-in locations. For example, a new three bay sink that can accommodate large pots and pans is shown to be installed where a smaller sink was located.

Any new equipment that would require new plumbing infrastructure was eliminated from the design. This allowed the existing grease trap to remain, and also reduced infrastructure costs.

Lastly, any existing finishes that were easy to clean and therefore appropriate for a commercial kitchen were retained. The existing washable ceiling tile was retained. The existing serving line area was priced as an alternate. While this area uses laminate cabinets, this is a material that can be considered commercial-grade as it is easy to wipe down. Ultimately, the Needham Public Health Division has discretion to approve all kitchen finishes. The CATH may choose to have a more detailed discussion concerning finishes with the Needham Public Health Division.







## 3.2 FITNESS ROOM EXPANSION







Figure 3.7: Users exercising in the fitness center.



Figure 3.8: Gym equipment inside the fitness center.





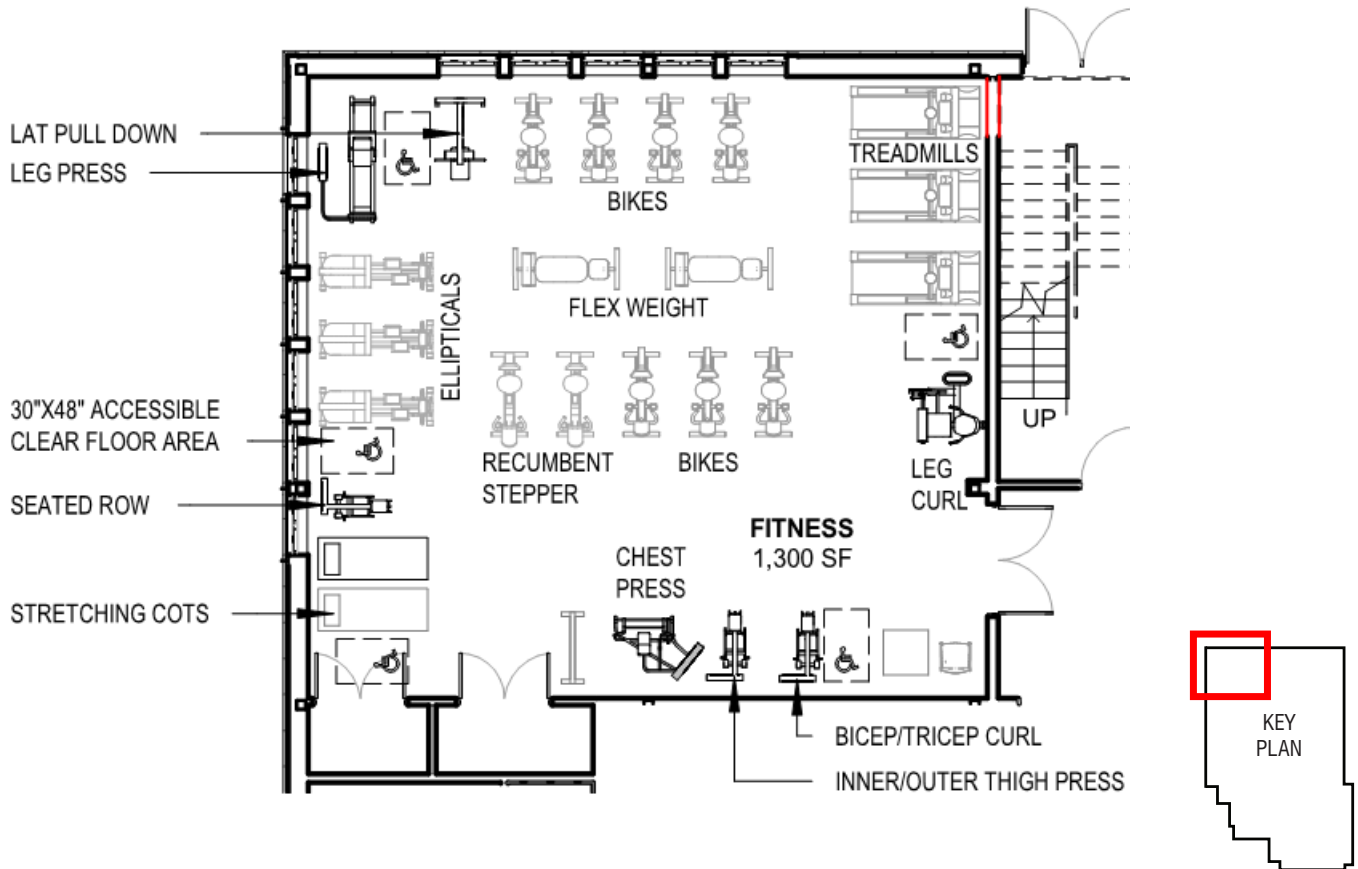


Figure 3.9: Proposed Fitness Room Plan (3/32" = 1'-0").

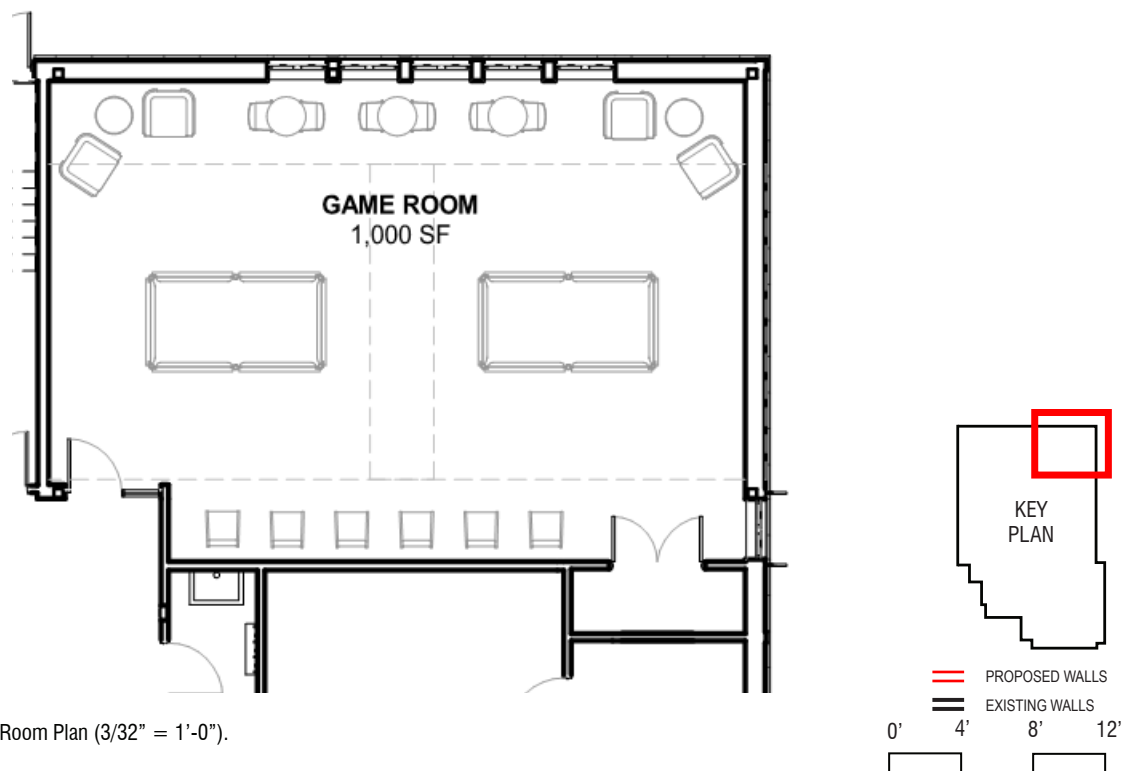


Figure 3.10: Proposed Game Room Plan (3/32" = 1'-0").

## FITNESS ROOM EXPANSION

## ALTERNATES

The preferred option, repurposing the game room, accommodates all of the existing and new fitness equipment and stretching cots, including the associated accessible clear floor areas. One drawback of this option is the location of the closets in the new fitness room. The existing closets, located at the far side of the room, would still be difficult to access and inconvenient for storing coats and personal belongings.

Moving the fitness room to the game room would require replacing the game room floor and providing additional dedicated power receptacles for the motorized fitness equipment. The proposed plan shows removing the second means of egress as it is not required by code. In addition to the costs associated with these upgrades, the CATH would also purchase strength-training equipment and an additional stretching cot.

In the proposed design, the former fitness room is repurposed as the game room. Though this space is 300 sf smaller, it still can comfortably accommodate two pool tables and spectator seating. Note that the two pool tables are required for pool tournaments. The collapsible ping pong table and desktop computers currently in the game room would need to be relocated. Patrons did not prefer a conversion top pool table that would allow a pool table to also be used as a ping pong table. The ping pong table could be relocated to the roof deck.

BH+A studied alternative new locations for the game room elsewhere in the building. There are no other program rooms large enough to accommodate two pool tables. Two smaller program rooms would have to be combined and this is cost prohibitive.

Renovations to this space would be largely cosmetic. New flooring and pendant lighting over the pool tables would be installed. The new game room would require a second means of egress, similar to the egress door in the existing pool room that connects directly to the stair. Alternate 3.3A and 3.3B Vestibule Addition and Accessible Parking also discusses additional egress options for this room.

| FITNESS EQUIPMENT       | QUANTITY (EXISTING) | QUANTITY (ALTERNATE) |
|-------------------------|---------------------|----------------------|
| TREADMILLS              | 3                   | 3                    |
| BIKES                   | 7                   | 7                    |
| RECUMBENT STEPPER       | 2                   | 2                    |
| FLEX WEIGHT             | 2                   | 2                    |
| ELLIPTICALS             | 3                   | 3                    |
| MULTI-GYM               | 1                   | 0                    |
| SEATED ROW              | 0                   | 1                    |
| BICEP/TRICEP CURL       | 0                   | 1                    |
| INNER/OUTER THIGH PRESS | 0                   | 1                    |
| LEG CURL                | 0                   | 1                    |
| LAT PULL DOWN           | 0                   | 1                    |
| LEG PRESS               | 0                   | 1                    |
| CHEST PRESS             | 0                   | 1                    |
| STRETCHING COTS         | 0                   | 2                    |
| <b>TOTAL EQUIPMENT</b>  | <b>18</b>           | <b>26</b>            |

Figure 3.11: Table of Existing and New Equipment.







**3.3A AND 3.3B  
VESTIBULE ADDITION AND  
ACCESSIBLE PARKING**







Figure 3.12: Rear entrance to small multipurpose room and adjacent accessible parking.



Figure 3.13: Multipurpose room; a potential location for an additional vestibule.

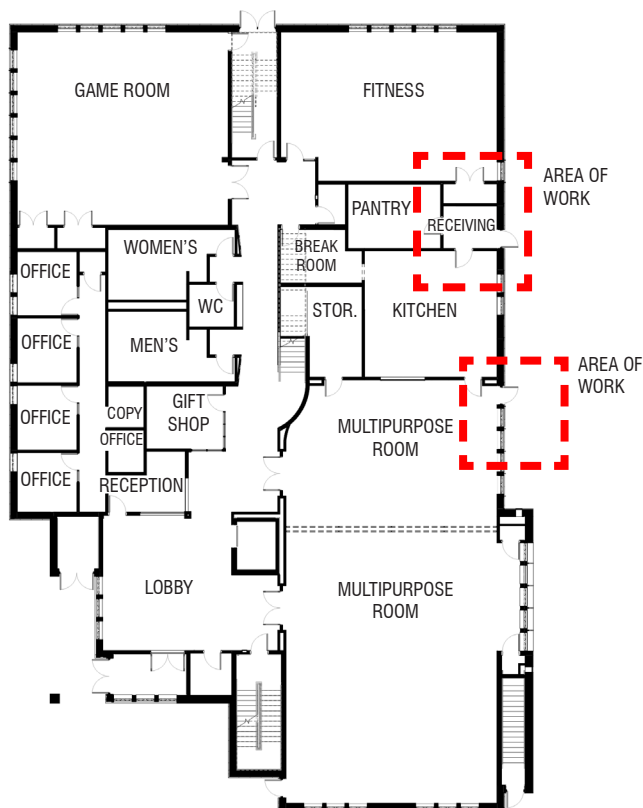
## VESTIBULE ADDITION AND ACCESSIBLE PARKING

The CATH was designed with 65 onsite parking spaces as well as an additional 12 offsite parking for staff located on Mark Lee Road. For special events, the town executed a memorandum of understanding with the Avery Crossing facility to provide 20 parking spaces and a shuttle. The adjacent MBTA commuter rail parking lot has 85 parking spaces. There are an additional 10 unrestricted use parking spaces on Hillside Avenue. Of the 65, there are 3 accessible parking spaces for the CATH's use. The CATH also provides a shuttle which transports patrons to and from the center and operates between the hours of 8:00 AM and 2:00 PM Monday through Friday.

The UMASS report noted that limited parking was a barrier to participating in CATH activities. In addition, the accessible parking spaces are located at the rear of the property, approximately 100' from the main entrance on Hillside Avenue. As a result, the multipurpose room's egress door is used as an unofficial entrance.

## ALTERNATES

BH+A studied these two related issues, parking scarcity, and the need for a secondary entrance. BH+A engaged a traffic and parking consult, Pare Corporation, to evaluate parking needs and the impact of the secondary entrance on parking and circulation in the parking lot. BH+A and Pare made two site visits on Tuesday, September 20th and Thursday, September 29th at 11:00 AM. These dates and times are considered to represent peak activity at the center.



Key Plan (First Floor)



## ALTERNATES

These are the key findings from these site visits:

- The dedicated CATH parking lot was more heavily used than the MBTA parking lot. The MBTA lot had 60 available parking spaces while the CATH parking lot had no available parking spaces.
- 7 parking spaces at the CATH were coned off for the generator, or were taken up by a wooden ramp in lieu of a curb cut.
- 95 patrons were observed in the building on September 20th at 11:00 am. Of these, 24 patrons were using the small multipurpose room.
- Patrons were observed entering and exiting the building using the small multipurpose room's egress door.
- The small multipurpose room was drafty, as the egress door was in almost constant use.

A new emergency generator will require 3 parking spaces.

## ALTERNATE 3.3A AND 3.3B

Parking is limited at the CATH and a solution should address both current and future needs, anticipating future growth. PARE made the following recommendations:

- Encourage use of the offsite staff parking.
- Add additional shuttle service.
- Lease additional parking spaces from the MBTA parking lot.
- Consider reserved spaces for older patrons or veterans. These spaces are more efficient as they do not include a striped transfer area.
- Provide 2-4 additional fully accessible parking spaces.

BH+A studied three locations for a new secondary entrance and additional accessible parking:

- Converting the small multipurpose room egress door to ingress and restriping parking spaces in this general area,
- Providing a new entrance at the rear associated with a proposed Café Lounge and restriping parking spaces in its vicinity, and
- Restriping MBTA parking spaces in close vicinity to the front entrance on Hillside Avenue.

The preferred accessible parking and vestibule solution creates a rear entrance and vestibule at the small multipurpose room, and adds two accessible parking spaces close to both the front and rear entrances.



Figure 3.14: Axonometric view of the entry vestibule addition.



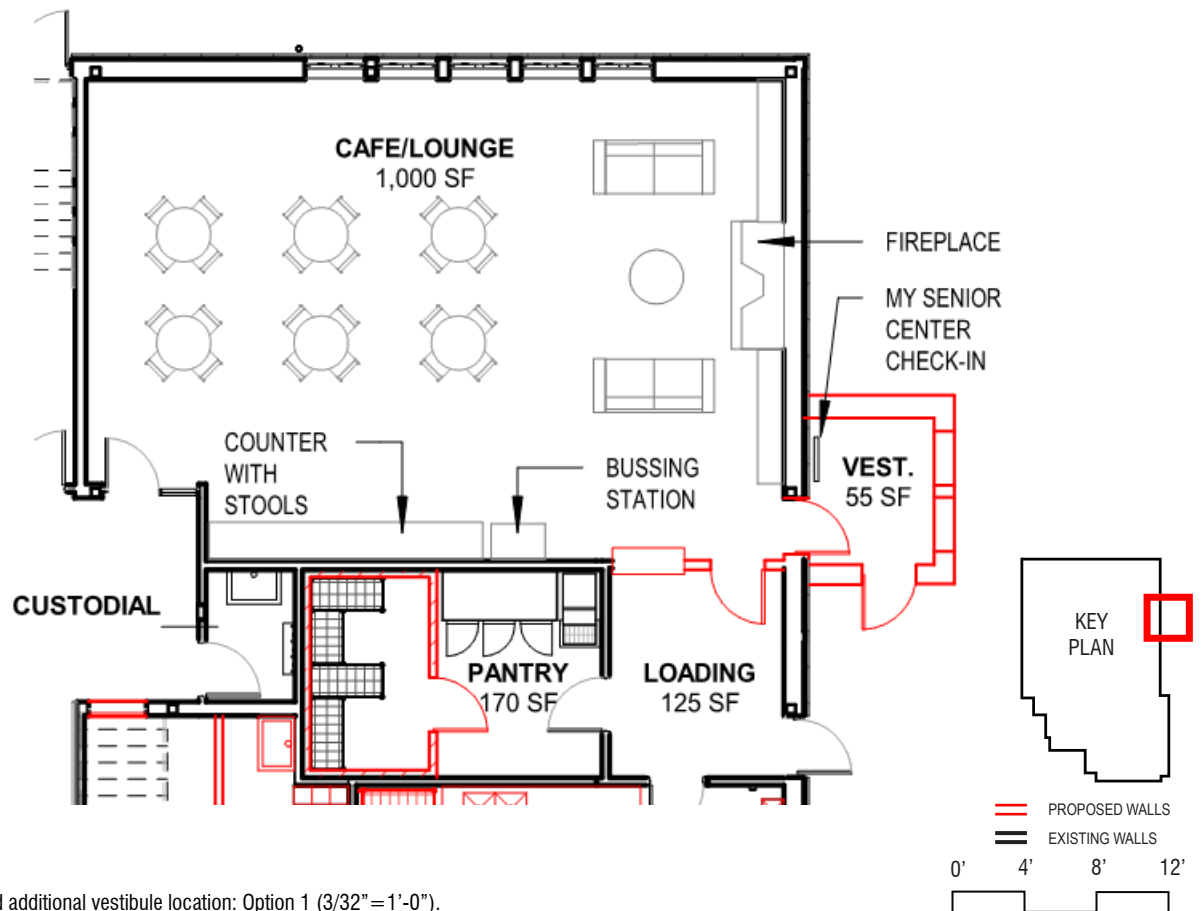


Figure 3.15: Proposed additional vestibule location: Option 1 (3/32" = 1'-0").

## OPTION 1

BH+A looked at several options for locating a second entrance at rear of the CATH.

Each conceptual design includes a vestibule. The vestibule allows for access control, provides an area for a patron to wait for a ride, and includes a My Senior Center check-in kiosk. A vestibule also functions as an airlock, limiting the amount of unconditioned air entering the building. Patrons noted that the small multipurpose room is drafty because patrons frequently use the egress door there.

The multipurpose room's egress door gets use because patrons can conveniently access one of the center's most popular programs: breakfast and lunch.

The first vestibule option looks at relocating the meals program to a new café lounge space converted from the former fitness room. A new vestibule addition would be built outside of the café lounge space. The multipurpose room door would return to solely be used for egress.

This option could be carried out independently of the kitchen renovation. It would, however, need to be carried out as part of the fitness room expansion work.

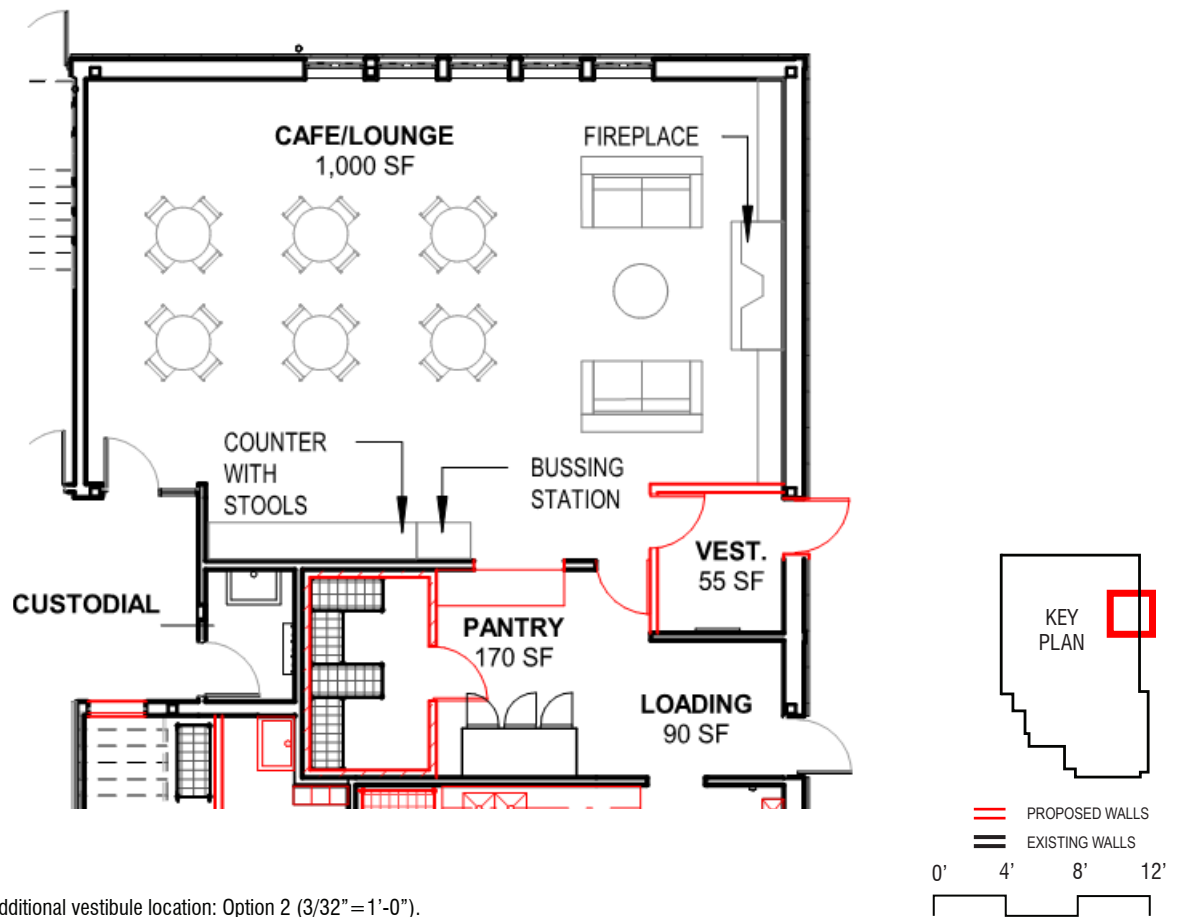


Figure 3.16: Proposed additional vestibule location: Option 2 (3/32" = 1'-0").

## OPTION 2

The second vestibule option also is associated with a new café lounge. With this design, the vestibule is not an addition to the existing building. Instead, the vestibule is converted out of the former fitness room's closet. This option is less expensive as it requires no exterior walls, foundations or roofing.

This option would need to be carried out as part of the commercial kitchen renovation.



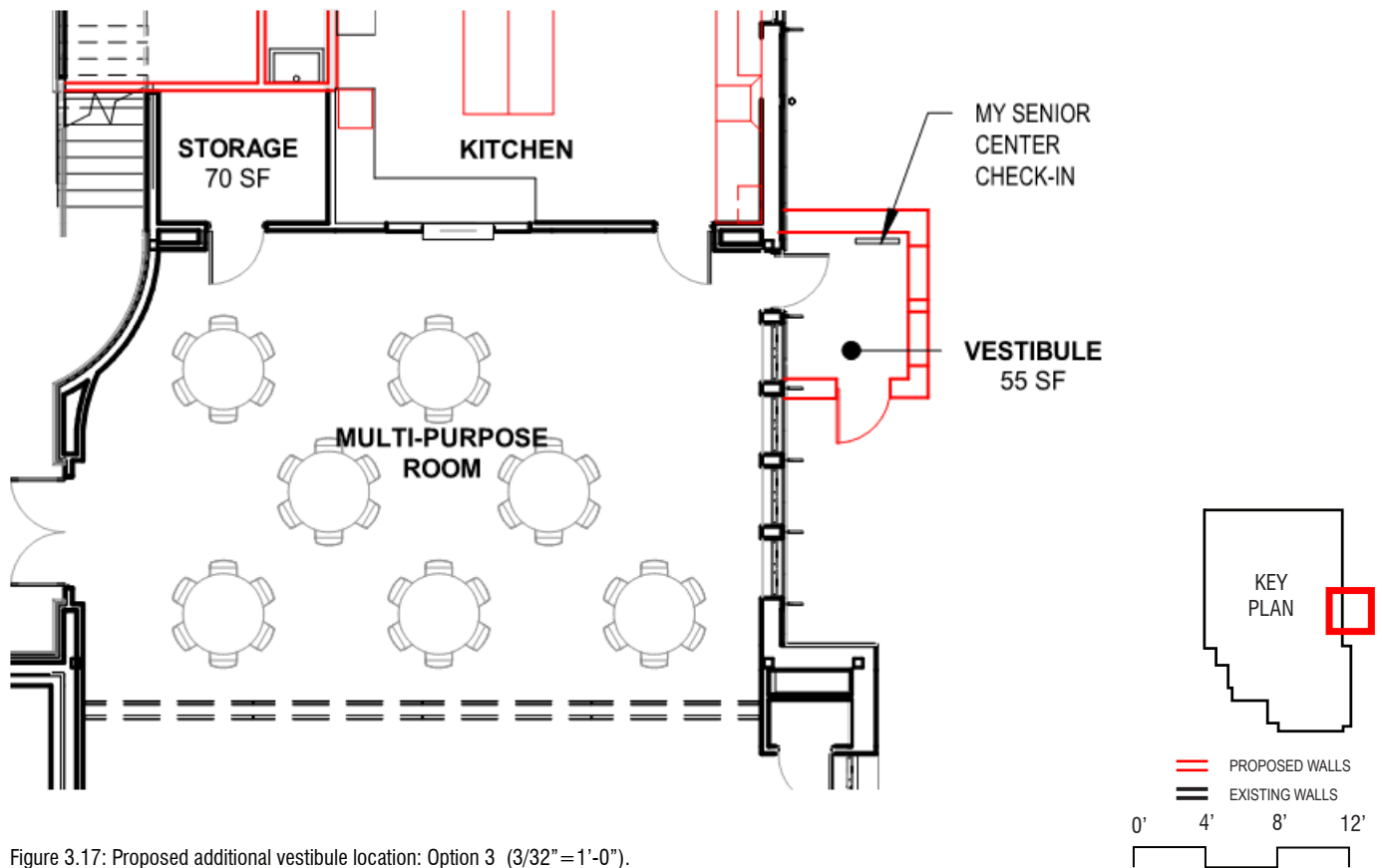


Figure 3.17: Proposed additional vestibule location: Option 3 (3/32"=1'-0").

### OPTION 3

The third vestibule option proposes an addition immediately outside of the small multipurpose room. Similar to the first option, this vestibule would have access control, a seating area, and a My Senior Center check-in kiosk.

This option could be carried out independent of the commercial kitchen renovation.

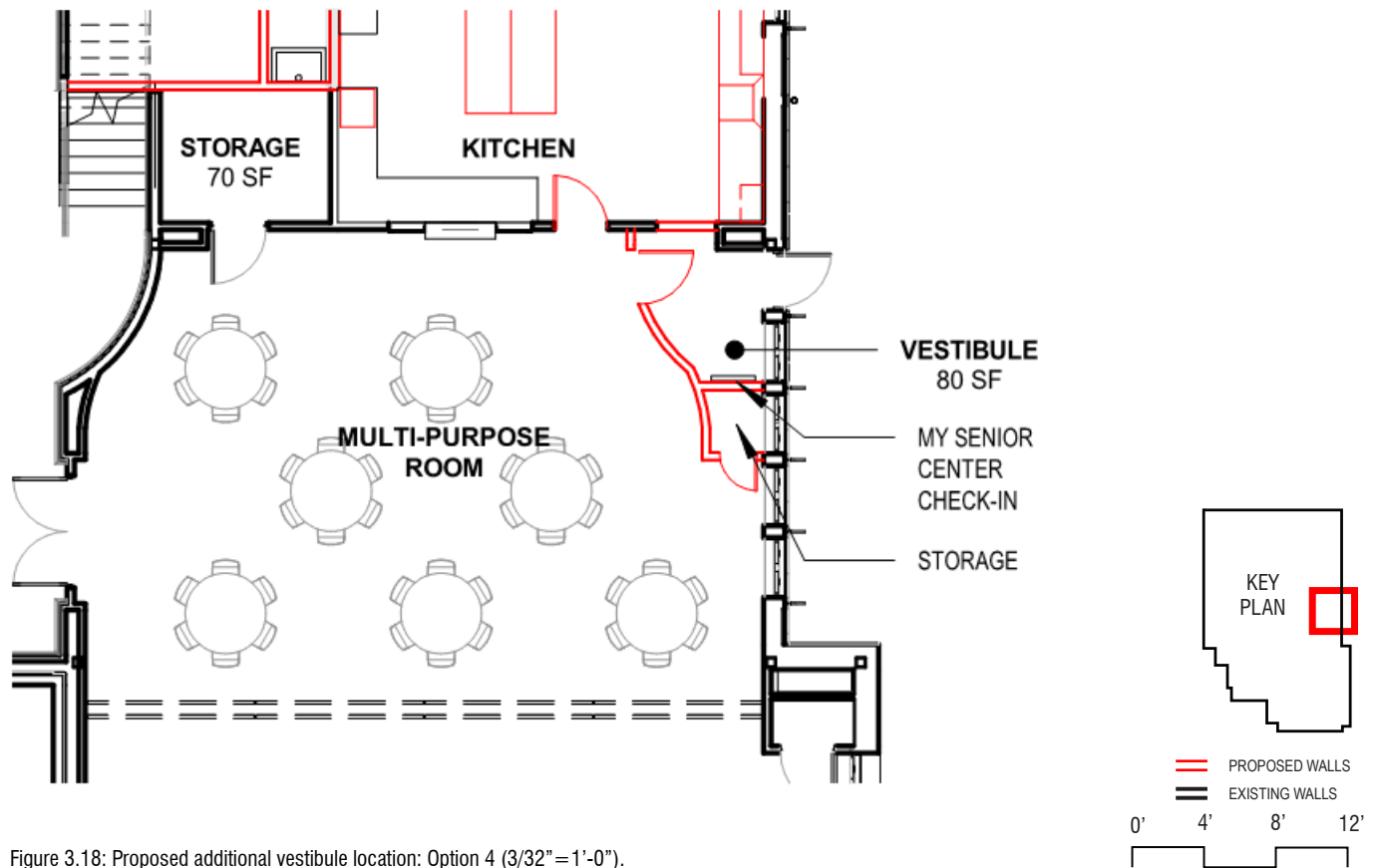


Figure 3.18: Proposed additional vestibule location: Option 4 (3/32" = 1'-0").

## OPTION 4

The fourth and final vestibule option proposes an interior vestibule just inside the small multipurpose room. This vestibule design, while less expensive, results in less useable space in the small multipurpose room and also impacts the design of the commercial kitchen; the door between the kitchen and multipurpose room would need to be relocated and the serving counter and heat wells would need to be rebuilt. This work would need to be carried out at the same time the commercial kitchen is renovated.





Figure 3.19: Site Plan Diagram of the Needham CATH Senior Center (N.T.S.).

## VESTIBULE ADDITION AND ACCESSIBLE PARKING

## ALTERNATES

The accompanying site plan shows the proposed parking improvements at the CATH.

The MBTA commuter parking lot is located to the south (Figure 3.19) of the CATH at the corner of Hillside Avenue and West Street. It was originally designed with 85 parking spaces. Thirteen spaces would be leased to the CATH for the use of staff and patrons. Three of these existing spaces would be converted to two accessible parking spaces with a shared striped aisle.

The CATH parking lot is located to the north and west of the CATH. It was originally designed with 65 parking spaces. Three parking spaces would be used to locate an emergency generator. One parking space is occupied by a temporary ramp. The proposed design would convert three existing parking spaces to two accessible parking spaces with a shared striped aisle.







## 3.4 BASEMENT RENOVATION







Figure 3.20: Basement space.



Figure 3.21: Storage usage in the basement.



## BASEMENT RENOVATION

The basement was designed as fit-out space, to be converted into a formal program room as the CATH expanded services.

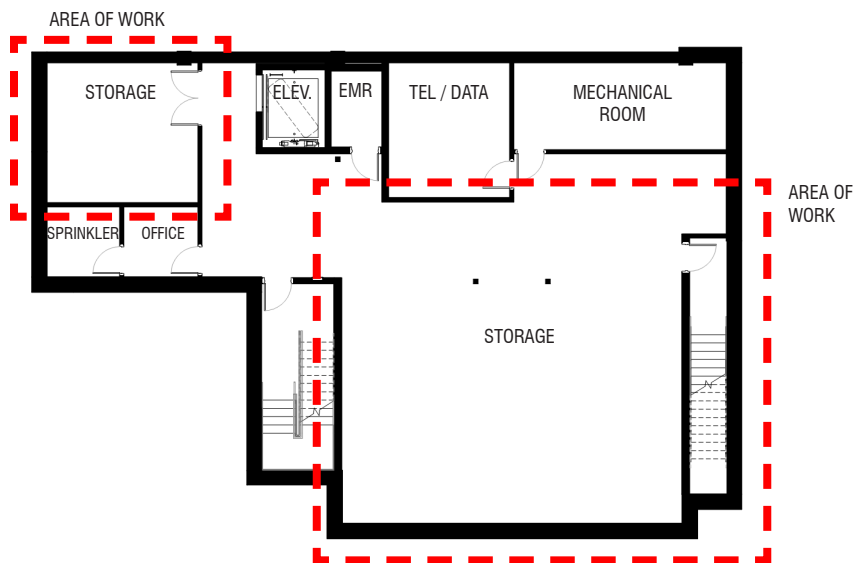
The CATH basement is approximately 3,500 gsf and houses the maintenance office, dedicated custodial storage, general use storage, the elevator machine room, main electrical room, mechanical, and sprinkler rooms. The elevator and two stairs service this level. There is approximately 1,900 sf of space that is available for fit-out. For comparison, this is equal to the size of two of the existing fitness rooms combined. This room could accommodate approximately 40 occupants.

However, this space, while large, has a low ceiling and no windows. Patrons and CATH staff were not generally receptive to moving programs into the basement; both relocating the fitness room and the pool room were discussed.

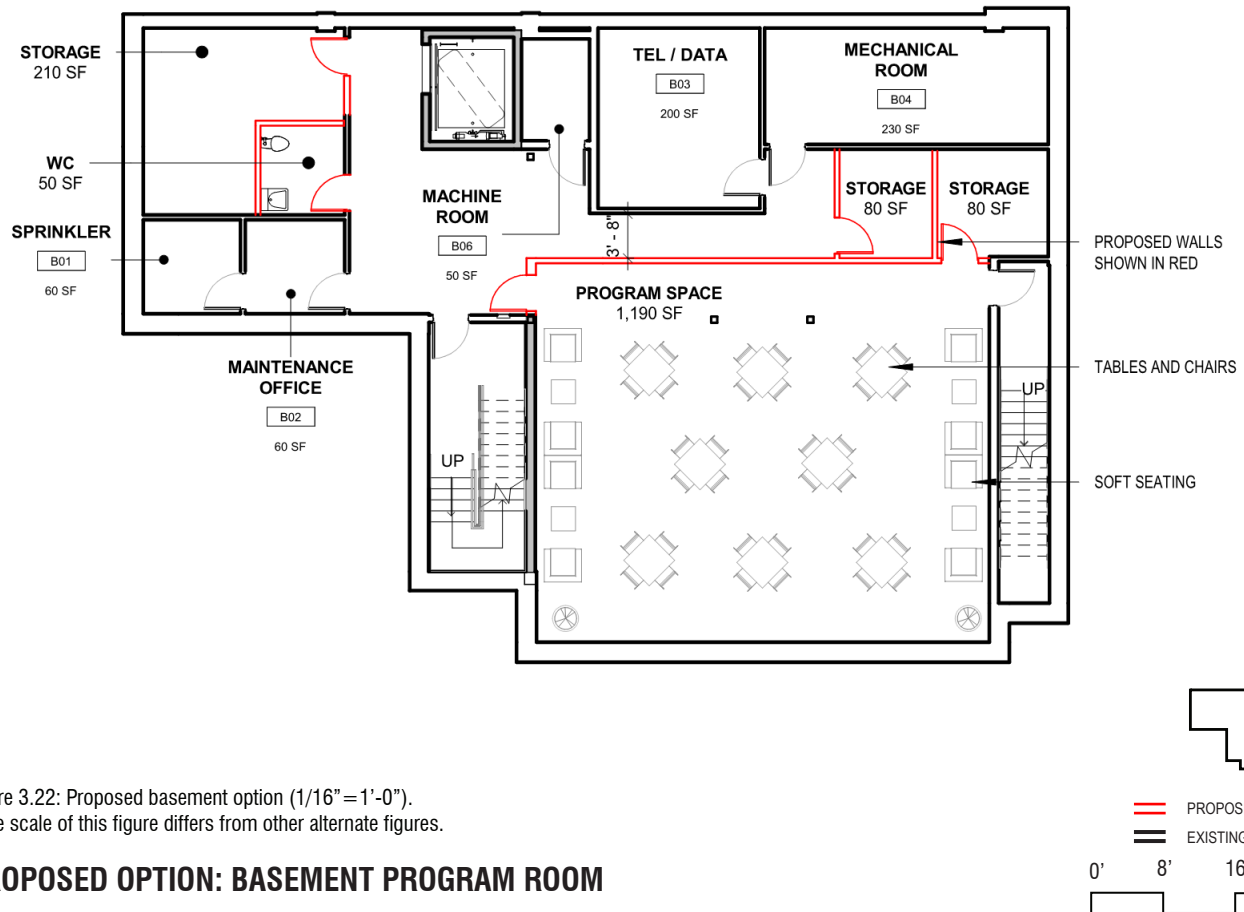
## ALTERNATES

In focus groups, several CATH patrons expressed to desire for more movie programming. This basement space would be the perfect venue for movie watching programs.

Converting this space into a useable program room would require finding a new home for the wide array of items various town departments store in the basement. BH+A also recommends building an accessible bathroom at this level. Additional improvements would include providing adequate heating, cooling and ventilation, new walls to partition the space, and finishes.



Key Plan (Basement)





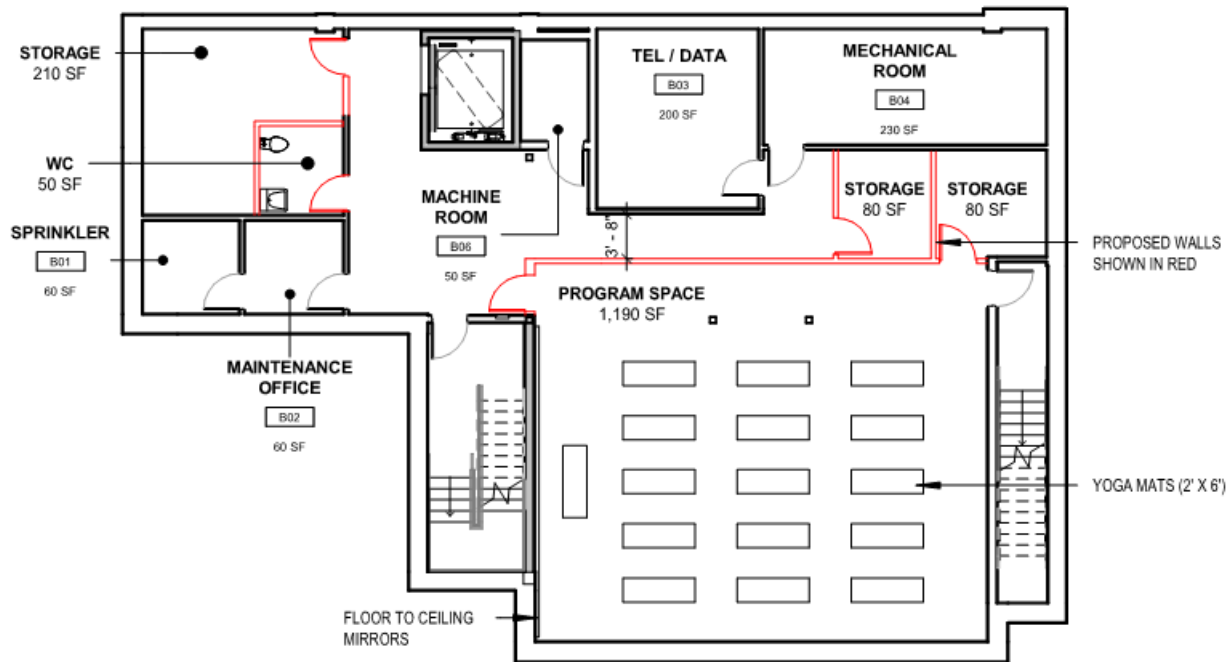
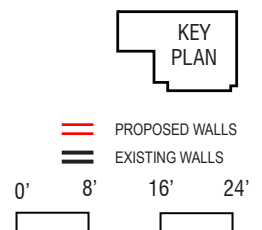


Figure 3.23: Proposed basement option second usage (3/32" = 1'-0").

## PROPOSED OPTION: BASEMENT FITNESS STUDIO

If the room was used for a physical activity like yoga, sixteen patrons could use this space.

Finishes can help transform this space from a generic "rec room" to a purpose-built exercise studio. Large mirrors installed along the back wall and an economical sports floor can be used for a range of activities from tap dance to tai chi.







# 3.5 ROOF DECK RENOVATION







Figure 3.24: The roof deck overlooks the MBTA parking lot and across the train tracks.

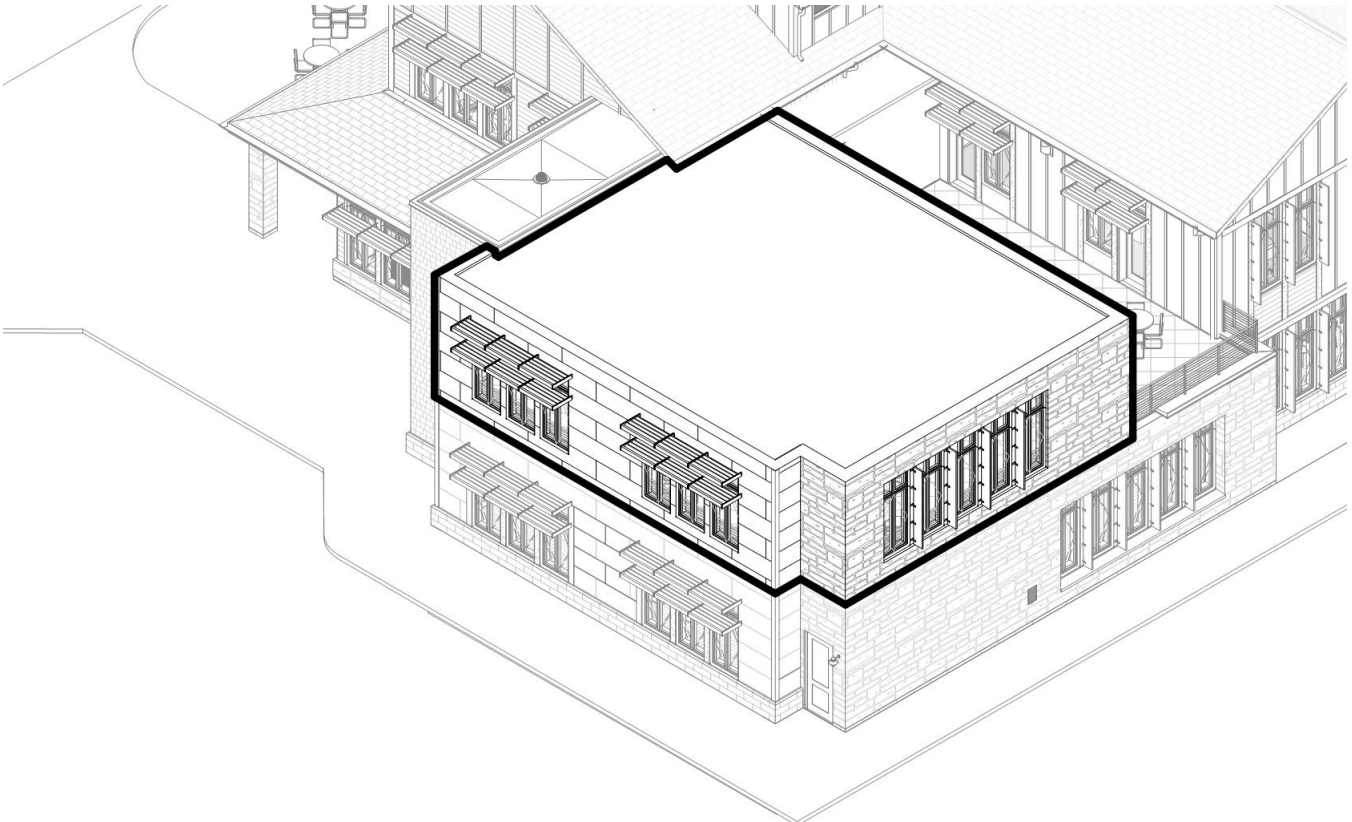


Figure 3.25: Axonometric view showing a roof fitness center option. This option was not preferred.



## ROOF DECK RENOVATION

The 2,000 sf roof deck provides a large and flexible space for a variety of activities and has great potential.

This space's size is both an asset and a barrier to its use. Though spacious, the roof deck is sparsely furnished and as a result feels uninviting and without purpose. Currently, there are several patio tables and raised planters spread out across the deck.

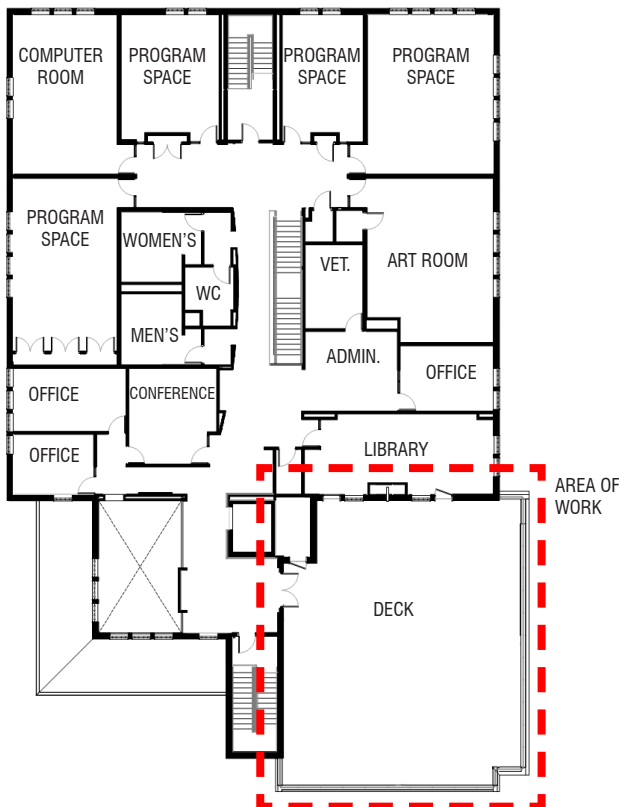
The roof deck's location to the southeast corner of the building also proves challenging. This area is exposed to both harsh summer sun, wind in the cooler seasons, and train noise throughout the year. The roof deck offers views of the parking lot and commuter rail line and affords little privacy. There is a small trellis at the southwest corner of the site, but its coverage is limited.

## ALTERNATES

BH+A looked at two approaches to better utilizing the roof deck:

- Build an addition, capturing some of the roof deck area to create additional program space, and
- Leave the roof deck as an outdoor space, updating furnishings to create a more functional and inviting space.

Building an addition on top of the roof deck was not preferred because it was expensive and would eliminate one of the only outdoor spaces at the CATH. The building's structure was not designed to anticipate a future addition on top of the multipurpose room and an addition would require significant structural upgrades. Egress requirements would limit the addition to 1,200 sf and preserve 700 sf of the roof deck.



Key Plan (Second Floor)

## ALTERNATES

## ALTERNATE 3.5

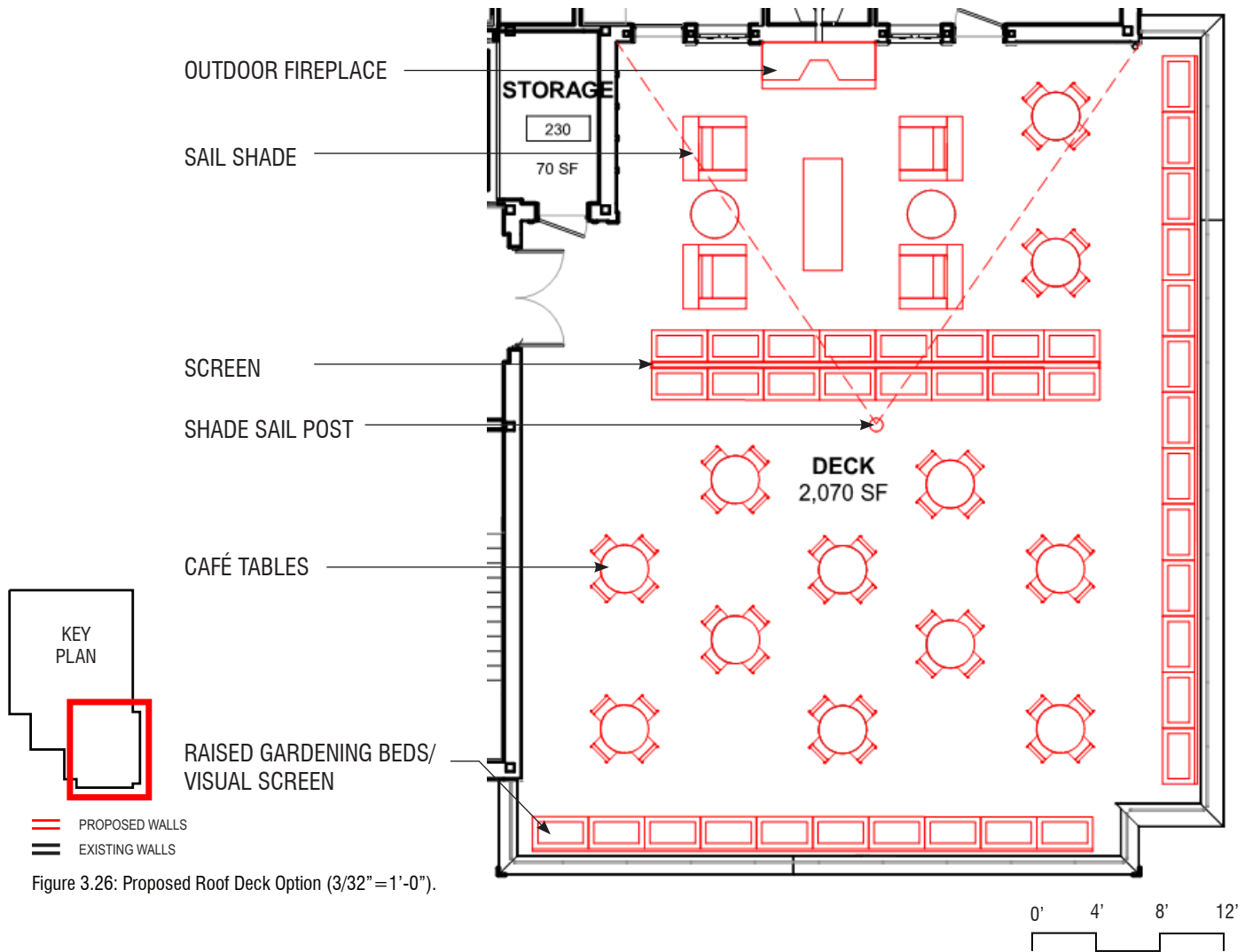


Figure 3.26: Proposed Roof Deck Option (3/32" = 1'-0").

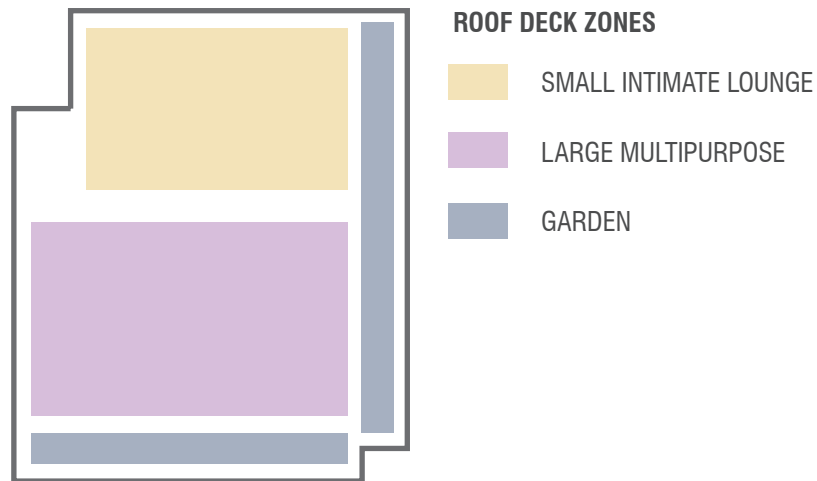


Figure 3.27: Roof Deck Zone Diagram.



**PROPOSED OPTION**

BH+A proposed using new furnishings to subdivide the roof deck into three unique zones: a small intimate lounge zone to the north, a larger multi-purpose zone to the south, and a garden zone along the perimeter.

In the lounge zone, soft lounge seating would be clustered around an outdoor fire place. Is intended for this furniture to remain in place. A shade sail helps define this zone and helps block the harsh summer sun.

The other half of the roof deck would be a multi-use zone, furnished with small tables and chairs. During warmer seasons, patrons could take meals on the roof deck. Smaller tables and chairs could be easily moved aside so the space could be used for outdoor fitness classes.

A planting bed and trellis placed between the two zones subdivides the deck and help create privacy between the two zones. Additional planting beds with trellises along the perimeter seperates the deck from the parking and train below.





## 3.6 CAFÉ LOUNGE RECONFIGURATION







Figure 3.28: Patrons gathered around eating and chatting with each other in the smaller multipurpose room.



Figure 3.29: Café Lounge space at Scituate Senior Center.



## CAFÉ LOUNGE RECONFIGURATION

BH+A observed that the small multipurpose room is the hub of the center. Patrons were observed socializing and eating here throughout the day.

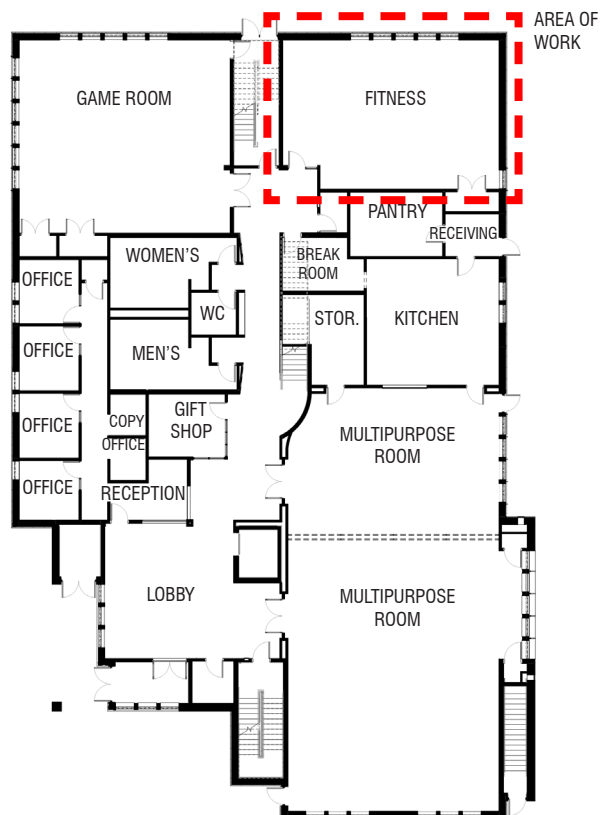
Though well-used, the small multipurpose room also feels institutional and cold, and its dedicated use as a dining room restricts the use of the full multipurpose room. The CATH currently has a need for a large space to accommodate popular in-person gross motor programs.

The UMASS report recommended solving this problem by providing dedicated fitness space and/or hiring additional staff to set up and break down the multipurpose room. Another perhaps more viable option is to better use the existing multipurpose room by creating a dedicated dining space.

## ALTERNATES

Currently, only half of the multipurpose room can be used. Providing an alternate space to eat meals would allow the full multipurpose room to be used for classes like yoga that require significant space.

Senior centers are increasingly moving away from using the multipurpose room as a formal dining space and instead incorporating a café lounge, a large “living room” space furnished with a combination of lounge chairs and café tables. These spaces are adjacent or in close proximity to the kitchen so meals can easily be served. CATH patrons are already familiar with the concept of an informal space for passive recreation and meals. When the multipurpose room floors were replaced, meal programs were temporarily moved to the game room.



Key Plan (First Floor)

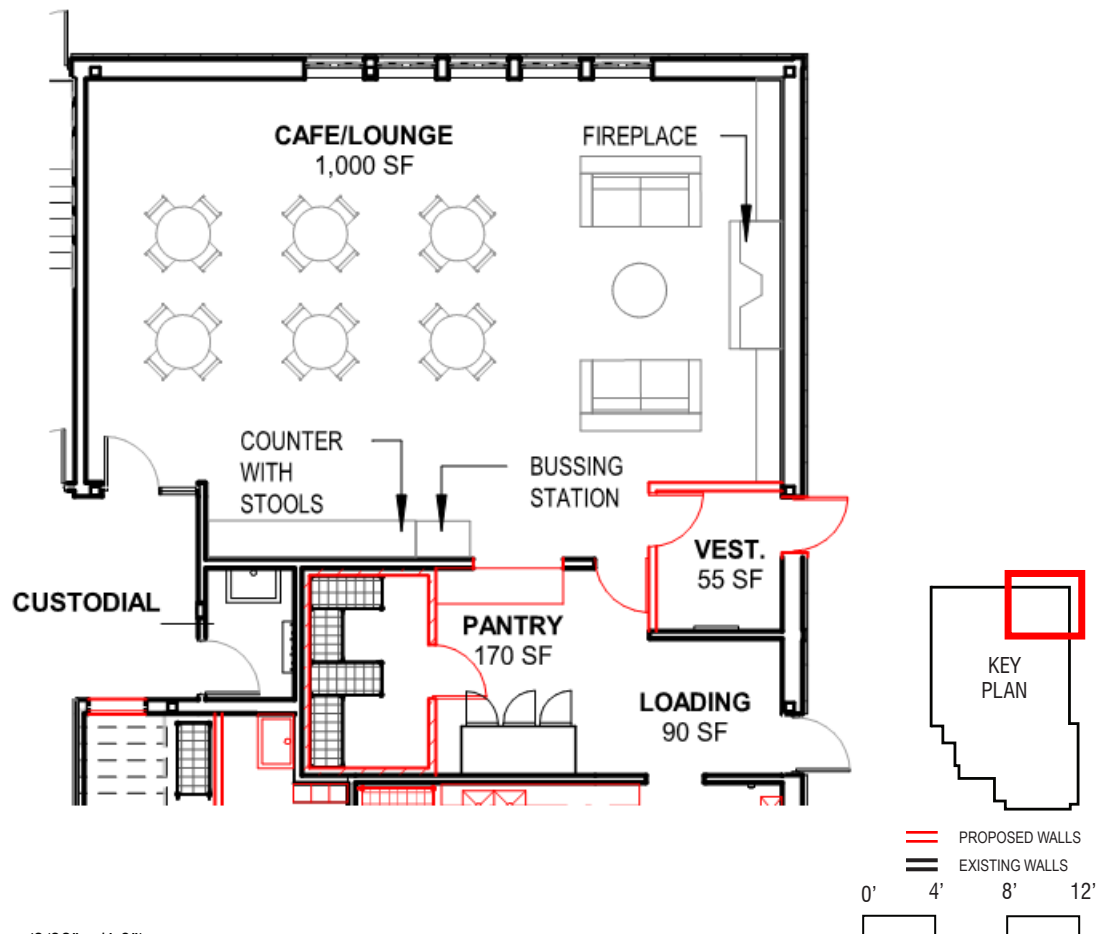


Figure 3.30: Proposed Café Lounge (3/32"=1'-0").

## PROPOSED CAFÉ LOUNGE

The proposed café-lounge would occupy the former fitness room when it moves to the former game room. Patrons could socialize at couches oriented around a fire place and tv or sit at café tables or a café counter. A new pass thru counter would connect this space to the kitchen. Grab n' go items could be served throughout the day as well as the hot meals prepared in the kitchen.

A café lounge renovation would need to be carried out at the same time as the fitness room expansion and the commercial kitchen renovation.

The café lounge renovation is one of the least preferred alternates because it would require finding adequate space for the game room. Currently, there are no existing program spaces large enough to accommodate two pool tables. Two second-floor program rooms would need to be combined to create a new game room or the game room would need to move to the basement.





Figure 3.31: Café Lounge at Falmouth Senior Center offers a variety of seating options.



Figure 3.32: Grab and Go Counter at Falmouth Senior Center.







## 3.7 OFFICE RECONFIGURATION







Figure 3.33: Conference Room.



Figure 3.34: Patrons using the computer room.



## OFFICE RECONFIGURATION

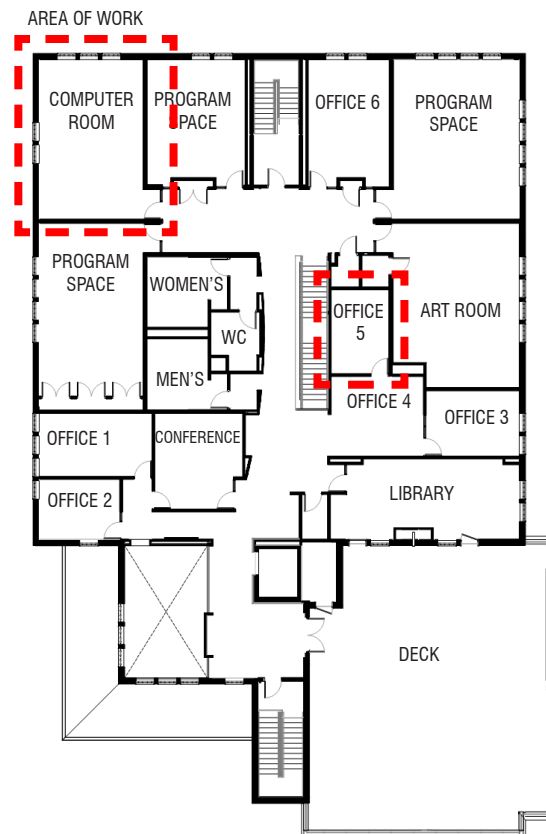
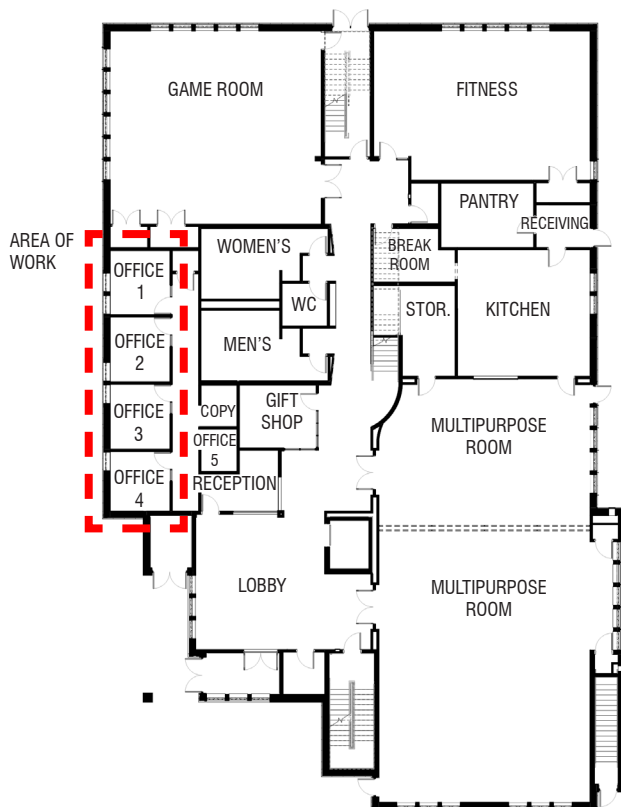
## ALTERNATES

### Overview

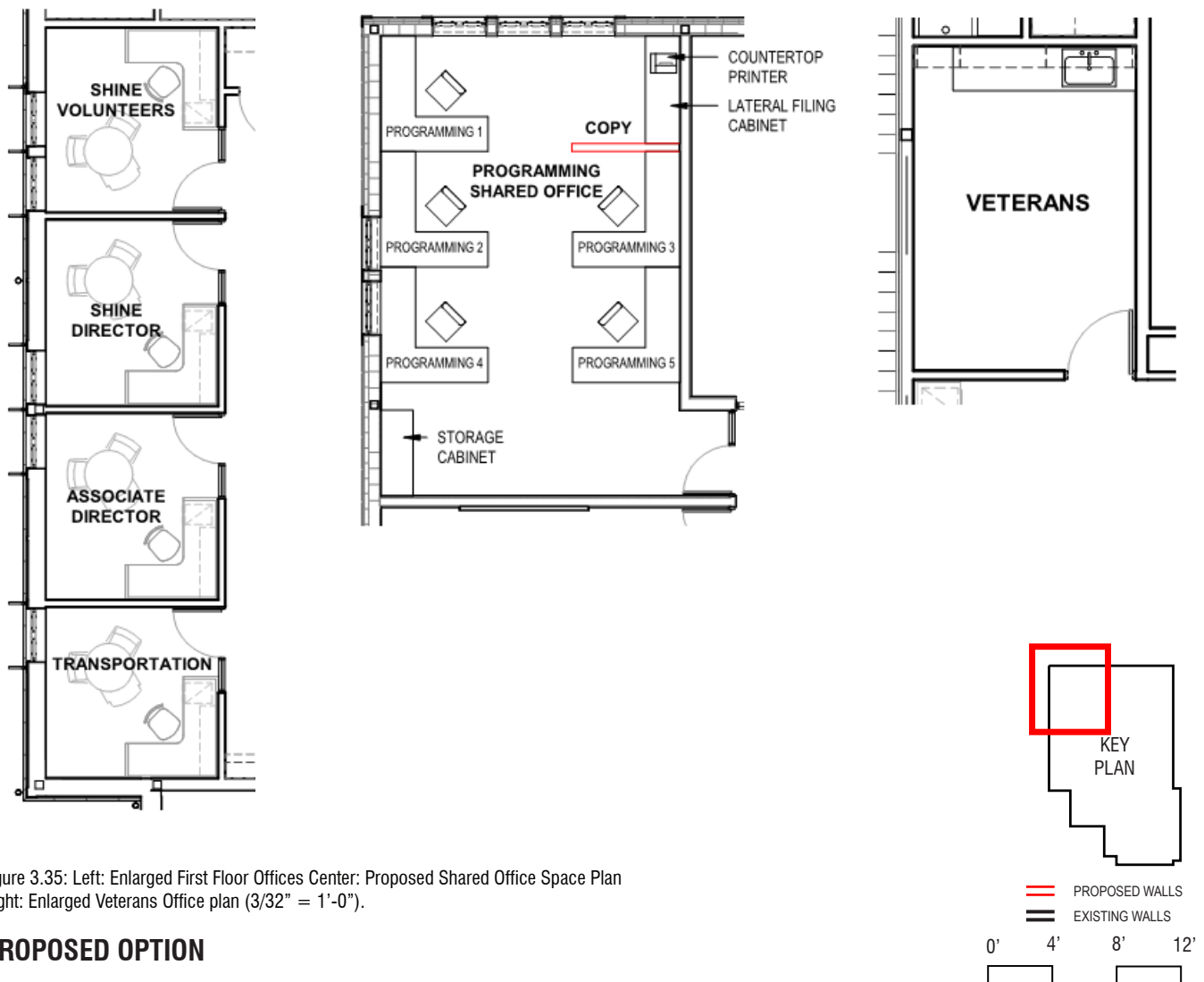
Currently, the CATH has eighteen full time and four part time staff. There are also an estimated five volunteers that work at the reception desk and in the kitchen. There are five offices on the first floor and six offices on the second floor. Currently one of the smaller program rooms is used as an office. Private office space used for confidential conversations with patrons is especially needed. In addition, BH+A studied:

- Providing a lactation room.
- Relocating the staff breakroom displaced by the commercial kitchen conversion.
- Providing additional office space by renovating the existing social work offices and conference room on the second floor to create six smaller private social work offices.

Alternatively, it would be less costly to free up already existing private offices in the building for the CATH's social workers.



Key Plans (Left: First Floor Right: Second Floor)











# SECTION 4 COST ESTIMATE SUMMARY







## OBSERVATIONS & RECOMMENDATIONS

### Cost Estimation

BH+A engaged PM&C to provide cost estimates for twelve original alternates. PM&C treated each alternate as a stand-alone project. If the town elected to pursue one or more alternates together, additional economies of scale may be realized. It would be logical to take on some of the alternates under one contractor. For example, building a café lounge must be done with the expansion of the fitness room and the renovation of the kitchen.

Each estimate includes both “hard” costs and “soft” costs. Hard costs are defined as the costs associated specifically with the construction of each alternate: the labor, materials, including furniture, fixtures and equipment, and contractor’s overhead. The soft costs include architectural and design fees, temporary space and moving costs, testing and inspections.

In addition, the estimates including the following assumptions:

- All contingencies, burdens and markups are included in each alternate.
- Building will be open and operational during construction.
- Scope of work will be bid and built by General Contractor.

The table below shows the total costs for each alternate. The itemized cost estimates, which breakdown each project by building components, are provided in the appendix. In the case of the accessible parking renovation, the town would assume the relatively minimal costs of restriping parking spaces and providing new signage.

These estimates do not include operational costs. The commercial kitchen, in particular, will require additional costs for supplies and staff.

### Cost Summary

| Scope                                                          | Estimate  |         |         |
|----------------------------------------------------------------|-----------|---------|---------|
|                                                                |           |         | Cost    |
| Alternate 1: Convert Residential Kitchen to Commercial Kitchen | 1,000 GSF | 920,714 | 920,000 |
| Alternate 2: Swap Locations of Fitness Room & Game Room        | 2,300 GSF | 263,435 | 263,000 |
| Alternate 3A: Vestibule Addition                               | 170 GSF   | 297,878 | 297,800 |
| Alternate 3B: Accessible Parking                               | NA        |         | NA      |
| Alternate 4: Renovate the Basement for Program Room            | 1,500 GSF | 743,886 | 743,000 |
| Alternate 5: Furnish Roof Deck                                 | NA        | 177,739 | 177,700 |
| Alternate 6: Café Lounge                                       | 3,600 GSF | 578,475 | 578,000 |
| Alternate 7: Office Configuration                              | 600 GSF   | 19,837  | 19,000  |

Figure 4.1: Cost Estimate Summary Table.





# SECTION 5 APPENDIX









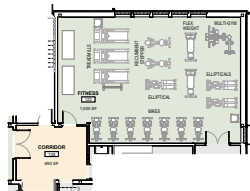
# **APPENDIX A.1**

## **ARCHITECTURAL STUDIES: FITNESS ROOM OPTIONS**

NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494

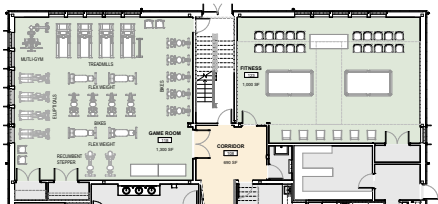
#1



1 Fitness Gym Original Equipment Layout  
1000 +/- SF

| TYPE OF EQUIPMENT      | QUANTITY |
|------------------------|----------|
| TREADMILLS             | 3        |
| BIKES                  | 7        |
| RECLINANT STEPPER      | 2        |
| "FLEX WEIGHT"          | 2        |
| ELLIPTICALS            | 3        |
| LAT PULLBROW MULTI-GYM | 1        |
| ROOM AREA              | 1000 SF  |

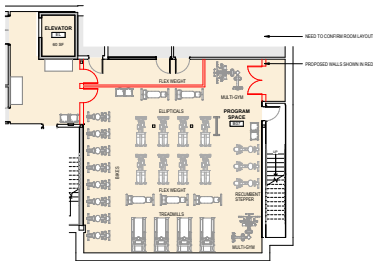
#2



2 Game Room Gym Equipment Layout and Fitness Billards Layout  
1300 +/- SF

| TYPE OF EQUIPMENT      | QUANTITY | NET GAIN |
|------------------------|----------|----------|
| TREADMILLS             | 4        | +1       |
| BIKES                  | 9        | +2       |
| RECLINANT STEPPER      | 2        | 0        |
| "FLEX WEIGHT"          | 4        | +2       |
| ELLIPTICALS            | 4        | +1       |
| LAT PULLBROW MULTI-GYM | 1        | 0        |
| ROOM AREA              |          | 1300 SF  |

#3



3 Basement Gym Equipment Layout  
1400 +/- SF

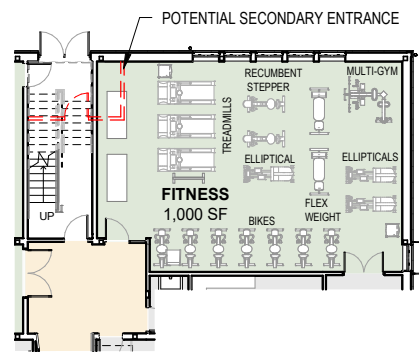
| TYPE OF EQUIPMENT      | QUANTITY | NET GAIN |
|------------------------|----------|----------|
| TREADMILLS             | 4        | +1       |
| BIKES                  | 8        | +1       |
| RECLINANT STEPPER      | 3        | +1       |
| "FLEX WEIGHT"          | 5        | +3       |
| ELLIPTICALS            | 8        | +5       |
| LAT PULLBROW MULTI-GYM | 2        | +2       |
| ROOM AREA              |          | 1400 SF  |



# NEEDHAM CENTER AT THE HEIGHTS

Fitness Room

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494

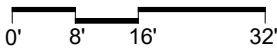


PARTIAL FIRST FLOOR PLAN

| TYPE OF EQUIPMENT       | QUANTITY |
|-------------------------|----------|
| TREADMILLS              | 3        |
| BIKES                   | 7        |
| RECUMBENT STEPPER       | 2        |
| "FLEX WEIGHT"           | 2        |
| ELLIPTICALS             | 3        |
| LAT PULLS/ROW MULTI-GYM | 1        |
| ROOM AREA               | 1,000 SF |

Current Fitness Room Configuration

bh+a Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 September 2022  
C:\Users\ssabaten\Documents\Needham Senior Center-SP\_012012\_2021\_SSabaten.rvt

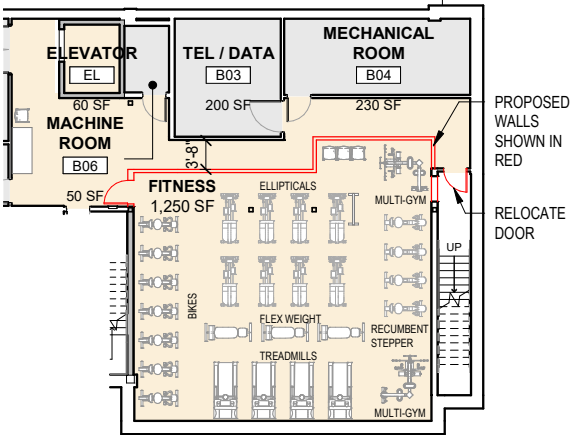


NEEDHAM CENTER AT THE HEIGHTS

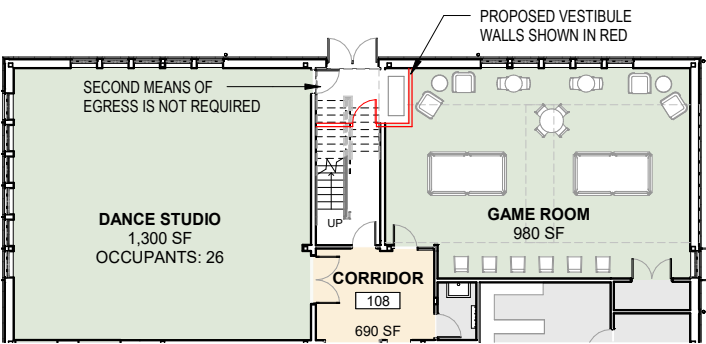
Fitness Room

NEEDHAM CENTER AT THE HEIGHTS

300 Hillside Avenue, Needham Heights, MA 02494



PARTIAL BASEMENT PLAN



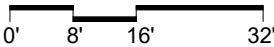
PARTIAL FIRST FLOOR PLAN

| TYPE OF EQUIPMENT       | QUANTITY | NET GAIN FROM EXISTING CONFIGURATION |
|-------------------------|----------|--------------------------------------|
| TREADMILLS              | 4        | +1                                   |
| BIKES                   | 7        | 0                                    |
| RECUMBENT STEPPER       | 4        | +2                                   |
| "FLEX WEIGHT"           | 3        | +1                                   |
| ELLIPTICALS             | 8        | +5                                   |
| LAT PULLS/ROW MULTI-GYM | 2        | +1                                   |
| ROOM AREA               | 1,250 SF | +250 SF                              |

Option 1 - Relocate Fitness Room to Basement



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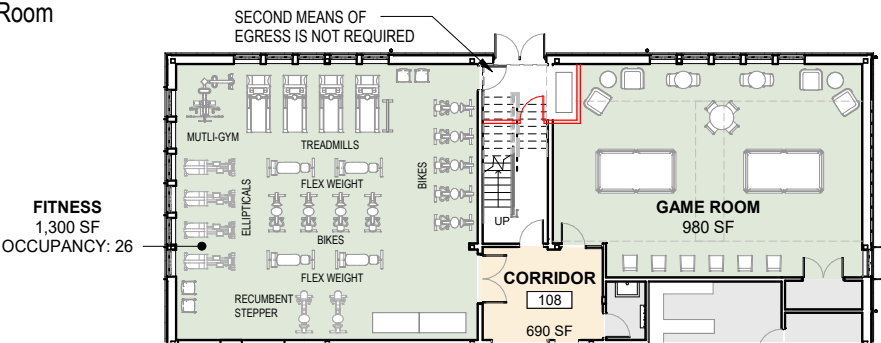


# NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS

300 Hillside Avenue, Needham Heights, MA 02494

Fitness Room



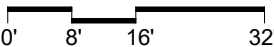
PARTIAL FIRST FLOOR PLAN

| TYPE OF EQUIPMENT       | QUANTITY | NET GAIN FROM EXISTING CONFIGURATION |
|-------------------------|----------|--------------------------------------|
| TREADMILLS              | 4        | +1                                   |
| BIKES                   | 9        | +2                                   |
| RECUMBENT STEPPER       | 2        | 0                                    |
| "FLEX WEIGHT"           | 4        | +2                                   |
| ELLIPTICALS             | 4        | +1                                   |
| LAT PULLS/ROW MULTI-GYM | 1        | 0                                    |
| ROOM AREA               | 1,300 SF | +300 SF                              |

## Option 2 - Switch Fitness Room and Game Room Layout



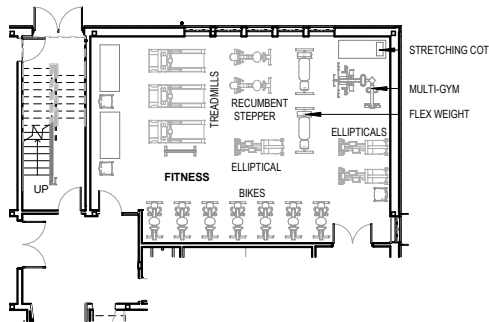
Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 September 2022  
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## NEEDHAM CENTER AT THE HEIGHTS

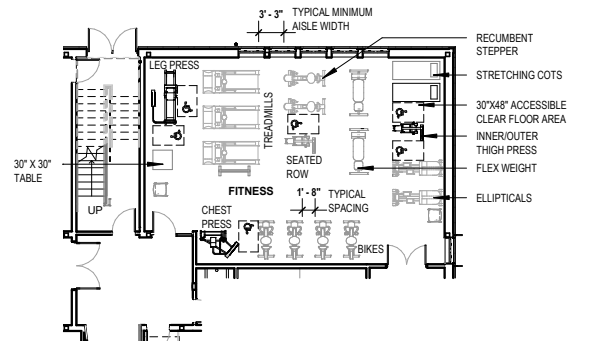
NEEDHAM CENTER AT THE HEIGHTS

300 Hillside Avenue, Needham Heights, MA 02494



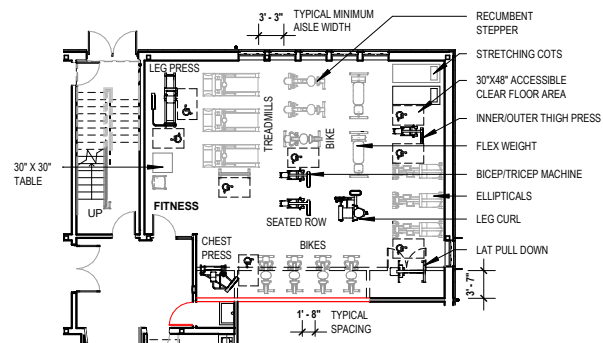
PARTIAL FIRST FLOOR PLAN  
EXISTING FITNESS ROOM LAYOUT  
• 1,000 SF  
• MULTI-GYM TO REMAIN\*

\*THIS EQUIPMENT IS CONSIDERED TO BE SUBSTANDARD AND THE  
ATHLETIC DIRECTORS ARE LOOKING TO REPLACE IT



OPTION 1: SUBSTITUTE EQUIPMENT WORKING WITH EXISTING FITNESS CENTER FOOTPRINT

- 1,000 SF
- ELIMINATE 3 BIKES, 1 ELLIPTICAL, AND MULTI-GYM\*
- PROVIDE LEG PRESS, UPPER BACK ROW MACHINE, CHEST PRESS, INNER/OUTER THIGH PRESS AND SECOND STRETCHING COT



OPTION 2: EXTEND FITNESS ROOM 3'-7" INTO KITCHEN

- 1,130 SF
- ELIMINATE 2 BIKES AND MULTI GYM\*
- PROVIDE LEG CURL, LAT PULL DOWN AND BICEP/TRICEP MACHINE AND SECOND STRETCHING COT

## FITNESS ROOM LAYOUT OPTIONS WITH ADDITIONAL STRENGTH TRAINING EQUIPMENT



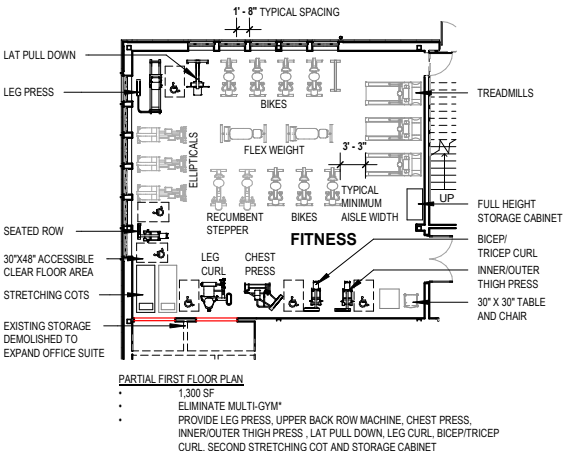
Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 December 2022  
C:\Users\ssabaten\Documents\Needham Senior Center-SP\_012012\_2021\_SSabaten.rvt

0' 8' 16' 32'



# NEEDHAM CENTER AT THE HEIGHTS

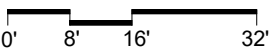
NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



\*THIS EQUIPMENT IS CONSIDERED TO BE SUBSTANDARD, AND THE ATHLETIC DIRECTORS ARE LOOKING TO REPLACE IT

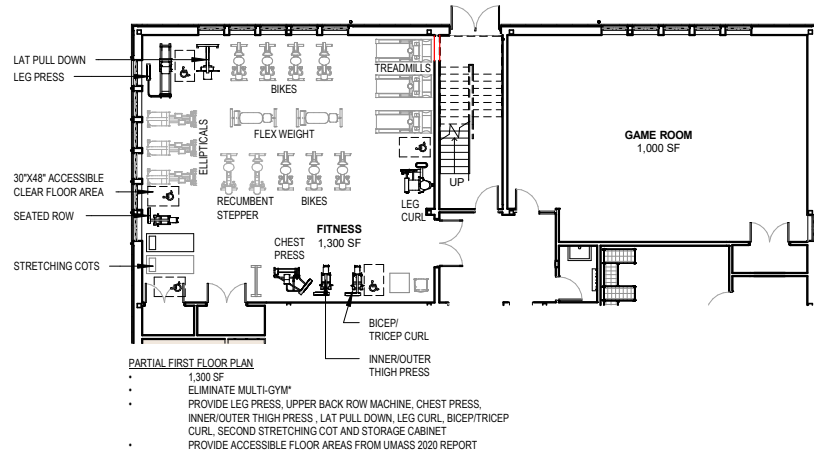
## Game Room Fitness Layout with Additional Strength Training Equipment

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## NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



\*THIS EQUIPMENT IS CONSIDERED TO BE SUBSTANDARD, AND THE ATHLETIC DIRECTORS ARE LOOKING TO REPLACE IT

## Game Room Fitness Layout with Additional Strength Training Equipment

bh+a Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 February 2023  
C:\Users\ssabaten\Documents\Needham Senior Center-SP\_012012\_2021\_ssabatenGQG4H.rvt

0' 8' 16' 32'







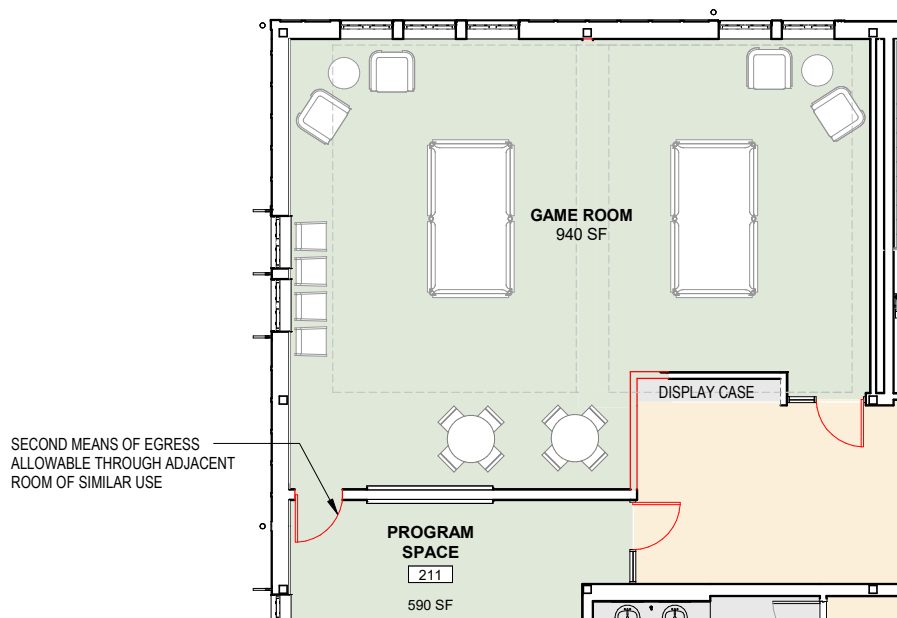


## **APPENDIX A.2**

### **ARCHITECTURAL STUDIES: GAME ROOM OPTIONS**

## NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494

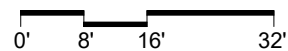


PARTIAL SECOND FLOOR PLAN

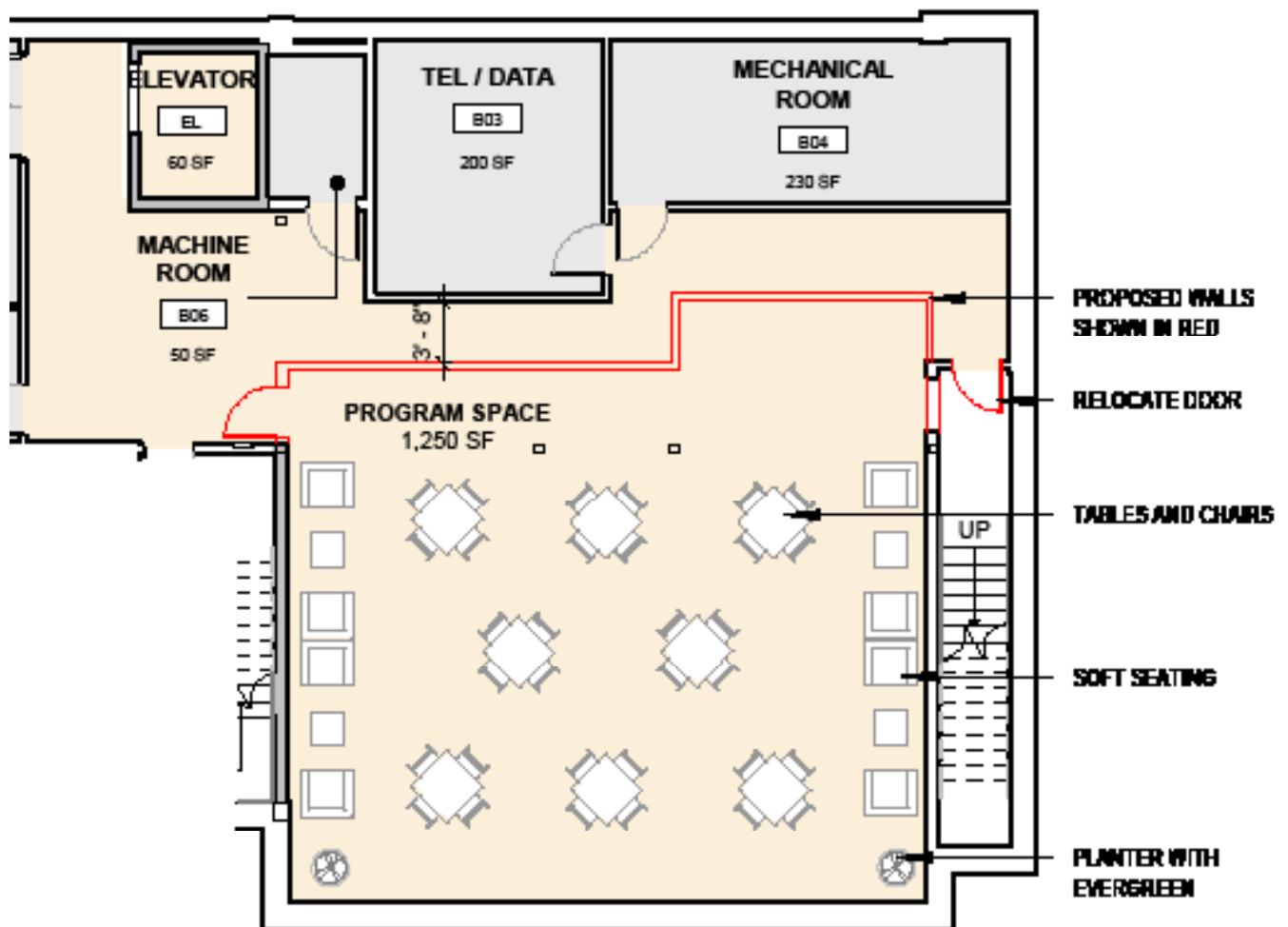
## Combining Two Program Rooms for Game Room



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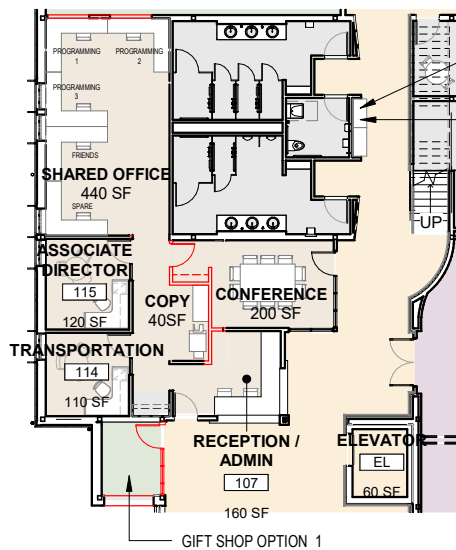


## **APPENDIX A.3**

### **ARCHITECTURAL STUDIES: OFFICE SUITE OPTIONS**

# NEEDHAM CENTER AT THE HEIGHTS

## Office Suite



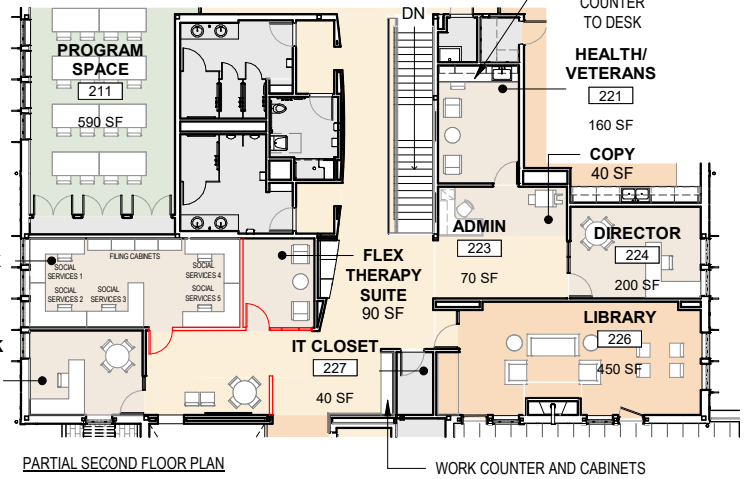
PARTIAL FIRST FLOOR PLAN

GIFT SHOP  
OPTION 2

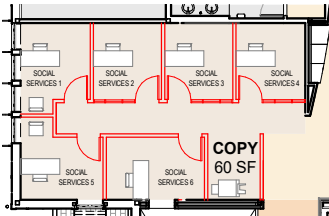
REMOVE  
BUILT-IN  
BENCHES AND  
PROVIDE  
DISPLAY  
CASES

SOCIAL WORK  
SHARED  
OFFICE  
320 SF

SOCIAL WORK  
SUPERVISOR  
205  
160 SF



PARTIAL SECOND FLOOR PLAN



PARTIAL SECOND FLOOR ALTERNATE LAYOUT

## Office Suite Reconfiguration - 1st Floor and Second Floor

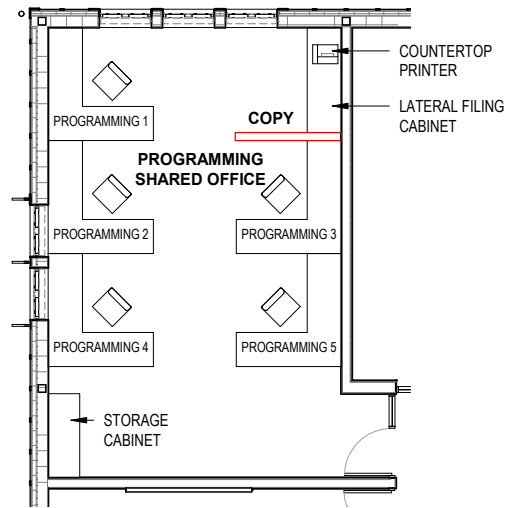
**bh+a** Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 September 2022  
C:\Users\ssabaten\Documents\Needham Senior Center-SP\_012012\_2021\_SSabaten.rvt

0' 8' 16' 32'



# NEEDHAM CENTER AT THE HEIGHTS

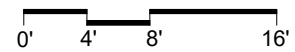
NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



PARTIAL SECOND FLOOR PLAN

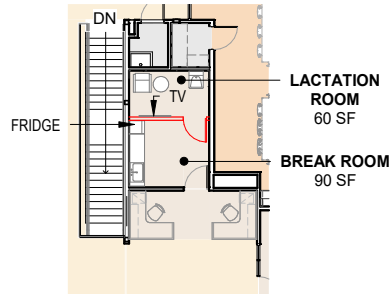
## Programming Shared Office Space

**bh+a** Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 January 2023  
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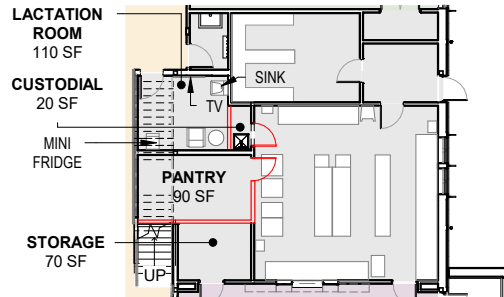


## NEEDHAM CENTER AT THE HEIGHTS

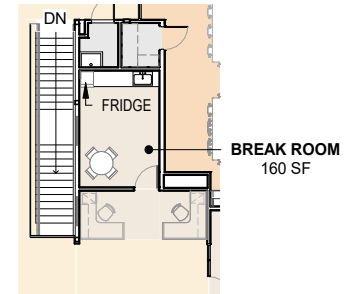
NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



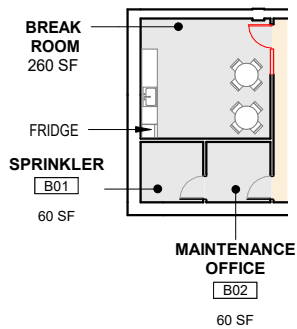
**OPTION 1: CONVERT NURSE PROFESSIONAL INTO BREAK ROOM AND LACTATION ROOM**  
PARTIAL FIRST FLOOR PLAN



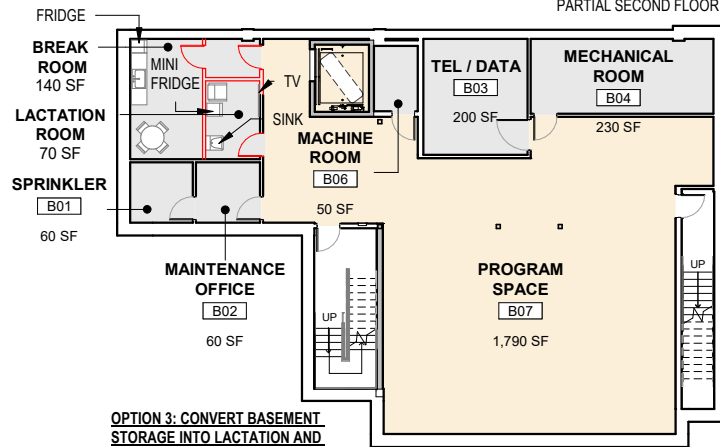
**OPTION 2: CONVERT BREAK ROOM INTO LACTATION ROOM**  
PARTIAL FIRST FLOOR PLAN



**OPTION 2A: CONVERT NURSE PROFESSIONAL INTO BREAK ROOM**  
PARTIAL SECOND FLOOR PLAN



**OPTION 2B: CONVERT STORAGE INTO BREAK ROOM**  
BASEMENT FLOOR PLAN



**OPTION 3: CONVERT BASEMENT STORAGE INTO LACTATION AND BREAK ROOM**  
BASEMENT FLOOR PLAN

## Lactation Room Options



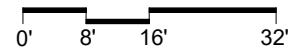
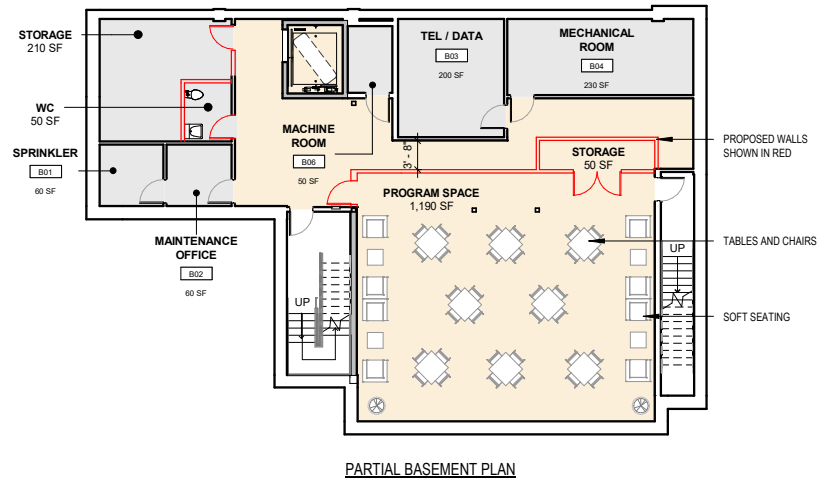
Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 November 2022  
C:\Users\ssabaten\Documents\Needham Senior Center-SP\_012012\_2021\_SSabaten.rvt

0' 8' 16' 32'



# NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



## Basement Reconfiguration

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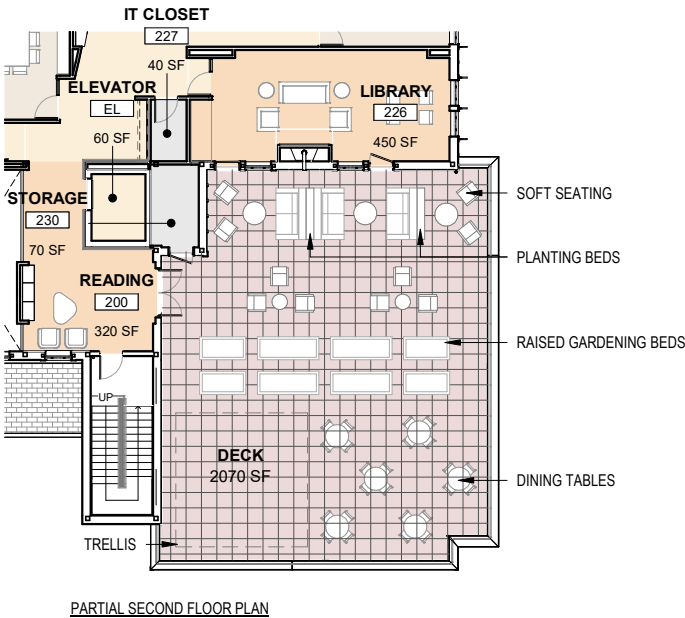
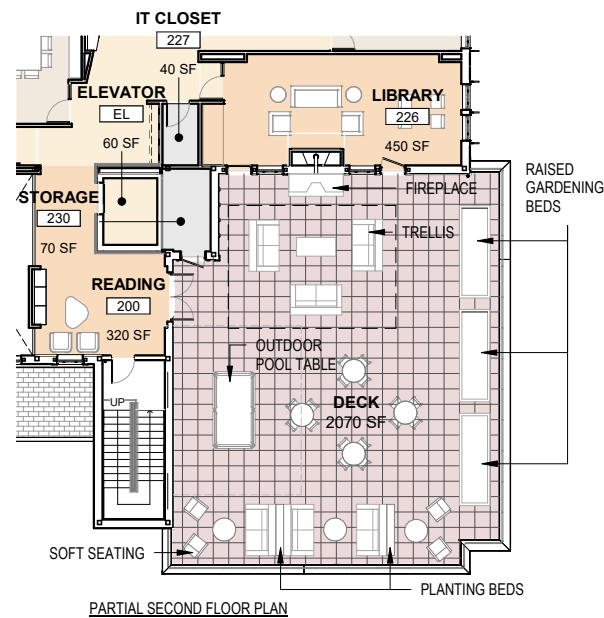


## **APPENDIX A.4**

# **ARCHITECTURAL STUDIES: ROOF DECK OPTIONS**

NEEDHAM CENTER AT THE HEIGHTS

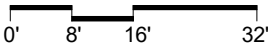
NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



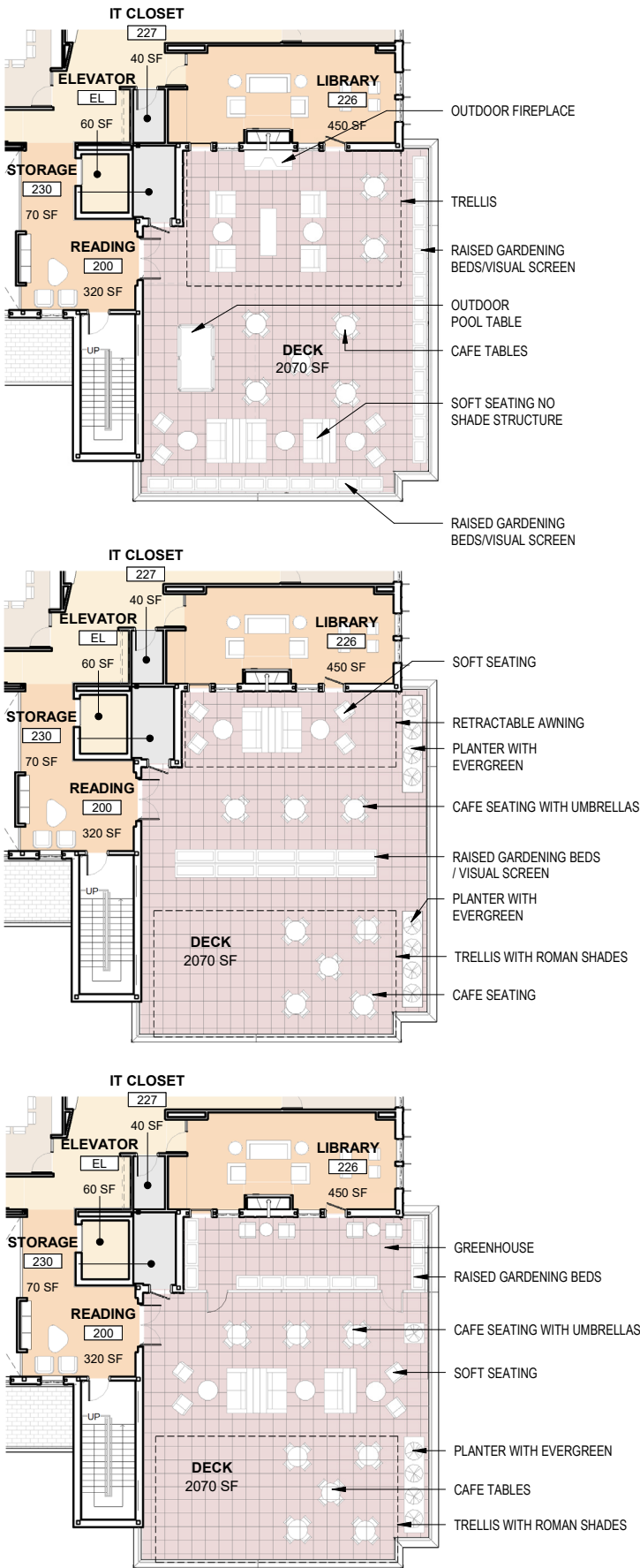
Deck Options



Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 September 2022  
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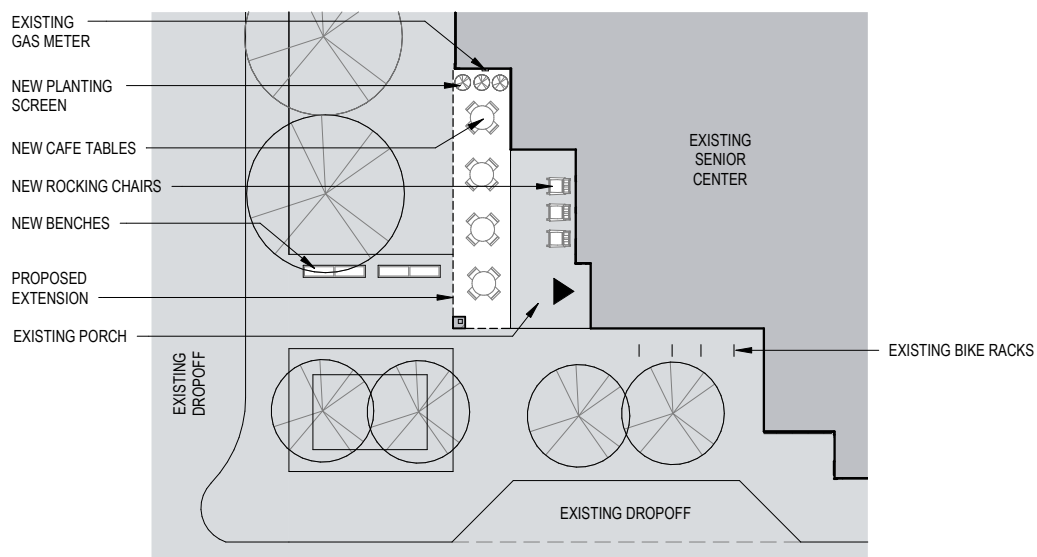


## **APPENDIX A.5 ARCHITECTURAL STUDIES: FRONT LAWN OPTIONS**



## NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



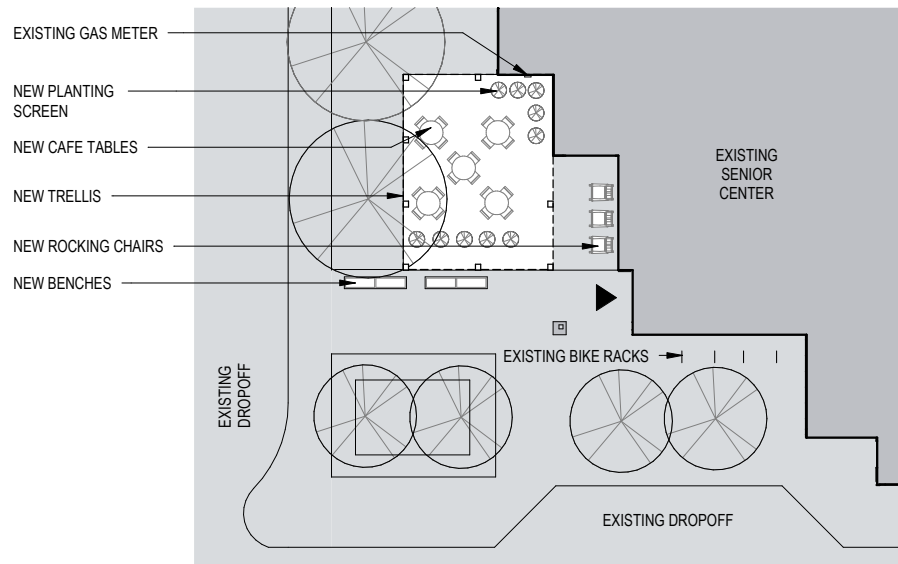
## Option 1 - Extend Existing Porch Area



Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 October 2022  
C:\Users\mbarker\Documents\Needham Senior Center-SP\_012012\_2021\_mbarkerZU62P.rvt

# NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494

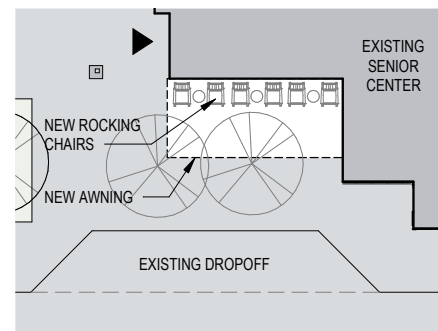
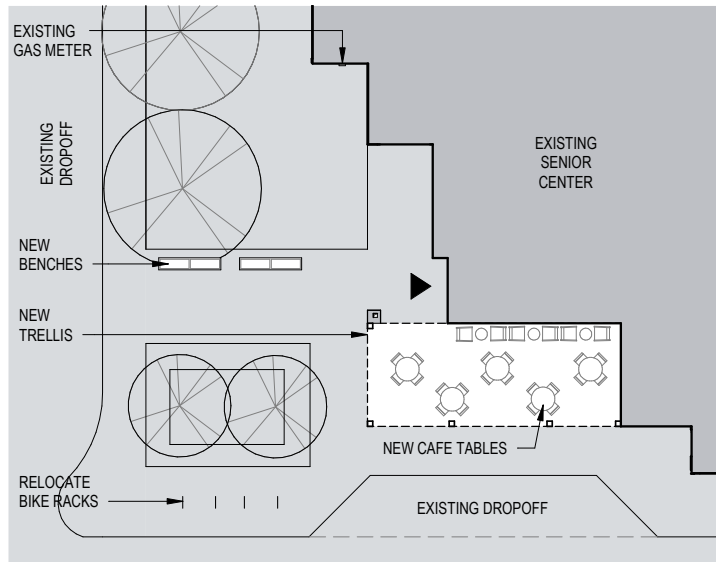


## Option 2 - Large Paved Area and Trellis

**bh+a** Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 October 2022  
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## NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



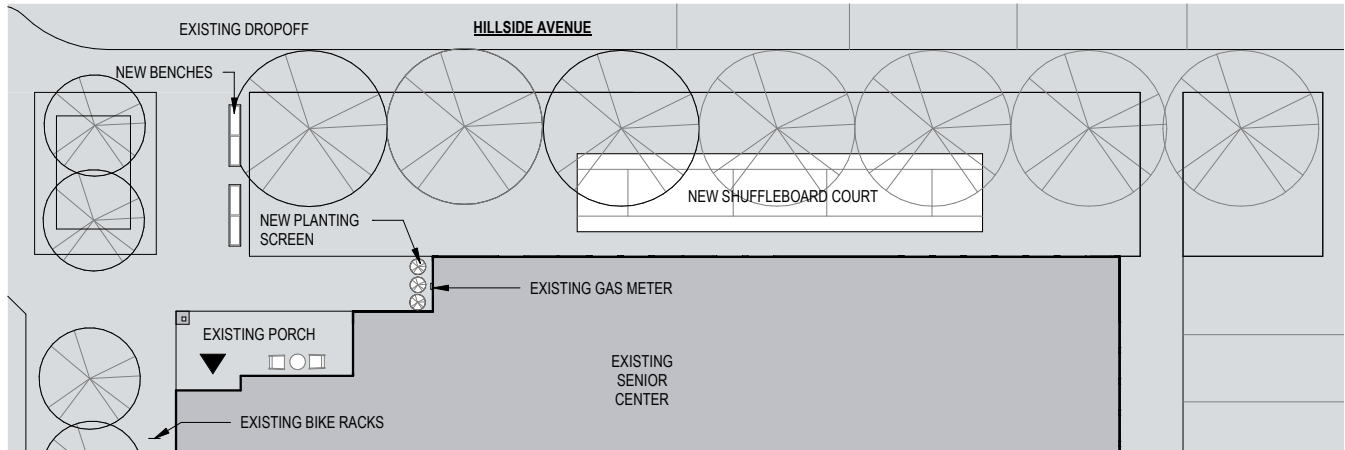
## Option 3 - Small Lounge Area

**bh+a** Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 October 2022  
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# NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



## Option 4 - Shuffleboard Court

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## **APPENDIX A.6**

# **ARCHITECTURAL STUDIES: VESTIBULE OPTIONS**

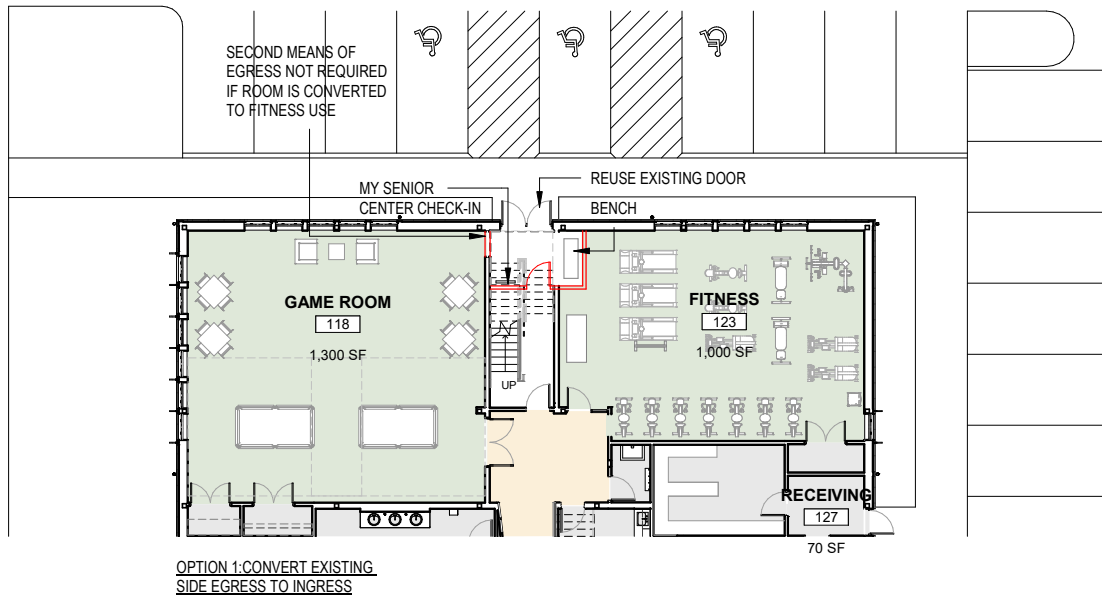


# NEEDHAM CENTER AT THE HEIGHTS

Alternate Accessible Entrance

NEEDHAM CENTER AT THE HEIGHTS

300 Hillside Avenue, Needham Heights, MA 02494



## Alternate Egress Plan - Stair

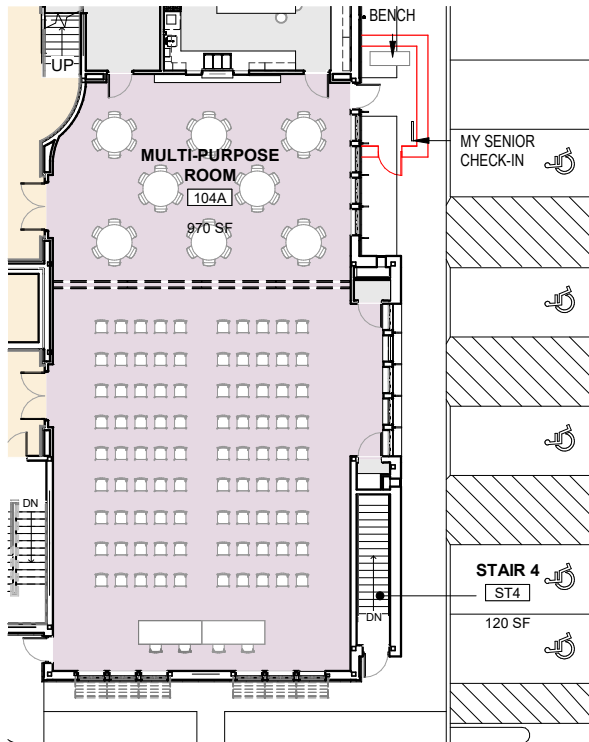


Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 September 2022  
C:\Users\ssabaten\Documents\Needham Senior Center-SP\_012012\_2021\_SSabaten.rvt

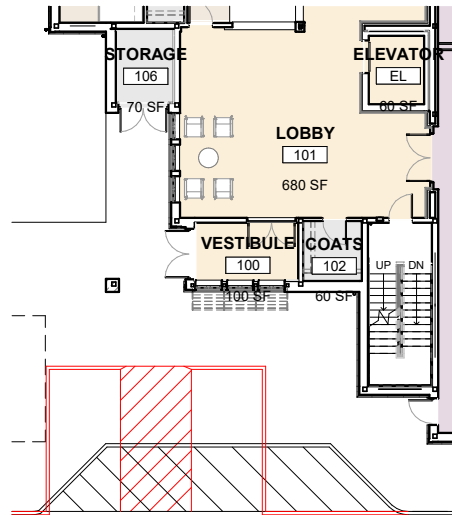
0' 8' 16' 32'

# NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



OPTION 2: PROVIDE VESTIBULE  
AT MULTIPURPOSE ROOM



OPTION 3: PROVIDE ACCESSIBLE  
PARKING AT MAIN ENTRANCE

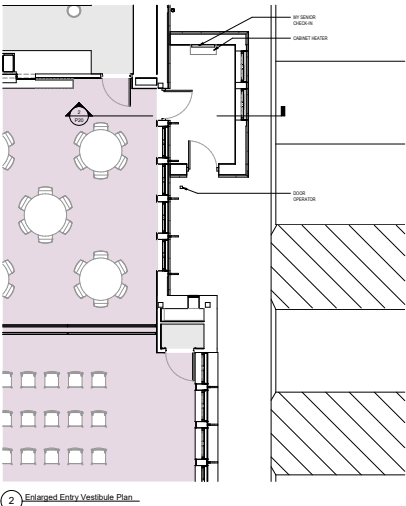
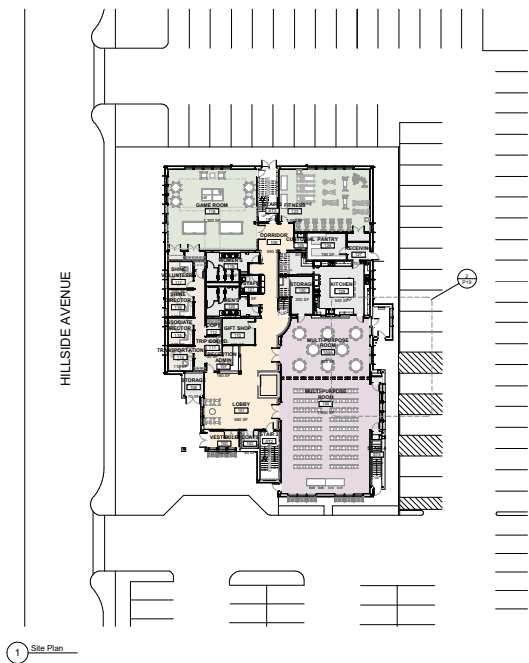
## Alternate Egress Plan - Multipurpose Room

bh+a Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 September 2022  
C:\Users\ssabaten\Documents\Needham Senior Center-SP\_012012\_2021\_SSabaten.rvt

0' 8' 16' 32'

NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494



Vestibule at Multipurpose Room

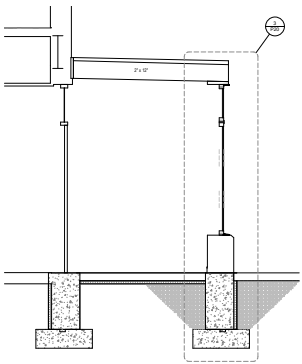
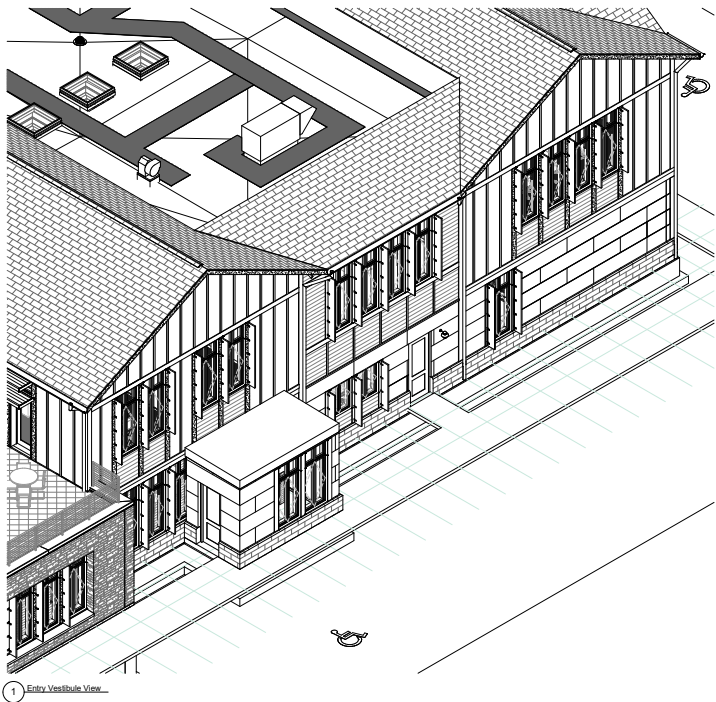
bh+a Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 October 2022  
C:\Users\hndrie\Documents\Needham Center\GP\_210102\_2021\_10\Needham Center GP 10

P19

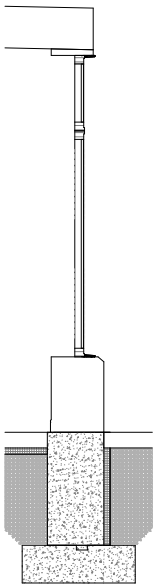


NEEDHAM CENTER AT THE HEIGHTS

NEEDHAM CENTER AT THE HEIGHTS  
300 Hillside Avenue, Needham Heights, MA 02494

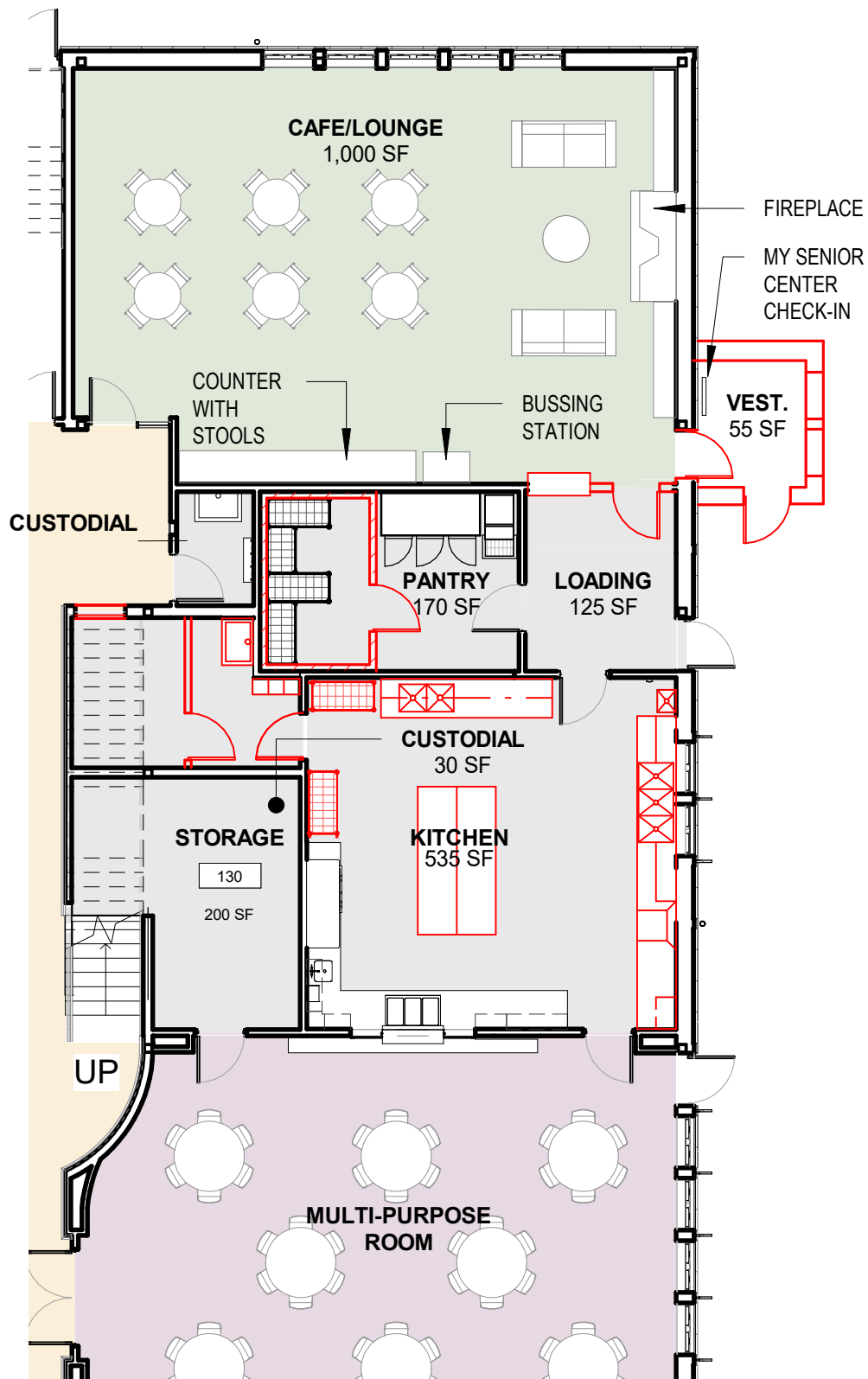


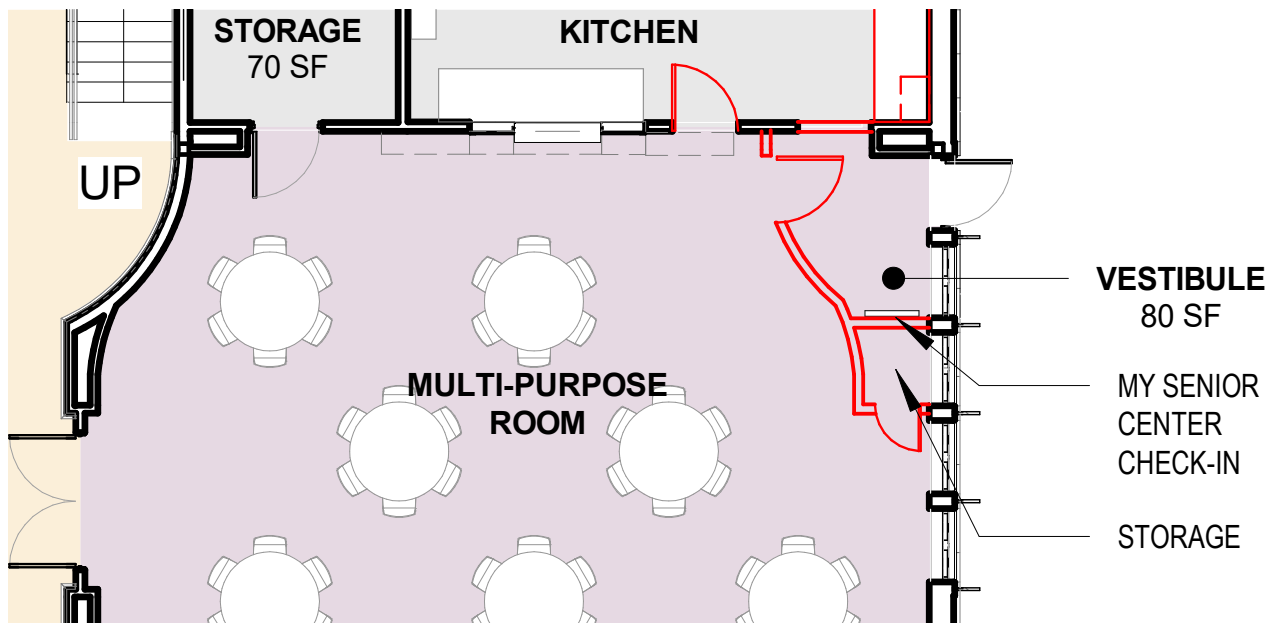
| SPECIFICATIONS  |
|-----------------|
| STOREFRONT:     |
| DOORS:          |
| DOOR HARDWARE:  |
| ROOF:           |
| CABINET HEATER: |



**Vestibule at Multi-purpose Room**  
**bh+a** Bargmann Hendrie + Archetype, Inc. 9 Channel Center Street Boston, MA 02210 Tel: (617) 350-0450 October 2022  
C:\Users\mshaw\Documents\Needham Center\RF\_Plan\RF\_2021\_08\NeedhamCenterRF.rvt

P20















## **APPENDIX B**

### **MEETING MINUTES**



BARGMANN HENDRIE + ARCHETYPE, INC.

Architecture | Planning | Interior Design

9 Channel Center Street  
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## meeting notes

date: September 9, 2022

project name and number: Needham CATH Space Utilization Plan #3480

subject: Kick-off Meeting

present: Hank Haff, Director, Needham Building Design & Construction Department  
Tim McDonald, Director, Needham Health & Human Services  
Barry Dulong, Director, Needham Building Maintenance  
Joel Bargmann, Principal, Bargmann Hendrie + Archetype

by: Rachel Young

The following is a summary of the kickoff meeting held on Friday September 9 via Zoom:

### Project Goals

Tim McDonald summarized the project goals as follows:

Assess the CATH, primarily focusing on access and uses. Some assumptions that were made during design may not have been true or have since changed. As the CATH is 10 years old, what we can do for the next ten years?

The primary spaces to study are the exercise room, computer room, and the deck. The staff think that these spaces aren't living up to their "full potential."

Concerning access, reviewing an alternate rear entry, especially for those with mobility impairment, should be studied. The town is looking for an outside expert to codify what is already fairly understood, that a rear entrance is a necessity.

Concerning parking, complaints have gone down because the CATH isn't attracting as many people post COVID. The town would like to understand if this is a permanent or temporary change? Is there an opportunity to renegotiate with the MBTA and have access to some of the closer spaces? Would this be less expensive than adding an entry?

The CATH has not transitioned back to full in-person. There are a fair number of instructors and patrons that prefer remote activities at this point. The town recognizes that there is value to in-person activities and the social emotional health of seniors.

Specific to the deck, what are the ramifications of turning the space into indoor space, especially if determined that the CATH needs more space? BH+A should review zoning (including FAR), egress and structural requirements.

Barry Dulong confirmed that the HVAC system is operational after replacing a rooftop unit.

### Kitchen Renovation

Socotec has been engaged to look at converting the existing demonstration kitchen to a commercial kitchen. Traveling Meals ("Meals on Wheels") is prepared at Beth Israel hospital.



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Springwell prepares meals off site and brings to CATH to heat up. Can the kitchen be modified to prepare 150 meals a day, for both 50 traveling meals packets, 50 in person lunches and 50 in person breakfasts. What is the cost to staff such an operation? The director of school nutrition did a "back of the napkin" assessment. Socotec is "85%" done. Optimistically, a draft would be available in 2-4 weeks.

Generator

Concerning the generator, Dorn Whittier is putting together proposal, project would go out to bid in December-January. Will result +/- 3 parking spaces. Trenching and repaving and repainting.

Parking

Stefan does parking counts.

Action Items:

BH+A to:

1. Disseminate project contact lists
2. Engage parking consultant to review existing conditions
3. Set up community outreach calendar with Tim McDonald's assistance
4. Send revised work plan

Needham to:

1. Send email of introduction to CoA staff and stakeholders
2. Forward Socotec's kitchen design when available





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## agenda

date: October 7, 2022

project name & number: CATH Space Utilization Study #3480

subject: Progress Meeting 1

distribution: Hank Haff  
Tim McDonald  
Barry Dulong  
Latanya Steele  
Katie King

1. Review project goals and key areas of study:
  - a. Parking and Accessibility
  - b. Staffing Spaces
  - c. Program Spaces:
    - i. Game Room
    - ii. Fitness Room
    - iii. Rooftop Deck
    - iv. Computer Lab
2. Review format for upcoming presentations to CoA and PBC
3. Update on community outreach and stakeholder interviews
4. Review information needed:
  - a. Future programming expansion goals
  - b. My Senior Center
  - c. Commercial kitchen study
  - d. Cost estimates
5. Schedule regular progress meetings



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## meeting notes

date: October 7, 2022

project name and number: Needham CATH Space Utilization Plan #3480

subject: Kick-off Meeting

present: Hank Haff, Director, Needham Building Design & Construction Department  
Tim McDonald, Director, Needham Health & Human Services  
Barry Dulong, Director, Needham Building Maintenance  
Amy Archer, Pare Corporation, Traffic Consultant

by: Rachel Young

The following are the summary of notes from the meeting on October 7 via Teams:

- 1) Background
  - a) Demographic & Usage Data
    - i) The 2020 UMass report indicated 200 daily users. Because not all patrons check-in using My Senior Center, this number is estimated to be 30% higher.
    - ii) Methodology:
      - (1) BH+A has preliminary data from this past year that I need to look into further.
      - (2) From three visits to the site on Tuesday and Thursday mornings, 95 users, including staff, were in the building.
  - b) Key findings from 2020 UMass Study:
    - i) Parking and Accessibility
    - ii) Fitness Room Use and Expanding Physical Activities
    - iii) Need for additional office space, especially for part-time staff and volunteers
    - iv) Underutilized Rooftop Deck
    - v) Underutilized Computer Lab
    - vi) CATH Commercial Kitchen\*
    - vii) Solar Canopies\*
  - c) Additional findings:
    - i) Underutilized spaces:
      - (1) Storage
      - (2) Informal gathering spaces
      - (3) Basement
      - (4) Break Room
      - (5) Veterans Office
      - (6) SHINE office space



## Needham CATH Space Utilization Plan #3480

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- (7) 2<sup>nd</sup> floor conference room
- (8) Game Room
- ii) Commercial Kitchen
  - (a) Costs
  - (b) Impact on Adjacent Spaces
  - (c) Impact Volunteer and Programming Opportunities
- iii) Hybrid Learning Capabilities: not all program rooms have tvs equipped with cameras.
- iv) Designing for the Future
  - (1) There are several large remote programs that may need to be accommodated in the future
  - (2) Spaces for Caregivers
  - (3) A Living Room Space
    - (a) The lobby was decked out like a living room. Staff wanted the space to be more efficient
    - (b) Lounge/Café Space from Falmouth. This type of space might be taken into consideration with the redesign of the kitchen.
  - (4) Future programming needs impact parking requirements
- v) For each of the issues noted above, there are administrative and architectural solutions.
- d) Additional Work to be Completed:
  - i) Review projected senior population demographic trends
  - ii) Review My Senior Center data from last year
  - iii) Engage with focus groups
  - iv) Speak with Steve and Lisa Cadima, fitness instructors
  - v) Review Commercial Kitchen Study
  - vi) Confirm staff counts
- 2) Observations and Preliminary Recommendations**
  - a) Parking
    - i) Parking is scarce during peak usage; generally, Tuesday and Thursday mornings
      - (1) Observed free spaces on X.X
      - (2) "" X.X
    - ii) Accessible parking is scarce
    - iii) Accessible parking is not close to the main entrance
    - iv) Accessible parking is not close to the main entrance
    - v) Van parking is limited
  - vi) We need to design parking for anticipated peak use in the **future**.





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## vii) Preliminary recommendations:

- (1) Incentive staff, in addition to patrons, to use alternative parking/commuting methods such as the "Starbucks parking lot"
- (2) Add additional van service throughout the day and/or weekend
- (3) Lease additional space from the MBTA lot
- (4) Convert drop-off space to accessible parking spaces. Not recommended. It is too close to the entrance and would be a stressful scenario.
- (5) Validate parking for staff to park at the MBTA lot and reimburse them. This provides flexibility and is less of a financial commitment than leasing. This would also allow the town to study the longterm needs/cost.
- (6) Provide second building entrance in closer to accessible parking spaces
- (7) New Rear Entrance. Most preferred.
- (8) New Side Entrance. Second most preferred. Not as visible. There would need to have changes to landscape to make this entrance more prominent, accessible.
- (9) Provide a minimum of 2 additional accessible spaces. Consider reserved space (for example for octogenarians) that is not fully accessible.
- (10) Questions:
  - (a) Will popular programming ever go back to in person?
  - (b) The meal delivery program will eventually transition to serve only those in need. That will both mean that van drivers are freed up to transport patrons and there will be more in person meals.
  - (c) Where will the generator go? It should take up 2 parking spots.
  - (d) Share planning decision with Pare
  - (e) Town administration indicated that purchasing additional spaces may not be possible but leasing spaces might be possible.
  - (f) Does the MBTA have any studies for future expansion to electric and charging stations for electric vehicles
  - (g) Outdated sign indicating MBTA parking is "numbered" spaces but there are no numbered spaces
  - (h) How many seniors come to the center by van daily? Specifically for the meals program?

## b) Fitness Room

- i) Observed 5-10 patrons using the fitness center equipment. Equipment in use was: bikes, elliptical machine, recumbent bike and treadmills.
- ii) UMass report notes that some equipment lacks required clear floor areas.
- iii) Preliminary Recommendations:
  - (1) Move the fitness room to the Game Room. This gains 300 sf and +/-6 piece of equipment. Least preferred. Town wants to retain the storage space, especially for storing voting machines. There is no natural light, windows. Price option out to show due diligence.
  - (2) Move the fitness room to the basement. This gains 250 sf and +/- 10 pieces of equipment



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- (3) UMass report suggested "borrowing" space from adjacent rooms and corridor. This is not recommended. Not preferred.
- iv) There is a very popular yoga program that they would need to find space for. BHA should look at how 40 yoga users fit in the large multipurpose room space.
- c) Office Space
  - i) The CATH has full time and part time staff, complicating office configurations.
  - ii) The CATH also has instructors and drivers who are not accounted for.
  - iii) It was preferred not to provide office space at the expense of program space.
  - iv) Acoustics between offices needed improvement
  - v) Preliminary Recommendations:
    - vi) On the first floor, consolidate offices and storage space into open office configuration. This is more efficient than individual offices.
    - vii) On the second floor, eliminate the wall between Annie's desk and the Veterans office to create an open office.
    - viii) Relocate conference room to first floor and relocate Friends' gift shop
    - ix) Eliminate Shine offices and use flexible space, such as the computer lab, 3 months of the year.
- d) Rooftop Deck
  - i) The deck is a large (2,000 sf) underutilized largely because it is exposed to the elements, noise from the commuter rail tracks
  - ii) Preliminary Recommendations:
    - (1) Create zones of use that subdivide the space into more intimate spaces with specific programs (this was recommended in the UMass report)
    - (2) Provide three-season space or green house
    - (3) Convert space into conditioned interior space. This option is not recommended.
  - iii) Look at the FAR implications of converting the deck into conditioned space
  - iv) Look at conservatory space off of the library
  - v) Is there a shade structure that could be removed in the winter time? Shade sails or a trellis or a roll-out awning with a center beam?
- e) Computer Lab
  - i) The computer lab is not used beyond a few months in the spring and fall for tax preparation and medicare enrollment, for about six months out of the year. The computer station in the library is used with greater frequency.
  - ii) Preliminary Recommendations:
    - (1) The UMass report recommended mobile computers.
    - (2) Convert hallway benches to computer stations
    - (3) Combine the computer room and program space into one larger program room
- f) Additional Comments/Thoughts:



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- a. Using the coat closet off of the lobby for storage for the large multipurpose room. Find another location for coats.
- b. Lactation Room
- c. Find original location for the roofdeck trellis
- d. Provide images for discussion with the seniors, of trellis
- e. For the presentation, make sure to solicit thoughts/comments. Stress that this process is reflective and reiterative.
- f. Create leave-behinds for CoA presentation
- g. For the user groups, "How can we improve the space to encourage you to come back?"





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## meeting notes

date: November 28, 2022

project name and number: Needham CATH Space Utilization Plan #3480

subject: Progress Meeting

present: Hank Haff, Director, Needham Building Design & Construction Department  
Tim McDonald, Director, Needham Health & Human Services

by: Rachel Young

### Meeting with Pool Group

Questions:  
Flag (Donated)– Hang in lobby?  
Use of Rosemary for more community activities like blood drives?  
Wellesley

To Do:  
Data from Aicha on myseniorcenter

9'7" X 5'5" pool table

Fitness room would need updated lighting

Cons:  
- Losing ping pong tables

\*Newton residents

- Adding more lounge furniture/tables?
- Should be moved?



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## meeting notes

date: December 16 and 23, 2022

project name and number: Needham CATH Space Utilization Plan #3480

subject: Progress Meeting

present: Hank Haff, Director, Needham Building Design & Construction Department  
Tim McDonald, Director, Needham Health & Human Services

by: Rachel Young

### Cost Estimate

Hank Haff had the following comments on the estimate:

1. The Option # columns on each page have a short description in addition to the Option Number.

For instance:

Fitness & Game Room

Option #1 – Fitness & Game rooms swap spaces

Option #2 – Game room moves to 2<sup>nd</sup> floor

Roof Deck:

Option #1 – Fitness Room Addition

Option #2 – Greenhouse Addition

Option #3- Trellis

Option #4- Shade Sail Structure

2. Delete the permit fees (they are not applicable on town projects.).
3. Pg 26 – Roof Deck Option #2- Greenhouse Addition – Fire protection will likely be required
4. Pg 28- Shade Sail- and estimated initial construction cost for the shade sail and cables should be included.
5. Pg 29- Division 8-Door buzzer and speaker is likely required at exterior door. ADA buttons and opening hardware will be needed on both the exterior and the interior vestibule doors. This is not broken out under doors & windows
6. Include soft costs (Management, Construction contingency, owner's contingency and FF&E)

### Commercial Kitchen

Hank Haff asked for a proposal from John Sousa at Crabtree McGrath for him to

1. Peer review of existing Socotec layout with recommended modifications & cost estimate
2. Full redrawing and layout with modifications to fit into the other café/vestibule options & cost estimate.

Current meal program:

Home meals: 2 meals (cold lunch and hot dinner) x 50 participants

CATH meals: 40-60 in-person hot lunches



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Future meal program:

The goal would be to enhance capacity of the meals program. Some senior centers that have meals programs have larger "catering" arms that allow the center to subsidize the meal program by providing food for other town departments.

The CATH, for example, could cater the high school football gatherings.

Preferred Options:

Roof Deck Option 4

The town does not want to pursue the office reconfigurations (see below).

Next Steps:

BH+A will explore the following:

"Innie" vestibule in the MPR or future café.

Locating the pool tables in the basement. (plan and rendering)

Convert the computer lab to shared program room space and move social workers to the offices downstairs.

PBC Meeting

Next meeting is scheduled for January 9.





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## meeting notes

date: January 13, January 27 and February 3, 2023

project name and number: Needham CATH Space Utilization Plan #3480

subject: Progress Meeting

present: Hank Haff, Director, Needham Building Design & Construction Department  
Tim McDonald, Director, Needham Health & Human Services  
Latanya Steele, Needham CATH Assistant Director of Programming  
Danielle Collins, Director of Nutrition Services  
Colleen

by: Rachel Young

### Date

#### To Do:

1. Get a better cost estimate on the commercial kitchen.
2. Reach out to John Sousa.
3. Do a layout of the computer room used as an open office.

#### Follow up with Latanya about:

1. Visiting Falmouth  
Office Use: Who uses the spaces when? What is the remote policy?

Time will speak with the Council on Aging (next Thursday) to get better direction on values.

### January 13

#### **Meeting with Latanya Steele, Needham CATH Assistant Director of Programming**

#### **Meeting with Colleen**

Latanya and Colleen were most in favor of the kitchen and expanding the fitness room.

Tim presented to the CoA on Thursday.

They liked the idea of converting the basement to a game room because you are adding space for the same cost as renovating.



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#### January 27

Socotec provided their feasibility study with PM&C estimate.

Tim McDonald has spoken with 3 senior centers and Danielle from the schools and the staffing levels and the associated costs seem acceptable

Falmouth is a smaller center with 2 part-time staff and volunteers. The Staff Cook, volunteers bus and do the dishes.

Falmouth's costs just cover food costs. The staffing costs are subsidized.

Is there an opportunity to charge other departments or community partners that use the CATH for meal events (like the high school) could pay for the CATH to cater these events?

Can card players go into the basement? They are part of a rotating league that goes to different centers. They use for examples

#### February 3

##### **Meeting with Danielle Collins, Director of Nutrition Services**

Danielle had the following advice:

1. Maybe just keep the reach-in fridges and then just have a walk-in freezer.
2. Combi ovens are highly recommended; they are even more valuable than the 6-burner range.
3. Could get by without the dishwasher.
4. Don't replace the cabinets if they are functional and can fit the new equipment.
5. Baker's rack is helpful for storage.

**Needham Council on Aging Board Meeting****October 13, 2022**

**Present:** Colleen Schaller, Chair; Helen Gregory, Penny Grossman, Sandra Prinn, Lianne Relich, Ed Cosgrove, Carol de Lemos, Kate Robey, Kathy Whitney, Sue Mullaney, Dan Goldberg, Ted Prorok, VFW representative

**COA:** Latanya Steele, Director

**Health and Human Services Director:** Timothy Muir McDonald

**BD & CD:** Hank Haff

**Consultant for CATH:** Rachel Parsons, RA Leed AP associate Bargman, Hendrie & Archetype Inc.

**Guests:** Carol Ditmor, Anne Brain, and Beverly Pavasaris, Friends of the Cath

**Other Guest:** Ann Cosgrove

**1. Meeting called to order by Ms. Schaller, Board Chair at 5:02 pm combination of in person and on Zoom**

**2. Nominating Committee**

Ms. DeLemos reported that the group had nominated Ms. Colleen Schaller as Chair for another term and Ms. Penny Grossman as Vice Chair.

Ms. Delemos made a motion to re-elect Ms. Schaller as Chair. Mr. Prorok seconded the motion. The motion passed unanimously by voice vote.

Ms. Delemos made a second motion to elect Ms. Grossman as vice chair. Ms. Mullaney seconded the motion. The motion passed unanimously by voice vote.

**3. CATH Space Study Discussion**

Mr. Haff introduced Ms. Young. Ms. Rachel Young noted she wants to use the meeting as a chance to receive input on the various ideas that her firm has designed as a part of the feasibility study. She noted there is a parallel study taking place on revamping the kitchen area. Ms. Young is open to suggestions. She presented a preliminary report that had already been shared with Mr. McDonald and Ms. Steele.

She noted the 2020 study used 2019 data. Ms. Young noted this is a reiterate process.

She noted that several needs are at the top of the list. These include:

- Expanding the fitness center
- Need for increased office space
- The roof deck is underutilized
- Computer lab underutilized
- Kitchen needs to be commercial especially if eventually the Traveling Meals program needs to be moved in house (which may be likely as the BEI Deaconess Needham hospital expands



and their meal preparation space decreases.) The need to increase space in other areas impacts on the separate kitchen expansion/study plan

- The opportunity for a multi-use café/lounge area-this could include café seating and a grab and go window similar to the Falmouth, MA senior center redesign.
- Reorganization of storage space
- Hybrid learning programming capabilities where the presenter or attendees are virtual
- Right sizing the car park which is currently at capacity
- Swapping the game room with the fitness room.
- The possibility of moving the fitness room to the basement.
- Making the roof deck a series of rooms or zones which fits in with the FRA zoning regulations. This could include walls and plantings to screen noise and provide a sense of place, soft furnishings, a moveable awning to provide shade over approximately one half of the deck which could be over the seating area. Also, a separate space for shuffleboard/pool table/ping pong area and a firepit.
- Office space expansion. This could involve moving offices to the first floor and programming to the second floor, making the current Veteran's office for 1 staff member into two while remaining mindful that the social service staff needs private offices for client meetings. Mr. McDonald noted that when the building came online in 2013 there was only one social service staff person, so the staff have grown to meet many social service needs but while programming has increased dramatically.
- Expanding the back parking lot with a substantial new entrance to accommodate handicapped patrons.

**A long and varied Board discussion occurred:**

This included options for “getting back” some of the underused MBTA parking post-pandemic.

The need for a ballet bar and more floor space in the fitness area as well as new flooring if the game room is switched with the fitness room. The floor space is needed to remove tripping hazards and to accommodate increased use with the new balance machine. The Board also noted they are happy to be one of the few senior centers with licensed fitness trainers on site.

Maintenance of the roof deck greenery and including seating and soft furnishings that can withstand winter weather.

The need to maintain the Gift Shop in the CATH as it provides an important source of programming funding.

The board feels natural light and easy access is important in the fitness room and wants to keep it on the first floor.

Plant and furnishing maintenance on the roof deck are serious issues with both the custodian and staff fully occupied elsewhere in the building.

Mr. McDonald noted that the next steps could include incremental changes over time to fit in with budget plans. He noted the Town's Capital plans are always several years out.

#### **Next Steps for Ms. Young's firm**

Focus groups with seniors October 18 and 20<sup>th</sup>  
 Reach out to MBTA with parking questions  
 Meetings with Ms. Steele and her staff  
 Review My Senior Center and transportation data  
 Identify preferred options with each user group  
 Review roof deck options with acoustic and structural consultants  
 Estimate costs associated with preferred options

#### **4. Aging Services Division Report Postponed until November.**

#### **5. Chairperson's Report Ms. Schaller**

##### **a. Approval of June 9, 2022, Minutes**

Mr. Goldberg made a motion to approve the June 9 Minutes. Ms. Grossman seconded. The minutes were unanimously approved by voice vote.

**September 8, 2022, Minutes** vote postponed until November.

#### **6. Old Business**

**Planning Board Meeting** - Ms. Schaller and Mr. Cosgrove attended the last meeting on behalf of the Board. Colleen noted they are meeting again on the 18th. The COA Board has no idea how they are leaning re: voting on the 100 West Street/former Avery site project but the vote is first on their agenda.

The Board briefly discussed the project.

The Board agreed they wished to write a letter concerning the project. **Mr. Goldberg made a motion for Ms. Schaller, Board Chair to write a letter noting the Council on Aging Board is opposed to granting a special permit for the 100 West Street project without the inclusion of independent living at that site as approved by Town meeting. Mr. Cosgrove seconded the motion. The motion passed unanimously. Ms. Schaller will send the letter prior to the October 18<sup>th</sup> meeting.**

#### **7. New Business**

**Ms. Schaller noted** that volunteers are still needed to deliver the Springwell meals from the CATH.

Ms. Schaller noted that the Needham Exchange Club wants to use the CATH to pack 125 lunches for the Veterans Association of Boston serving one of their homeless shelters. She noted that

## PERMANENT PUBLIC BUILDING COMMITTEE

## TOWN OF NEEDHAM

## MINUTES OF MEETING

|                        |  |                                                                                                                                   |                                                                                    |
|------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Date: October 25, 2022 |  | Time: 7:30 PM                                                                                                                     | Location: Zoom Cloud Meeting                                                       |
| <b>Attendance</b>      |  |                                                                                                                                   |                                                                                    |
| PPBC Members:          |  | Present: Stuart Chandler, Richard Creem, George Kent, Irwin Silverstein<br>Absent: Lynne Deninger, Roy Schifilliti, Gene Voloshin |                                                                                    |
| BDCD Staff:            |  | Hank Haff (Director)<br>Ken Sargent (Senior Project Manager)                                                                      |                                                                                    |
| User Representatives:  |  | Ed Olsen                                                                                                                          | Parks & Forestry Director, Ridge Hill, Rep.                                        |
|                        |  | Barry Dulong                                                                                                                      | Bldg Maintenance Director, Ridge Hill, RTU Replacement CATH, & Rep.                |
|                        |  | Michael Greis                                                                                                                     | School Committee, Emery Grover Rep.                                                |
|                        |  | Anne Gulati                                                                                                                       | School Finance Director, Emery Grover, Theater Sound & Light, RTU Replacement Rep. |
|                        |  | LeeAnn Sutton                                                                                                                     | Fine & Performing Arts Director, Sound & Light Rep.                                |
|                        |  | Tim McDonald                                                                                                                      | Director of Health & Human Services, CATH Rep.                                     |
| Other Attendees:       |  | Deborah Robinson                                                                                                                  | Bargmann Hendrie & Archetype                                                       |
|                        |  | Matt DiSalvo                                                                                                                      | GGD Consulting Engineers                                                           |
|                        |  | Rachel Young                                                                                                                      | Bargmann Hendrie & Archetype                                                       |
|                        |  | Amy Archer                                                                                                                        | PARE                                                                               |
| Minutes prepared by:   |  | Hank Haff                                                                                                                         | Director                                                                           |

This meeting was posted on the Town web site on October 20, 2022, as a:

**Hybrid/Virtual Meeting at the PSAB and on Zoom Cloud Meetings**

Meeting ID # 88414728107

<https://us02web.zoom.us/j/88414728107>

with the following instructions:

To view and participate remotely in this meeting on your computer, at the above date and time, go to [www.zoom.us](https://us02web.zoom.us/j/88414728107), click “Join a Meeting” and enter the Meeting ID: 884-1472-8107 Or join the meeting at link: <https://us02web.zoom.us/j/88414728107>

A. Approval of Minutes

The Committee reviewed the minutes from the October 11, 2022 PPBC meeting. Mr. Chandler made a motion that the Committee approve the minutes as presented. Mr. Silverstein seconded the motion. The motion was then voted upon and approved 4 yeas - 0 nays – 0 abstain.



**B. Ridge Hill Demolition**

Barry Dulong (DPW), Ed Olsen (Parks & Forest), Ken Sargent and Hank Haff (BDCD) attended the meeting remotely.

Mr. Sargent reported on the progress of the project. The kickoff meeting with S&R Corporation happened October 20<sup>th</sup>. They are applying for the demolition permit and filing for the DEP notification for the asbestos removal. In two weeks, demolition should start if all permits are obtained. The Town – Contractor Agreement contract documents are being processed.

Everything of value has been removed from the building. Some Items were delivered to the Needham Historical Society, Conservation Department removed old files, DPW removed remaining items from the garage. All remaining contents are part of the demolition.

Documents: Invoice, Updated budget

**C. Emery Grover Building / Hillside**

Michael Greis (School Committee), Anne Gulati (School Finance Director), Deborah Robinson (BH+A), Hank Haff and Ken Sargent (BDCD) attended the meeting remotely.

Mr. Chandler noted that Warrant Article #10 for supplemental funding of the Emery Grover Renovations project was approved at yesterday's Special Town Meeting. This provides \$2.725 Million in additional contingency funds. This enables the Town to proceed with the award of the contract to the low bidder, M. O'Connor Contracting, Inc. (MOCC). Mr. Haff will send the Notice of Award and draft contract tomorrow and schedule a kick-off meeting next week.

Because no elevator bids were received the BD&CD has solicited bids from four elevator contractors recommended by BH+A. The GCs all carried an estimated value of \$350,000 in their bids. Once the elevator re-bids are received on 11/3/22 the GC contract will be amended up or down by change order. If there is an increase in the cost of the elevator would be covered by the contingency. The current project budget has over \$600,000 in contingency remaining after the GC contract is awarded for \$15.747 Million which is sufficient to move the project forward now.

Mr. Sargent reported that the Hillside Renovation work is progressing well. Some long lead items for electrical and mechanical are expected by mid-November. Bid documents for the move are being prepared. IT is now settled in the cafeteria space. The production office will move in early December with other departments moving after 12/21/22. Some staff will work remotely during the move period.

Mr. Dulong reported that the boiler work is nearing completion. Boiler commissioning is anticipated in one to two weeks. Unit ventilators are being reassembled. The electrical upgrade is awaiting a disconnect switch, now required by Eversource, which should be received by mid-November.

Mr. Chandler made a motion that the Committee approve the following change order for two adds:

|                           |       |             |
|---------------------------|-------|-------------|
| J.J. Cardosi Construction | CO #4 | \$ 4,672.71 |
|---------------------------|-------|-------------|

Mr. Kent seconded the motion. The motion was then voted upon and approved unanimously - 6 yeas - 0 nays – 0 abstain.

Mr. Chandler made a motion that the Committee approve the following invoices for payment:

|                              |                                  |             |
|------------------------------|----------------------------------|-------------|
| Bargmann Hendrie & Archetype | September 2022 Services Hillside | \$ 9,686.25 |
|------------------------------|----------------------------------|-------------|

Mr. Greis seconded the motion. The motion was then voted upon and approved unanimously - 6 yeas - 0 nays – 0 abstain.

Mr. Chandler made a motion that the Committee approve the following invoice for payment:

|                    |                         |              |
|--------------------|-------------------------|--------------|
| Hill International | September 2022 Services | \$ 21,212.33 |
|--------------------|-------------------------|--------------|

Mr. Creem seconded the motion. The motion was then voted upon and approved unanimously - 6 yeas - 0 nays – 0 abstain.

Mr. Chandler made a motion that the Committee approve the following invoice for payment:

|                            |                      |             |
|----------------------------|----------------------|-------------|
| Wakefield Moving & Storage | IT move to cafeteria | \$ 9,740.00 |
|----------------------------|----------------------|-------------|

Mr. Creem seconded the motion. The motion was then voted upon and approved unanimously - 6 yeas - 0 nays – 0 abstain.

Documents: Invoices, CO4

#### D. Theater Sound & Light Study

Anne Gulati (School Finance Director), LeeAnn Sutton ( Fine & Performing Arts Director), Hank Haff (BDCD) attended the meeting.

Four firms submitted their qualifications on October 13<sup>th</sup>. They were Hewshott International LLC, Schuler Shook, Studio T+L LLC, and Theater Design Inc. Hewshott International LLC, Schuler Shook, and Studio T+L LLC were shortlisted for interviews that occurred earlier today. The subcommittee of Ms. Gulati, Ms. Sutton, and Mr. Haff ranked Hewshott first, Studio T+L second and Schuler Shook third.

Mr. Chandler moved that the contract be awarded to Hewshott International LLC. Mr. Creem seconded the motion. The motion was then voted upon and approved unanimously – 6 yeas - 0 nays – 0 abstain.

Documents: Ranking sheet

#### E. RTU Replacement at Broadmeadow and Eliot Schools

Anne Gulati (School Finance Director), Barry Dulong (DPW), Hank Haff (BDCD) and Matt DiSalvo (GGD) attended the meeting.

Mr. Haff distributed the Draft Report dated 10/14/22 to the committee last week. Mr. DiSalvo presented a slideshow overview of the key points in this report including:

- Assessment of the existing conditions of RTUs at both schools

- Energy Recovery RTUs will be required by the energy code in 2023
  - Larger Unit footprint & weight
  - Reduced energy usage
  - Reduced heating & cooling capacity required
- Studying air sourced heat pumps (ASHP)
  - Eliminate natural gas at the RTU – reduce carbon footprint.
  - Detailed review of electric infrastructure next
- Demand Control Ventilation
  - 5 of 9 AHU serve VAV duct systems
  - Opportunity for reduced energy use
- Repair recommendations by Architect
  - Some roof repairs needed to extend roof life for another decade
  - Adapter curbs for RTUs will be studied to install new larger units
  - Age of roof (20years) a concern for solar PV installation now
  - Roof size and orientation ideal for future installation after roof repair
  - MSBA accelerated repair program not eligible until roof is at least 25-years old
- Next Steps- Explore options, energy analysis, cost analysis- return in December 2022

Documents: Draft report, Overview slideshow

F. CATH Space Utilization Study

Tim McDonald (Health & Human Services), Barry Dulong (DPW), Hank Haff (BDCD), Rachel Young (BH+A) and Amy Archer (PARE) attended the meeting.

Ms. Young presented a slideshow on study to date which explored the following issues identified in the UMass 2020 report: 1) Parking & accessibility, 2) fitness space (too small), 3) office space expansion/ reorganization, 4) computer lab (low use), 5) roof deck (underutilized). 6) Kitchen expansion to commercial kitchen being studied by others. Interviews are being conducted with staff, user groups and a presentation of these issues and opportunities has been made to the Council on Aging (COA). Concept images are included in the presentation. Town Manager is opening discussions with the MBTA about parking since post-COVID ridership remains low. These opportunities will be explored in further detail and the construction costs will be estimated to enable the PPBC and CATH to develop a priority and phasing of any future projects.

Documents: slideshow

G. Adjournment

The meeting was adjourned at 9:45 PM.

The next PPBC meeting is scheduled for Monday, November 14, 2022, at 7:30 PM, as a Virtual Meeting on Zoom Cloud Meetings.

These minutes are intended to convey the content of the discussions at the Committee meeting. If no comments are received by the next meeting, they will go to file as part of the permanent Committee record.



other members are providing small home repairs to Needham seniors in their homes. The Exchange Club will have a small party for the volunteers including beer and wine after the homeless shelter lunchtime meal event. Mr. Cosgrove made a motion to approve the one-day rental of the CATH for purposes of the lunch packing volunteer event. Ms. Robey seconded. The vote was unanimous to allow the 1-day rental by voice vote. Mr. McDonald noted he will process the necessary paperwork for the license to be approved.

**8. Ms. Helen Gregory, Housing Subcommittee Report**

Ms. Gregory provided an update. The Housing group reviewed its draft recommendation on September 29<sup>th</sup>. On October 11<sup>th</sup>, the group presented the plan to the Select Board. The response was positive, and the group hopes for an implementation commitment. Their next meeting is October 27<sup>th</sup> followed by a community wide meeting for input on November 16<sup>th</sup>. The Committee will wrap up its work on December 8<sup>th</sup>.

**9. Mr. Ted Prorok, VFW Representative Report**

Mr. Prorok noted that Nancy Blanchard, the 5 town Veterans Representative has recently resigned.

Mr. McDonald noted it was a loss to the Town and he is working on a replacement. He noted it was a challenge with the Director deployed and the Deputy Director's resignation.

Mr. Prorok also noted that the singalong and Veterans breakfast in the November 2021 Compass was missing in the online November 2022 version. Ms. Schaller noted she will check with Ms. Kelley on the status of November veterans' events.

**10. Ms. Schaller requested a Motion to Adjourn**

**Ms. Gregory made a motion to adjourn; Ms. Robey seconded this motion. The board unanimously adjourned at 6:29 pm**

Respectfully Submitted,

Faith Crisley

Recording Secretary







# **APPENDIX C.1**

## **COST ESTIMATE - NOVEMBER 11, 2022**



## **Feasibility Estimate**

# **Needham Senior Center Kitchen Renovations**

**Needham, MA**

**PMC LLC**  
20 Downer Avenue, Suite 5  
Hingham  
MA 02043  
(ph) 781-740-8007

**Prepared for:**

**Socratic AE Consulting, LLC**  
November 11, 2022



**Needham Senior Center**  
Kitchen Renovations  
Needham, MA

11-Nov-22

**Feasibility Estimate****MAIN CONSTRUCTION COST SUMMARY**

|                                   | <b>Construction<br/>Start</b> | <b>\$/SF</b> | <b>Estimated Construction<br/>Cost</b> |
|-----------------------------------|-------------------------------|--------------|----------------------------------------|
|                                   | Summer 2023                   |              |                                        |
| <b>KITCHEN RENO</b>               |                               |              | \$665,631                              |
| <b>HAZ MAT Removal</b>            |                               |              | NIC                                    |
| <hr/>                             |                               |              |                                        |
| SUBTOTAL TRADE COSTS              |                               |              | \$665,631                              |
| Design and Estimating Contingency | 15.0%                         |              | \$99,845                               |
| Escalation                        | 5.3%                          |              | \$35,278                               |
| <hr/>                             |                               |              |                                        |
| SUBTOTAL                          |                               |              | \$800,754                              |
| General Conditions/GR's -         |                               |              | \$100,000                              |
| Insurances                        | 2.0%                          |              | \$18,015                               |
| Bond                              | 1.00%                         |              | \$8,008                                |
| Fee                               | 10.0%                         |              | \$92,678                               |
| Building Permit                   |                               |              | Assume by Owner                        |
| <b>TOTAL CONSTRUCTION COSTS</b>   |                               |              | <b>\$1,019,455</b>                     |
| <hr/>                             |                               |              |                                        |





**Needham Senior Center  
Kitchen Renovations  
Needham, MA**

**11-NOV-22**

### **Feasibility Estimate**

**This Feasibility estimate was produced from drawings prepared by Socotec AE Consulting dated October 11, 2022. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.**

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation assumes start dates indicated.

**Bidding conditions are expected to be negotiated, pricing to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufacturers.**

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

### **ITEMS NOT CONSIDERED IN THIS ESTIMATE**

**Items not included in this estimate are:**

- All professional fees and insurance**
- Building Permit costs**
- Land acquisition, feasibility, and financing costs**
- All Furnishings, Fixtures and Equipment**
- Items identified in the design as Not In Contract (NIC)**
- Items identified in the design as by others**
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)**
- Construction or occupancy phasing or off hours' work - except as noted in the estimate**



Needham Senior Center  
Kitchen Renovations  
Needham, MA

## Feasibility Estimate

|                                                |
|------------------------------------------------|
| <b>CONSTRUCTION COST SUMMARY IN CSI FORMAT</b> |
|------------------------------------------------|

|                                                     | <i>Subtotal</i> | <i>Total</i>    |
|-----------------------------------------------------|-----------------|-----------------|
| <b>DIV. 2 EXISTING CONDITIONS</b>                   |                 | <b>\$32,355</b> |
| 024100 Selective Demolition                         | \$32,355        |                 |
| 025000 Haz Mat Removal                              | N.I.C.          |                 |
| <b>DIV. 3 CONCRETE</b>                              |                 | <b>\$7,500</b>  |
| 031000 Concrete                                     | \$7,500         |                 |
| <b>DIV. 4 MASONRY</b>                               |                 | <b>\$0</b>      |
| 042000 Unit Masonry                                 | \$0             |                 |
| <b>DIV. 5 METALS</b>                                |                 | <b>\$2,823</b>  |
| 055000 Metal Fabrications                           | \$2,823         |                 |
| <b>DIV. 6 WOODS, PLASTICS &amp; COMPOSITES</b>      |                 | <b>\$4,705</b>  |
| 061000 Rough Carpentry                              | \$1,882         |                 |
| 062000 Finish Carpentry                             | \$2,823         |                 |
| <b>DIV. 7 THERMAL &amp; MOISTURE PROTECTION</b>     |                 | <b>\$941</b>    |
| 070001 Joint Sealants, Waterproofing & Dampproofing | \$941           |                 |
| <b>DIV. 8 DOORS &amp; WINDOWS</b>                   |                 | <b>\$0</b>      |
| 081110 Doors, Frames and Hardware                   | \$0             |                 |
| <b>DIV. 9 FINISHES</b>                              |                 | <b>\$76,817</b> |
| 090002 Tile                                         | \$0             |                 |
| 090003 Acoustical Tile                              | \$56,851        |                 |
| 090007 Painting                                     | \$6,084         |                 |
| 090003 Resilient Flooring                           | \$0             |                 |
| 096800 Carpet                                       | \$1,000         |                 |
| 092900 GWB Assemblies                               | \$12,882        |                 |
| <b>DIV. 10 SPECIALTIES</b>                          |                 | <b>\$29,720</b> |
| 101100 Visual Display Boards                        | \$0             |                 |
| 101400 Signage                                      | \$1,000         |                 |
| 102113 Toilet Compartments                          | \$0             |                 |
| 102600 Wall Protection                              | \$27,720        |                 |
| 102813 Toilet Accessories                           | \$0             |                 |
| 104400 Fire Protection Specialties                  | \$1,000         |                 |



Needham Senior Center  
Kitchen Renovations  
Needham, MA

Feasibility Estimate

**CONSTRUCTION COST SUMMARY IN CSI FORMAT**

|                                     | <i>Subtotal</i> | <i>Total</i>     |
|-------------------------------------|-----------------|------------------|
| <b>DIV. 11 EQUIPMENT</b>            |                 | <b>\$254,070</b> |
| 114000 Food Service Equipment       | \$254,070       |                  |
| <b>DIV. 12 FURNISHINGS</b>          |                 | <b>\$28,800</b>  |
| 123000 Casework                     | \$28,800        |                  |
| 126000 Window Treatments            | \$0             |                  |
| <b>DIV. 13 SPECIAL CONSTRUCTION</b> |                 | <b>\$0</b>       |
| 139000 Special Construction         | \$0             |                  |
| <b>DIV. 14 CONVEYING</b>            |                 | <b>\$0</b>       |
| 142000 Conveying                    | \$0             |                  |
| <b>DIV.21 FIRE PROTECTION</b>       |                 | <b>\$4,705</b>   |
| 210000 Fire Protection              | \$4,705         |                  |
| <b>DIV.22 PLUMBING</b>              |                 | <b>\$85,775</b>  |
| 220000 Plumbing                     | \$85,775        |                  |
| <b>DIV.23 HVAC</b>                  |                 | <b>\$64,018</b>  |
| 230000 HVAC                         | \$64,018        |                  |
| <b>DIV.26 ELECTRICAL</b>            |                 | <b>\$61,402</b>  |
| 260000 Electrical                   | \$61,402        |                  |
| <b>DIV.32 EARTHWORK</b>             |                 | <b>\$12,000</b>  |
| 320000 Earthwork                    | \$12,000        |                  |
| <b>SUBTOTAL DIRECT (TRADE) COST</b> |                 | <b>\$665,631</b> |





Needham Senior Center  
Kitchen Renovations  
Needham, MA

11-Nov-22

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

### Kitchen Renovation

#### Renovation area

Kitchen

941

**TOTAL**

**941 gsf**

#### **02 EXISTING CONDITIONS**

##### **021500 DEMOLITION**

Remove SOG for new below grade grease trap and floor drains

**300**

sf

15.00

4,500

Demo and remove ceramic tile floor finishes and bases

**941**

sf

6.00

5,646

Demo and remove ceiling (tile and gwb)

**941**

sf

3.00

2,823

Demo and remove door, frame and hardware

NIC

GWB from one side of ETR framing

**200**

lf

36.00

7,200

Miscellaneous interior demolition - counters, casework and accessories etc.

**941**

gsf

2.00

1,882

Remove cut and capped fixtures and fittings

**941**

gsf

4.00

3,764

Remove existing kitchen equipment

By owner

Temp partition

**30**

lf

108.00

3,240

Temp door

**1**

loc

800.00

800

Dust control & protection of existing to remain - allowance

**1**

ls

2,500.00

2,500

SUBTOTAL

32,355

##### **025000 HAZARDOUS COMPONENTS ABATEMENT**

HAZ MAT removal

By Owner

SUBTOTAL

-

#### **TOTAL EXISTING CONDITIONS**

**\$32,355**

#### **03 CONCRETE**

##### **031000 CONCRETE**

Replace slab on grade with new-

**300**

sf

25.00

7,500

SUBTOTAL

7,500

#### **TOTAL CONCRETE**

**\$7,500**

#### **04 MASONRY**

##### **042000 UNIT MASONRY**

SUBTOTAL

-

#### **TOTAL MASONRY**

**\$0**

#### **05 METALS**

##### **055000 METAL FABRICATIONS**

Misc. metals allowance

**941**

gsf

3.00

2,823

SUBTOTAL

2,823

#### **TOTAL METALS**

**\$2,823**

#### **06 WOOD & PLASTICS**

##### **061000 ROUGH CARPENTRY**

Misc. blocking allowance

**941**

gsf

2.00

1,882

SUBTOTAL

1,882

##### **064020 INTERIOR ARCHITECTURAL WOODWORK**

Allowance for miscellaneous finish carpentry patching

**941**

gsf

3.00

2,823



Needham Senior Center  
Kitchen Renovations  
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| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | ESTD<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|--------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|--------------|--------------|---------------|

### Kitchen Renovation

|     |                                                                       |       |     |          |        |          |                 |
|-----|-----------------------------------------------------------------------|-------|-----|----------|--------|----------|-----------------|
| 54  | SUBTOTAL                                                              |       |     |          |        | 2,823    |                 |
| 55  |                                                                       |       |     |          |        |          |                 |
| 56  | <b>TOTAL WOOD &amp; PLASTICS</b>                                      |       |     |          |        |          | <b>\$4,705</b>  |
| 57  |                                                                       |       |     |          |        |          |                 |
| 58  | <b>07 THERMAL &amp; MOISTURE PROTECTION</b>                           |       |     |          |        |          |                 |
| 59  |                                                                       |       |     |          |        |          |                 |
| 60  | <b>070001 WATERPROOFING, DAMPPROOFING &amp; CAULKING</b>              |       |     |          |        |          |                 |
| 61  | Sealant allowance                                                     | 941   | gsf | 1.00     | 941    |          |                 |
| 62  | SUBTOTAL                                                              |       |     |          |        | 941      |                 |
| 63  |                                                                       |       |     |          |        |          |                 |
| 64  | <b>TOTAL THERMAL AND MOISTURE PROTECTION</b>                          |       |     |          |        |          | <b>\$941</b>    |
| 65  |                                                                       |       |     |          |        |          |                 |
| 66  | <b>08 DOORS &amp; WINDOWS</b>                                         |       |     |          |        |          |                 |
| 67  |                                                                       |       |     |          |        |          |                 |
| 68  | <b>081100 DOORS, FRAMES AND HARDWARE</b>                              |       |     |          |        |          |                 |
| 69  | No work assumed                                                       |       |     |          |        |          |                 |
| 70  | SUBTOTAL                                                              |       |     |          |        | -        |                 |
| 71  |                                                                       |       |     |          |        |          |                 |
| 72  | <b>TOTAL DOORS AND WINDOWS</b>                                        |       |     |          |        |          | <b>\$0</b>      |
| 73  |                                                                       |       |     |          |        |          |                 |
| 74  | <b>09 FINISHES</b>                                                    |       |     |          |        |          |                 |
| 75  |                                                                       |       |     |          |        |          |                 |
| 76  | <b>0900002 TILE</b>                                                   |       |     |          |        |          |                 |
| 77  | Ceramic wall tile backsplash                                          | 84    | sf  | 40.00    | 3,360  |          |                 |
| 78  | Quarry floor tile                                                     | 941   | sf  | 38.00    | 35,758 |          |                 |
| 79  | Quarry floor tile base                                                | 201   | lf  | 18.00    | 3,618  |          |                 |
| 80  | SUBTOTAL                                                              |       |     |          |        | -        |                 |
| 81  |                                                                       |       |     |          |        |          |                 |
| 82  | <b>0900003 ACOUSTIC CEILING TILE</b>                                  |       |     |          |        |          |                 |
| 83  | Acoustic ceiling tile; washable                                       | 941   | sf  | 15.00    | 14,115 |          |                 |
| 84  | SUBTOTAL                                                              |       |     |          |        | 56,851   |                 |
| 85  |                                                                       |       |     |          |        |          |                 |
| 86  | <b>0900007 PAINTING AND COATING</b>                                   |       |     |          |        |          |                 |
| 87  | Prepare, prime and paint existing to remain walls and doors allowance | 1     | ls  | 1,500.00 | 1,500  |          |                 |
| 88  | New sheetrock walls                                                   | 764   | sf  | 6.00     | 4,584  |          |                 |
| 89  | SUBTOTAL                                                              |       |     |          |        | 6,084    |                 |
| 90  |                                                                       |       |     |          |        |          |                 |
| 91  | <b>096500 RESILIENT FLOORING</b>                                      |       |     |          |        |          |                 |
| 92  | No work assumed                                                       |       |     |          |        |          |                 |
| 93  | SUBTOTAL                                                              |       |     |          |        | -        |                 |
| 94  |                                                                       |       |     |          |        |          |                 |
| 95  | <b>096800 CARPET</b>                                                  |       |     |          |        |          |                 |
| 96  | Allowance to patch and repair assumed carpet at dinning               | 1     | ls  | 1,000.00 | 1,000  |          |                 |
| 97  | SUBTOTAL                                                              |       |     |          |        | 1,000    |                 |
| 98  |                                                                       |       |     |          |        |          |                 |
| 99  | <b>092900 GYPSUM BOARD ASSEMBLIES</b>                                 |       |     |          |        |          |                 |
| 100 | Apply new MR GWB to existing studs                                    | 1,800 | sf  | 5.00     | 9,000  |          |                 |
| 101 | Allowance to patch ETR partitions disturbed by new MEP work           | 941   | gsf | 2.00     | 1,882  |          |                 |
| 102 | GWB ceilings and soffits allowance                                    | 1     | ls  | 2,000.00 | 2,000  |          |                 |
| 103 | SUBTOTAL                                                              |       |     |          |        | 12,882   |                 |
| 104 |                                                                       |       |     |          |        |          |                 |
| 105 | <b>TOTAL FINISHES</b>                                                 |       |     |          |        |          | <b>\$76,817</b> |
| 106 |                                                                       |       |     |          |        |          |                 |
| 107 | <b>10 - SPECIALTIES</b>                                               |       |     |          |        |          |                 |
| 108 |                                                                       |       |     |          |        |          |                 |
| 109 | <b>101100 VISUAL DISPLAY SURFACES</b>                                 |       |     |          |        | No scope |                 |
| 110 | SUBTOTAL                                                              |       |     |          |        | -        |                 |
| 111 |                                                                       |       |     |          |        |          |                 |



Needham Senior Center  
Kitchen Renovations  
Needham, MA

11-Nov-22

| CSI<br>CODE               | DESCRIPTION                                                                             | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST    |
|---------------------------|-----------------------------------------------------------------------------------------|-----|------|--------------|---------------|--------------|------------------|
| <b>Kitchen Renovation</b> |                                                                                         |     |      |              |               |              |                  |
| 112                       | <b>101400 SIGNAGE</b>                                                                   |     |      |              |               |              |                  |
| 113                       | Signage and graphics allowance                                                          | 1   | ls   | 1,000.00     | 1,000         |              |                  |
| 114                       | SUBTOTAL                                                                                |     |      |              |               | 1,000        |                  |
| 115                       |                                                                                         |     |      |              |               |              |                  |
| 116                       | <b>102110 TOILET COMPARTMENTS</b>                                                       |     |      |              |               |              |                  |
| 117                       | SUBTOTAL                                                                                |     |      |              |               | -            |                  |
| 118                       |                                                                                         |     |      |              |               |              |                  |
| 119                       | <b>102600 WALL Protection</b>                                                           |     |      |              |               |              |                  |
| 120                       | Stainless steel wall panel (8' high)                                                    | 256 | sf   | 50.00        | 12,800        |              |                  |
| 121                       | FRP wall panel (8' high)                                                                | 696 | sf   | 20.00        | 13,920        |              |                  |
| 122                       | Allowance for wall protection                                                           | 1   | ls   | 1,000.00     | 1,000         |              |                  |
| 123                       | SUBTOTAL                                                                                |     |      |              |               | 27,720       |                  |
| 124                       |                                                                                         |     |      |              |               |              |                  |
| 125                       | <b>102800 TOILET ACCESSORIES</b>                                                        |     |      |              |               |              |                  |
| 126                       | No work assumed                                                                         |     |      |              |               |              |                  |
| 127                       | SUBTOTAL                                                                                |     |      |              |               | -            |                  |
| 128                       |                                                                                         |     |      |              |               |              |                  |
| 129                       | <b>104400 FIRE PROTECTION SPECIALTIES</b>                                               |     |      |              |               |              |                  |
| 130                       | Fire extinguisher cabinets                                                              | 1   | ls   | 1,000.00     | 1,000         |              |                  |
| 131                       | SUBTOTAL                                                                                |     |      |              |               | 1,000        |                  |
| 132                       |                                                                                         |     |      |              |               |              |                  |
| 133                       | <b>TOTAL - SPECIALTIES</b>                                                              |     |      |              |               |              | <b>\$29,720</b>  |
| 134                       |                                                                                         |     |      |              |               |              |                  |
| 135                       | <b>11 - EQUIPMENT</b>                                                                   |     |      |              |               |              |                  |
| 136                       |                                                                                         |     |      |              |               |              |                  |
| 137                       | <b>114000 FOOD SEWRVICE EQUIP.</b>                                                      |     |      |              |               |              |                  |
| 138                       | Food service equipment budget per Colburn Guyette report dated 8-12-22                  | 941 | sf   | 270.00       | 254,070       |              |                  |
| 139                       | SUBTOTAL                                                                                |     |      |              |               | 254,070      |                  |
| 140                       |                                                                                         |     |      |              |               |              |                  |
| 141                       | <b>TOTAL - EQUIPMENT</b>                                                                |     |      |              |               |              | <b>\$254,070</b> |
| 142                       |                                                                                         |     |      |              |               |              |                  |
| 143                       | <b>12 - FURNISHINGS</b>                                                                 |     |      |              |               |              |                  |
| 144                       |                                                                                         |     |      |              |               |              |                  |
| 145                       | <b>123000 CASEWORK</b>                                                                  |     |      |              |               |              |                  |
| 146                       | Pickup, base and counter                                                                | 15  | lf   | 550.00       | 8,250         |              |                  |
| 147                       | Prep cabinet, base and counter                                                          | 11  | lf   | 550.00       | 6,050         |              |                  |
| 148                       | Prep upper shelf                                                                        | 11  | lf   | 350.00       | 3,850         |              |                  |
| 149                       | Serving cabinet, base and counter                                                       | 14  | lf   | 550.00       | 7,700         |              |                  |
| 150                       | Serving upper shelf                                                                     | 5   | lf   | 350.00       | 1,750         |              |                  |
| 151                       | Misc. casework at serve window                                                          | 6   | lf   | 200.00       | 1,200         |              |                  |
| 152                       | SUBTOTAL                                                                                |     |      |              |               | 28,800       |                  |
| 153                       |                                                                                         |     |      |              |               |              |                  |
| 154                       | <b>126000 WINDOW TREATMENTS</b>                                                         |     |      |              |               |              |                  |
| 155                       | SUBTOTAL                                                                                |     |      |              |               | -            |                  |
| 156                       |                                                                                         |     |      |              |               |              |                  |
| 157                       | <b>TOTAL - FURNISHINGS</b>                                                              |     |      |              |               |              | <b>\$28,800</b>  |
| 158                       |                                                                                         |     |      |              |               |              |                  |
| 159                       | <b>21 - FIRE PROTECTION</b>                                                             |     |      |              |               |              |                  |
| 160                       |                                                                                         |     |      |              |               |              |                  |
| 161                       | <b>210000 FIRE PROTECTION</b>                                                           |     |      |              |               |              |                  |
| 162                       | Remove and reinstall branch piping and sprinkler heads as required for renovated spaces | 941 | gsf  | 5.00         | 4,705         |              |                  |
| 163                       | SUBTOTAL                                                                                |     |      |              |               | 4,705        |                  |
| 164                       |                                                                                         |     |      |              |               |              |                  |
| 165                       | <b>TOTAL - FIRE PROTECTION</b>                                                          |     |      |              |               |              | <b>\$4,705</b>   |





Needham Senior Center  
Kitchen Renovations  
Needham, MA

11-Nov-22

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

### Kitchen Renovation

#### 22 - PLUMBING

##### 220000 PLUMBING

##### Plumbing Fixtures

Connect to new kitchen equipment

25

ea

800.00

20,000

Replace Gas Shutoff /Ansul System

1

ea

BY OWNER

Floor drains

4

ea

1,200.00

4,800

##### Domestic Water Piping

Extend or repair fixture rough-in piping

25

ea

250.00

6,250

##### Pipe Insulation

Pipe insulation or replace, as required

25

ea

75.00

1,875

##### Sanitary Waste And Vent Pipe

New sanitary underground pipe

80

lf

130.00

10,400

Extend fixture rough-in piping at fixtures

30

ea

300.00

9,000

Grease tank and pump (50 gmp), recessed

1

ls

15,000.00

15,000

Connect to exiting sanitary system, underground

1

loc

800.00

800

Clean existing sanity pipe allowance

1

ls

4,500.00

4,500

##### Miscellaneous

Coordination & management

1

ls

10,000.00

10,000

Coring, sleeves & fire stopping

1

ls

1,500.00

1,500

Testing and sterilization

1

ls

600.00

600

Fees & permits

1

ls

1,050.00

1,050

SUBTOTAL

85,775

#### TOTAL - PLUMBING

\$85,775

#### 23 HVAC

##### 230000 HVAC, GENERALLY

##### Equipment

VRF Heat Pump

1

ea

7,500.00

7,500

VRF Branch Controller

1

ea

4,500.00

4,500

VRF 4-Way Cassette w/ Grill

2

ea

2,800.00

5,600

Kitchen Exhaust Fan KEF-1

1

ea

6,500.00

6,500

Kitchen Makeup Air Fan, MAU-1

1

ea

6,500.00

6,500

##### Sheet metal & Accessories

Grease Duct, Welded

80

lf

30.00

2,400

Insulation, Fyre Wrap

80

lf

8.00

640

##### HVAC Piping

##### Refrigerant Piping

Refrigerant Piping with inline components

240

ea

35.00

8,400

##### Condensate Drain Piping

Copper pipe type L with fittings & hangers

2

ea

700.00

1,400

##### Piping Insulation

Piping insulation, Refrigerant

240

lf

13.00

3,120

##### Temperature Controls (DDC)

Provide and connect new VRF controls to BMS

941

sf

4.50

4,235

##### Balancing

System testing & balancing

941

sf

3.00

2,823

##### Miscellaneous

Coordination & management

1

ls

8,000.00

8,000

Coring, sleeves & fire stopping

1

ls

1,000.00

1,000

Testing and sterilization

1

ls

600.00

600

Fees & permits

1

ls

800.00

800

SUBTOTAL

64,018



Needham Senior Center  
Kitchen Renovations  
Needham, MA

11-Nov-22

| CSI<br>CODE               | DESCRIPTION                                                          | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST   |
|---------------------------|----------------------------------------------------------------------|-----|------|--------------|---------------|--------------|-----------------|
| <b>Kitchen Renovation</b> |                                                                      |     |      |              |               |              |                 |
| 223                       | <b>TOTAL, HVAC</b>                                                   |     |      |              |               |              | <b>\$64,018</b> |
| 224                       |                                                                      |     |      |              |               |              |                 |
| 225                       | <b>26 ELECTRICAL</b>                                                 |     |      |              |               |              |                 |
| 226                       |                                                                      |     |      |              |               |              |                 |
| 227                       | Power:                                                               |     |      |              |               |              |                 |
| 228                       | Modify and make connections at existing gear and distribution        | 1   | ls   | 5,000.00     | 5,000         |              |                 |
| 229                       |                                                                      |     |      |              |               |              |                 |
| 230                       | Equipment Wiring:                                                    |     |      |              |               |              |                 |
| 231                       | MAU feed and connections                                             | 1   | ea   | 4,500.00     | 4,500         |              |                 |
| 232                       | VRF/Heat pump feed and connections                                   | 1   | ea   | 4,500.00     | 4,500         |              |                 |
| 233                       | VRF/Cassette feed and connections                                    | 2   | ea   | 1,200.00     | 2,400         |              |                 |
| 234                       | DDC feed and connections                                             | 1   | ea   | 500.00       | 500           |              |                 |
| 235                       |                                                                      |     |      |              |               |              |                 |
| 236                       | Kitchen equipment Wiring:                                            |     |      |              |               |              |                 |
| 237                       | Exhaust fan feed and connection                                      | 1   | ea   | 1,500.00     | 1,500         |              |                 |
| 238                       | Combi oven (Gas)                                                     | 1   | ea   | 1,000.00     | 1,000         |              |                 |
| 239                       | Dishwasher feed and connection                                       | 2   | ea   | 2,500.00     | 5,000         |              |                 |
| 240                       | 20A feed and connections                                             | 7   | ea   | 1,000.00     | 7,000         |              |                 |
| 241                       |                                                                      |     |      |              |               |              |                 |
| 242                       | Lighting:                                                            |     |      |              |               |              |                 |
| 243                       | New Kitchen lighting, installation and circuitry                     | 941 | sf   | 12.00        | 11,292        |              |                 |
| 244                       | Lighting controls                                                    | 941 | sf   | 2.00         | 1,882         |              |                 |
| 245                       | Branch devices and circuitry not depicted                            | 941 | sf   | 8.00         | 7,528         |              |                 |
| 246                       |                                                                      |     |      |              |               |              |                 |
| 247                       | Fire Alarm:                                                          |     |      |              |               |              |                 |
| 248                       | Allow for modifications to existing FACP and testing                 | 1   | ls   | 2,500.00     | 2,500         |              |                 |
| 249                       | Devices, modules and cabling                                         | 1   | ls   | 2,500.00     | 2,500         |              |                 |
| 250                       |                                                                      |     |      |              |               |              |                 |
| 251                       | Telecommunications (assumes ETR)                                     |     |      |              | ETR           |              |                 |
| 252                       | Security system (assumes ETR)                                        |     |      |              | ETR           |              |                 |
| 253                       |                                                                      |     |      |              |               |              |                 |
| 254                       | Miscellaneous:                                                       |     |      |              |               |              |                 |
| 255                       | Demo and make safe                                                   | 1   | ls   | 3,500.00     | 3,500         |              |                 |
| 256                       | Fees and permits                                                     | 1   | ls   | 800.00       | 800           |              |                 |
| 257                       | SUBTOTAL                                                             |     |      |              |               | 61,402       |                 |
| 258                       |                                                                      |     |      |              |               |              |                 |
| 259                       | <b>TOTAL ELECTRICAL</b>                                              |     |      |              |               |              | <b>\$61,402</b> |
| 260                       |                                                                      |     |      |              |               |              |                 |
| 261                       | <b>32 - EARTHWORK</b>                                                |     |      |              |               |              |                 |
| 262                       |                                                                      |     |      |              |               |              |                 |
| 263                       | <b>320000 EARTHWORK</b>                                              |     |      |              |               |              |                 |
| 264                       | Allowance to remove and reinstall soils for new grease trap          | 1   | ls   | 4,000.00     | 4,000         |              |                 |
| 265                       | Allowance for E&B at new sanitary                                    | 60  | lf   | 50.00        | 3,000         |              |                 |
| 266                       | Allowance for misc. disposal, dewatering, bedding and fill materials | 1   | ls   | 5,000.00     | 5,000         |              |                 |
| 267                       | SUBTOTAL                                                             |     |      |              |               | 12,000       |                 |
| 268                       |                                                                      |     |      |              |               |              |                 |
| 269                       | <b>TOTAL - EARTHWORK</b>                                             |     |      |              |               |              | <b>12,000</b>   |
| 270                       |                                                                      |     |      |              |               |              |                 |





## **APPENDIX C.2**

### **COST ESTIMATE - DECEMBER 9, 2022**



## **Schematic Design Estimate**

# **Needham Center at the Heights** **Space Utilization Study #3480**

Needham, MA

**PM&C LLC**  
20 Downer Ave, Suite 5  
Hingham, MA 02043  
(T) 781-740-8007  
(F) 781-740-1012

Prepared for:

**Bargmann Hendrie + Archetype, Inc.**

December 9, 2022



**Needham Center at the Heights**  
 Space Utilization Study #3480  
 Needham, MA

9-Dec-22

**Schematic Design Estimate**

**Estimated  
Construction Cost**

**PROJECT AREA TOTALS - includes mark-ups**
**Fitness Room and Game Room**

|          |           |
|----------|-----------|
| Option 1 | \$165,344 |
| Option 2 | \$380,767 |

**Roof Deck**

|          |             |
|----------|-------------|
| Option 1 | \$1,165,902 |
| Option 2 | \$175,873   |
| Option 3 | \$169,252   |
| Option 4 | \$30,076    |

**Vestibule**

\$163,163

**Lactation and Break Room**

|          |           |
|----------|-----------|
| Option 1 | \$155,314 |
| Option 2 | \$84,080  |

**Office Reconfiguration**

|          |           |
|----------|-----------|
| Option 1 | \$87,282  |
| Option 2 | \$215,006 |
| Option 3 | \$18,838  |



**Needham Center at the Heights**

Space Utilization Study #3480

Needham, MA

9-Dec-22

**Schematic Design Estimate**

This Schematic Design document cost estimate was produced from drawings, narratives and other documentation prepared by Bargmann Hendrie + Archetype, Inc. and their design team dated November 23rd, 2022. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractors overhead, fee and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufacturers.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

**ITEMS NOT CONSIDERED IN THIS ESTIMATE**

Items not included in this estimate are:

- Land acquisition, feasibility, and financing costs
- All professional fees and insurance
- Site or existing conditions surveys investigations costs, including to determine subsoil conditions
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items as indicated in the estimate
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction contingency
- Contaminated soils removal



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

| <b>CONSTRUCTION COST SUMMARY IN CSI FORMAT</b>  |                 |                 |                 |                  |
|-------------------------------------------------|-----------------|-----------------|-----------------|------------------|
|                                                 | <b>OPTION 1</b> |                 | <b>OPTION 2</b> |                  |
|                                                 | <i>Subtotal</i> | <i>Total</i>    | <i>Subtotal</i> | <i>Total</i>     |
| <b>FITNESS ROOM AND GAME ROOM</b>               |                 |                 |                 |                  |
| <b>DIV. 2 EXISTING CONDITIONS</b>               |                 | <b>\$13,710</b> |                 | <b>\$29,615</b>  |
| 024100 Demolition                               | \$13,710        |                 | \$29,615        |                  |
| 013280 Haz-Mat Abatement                        | \$0             |                 | \$0             |                  |
| <b>DIV. 3 CONCRETE</b>                          |                 | <b>\$5,615</b>  |                 | <b>\$7,916</b>   |
| 033000 Cast In Place Concrete                   | \$5,615         |                 | \$7,916         |                  |
| <b>DIV. 4 MASONRY</b>                           |                 | <b>\$0</b>      |                 | <b>\$0</b>       |
| 044000 Masonry                                  | \$0             |                 | \$0             |                  |
| <b>DIV. 5 METALS</b>                            |                 | <b>\$2,500</b>  |                 | <b>\$2,500</b>   |
| 050001 Metal Fabrications                       | \$2,500         |                 | \$2,500         |                  |
| 051200 Structural Steel Framing                 | \$0             |                 | \$0             |                  |
| 053100 Steel Decking                            | \$0             |                 | \$0             |                  |
| <b>DIV. 6 WOODS, PLASTICS &amp; COMPOSITES</b>  |                 | <b>\$1,500</b>  |                 | <b>\$2,500</b>   |
| 061000 Rough Carpentry                          | \$1,500         |                 | \$2,500         |                  |
| 064000 Architectural Woodwork                   | \$0             |                 | \$0             |                  |
| <b>DIV. 7 THERMAL &amp; MOISTURE PROTECTION</b> |                 | <b>\$500</b>    |                 | <b>\$1,250</b>   |
| 070001 Waterproofing/Dampproofing/Caulking      | \$500           |                 | \$500           |                  |
| 070002 Roofing & Flashing                       | \$0             |                 | \$0             |                  |
| 072100 Thermal Insulation                       | \$0             |                 | \$0             |                  |
| 072400 Exterior Gypsum/Stucco Finishes          | \$0             |                 | \$0             |                  |
| 074210 Metal Wall Panels                        | \$0             |                 | \$0             |                  |
| 074690 Siding                                   | \$0             |                 | \$750           |                  |
| 077200 Roof Specialties                         | \$0             |                 | \$0             |                  |
| 078100 Applied Fireproofing                     | \$0             |                 | \$0             |                  |
| 078400 Firestopping                             | \$0             |                 | \$0             |                  |
| 079513 Construction & Expansion Joints          | \$0             |                 | \$0             |                  |
| <b>DIV. 8 DOORS &amp; WINDOWS</b>               |                 | <b>\$6,000</b>  |                 | <b>\$22,900</b>  |
| 084002 Glass & Glazing                          | \$6,000         |                 | \$7,700         |                  |
| 081113 Doors and Frames                         | \$0             |                 | \$8,700         |                  |
| 083100 Access Doors and Panels                  | \$0             |                 | \$0             |                  |
| 083323 Overhead Coiling Doors                   | \$0             |                 | \$6,500         |                  |
| 083400 Specialty Doors                          | \$0             |                 | \$0             |                  |
| 087100 Door Hardware                            | \$0             |                 | \$0             |                  |
| 089000 Louvers and Vents                        | \$0             |                 | \$0             |                  |
| <b>DIV. 9 FINISHES</b>                          |                 | <b>\$43,875</b> |                 | <b>\$102,673</b> |
| 090000 General Finishes                         | \$0             |                 | \$0             |                  |
| 090002 Tile                                     | \$0             |                 | \$11,120        |                  |
| 090003 Acoustical Ceilings                      | \$1,500         |                 | \$21,008        |                  |
| 090005 Resilient Flooring                       | \$33,825        |                 | \$35,640        |                  |
| 090009 Painting                                 | \$5,700         |                 | \$8,988         |                  |
| 092900 GWB, Lath and Plastering                 | \$2,850         |                 | \$19,807        |                  |
| 096400 Wood Flooring                            | \$0             |                 | \$0             |                  |
| 096460 Wood Athletic Flooring                   | \$0             |                 | \$0             |                  |
| 096766 Fluid Applied Flooring                   | \$0             |                 | \$0             |                  |
| 096800 Carpet                                   | \$0             |                 | \$6,110         |                  |
| 097200 Wallcoverings/FRP                        | \$0             |                 | \$0             |                  |
| 098414 Acoustic Panels                          | \$0             |                 | \$0             |                  |
| <b>DIV. 10 SPECIALTIES</b>                      |                 | <b>\$0</b>      |                 | <b>\$25,000</b>  |
| 100000 Miscellaneous Specialties                | \$0             |                 | \$0             |                  |
| 101100 Markerboards                             | \$0             |                 | \$0             |                  |
| 101200 Display Cases                            | \$0             |                 | \$10,000        |                  |
| 101400 Signage                                  | \$0             |                 | \$0             |                  |
| 102113 Toilet Compartments                      | \$0             |                 | \$0             |                  |



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

| <b>CONSTRUCTION COST SUMMARY IN CSI FORMAT</b> |                 |                  |                 |                  |
|------------------------------------------------|-----------------|------------------|-----------------|------------------|
|                                                | <b>OPTION 1</b> |                  | <b>OPTION 2</b> |                  |
|                                                | <i>Subtotal</i> | <i>Total</i>     | <i>Subtotal</i> | <i>Total</i>     |
| <b>FITNESS ROOM AND GAME ROOM</b>              |                 |                  |                 |                  |
| 102228 Operable Partition                      | \$0             |                  | \$0             |                  |
| 102813 Toilet Accessories                      | \$0             |                  | \$0             |                  |
| 103000 Gas Fireplaces                          | \$0             |                  | \$15,000        |                  |
| 104400 Safety Specialties                      | \$0             |                  | \$0             |                  |
| 105113 Metal Lockers                           | \$0             |                  | \$0             |                  |
| <b>DIV. 11 EQUIPMENT</b>                       |                 | <b>\$0</b>       |                 | <b>\$0</b>       |
| 110000 Miscellaneous Equipment                 | \$0             |                  | \$0             |                  |
| 113100 Appliances                              | \$0             |                  | \$0             |                  |
| 114000 Foodservice Equipment                   | \$0             |                  | \$0             |                  |
| 115213 Projection Screens                      | \$0             |                  | \$0             |                  |
| 116623 Athletic Equipment                      | \$0             |                  | \$0             |                  |
| <b>DIV. 12 FURNISHINGS</b>                     |                 | <b>\$0</b>       |                 | <b>\$0</b>       |
| 120000 Miscellaneous Furnishings               | \$0             |                  | \$0             |                  |
| 122400 Window Shades                           | \$0             |                  | \$0             |                  |
| 124813 Entrance Floor Mats and Frames          | \$0             |                  | \$0             |                  |
| <b>DIV. 13 SPECIAL CONSTRUCTION</b>            |                 | <b>\$0</b>       |                 | <b>\$0</b>       |
| 130000 Greenhouses                             | \$0             |                  | \$0             |                  |
| 130000 Trellis                                 | \$0             |                  | \$0             |                  |
| 130000 Shade Sail                              | \$0             |                  | \$0             |                  |
| <b>DIV. 14 CONVEYING SYSTEMS</b>               |                 | <b>\$0</b>       |                 | <b>\$0</b>       |
| 140000 Elevators                               | \$0             |                  | \$0             |                  |
| <b>DIV. 21 FIRE SUPPRESSION</b>                |                 | <b>\$0</b>       |                 | <b>\$3,500</b>   |
| 210000 Fire Suppression                        | \$0             |                  | \$3,500         |                  |
| <b>DIV. 22 PLUMBING</b>                        |                 | <b>\$0</b>       |                 | <b>\$2,500</b>   |
| 220000 Plumbing                                | \$0             |                  | \$2,500         |                  |
| <b>DIV. 23 HVAC</b>                            |                 | <b>\$18,700</b>  |                 | <b>\$18,700</b>  |
| 230000 HVAC                                    | \$18,700        |                  | \$18,700        |                  |
| <b>DIV. 26 ELECTRICAL</b>                      |                 | <b>\$12,050</b>  |                 | <b>\$21,481</b>  |
| 260000 Electrical                              | \$12,050        |                  | \$21,481        |                  |
| <b>DIV. 31 EARTHWORK</b>                       |                 | <b>\$0</b>       |                 | <b>\$0</b>       |
| 310000 Earthwork                               | \$0             |                  | \$0             |                  |
| <b>DIV. 32 EXTERIOR IMPROVEMENTS</b>           |                 | <b>\$0</b>       |                 | <b>\$0</b>       |
| 323100 Site Improvements                       | \$0             |                  | \$0             |                  |
| <b>SUBTOTAL DIRECT (TRADE) COST</b>            |                 | <b>\$104,450</b> |                 | <b>\$240,535</b> |

|                                |       |                  |                  |
|--------------------------------|-------|------------------|------------------|
| ESCALATION                     | 6.0%  | \$6,267          | \$14,432         |
| DESIGN AND PRICING CONTINGENCY | 10.0% | \$10,445         | \$24,054         |
| <b>SUB-TOTAL</b>               |       | <b>\$121,162</b> | <b>\$279,021</b> |
| GENERAL CONDITIONS             | 12.5% | \$15,145         | \$34,878         |
| GENERAL REQUIREMENTS           | 3.5%  | \$4,241          | \$9,766          |
| PHASING PREMIUM                | 5.0%  | \$6,058          | \$13,951         |
| BONDS                          | 0.75% | \$909            | \$2,093          |
| INSURANCE                      | 1.40% | \$1,696          | \$3,906          |
| PERMIT - \$10.00 per \$1,000   |       | \$1,212          | \$2,790          |
| OVERHEAD + PROFIT              | 10.0% | \$14,921         | \$34,362         |





Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

| <i><b>CONSTRUCTION COST SUMMARY IN CSI FORMAT</b></i> |              |                        |                  |
|-------------------------------------------------------|--------------|------------------------|------------------|
| <i><b>OPTION 1</b></i>                                |              | <i><b>OPTION 2</b></i> |                  |
| <i>Subtotal</i>                                       | <i>Total</i> | <i>Subtotal</i>        | <i>Total</i>     |
| <b>FITNESS ROOM AND GAME ROOM</b>                     |              |                        |                  |
| <b><i>TOTAL OF ALL CONSTRUCTION</i></b>               |              | <b>\$165,344</b>       | <b>\$380,767</b> |

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

2,280

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## FITNESS ROOM AND GAME ROOM - OPTION 1

Fitness Room  
Game Room

1,300  
980

## TOTAL GROSS FLOOR AREA (GFA)

2,280 sf

## 02 - EXISTING CONDITIONS

## 024000 DEMOLITION

Interior Demolition

Remove/Dispose existing finishes

2,280

sf

4.50

10,260

Score/Trench for electrical/floor boxes

1,300

sf

1.50

1,950

Protection/Temp partitions to isolate space

1

ls

1,500.00

1,500

SUBTOTAL

13,710

## TOTAL - MASONRY

\$13,710

## 03 - CONCRETE

## 033000 CONCRETE

Interior Construction

Floor patching/Prep - Fitness Room

1,300

sf

3.00

3,900

Minor floor prep - Game Room

980

sf

1.75

1,715

SUBTOTAL

5,615

## TOTAL - CONCRETE

\$5,615

## 05 - METALS

## 050001 METAL FABRICATIONS

Interior Construction

Support for MEP equipment

1

ls

2,500.00

2,500

SUBTOTAL

2,500

## TOTAL - METALS

\$2,500

## 06 - WOOD, PLASTICS AND COMPOSITES

## 061000 ROUGH CARPENTRY

Interior Construction

Misc carpentry/Blocking

1

ls

1,500.00

1,500

SUBTOTAL

1,500

## 064100 ARCHITECTURAL WOODWORK

Interior Construction

Ceiling/Wall paneling

assumed not required

Cabinetry/Built-ins

assumed not required

SUBTOTAL

-

## TOTAL - WOOD, PLASTICS AND COMPOSITES

\$1,500

## 07 - THERMAL AND MOISTURE PROTECTION

## 070002 WATERPROOFING / DAMPPROOFING / CAULKING

# COST ESTIMATE - DECEMBER 9, 2022

# APPENDIX



Needham Center at the Heights  
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9-Dec-22

GFA 2,280

| DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|-------------|-----|------|-----------|------------|-----------|------------|
|-------------|-----|------|-----------|------------|-----------|------------|

## FITNESS ROOM AND GAME ROOM - OPTION 1

### Interior Construction

Caulking - dissimilar materials

1 ls 500.00 500 500

SUBTOTAL

**TOTAL - THERMAL AND MOISTURE PROTECTION \$500**

## 08 - OPENINGS

### 084002 GLASS & GLAZING

#### Interior Construction

Wall mounted mirrors - Fitness

150 sf 40.00 6,000

Glazing sidelights

8 loc 850.00 ETR

SUBTOTAL

6,000

### 081113 DOORS AND FRAMES

#### Interior

Doors/Frames/Hardware

Doors/HM frames - single

1 ea 1,150.00 ETR

Doors/HM frames - double

2 ea 2,000.00 ETR

Premium for glass in doors

3 ea 500.00 ETR

Frames, sidelights

3 loc 900.00 ETR

SUBTOTAL

-

### 083100 ACCESS DOORS AND FRAMES

#### Interior Doors

Access doors

2 rms 250.00 ETR

SUBTOTAL

-

### 087100 DOOR HARDWARE

#### Interior Doors

Hardware to interior doors

5 set 900.00 ETR

SUBTOTAL

-

**TOTAL - OPENINGS \$6,000**

## 09 - FINISHES

### 090003 ACT

#### Interior Finishes

Open/Close/Patch existing ceilings

1 ls 1,500.00 1,500

SUBTOTAL

1,500

### 090005 RESILIENT FLOORS

#### Interior Finishes

Resilient flooring - game room

980 sf 10.00 9,800

Resilient sports sheet flooring - Fitness

1,300 sf 17.50 22,750

Resilient base

255 lf 5.00 1,275

SUBTOTAL

33,825

### 090007 PAINTING

#### Interior Finishes

Prep/Paint affected areas

2,280 sf 2.50 5,700

SUBTOTAL

5,700

### 092900 GWB

#### Interior Construction

Open/Close/Patch existing walls

2,280 sf 1.25 2,850



## APPENDIX

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Needham Center at the Heights  
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GFA

2,280

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## FITNESS ROOM AND GAME ROOM - OPTION 1

|     |                                      |  |    |       |                      |       |                 |
|-----|--------------------------------------|--|----|-------|----------------------|-------|-----------------|
| 119 | SUBTOTAL                             |  |    |       |                      | 2,850 |                 |
| 120 |                                      |  |    |       |                      |       |                 |
| 121 | <b>097200 WALLCOVERINGS</b>          |  |    |       |                      |       |                 |
| 122 | <u>Wall Finishes</u>                 |  |    |       |                      |       |                 |
| 123 | Vinyl wallcoverings/Graphics         |  |    |       | assumed not required |       |                 |
| 124 | SUBTOTAL                             |  |    |       |                      | -     |                 |
| 125 |                                      |  |    |       |                      |       |                 |
| 126 | <b>098413 SOUND ABSORBING PANELS</b> |  |    |       |                      |       |                 |
| 127 | <u>Interior Finishes</u>             |  |    |       |                      |       |                 |
| 128 | Acoustic panels                      |  | sf | 35.00 | NR                   |       |                 |
| 129 | SUBTOTAL                             |  |    |       |                      | -     |                 |
| 130 |                                      |  |    |       |                      |       |                 |
| 131 |                                      |  |    |       |                      |       |                 |
| 132 | <b>TOTAL - FINISHES</b>              |  |    |       |                      |       | <b>\$43,875</b> |

## 10 - SPECIALTIES

|     |                                        |  |  |  |                      |   |  |
|-----|----------------------------------------|--|--|--|----------------------|---|--|
| 135 |                                        |  |  |  |                      |   |  |
| 136 | <b>101100 VISUAL DISPLAY SURFACES</b>  |  |  |  |                      |   |  |
| 137 | <u>Interior Construction</u>           |  |  |  |                      |   |  |
| 138 | Marker boards/Tackboards/Display cases |  |  |  | assumed not required |   |  |
| 139 | SUBTOTAL                               |  |  |  |                      | - |  |
| 140 |                                        |  |  |  |                      |   |  |
| 141 | <b>101400 SIGNAGE</b>                  |  |  |  |                      |   |  |
| 142 | <u>Interior Construction</u>           |  |  |  |                      |   |  |
| 143 | Room Signs                             |  |  |  | assumed not required |   |  |
| 144 | Branding/Graphics                      |  |  |  | assumed not required |   |  |
| 145 | SUBTOTAL                               |  |  |  |                      | - |  |
| 146 |                                        |  |  |  |                      |   |  |
| 147 |                                        |  |  |  |                      |   |  |
| 148 | <b>TOTAL - SPECIALTIES</b>             |  |  |  |                      |   |  |

## 11 - EQUIPMENT

|     |                                          |  |  |  |                      |   |  |
|-----|------------------------------------------|--|--|--|----------------------|---|--|
| 150 |                                          |  |  |  |                      |   |  |
| 151 | <b>113100 APPLIANCES</b>                 |  |  |  |                      |   |  |
| 152 | <u>Equipment</u>                         |  |  |  |                      |   |  |
| 153 | UC refrigerator - Fitness                |  |  |  | assumed not required |   |  |
| 154 | SUBTOTAL                                 |  |  |  |                      | - |  |
| 155 |                                          |  |  |  |                      |   |  |
| 156 | <b>115213 PROJECTION SCREENS</b>         |  |  |  |                      |   |  |
| 157 | <u>Equipment</u>                         |  |  |  |                      |   |  |
| 158 | TV/Monitors                              |  |  |  | By Owner             |   |  |
| 159 | SUBTOTAL                                 |  |  |  |                      | - |  |
| 160 |                                          |  |  |  |                      |   |  |
| 161 | <b>116600 ATHLETIC + OTHER EQUIPMENT</b> |  |  |  |                      |   |  |
| 162 | <u>Equipment</u>                         |  |  |  |                      |   |  |
| 163 | Athletic/Fitness equipment               |  |  |  | By Owner             |   |  |
| 164 | SUBTOTAL                                 |  |  |  |                      | - |  |
| 165 |                                          |  |  |  |                      |   |  |
| 166 |                                          |  |  |  |                      |   |  |
| 167 |                                          |  |  |  |                      |   |  |
| 168 |                                          |  |  |  |                      |   |  |
| 169 | <b>TOTAL - EQUIPMENT</b>                 |  |  |  |                      |   |  |

## 12 - FURNISHINGS

|     |                                            |  |    |      |     |   |  |
|-----|--------------------------------------------|--|----|------|-----|---|--|
| 171 |                                            |  |    |      |     |   |  |
| 172 | <b>122100 WINDOW TREATMENT</b>             |  |    |      |     |   |  |
| 173 | <u>Furnishings</u>                         |  |    |      |     |   |  |
| 174 | Window blinds - protect existing to remain |  | sf | 7.00 | ETR |   |  |
| 175 | SUBTOTAL                                   |  |    |      |     | - |  |
| 176 |                                            |  |    |      |     |   |  |
| 177 |                                            |  |    |      |     |   |  |
| 178 | <b>TOTAL - FURNISHINGS</b>                 |  |    |      |     |   |  |



Needham Center at the Heights  
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GFA

2,280

| DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|-------------|-----|------|-----------|------------|-----------|------------|
|-------------|-----|------|-----------|------------|-----------|------------|

## FITNESS ROOM AND GAME ROOM - OPTION 1

**21 - FIRE SUPPRESSION****210000 FIRE PROTECTION**Fire Protection System

Adjust existing heads

1

ls

2,500.00

ETR

SUBTOTAL

-

**TOTAL - FIRE SUPPRESSION****22 - PLUMBING****220000 PLUMBING**Plumbing Fixtures & Specialties

Water cooler

ea

4,200.00

NR

SUBTOTAL

-

**TOTAL - PLUMBING****23 - HVAC****230000 HVAC**Air distribution

Split AC cassette unit with ACCU

1

ea

12,500.00

12,500

Sheet metal & Accessories

Minor rework of duct + RGDs

1

ls

2,500.00

2,500

Automatic Temperature Controls

Automatic temperature controls DDC

2

loc

1,500.00

3,000

Balancing

System testing &amp; balancing

2

rms

350.00

700

SUBTOTAL

18,700

**TOTAL - HVAC****\$18,700****26 - ELECTRICAL****260000 ELECTRICAL**Equipment Wiring

MEP equipment

1

unit

1,500.00

1,500

Lighting (fixture schedule not provided, allow)

Minor rework existing

1

ls

1,000.00

1,000

Pendant lights - Game Room

2

ea

500.00

1,000

Lighting Controls

Lighting controls/switching/occupancy sensors

2

loc

250.00

ETR

Branch Power

Receptacles/Devices

2,280

gsf

2.00

4,560

Fire Alarm

Fire alarm system

2,280

gsf

3.50

ETR

Telephone/Data/CATV

Devices and cabling

2,280

gsf

1.00

2,280

Audio/Visual systems

Rough-in only with conduits and backboxes

2,280

gsf

0.75

1,710

Sound system - Fitness

NIC

SUBTOTAL

\$12,050

## APPENDIX

## COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
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GFA

2,280

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## FITNESS ROOM AND GAME ROOM - OPTION 1

239

|                          |                 |
|--------------------------|-----------------|
| <b>TOTAL -ELECTRICAL</b> | <b>\$12,050</b> |
|--------------------------|-----------------|

240

241

|                                                    |                  |
|----------------------------------------------------|------------------|
| <b>TOTAL FITNESS ROOM AND GAME ROOM - OPTION 1</b> | <b>\$104,450</b> |
|----------------------------------------------------|------------------|





Needham Center at the Heights  
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GFA

3,595

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

#### FITNESS ROOM AND GAME ROOM - OPTION 2

|                              |       |
|------------------------------|-------|
| Fitness Room                 | 1,300 |
| Café Lounge/Pantry/Vestibule | 1,315 |
| Game Room                    | 980   |

#### TOTAL GROSS FLOOR AREA (GFA)

3,595 sf

#### 02 - EXISTING CONDITIONS

##### 024000 DEMOLITION

##### Interior Demolition

|                                             |       |    |          |        |        |
|---------------------------------------------|-------|----|----------|--------|--------|
| Remove/Dispose existing finishes + walls    | 3,595 | sf | 7.00     | 25,165 |        |
| Score/Trench for electrical/floor boxes     | 1,300 | sf | 1.50     | 1,950  |        |
| Protection/Temp partitions to isolate space | 1     | ls | 2,500.00 | 2,500  |        |
| SUBTOTAL                                    |       |    |          |        | 29,615 |

#### TOTAL - MASONRY

\$29,615

#### 03 - CONCRETE

##### 033000 CONCRETE

##### Interior Construction

|                                                           |       |    |      |       |       |
|-----------------------------------------------------------|-------|----|------|-------|-------|
| Floor patching/Prep - Fitness Room                        | 1,300 | sf | 3.00 | 3,900 |       |
| Minor floor prep - Game Room/Café Lounge/Pantry/Vestibule | 2,295 | sf | 1.75 | 4,016 |       |
| SUBTOTAL                                                  |       |    |      |       | 7,916 |

#### TOTAL - CONCRETE

\$7,916

#### 05 - METALS

##### 050001 METAL FABRICATIONS

##### Interior Construction

|                           |   |    |          |       |       |
|---------------------------|---|----|----------|-------|-------|
| Support for MEP equipment | 1 | ls | 2,500.00 | 2,500 |       |
| SUBTOTAL                  |   |    |          |       | 2,500 |

#### TOTAL - METALS

\$2,500

#### 06 - WOOD, PLASTICS AND COMPOSITES

##### 061000 ROUGH CARPENTRY

##### Interior Construction

|                         |   |    |          |       |       |
|-------------------------|---|----|----------|-------|-------|
| Misc carpentry/Blocking | 1 | ls | 2,500.00 | 2,500 |       |
| SUBTOTAL                |   |    |          |       | 2,500 |

##### 064100 ARCHITECTURAL WOODWORK

##### Interior Construction

|                       |  |  |  |                      |   |
|-----------------------|--|--|--|----------------------|---|
| Ceiling/Wall paneling |  |  |  | assumed not required |   |
| Cabinetry/Built-ins   |  |  |  | assumed not required |   |
| SUBTOTAL              |  |  |  |                      | - |

#### TOTAL - WOOD, PLASTICS AND COMPOSITES

\$2,500

#### 07 - THERMAL AND MOISTURE PROTECTION

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



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GFA

3,595

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## FITNESS ROOM AND GAME ROOM - OPTION 2

## 074690 SIDING

Exterior Walls

Minor repairs/Rework siding + trim at fireplace direct vent location

1

ls

750.00

750

SUBTOTAL

750

## 070002 WATERPROOFING / DAMPPROOFING / CAULKING

Interior Construction

Caulking - dissimilar materials

1

ls

500.00

500

SUBTOTAL

500

## TOTAL - THERMAL AND MOISTURE PROTECTION

\$1,250

## 08 - OPENINGS

## 084002 GLASS &amp; GLAZING

Interior Construction

Wall mounted mirrors - Fitness

150

sf

40.00

6,000

Glazing sidelights

2

loc

850.00

1,700

SUBTOTAL

7,700

## 081113 DOORS AND FRAMES

InteriorDoors/Frames/Hardware

Doors/HM frames - single

6

ea

1,150.00

6,900

Doors/HM frames - double

1

ea

2,000.00

ETR

Premium for glass in doors

6

ea

500.00

ETR

Frames, sidelights

2

loc

900.00

1,800

SUBTOTAL

8,700

## 083100 ACCESS DOORS AND FRAMES

Interior Doors

Access doors

2

rms

250.00

ETR

SUBTOTAL

-

## 083323 OVERHEAD DOORS

Interior Doors

Overhead coiling door - 5x5 at Café Lounge

1

ea

6,500.00

6,500

SUBTOTAL

6,500

## 087100 DOOR HARDWARE

Interior Doors

Hardware to interior doors

8

set

900.00

ETR

SUBTOTAL

-

## TOTAL - OPENINGS

\$22,900

## 09 - FINISHES

## 090002 TILE

Interior Finishes

Tile floor - Pantry and Vestibule

226

sf

35.00

7,910

Tile base

85

lf

26.00

2,210

Thresholds/Transitions

1

ls

1,000.00

1,000

SUBTOTAL

11,120

## 090003 ACT

Interior Finishes

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GFA

3,595

|  | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|--|-------------|-----|------|-----------|------------|-----------|------------|
|--|-------------|-----|------|-----------|------------|-----------|------------|

## FITNESS ROOM AND GAME ROOM - OPTION 2

|     |                                                           |       |    |          |                      |        |                  |
|-----|-----------------------------------------------------------|-------|----|----------|----------------------|--------|------------------|
| 119 | New ACT ceilings - Café Lounge/Pantry/Vestibule/Game Room | 2,295 | sf | 8.50     | 19,508               |        |                  |
| 120 | Open/Close/Patch existing ceilings                        | 1     | ls | 1,500.00 | 1,500                |        |                  |
| 121 | SUBTOTAL                                                  |       |    |          |                      | 21,008 |                  |
| 122 |                                                           |       |    |          |                      |        |                  |
| 123 | <b>090005 RESILIENT FLOORS</b>                            |       |    |          |                      |        |                  |
| 124 | <u>Interior Finishes</u>                                  |       |    |          |                      |        |                  |
| 125 | Resilient flooring - Café Lounge                          | 1,089 | sf | 10.00    | 10,890               |        |                  |
| 126 | Resilient sports sheet flooring - Fitness                 | 1,300 | sf | 17.50    | 22,750               |        |                  |
| 127 | Resilient base                                            | 400   | lf | 5.00     | 2,000                |        |                  |
| 128 | SUBTOTAL                                                  |       |    |          |                      | 35,640 |                  |
| 129 |                                                           |       |    |          |                      |        |                  |
| 130 | <b>090007 PAINTING</b>                                    |       |    |          |                      |        |                  |
| 131 | <u>Interior Finishes</u>                                  |       |    |          |                      |        |                  |
| 132 | Prep/Paint affected areas                                 | 3,595 | sf | 2.50     | 8,988                |        |                  |
| 133 | SUBTOTAL                                                  |       |    |          |                      | 8,988  |                  |
| 134 |                                                           |       |    |          |                      |        |                  |
| 135 | <b>092900 GWB</b>                                         |       |    |          |                      |        |                  |
| 136 | <u>Interior Construction</u>                              |       |    |          |                      |        |                  |
| 137 | New partitions/Install door frames                        | 875   | sf | 17.50    | 15,313               |        |                  |
| 138 | Open/Close/Patch existing walls                           | 3,595 | sf | 1.25     | 4,494                |        |                  |
| 139 | SUBTOTAL                                                  |       |    |          |                      | 19,807 |                  |
| 140 |                                                           |       |    |          |                      |        |                  |
| 141 | <b>096800 CARPETING</b>                                   |       |    |          |                      |        |                  |
| 142 | <u>Interior Construction</u>                              |       |    |          |                      |        |                  |
| 143 | Carpet - Game Room                                        | 940   | sf | 6.50     | 6,110                |        |                  |
| 144 | SUBTOTAL                                                  |       |    |          |                      | 6,110  |                  |
| 145 |                                                           |       |    |          |                      |        |                  |
| 146 | <b>097200 WALLCOVERINGS</b>                               |       |    |          |                      |        |                  |
| 147 | <u>Wall Finishes</u>                                      |       |    |          |                      |        |                  |
| 148 | Vinyl wallcoverings/Graphics                              |       |    |          | assumed not required |        |                  |
| 149 | SUBTOTAL                                                  |       |    |          |                      | -      |                  |
| 150 |                                                           |       |    |          |                      |        |                  |
| 151 | <b>098413 SOUND ABSORBING PANELS</b>                      |       |    |          |                      |        |                  |
| 152 | <u>Interior Finishes</u>                                  |       |    |          |                      |        |                  |
| 153 | Acoustic panels                                           |       | sf | 35.00    | NR                   |        |                  |
| 154 | SUBTOTAL                                                  |       |    |          |                      | -      |                  |
| 155 |                                                           |       |    |          |                      |        |                  |
| 156 |                                                           |       |    |          |                      |        |                  |
| 157 | <b>TOTAL - FINISHES</b>                                   |       |    |          |                      |        | <b>\$102,673</b> |

## 10 - SPECIALTIES

|     |                                             |   |    |           |                      |        |  |
|-----|---------------------------------------------|---|----|-----------|----------------------|--------|--|
| 161 | <b>101100 VISUAL DISPLAY SURFACES</b>       |   |    |           |                      |        |  |
| 162 | <u>Interior Construction</u>                |   |    |           |                      |        |  |
| 163 | Marker boards/Tackboards/Display cases      |   |    |           | assumed not required |        |  |
| 164 | SUBTOTAL                                    |   |    |           |                      | -      |  |
| 165 |                                             |   |    |           |                      |        |  |
| 166 | <b>101200 DISPLAY CASES</b>                 |   |    |           |                      |        |  |
| 167 | <u>Interior Construction</u>                |   |    |           |                      |        |  |
| 168 | Display cases                               | 1 | ls | 10,000.00 | 10,000               |        |  |
| 169 | SUBTOTAL                                    |   |    |           |                      | 10,000 |  |
| 170 |                                             |   |    |           |                      |        |  |
| 171 | <b>103000 MANUFACTURED FIREPLACES</b>       |   |    |           |                      |        |  |
| 172 | <u>Interior Construction</u>                |   |    |           |                      |        |  |
| 173 | Fireplace - includes hearth/surround/mantel | 1 | ls | 15,000.00 | 15,000               |        |  |
| 174 | SUBTOTAL                                    |   |    |           |                      | 15,000 |  |
| 175 |                                             |   |    |           |                      |        |  |
| 176 | <b>101400 SIGNAGE</b>                       |   |    |           |                      |        |  |
| 177 | <u>Interior Construction</u>                |   |    |           |                      |        |  |
| 178 | Room Signs                                  |   |    |           | assumed not required |        |  |



## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
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9-Dec-22

GFA

3,595

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

**FITNESS ROOM AND GAME ROOM - OPTION 2**

|     |                            |  |  |  |                      |   |                 |
|-----|----------------------------|--|--|--|----------------------|---|-----------------|
| 179 | Branding/Graphics          |  |  |  | assumed not required |   |                 |
| 180 | SUBTOTAL                   |  |  |  |                      | - |                 |
| 181 |                            |  |  |  |                      |   |                 |
| 182 | <b>TOTAL - SPECIALTIES</b> |  |  |  |                      |   | <b>\$25,000</b> |

**11 - EQUIPMENT****113100 APPLIANCES**Equipment

UC refrigerator - Fitness

assumed not required

SUBTOTAL

-

**115213 PROJECTION SCREENS**Equipment

TV/Monitors

By Owner

SUBTOTAL

-

**116600 ATHLETIC + OTHER EQUIPMENT**Equipment

Athletic/Fitness equipment

By Owner

SUBTOTAL

-

**TOTAL - EQUIPMENT****12 - FURNISHINGS****122100 WINDOW TREATMENT**Furnishings

Window blinds - protect existing to remain

sf

7.00

ETR

SUBTOTAL

-

**TOTAL - FURNISHINGS****21 - FIRE SUPPRESSION****210000 FIRE PROTECTION**Fire Protection System

Adjust existing heads

1

ls

3,500.00

3,500

SUBTOTAL

3,500

**TOTAL - FIRE SUPPRESSION****\$3,500****22 - PLUMBING****220000 PLUMBING**Plumbing Fixtures & Specialties

Gas piping - fire place

1

ls

2,500.00

2,500

Water cooler

ea

4,200.00

NR

SUBTOTAL

2,500

**TOTAL - PLUMBING****\$2,500****23 - HVAC**

# COST ESTIMATE - DECEMBER 9, 2022

# APPENDIX



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

3,595

|     | DESCRIPTION                                            | QTY   | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST    |
|-----|--------------------------------------------------------|-------|------|--------------|---------------|--------------|------------------|
|     | <b>FITNESS ROOM AND GAME ROOM - OPTION 2</b>           |       |      |              |               |              |                  |
| 239 | <b>230000 HVAC</b>                                     |       |      |              |               |              |                  |
| 240 | <u>Air distribution</u>                                |       |      |              |               |              |                  |
| 241 | Split AC cassette unit with ACCU                       | 1     | ea   | 12,500.00    | 12,500        |              |                  |
| 242 | <u>Sheet metal &amp; Accessories</u>                   |       |      |              |               |              |                  |
| 243 | Minor rework of duct + RGDs                            | 1     | ls   | 2,500.00     | 2,500         |              |                  |
| 244 | <u>Automatic Temperature Controls</u>                  |       |      |              |               |              |                  |
| 245 | Automatic temperature controls DDC                     | 2     | loc  | 1,500.00     | 3,000         |              |                  |
| 246 | <u>Balancing</u>                                       |       |      |              |               |              |                  |
| 247 | System testing & balancing                             | 2     | rms  | 350.00       | 700           |              |                  |
| 248 | SUBTOTAL                                               |       |      |              |               | 18,700       |                  |
| 249 |                                                        |       |      |              |               |              |                  |
| 250 | <b>TOTAL - HVAC</b>                                    |       |      |              |               |              | <b>\$18,700</b>  |
| 251 |                                                        |       |      |              |               |              |                  |
| 252 |                                                        |       |      |              |               |              |                  |
| 253 | <b>26 - ELECTRICAL</b>                                 |       |      |              |               |              |                  |
| 254 |                                                        |       |      |              |               |              |                  |
| 255 | <b>260000 ELECTRICAL</b>                               |       |      |              |               |              |                  |
| 256 | <u>Equipment Wiring</u>                                |       |      |              |               |              |                  |
| 257 | MEP equipment                                          | 1     | unit | 1,500.00     | 1,500         |              |                  |
| 258 | Fireplace                                              | 1     | unit | 1,500.00     | 1,500         |              |                  |
| 259 | <u>Lighting (fixture schedule not provided, allow)</u> |       |      |              |               |              |                  |
| 260 | Minor rework existing                                  | 1     | ls   | 1,000.00     | 1,000         |              |                  |
| 261 | New lights - Game Room                                 | 8     | ea   | 500.00       | 4,000         |              |                  |
| 262 | <u>Lighting Controls</u>                               |       |      |              |               |              |                  |
| 263 | Lighting controls/switching/occupancy sensors          | 2     | loc  | 250.00       | ETR           |              |                  |
| 264 | <u>Branch Power</u>                                    |       |      |              |               |              |                  |
| 265 | Receptacles/Devices                                    | 3,595 | gsf  | 2.00         | 7,190         |              |                  |
| 266 | <u>Fire Alarm</u>                                      |       |      |              |               |              |                  |
| 267 | Fire alarm system                                      | 3,595 | gsf  | 3.50         | ETR           |              |                  |
| 268 | <u>Telephone/Data/CATV</u>                             |       |      |              |               |              |                  |
| 269 | Devices and cabling                                    | 3,595 | gsf  | 1.00         | 3,595         |              |                  |
| 270 | <u>Audio/Visual systems</u>                            |       |      |              |               |              |                  |
| 271 | Rough-in only with conduits and backboxes              | 3,595 | gsf  | 0.75         | 2,696         |              |                  |
| 272 | Sound system - Fitness                                 |       |      |              | NIC           |              |                  |
| 273 | SUBTOTAL                                               |       |      |              |               | \$21,481     |                  |
| 274 |                                                        |       |      |              |               |              |                  |
| 275 | <b>TOTAL -ELECTRICAL</b>                               |       |      |              |               |              | <b>\$21,481</b>  |
| 276 |                                                        |       |      |              |               |              |                  |
| 277 | <b>TOTAL FITNESS ROOM AND GAME ROOM - OPTION 2</b>     |       |      |              |               |              | <b>\$240,535</b> |

## APPENDIX

## COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

| CONSTRUCTION COST SUMMARY IN CSI FORMAT         |           |                  |          |                 |          |                 |          |                |
|-------------------------------------------------|-----------|------------------|----------|-----------------|----------|-----------------|----------|----------------|
|                                                 | OPTION 1  |                  | OPTION 2 |                 | OPTION 3 |                 | OPTION 4 |                |
|                                                 | Subtotal  | Total            | Subtotal | Total           | Subtotal | Total           | Subtotal | Total          |
| <b>ROOF DECK</b>                                |           |                  |          |                 |          |                 |          |                |
| <b>DIV. 2 EXISTING CONDITIONS</b>               |           | <b>\$21,990</b>  |          | <b>\$5,745</b>  |          | <b>\$3,000</b>  |          | <b>\$1,500</b> |
| 024100 Demolition                               | \$21,990  |                  | \$5,745  |                 | \$3,000  |                 | \$1,500  |                |
| 013280 Haz-Mat Abatement                        | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 3 CONCRETE</b>                          |           | <b>\$24,776</b>  |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 033000 Cast In Place Concrete                   | \$24,776  |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 4 MASONRY</b>                           |           | <b>\$120,190</b> |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 044000 Masonry                                  | \$120,190 |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 5 METALS</b>                            |           | <b>\$139,020</b> |          | <b>\$10,000</b> |          | <b>\$10,000</b> |          | <b>\$9,000</b> |
| 050001 Metal Fabrications                       | \$16,428  |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 051200 Structural Steel Framing                 | \$105,000 |                  | \$10,000 |                 | \$10,000 |                 | \$9,000  |                |
| 053100 Steel Decking                            | \$17,592  |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 6 WOODS, PLASTICS &amp; COMPOSITES</b>  |           | <b>\$21,990</b>  |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 061000 Rough Carpentry                          | \$7,330   |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 064000 Architectural Woodwork                   | \$14,660  |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 7 THERMAL &amp; MOISTURE PROTECTION</b> |           | <b>\$90,353</b>  |          | <b>\$7,266</b>  |          | <b>\$5,000</b>  |          | <b>\$5,000</b> |
| 070001 Waterproofing/Dampproofing/Caulking      | \$21,880  |                  | \$766    |                 | \$0      |                 | \$0      |                |
| 070002 Roofing & Flashing                       | \$57,174  |                  | \$6,500  |                 | \$5,000  |                 | \$5,000  |                |
| 072100 Thermal Insulation                       | \$1,235   |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 074210 Metal Wall Panels                        | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 074690 Siding                                   | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 077200 Roof Specialties                         | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 078100 Applied Fireproofing                     | \$4,765   |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 078400 Firestopping                             | \$3,299   |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 079513 Construction & Expansion Joints          | \$2,000   |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 8 DOORS &amp; WINDOWS</b>               |           | <b>\$82,904</b>  |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 084002 Glass & Glazing                          | \$66,278  |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 081113 Doors and Frames                         | \$10,995  |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 083100 Access Doors and Panels                  | \$500     |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 083223 Overhead Coiling Doors                   | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 083400 Specialty Doors                          | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 087100 Door Hardware                            | \$5,131   |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 089000 Louvers and Vents                        | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 9 FINISHES</b>                          |           | <b>\$51,310</b>  |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 090000 General Finishes                         | \$51,310  |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 090002 Tile                                     | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 090003 Acoustical Ceilings                      | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 090005 Resilient Flooring                       | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 090009 Painting                                 | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 092900 GWB, Lath and Plastering                 | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 096400 Wood Flooring                            | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 096460 Wood Athletic Flooring                   | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 096766 Fluid Applied Flooring                   | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 096800 Carpet                                   | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 097200 Wallcoverings/FRP                        | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 098414 Acoustic Panels                          | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 10 SPECIALTIES</b>                      |           | <b>\$2,932</b>   |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 100000 Miscellaneous Specialties                | \$2,932   |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 101100 Markerboards                             | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 101200 Display Cases                            | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 101400 Signage                                  | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 102113 Toilet Compartments                      | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 102228 Operable Partition                       | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 102813 Toilet Accessories                       | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 103000 Gas Fireplaces                           | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 104400 Safety Specialties                       | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 105113 Metal Lockers                            | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 11 EQUIPMENT</b>                        |           | <b>\$2,199</b>   |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 110000 Miscellaneous Equipment                  | \$2,199   |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 113100 Appliances                               | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 114000 Foodservice Equipment                    | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 115213 Projection Screens                       | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 116623 Athletic Equipment                       | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 12 FURNISHINGS</b>                      |           | <b>\$3,665</b>   |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 120000 Miscellaneous Furnishings                | \$3,665   |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 122400 Window Shades                            | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| 124813 Entrance Floor Mats and Frames           | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 13 SPECIAL CONSTRUCTION</b>             |           | <b>\$0</b>       |          | <b>\$70,855</b> |          | <b>\$85,500</b> |          | <b>\$0</b>     |
| 130000 Greenhouses                              | \$0       |                  | \$70,855 |                 | \$0      |                 | \$0      |                |
| 130000 Trellis                                  | \$0       |                  | \$0      |                 | \$85,500 |                 | \$0      |                |
| 130000 Shade Sail                               | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 14 CONVEYING SYSTEMS</b>                |           | <b>\$0</b>       |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 140000 Elevators                                | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 21 FIRE SUPPRESSION</b>                 |           | <b>\$13,927</b>  |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 210000 Fire Suppression                         | \$13,927  |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 22 PLUMBING</b>                         |           | <b>\$21,990</b>  |          | <b>\$1,915</b>  |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 220000 Plumbing                                 | \$21,990  |                  | \$1,915  |                 | \$0      |                 | \$0      |                |
| <b>DIV. 23 HVAC</b>                             |           | <b>\$80,630</b>  |          | <b>\$7,660</b>  |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 230000 HVAC                                     | \$80,630  |                  | \$7,660  |                 | \$0      |                 | \$0      |                |
| <b>DIV. 26 ELECTRICAL</b>                       |           | <b>\$58,640</b>  |          | <b>\$7,660</b>  |          | <b>\$3,420</b>  |          | <b>\$3,500</b> |
| 260000 Electrical                               | \$58,640  |                  | \$7,660  |                 | \$3,420  |                 | \$3,500  |                |
| <b>DIV. 31 EARTHWORK</b>                        |           | <b>\$0</b>       |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 310000 Earthwork                                | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |
| <b>DIV. 32 EXTERIOR IMPROVEMENTS</b>            |           | <b>\$0</b>       |          | <b>\$0</b>      |          | <b>\$0</b>      |          | <b>\$0</b>     |
| 323100 Site Improvements                        | \$0       |                  | \$0      |                 | \$0      |                 | \$0      |                |



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

| CONSTRUCTION COST SUMMARY IN CSI FORMAT |       |           |       |           |       |           |          |
|-----------------------------------------|-------|-----------|-------|-----------|-------|-----------|----------|
| OPTION 1                                |       | OPTION 2  |       | OPTION 3  |       | OPTION 4  |          |
| Subtotal                                | Total | Subtotal  | Total | Subtotal  | Total | Subtotal  | Total    |
| ROOF DECK                               |       |           |       |           |       |           |          |
| SUBTOTAL DIRECT (TRADE) COST            |       | \$736,516 |       | \$111,101 |       | \$106,920 | \$19,000 |



## APPENDIX

## COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
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Needham, MA  
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9-Dec-22

| CONSTRUCTION COST SUMMARY IN CSI FORMAT |       |          |             |          |           |          |           |          |          |
|-----------------------------------------|-------|----------|-------------|----------|-----------|----------|-----------|----------|----------|
|                                         |       | OPTION 1 |             | OPTION 2 |           | OPTION 3 |           | OPTION 4 |          |
|                                         |       | Subtotal | Total       | Subtotal | Total     | Subtotal | Total     | Subtotal | Total    |
| ROOF DECK                               |       |          |             |          |           |          |           |          |          |
| ESCALATION                              | 6.0%  |          | \$44,191    |          | \$6,666   |          | \$6,415   |          | \$1,140  |
| DESIGN AND PRICING CONTINGENCY          | 10.0% |          | \$73,652    |          | \$11,110  |          | \$10,692  |          | \$1,900  |
| SUB-TOTAL                               |       |          | \$854,359   |          | \$128,877 |          | \$124,027 |          | \$22,040 |
| GENERAL CONDITIONS                      | 12.5% |          | \$106,795   |          | \$16,110  |          | \$15,503  |          | \$2,755  |
| GENERAL REQUIREMENTS                    | 3.5%  |          | \$29,903    |          | \$4,511   |          | \$4,341   |          | \$771    |
| PHASING PREMIUM                         | 5.0%  |          | \$42,718    |          | \$6,444   |          | \$6,201   |          | \$1,102  |
| BONDS                                   | 0.75% |          | \$6,408     |          | \$967     |          | \$930     |          | \$165    |
| INSURANCE                               | 1.40% |          | \$11,961    |          | \$1,804   |          | \$1,736   |          | \$309    |
| PERMIT - \$10.00 per \$1,000            |       |          | \$8,544     |          | \$1,289   |          | \$1,240   |          | \$220    |
| OVERHEAD + PROFIT                       | 10.0% |          | \$105,214   |          | \$15,871  |          | \$15,274  |          | \$2,714  |
| TOTAL OF ALL CONSTRUCTION               |       |          | \$1,165,902 |          | \$175,873 |          | \$169,252 |          | \$30,076 |

## COST ESTIMATE - DECEMBER 9, 2022

## APPENDIX



Needham Center at the Heights  
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9-Dec-22

GFA

1,466

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## ROOF DECK - OPTION 1

Addition - Roof Deck

1,466

TOTAL GROSS FLOOR AREA (GFA)

1,466 sf

## 02 - EXISTING CONDITIONS

## 024000 DEMOLITION

Interior Demolition

Demo/Prep for new addition - includes protection

1,466

sf

15.00

21,990

SUBTOTAL

21,990

TOTAL - MASONRY

\$21,990

## 03 - CONCRETE

## 033000 CONCRETE

Floor ConstructionFloor Structure - Steel/Concrete:

Mesh reinforcement in concrete topping

1,686

sf

2.50

4,215

Concrete slab to metal decking, 5" total thickness; normal weight

24

cy

200.00

4,800

Place + finish slabs

1,466

sf

10.00

14,660

Rebar at slab edges

367

lbs

3.00

1,101

SUBTOTAL

24,776

TOTAL - CONCRETE

\$24,776

## 04 - MASONRY

## 040000 MASONRY

Exterior Walls

Precast panels

1,414

sf

85.00

120,190

SUBTOTAL

120,190

TOTAL - MASONRY

\$120,190

## 05 - METALS

## 050001 METAL FABRICATIONS

Exterior Walls

Misc. metals at masonry

1,414

sf

2.00

2,828

Sunshades

68

lf

200.00

13,600

Interior Construction

Extend egress stairs

assumed not required

SUBTOTAL

16,428

## 051200 STRUCTURAL STEEL FRAMING

Roof Construction

Augment/Modify/Prep existing structure for roof top addition

1

ls

20,000.00

20,000

Structural steel framing - based on 13.5lbs/sf

10

tns

8,500.00

85,000

Roof top equipment screen - structure

assumed not required

Moment connections

included above

SUBTOTAL

105,000

## 053100 STEEL DECKING

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



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GFA

1,466

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## ROOF DECK - OPTION 1

Floor Construction

Metal floor decking; 3"

sf

7.00

ETR

Roof Construction

Metal floor decking; 2"

1,466

sf

12.00

17,592

SUBTOTAL

17,592

**054000 COLD FORM METAL FRAMING**

With Div. 9 (backup walls)

SUBTOTAL

-

**TOTAL - METALS****\$139,020****06 - WOOD, PLASTICS AND COMPOSITES****061000 ROUGH CARPENTRY**Floor/Roof Construction

Miscellaneous blocking/carpentry

1,466

gsf

5.00

7,330

SUBTOTAL

7,330

**064100 ARCHITECTURAL WOODWORK**Specialties / Millwork

Millwork/Finish Carpentry package

1,466

gsf

10.00

14,660

SUBTOTAL

14,660

**TOTAL - WOOD, PLASTICS AND COMPOSITES****\$21,990****07 - THERMAL AND MOISTURE PROTECTION****070002 WATERPROOFING / DAMPPROOFING / CAULKING**Exterior Walls

2" Composite sheathing board w/integral weather resistance barrier

1,414

sf

11.00

15,554

Miscellaneous sealants to closure

1,414

sf

0.50

707

Air barrier/flashing at storefront &amp; windows

190

lf

9.00

1,710

Backer rod &amp; double sealant

190

lf

9.00

1,710

Interior Construction

Miscellaneous sealants

1,466

gsf

1.50

2,199

SUBTOTAL

21,880

**070002 ROOFING AND FLASHING**Roof CoveringsMembrane Roof

Roofing complete; TPO

1,466

sf

39.00

57,174

SUBTOTAL

57,174

**072100 THERMAL INSULATION**Exterior Walls

Insulation - 2" composite sheathing board + batt insulation

w/ GWB

Foam insulation at window framing cavities

190

lf

6.50

1,235

SUBTOTAL

1,235

**078100 FIREPROOFING**Floor Construction

Spray-applied fireproofing

1,466

gsf

3.25

4,765

Intumescent fireproofing

included above

Roof Construction

Fire proofing to columns, beams and deck

included above

## COST ESTIMATE - DECEMBER 9, 2022

## APPENDIX



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Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

1,466

|     | DESCRIPTION                                    | QTY   | UNIT   | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST   |
|-----|------------------------------------------------|-------|--------|--------------|---------------|--------------|-----------------|
|     | <b>ROOF DECK - OPTION 1</b>                    |       |        |              |               |              |                 |
| 117 | SUBTOTAL                                       |       |        |              |               | 4,765        |                 |
| 118 |                                                |       |        |              |               |              |                 |
| 119 | <b>078400 FIRESTOPPING</b>                     |       |        |              |               |              |                 |
| 120 | <u>Floor Construction</u>                      |       |        |              |               |              |                 |
| 121 | Miscellaneous fire stopping                    | 1,466 | gsf    | 2.25         | 3,299         |              |                 |
| 122 | SUBTOTAL                                       |       |        |              |               | 3,299        |                 |
| 123 |                                                |       |        |              |               |              |                 |
| 124 | <b>079513 EXPANSION JOINTS</b>                 |       |        |              |               |              |                 |
| 125 | <u>Floor Construction</u>                      |       |        |              |               |              |                 |
| 126 | Allowance for expansion joints                 | 1     | ls     | 2,000.00     | 2,000         |              |                 |
| 127 | SUBTOTAL                                       |       |        |              |               | 2,000        |                 |
| 128 |                                                |       |        |              |               |              |                 |
| 129 | <b>TOTAL - THERMAL AND MOISTURE PROTECTION</b> |       |        |              |               |              | <b>\$90,353</b> |
| 130 |                                                |       |        |              |               |              |                 |
| 131 |                                                |       |        |              |               |              |                 |
| 132 | <b>08 - OPENINGS</b>                           |       |        |              |               |              |                 |
| 133 |                                                |       |        |              |               |              |                 |
| 134 | <b>084002 GLASS &amp; GLAZING</b>              |       |        |              |               |              |                 |
| 135 | <u>Windows</u>                                 |       |        |              |               |              |                 |
| 136 | New windows                                    | 476   | sf     | 130.00       | 61,880        |              |                 |
| 137 | <u>Interior Construction</u>                   |       |        |              |               |              |                 |
| 138 | Interior sidelights/borrowed lights            | 1,466 | gsf    | 3.00         | 4,398         |              |                 |
| 139 | SUBTOTAL                                       |       |        |              |               | 66,278       |                 |
| 140 |                                                |       |        |              |               |              |                 |
| 141 | <b>081113 DOORS AND FRAMES</b>                 |       |        |              |               |              |                 |
| 142 | <u>Interior</u>                                |       |        |              |               |              |                 |
| 143 | <u>Doors/Frames</u>                            |       |        |              |               |              |                 |
| 144 | Door frames/Doors                              | 1,466 | gsf    | 7.50         | 10,995        |              |                 |
| 145 | SUBTOTAL                                       |       |        |              |               | 10,995       |                 |
| 146 |                                                |       |        |              |               |              |                 |
| 147 | <b>083100 ACCESS DOORS AND FRAMES</b>          |       |        |              |               |              |                 |
| 148 | <u>Interior Doors</u>                          |       |        |              |               |              |                 |
| 149 | Access doors                                   | 1     | levels | 500.00       | 500           |              |                 |
| 150 | SUBTOTAL                                       |       |        |              |               | 500          |                 |
| 151 |                                                |       |        |              |               |              |                 |
| 152 | <b>087100 DOOR HARDWARE</b>                    |       |        |              |               |              |                 |
| 153 | <u>Interior Doors</u>                          |       |        |              |               |              |                 |
| 154 | Hardware to interior doors                     | 1,466 | gsf    | 3.50         | 5,131         |              |                 |
| 155 | SUBTOTAL                                       |       |        |              |               | 5,131        |                 |
| 156 |                                                |       |        |              |               |              |                 |
| 157 | <b>TOTAL - OPENINGS</b>                        |       |        |              |               |              | <b>\$82,904</b> |
| 158 |                                                |       |        |              |               |              |                 |
| 159 |                                                |       |        |              |               |              |                 |
| 160 | <b>09 - FINISHES</b>                           |       |        |              |               |              |                 |
| 161 |                                                |       |        |              |               |              |                 |
| 162 | <b>090000 FINISHES</b>                         |       |        |              |               |              |                 |
| 163 | Partitions/Floors/Ceilings                     | 1,466 | gsf    | 35.00        | 51,310        |              |                 |
| 164 | SUBTOTAL                                       |       |        |              |               | 51,310       |                 |
| 165 |                                                |       |        |              |               |              |                 |
| 166 |                                                |       |        |              |               |              |                 |
| 167 | <b>TOTAL - FINISHES</b>                        |       |        |              |               |              | <b>\$51,310</b> |
| 168 |                                                |       |        |              |               |              |                 |
| 169 |                                                |       |        |              |               |              |                 |
| 170 | <b>10 - SPECIALTIES</b>                        |       |        |              |               |              |                 |
| 171 |                                                |       |        |              |               |              |                 |
| 172 | <b>100000 SPECIALTIES</b>                      |       |        |              |               |              |                 |
| 173 | Misc specialties                               | 1,466 | gsf    | 2.00         | 2,932         |              |                 |
| 174 | SUBTOTAL                                       |       |        |              |               | 2,932        |                 |
| 175 |                                                |       |        |              |               |              |                 |
| 176 | <b>TOTAL - SPECIALTIES</b>                     |       |        |              |               |              | <b>\$2,932</b>  |



## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
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9-Dec-22

GFA

1,466

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## ROOF DECK - OPTION 1

## 11 - EQUIPMENT

## 110000 EQUIPMENT

Misc equipment/appliances

1,466

gsf

1.50

2,199

SUBTOTAL

2,199

SUBTOTAL

-

## TOTAL - EQUIPMENT

\$2,199

## 12 - FURNISHINGS

## 120000 FURNISHINGS

Misc furnishings

1,466

gsf

2.50

3,665

SUBTOTAL

3,665

## TOTAL - FURNISHINGS

\$3,665

## 14 - CONVEYING SYSTEMS

## 142200 ELEVATOR

Elevator extend

assumed not required

SUBTOTAL

-

## TOTAL - CONVEYING

## 21 - FIRE SUPPRESSION

## 210000 FIRE PROTECTION

Fire Protection System - extended from existing system

1,466

gsf

9.50

13,927

SUBTOTAL

13,927

## TOTAL - FIRE SUPPRESSION

\$13,927

## 22 - PLUMBING

## 220000 PLUMBING

Plumbing systems - extended from existing system

1,466

gsf

15.00

21,990

SUBTOTAL

21,990

## TOTAL - PLUMBING

\$21,990

## 23 - HVAC

## 230000 HVAC

HVAC systems - extended from existing system

1,466

gsf

55.00

80,630

SUBTOTAL

80,630

## TOTAL - HVAC

\$80,630

## 26 - ELECTRICAL



Needham Center at the Heights  
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1,466

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

**ROOF DECK - OPTION 1**

236

237

**260000 ELECTRICAL**

238

Electrical systems - extended from existing system

**1,466**

gsf

40.00

58,640

239

SUBTOTAL

\$58,640

240

241

**TOTAL -ELECTRICAL****\$58,640**

242

243

**TOTAL ROOF DECK - OPTION 1****\$736,516**

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
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383

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## ROOF DECK - OPTION 2

|    |  |                                                                   |            |     |           |               |                 |
|----|--|-------------------------------------------------------------------|------------|-----|-----------|---------------|-----------------|
| 1  |  | Greenhouse - Roof Deck                                            |            |     | 383       |               |                 |
| 2  |  |                                                                   |            |     |           |               |                 |
| 3  |  | <b>TOTAL GROSS FLOOR AREA (GFA)</b>                               |            |     |           | <b>383 sf</b> |                 |
| 4  |  |                                                                   |            |     |           |               |                 |
| 5  |  |                                                                   |            |     |           |               |                 |
| 6  |  | <b>02 - EXISTING CONDITIONS</b>                                   |            |     |           |               |                 |
| 7  |  |                                                                   |            |     |           |               |                 |
| 8  |  | <b>024000 DEMOLITION</b>                                          |            |     |           |               |                 |
| 9  |  | <u>Interior Demolition</u>                                        |            |     |           |               |                 |
| 10 |  | Demo/Prep for new greenhouse - includes protection                | <b>383</b> | sf  | 15.00     | 5,745         |                 |
| 11 |  | SUBTOTAL                                                          |            |     |           |               | 5,745           |
| 12 |  |                                                                   |            |     |           |               |                 |
| 13 |  | <b>TOTAL - MASONRY</b>                                            |            |     |           |               | <b>\$5,745</b>  |
| 14 |  |                                                                   |            |     |           |               |                 |
| 15 |  |                                                                   |            |     |           |               |                 |
| 16 |  | <b>05 - METALS</b>                                                |            |     |           |               |                 |
| 17 |  |                                                                   |            |     |           |               |                 |
| 18 |  | <b>050001 METAL FABRICATIONS</b>                                  |            |     |           | NR            |                 |
| 19 |  | SUBTOTAL                                                          |            |     |           |               | -               |
| 20 |  |                                                                   |            |     |           |               |                 |
| 21 |  | <b>051200 STRUCTURAL STEEL FRAMING</b>                            |            |     |           |               |                 |
| 22 |  | <u>Roof Construction</u>                                          |            |     |           |               |                 |
| 23 |  | Augment/Modify/Prep existing structure for greenhouse connections | <b>1</b>   | ls  | 10,000.00 | 10,000        |                 |
| 24 |  | SUBTOTAL                                                          |            |     |           |               | 10,000          |
| 25 |  |                                                                   |            |     |           |               |                 |
| 26 |  | <b>TOTAL - METALS</b>                                             |            |     |           |               | <b>\$10,000</b> |
| 27 |  |                                                                   |            |     |           |               |                 |
| 28 |  |                                                                   |            |     |           |               |                 |
| 29 |  | <b>07 - THERMAL AND MOISTURE PROTECTION</b>                       |            |     |           |               |                 |
| 30 |  |                                                                   |            |     |           |               |                 |
| 31 |  | <b>070002 WATERPROOFING / DAMPPROOFING / CAULKING</b>             |            |     |           |               |                 |
| 32 |  | <u>Exterior Walls</u>                                             |            |     |           |               |                 |
| 33 |  | Miscellaneous sealants to closure                                 | <b>383</b> | gsf | 2.00      | 766           |                 |
| 34 |  | SUBTOTAL                                                          |            |     |           |               | 766             |
| 35 |  |                                                                   |            |     |           |               |                 |
| 36 |  | <b>070002 ROOFING AND FLASHING</b>                                |            |     |           |               |                 |
| 37 |  | <u>Roof Coverings</u>                                             |            |     |           |               |                 |
| 38 |  | <u>Roofing</u>                                                    |            |     |           |               |                 |
| 39 |  | Miscellaneous roof patching                                       | <b>1</b>   | ls  | 5,000.00  | 5,000         |                 |
| 40 |  | <u>Flashings</u>                                                  |            |     |           |               |                 |
| 41 |  | Flashings/Tie into existing exterior walls                        | <b>1</b>   | ls  | 1,500.00  | 1,500         |                 |
| 42 |  | SUBTOTAL                                                          |            |     |           |               | 6,500           |
| 43 |  |                                                                   |            |     |           |               |                 |
| 44 |  | <b>TOTAL - THERMAL AND MOISTURE PROTECTION</b>                    |            |     |           |               | <b>\$7,266</b>  |
| 45 |  |                                                                   |            |     |           |               |                 |
| 46 |  |                                                                   |            |     |           |               |                 |
| 47 |  | <b>13 - SPECIAL CONSTRUCTION</b>                                  |            |     |           |               |                 |
| 48 |  |                                                                   |            |     |           |               |                 |
| 49 |  | <b>130000 GREENHOUSE</b>                                          |            |     |           |               |                 |
| 50 |  | Greenhouse                                                        | <b>383</b> | gsf | 185.00    | 70,855        |                 |
| 51 |  | SUBTOTAL                                                          |            |     |           |               | 70,855          |
| 52 |  |                                                                   |            |     |           |               |                 |
| 53 |  | <b>TOTAL - FURNISHINGS</b>                                        |            |     |           |               | <b>\$70,855</b> |
| 54 |  |                                                                   |            |     |           |               |                 |
| 55 |  |                                                                   |            |     |           |               |                 |
| 56 |  | <b>21 - FIRE SUPPRESSION</b>                                      |            |     |           |               |                 |
| 57 |  |                                                                   |            |     |           |               |                 |
| 58 |  | <b>210000 FIRE PROTECTION</b>                                     |            |     |           |               |                 |



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GFA

383

|                             | DESCRIPTION                       | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST    |
|-----------------------------|-----------------------------------|-----|------|--------------|---------------|--------------|------------------|
| <b>ROOF DECK - OPTION 2</b> |                                   |     |      |              |               |              |                  |
| 59                          | Fire Protection System            | 383 | gsf  | 10.00        | NR            |              |                  |
| 60                          | SUBTOTAL                          |     |      |              |               | -            |                  |
| 61                          |                                   |     |      |              |               |              |                  |
| 62                          | <b>TOTAL - FIRE SUPPRESSION</b>   |     |      |              |               |              |                  |
| 63                          |                                   |     |      |              |               |              |                  |
| 64                          | <b>22 - PLUMBING</b>              |     |      |              |               |              |                  |
| 65                          |                                   |     |      |              |               |              |                  |
| 66                          | <b>220000 PLUMBING</b>            |     |      |              |               |              |                  |
| 67                          | Plumbing systems                  | 383 | gsf  | 5.00         | 1,915         |              |                  |
| 68                          | SUBTOTAL                          |     |      |              |               | 1,915        |                  |
| 69                          |                                   |     |      |              |               |              |                  |
| 70                          |                                   |     |      |              |               |              |                  |
| 71                          | <b>TOTAL - PLUMBING</b>           |     |      |              |               |              |                  |
| 72                          |                                   |     |      |              |               |              | <b>\$1,915</b>   |
| 73                          |                                   |     |      |              |               |              |                  |
| 74                          | <b>23 - HVAC</b>                  |     |      |              |               |              |                  |
| 75                          |                                   |     |      |              |               |              |                  |
| 76                          | <b>230000 HVAC</b>                |     |      |              |               |              |                  |
| 77                          | HVAC systems                      | 383 | gsf  | 20.00        | 7,660         |              |                  |
| 78                          | SUBTOTAL                          |     |      |              |               | 7,660        |                  |
| 79                          |                                   |     |      |              |               |              |                  |
| 80                          | <b>TOTAL - HVAC</b>               |     |      |              |               |              |                  |
| 81                          |                                   |     |      |              |               |              | <b>\$7,660</b>   |
| 82                          |                                   |     |      |              |               |              |                  |
| 83                          | <b>26 - ELECTRICAL</b>            |     |      |              |               |              |                  |
| 84                          |                                   |     |      |              |               |              |                  |
| 85                          | <b>260000 ELECTRICAL</b>          |     |      |              |               |              |                  |
| 86                          | Electrical systems                | 383 | gsf  | 20.00        | 7,660         |              |                  |
| 87                          | SUBTOTAL                          |     |      |              |               | \$7,660      |                  |
| 88                          |                                   |     |      |              |               |              |                  |
| 89                          | <b>TOTAL - ELECTRICAL</b>         |     |      |              |               |              |                  |
| 90                          |                                   |     |      |              |               |              | <b>\$7,660</b>   |
| 91                          | <b>TOTAL ROOF DECK - OPTION 2</b> |     |      |              |               |              |                  |
|                             |                                   |     |      |              |               |              | <b>\$111,101</b> |



## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
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GFA

684

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## ROOF DECK - OPTION 3

Trellis - Roof Deck

684

TOTAL GROSS FLOOR AREA (GFA)

684 sf

## 02 - EXISTING CONDITIONS

## 024000 DEMOLITION

Interior Demolition

Demo/Prep for new trellis - includes protection

6

loc

500.00

3,000

SUBTOTAL

3,000

TOTAL - MASONRY

\$3,000

## 05 - METALS

## 050001 METAL FABRICATIONS

SUBTOTAL

NR

-

## 051200 STRUCTURAL STEEL FRAMING

Roof Construction

Augment/Modify/Prep existing structure for trellis connections

1

ls

10,000.00

10,000

SUBTOTAL

10,000

TOTAL - METALS

\$10,000

## 07 - THERMAL AND MOISTURE PROTECTION

## 070002 ROOFING AND FLASHING

Roof CoveringsRoofing

Miscellaneous roof patching

1

ls

5,000.00

5,000

SUBTOTAL

5,000

TOTAL - THERMAL AND MOISTURE PROTECTION

\$5,000

## 13 - SPECIAL CONSTRUCTION

## 130000 TRELLIS

Trellis - structure / finishes

684

gsf

125.00

85,500

SUBTOTAL

85,500

TOTAL - FURNISHINGS

\$85,500

## 26 - ELECTRICAL

## 260000 ELECTRICAL

Electrical systems - lighting &amp; power

684

gsf

5.00

3,420

SUBTOTAL

\$3,420

TOTAL - ELECTRICAL

\$3,420

TOTAL ROOF DECK - OPTION 3



Needham Center at the Heights  
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|                             | DESCRIPTION                                                           | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST      |
|-----------------------------|-----------------------------------------------------------------------|-----|------|-----------|------------|-----------|-----------------|
| <b>ROOF DECK - OPTION 4</b> |                                                                       |     |      |           |            |           |                 |
| 1                           | Shade Sail Structure - Roof Deck                                      |     |      |           |            |           |                 |
| 2                           |                                                                       |     |      |           |            |           |                 |
| 3                           | <b>TOTAL GROSS FLOOR AREA (GFA)</b>                                   |     |      |           |            |           | <b>sf</b>       |
| 4                           |                                                                       |     |      |           |            |           |                 |
| 5                           |                                                                       |     |      |           |            |           |                 |
| 6                           | <b>02 - EXISTING CONDITIONS</b>                                       |     |      |           |            |           |                 |
| 7                           |                                                                       |     |      |           |            |           |                 |
| 8                           | <b>024000 DEMOLITION</b>                                              |     |      |           |            |           |                 |
| 9                           | <u>Interior Demolition</u>                                            |     |      |           |            |           |                 |
| 10                          | Demo/Prep for new posts - includes protection                         | 2   | loc  | 750.00    | 1,500      |           |                 |
| 11                          | SUBTOTAL                                                              |     |      |           |            | 1,500     |                 |
| 12                          |                                                                       |     |      |           |            |           |                 |
| 13                          | <b>TOTAL - MASONRY</b>                                                |     |      |           |            |           | <b>\$1,500</b>  |
| 14                          |                                                                       |     |      |           |            |           |                 |
| 15                          |                                                                       |     |      |           |            |           |                 |
| 16                          | <b>05 - METALS</b>                                                    |     |      |           |            |           |                 |
| 17                          |                                                                       |     |      |           |            |           |                 |
| 18                          | <b>051200 STRUCTURAL STEEL FRAMING</b>                                |     |      |           |            |           |                 |
| 19                          | <u>Roof Construction</u>                                              |     |      |           |            |           |                 |
| 20                          | Structural steel posts/includes modification and prep for connections | 2   | ea   | 4,500.00  | 9,000      |           |                 |
| 21                          | SUBTOTAL                                                              |     |      |           |            | 9,000     |                 |
| 22                          |                                                                       |     |      |           |            |           |                 |
| 23                          | <b>TOTAL - METALS</b>                                                 |     |      |           |            |           | <b>\$9,000</b>  |
| 24                          |                                                                       |     |      |           |            |           |                 |
| 25                          |                                                                       |     |      |           |            |           |                 |
| 26                          | <b>07 - THERMAL AND MOISTURE PROTECTION</b>                           |     |      |           |            |           |                 |
| 27                          |                                                                       |     |      |           |            |           |                 |
| 28                          | <b>070002 ROOFING AND FLASHING</b>                                    |     |      |           |            |           |                 |
| 29                          | <u>Roof Coverings</u>                                                 |     |      |           |            |           |                 |
| 30                          | <u>Roofing</u>                                                        |     |      |           |            |           |                 |
| 31                          | Miscellaneous roof patching                                           | 1   | ls   | 5,000.00  | 5,000      |           |                 |
| 32                          | SUBTOTAL                                                              |     |      |           |            | 5,000     |                 |
| 33                          |                                                                       |     |      |           |            |           |                 |
| 34                          | <b>TOTAL - THERMAL AND MOISTURE PROTECTION</b>                        |     |      |           |            |           | <b>\$5,000</b>  |
| 35                          |                                                                       |     |      |           |            |           |                 |
| 36                          |                                                                       |     |      |           |            |           |                 |
| 37                          | <b>13 - SPECIAL CONSTRUCTION</b>                                      |     |      |           |            |           |                 |
| 38                          |                                                                       |     |      |           |            |           |                 |
| 39                          | <b>130000 SHADE SAIL</b>                                              |     |      |           |            |           |                 |
| 40                          | Shade sail                                                            |     |      |           |            | FFE       |                 |
| 41                          | SUBTOTAL                                                              |     |      |           |            |           | -               |
| 42                          |                                                                       |     |      |           |            |           |                 |
| 43                          | <b>TOTAL - FURNISHINGS</b>                                            |     |      |           |            |           |                 |
| 44                          |                                                                       |     |      |           |            |           |                 |
| 45                          |                                                                       |     |      |           |            |           |                 |
| 46                          | <b>26 - ELECTRICAL</b>                                                |     |      |           |            |           |                 |
| 47                          |                                                                       |     |      |           |            |           |                 |
| 48                          | <b>260000 ELECTRICAL</b>                                              |     |      |           |            |           |                 |
| 49                          | Electrical systems - lighting & power                                 | 1   | ls   | 3,500.00  | 3,500      |           |                 |
| 50                          | SUBTOTAL                                                              |     |      |           |            | \$3,500   |                 |
| 51                          |                                                                       |     |      |           |            |           |                 |
| 52                          | <b>TOTAL - ELECTRICAL</b>                                             |     |      |           |            |           | <b>\$3,500</b>  |
| 53                          |                                                                       |     |      |           |            |           |                 |
| 54                          | <b>TOTAL ROOF DECK - OPTION 4</b>                                     |     |      |           |            |           | <b>\$19,000</b> |



Needham Center at the Heights  
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## CONSTRUCTION COST SUMMARY IN CSI FORMAT

### VESTIBULE

*Subtotal* *Total*

#### VESTIBULE

|                                                 |          |                 |
|-------------------------------------------------|----------|-----------------|
| <b>DIV. 2 EXISTING CONDITIONS</b>               |          | <b>\$7,500</b>  |
| 024100 Demolition                               | \$7,500  |                 |
| 013280 Haz-Mat Abatement                        | \$0      |                 |
| <b>DIV. 3 CONCRETE</b>                          |          | <b>\$16,863</b> |
| 033000 Cast In Place Concrete                   | \$16,863 |                 |
| <b>DIV. 4 MASONRY</b>                           |          | <b>\$4,800</b>  |
| 044000 Masonry                                  | \$4,800  |                 |
| <b>DIV. 5 METALS</b>                            |          | <b>\$1,000</b>  |
| 050001 Metal Fabrications                       | \$1,000  |                 |
| 051200 Structural Steel Framing                 | \$0      |                 |
| 053100 Steel Decking                            | \$0      |                 |
| <b>DIV. 6 WOODS, PLASTICS &amp; COMPOSITES</b>  |          | <b>\$16,208</b> |
| 061000 Rough Carpentry                          | \$14,768 |                 |
| 064000 Architectural Woodwork                   | \$1,440  |                 |
| <b>DIV. 7 THERMAL &amp; MOISTURE PROTECTION</b> |          | <b>\$20,644</b> |
| 070001 Waterproofing/Dampproofing/Caulking      | \$5,195  |                 |
| 070002 Roofing & Flashing                       | \$5,590  |                 |
| 072100 Thermal Insulation                       | \$1,714  |                 |
| 072400 Exterior Gypsum/Stucco Finishes          | \$0      |                 |
| 074210 Metal Wall Panels                        | \$0      |                 |
| 074690 Siding                                   | \$8,145  |                 |
| 077200 Roof Specialties                         | \$0      |                 |
| 078100 Applied Fireproofing                     | \$0      |                 |
| 078400 Firestopping                             | \$0      |                 |
| 079513 Construction & Expansion Joints          | \$0      |                 |
| <b>DIV. 8 DOORS &amp; WINDOWS</b>               |          | <b>\$47,050</b> |
| 084002 Glass & Glazing                          | \$47,050 |                 |
| 081113 Doors and Frames                         | \$0      |                 |
| 083100 Access Doors and Panels                  | \$0      |                 |
| 083323 Overhead Coiling Doors                   | \$0      |                 |
| 083400 Specialty Doors                          | \$0      |                 |
| 087100 Door Hardware                            | \$0      |                 |



Needham Center at the Heights  
 Space Utilization Study #3480  
 Needham, MA  
 Schematic Design Estimate

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## CONSTRUCTION COST SUMMARY IN CSI FORMAT

### VESTIBULE

*Subtotal*      *Total*

### VESTIBULE

089000 Louvers and Vents \$0

### DIV. 9 FINISHES

**\$13,978**

|                                 |          |  |
|---------------------------------|----------|--|
| 090000 General Finishes         | \$10,000 |  |
| 090002 Tile                     | \$0      |  |
| 090003 Acoustical Ceilings      | \$0      |  |
| 090005 Resilient Flooring       | \$0      |  |
| 090009 Painting                 | \$960    |  |
| 092900 GWB, Lath and Plastering | \$3,018  |  |
| 096400 Wood Flooring            | \$0      |  |
| 096460 Wood Athletic Flooring   | \$0      |  |
| 096766 Fluid Applied Flooring   | \$0      |  |
| 096800 Carpet                   | \$0      |  |
| 097200 Wallcoverings/FRP        | \$0      |  |
| 098414 Acoustic Panels          | \$0      |  |

### DIV 10 SPECIALTIES

**\$0**

|                                  |     |  |
|----------------------------------|-----|--|
| 100000 Miscellaneous Specialties | \$0 |  |
| 101100 Markerboards              | \$0 |  |
| 101200 Display Cases             | \$0 |  |
| 101400 Signage                   | \$0 |  |
| 102113 Toilet Compartments       | \$0 |  |
| 102228 Operable Partition        | \$0 |  |
| 102813 Toilet Accessories        | \$0 |  |
| 103000 Gas Fireplaces            | \$0 |  |
| 104400 Safety Specialties        | \$0 |  |
| 105113 Metal Lockers             | \$0 |  |

### DIV. 11 EQUIPMENT

**\$0**

|                                |     |  |
|--------------------------------|-----|--|
| 110000 Miscellaneous Equipment | \$0 |  |
| 113100 Appliances              | \$0 |  |
| 114000 Foodservice Equipment   | \$0 |  |
| 115213 Projection Screens      | \$0 |  |
| 116623 Athletic Equipment      | \$0 |  |

### DIV. 12 FURNISHINGS

**\$5,120**

|                                       |         |  |
|---------------------------------------|---------|--|
| 120000 Miscellaneous Furnishings      | \$0     |  |
| 122400 Window Shades                  | \$0     |  |
| 124813 Entrance Floor Mats and Frames | \$5,120 |  |





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## CONSTRUCTION COST SUMMARY IN CSI FORMAT

### VESTIBULE

*Subtotal                      Total*

### VESTIBULE

|                                      |          |                 |
|--------------------------------------|----------|-----------------|
| <b>DIV. 13 SPECIAL CONSTRUCTION</b>  |          | <b>\$0</b>      |
| 130000 Greenhouses                   | \$0      |                 |
| 130000 Trellis                       | \$0      |                 |
| 130000 Shade Sail                    | \$0      |                 |
| <b>DIV. 14 CONVEYING SYSTEMS</b>     |          | <b>\$0</b>      |
| 140000 Elevators                     | \$0      |                 |
| <b>DIV. 21 FIRE SUPPRESSION</b>      |          | <b>\$2,000</b>  |
| 210000 Fire Suppression              | \$2,000  |                 |
| <b>DIV. 22 PLUMBING</b>              |          | <b>\$0</b>      |
| 220000 Plumbing                      | \$0      |                 |
| <b>DIV. 23 HVAC</b>                  |          | <b>\$5,500</b>  |
| 230000 HVAC                          | \$5,500  |                 |
| <b>DIV. 26 ELECTRICAL</b>            |          | <b>\$3,500</b>  |
| 260000 Electrical                    | \$3,500  |                 |
| <b>DIV. 31 EARTHWORK</b>             |          | <b>\$9,000</b>  |
| 310000 Earthwork                     | \$9,000  |                 |
| <b>DIV. 32 EXTERIOR IMPROVEMENTS</b> |          | <b>\$10,000</b> |
| 323100 Site Improvements             | \$10,000 |                 |

|                                     |                  |
|-------------------------------------|------------------|
| <b>SUBTOTAL DIRECT (TRADE) COST</b> | <b>\$163,163</b> |
|-------------------------------------|------------------|

|                                |       |                  |
|--------------------------------|-------|------------------|
| ESCALATION                     | 6.0%  | \$9,790          |
| DESIGN AND PRICING CONTINGENCY | 10.0% | \$16,316         |
| <b>SUB-TOTAL</b>               |       | <b>\$189,269</b> |
| GENERAL CONDITIONS             | 12.5% | \$23,659         |
| GENERAL REQUIREMENTS           | 3.5%  | \$6,624          |
| PHASING PREMIUM                | 5.0%  | \$9,463          |
| BONDS                          | 0.75% | \$1,420          |



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### CONSTRUCTION COST SUMMARY IN CSI FORMAT

#### VESTIBULE

Subtotal Total

#### VESTIBULE

|                              |       |          |
|------------------------------|-------|----------|
| INSURANCE                    | 1.40% | \$2,650  |
| PERMIT - \$10.00 per \$1,000 |       | \$1,893  |
| OVERHEAD + PROFIT            | 10.0% | \$23,309 |

#### TOTAL OF ALL CONSTRUCTION

**\$258,287**

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

64

|  | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|--|-------------|-----|------|-----------|------------|-----------|------------|
|--|-------------|-----|------|-----------|------------|-----------|------------|

## VESTIBULE

|   |                                     |    |  |  |  |              |  |
|---|-------------------------------------|----|--|--|--|--------------|--|
| 1 | Vestibule                           | 64 |  |  |  |              |  |
| 2 |                                     |    |  |  |  |              |  |
| 3 | <b>TOTAL GROSS FLOOR AREA (GFA)</b> |    |  |  |  | <b>64 sf</b> |  |

**02 - EXISTING CONDITIONS****024000 DEMOLITION****Interior Demolition**

Demo/Prep for new addition - includes protection

1

ls

7,500.00

7,500

SUBTOTAL

7,500

**TOTAL - MASONRY****\$7,500****03 - CONCRETE****033000 CONCRETE**Strip footings; 2'-0" x 1'-0" - Exterior

Formwork

48

sf

20.00

960

Re-bar

138

lbs

3.00

414

Concrete material; 3,000 psi

2

cy

150.00

300

Placing concrete

2

cy

250.00

500

Foundation wall; 12" thick

Formwork

168

sf

24.00

4,032

Re-bar

270

lbs

3.00

810

Concrete material; 3,000 psi

3

cy

150.00

450

Placing concrete

3

cy

250.00

750

Form shelf

24

lf

10.00

240

Miscellaneous

Dewatering - localized

1

ls

5,000.00

5,000

**Lowest Floor Construction**New Slab on grade, 5" thick

64

sf

Mesh Re-bar 15% lap

74

sf

2.50

185

Concrete -5" thick; 4,000 psi

1

cy

150.00

150

Place &amp; finish including control joints

64

sf

45.00

2,880

Miscellaneous

Moisture Mitigation; admixture

assumed not required

Vapor barrier

64

sf

3.00

192

SUBTOTAL

16,863

**TOTAL - CONCRETE****\$16,863****04 - MASONRY****040000 MASONRY****Exterior Walls**

Precast base

48

sf

100.00

4,800

SUBTOTAL

4,800

**TOTAL - MASONRY****\$4,800****05 - METALS****050001 METAL FABRICATIONS****Exterior Walls**



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GFA

64

|                  | DESCRIPTION                                                       | QTY | UNIT | UNIT COST | EST'D COST  | SUB TOTAL | TOTAL COST      |
|------------------|-------------------------------------------------------------------|-----|------|-----------|-------------|-----------|-----------------|
| <b>VESTIBULE</b> |                                                                   |     |      |           |             |           |                 |
| 59               | Misc. metals - framing package                                    | 1   | ls   | 1,000.00  | 1,000       |           |                 |
| 60               | SUBTOTAL                                                          |     |      |           |             | 1,000     |                 |
| 61               |                                                                   |     |      |           |             |           |                 |
| 62               | <b>051200 STRUCTURAL STEEL FRAMING</b>                            |     |      |           |             |           |                 |
| 63               | <u>Roof Construction</u>                                          |     |      |           |             |           |                 |
| 64               | Structural steel framing                                          |     | tns  | 10,000.00 | wood framed |           |                 |
| 65               | SUBTOTAL                                                          |     |      |           |             | -         |                 |
| 66               |                                                                   |     |      |           |             |           |                 |
| 67               | <b>053100 STEEL DECKING</b>                                       |     |      |           |             |           |                 |
| 68               | <u>Roof Construction</u>                                          |     |      |           |             |           |                 |
| 69               | Metal floor decking; 2"                                           |     | sf   | 15.00     | wood framed |           |                 |
| 70               | SUBTOTAL                                                          |     |      |           |             | -         |                 |
| 71               |                                                                   |     |      |           |             |           |                 |
| 72               | <b>TOTAL - METALS</b>                                             |     |      |           |             |           | <b>\$1,000</b>  |
| 73               |                                                                   |     |      |           |             |           |                 |
| 74               |                                                                   |     |      |           |             |           |                 |
| 75               | <b>06 - WOOD, PLASTICS AND COMPOSITES</b>                         |     |      |           |             |           |                 |
| 76               |                                                                   |     |      |           |             |           |                 |
| 77               | <b>061000 ROUGH CARPENTRY</b>                                     |     |      |           |             |           |                 |
| 78               | <u>Floor/Roof Construction</u>                                    |     |      |           |             |           |                 |
| 79               | Framing for structure - materials                                 | 64  | gsf  | 50.00     | 3,200       |           |                 |
| 80               | Framing for structure - labor                                     | 4   | cdys | 2,280.00  | 9,120       |           |                 |
| 81               | Miscellaneous blocking/carpentry                                  | 64  | gsf  | 5.00      | 320         |           |                 |
| 82               | <u>Exterior Walls</u>                                             |     |      |           |             |           |                 |
| 83               | Exterior framing                                                  |     |      |           | w/ Div 9    |           |                 |
| 84               | Window sills                                                      | 32  | lf   | 15.00     | 480         |           |                 |
| 85               | <u>Windows/Storefront</u>                                         |     |      |           |             |           |                 |
| 86               | Wood blocking at openings - exterior                              | 176 | lf   | 8.00      | 1,408       |           |                 |
| 87               | <u>Roof Coverings</u>                                             |     |      |           |             |           |                 |
| 88               | Rough blocking at roofing                                         | 24  | lf   | 10.00     | 240         |           |                 |
| 89               | SUBTOTAL                                                          |     |      |           |             | 14,768    |                 |
| 90               |                                                                   |     |      |           |             |           |                 |
| 91               | <b>064100 ARCHITECTURAL WOODWORK</b>                              |     |      |           |             |           |                 |
| 92               | <u>Specialties / Millwork</u>                                     |     |      |           |             |           |                 |
| 93               | Window sills/stool/aprons - solid surface                         | 32  | lf   | 45.00     | 1,440       |           |                 |
| 94               | SUBTOTAL                                                          |     |      |           |             | 1,440     |                 |
| 95               |                                                                   |     |      |           |             |           |                 |
| 96               | <b>TOTAL - WOOD, PLASTICS AND COMPOSITES</b>                      |     |      |           |             |           | <b>\$16,208</b> |
| 97               |                                                                   |     |      |           |             |           |                 |
| 98               |                                                                   |     |      |           |             |           |                 |
| 99               | <b>07 - THERMAL AND MOISTURE PROTECTION</b>                       |     |      |           |             |           |                 |
| 100              |                                                                   |     |      |           |             |           |                 |
| 101              | <b>070002 WATERPROOFING / DAMPPROOFING / CAULKING</b>             |     |      |           |             |           |                 |
| 102              | <u>Foundations</u>                                                |     |      |           |             |           |                 |
| 103              | Dampproofing foundation wall and footing                          | 108 | sf   | 3.50      | 378         |           |                 |
| 104              | Drainage board at foundation wall                                 | 84  | sf   | 5.00      | 420         |           |                 |
| 105              | <u>Exterior Walls</u>                                             |     |      |           |             |           |                 |
| 106              | 2"Composite sheathing board w/integral weather resistance barrier | 91  | sf   | 11.00     | 1,001       |           |                 |
| 107              | Miscellaneous sealants to closure                                 | 91  | sf   | 2.50      | 228         |           |                 |
| 108              | <u>Windows</u>                                                    |     |      |           |             |           |                 |
| 109              | Air barrier/flashing at storefront & windows                      | 176 | lf   | 9.00      | 1,584       |           |                 |
| 110              | Backer rod & double sealant                                       | 176 | lf   | 9.00      | 1,584       |           |                 |
| 111              | SUBTOTAL                                                          |     |      |           |             | 5,195     |                 |
| 112              |                                                                   |     |      |           |             |           |                 |
| 113              | <b>070002 ROOFING AND FLASHING</b>                                |     |      |           |             |           |                 |
| 114              | <u>Roof Coverings</u>                                             |     |      |           |             |           |                 |
| 115              | <u>Membrane Roof</u>                                              |     |      |           |             |           |                 |
| 116              | Roofing complete; TPO                                             | 64  | sf   | 45.00     | 2,880       |           |                 |



## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
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GFA

64

|     | DESCRIPTION                                                                                    | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST      |
|-----|------------------------------------------------------------------------------------------------|-----|------|-----------|------------|-----------|-----------------|
|     | <b>VESTIBULE</b>                                                                               |     |      |           |            |           |                 |
| 117 | <u>Miscellaneous</u>                                                                           |     |      |           |            |           |                 |
| 118 | Tie new roof into adjacent wall                                                                | 8   | lf   | 125.00    | 1,000      |           |                 |
| 119 | Miscellaneous sealants & flashings                                                             | 1   | ls   | 750.00    | 750        |           |                 |
| 120 | Parapet cap & fascia                                                                           | 24  | lf   | 30.00     | 720        |           |                 |
| 121 | <u>Misc. Flashing</u>                                                                          |     |      |           |            |           |                 |
| 122 | Flashing at base of exterior wall                                                              | 24  | lf   | 10.00     | 240        |           |                 |
| 123 | SUBTOTAL                                                                                       |     |      |           |            | 5,590     |                 |
| 124 |                                                                                                |     |      |           |            |           |                 |
| 125 | <b>072100 THERMAL INSULATION</b>                                                               |     |      |           |            |           |                 |
| 126 | <u>Foundations</u>                                                                             |     |      |           |            |           |                 |
| 127 | Insulation to foundation walls; 2" thick - exterior                                            | 84  | sf   | 3.50      | 294        |           |                 |
| 128 | Insulation strip at foundation wall step at exterior wall                                      | 24  | lf   | 3.50      | 84         |           |                 |
| 129 | <u>Lowest Floor Construction</u>                                                               |     |      |           |            |           |                 |
| 130 | Rigid insulation slab on grade; 2" thick                                                       | 64  | sf   | 3.00      | 192        |           |                 |
| 131 | <u>Exterior Walls</u>                                                                          |     |      |           |            |           |                 |
| 132 | Insulation - 2" composite sheathing board + batt insulation                                    |     |      |           | w/ GWB     |           |                 |
| 133 | <u>Windows</u>                                                                                 |     |      |           |            |           |                 |
| 134 | Foam insulation at window framing cavities                                                     | 176 | lf   | 6.50      | 1,144      |           |                 |
| 135 | SUBTOTAL                                                                                       |     |      |           |            | 1,714     |                 |
| 136 |                                                                                                |     |      |           |            |           |                 |
| 137 | <b>074690 SIDING</b>                                                                           |     |      |           |            |           |                 |
| 138 | <u>Exterior Walls</u>                                                                          |     |      |           |            |           |                 |
| 139 | Cement fiberboard siding                                                                       | 91  | sf   | 75.00     | 6,825      |           |                 |
| 140 | Cornice                                                                                        | 24  | lf   | 55.00     | 1,320      |           |                 |
| 141 | SUBTOTAL                                                                                       |     |      |           |            | 8,145     |                 |
| 142 |                                                                                                |     |      |           |            |           |                 |
| 143 | <b>078100 FIREPROOFING</b>                                                                     |     |      |           |            |           |                 |
| 144 | <u>Roof Construction</u>                                                                       |     |      |           |            |           |                 |
| 145 | Spray-applied fireproofing                                                                     |     | sf   | 3.25      | NR         |           |                 |
| 146 | SUBTOTAL                                                                                       |     |      |           |            | -         |                 |
| 147 |                                                                                                |     |      |           |            |           |                 |
| 148 | <b>079513 EXPANSION JOINTS</b>                                                                 |     |      |           |            |           |                 |
| 149 | <u>Floor Construction</u>                                                                      |     |      |           |            |           |                 |
| 150 | Allowance for expansion joints                                                                 | 1   | ls   | 1,500.00  | NR         |           |                 |
| 151 | SUBTOTAL                                                                                       |     |      |           |            | -         |                 |
| 152 |                                                                                                |     |      |           |            |           |                 |
| 153 | <b>TOTAL - THERMAL AND MOISTURE PROTECTION</b>                                                 |     |      |           |            |           | <b>\$20,644</b> |
| 154 |                                                                                                |     |      |           |            |           |                 |
| 155 |                                                                                                |     |      |           |            |           |                 |
| 156 | <b>o8 - OPENINGS</b>                                                                           |     |      |           |            |           |                 |
| 157 |                                                                                                |     |      |           |            |           |                 |
| 158 | <b>o84002 GLASS &amp; GLAZING</b>                                                              |     |      |           |            |           |                 |
| 159 | <u>Windows</u>                                                                                 |     |      |           |            |           |                 |
| 160 | New windows                                                                                    | 224 | sf   | 130.00    | 29,120     |           |                 |
| 161 | <u>Exterior Doors</u>                                                                          |     |      |           |            |           |                 |
| 162 | Glazed aluminum entrance doors including frame and hardware; single - assumed at main entrance | 1   | ea   | 5,000.00  | 5,000      |           |                 |
| 163 | <u>Interior Construction</u>                                                                   |     |      |           |            |           |                 |
| 164 | Interior storefront                                                                            | 63  | sf   | 110.00    | 6,930      |           |                 |
| 165 | Glazed aluminum interior doors including frame and hardware; single                            | 1   | ea   | 6,000.00  | 6,000      |           |                 |
| 166 | SUBTOTAL                                                                                       |     |      |           |            | 47,050    |                 |
| 167 |                                                                                                |     |      |           |            |           |                 |
| 168 | <b>TOTAL - OPENINGS</b>                                                                        |     |      |           |            |           | <b>\$47,050</b> |
| 169 |                                                                                                |     |      |           |            |           |                 |
| 170 |                                                                                                |     |      |           |            |           |                 |
| 171 | <b>o9 - FINISHES</b>                                                                           |     |      |           |            |           |                 |
| 172 |                                                                                                |     |      |           |            |           |                 |

# COST ESTIMATE - DECEMBER 9, 2022

# APPENDIX



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

64

|     | DESCRIPTION                                                   | QTY | UNIT | UNIT COST | EST'D COST           | SUB TOTAL | TOTAL COST      |
|-----|---------------------------------------------------------------|-----|------|-----------|----------------------|-----------|-----------------|
|     | <b>VESTIBULE</b>                                              |     |      |           |                      |           |                 |
| 173 | <b>090000 FINISHES</b>                                        |     |      |           |                      |           |                 |
| 174 | <u>Existing Areas</u>                                         |     |      |           |                      |           |                 |
| 175 | Patch affected floors/walls/ceilings within existing building | 1   | ls   | 10,000.00 | 10,000               |           |                 |
| 176 | SUBTOTAL                                                      |     |      |           |                      | 10,000    |                 |
| 177 |                                                               |     |      |           |                      |           |                 |
| 178 | <b>090007 PAINTING</b>                                        |     |      |           |                      |           |                 |
| 179 | <u>Interior Finishes</u>                                      |     |      |           |                      |           |                 |
| 180 | Prep/Paint new walls/ceilings                                 | 64  | sf   | 15.00     | 960                  |           |                 |
| 181 | SUBTOTAL                                                      |     |      |           |                      | 960       |                 |
| 182 |                                                               |     |      |           |                      |           |                 |
| 183 | <b>092900 GWB</b>                                             |     |      |           |                      |           |                 |
| 184 | <u>Interior Construction</u>                                  |     |      |           |                      |           |                 |
| 185 | New partitions - GWB/batt insulation on exterior walls        | 139 | sf   | 12.50     | 1,738                |           |                 |
| 186 | GWB ceiling                                                   | 64  | sf   | 20.00     | 1,280                |           |                 |
| 187 | SUBTOTAL                                                      |     |      |           |                      | 3,018     |                 |
| 188 |                                                               |     |      |           |                      |           |                 |
| 189 | <b>097200 WALLCOVERINGS</b>                                   |     |      |           |                      |           |                 |
| 190 | <u>Wall Finishes</u>                                          |     |      |           |                      |           |                 |
| 191 | Vinyl wallcoverings/Graphics                                  |     |      |           | assumed not required |           |                 |
| 192 | SUBTOTAL                                                      |     |      |           |                      | -         |                 |
| 193 |                                                               |     |      |           |                      |           |                 |
| 194 | <b>TOTAL - FINISHES</b>                                       |     |      |           |                      |           | <b>\$13,978</b> |
| 195 |                                                               |     |      |           |                      |           |                 |
| 196 |                                                               |     |      |           |                      |           |                 |
| 197 | <b>12 - FURNISHINGS</b>                                       |     |      |           |                      |           |                 |
| 198 |                                                               |     |      |           |                      |           |                 |
| 199 | <b>124813 ENTRANCE MATS</b>                                   |     |      |           |                      |           |                 |
| 200 | Entrance mats - recessed                                      | 64  | sf   | 80.00     | 5,120                |           |                 |
| 201 | SUBTOTAL                                                      |     |      |           |                      | 5,120     |                 |
| 202 |                                                               |     |      |           |                      |           |                 |
| 203 | <b>TOTAL - FURNISHINGS</b>                                    |     |      |           |                      |           | <b>\$5,120</b>  |
| 204 |                                                               |     |      |           |                      |           |                 |
| 205 |                                                               |     |      |           |                      |           |                 |
| 206 | <b>21 - FIRE SUPPRESSION</b>                                  |     |      |           |                      |           |                 |
| 207 |                                                               |     |      |           |                      |           |                 |
| 208 | <b>210000 FIRE PROTECTION</b>                                 |     |      |           |                      |           |                 |
| 209 | Fire Protection System                                        | 1   | ls   | 2,000.00  | 2,000                |           |                 |
| 210 | SUBTOTAL                                                      |     |      |           |                      | 2,000     |                 |
| 211 |                                                               |     |      |           |                      |           |                 |
| 212 | <b>TOTAL - FIRE SUPPRESSION</b>                               |     |      |           |                      |           | <b>\$2,000</b>  |
| 213 |                                                               |     |      |           |                      |           |                 |
| 214 | <b>23 - HVAC</b>                                              |     |      |           |                      |           |                 |
| 215 |                                                               |     |      |           |                      |           |                 |
| 216 | <b>230000 HVAC</b>                                            |     |      |           |                      |           |                 |
| 217 | HVAC systems                                                  | 1   | ls   | 5,500.00  | 5,500                |           |                 |
| 218 | SUBTOTAL                                                      |     |      |           |                      | 5,500     |                 |
| 219 |                                                               |     |      |           |                      |           |                 |
| 220 | <b>TOTAL - HVAC</b>                                           |     |      |           |                      |           | <b>\$5,500</b>  |
| 221 |                                                               |     |      |           |                      |           |                 |
| 222 |                                                               |     |      |           |                      |           |                 |
| 223 | <b>26 - ELECTRICAL</b>                                        |     |      |           |                      |           |                 |
| 224 |                                                               |     |      |           |                      |           |                 |
| 225 | <b>260000 ELECTRICAL</b>                                      |     |      |           |                      |           |                 |
| 226 | Electrical systems                                            | 1   | ls   | 3,500.00  | 3,500                |           |                 |
| 227 | SUBTOTAL                                                      |     |      |           |                      | \$3,500   |                 |
| 228 |                                                               |     |      |           |                      |           |                 |
| 229 | <b>TOTAL - ELECTRICAL</b>                                     |     |      |           |                      |           | <b>\$3,500</b>  |
| 230 |                                                               |     |      |           |                      |           |                 |
| 231 | <b>31 EARTHWORK</b>                                           |     |      |           |                      |           |                 |

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



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|     | DESCRIPTION                                           | QTY | UNIT | UNIT COST | EST'D COST           | SUB TOTAL | TOTAL COST       |
|-----|-------------------------------------------------------|-----|------|-----------|----------------------|-----------|------------------|
|     | VESTIBULE                                             |     |      |           |                      |           |                  |
| 232 |                                                       |     |      |           |                      |           |                  |
| 233 |                                                       |     |      |           |                      |           |                  |
| 234 | <b>312000 EARTH WORK</b>                              |     |      |           |                      |           |                  |
| 235 | <b>Foundations</b>                                    |     |      |           |                      |           |                  |
| 236 | <u>Strip footings &amp; foundation wall</u>           |     |      |           |                      |           |                  |
| 237 | Excavation/Prep for slab/Backfill/Haul & dispose soil | 1   | ls   | 7,500.00  | 7,500                |           |                  |
| 238 | Erosion control                                       | 1   | ls   | 1,500.00  | 1,500                |           |                  |
| 239 | <u>Rock removal</u>                                   |     |      |           | assumed not required |           |                  |
| 240 | Ledge/Rock removal allowance                          |     |      |           |                      |           |                  |
| 241 | SUBTOTAL                                              |     |      |           |                      | 9,000     |                  |
| 242 |                                                       |     |      |           |                      |           |                  |
| 243 | <b>TOTAL, DIVISION 31 - EARTHWORK</b>                 |     |      |           |                      |           | <b>\$9,000</b>   |
| 244 |                                                       |     |      |           |                      |           |                  |
| 245 | <b>32 SITE IMPROVEMENTS</b>                           |     |      |           |                      |           |                  |
| 246 |                                                       |     |      |           |                      |           |                  |
| 247 |                                                       |     |      |           |                      |           |                  |
| 248 | <b>320000 SITE IMPROVEMENTS</b>                       |     |      |           |                      |           |                  |
| 249 | Repair existing sidewalks/landscaping                 | 1   | ls   | 10,000.00 | 10,000               |           |                  |
| 250 | SUBTOTAL                                              |     |      |           |                      | 10,000    |                  |
| 251 |                                                       |     |      |           |                      |           |                  |
| 252 | <b>TOTAL, DIVISION 31 - EARTHWORK</b>                 |     |      |           |                      |           | <b>\$10,000</b>  |
| 253 |                                                       |     |      |           |                      |           |                  |
| 254 | <b>TOTAL VESTIBULE</b>                                |     |      |           |                      |           | <b>\$163,163</b> |



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| <b>CONSTRUCTION COST SUMMARY IN CSI FORMAT</b>  |                 |                 |                 |                |
|-------------------------------------------------|-----------------|-----------------|-----------------|----------------|
|                                                 | <b>OPTION 1</b> |                 | <b>OPTION 2</b> |                |
|                                                 | <i>Subtotal</i> | <i>Total</i>    | <i>Subtotal</i> | <i>Total</i>   |
| <b>LACTATION AND BREAK ROOM</b>                 |                 |                 |                 |                |
| <b>DIV. 2 EXISTING CONDITIONS</b>               |                 | <b>\$4,725</b>  |                 | <b>\$2,250</b> |
| 024100 Demolition                               | \$4,725         |                 | \$2,250         |                |
| 013280 Haz-Mat Abatement                        | \$0             |                 | \$0             |                |
| <b>DIV. 3 CONCRETE</b>                          |                 | <b>\$1,604</b>  |                 | <b>\$375</b>   |
| 033000 Cast In Place Concrete                   | \$1,604         |                 | \$375           |                |
| <b>DIV. 4 MASONRY</b>                           |                 | <b>\$0</b>      |                 | <b>\$0</b>     |
| 044000 Masonry                                  | \$0             |                 | \$0             |                |
| <b>DIV. 5 METALS</b>                            |                 | <b>\$0</b>      |                 | <b>\$0</b>     |
| 050001 Metal Fabrications                       | \$0             |                 | \$0             |                |
| 051200 Structural Steel Framing                 | \$0             |                 | \$0             |                |
| 053100 Steel Decking                            | \$0             |                 | \$0             |                |
| <b>DIV. 6 WOODS, PLASTICS &amp; COMPOSITES</b>  |                 | <b>\$9,150</b>  |                 | <b>\$8,150</b> |
| 061000 Rough Carpentry                          | \$1,500         |                 | \$500           |                |
| 064000 Architectural Woodwork                   | \$7,650         |                 | \$7,650         |                |
| <b>DIV. 7 THERMAL &amp; MOISTURE PROTECTION</b> |                 | <b>\$500</b>    |                 | <b>\$500</b>   |
| 070001 Waterproofing/Dampproofing/Caulking      | \$500           |                 | \$500           |                |
| 070002 Roofing & Flashing                       | \$0             |                 | \$0             |                |
| 072100 Thermal Insulation                       | \$0             |                 | \$0             |                |
| 072400 Exterior Gypsum/Stucco Finishes          | \$0             |                 | \$0             |                |
| 074210 Metal Wall Panels                        | \$0             |                 | \$0             |                |
| 074690 Siding                                   | \$0             |                 | \$0             |                |
| 077200 Roof Specialties                         | \$0             |                 | \$0             |                |
| 078100 Applied Fireproofing                     | \$0             |                 | \$0             |                |
| 078400 Firestopping                             | \$0             |                 | \$0             |                |
| 079513 Construction & Expansion Joints          | \$0             |                 | \$0             |                |
| <b>DIV. 8 DOORS &amp; WINDOWS</b>               |                 | <b>\$6,500</b>  |                 | <b>\$2,300</b> |
| 084002 Glass & Glazing                          | \$0             |                 | \$0             |                |
| 081113 Doors and Frames                         | \$3,450         |                 | \$1,150         |                |
| 083100 Access Doors and Panels                  | \$350           |                 | \$250           |                |
| 083323 Overhead Coiling Doors                   | \$0             |                 | \$0             |                |
| 083400 Specialty Doors                          | \$0             |                 | \$0             |                |
| 087100 Door Hardware                            | \$2,700         |                 | \$900           |                |
| 089000 Louvers and Vents                        | \$0             |                 | \$0             |                |
| <b>DIV. 9 FINISHES</b>                          |                 | <b>\$25,091</b> |                 | <b>\$8,576</b> |
| 090000 General Finishes                         | \$0             |                 | \$0             |                |
| 090002 Tile                                     | \$0             |                 | \$0             |                |
| 090003 Acoustical Ceilings                      | \$4,433         |                 | \$2,775         |                |
| 090005 Resilient Flooring                       | \$3,463         |                 | \$1,475         |                |
| 090009 Painting                                 | \$2,104         |                 | \$1,763         |                |
| 092900 GWB, Lath and Plastering                 | \$15,091        |                 | \$2,563         |                |
| 096400 Wood Flooring                            | \$0             |                 | \$0             |                |
| 096460 Wood Athletic Flooring                   | \$0             |                 | \$0             |                |
| 096766 Fluid Applied Flooring                   | \$0             |                 | \$0             |                |
| 096800 Carpet                                   | \$0             |                 | \$0             |                |
| 097200 Wallcoverings/FRP                        | \$0             |                 | \$0             |                |
| 098414 Acoustic Panels                          | \$0             |                 | \$0             |                |
| <b>DIV 10 SPECIALTIES</b>                       |                 | <b>\$0</b>      |                 | <b>\$0</b>     |
| 100000 Miscellaneous Specialties                | \$0             |                 | \$0             |                |
| 101100 Markerboards                             | \$0             |                 | \$0             |                |
| 101200 Display Cases                            | \$0             |                 | \$0             |                |
| 101400 Signage                                  | \$0             |                 | \$0             |                |
| 102113 Toilet Compartments                      | \$0             |                 | \$0             |                |





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| <b>CONSTRUCTION COST SUMMARY IN CSI FORMAT</b> |                 |                 |                 |                 |
|------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                                | <b>OPTION 1</b> |                 | <b>OPTION 2</b> |                 |
|                                                | <i>Subtotal</i> | <i>Total</i>    | <i>Subtotal</i> | <i>Total</i>    |
| <b>LACTATION AND BREAK ROOM</b>                |                 |                 |                 |                 |
| 102228 Operable Partition                      | \$0             |                 | \$0             |                 |
| 102813 Toilet Accessories                      | \$0             |                 | \$0             |                 |
| 103000 Gas Fireplaces                          | \$0             |                 | \$0             |                 |
| 104400 Safety Specialties                      | \$0             |                 | \$0             |                 |
| 105113 Metal Lockers                           | \$0             |                 | \$0             |                 |
| <b>DIV. 11 EQUIPMENT</b>                       |                 | <b>\$6,700</b>  |                 | <b>\$6,700</b>  |
| 110000 Miscellaneous Equipment                 | \$0             |                 | \$0             |                 |
| 113100 Appliances                              | \$6,700         |                 | \$6,700         |                 |
| 114000 Foodservice Equipment                   | \$0             |                 | \$0             |                 |
| 115213 Projection Screens                      | \$0             |                 | \$0             |                 |
| 116623 Athletic Equipment                      | \$0             |                 | \$0             |                 |
| <b>DIV. 12 FURNISHINGS</b>                     |                 | <b>\$0</b>      |                 | <b>\$0</b>      |
| 120000 Miscellaneous Furnishings               | \$0             |                 | \$0             |                 |
| 122400 Window Shades                           | \$0             |                 | \$0             |                 |
| 124813 Entrance Floor Mats and Frames          | \$0             |                 | \$0             |                 |
| <b>DIV. 13 SPECIAL CONSTRUCTION</b>            |                 | <b>\$0</b>      |                 | <b>\$0</b>      |
| 130000 Greenhouses                             | \$0             |                 | \$0             |                 |
| 130000 Trellis                                 | \$0             |                 | \$0             |                 |
| 130000 Shade Sail                              | \$0             |                 | \$0             |                 |
| <b>DIV. 14 CONVEYING SYSTEMS</b>               |                 | <b>\$0</b>      |                 | <b>\$0</b>      |
| 140000 Elevators                               | \$0             |                 | \$0             |                 |
| <b>DIV. 21 FIRE SUPPRESSION</b>                |                 | <b>\$2,500</b>  |                 | <b>\$1,500</b>  |
| 210000 Fire Suppression                        | \$2,500         |                 | \$1,500         |                 |
| <b>DIV. 22 PLUMBING</b>                        |                 | <b>\$13,000</b> |                 | <b>\$13,000</b> |
| 220000 Plumbing                                | \$13,000        |                 | \$13,000        |                 |
| <b>DIV. 23 HVAC</b>                            |                 | <b>\$19,050</b> |                 | <b>\$6,200</b>  |
| 230000 HVAC                                    | \$19,050        |                 | \$6,200         |                 |
| <b>DIV. 26 ELECTRICAL</b>                      |                 | <b>\$9,294</b>  |                 | <b>\$3,563</b>  |
| 260000 Electrical                              | \$9,294         |                 | \$3,563         |                 |
| <b>DIV. 31 EARTHWORK</b>                       |                 | <b>\$0</b>      |                 | <b>\$0</b>      |
| 310000 Earthwork                               | \$0             |                 | \$0             |                 |
| <b>DIV. 32 EXTERIOR IMPROVEMENTS</b>           |                 | <b>\$0</b>      |                 | <b>\$0</b>      |
| 323100 Site Improvements                       | \$0             |                 | \$0             |                 |
| <b>SUBTOTAL DIRECT (TRADE) COST</b>            |                 | <b>\$98,114</b> |                 | <b>\$53,114</b> |

|                                |       |                  |                 |
|--------------------------------|-------|------------------|-----------------|
| ESCALATION                     | 6.0%  | \$5,887          | \$3,187         |
| DESIGN AND PRICING CONTINGENCY | 10.0% | \$9,811          | \$5,311         |
| <b>SUB-TOTAL</b>               |       | <b>\$113,812</b> | <b>\$61,612</b> |
| GENERAL CONDITIONS             | 12.5% | \$14,227         | \$7,702         |
| GENERAL REQUIREMENTS           | 3.5%  | \$3,983          | \$2,156         |
| PHASING PREMIUM                | 5.0%  | \$5,691          | \$3,081         |
| BONDS                          | 0.75% | \$854            | \$462           |
| INSURANCE                      | 1.40% | \$1,593          | \$863           |
| PERMIT - \$10.00 per \$1,000   |       | \$1,138          | \$616           |
| OVERHEAD + PROFIT              | 10.0% | \$14,016         | \$7,588         |



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| <i><b>CONSTRUCTION COST SUMMARY IN CSI FORMAT</b></i> |              |                        |                 |
|-------------------------------------------------------|--------------|------------------------|-----------------|
| <i><b>OPTION 1</b></i>                                |              | <i><b>OPTION 2</b></i> |                 |
| <i>Subtotal</i>                                       | <i>Total</i> | <i>Subtotal</i>        | <i>Total</i>    |
| <b>LACTATION AND BREAK ROOM</b>                       |              |                        |                 |
| <b>TOTAL OF ALL CONSTRUCTION</b>                      |              | <b>\$155,314</b>       | <b>\$84,080</b> |

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
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GFA

345

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## LACTATION ROOM &amp; BREAK ROOM - OPTION 1

|                |     |
|----------------|-----|
| Lactation Room | 70  |
| Storage Room   | 135 |
| Break Room     | 140 |

## TOTAL GROSS FLOOR AREA (GFA)

345 sf

## 02 - EXISTING CONDITIONS

## 024000 DEMOLITION

Interior Demolition

|                                             |     |    |          |       |       |
|---------------------------------------------|-----|----|----------|-------|-------|
| Remove/Dispose existing finishes            | 345 | sf | 5.00     | 1,725 |       |
| Sawcut/Trench for plumbing waste            | 1   | ls | 1,500.00 | 1,500 |       |
| Protection/Temp partitions to isolate space | 1   | ls | 1,500.00 | 1,500 |       |
| SUBTOTAL                                    |     |    |          |       | 4,725 |

## TOTAL - MASONRY

\$4,725

## 03 - CONCRETE

## 033000 CONCRETE

Interior Construction

|                                      |     |    |          |       |       |
|--------------------------------------|-----|----|----------|-------|-------|
| Floor patching/Prep - plumbing waste | 1   | ls | 1,000.00 | 1,000 |       |
| Minor floor prep                     | 345 | sf | 1.75     | 604   |       |
| SUBTOTAL                             |     |    |          |       | 1,604 |

## TOTAL - CONCRETE

\$1,604

## 06 - WOOD, PLASTICS AND COMPOSITES

## 061000 ROUGH CARPENTRY

Interior Construction

|                         |   |    |          |       |       |
|-------------------------|---|----|----------|-------|-------|
| Misc carpentry/Blocking | 1 | ls | 1,500.00 | 1,500 |       |
| SUBTOTAL                |   |    |          |       | 1,500 |

## 064100 ARCHITECTURAL WOODWORK

Interior Construction

|                                      |   |    |        |                |       |
|--------------------------------------|---|----|--------|----------------|-------|
| Cabinetry/Built-ins - Break Room     | 9 | lf | 850.00 | 7,650          |       |
| Cabinetry/Built-ins - Lactation Room |   |    |        | wall hung sink |       |
| SUBTOTAL                             |   |    |        |                | 7,650 |

## TOTAL - WOOD, PLASTICS AND COMPOSITES

\$9,150

## 07 - THERMAL AND MOISTURE PROTECTION

## 070002 WATERPROOFING / DAMPPROOFING / CAULKING

Interior Construction

|                                 |   |    |        |     |     |
|---------------------------------|---|----|--------|-----|-----|
| Caulking - dissimilar materials | 1 | ls | 500.00 | 500 |     |
| SUBTOTAL                        |   |    |        |     | 500 |

## TOTAL - THERMAL AND MOISTURE PROTECTION

\$500

## 08 - OPENINGS

# COST ESTIMATE - DECEMBER 9, 2022

# APPENDIX



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GFA

345

|  | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|--|-------------|-----|------|-----------|------------|-----------|------------|
|--|-------------|-----|------|-----------|------------|-----------|------------|

## LACTATION ROOM & BREAK ROOM - OPTION 1

### 084002 GLASS & GLAZING

#### Interior Construction

Glazing sidelights

NR

SUBTOTAL

-

### 081113 DOORS AND FRAMES

#### Interior

#### Doors/Frames/Hardware

Doors/HM frames - single

3

ea

1,150.00

3,450

Doors/HM frames - double

ea

2,000.00

NR

Premium for glass in doors

ea

500.00

NR

Frames, sidelights

loc

900.00

NR

SUBTOTAL

3,450

### 083100 ACCESS DOORS AND FRAMES

#### Interior Doors

Access doors

1

ls

350.00

350

SUBTOTAL

350

### 087100 DOOR HARDWARE

#### Interior Doors

Hardware to interior doors

3

set

900.00

2,700

SUBTOTAL

2,700

## TOTAL - OPENINGS

\$6,500

## 09 - FINISHES

### 090003 ACT

#### Interior Finishes

New ACT ceilings

345

sf

8.50

2,933

Open/Close/Patch existing ceilings

1

ls

1,500.00

1,500

SUBTOTAL

4,433

### 090005 RESILIENT FLOORS

#### Interior Finishes

Resilient flooring - VCT

345

sf

7.50

2,588

Resilient base

175

lf

5.00

875

SUBTOTAL

3,463

### 090007 PAINTING

#### Interior Finishes

Prep/Paint new construction

345

sf

1.75

604

Prep/Paint affected areas

1

ls

1,500.00

1,500

SUBTOTAL

2,104

### 092900 GWB

#### Interior Construction

New partitions/Install door frames

813

sf

17.50

14,228

Open/Close/Patch existing walls

345

sf

2.50

863

SUBTOTAL

15,091

### 097200 WALLCOVERINGS

#### Wall Finishes

Vinyl wallcoverings/Graphics

assumed not required

SUBTOTAL

-



## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



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345

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## LACTATION ROOM &amp; BREAK ROOM - OPTION 1

|                         |  |  |  |  |  |  |                 |
|-------------------------|--|--|--|--|--|--|-----------------|
| <b>TOTAL - FINISHES</b> |  |  |  |  |  |  | <b>\$25,091</b> |
|-------------------------|--|--|--|--|--|--|-----------------|

## 10 - SPECIALTIES

## 100000 VISUAL DISPLAY SURFACES

Interior Construction

Marker boards/Tackboards/Display cases

assumed not required

SUBTOTAL

-

## 101400 SIGNAGE

Interior Construction

Room Signs

assumed not required

Branding/Graphics

assumed not required

SUBTOTAL

-

## TOTAL - SPECIALTIES

## 11 - EQUIPMENT

## 113100 APPLIANCES

Equipment

Appliances - Break Room

1

ea

5,500.00

5,500

UC refrigerator - Lactation Room

1

ea

1,200.00

1,200

SUBTOTAL

6,700

## TOTAL - EQUIPMENT

\$6,700

## 21 - FIRE SUPPRESSION

## 210000 FIRE PROTECTION

Fire Protection System

Adjust existing heads

1

ls

2,500.00

2,500

SUBTOTAL

2,500

## TOTAL - FIRE SUPPRESSION

\$2,500

## 22 - PLUMBING

## 220000 PLUMBING

Plumbing Fixtures & Specialties

Sink - Break Room

1

ea

6,500.00

6,500

Sink - Lactation Room

1

ea

6,500.00

6,500

SUBTOTAL

13,000

## TOTAL - PLUMBING

\$13,000

## 23 - HVAC

## 230000 HVAC

Air distribution

Fan coil units

2

ea

5,500.00

11,000

Sheet metal & Accessories

Minor rework of duct + RGDs

1

ls

2,500.00

2,500

Automatic Temperature Controls



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|     | DESCRIPTION                                            | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST   |
|-----|--------------------------------------------------------|-----|------|--------------|---------------|--------------|-----------------|
|     | <b>LACTATION ROOM &amp; BREAK ROOM - OPTION 1</b>      |     |      |              |               |              |                 |
| 179 | Automatic temperature controls DDC                     | 3   | loc  | 1,500.00     | 4,500         |              |                 |
| 180 | <u>Balancing</u>                                       |     |      |              |               |              |                 |
| 181 | System testing & balancing                             | 3   | rms  | 350.00       | 1,050         |              |                 |
| 182 | SUBTOTAL                                               |     |      |              |               | 19,050       |                 |
| 183 |                                                        |     |      |              |               |              |                 |
| 184 | <b>TOTAL - HVAC</b>                                    |     |      |              |               |              | <b>\$19,050</b> |
| 185 |                                                        |     |      |              |               |              |                 |
| 186 |                                                        |     |      |              |               |              |                 |
| 187 | <b>26 - ELECTRICAL</b>                                 |     |      |              |               |              |                 |
| 188 |                                                        |     |      |              |               |              |                 |
| 189 | <b>260000 ELECTRICAL</b>                               |     |      |              |               |              |                 |
| 190 | <u>Equipment Wiring</u>                                |     |      |              |               |              |                 |
| 191 | MEP equipment                                          | 2   | unit | 1,500.00     | 3,000         |              |                 |
| 192 | <u>Lighting (fixture schedule not provided, allow)</u> |     |      |              |               |              |                 |
| 193 | Minor rework existing                                  | 1   | ls   | 1,000.00     | 1,000         |              |                 |
| 194 | New lighting                                           | 8   | ea   | 500.00       | 4,000         |              |                 |
| 195 | <u>Lighting Controls</u>                               |     |      |              |               |              |                 |
| 196 | Lighting controls/switching/occupancy sensors          | 3   | loc  | 250.00       | ETR           |              |                 |
| 197 | <u>Branch Power</u>                                    |     |      |              |               |              |                 |
| 198 | Receptacles/Devices                                    | 345 | gsf  | 2.00         | 690           |              |                 |
| 199 | <u>Fire Alarm</u>                                      |     |      |              |               |              |                 |
| 200 | Fire alarm system                                      | 345 | gsf  | 3.50         | ETR           |              |                 |
| 201 | <u>Telephone/Data/CATV</u>                             |     |      |              |               |              |                 |
| 202 | Devices and cabling                                    | 345 | gsf  | 1.00         | 345           |              |                 |
| 203 | <u>Audio/Visual systems</u>                            |     |      |              |               |              |                 |
| 204 | Rough-in only with conduits and backboxes              | 345 | gsf  | 0.75         | 259           |              |                 |
| 205 | Sound system - Fitness                                 |     |      |              | NIC           |              |                 |
| 206 | SUBTOTAL                                               |     |      |              |               | \$9,294      |                 |
| 207 |                                                        |     |      |              |               |              |                 |
| 208 | <b>TOTAL -ELECTRICAL</b>                               |     |      |              |               |              | <b>\$9,294</b>  |
| 209 |                                                        |     |      |              |               |              |                 |
| 210 | <b>TOTAL LACTATION AND BREAK ROOM - OPTION 1</b>       |     |      |              |               |              | <b>\$98,114</b> |

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

150

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## LACTATION ROOM &amp; BREAK ROOM - OPTION 2

Lactation Room  
Storage Room

60  
90

## TOTAL GROSS FLOOR AREA (GFA)

150 sf

## 02 - EXISTING CONDITIONS

## 024000 DEMOLITION

Interior Demolition

Remove/Dispose existing finishes

150

sf

5.00

750

Protection/Temp partitions to isolate space

1

ls

1,500.00

1,500

SUBTOTAL

2,250

## TOTAL - MASONRY

\$2,250

## 03 - CONCRETE

## 033000 CONCRETE

Interior Construction

Minor floor prep

150

sf

2.50

375

SUBTOTAL

375

## TOTAL - CONCRETE

\$375

## 06 - WOOD, PLASTICS AND COMPOSITES

## 061000 ROUGH CARPENTRY

Interior Construction

Misc carpentry/Blocking

1

ls

500.00

500

SUBTOTAL

500

## 064100 ARCHITECTURAL WOODWORK

Interior Construction

Cabinetry/Built-ins - Break Room

9

lf

850.00

7,650

Cabinetry/Built-ins - Lactation Room

wall hung sink

SUBTOTAL

7,650

## TOTAL - WOOD, PLASTICS AND COMPOSITES

\$8,150

## 07 - THERMAL AND MOISTURE PROTECTION

## 070002 WATERPROOFING / DAMPPROOFING / CAULKING

Interior Construction

Caulking - dissimilar materials

1

ls

500.00

500

SUBTOTAL

500

## TOTAL - THERMAL AND MOISTURE PROTECTION

\$500

## 08 - OPENINGS

## 084002 GLASS &amp; GLAZING

Interior Construction

Glazing sidelights

NR



Needham Center at the Heights  
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9-Dec-22

GFA

150

|     | DESCRIPTION                                       | QTY | UNIT | UNIT<br>COST | EST'D<br>COST        | SUB<br>TOTAL | TOTAL<br>COST  |
|-----|---------------------------------------------------|-----|------|--------------|----------------------|--------------|----------------|
|     | <b>LACTATION ROOM &amp; BREAK ROOM - OPTION 2</b> |     |      |              |                      |              |                |
| 60  | SUBTOTAL                                          |     |      |              |                      | -            |                |
| 61  |                                                   |     |      |              |                      |              |                |
| 62  | <b>081113 DOORS AND FRAMES</b>                    |     |      |              |                      |              |                |
| 63  | <u>Interior</u>                                   |     |      |              |                      |              |                |
| 64  | <u>Doors/Frames/Hardware</u>                      |     |      |              |                      |              |                |
| 65  | Doors/HM frames - single                          | 1   | ea   | 1,150.00     | 1,150                |              |                |
| 66  | Doors/HM frames - double                          |     | ea   | 2,000.00     | NR                   |              |                |
| 67  | Premium for glass in doors                        |     | ea   | 500.00       | NR                   |              |                |
| 68  | Frames, sidelights                                |     | loc  | 900.00       | NR                   |              |                |
| 69  | SUBTOTAL                                          |     |      |              |                      | 1,150        |                |
| 70  |                                                   |     |      |              |                      |              |                |
| 71  | <b>083100 ACCESS DOORS AND FRAMES</b>             |     |      |              |                      |              |                |
| 72  | <u>Interior Doors</u>                             |     |      |              |                      |              |                |
| 73  | Access doors                                      | 1   | ls   | 250.00       | 250                  |              |                |
| 74  | SUBTOTAL                                          |     |      |              |                      | 250          |                |
| 75  |                                                   |     |      |              |                      |              |                |
| 76  | <b>087100 DOOR HARDWARE</b>                       |     |      |              |                      |              |                |
| 77  | <u>Interior Doors</u>                             |     |      |              |                      |              |                |
| 78  | Hardware to interior doors                        | 1   | set  | 900.00       | 900                  |              |                |
| 79  | SUBTOTAL                                          |     |      |              |                      | 900          |                |
| 80  |                                                   |     |      |              |                      |              |                |
| 81  | <b>TOTAL - OPENINGS</b>                           |     |      |              |                      |              | <b>\$2,300</b> |
| 82  |                                                   |     |      |              |                      |              |                |
| 83  |                                                   |     |      |              |                      |              |                |
| 84  | <b>09 - FINISHES</b>                              |     |      |              |                      |              |                |
| 85  |                                                   |     |      |              |                      |              |                |
| 86  | <b>090003 ACT</b>                                 |     |      |              |                      |              |                |
| 87  | <u>Interior Finishes</u>                          |     |      |              |                      |              |                |
| 88  | New ACT ceilings                                  | 150 | sf   | 8.50         | 1,275                |              |                |
| 89  | Open/Close/Patch existing ceilings                | 1   | ls   | 1,500.00     | 1,500                |              |                |
| 90  | SUBTOTAL                                          |     |      |              |                      | 2,775        |                |
| 91  |                                                   |     |      |              |                      |              |                |
| 92  | <b>090005 RESILIENT FLOORS</b>                    |     |      |              |                      |              |                |
| 93  | <u>Interior Finishes</u>                          |     |      |              |                      |              |                |
| 94  | Resilient flooring - VCT                          | 150 | sf   | 7.50         | 1,125                |              |                |
| 95  | Resilient base                                    | 70  | lf   | 5.00         | 350                  |              |                |
| 96  | SUBTOTAL                                          |     |      |              |                      | 1,475        |                |
| 97  |                                                   |     |      |              |                      |              |                |
| 98  | <b>090007 PAINTING</b>                            |     |      |              |                      |              |                |
| 99  | <u>Interior Finishes</u>                          |     |      |              |                      |              |                |
| 100 | Prep/Paint new construction                       | 150 | sf   | 1.75         | 263                  |              |                |
| 101 | Prep/Paint affected areas                         | 1   | ls   | 1,500.00     | 1,500                |              |                |
| 102 | SUBTOTAL                                          |     |      |              |                      | 1,763        |                |
| 103 |                                                   |     |      |              |                      |              |                |
| 104 | <b>092900 GWB</b>                                 |     |      |              |                      |              |                |
| 105 | <u>Interior Construction</u>                      |     |      |              |                      |              |                |
| 106 | New partitions/Install door frames                | 125 | sf   | 17.50        | 2,188                |              |                |
| 107 | Open/Close/Patch existing walls                   | 150 | sf   | 2.50         | 375                  |              |                |
| 108 | SUBTOTAL                                          |     |      |              |                      | 2,563        |                |
| 109 |                                                   |     |      |              |                      |              |                |
| 110 | <b>097200 WALLCOVERINGS</b>                       |     |      |              |                      |              |                |
| 111 | <u>Wall Finishes</u>                              |     |      |              |                      |              |                |
| 112 | Vinyl wallcoverings/Graphics                      |     |      |              | assumed not required |              |                |
| 113 | SUBTOTAL                                          |     |      |              |                      | -            |                |
| 114 |                                                   |     |      |              |                      |              |                |
| 115 | <b>TOTAL - FINISHES</b>                           |     |      |              |                      |              | <b>\$8,576</b> |
| 116 |                                                   |     |      |              |                      |              |                |
| 117 |                                                   |     |      |              |                      |              |                |
| 118 |                                                   |     |      |              |                      |              |                |



## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
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9-Dec-22

GFA

150

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## LACTATION ROOM &amp; BREAK ROOM - OPTION 2

## 10 - SPECIALTIES

## 100000 VISUAL DISPLAY SURFACES

Interior Construction

Marker boards/Tackboards/Display cases

assumed not required

SUBTOTAL

-

## 101400 SIGNAGE

Interior Construction

Room Signs

assumed not required

Branding/Graphics

assumed not required

SUBTOTAL

-

## TOTAL - SPECIALTIES

## 11 - EQUIPMENT

## 113100 APPLIANCES

Equipment

Appliances - Break Room

1

ea

5,500.00

5,500

UC refrigerator - Lactation Room

1

ea

1,200.00

1,200

SUBTOTAL

6,700

## TOTAL - EQUIPMENT

\$6,700

## 21 - FIRE SUPPRESSION

## 210000 FIRE PROTECTION

Fire Protection System

Adjust existing heads

1

ls

1,500.00

1,500

SUBTOTAL

1,500

## TOTAL - FIRE SUPPRESSION

\$1,500

## 22 - PLUMBING

## 220000 PLUMBING

Plumbing Fixtures & Specialties

Sink - Break Room

1

ea

6,500.00

6,500

Sink - Lactation Room

1

ea

6,500.00

6,500

SUBTOTAL

13,000

## TOTAL - PLUMBING

\$13,000

## 23 - HVAC

## 230000 HVAC

Air distribution

Fan coil units

ea

5,500.00

NR

Sheet metal & Accessories

Minor rework of duct + RGDs

1

ls

2,500.00

2,500

Automatic Temperature Controls

Automatic temperature controls DDC

2

loc

1,500.00

3,000

Balancing

System testing &amp; balancing

2

rms

350.00

700



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150

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

#### LACTATION ROOM & BREAK ROOM - OPTION 2

179 SUBTOTAL 6,200

|     |                     |  |  |  |  |  |                |
|-----|---------------------|--|--|--|--|--|----------------|
| 180 | <b>TOTAL - HVAC</b> |  |  |  |  |  | <b>\$6,200</b> |
|-----|---------------------|--|--|--|--|--|----------------|

|     |                        |  |  |  |  |  |  |
|-----|------------------------|--|--|--|--|--|--|
| 182 | <b>26 - ELECTRICAL</b> |  |  |  |  |  |  |
|-----|------------------------|--|--|--|--|--|--|

|     |                                                 |     |      |          |  |       |         |
|-----|-------------------------------------------------|-----|------|----------|--|-------|---------|
| 184 | <b>260000 ELECTRICAL</b>                        |     |      |          |  |       |         |
| 185 | Equipment Wiring                                |     |      |          |  |       |         |
| 186 | MEP equipment                                   |     | unit | 1,500.00 |  | NR    |         |
| 187 | Lighting (fixture schedule not provided, allow) |     |      |          |  |       |         |
| 188 | Minor rework existing                           | 1   | ls   | 1,000.00 |  | 1,000 |         |
| 189 | New lighting                                    | 4   | ea   | 500.00   |  | 2,000 |         |
| 190 | Lighting Controls                               |     |      |          |  |       |         |
| 191 | Lighting controls/switching/occupancy sensors   | 2   | loc  | 250.00   |  | ETR   |         |
| 192 | Branch Power                                    |     |      |          |  |       |         |
| 193 | Receptacles/Devices                             | 150 | gsf  | 2.00     |  | 300   |         |
| 194 | Fire Alarm                                      |     |      |          |  |       |         |
| 195 | Fire alarm system                               | 150 | gsf  | 3.50     |  | ETR   |         |
| 196 | Telephone/Data/CATV                             |     |      |          |  |       |         |
| 197 | Devices and cabling                             | 150 | gsf  | 1.00     |  | 150   |         |
| 198 | Audio/Visual systems                            |     |      |          |  |       |         |
| 199 | Rough-in only with conduits and backboxes       | 150 | gsf  | 0.75     |  | 113   |         |
| 200 | Sound system - Fitness                          |     |      |          |  | NIC   |         |
| 201 | SUBTOTAL                                        |     |      |          |  |       | \$3,563 |

|     |                          |  |  |  |  |  |                |
|-----|--------------------------|--|--|--|--|--|----------------|
| 202 | <b>TOTAL -ELECTRICAL</b> |  |  |  |  |  | <b>\$3,563</b> |
|-----|--------------------------|--|--|--|--|--|----------------|

|     |                                                  |  |  |  |  |  |                 |
|-----|--------------------------------------------------|--|--|--|--|--|-----------------|
| 203 | <b>TOTAL LACTATION AND BREAK ROOM - OPTION 1</b> |  |  |  |  |  | <b>\$53,114</b> |
|-----|--------------------------------------------------|--|--|--|--|--|-----------------|

## APPENDIX

## COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

| CONSTRUCTION COST SUMMARY IN CSI FORMAT |                                     |          |          |          |          |          |         |
|-----------------------------------------|-------------------------------------|----------|----------|----------|----------|----------|---------|
|                                         |                                     | OPTION 1 |          | OPTION 2 |          | OPTION 3 |         |
|                                         |                                     | Subtotal | Total    | Subtotal | Total    | Subtotal | Total   |
| OFFICE RECONFIGURATION                  |                                     |          |          |          |          |          |         |
| DIV. 2 EXISTING CONDITIONS              |                                     |          | \$5,550  |          | \$5,870  |          | \$2,250 |
| 024100                                  | Demolition                          | \$5,550  |          | \$5,870  |          | \$2,250  |         |
| 013280                                  | Haz-Mat Abatement                   | \$0      |          | \$0      |          | \$0      |         |
| DIV. 3 CONCRETE                         |                                     |          | \$2,025  |          | \$2,185  |          | \$375   |
| 033000                                  | Cast In Place Concrete              | \$2,025  |          | \$2,185  |          | \$375    |         |
| DIV. 4 MASONRY                          |                                     |          | \$0      |          | \$0      |          | \$0     |
| 044000                                  | Masonry                             | \$0      |          | \$0      |          | \$0      |         |
| DIV. 5 METALS                           |                                     |          | \$0      |          | \$0      |          | \$0     |
| 050001                                  | Metal Fabrications                  | \$0      |          | \$0      |          | \$0      |         |
| 051200                                  | Structural Steel Framing            | \$0      |          | \$0      |          | \$0      |         |
| 053100                                  | Steel Decking                       | \$0      |          | \$0      |          | \$0      |         |
| DIV. 6 WOODS, PLASTICS & COMPOSITES     |                                     |          | \$4,375  |          | \$2,250  |          | \$500   |
| 061000                                  | Rough Carpentry                     | \$1,500  |          | \$2,250  |          | \$500    |         |
| 064000                                  | Architectural Woodwork              | \$2,875  |          | \$0      |          | \$0      |         |
| DIV. 7 THERMAL & MOISTURE PROTECTION    |                                     |          | \$1,000  |          | \$1,000  |          | \$500   |
| 070001                                  | Waterproofing/Dampproofing/Caulking | \$1,000  |          | \$1,000  |          | \$500    |         |
| 070002                                  | Roofing & Flashing                  | \$0      |          | \$0      |          | \$0      |         |
| 072100                                  | Thermal Insulation                  | \$0      |          | \$0      |          | \$0      |         |
| 072400                                  | Exterior Gypsum/Stucco Finishes     | \$0      |          | \$0      |          | \$0      |         |
| 074210                                  | Metal Wall Panels                   | \$0      |          | \$0      |          | \$0      |         |
| 074690                                  | Siding                              | \$0      |          | \$0      |          | \$0      |         |
| 077200                                  | Roof Specialties                    | \$0      |          | \$0      |          | \$0      |         |
| 078100                                  | Applied Fireproofing                | \$0      |          | \$0      |          | \$0      |         |
| 078400                                  | Firestopping                        | \$0      |          | \$0      |          | \$0      |         |
| 079513                                  | Construction & Expansion Joints     | \$0      |          | \$0      |          | \$0      |         |
| DIV. 8 DOORS & WINDOWS                  |                                     |          | \$2,300  |          | \$31,550 |          | \$250   |
| 084002                                  | Glass & Glazing                     | \$0      |          | \$19,000 |          | \$0      |         |
| 081113                                  | Doors and Frames                    | \$1,150  |          | \$6,900  |          | \$0      |         |
| 083100                                  | Access Doors and Panels             | \$250    |          | \$250    |          | \$250    |         |
| 083323                                  | Overhead Coiling Doors              | \$0      |          | \$0      |          | \$0      |         |
| 083400                                  | Specialty Doors                     | \$0      |          | \$0      |          | \$0      |         |
| 087100                                  | Door Hardware                       | \$900    |          | \$5,400  |          | \$0      |         |
| 089000                                  | Louvers and Vents                   | \$0      |          | \$0      |          | \$0      |         |
| DIV. 9 FINISHES                         |                                     |          | \$22,941 |          | \$44,156 |          | \$3,725 |
| 090000                                  | General Finishes                    | \$0      |          | \$0      |          | \$0      |         |
| 090002                                  | Tile                                | \$0      |          | \$0      |          | \$0      |         |
| 090003                                  | Acoustical Ceilings                 | \$4,550  |          | \$4,870  |          | \$1,250  |         |
| 090005                                  | Resilient Flooring                  | \$740    |          | \$1,695  |          | \$175    |         |
| 090009                                  | Painting                            | \$1,918  |          | \$3,685  |          | \$875    |         |
| 092900                                  | GWB, Lath and Plastering            | \$9,658  |          | \$28,225 |          | \$450    |         |
| 096400                                  | Wood Flooring                       | \$0      |          | \$0      |          | \$0      |         |
| 096460                                  | Wood Athletic Flooring              | \$0      |          | \$0      |          | \$0      |         |
| 096766                                  | Fluid Applied Flooring              | \$0      |          | \$0      |          | \$0      |         |
| 096800                                  | Carpet                              | \$6,075  |          | \$5,681  |          | \$975    |         |
| 097200                                  | Wallcoverings/FRP                   | \$0      |          | \$0      |          | \$0      |         |
| 098414                                  | Acoustic Panels                     | \$0      |          | \$0      |          | \$0      |         |
| DIV 10 SPECIALTIES                      |                                     |          | \$0      |          | \$0      |          | \$0     |
| 100000                                  | Miscellaneous Specialties           | \$0      |          | \$0      |          | \$0      |         |
| 101100                                  | Markerboards                        | \$0      |          | \$0      |          | \$0      |         |
| 101200                                  | Display Cases                       | \$0      |          | \$0      |          | \$0      |         |
| 101400                                  | Signage                             | \$0      |          | \$0      |          | \$0      |         |
| 102113                                  | Toilet Compartments                 | \$0      |          | \$0      |          | \$0      |         |
| 102228                                  | Operable Partition                  | \$0      |          | \$0      |          | \$0      |         |
| 102813                                  | Toilet Accessories                  | \$0      |          | \$0      |          | \$0      |         |
| 103000                                  | Gas Fireplaces                      | \$0      |          | \$0      |          | \$0      |         |
| 104400                                  | Safety Specialties                  | \$0      |          | \$0      |          | \$0      |         |
| 105113                                  | Metal Lockers                       | \$0      |          | \$0      |          | \$0      |         |
| DIV. 11 EQUIPMENT                       |                                     |          | \$0      |          | \$0      |          | \$0     |
| 110000                                  | Miscellaneous Equipment             | \$0      |          | \$0      |          | \$0      |         |
| 113100                                  | Appliances                          | \$0      |          | \$0      |          | \$0      |         |
| 114000                                  | Foodservice Equipment               | \$0      |          | \$0      |          | \$0      |         |
| 115213                                  | Projection Screens                  | \$0      |          | \$0      |          | \$0      |         |
| 116623                                  | Athletic Equipment                  | \$0      |          | \$0      |          | \$0      |         |
| DIV. 12 FURNISHINGS                     |                                     |          | \$0      |          | \$0      |          | \$0     |
| 120000                                  | Miscellaneous Furnishings           | \$0      |          | \$0      |          | \$0      |         |
| 122400                                  | Window Shades                       | \$0      |          | \$0      |          | \$0      |         |
| 124813                                  | Entrance Floor Mats and Frames      | \$0      |          | \$0      |          | \$0      |         |
| DIV. 13 SPECIAL CONSTRUCTION            |                                     |          | \$0      |          | \$0      |          | \$0     |
| 130000                                  | Greenhouses                         | \$0      |          | \$0      |          | \$0      |         |
| 130000                                  | Trellis                             | \$0      |          | \$0      |          | \$0      |         |
| 130000                                  | Shade Sail                          | \$0      |          | \$0      |          | \$0      |         |



Needham Center at the Heights  
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Schematic Design Estimate

9-Dec-22

| <b>CONSTRUCTION COST SUMMARY IN CSI FORMAT</b> |                 |                 |                 |                  |                 |                 |
|------------------------------------------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|
|                                                | <b>OPTION 1</b> |                 | <b>OPTION 2</b> |                  | <b>OPTION 3</b> |                 |
|                                                | <i>Subtotal</i> | <i>Total</i>    | <i>Subtotal</i> | <i>Total</i>     | <i>Subtotal</i> | <i>Total</i>    |
| <b>OFFICE RECONFIGURATION</b>                  |                 |                 |                 |                  |                 |                 |
| <b>DIV. 14 CONVEYING SYSTEMS</b>               |                 | <b>\$0</b>      |                 | <b>\$0</b>       |                 | <b>\$0</b>      |
| 140000 Elevators                               | \$0             |                 | \$0             |                  | \$0             |                 |
| <b>DIV. 21 FIRE SUPPRESSION</b>                |                 | <b>\$2,500</b>  |                 | <b>\$2,500</b>   |                 | <b>\$1,000</b>  |
| 210000 Fire Suppression                        | \$2,500         |                 | \$2,500         |                  | \$1,000         |                 |
| <b>DIV. 22 PLUMBING</b>                        |                 | <b>\$0</b>      |                 | <b>\$0</b>       |                 | <b>\$0</b>      |
| 220000 Plumbing                                | \$0             |                 | \$0             |                  | \$0             |                 |
| <b>DIV. 23 HVAC</b>                            |                 | <b>\$6,200</b>  |                 | <b>\$25,600</b>  |                 | <b>\$1,100</b>  |
| 230000 HVAC                                    | \$6,200         |                 | \$25,600        |                  | \$1,100         |                 |
| <b>DIV. 26 ELECTRICAL</b>                      |                 | <b>\$8,245</b>  |                 | <b>\$20,711</b>  |                 | <b>\$2,200</b>  |
| 260000 Electrical                              | \$8,245         |                 | \$20,711        |                  | \$2,200         |                 |
| <b>DIV. 31 EARTHWORK</b>                       |                 | <b>\$0</b>      |                 | <b>\$0</b>       |                 | <b>\$0</b>      |
| 310000 Earthwork                               | \$0             |                 | \$0             |                  | \$0             |                 |
| <b>DIV. 32 EXTERIOR IMPROVEMENTS</b>           |                 | <b>\$0</b>      |                 | <b>\$0</b>       |                 | <b>\$0</b>      |
| 323100 Site Improvements                       | \$0             |                 | \$0             |                  | \$0             |                 |
| <b>SUBTOTAL DIRECT (TRADE) COST</b>            |                 | <b>\$55,136</b> |                 | <b>\$135,822</b> |                 | <b>\$11,900</b> |
| ESCALATION                                     | 6.0%            | \$3,308         |                 | \$8,149          |                 | \$714           |
| DESIGN AND PRICING CONTINGENCY                 | 10.0%           | \$5,514         |                 | \$13,582         |                 | \$1,190         |
| <b>SUB-TOTAL</b>                               |                 | <b>\$63,958</b> |                 | <b>\$157,553</b> |                 | <b>\$13,804</b> |
| GENERAL CONDITIONS                             | 12.5%           | \$7,995         |                 | \$19,694         |                 | \$1,726         |
| GENERAL REQUIREMENTS                           | 3.5%            | \$2,239         |                 | \$5,514          |                 | \$483           |
| PHASING PREMIUM                                | 5.0%            | \$3,198         |                 | \$7,878          |                 | \$690           |
| BONDS                                          | 0.75%           | \$480           |                 | \$1,182          |                 | \$104           |
| INSURANCE                                      | 1.40%           | \$895           |                 | \$2,206          |                 | \$193           |
| PERMIT - \$10.00 per \$1,000                   |                 | \$640           |                 | \$1,576          |                 | \$138           |
| OVERHEAD + PROFIT                              | 10.0%           | \$7,877         |                 | \$19,403         |                 | \$1,700         |
| <b>TOTAL OF ALL CONSTRUCTION</b>               |                 | <b>\$87,282</b> |                 | <b>\$215,006</b> |                 | <b>\$18,838</b> |



## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

810

| DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-----|------|--------------|---------------|--------------|---------------|

## OFFICE RECONFIGURATION - OPTION 1

Office Space Reconfiguration

810

TOTAL GROSS FLOOR AREA (GFA)

810 sf

## 02 - EXISTING CONDITIONS

## 024000 DEMOLITION

Interior Demolition

Remove/Dispose existing finishes

810

sf

5.00

4,050

Protection/Temp partitions to isolate space

1

ls

1,500.00

1,500

SUBTOTAL

5,550

TOTAL - MASONRY

\$5,550

## 03 - CONCRETE

## 033000 CONCRETE

Interior Construction

Minor floor prep

810

sf

2.50

2,025

SUBTOTAL

2,025

TOTAL - CONCRETE

\$2,025

## 06 - WOOD, PLASTICS AND COMPOSITES

## 061000 ROUGH CARPENTRY

Interior Construction

Misc carpentry/Blocking

1

ls

1,500.00

1,500

SUBTOTAL

1,500

## 064100 ARCHITECTURAL WOODWORK

Interior Construction

Cabinetry/Built-ins - Conference

5

lf

575.00

2,875

SUBTOTAL

2,875

TOTAL - WOOD, PLASTICS AND COMPOSITES

\$4,375

## 07 - THERMAL AND MOISTURE PROTECTION

## 070002 WATERPROOFING / DAMPPROOFING / CAULKING

Interior Construction

Caulking - dissimilar materials

1

ls

1,000.00

1,000

SUBTOTAL

1,000

TOTAL - THERMAL AND MOISTURE PROTECTION

\$1,000

## 08 - OPENINGS

## 084002 GLASS &amp; GLAZING

Interior Construction

Glazing sidelights

NR

SUBTOTAL

-



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

810

|                                          | DESCRIPTION                           | QTY | UNIT | UNIT<br>COST | EST'D<br>COST        | SUB<br>TOTAL | TOTAL<br>COST   |
|------------------------------------------|---------------------------------------|-----|------|--------------|----------------------|--------------|-----------------|
| <b>OFFICE RECONFIGURATION - OPTION 1</b> |                                       |     |      |              |                      |              |                 |
| 60                                       | <b>081113 DOORS AND FRAMES</b>        |     |      |              |                      |              |                 |
| 61                                       | <u>Interior</u>                       |     |      |              |                      |              |                 |
| 62                                       | <u>Doors/Frames/Hardware</u>          |     |      |              |                      |              |                 |
| 63                                       | Doors/HM frames - single              | 1   | ea   | 1,150.00     | 1,150                |              |                 |
| 64                                       | Doors/HM frames - double              |     | ea   | 2,000.00     | NR                   |              |                 |
| 65                                       | Premium for glass in doors            |     | ea   | 500.00       | NR                   |              |                 |
| 66                                       | Frames, sidelights                    |     | loc  | 900.00       | NR                   |              |                 |
| 67                                       | SUBTOTAL                              |     |      |              |                      | 1,150        |                 |
| 68                                       |                                       |     |      |              |                      |              |                 |
| 69                                       | <b>083100 ACCESS DOORS AND FRAMES</b> |     |      |              |                      |              |                 |
| 70                                       | <u>Interior Doors</u>                 |     |      |              |                      |              |                 |
| 71                                       | Access doors                          | 1   | ls   | 250.00       | 250                  |              |                 |
| 72                                       | SUBTOTAL                              |     |      |              |                      | 250          |                 |
| 73                                       |                                       |     |      |              |                      |              |                 |
| 74                                       | <b>087100 DOOR HARDWARE</b>           |     |      |              |                      |              |                 |
| 75                                       | <u>Interior Doors</u>                 |     |      |              |                      |              |                 |
| 76                                       | Hardware to interior doors            | 1   | set  | 900.00       | 900                  |              |                 |
| 77                                       | SUBTOTAL                              |     |      |              |                      | 900          |                 |
| 78                                       |                                       |     |      |              |                      |              |                 |
| 79                                       | <b>TOTAL - OPENINGS</b>               |     |      |              |                      |              | <b>\$2,300</b>  |
| 80                                       |                                       |     |      |              |                      |              |                 |
| 81                                       |                                       |     |      |              |                      |              |                 |
| 82                                       | <b>09 - FINISHES</b>                  |     |      |              |                      |              |                 |
| 83                                       |                                       |     |      |              |                      |              |                 |
| 84                                       | <b>090003 ACT</b>                     |     |      |              |                      |              |                 |
| 85                                       | <u>Interior Finishes</u>              |     |      |              |                      |              |                 |
| 86                                       | New/Patch ACT ceilings                | 810 | sf   | 5.00         | 4,050                |              |                 |
| 87                                       | Open/Close/Patch existing ceilings    | 1   | ls   | 500.00       | 500                  |              |                 |
| 88                                       | SUBTOTAL                              |     |      |              |                      | 4,550        |                 |
| 89                                       |                                       |     |      |              |                      |              |                 |
| 90                                       | <b>090005 RESILIENT FLOORS</b>        |     |      |              |                      |              |                 |
| 91                                       | <u>Interior Finishes</u>              |     |      |              |                      |              |                 |
| 92                                       | Resilient base                        | 148 | lf   | 5.00         | 740                  |              |                 |
| 93                                       | SUBTOTAL                              |     |      |              |                      | 740          |                 |
| 94                                       |                                       |     |      |              |                      |              |                 |
| 95                                       | <b>090007 PAINTING</b>                |     |      |              |                      |              |                 |
| 96                                       | <u>Interior Finishes</u>              |     |      |              |                      |              |                 |
| 97                                       | Prep/Paint new construction           | 810 | sf   | 1.75         | 1,418                |              |                 |
| 98                                       | Prep/Paint affected areas             | 1   | ls   | 500.00       | 500                  |              |                 |
| 99                                       | SUBTOTAL                              |     |      |              |                      | 1,918        |                 |
| 100                                      |                                       |     |      |              |                      |              |                 |
| 101                                      | <b>092900 GWB</b>                     |     |      |              |                      |              |                 |
| 102                                      | <u>Interior Construction</u>          |     |      |              |                      |              |                 |
| 103                                      | New partitions/Install door frames    | 413 | sf   | 17.50        | 7,228                |              |                 |
| 104                                      | Open/Close/Patch existing walls       | 810 | sf   | 3.00         | 2,430                |              |                 |
| 105                                      | SUBTOTAL                              |     |      |              |                      | 9,658        |                 |
| 106                                      |                                       |     |      |              |                      |              |                 |
| 107                                      | <b>096800 CARPETING</b>               |     |      |              |                      |              |                 |
| 108                                      | <u>Interior Construction</u>          |     |      |              |                      |              |                 |
| 109                                      | Carpet - office areas                 | 810 | sf   | 7.50         | 6,075                |              |                 |
| 110                                      | SUBTOTAL                              |     |      |              |                      | 6,075        |                 |
| 111                                      |                                       |     |      |              |                      |              |                 |
| 112                                      | <b>097200 WALLCOVERINGS</b>           |     |      |              |                      |              |                 |
| 113                                      | <u>Wall Finishes</u>                  |     |      |              |                      |              |                 |
| 114                                      | Vinyl wallcoverings/Graphics          |     |      |              | assumed not required |              |                 |
| 115                                      | SUBTOTAL                              |     |      |              |                      | -            |                 |
| 116                                      |                                       |     |      |              |                      |              |                 |
| 117                                      |                                       |     |      |              |                      |              |                 |
| 118                                      | <b>TOTAL - FINISHES</b>               |     |      |              |                      |              | <b>\$22,941</b> |

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

810

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## OFFICE RECONFIGURATION - OPTION 1

## 10 - SPECIALTIES

## 100000 VISUAL DISPLAY SURFACES

Interior Construction

Marker boards/Tackboards/Display cases

assumed not required

SUBTOTAL

-

## 101400 SIGNAGE

Interior Construction

Room Signs

assumed not required

Branding/Graphics

assumed not required

SUBTOTAL

-

## TOTAL - SPECIALTIES

## 11 - EQUIPMENT

## 113100 APPLIANCES

Equipment

Appliances

assumed not required

SUBTOTAL

-

## TOTAL - EQUIPMENT

## 21 - FIRE SUPPRESSION

## 210000 FIRE PROTECTION

Fire Protection System

Adjust existing heads

1

ls

2,500.00

2,500

SUBTOTAL

2,500

## TOTAL - FIRE SUPPRESSION

\$2,500

## 22 - PLUMBING

## 220000 PLUMBING

Plumbing Fixtures & Specialties

Sink

assumed not required

SUBTOTAL

-

## TOTAL - PLUMBING

## 23 - HVAC

## 230000 HVAC

Air distribution

Fan coil units - new/relocate

ea

5,500.00

NR

Sheet metal & Accessories

Minor rework of duct + RGDs

1

ls

2,500.00

2,500

Automatic Temperature Controls

Automatic temperature controls DDC

2

loc

1,500.00

3,000

Balancing

System testing &amp; balancing

2

rms

350.00

700



Needham Center at the Heights  
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Needham, MA  
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GFA

810

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## OFFICE RECONFIGURATION - OPTION 1

SUBTOTAL

6,200

|                     |                |
|---------------------|----------------|
| <b>TOTAL - HVAC</b> | <b>\$6,200</b> |
|---------------------|----------------|

|                        |
|------------------------|
| <b>26 - ELECTRICAL</b> |
|------------------------|

**260000 ELECTRICAL**Equipment Wiring

MEP equipment

unit

1,500.00

NR

Lighting (fixture schedule not provided, allow)

Minor rework existing

1

ls

1,500.00

1,500

New lighting

ea

500.00

NR

Lighting Controls

Lighting controls/switching/occupancy sensors

2

loc

250.00

500

Branch Power

Receptacles/Devices

810

gsf

1.00

810

Data/Power connections for workstations

4

ea

650.00

2,600

Fire Alarm

Fire alarm system

810

gsf

3.50

2,835

Telephone/Data

Devices and cabling - rough-in

gsf

1.50 w/ above

SUBTOTAL

\$8,245

|                          |                |
|--------------------------|----------------|
| <b>TOTAL -ELECTRICAL</b> | <b>\$8,245</b> |
|--------------------------|----------------|

|                                                |                 |
|------------------------------------------------|-----------------|
| <b>TOTAL OFFICE RECONFIGURATION - OPTION 1</b> | <b>\$55,136</b> |
|------------------------------------------------|-----------------|



## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

874

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## OFFICE RECONFIGURATION - OPTION 2

Office Space Reconfiguration

874

## TOTAL GROSS FLOOR AREA (GFA)

874 sf

## 02 - EXISTING CONDITIONS

## 024000 DEMOLITION

Interior Demolition

Remove/Dispose existing finishes

874

sf

5.00

4,370

Protection/Temp partitions to isolate space

1

ls

1,500.00

1,500

SUBTOTAL

5,870

## TOTAL - MASONRY

\$5,870

## 03 - CONCRETE

## 033000 CONCRETE

Interior Construction

Minor floor prep

874

sf

2.50

2,185

SUBTOTAL

2,185

## TOTAL - CONCRETE

\$2,185

## 06 - WOOD, PLASTICS AND COMPOSITES

## 061000 ROUGH CARPENTRY

Interior Construction

Misc carpentry/Blocking

1

ls

2,250.00

2,250

SUBTOTAL

2,250

## 064100 ARCHITECTURAL WOODWORK

Interior Construction

Cabinetry/Built-ins

NR

SUBTOTAL

-

## TOTAL - WOOD, PLASTICS AND COMPOSITES

\$2,250

## 07 - THERMAL AND MOISTURE PROTECTION

## 070002 WATERPROOFING / DAMPPROOFING / CAULKING

Interior Construction

Caulking - dissimilar materials

1

ls

1,000.00

1,000

SUBTOTAL

1,000

## TOTAL - THERMAL AND MOISTURE PROTECTION

\$1,000

## 08 - OPENINGS

## 084002 GLASS &amp; GLAZING

Interior Construction

Aluminum office fronts

200

sf

95.00

19,000

SUBTOTAL

19,000

# COST ESTIMATE - DECEMBER 9, 2022

# APPENDIX



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

874

|                                          | DESCRIPTION                           | QTY   | UNIT | UNIT COST | EST'D COST           | SUB TOTAL | TOTAL COST      |
|------------------------------------------|---------------------------------------|-------|------|-----------|----------------------|-----------|-----------------|
| <b>OFFICE RECONFIGURATION - OPTION 2</b> |                                       |       |      |           |                      |           |                 |
| 60                                       | <b>081113 DOORS AND FRAMES</b>        |       |      |           |                      |           |                 |
| 61                                       | <u>Interior</u>                       |       |      |           |                      |           |                 |
| 62                                       | <u>Doors/Frames/Hardware</u>          |       |      |           |                      |           |                 |
| 63                                       | Doors/HM frames - single              | 6     | ea   | 1,150.00  | 6,900                |           |                 |
| 64                                       | Doors/HM frames - double              |       | ea   | 2,000.00  | NR                   |           |                 |
| 65                                       | Premium for glass in doors            |       | ea   | 500.00    | NR                   |           |                 |
| 66                                       | Frames, sidelights                    |       | loc  | 900.00    | NR                   |           |                 |
| 67                                       | SUBTOTAL                              |       |      |           |                      | 6,900     |                 |
| 68                                       |                                       |       |      |           |                      |           |                 |
| 69                                       | <b>083100 ACCESS DOORS AND FRAMES</b> |       |      |           |                      |           |                 |
| 70                                       | <u>Interior Doors</u>                 |       |      |           |                      |           |                 |
| 71                                       | Access doors                          | 1     | ls   | 250.00    | 250                  |           |                 |
| 72                                       | SUBTOTAL                              |       |      |           |                      | 250       |                 |
| 73                                       |                                       |       |      |           |                      |           |                 |
| 74                                       | <b>087100 DOOR HARDWARE</b>           |       |      |           |                      |           |                 |
| 75                                       | <u>Interior Doors</u>                 |       |      |           |                      |           |                 |
| 76                                       | Hardware to interior doors            | 6     | set  | 900.00    | 5,400                |           |                 |
| 77                                       | SUBTOTAL                              |       |      |           |                      | 5,400     |                 |
| 78                                       |                                       |       |      |           |                      |           |                 |
| 79                                       | <b>TOTAL - OPENINGS</b>               |       |      |           |                      |           | <b>\$31,550</b> |
| 80                                       |                                       |       |      |           |                      |           |                 |
| 81                                       |                                       |       |      |           |                      |           |                 |
| 82                                       | <b>09 - FINISHES</b>                  |       |      |           |                      |           |                 |
| 83                                       |                                       |       |      |           |                      |           |                 |
| 84                                       | <b>090003 ACT</b>                     |       |      |           |                      |           |                 |
| 85                                       | <u>Interior Finishes</u>              |       |      |           |                      |           |                 |
| 86                                       | New/Patch ACT ceilings                | 874   | sf   | 5.00      | 4,370                |           |                 |
| 87                                       | Open/Close/Patch existing ceilings    | 1     | ls   | 500.00    | 500                  |           |                 |
| 88                                       | SUBTOTAL                              |       |      |           |                      | 4,870     |                 |
| 89                                       |                                       |       |      |           |                      |           |                 |
| 90                                       | <b>090005 RESILIENT FLOORS</b>        |       |      |           |                      |           |                 |
| 91                                       | <u>Interior Finishes</u>              |       |      |           |                      |           |                 |
| 92                                       | Resilient base                        | 339   | lf   | 5.00      | 1,695                |           |                 |
| 93                                       | SUBTOTAL                              |       |      |           |                      | 1,695     |                 |
| 94                                       |                                       |       |      |           |                      |           |                 |
| 95                                       | <b>090007 PAINTING</b>                |       |      |           |                      |           |                 |
| 96                                       | <u>Interior Finishes</u>              |       |      |           |                      |           |                 |
| 97                                       | Prep/Paint new construction           | 874   | sf   | 2.50      | 2,185                |           |                 |
| 98                                       | Prep/Paint affected areas             | 1     | ls   | 1,500.00  | 1,500                |           |                 |
| 99                                       | SUBTOTAL                              |       |      |           |                      | 3,685     |                 |
| 100                                      |                                       |       |      |           |                      |           |                 |
| 101                                      | <b>092900 GWB</b>                     |       |      |           |                      |           |                 |
| 102                                      | <u>Interior Construction</u>          |       |      |           |                      |           |                 |
| 103                                      | New partitions/Install door frames    | 1,463 | sf   | 17.50     | 25,603               |           |                 |
| 104                                      | Open/Close/Patch existing walls       | 874   | sf   | 3.00      | 2,622                |           |                 |
| 105                                      | SUBTOTAL                              |       |      |           |                      | 28,225    |                 |
| 106                                      |                                       |       |      |           |                      |           |                 |
| 107                                      | <b>096800 CARPETING</b>               |       |      |           |                      |           |                 |
| 108                                      | <u>Interior Construction</u>          |       |      |           |                      |           |                 |
| 109                                      | Carpet - office areas                 | 874   | sf   | 6.50      | 5,681                |           |                 |
| 110                                      | SUBTOTAL                              |       |      |           |                      | 5,681     |                 |
| 111                                      |                                       |       |      |           |                      |           |                 |
| 112                                      | <b>097200 WALLCOVERINGS</b>           |       |      |           |                      |           |                 |
| 113                                      | <u>Wall Finishes</u>                  |       |      |           |                      |           |                 |
| 114                                      | Vinyl wallcoverings/Graphics          |       |      |           | assumed not required |           |                 |
| 115                                      | SUBTOTAL                              |       |      |           |                      | -         |                 |
| 116                                      |                                       |       |      |           |                      |           |                 |
| 117                                      |                                       |       |      |           |                      |           |                 |
| 118                                      | <b>TOTAL - FINISHES</b>               |       |      |           |                      |           | <b>\$44,156</b> |

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

874

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## OFFICE RECONFIGURATION - OPTION 2

## 10 - SPECIALTIES

## 100000 VISUAL DISPLAY SURFACES

Interior Construction

Marker boards/Tackboards/Display cases

assumed not required

SUBTOTAL

-

## 101400 SIGNAGE

Interior Construction

Room Signs

assumed not required

Branding/Graphics

assumed not required

SUBTOTAL

-

## TOTAL - SPECIALTIES

## 11 - EQUIPMENT

## 113100 APPLIANCES

Equipment

Appliances

assumed not required

SUBTOTAL

-

## TOTAL - EQUIPMENT

## 21 - FIRE SUPPRESSION

## 210000 FIRE PROTECTION

Fire Protection System

Adjust existing heads

1

ls

2,500.00

2,500

SUBTOTAL

2,500

## TOTAL - FIRE SUPPRESSION

\$2,500

## 22 - PLUMBING

## 220000 PLUMBING

Plumbing Fixtures & Specialties

Sink

assumed not required

SUBTOTAL

-

## TOTAL - PLUMBING

## 23 - HVAC

## 230000 HVAC

Air distribution

Fan coil units - new/relocate

2

ea

5,500.00

11,000

Sheet metal & Accessories

Minor rework of duct + RGDs

1

ls

3,500.00

3,500

Automatic Temperature Controls

Automatic temperature controls DDC

6

loc

1,500.00

9,000

Balancing

System testing &amp; balancing

6

rms

350.00

2,100



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

874

| DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-----|------|--------------|---------------|--------------|---------------|

## OFFICE RECONFIGURATION - OPTION 2

SUBTOTAL

25,600

|                     |                 |
|---------------------|-----------------|
| <b>TOTAL - HVAC</b> | <b>\$25,600</b> |
|---------------------|-----------------|

**26 - ELECTRICAL****260000 ELECTRICAL**Equipment Wiring

MEP equipment

**2**

unit

1,500.00

3,000

Lighting (fixture schedule not provided, allow)

Minor rework existing

**1**

ls

750.00

750

New lighting

**16**

ea

500.00

8,000

Lighting Controls

Lighting controls/switching/occupancy sensors

**7**

loc

250.00

1,750

Branch Power

Receptacles/Devices

**874**

gsf

3.25

2,841

Fire Alarm

Fire alarm system

**874**

gsf

3.50

3,059

Telephone/Data

Devices and cabling - rough-in

**874**

gsf

1.50

1,311

SUBTOTAL

\$20,711

|                          |                 |
|--------------------------|-----------------|
| <b>TOTAL -ELECTRICAL</b> | <b>\$20,711</b> |
|--------------------------|-----------------|

|                                                |                  |
|------------------------------------------------|------------------|
| <b>TOTAL OFFICE RECONFIGURATION - OPTION 2</b> | <b>\$135,822</b> |
|------------------------------------------------|------------------|



## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

150

| DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|-------------|-----|------|-----------|------------|-----------|------------|
|-------------|-----|------|-----------|------------|-----------|------------|

## OFFICE RECONFIGURATION - OPTION 3

Office Space Reconfiguration

150

**TOTAL GROSS FLOOR AREA (GFA)****150 sf****02 - EXISTING CONDITIONS****024000 DEMOLITION**Interior Demolition

Remove/Dispose existing finishes

150

sf

5.00

750

Protection/Temp partitions to isolate space

1

ls

1,500.00

1,500

SUBTOTAL

2,250

**TOTAL - MASONRY****\$2,250****03 - CONCRETE****033000 CONCRETE**Interior Construction

Minor floor prep

150

sf

2.50

375

SUBTOTAL

375

**TOTAL - CONCRETE****\$375****06 - WOOD, PLASTICS AND COMPOSITES****061000 ROUGH CARPENTRY**Interior Construction

Misc carpentry/Blocking

1

ls

500.00

500

SUBTOTAL

500

**064100 ARCHITECTURAL WOODWORK**Interior Construction

Cabinetry/Built-ins

NR

SUBTOTAL

-

**TOTAL - WOOD, PLASTICS AND COMPOSITES****\$500****07 - THERMAL AND MOISTURE PROTECTION****070002 WATERPROOFING / DAMPPROOFING / CAULKING**Interior Construction

Caulking - dissimilar materials

1

ls

500.00

500

SUBTOTAL

500

**TOTAL - THERMAL AND MOISTURE PROTECTION****\$500****08 - OPENINGS****084002 GLASS & GLAZING**Interior Construction

Glazing sidelights

NR

SUBTOTAL

-

# COST ESTIMATE - DECEMBER 9, 2022

# APPENDIX



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

150

|     | DESCRIPTION                              | QTY | UNIT | UNIT COST | EST'D COST           | SUB TOTAL | TOTAL COST     |
|-----|------------------------------------------|-----|------|-----------|----------------------|-----------|----------------|
|     | <b>OFFICE RECONFIGURATION - OPTION 3</b> |     |      |           |                      |           |                |
| 60  | <b>081113 DOORS AND FRAMES</b>           |     |      |           |                      |           |                |
| 61  | <u>Interior</u>                          |     |      |           |                      |           |                |
| 62  | <u>Doors/Frames/Hardware</u>             |     |      |           |                      |           |                |
| 63  | Doors/HM frames - single                 |     | ea   | 1,150.00  | NR                   |           |                |
| 64  | Doors/HM frames - double                 |     | ea   | 2,000.00  | NR                   |           |                |
| 65  | Premium for glass in doors               |     | ea   | 500.00    | NR                   |           |                |
| 66  | Frames, sidelights                       |     | loc  | 900.00    | NR                   |           |                |
| 67  | SUBTOTAL                                 |     |      |           |                      | -         |                |
| 68  |                                          |     |      |           |                      |           |                |
| 69  | <b>083100 ACCESS DOORS AND FRAMES</b>    |     |      |           |                      |           |                |
| 70  | <u>Interior Doors</u>                    |     |      |           |                      |           |                |
| 71  | Access doors                             | 1   | ls   | 250.00    | 250                  |           |                |
| 72  | SUBTOTAL                                 |     |      |           |                      | 250       |                |
| 73  |                                          |     |      |           |                      |           |                |
| 74  | <b>087100 DOOR HARDWARE</b>              |     |      |           |                      |           |                |
| 75  | <u>Interior Doors</u>                    |     |      |           |                      |           |                |
| 76  | Hardware to interior doors               |     | set  | 900.00    | NR                   |           |                |
| 77  | SUBTOTAL                                 |     |      |           |                      | -         |                |
| 78  |                                          |     |      |           |                      |           |                |
| 79  | <b>TOTAL - OPENINGS</b>                  |     |      |           |                      |           | <b>\$250</b>   |
| 80  |                                          |     |      |           |                      |           |                |
| 81  |                                          |     |      |           |                      |           |                |
| 82  | <b>09 - FINISHES</b>                     |     |      |           |                      |           |                |
| 83  |                                          |     |      |           |                      |           |                |
| 84  | <b>090003 ACT</b>                        |     |      |           |                      |           |                |
| 85  | <u>Interior Finishes</u>                 |     |      |           |                      |           |                |
| 86  | New/Patch ACT ceilings                   | 150 | sf   | 5.00      | 750                  |           |                |
| 87  | Open/Close/Patch existing ceilings       | 1   | ls   | 500.00    | 500                  |           |                |
| 88  | SUBTOTAL                                 |     |      |           |                      | 1,250     |                |
| 89  |                                          |     |      |           |                      |           |                |
| 90  | <b>090005 RESILIENT FLOORS</b>           |     |      |           |                      |           |                |
| 91  | <u>Interior Finishes</u>                 |     |      |           |                      |           |                |
| 92  | Resilient base                           | 35  | lf   | 5.00      | 175                  |           |                |
| 93  | SUBTOTAL                                 |     |      |           |                      | 175       |                |
| 94  |                                          |     |      |           |                      |           |                |
| 95  | <b>090007 PAINTING</b>                   |     |      |           |                      |           |                |
| 96  | <u>Interior Finishes</u>                 |     |      |           |                      |           |                |
| 97  | Prep/Paint new construction              | 150 | sf   | 2.50      | 375                  |           |                |
| 98  | Prep/Paint affected areas                | 1   | ls   | 500.00    | 500                  |           |                |
| 99  | SUBTOTAL                                 |     |      |           |                      | 875       |                |
| 100 |                                          |     |      |           |                      |           |                |
| 101 | <b>092900 GWB</b>                        |     |      |           |                      |           |                |
| 102 | <u>Interior Construction</u>             |     |      |           |                      |           |                |
| 103 | New partitions/Install door frames       |     | sf   | 20.00     | NR                   |           |                |
| 104 | Open/Close/Patch existing walls          | 150 | sf   | 3.00      | 450                  |           |                |
| 105 | SUBTOTAL                                 |     |      |           |                      | 450       |                |
| 106 |                                          |     |      |           |                      |           |                |
| 107 | <b>096800 CARPETING</b>                  |     |      |           |                      |           |                |
| 108 | <u>Interior Construction</u>             |     |      |           |                      |           |                |
| 109 | Carpet - office areas                    | 150 | sf   | 6.50      | 975                  |           |                |
| 110 | SUBTOTAL                                 |     |      |           |                      | 975       |                |
| 111 |                                          |     |      |           |                      |           |                |
| 112 | <b>097200 WALLCOVERINGS</b>              |     |      |           |                      |           |                |
| 113 | <u>Wall Finishes</u>                     |     |      |           |                      |           |                |
| 114 | Vinyl wallcoverings/Graphics             |     |      |           | assumed not required |           |                |
| 115 | SUBTOTAL                                 |     |      |           |                      | -         |                |
| 116 |                                          |     |      |           |                      |           |                |
| 117 | <b>TOTAL - FINISHES</b>                  |     |      |           |                      |           | <b>\$3,725</b> |
| 118 |                                          |     |      |           |                      |           |                |

## APPENDIX

COST ESTIMATE - DECEMBER 9, 2022



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

150

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

## OFFICE RECONFIGURATION - OPTION 3

## 10 - SPECIALTIES

## 100000 VISUAL DISPLAY SURFACES

Interior Construction

Marker boards/Tackboards/Display cases

assumed not required

SUBTOTAL

-

## 101400 SIGNAGE

Interior Construction

Room Signs

assumed not required

Branding/Graphics

assumed not required

SUBTOTAL

-

## TOTAL - SPECIALTIES

## 11 - EQUIPMENT

## 113100 APPLIANCES

Equipment

Appliances

assumed not required

SUBTOTAL

-

## TOTAL - EQUIPMENT

## 21 - FIRE SUPPRESSION

## 210000 FIRE PROTECTION

Fire Protection System

Adjust existing heads

1

ls

1,000.00

1,000

SUBTOTAL

1,000

## TOTAL - FIRE SUPPRESSION

\$1,000

## 22 - PLUMBING

## 220000 PLUMBING

Plumbing Fixtures & Specialties

Sink

assumed not required

SUBTOTAL

-

## TOTAL - PLUMBING

## 23 - HVAC

## 230000 HVAC

Air distribution

Fan coil units - new/relocate

ea

5,500.00 NR

Sheet metal & Accessories

Minor rework of duct + RGDs

1

ls

750.00

750

Automatic Temperature Controls

Automatic temperature controls DDC

loc

1,500.00 NR

Balancing

System testing &amp; balancing

1

rms

350.00

350



Needham Center at the Heights  
Space Utilization Study #3480  
Needham, MA  
Schematic Design Estimate

9-Dec-22

GFA

150

|  | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|--|-------------|-----|------|--------------|---------------|--------------|---------------|
|--|-------------|-----|------|--------------|---------------|--------------|---------------|

#### OFFICE RECONFIGURATION - OPTION 3

SUBTOTAL

1,100

|                     |                |
|---------------------|----------------|
| <b>TOTAL - HVAC</b> | <b>\$1,100</b> |
|---------------------|----------------|

|                        |
|------------------------|
| <b>26 - ELECTRICAL</b> |
|------------------------|

#### 260000 ELECTRICAL

##### Equipment Wiring

MEP equipment

unit

1,500.00

NR

Lighting (fixture schedule not provided, allow)

Minor rework existing

1

ls

750.00

750

New lighting

ea

500.00

NR

##### Lighting Controls

Lighting controls/switching/occupancy sensors

7

loc

250.00

NR

##### Branch Power

Receptacles/Devices

150

gsf

1.00

150

Data/Power connections for workstations

2

ea

650.00

1,300

##### Fire Alarm

Fire alarm system

150

gsf

3.50

NR

##### Telephone/Data/CATV

Devices and cabling - rough-in

gsf

1.50 w/ above

SUBTOTAL

\$2,200

|                          |                |
|--------------------------|----------------|
| <b>TOTAL -ELECTRICAL</b> | <b>\$2,200</b> |
|--------------------------|----------------|

|                                                |                 |
|------------------------------------------------|-----------------|
| <b>TOTAL OFFICE RECONFIGURATION - OPTION 3</b> | <b>\$11,900</b> |
|------------------------------------------------|-----------------|





## **APPENDIX C.3**

### **COST ESTIMATE - FEBRUARY 23, 2023**



## **Schematic Design Estimate**

# **Needham Senior Center Kitchen Renovations**

Needham, MA

**PMC LLC**  
20 Downer Avenue, Suite 5  
Hingham  
MA 02043  
(ph) 781-740-8007  
(f) 781-740-1012

Prepared for:

**Bargmann Hendrie + Archetype, Inc.**  
February 23, 2023



**Needham Senior Center**  
Kitchen Renovations  
Needham, MA

23-Feb-23

**Schematic Design Estimate****MAIN CONSTRUCTION COST SUMMARY**

|                                   | <b>Construction<br/>Start</b> | <b>\$/SF</b> | <b>Estimated Construction<br/>Cost</b> |
|-----------------------------------|-------------------------------|--------------|----------------------------------------|
|                                   | Fall 2023                     |              |                                        |
| <b>KITCHEN RENOVATION</b>         |                               |              | \$409,055                              |
| <b>HAZ MAT REMOVAL</b>            |                               |              | NIC                                    |
| <hr/>                             |                               |              |                                        |
| SUBTOTAL TRADE COSTS              |                               |              | \$409,055                              |
| Design and Estimating Contingency | 12.0%                         |              | \$49,087                               |
| Escalation                        | 4.7%                          |              | \$19,226                               |
| <hr/>                             |                               |              |                                        |
| SUBTOTAL                          |                               |              | \$477,368                              |
| General Conditions/GR's -         |                               |              | \$100,000                              |
| Insurances                        | 2.0%                          |              | \$11,547                               |
| Bond                              | 1.00%                         |              | \$4,774                                |
| Fee                               | 10.0%                         |              | \$59,369                               |
| Building Permit                   |                               |              | Assume by Owner                        |
| <hr/>                             |                               |              |                                        |
| <b>TOTAL CONSTRUCTION COSTS</b>   |                               |              | <b>\$653,058</b>                       |
| <hr/>                             |                               |              |                                        |

**Alternates** *(includes mark-ups)*

|                                                 |     |                 |
|-------------------------------------------------|-----|-----------------|
| 1 Demolish and renovate existing servicing area | ADD | <b>\$87,480</b> |
| 2 Alternate pantry layout                       | ADD | <b>\$24,604</b> |



**Needham Senior Center**

Kitchen Renovations

Needham, MA

23-Feb-23

**Schematic Design Estimate**

This Feasibility estimate was produced from drawings prepared by Bargmann Hendrie + Archetype, Inc. dated February 2023. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be negotiated pricing to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufacturers.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

**ITEMS NOT CONSIDERED IN THIS ESTIMATE**

Items not included in this estimate are:

- All professional fees and insurance
- Building Permit costs
- Land acquisition, feasibility, and financing costs
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)
- Construction or occupancy phasing or off hours' work - except as noted in the estimate



Needham Senior Center  
Kitchen Renovations  
Needham, MA

Schematic Design Estimate

**CONSTRUCTION COST SUMMARY IN CSI FORMAT**

|                           |                                                     | <i>Subtotal</i> | <i>Total</i>    |
|---------------------------|-----------------------------------------------------|-----------------|-----------------|
| <b>Kitchen Renovation</b> |                                                     |                 |                 |
| <b>DIV. 2</b>             | <b>EXISTING CONDITIONS</b>                          |                 | <b>\$28,676</b> |
|                           | 024100 Selective Demolition                         | \$28,676        |                 |
|                           | 025000 Haz Mat Removal                              | N.I.C.          |                 |
| <b>DIV. 3</b>             | <b>CONCRETE</b>                                     |                 | <b>\$5,750</b>  |
|                           | 031000 Concrete                                     | \$5,750         |                 |
| <b>DIV. 4</b>             | <b>MASONRY</b>                                      |                 | <b>\$0</b>      |
|                           | 042000 Unit Masonry                                 | \$0             |                 |
| <b>DIV. 5</b>             | <b>METALS</b>                                       |                 | <b>\$2,823</b>  |
|                           | 055000 Metal Fabrications                           | \$2,823         |                 |
| <b>DIV. 6</b>             | <b>WOODS, PLASTICS &amp; COMPOSITES</b>             |                 | <b>\$4,705</b>  |
|                           | 061000 Rough Carpentry                              | \$1,882         |                 |
|                           | 062000 Finish Carpentry                             | \$2,823         |                 |
| <b>DIV. 7</b>             | <b>THERMAL &amp; MOISTURE PROTECTION</b>            |                 | <b>\$941</b>    |
|                           | 070001 Joint Sealants, Waterproofing & Dampproofing | \$941           |                 |
| <b>DIV. 8</b>             | <b>DOORS &amp; WINDOWS</b>                          |                 | <b>\$2,400</b>  |
|                           | 081110 Doors, Frames and Hardware                   | \$2,400         |                 |
| <b>DIV. 9</b>             | <b>FINISHES</b>                                     |                 | <b>\$63,285</b> |
|                           | 090002 Tile                                         | \$51,630        |                 |
|                           | 090003 Acoustical Tile                              | \$2,950         |                 |
|                           | 090007 Painting                                     | \$4,705         |                 |
|                           | 090003 Resilient Flooring                           | \$0             |                 |
|                           | 096800 Carpet                                       | \$0             |                 |
|                           | 092900 GWB Assemblies                               | \$4,000         |                 |
| <b>DIV. 10</b>            | <b>SPECIALTIES</b>                                  |                 | <b>\$12,200</b> |
|                           | 101100 Visual Display Boards                        | \$0             |                 |
|                           | 101400 Signage                                      | \$1,000         |                 |
|                           | 102113 Toilet Compartments                          | \$0             |                 |
|                           | 102600 Wall Protection                              | \$10,200        |                 |
|                           | 102813 Toilet Accessories                           | \$0             |                 |
|                           | 104400 Fire Protection Specialties                  | \$1,000         |                 |



Needham Senior Center  
Kitchen Renovations  
Needham, MA

Schematic Design Estimate

**CONSTRUCTION COST SUMMARY IN CSI FORMAT**

|                                     | <i>Subtotal</i> | <i>Total</i>     |
|-------------------------------------|-----------------|------------------|
| <b>Kitchen Renovation</b>           |                 |                  |
| <b>DIV. 11 EQUIPMENT</b>            |                 | <b>\$115,000</b> |
| 114000 Food Service Equipment       | \$115,000       |                  |
| <b>DIV. 12 FURNISHINGS</b>          |                 | <b>\$2,500</b>   |
| 123000 Casework                     | \$2,500         |                  |
| 126000 Window Treatments            | \$0             |                  |
| <b>DIV. 13 SPECIAL CONSTRUCTION</b> |                 | <b>\$0</b>       |
| 139000 Special Construction         | \$0             |                  |
| <b>DIV. 14 CONVEYING</b>            |                 | <b>\$0</b>       |
| 142000 Conveying                    | \$0             |                  |
| <b>DIV.21 FIRE PROTECTION</b>       |                 | <b>\$4,705</b>   |
| 210000 Fire Protection              | \$4,705         |                  |
| <b>DIV.22 PLUMBING</b>              |                 | <b>\$40,650</b>  |
| 220000 Plumbing                     | \$40,650        |                  |
| <b>DIV.23 HVAC</b>                  |                 | <b>\$64,018</b>  |
| 230000 HVAC                         | \$64,018        |                  |
| <b>DIV.26 ELECTRICAL</b>            |                 | <b>\$61,402</b>  |
| 260000 Electrical                   | \$61,402        |                  |
| <b>DIV.32 EARTHWORK</b>             |                 | <b>\$0</b>       |
| 320000 Earthwork                    | \$0             |                  |
| <b>SUBTOTAL DIRECT (TRADE) COST</b> |                 | <b>\$409,055</b> |



Needham Senior Center  
Kitchen Renovations  
Needham, MA

## Schematic Design Estimate

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL |
|-------------|-------------|-----|------|--------------|---------------|--------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|

## Kitchen Renovation

Renovation area

Kitchen

941

TOTAL

941 gsf

## 02 EXISTING CONDITIONS

## 021500 DEMOLITION

|                                                                             |     |     |          |       |          |
|-----------------------------------------------------------------------------|-----|-----|----------|-------|----------|
| Remove/Chip SOG for depressed slab - walk-in cooler                         | 1   | ls  | 2,500.00 | 2,500 |          |
| Demo and remove ceramic tile floor finishes and bases                       | 850 | sf  | 8.00     | 6,800 |          |
| Demo and remove ceramic tile wall finishes                                  | 400 | sf  | 8.00     | 3,200 |          |
| Demo and remove ceiling (tile only)                                         | 130 | sf  | 3.00     | 390   |          |
| Demo and remove door, frame and hardware                                    |     |     |          |       | NIC      |
| GWB from one side of ETR framing                                            | 100 | lf  | 36.00    | 3,600 |          |
| Miscellaneous interior demolition - counters, casework and accessories etc. | 941 | gsf | 2.00     | 1,882 |          |
| Remove cut and capped fixtures and fittings                                 | 941 | gsf | 4.00     | 3,764 |          |
| Remove existing kitchen equipment                                           |     |     |          |       | By owner |
| Temp partition                                                              | 30  | lf  | 108.00   | 3,240 |          |
| Temp door                                                                   | 1   | loc | 800.00   | 800   |          |
| Dust control & protection of existing to remain - allowance                 | 1   | ls  | 2,500.00 | 2,500 |          |
| SUBTOTAL                                                                    |     |     |          |       | 28,676   |

## 025000 HAZARDOUS COMPONENTS ABATEMENT

|                 |  |  |  |  |          |
|-----------------|--|--|--|--|----------|
| HAZ MAT removal |  |  |  |  | By Owner |
| SUBTOTAL        |  |  |  |  | -        |

## TOTAL EXISTING CONDITIONS

## 03 CONCRETE

## 031000 CONCRETE

|                                              |     |    |          |       |       |
|----------------------------------------------|-----|----|----------|-------|-------|
| Replace/Patch slab on grade - walk-in cooler | 1   | ls | 1,500.00 | 1,500 |       |
| Floor prep - removed tile                    | 850 | sf | 5.00     | 4,250 |       |
| SUBTOTAL                                     |     |    |          |       | 5,750 |

## TOTAL CONCRETE

## 04 MASONRY

## 042000 UNIT MASONRY

|          |  |  |  |  |          |
|----------|--|--|--|--|----------|
| SUBTOTAL |  |  |  |  | No scope |
|          |  |  |  |  | -        |

## TOTAL MASONRY

## 05 METALS

## 055000 METAL FABRICATIONS

|                        |     |     |      |       |       |
|------------------------|-----|-----|------|-------|-------|
| Misc. metals allowance | 941 | gsf | 3.00 | 2,823 |       |
| SUBTOTAL               |     |     |      |       | 2,823 |

## TOTAL METALS

## 06 WOOD &amp; PLASTICS

## 061000 ROUGH CARPENTRY





Needham Senior Center  
Kitchen Renovations  
Needham, MA

23-Feb-23

Schematic Design Estimate

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

**Kitchen Renovation**

|     |                                                                               |     |     |          |        |          |                 |
|-----|-------------------------------------------------------------------------------|-----|-----|----------|--------|----------|-----------------|
| 57  | SUBTOTAL                                                                      |     |     |          |        | 2,823    |                 |
| 58  |                                                                               |     |     |          |        |          |                 |
| 59  | <b>TOTAL WOOD &amp; PLASTICS</b>                                              |     |     |          |        |          | <b>\$4,705</b>  |
| 60  |                                                                               |     |     |          |        |          |                 |
| 61  | <b>07 THERMAL &amp; MOISTURE PROTECTION</b>                                   |     |     |          |        |          |                 |
| 62  |                                                                               |     |     |          |        |          |                 |
| 63  | <b>070001 WATERPROOFING, DAMPPROOFING &amp; CAULKING</b>                      |     |     |          |        |          |                 |
| 64  | Sealant allowance                                                             | 941 | gsf | 1.00     | 941    |          |                 |
| 65  | SUBTOTAL                                                                      |     |     |          |        | 941      |                 |
| 66  |                                                                               |     |     |          |        |          |                 |
| 67  | <b>TOTAL THERMAL AND MOISTURE PROTECTION</b>                                  |     |     |          |        |          | <b>\$941</b>    |
| 68  |                                                                               |     |     |          |        |          |                 |
| 69  | <b>08 DOORS &amp; WINDOWS</b>                                                 |     |     |          |        |          |                 |
| 70  |                                                                               |     |     |          |        |          |                 |
| 71  | <b>081100 DOORS, FRAMES AND HARDWARE</b>                                      |     |     |          |        |          |                 |
| 72  | New door/frame/hardware                                                       | 1   | ls  | 2,400.00 | 2,400  |          |                 |
| 73  | SUBTOTAL                                                                      |     |     |          |        | 2,400    |                 |
| 74  |                                                                               |     |     |          |        |          |                 |
| 75  | <b>TOTAL DOORS AND WINDOWS</b>                                                |     |     |          |        |          | <b>\$2,400</b>  |
| 76  |                                                                               |     |     |          |        |          |                 |
| 77  | <b>09 FINISHES</b>                                                            |     |     |          |        |          |                 |
| 78  |                                                                               |     |     |          |        |          |                 |
| 79  | <b>0900002 TILE</b>                                                           |     |     |          |        |          |                 |
| 80  | Ceramic wall tile                                                             | 400 | sf  | 40.00    | 16,000 |          |                 |
| 81  | Quarry floor tile                                                             | 850 | sf  | 38.00    | 32,300 |          |                 |
| 82  | Quarry floor tile base                                                        | 185 | lf  | 18.00    | 3,330  |          |                 |
| 83  | SUBTOTAL                                                                      |     |     |          |        | 51,630   |                 |
| 84  |                                                                               |     |     |          |        |          |                 |
| 85  | <b>0900003 ACOUSTIC CEILING TILE</b>                                          |     |     |          |        |          |                 |
| 86  | Acoustic ceiling tile; washable - open/close existing                         | 1   | ls  | 1,000.00 | 1,000  |          |                 |
| 87  | Acoustic ceiling tile; washable - new                                         | 130 | sf  | 15.00    | 1,950  |          |                 |
| 88  | SUBTOTAL                                                                      |     |     |          |        | 2,950    |                 |
| 89  |                                                                               |     |     |          |        |          |                 |
| 90  | <b>090007 PAINTING AND COATING</b>                                            |     |     |          |        |          |                 |
| 91  | Prepare, prime and paint new and existing to remain walls and doors allowance | 941 | gsf | 5.00     | 4,705  |          |                 |
| 92  | SUBTOTAL                                                                      |     |     |          |        | 4,705    |                 |
| 93  |                                                                               |     |     |          |        |          |                 |
| 94  | <b>096500 RESILIENT FLOORING</b>                                              |     |     |          |        | No scope |                 |
| 95  | No work assumed                                                               |     |     |          |        |          |                 |
| 96  | SUBTOTAL                                                                      |     |     |          |        | -        |                 |
| 97  |                                                                               |     |     |          |        |          |                 |
| 98  | <b>096800 CARPET</b>                                                          |     |     |          |        |          |                 |
| 99  | Allowance to patch and repair assumed carpet at dining                        |     |     |          |        | NR       |                 |
| 100 | SUBTOTAL                                                                      |     |     |          |        | -        |                 |
| 101 |                                                                               |     |     |          |        |          |                 |
| 102 | <b>092900 GYPSUM BOARD ASSEMBLIES</b>                                         |     |     |          |        |          |                 |
| 103 | New partition                                                                 | 1   | ls  | 1,000.00 | 1,000  |          |                 |
| 104 | Open/Close GWB walls, ceilings and soffits allowance                          | 1   | ls  | 3,000.00 | 3,000  |          |                 |
| 105 | SUBTOTAL                                                                      |     |     |          |        | 4,000    |                 |
| 106 |                                                                               |     |     |          |        |          |                 |
| 107 | <b>TOTAL FINISHES</b>                                                         |     |     |          |        |          | <b>\$63,285</b> |
| 108 |                                                                               |     |     |          |        |          |                 |
| 109 | <b>10 - SPECIALTIES</b>                                                       |     |     |          |        |          |                 |
| 110 |                                                                               |     |     |          |        |          |                 |
| 111 | <b>101100 VISUAL DISPLAY SURFACES</b>                                         |     |     |          |        | No scope |                 |
| 112 | SUBTOTAL                                                                      |     |     |          |        | -        |                 |
| 113 |                                                                               |     |     |          |        |          |                 |
| 114 | <b>101400 SIGNAGE</b>                                                         |     |     |          |        |          |                 |
| 115 | Signage and graphics allowance                                                | 1   | ls  | 1,000.00 | 1,000  |          |                 |



Needham Senior Center  
Kitchen Renovations  
Needham, MA

23-Feb-23

Schematic Design Estimate

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

**Kitchen Renovation**

|     |                                           |     |    |          |       |        |  |
|-----|-------------------------------------------|-----|----|----------|-------|--------|--|
| 116 | SUBTOTAL                                  |     |    |          |       | 1,000  |  |
| 117 |                                           |     |    |          |       |        |  |
| 118 | <b>102110 TOILET COMPARTMENTS</b>         |     |    |          |       |        |  |
| 119 | SUBTOTAL                                  |     |    |          |       | -      |  |
| 120 |                                           |     |    |          |       |        |  |
| 121 | <b>102600 WALL Protection</b>             |     |    |          |       |        |  |
| 122 | Stainless steel wall panel (8' high)      | 120 | sf | 50.00    | 6,000 |        |  |
| 123 | FRP wall panel (8' high)                  | 160 | sf | 20.00    | 3,200 |        |  |
| 124 | Allowance for wall protection             | 1   | ls | 1,000.00 | 1,000 |        |  |
| 125 | SUBTOTAL                                  |     |    |          |       | 10,200 |  |
| 126 |                                           |     |    |          |       |        |  |
| 127 | <b>102800 TOILET ACCESSORIES</b>          |     |    |          |       |        |  |
| 128 | No work assumed                           |     |    |          |       |        |  |
| 129 | SUBTOTAL                                  |     |    |          |       | -      |  |
| 130 |                                           |     |    |          |       |        |  |
| 131 | <b>104400 FIRE PROTECTION SPECIALTIES</b> |     |    |          |       |        |  |
| 132 | Fire extinguisher cabinets                | 1   | ls | 1,000.00 | 1,000 |        |  |
| 133 | SUBTOTAL                                  |     |    |          |       | 1,000  |  |
| 134 |                                           |     |    |          |       |        |  |
| 135 | <b>105113 LOCKERS</b>                     |     |    |          |       |        |  |
| 136 | Metal lockers - Kitchen                   | 3   | ea | 220.00   | 660   |        |  |
| 137 | SUBTOTAL                                  |     |    |          |       | 660    |  |
| 138 |                                           |     |    |          |       |        |  |

|                            |                 |
|----------------------------|-----------------|
| <b>TOTAL - SPECIALTIES</b> | <b>\$12,860</b> |
|----------------------------|-----------------|

|                       |
|-----------------------|
| <b>11 - EQUIPMENT</b> |
|-----------------------|

|     |                                                 |   |    |            |         |         |  |
|-----|-------------------------------------------------|---|----|------------|---------|---------|--|
| 143 | <b>114000 FOOD SEWRVICE EQUIP.</b>              |   |    |            |         |         |  |
| 144 | Food service equipment budget per BH+A/Crabtree | 1 | ls | 115,000.00 | 115,000 |         |  |
| 145 | SUBTOTAL                                        |   |    |            |         | 115,000 |  |

|                          |                  |
|--------------------------|------------------|
| <b>TOTAL - EQUIPMENT</b> | <b>\$115,000</b> |
|--------------------------|------------------|

|                         |
|-------------------------|
| <b>12 - FURNISHINGS</b> |
|-------------------------|

|     |                                                     |   |    |          |            |       |  |
|-----|-----------------------------------------------------|---|----|----------|------------|-------|--|
| 151 | <b>123000 CASEWORK</b>                              |   |    |          |            |       |  |
| 152 | Misc. casework/Remove and install existing shelving | 1 | ls | 2,500.00 | 2,500      |       |  |
| 153 | SUBTOTAL                                            |   |    |          |            | 2,500 |  |
| 154 |                                                     |   |    |          |            |       |  |
| 155 | <b>126000 WINDOW TREATMENTS</b>                     |   |    |          | Assume ETR |       |  |
| 156 | SUBTOTAL                                            |   |    |          |            | -     |  |

|                            |                |
|----------------------------|----------------|
| <b>TOTAL - FURNISHINGS</b> | <b>\$2,500</b> |
|----------------------------|----------------|

|                             |
|-----------------------------|
| <b>21 - FIRE PROTECTION</b> |
|-----------------------------|

|     |                                                                                         |     |     |      |       |       |  |
|-----|-----------------------------------------------------------------------------------------|-----|-----|------|-------|-------|--|
| 162 | <b>210000 FIRE PROTECTION</b>                                                           |     |     |      |       |       |  |
| 163 | Remove and reinstall branch piping and sprinkler heads as required for renovated spaces | 941 | gsf | 5.00 | 4,705 |       |  |
| 164 | SUBTOTAL                                                                                |     |     |      |       | 4,705 |  |

|                                |                |
|--------------------------------|----------------|
| <b>TOTAL - FIRE PROTECTION</b> | <b>\$4,705</b> |
|--------------------------------|----------------|

|                      |
|----------------------|
| <b>22 - PLUMBING</b> |
|----------------------|

|     |                          |  |  |  |  |  |  |
|-----|--------------------------|--|--|--|--|--|--|
| 170 | <b>220000 PLUMBING</b>   |  |  |  |  |  |  |
| 171 | <u>Plumbing Fixtures</u> |  |  |  |  |  |  |

## APPENDIX

## COST ESTIMATE - FEBRUARY 23, 2023



Needham Senior Center  
Kitchen Renovations  
Needham, MA

23-Feb-23

## Schematic Design Estimate

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

## Kitchen Renovation

|     |                                                 |    |     |           |          |        |  |
|-----|-------------------------------------------------|----|-----|-----------|----------|--------|--|
| 172 | Connect to new kitchen equipment                | 25 | ea  | 800.00    | 20,000   |        |  |
| 173 | Replace Gas Shutoff /Ansul System               | 1  | ea  |           | by Owner |        |  |
| 174 | Floor drains                                    |    | ea  | 1,200.00  | ETR      |        |  |
| 175 | <u>Domestic Water Piping</u>                    |    |     |           |          |        |  |
| 176 | Extend or repair fixture rough-in piping        | 1  | ls  | 5,000.00  | 5,000    |        |  |
| 177 | <u>Pipe Insulation</u>                          |    |     |           |          |        |  |
| 178 | Pipe insulation or replace, as required         | 1  | ls  | 1,500.00  | 1,500    |        |  |
| 179 | <u>Sanitary Waste And Vent Pipe</u>             |    |     |           |          |        |  |
| 180 | New sanitary underground pipe                   |    | lf  | 130.00    | ETR      |        |  |
| 181 | Extend fixture rough-in piping at fixtures      | 1  | ls  | 2,500.00  | 2,500    |        |  |
| 182 | Grease tank and pump (50 gmp), recessed         |    | ls  | 15,000.00 | ETR      |        |  |
| 183 | Connect to exiting sanitary system, underground |    | loc | 800.00    | ETR      |        |  |
| 184 | Clean existing sanity pipe allowance            | 1  | ls  | 4,500.00  | 4,500    |        |  |
| 185 | <u>Miscellaneous</u>                            |    |     |           |          |        |  |
| 186 | Coordination & management                       | 1  | ls  | 5,000.00  | 5,000    |        |  |
| 187 | Coring, sleeves & fire stopping                 | 1  | ls  | 500.00    | 500      |        |  |
| 188 | Testing and sterilization                       | 1  | ls  | 600.00    | 600      |        |  |
| 189 | Fees & permits                                  | 1  | ls  | 1,050.00  | 1,050    |        |  |
| 190 | SUBTOTAL                                        |    |     |           |          | 40,650 |  |

## TOTAL - PLUMBING

\$40,650

## 23 HVAC

## 230000 HVAC, GENERALLY

|     |                                             |     |    |          |       |        |  |
|-----|---------------------------------------------|-----|----|----------|-------|--------|--|
| 197 | <u>Equipment</u>                            |     |    |          |       |        |  |
| 198 | VRF Heat Pump                               | 1   | ea | 7,500.00 | 7,500 |        |  |
| 199 | VRF Branch Controller                       | 1   | ea | 4,500.00 | 4,500 |        |  |
| 200 | VRF 4-Way Cassette w/ Grill                 | 2   | ea | 2,800.00 | 5,600 |        |  |
| 201 | Kitchen Exhaust Fan KEF-1                   | 1   | ea | 6,500.00 | 6,500 |        |  |
| 202 | Kitchen Makeup Air Fan, MAU-1               | 1   | ea | 6,500.00 | 6,500 |        |  |
| 203 | <u>Sheet metal &amp; Accessories</u>        |     |    |          |       |        |  |
| 204 | Grease Duct, Welded                         | 80  | lf | 30.00    | 2,400 |        |  |
| 205 | Insulation, Fyre Wrap                       | 80  | lf | 8.00     | 640   |        |  |
| 206 | <u>HVAC Piping</u>                          |     |    |          |       |        |  |
| 207 | <u>Refrigerant Piping</u>                   |     |    |          |       |        |  |
| 208 | Refrigerant Piping with inline components   | 240 | ea | 35.00    | 8,400 |        |  |
| 209 | <u>Condensate Drain Piping</u>              |     |    |          |       |        |  |
| 210 | Copper pipe type L with fittings & hangers  | 2   | ea | 700.00   | 1,400 |        |  |
| 211 | <u>Piping Insulation</u>                    |     |    |          |       |        |  |
| 212 | Piping insulation, Refrigerant              | 240 | lf | 13.00    | 3,120 |        |  |
| 213 | <u>Temperature Controls (DDC)</u>           |     |    |          |       |        |  |
| 214 | Provide and connect new VRF controls to BMS | 941 | sf | 4.50     | 4,235 |        |  |
| 215 | <u>Balancing</u>                            |     |    |          |       |        |  |
| 216 | System testing & balancing                  | 941 | sf | 3.00     | 2,823 |        |  |
| 217 | <u>Miscellaneous</u>                        |     |    |          |       |        |  |
| 218 | Coordination & management                   | 1   | ls | 8,000.00 | 8,000 |        |  |
| 219 | Coring, sleeves & fire stopping             | 1   | ls | 1,000.00 | 1,000 |        |  |
| 220 | Testing and sterilization                   | 1   | ls | 600.00   | 600   |        |  |
| 221 | Fees & permits                              | 1   | ls | 800.00   | 800   |        |  |
| 222 | SUBTOTAL                                    |     |    |          |       | 64,018 |  |

## TOTAL, HVAC

\$64,018

## 26 ELECTRICAL

|     |                                                               |   |    |          |       |  |  |
|-----|---------------------------------------------------------------|---|----|----------|-------|--|--|
| 228 | Power:                                                        |   |    |          |       |  |  |
| 229 | Modify and make connections at existing gear and distribution | 1 | ls | 5,000.00 | 5,000 |  |  |



Needham Senior Center  
Kitchen Renovations  
Needham, MA

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Schematic Design Estimate

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

**Kitchen Renovation**

|     |                                                                      |     |    |          |        |        |                 |
|-----|----------------------------------------------------------------------|-----|----|----------|--------|--------|-----------------|
| 231 | Equipment Wiring:                                                    |     |    |          |        |        |                 |
| 232 | MAU feed and connections                                             | 1   | ea | 4,500.00 | 4,500  |        |                 |
| 233 | VRF/Heat pump feed and connections                                   | 1   | ea | 4,500.00 | 4,500  |        |                 |
| 234 | VRF/Cassette feed and connections                                    | 2   | ea | 1,200.00 | 2,400  |        |                 |
| 235 | DDC feed and connections                                             | 1   | ea | 500.00   | 500    |        |                 |
| 236 |                                                                      |     |    |          |        |        |                 |
| 237 | Kitchen equipment Wiring:                                            |     |    |          |        |        |                 |
| 238 | Exhaust fan feed and connection                                      | 1   | ea | 1,500.00 | 1,500  |        |                 |
| 239 | Combi oven (Gas)                                                     | 1   | ea | 1,000.00 | 1,000  |        |                 |
| 240 | Dishwasher feed and connection                                       | 2   | ea | 2,500.00 | 5,000  |        |                 |
| 241 | 20A feed and connections                                             | 7   | ea | 1,000.00 | 7,000  |        |                 |
| 242 |                                                                      |     |    |          |        |        |                 |
| 243 | Lighting:                                                            |     |    |          |        |        |                 |
| 244 | New Kitchen lighting, installation and circuitry                     | 941 | sf | 12.00    | 11,292 |        |                 |
| 245 | Lighting controls                                                    | 941 | sf | 2.00     | 1,882  |        |                 |
| 246 | Branch devices and circuitry not depicted                            | 941 | sf | 8.00     | 7,528  |        |                 |
| 247 |                                                                      |     |    |          |        |        |                 |
| 248 | Fire Alarm:                                                          |     |    |          |        |        |                 |
| 249 | Allow for modifications to existing FACP and testing                 | 1   | ls | 2,500.00 | 2,500  |        |                 |
| 250 | Devices, modules and cabling                                         | 1   | ls | 2,500.00 | 2,500  |        |                 |
| 251 |                                                                      |     |    |          |        |        |                 |
| 252 | Telecommunications (assumes ETR)                                     |     |    |          | ETR    |        |                 |
| 253 | Security system (assumes ETR)                                        |     |    |          | ETR    |        |                 |
| 254 |                                                                      |     |    |          |        |        |                 |
| 255 | Miscellaneous:                                                       |     |    |          |        |        |                 |
| 256 | Demo and make safe                                                   | 1   | ls | 3,500.00 | 3,500  |        |                 |
| 257 | Fees and permits                                                     | 1   | ls | 800.00   | 800    |        |                 |
| 258 | SUBTOTAL                                                             |     |    |          |        | 61,402 |                 |
| 259 |                                                                      |     |    |          |        |        |                 |
| 260 | <b>TOTAL ELECTRICAL</b>                                              |     |    |          |        |        | <b>\$61,402</b> |
| 261 |                                                                      |     |    |          |        |        |                 |
| 262 | <b>32 - EARTHWORK</b>                                                |     |    |          |        |        |                 |
| 263 |                                                                      |     |    |          |        |        |                 |
| 264 | <b>320000 EARTHWORK</b>                                              |     |    |          |        |        |                 |
| 265 | Allowance to remove and reinstall soils for new grease trap          |     |    |          |        | NR     |                 |
| 266 | Allowance for E&B at new sanitary                                    |     |    |          |        | NR     |                 |
| 267 | Allowance for misc. disposal, dewatering, bedding and fill materials |     |    |          |        | NR     |                 |
| 268 | SUBTOTAL                                                             |     |    |          |        | -      |                 |
| 269 |                                                                      |     |    |          |        |        |                 |
| 270 | <b>TOTAL - EARTHWORK</b>                                             |     |    |          |        |        | <b>-</b>        |
| 271 |                                                                      |     |    |          |        |        |                 |





Needham Senior Center  
Kitchen Renovations  
Needham, MA

23-Feb-23

Schematic Design Estimate

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

ALTERNATES

**1 Demolish and renovate existing servicing area**

Demolition

Remove wall tile 100 sf 8.00 800

Misc. demo/removals 1 ls 500.00 500

Tile

Install new wall tile 100 sf 40.00 4,000

Equipment

Food service equipment budget per BH+A/Crabtree 1 ls 50,000.00 50,000

Plumbing

Disconnect existing/Connect new equipment 1 ls 7,500.00 7,500

Electrical

Equipment disconnect/connection 1 ls 2,000.00 2,000

**Add Alternate #1 - direct costs 64,800**

**TOTAL - ALTERNATE 1**

**\$64,800**

**2 Alternate pantry layout**

Demolition

Remove existing single door 1 ls 250.00 250

Create openings for overhead door/new door 1 ls 750.00 750

Misc. Metals

Support for overhead coiling door 1 ls 4,500.00 4,500

Doors

Overhead coiling door w/ counter 1 loc 6,500.00 6,500

Single door/frame/hardware 1 loc 1,975.00 1,975

Painting

Paint affected areas/new door 1 ls 500.00 500

Equipment

Relocate existing freezer 1 ls 2,000.00 2,000

Electrical

Equipment disconnect/connection 1 ls 1,750.00 1,750

**Add Alternate #2 - direct costs 18,225**

**TOTAL - ALTERNATE 2**

**\$18,225**





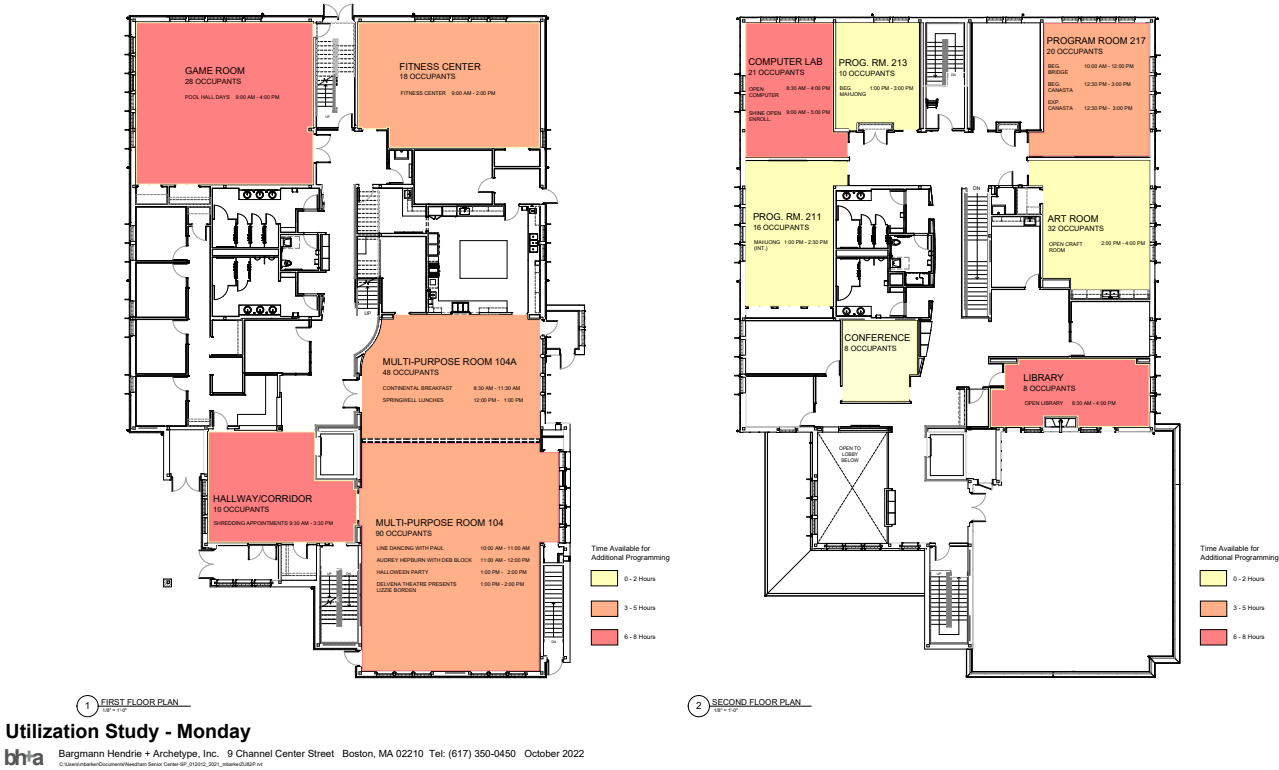
## **APPENDIX D**

### **ROOM USAGE STUDIES**



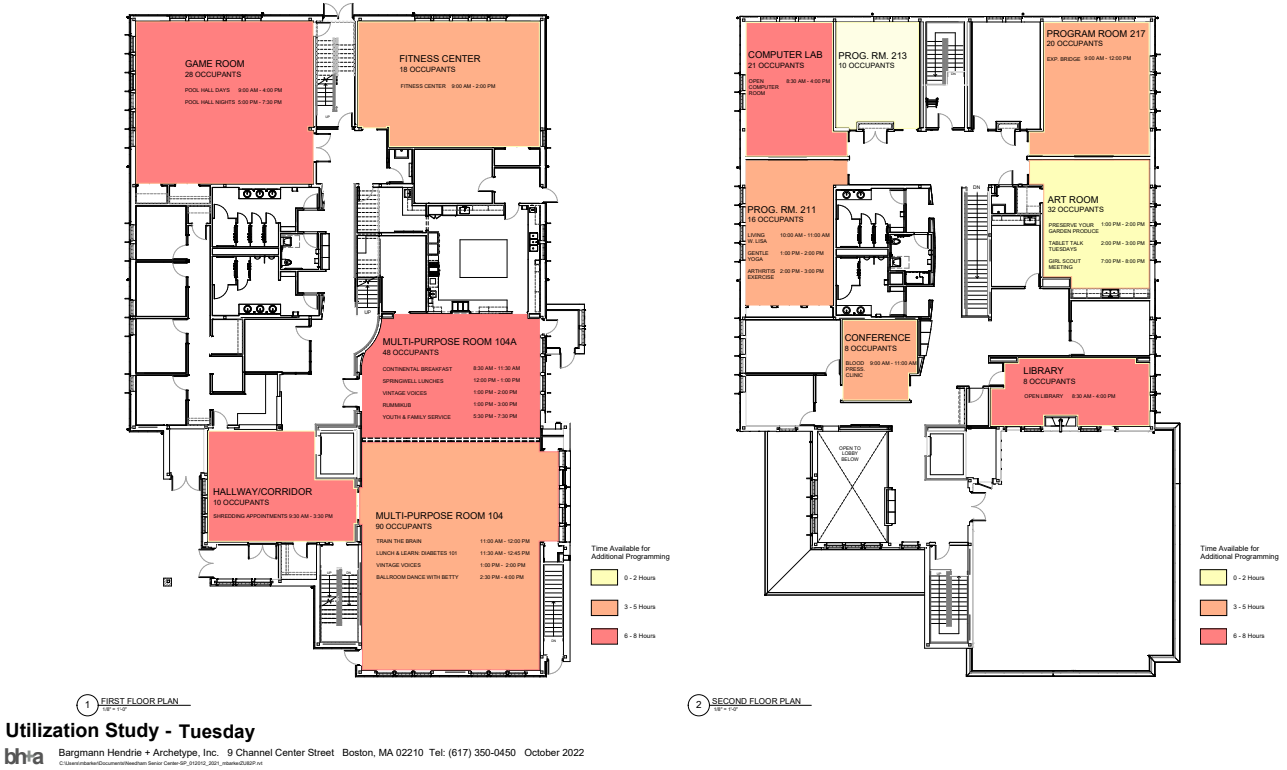
NEEDHAM CENTER AT THE HEIGHTS

SPACE UTILIZATION STUDY  
300 Hillside Avenue, Needham Heights, MA 02494



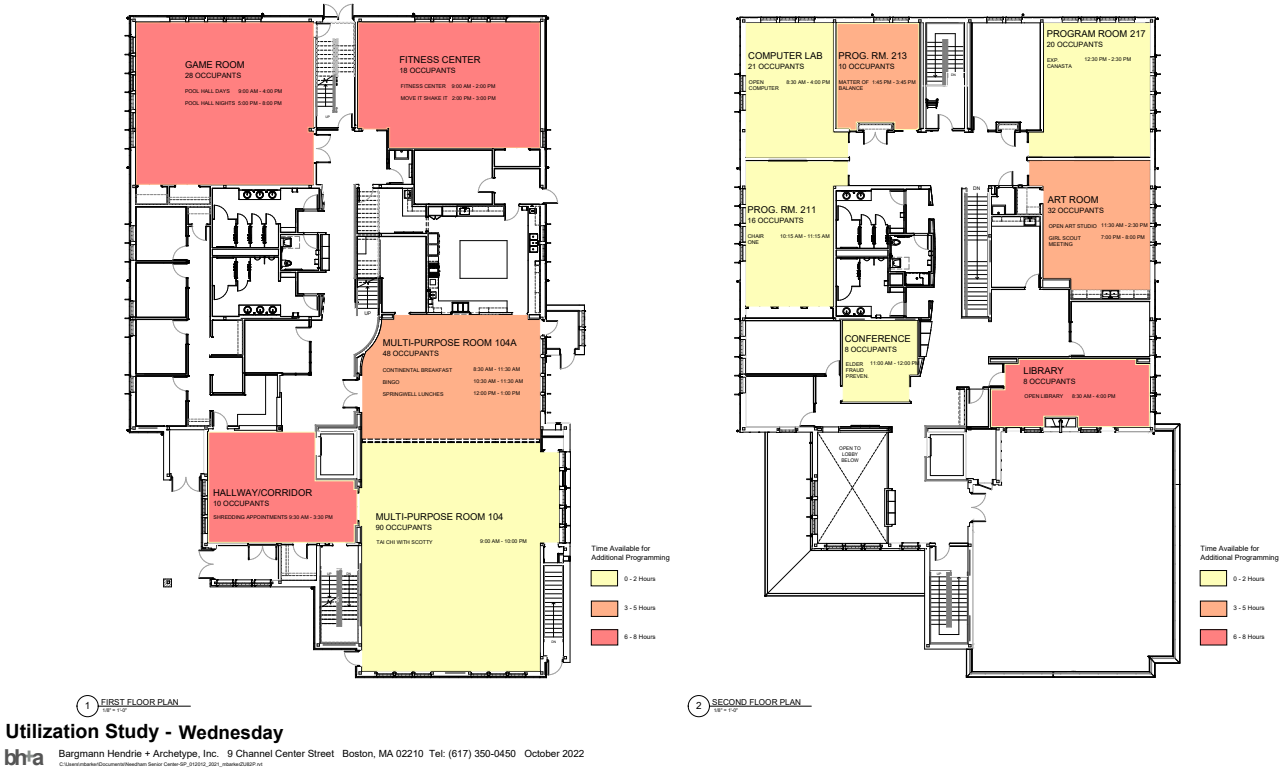
NEEDHAM CENTER AT THE HEIGHTS

SPACE UTILIZATION STUDY  
300 Hillside Avenue, Needham Heights, MA 02494



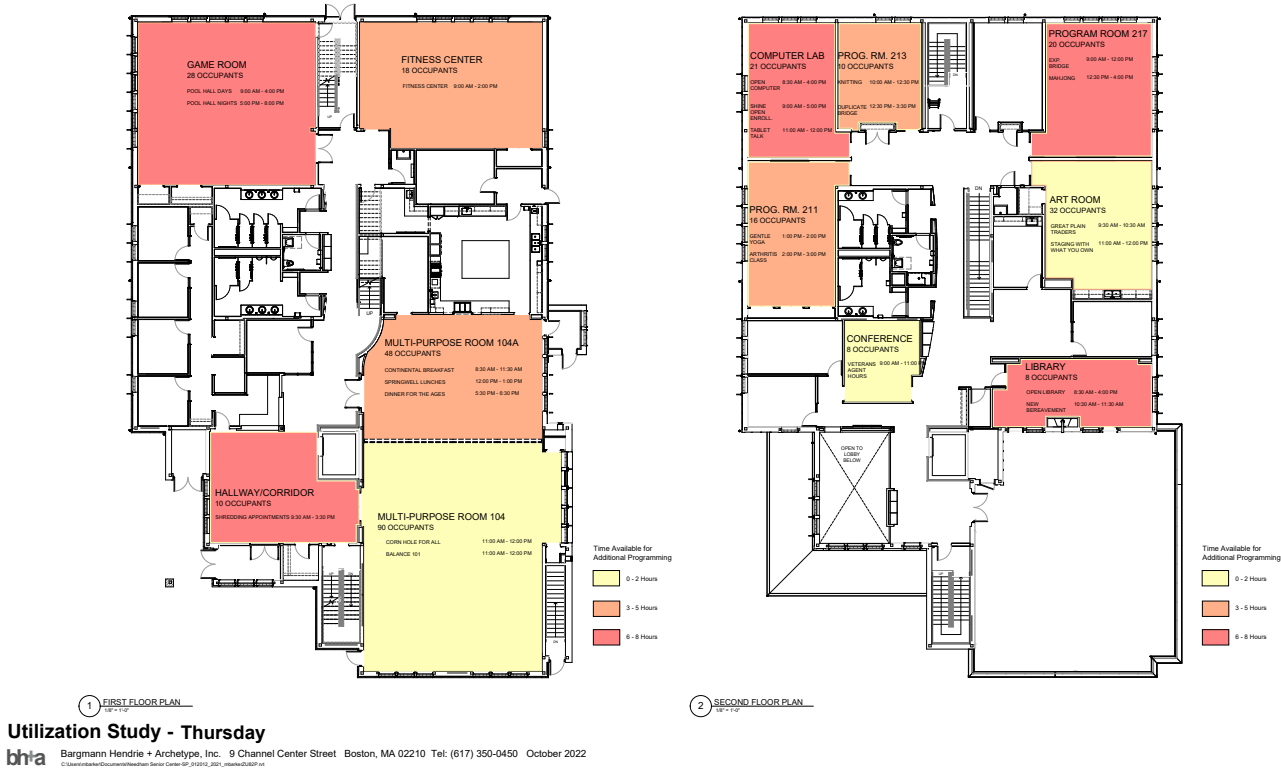
NEEDHAM CENTER AT THE HEIGHTS

SPACE UTILIZATION STUDY  
300 Hillside Avenue, Needham Heights, MA 02494



NEEDHAM CENTER AT THE HEIGHTS

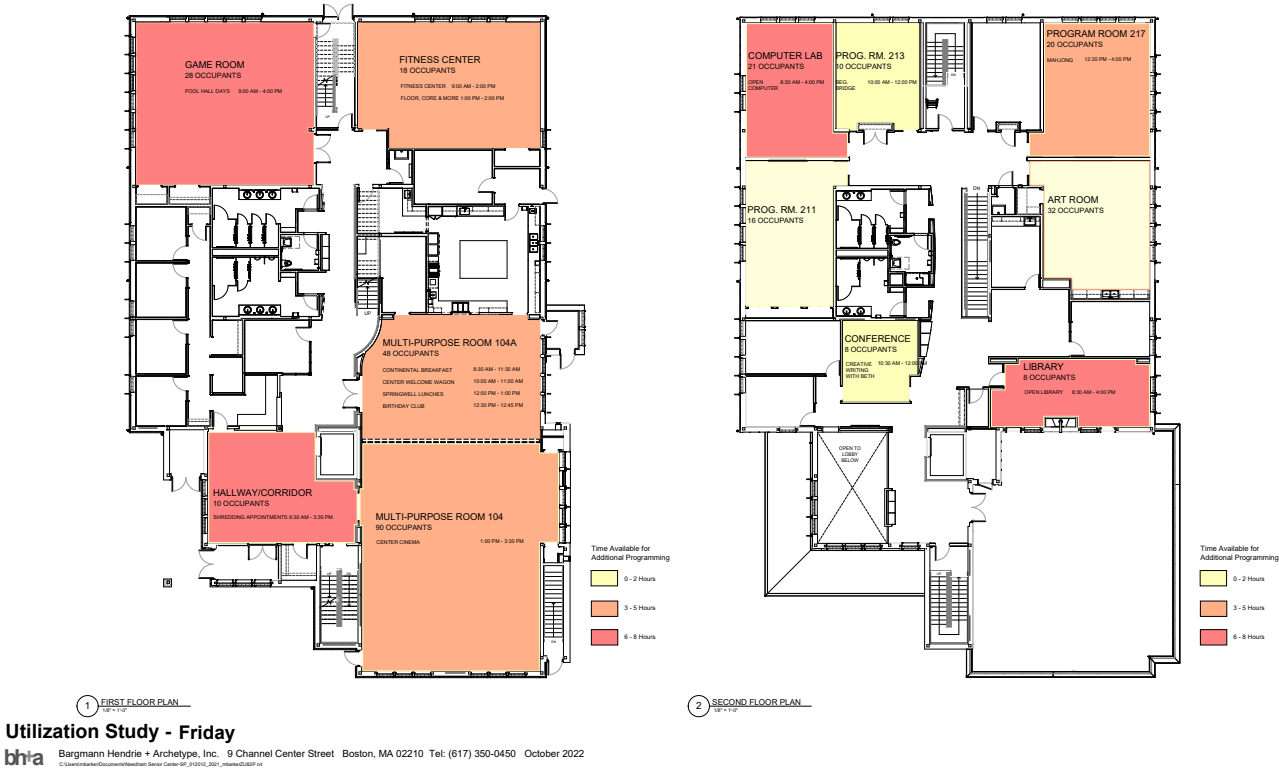
SPACE UTILIZATION STUDY  
300 Hillside Avenue, Needham Heights, MA 02494





NEEDHAM CENTER AT THE HEIGHTS

SPACE UTILIZATION STUDY  
300 Hillside Avenue, Needham Heights, MA 02494







**APPENDIX E**  
**BASEMENT RE-USE MEMO:**  
**JUNE 3, 2013**





BARGMANN HENDRIE + ARCHETYPE, INC.

Architecture Planning Interior Design

300 A Street  
Boston, MA 02210-1710

617 350 0450 tel  
617 350 0215 fax

bha@bhplus.com  
www.bhplus.com

June 3, 2013

Steve Popper, PE Director of Design and Construction, DPF/PPBC  
Phaldie Taliep, Project Manager, DPF  
500 Dedham Ave  
Needham, MA 02492

re: Needham Senior Center- Basement Space  
BH+A Project No. 3027

Dear Steve & Phaldie:

The potential ceiling height due to the depth of the steel beams, and projecting elements in the basement space have been raised as a concern. We have reviewed the documents and building code and note the following:

#### Ceiling Height

Current Use: The space is currently permitted as Accessory Storage Area/ Mechanical Rooms.

- The space is fully sprinklered and has emergency lighting and exit signs.
- No ceiling is scheduled for the space under this permit.
- The underside of the deepest beams are 7'-3" (+/-) above the finish floor; the underside of the floor deck is 8'-6 ½" (+/-).
- The Town must maintain a clear egress path between Stair No. 02 and Stair No. 04.
- The Town must maintain a clear accessible path to the elevator.

Future Use: In the future, Town may determine that an enclosed program space may be needed in the basement. In order to create a program space, the following would be required:

- A defined egress path (corridor) and accessible route must be maintained between the elevators and Stairs 04 and 05.
- It is assumed that the space south of Gridline 6 would be developed into the future program space.
- The future program space is defined by the IBC as an Occupiable Space.
- A minimum 7'-6 inch high ceiling could be installed between the beams. (IBC Section 1208.2)
- It is assumed that new lighting, sprinkler, and HVAC designs would be prepared to accommodate a program use in the future. Changing from an unoccupied Storage space to an occupied Assembly or Office use.
- The 4 deep steel framing members would be wrapped in GWB or a similar material with the bottom of the GWB at a minimum of 7'-0" AFF. IBC Section 1208.2.1 defines the wrapped beams as a "furred ceiling". The extent of furred ceilings cannot exceed two-thirds of the floor area.
- The sweep of the telephone/cable conduits on the south side of the space between gridlines 8 and 8.3 would require a furred ceiling soffit or construction of a closet below them since the conduits create restricted head room.



Steve Popper/Phaldie Taliep  
Needham Senior Center- Basement Space  
June 3 2013  
Page 2

- The floor area of the future program space is approximately 962 SF. 12 inch wide soffits along the 4 beam lines would be 104 SF. A soffit or closet below the conduits would be another 40 SF. Total furred ceiling would be 144 SF. This is 14% of the area; far below the allowable 33% of furred ceiling.

#### Ceiling Projections

Areas where equipment is hanging below 7'-0" (*code minimum of a projection is 6"-8"*), will be marked on the floor and/or on the projection itself to ensure safe access to occupants and emergency personnel in the building during an emergency event. BH+A will prepare a Bulletin with recommended markings and protection.

At this time, our primary concern is ensuring that the Building and Fire Department are satisfied with markings identifying elements hanging below 6'-8" in the basement space to ensure safe passage during emergency conditions.

Please feel free to contact me with additional questions.

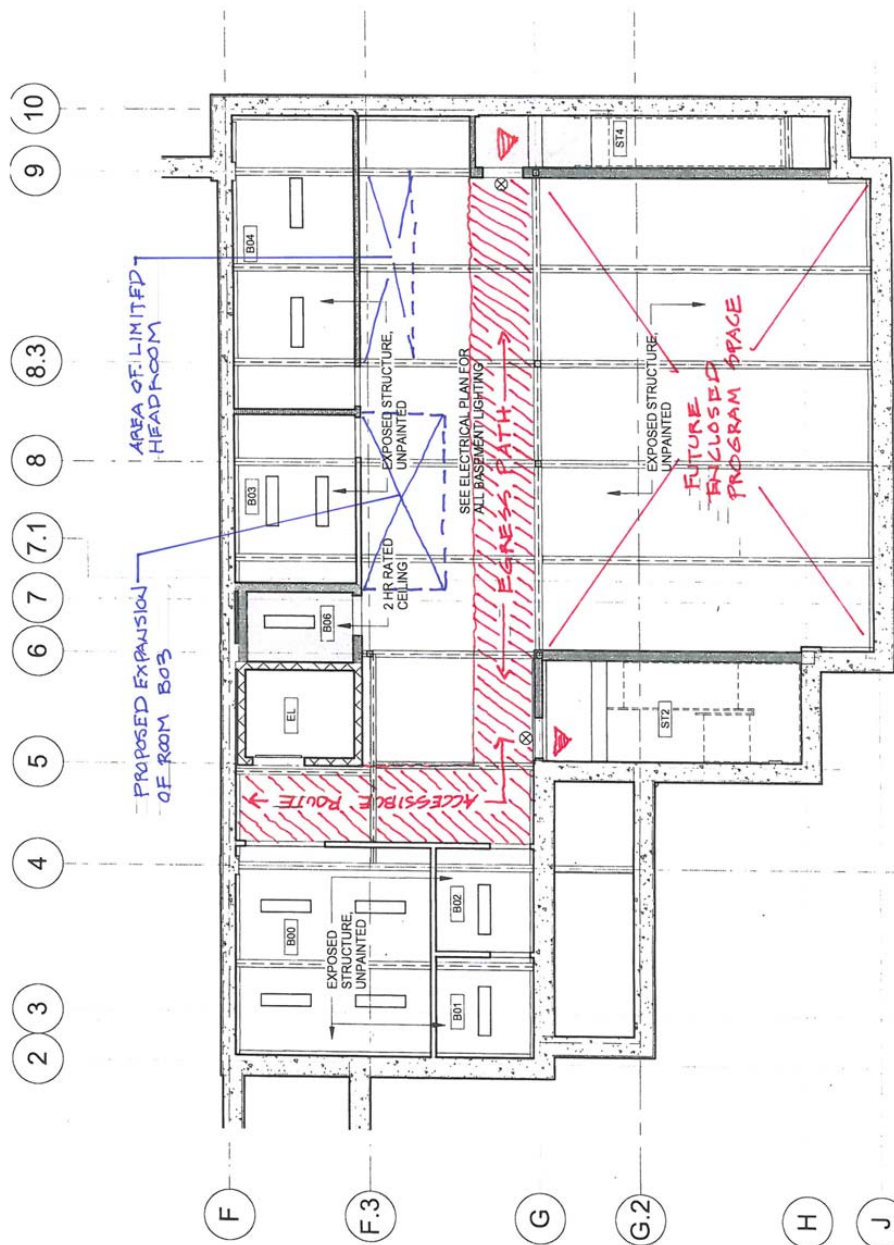
Sincerely,

Thomas A. Scarlata, CSI, CCS, AIA  
Principal

cc: Jeff Guilherme  
Gary Moses  
enc: Plan Showing egress and access path/location of future program space.



Steve Popper/Phaldie Taliep  
Needham Senior Center- Basement Space  
June 3 2013  
Page 3









**APPENDIX F**  
**PLANNING DECISION:**  
**FEBRUARY 21, 2012**





## TOWN OF NEEDHAM, MA

PLANNING AND COMMUNITY  
DEVELOPMENT DEPARTMENT

RECEIVED TOWN CLERK  
NEEDHAM, MA 02492  
2012 FEB 23 PM 1:52

500 Dedham Ave  
Needham, MA 02492  
781-455-7500

**AMENDMENT TO DECISION**  
**February 21, 2012**

PLANNING

**Major Project Site Plan Special Permit**  
**Needham Senior Center**  
**SPMP No. 2011-04**  
**(Original Decision October 18, 2011)**

DECISION of the Planning Board of the Town of Needham, Massachusetts, (hereinafter together with any entity succeeding the powers of said Planning Board referred to as the "Board") on the petition of the Town of Needham by its agent the Needham Permanent Public Building Committee ("the Petitioner"), 470 Dedham Avenue, Needham, Massachusetts for that certain property located at 300 Hillside Avenue, Needham, Massachusetts. The subject property is located at 300 Hillside Avenue, Needham, Massachusetts, shown on Assessor's Map No. 99, Parcel 14 containing 71,311 square feet in the Hillside Avenue Business Zoning District. The Site was the subject of a Major Project Site Plan Special Permit No. 2011-04, dated October 18, 2011.

The original Major Project Site Plan Special Permit, issued on October 18, 2011, allowed the construction of a new 2-story building for use as a Senior Center for the Town of Needham. The building will include a partial basement of 3,513 square feet, a first floor of 11,460 square feet and a second floor of 8,871 square feet for a total building size of 23,844 square feet. The project includes 65 on-site parking spaces for the Senior Center. Additional spaces are being provided off-site to accommodate needs for both typical days and special events. The project also provides 85 parking spaces that the MBTA will use for parking for its Needham Heights commuter rail station. Site work includes modifications to the site grading and drainage, and the addition of landscaping. The Senior Center includes a multi-purpose room, a kitchen, a game room, a fitness studio, an art space, a computer room, and space for the Council on Aging administration and support staff as well as additional spaces for other programs.

This decision is in response to an application submitted to the Board on February 21, 2012, by the Petitioner to amend the decision by the Board dated October 18, 2011, for approval to make certain minor site modifications, all in accordance with the Exhibits identified below.

The changes requested are deemed minor in nature and extent and do not require public notice or public hearing. Testimony and documentary evidence were presented to the Board on February 21, 2012 in the Charles River Room, First Floor, Public Services Administration Building, 500 Dedham Avenue, Needham, Massachusetts. Board members, Bruce T. Eisenhut, Martin Jacobs, Jeanne S. McKnight and Sam Bass Warner were present throughout the February 21, 2012 proceedings. After testimony and documentary evidence were presented the Board took action on the matter.

## EVIDENCE

Submitted for the Board's review were the following exhibits:

1. Application Form for Site Plan Review completed by the applicant's representative dated February 21, 2012.

2. Transmittal memo to Lee Newman, Director of Planning and Community Development, from Deborah Robinson, Bargmann Hendrie + Archetype, Inc., dated January 20, 2012.
3. Needham Senior Center Drawing List dated August 19, 2011, revised September 26, 2011 and January 20, 2012.
4. Letter to Lee Newman, Director of Planning and Community Development, from Calvin M. Olson, Drummey Rosane Anderson, Inc., dated February 7, 2012.
5. Plans titled "Needham Senior Center, Needham, Massachusetts" prepared by Bargmann Hendrie + Archetype, Inc., 300 A Street, Boston, MA 02210, Bolton & DiMartino, Inc., 100 Grove Street, Worcester MA, 01605, Allied Consulting Engineering, Inc., 215 Boston Post Road, Sudbury MA 01776, Columbia Design Group, LLC, 14 Upham Street, Boston, MA 02125, Hammer+Walsh Design Inc., 300 A Street, Boston MA 02210, consisting of 12 pages: Sheet 1, Sheet SP-A000, entitled "Cover Sheet," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 2, Sheet SP-C101, entitled "General Plan," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 3, Sheet SP-C102, entitled "Drainage & Utility Plan," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 4, Sheet SP-C104, entitled "Storm Drainage Details," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 5, Sheet SP-C105, entitled "Site Phasing Plan," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 6, Sheet SP-L100, entitled "Landscape Plan," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 7, Sheet SP-L200, entitled "Landscape Details," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 8, Sheet SP-A100, entitled "Basement Plan," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 9, Sheet SP-A101, entitled "First and Second Floor Plans," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 10, Sheet SP-A102, entitled "Roof Plan and Typical Details," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 11 Sheet SP-A200, entitled "Exterior Elevations," dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 12, Sheet SP-E001, entitled "Electrical Site Plan," dated August 19, 2011 revised September 20, 2011, January 4, 2012 and January 20, 2012.
6. Interdepartmental Communication (IDC) to the Board from Anthony Del Gaizo, Assistant Director, DPW, dated February 21, 2012.

#### FINDINGS AND CONCLUSIONS

The findings and conclusions made in Major Project Site Plan Special Permit No. 2011-04, dated October 18, 2011 were ratified and confirmed except as follows:

1. The Board hereby approves the modifications as described under Exhibits 1, 2, 3, 4 and 5.
2. Issuance of a building permit to permit the minor modifications as described under Exhibits 1, 2, 3, 4, and 5 above is hereby authorized as limited herein.
3. The following plans, as modified by this decision, constitute the final plan set for this project. The bolded plan sheets are those that were altered by this modification.
  - a) Plans titled "Needham Senior Center, Needham, Massachusetts" prepared by Bargmann Hendrie + Archetype, Inc., 300 A Street, Boston, MA 02210, Bolton & DiMartino, Inc., 100 Grove Street,



Worcester MA, 01605, Allied Consulting Engineering, Inc., 215 Boston Post Road, Sudbury MA 01776, Columbia Design Group, LLC, 14 Upham Street, Boston, MA 02125, Hammer+Walsh Design Inc., 300 A Street, Boston MA 02210, consisting of 12 pages: **Sheet 1, Sheet SP-A000, entitled “Cover Sheet,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 2, Sheet SP-C101, entitled “General Plan,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 3, Sheet SP-C102, entitled “Drainage & Utility Plan,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 4, Sheet SP-C103, entitled “Grading Plan,” dated August 19, 2011, revised September 20, 2011; Sheet 5, Sheet SP-C104, entitled “Storm Drainage Details,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 6, Sheet SP-C105, entitled “Site Phasing Plan,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 7, Sheet SP-L100, entitled “Landscape Plan,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 8, Sheet SP-A100, entitled “Basement Plan,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 9, Sheet SP-A101, entitled “First and Second Floor Plans,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 10, Sheet SP-A102, entitled “Roof Plan and Typical Details,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 11, Sheet SP-A200, entitled “Exterior Elevations,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012; Sheet 12, Sheet SP-E001, entitled “Electrical Site Plan,” dated August 19, 2011 revised September 20, 2011, January 4, 2012 and January 20, 2012.**

b) Plan entitled “Needham Senior Center,” Sheet SP-A201, entitled “Exterior Presentation Elevations,” dated August 19, 2011.

c) Plans entitled “Needham Senior Center, Sheet SP-C001, entitled “Existing Site Drawing,” dated August 19, 2011; and **Sheet SP-L200, entitled “Landscape Details,” dated August 19, 2011, revised September 20, 2011, January 4, 2012 and January 20, 2012.**

4. Notwithstanding the above plans, the Petitioner shall be entitled to install a shade trellis at the roof deck at its discretion.
5. The proposed changes are deemed minor in nature and do not require public notice or hearing.

#### CONDITIONS AND LIMITATIONS

The plan modifications, conditions and limitations contained in Major Project Site Plan Special Permit No. 2011-04, dated October 18, 2011 are ratified and confirmed except as modified herein.

#### DECISION

NOW THEREFORE, by unanimous vote of the Planning Board, the Board votes that:

1. The proposed changes are minor in nature and do not require a public notice or a public hearing. No 20-day appeal period from this Amendment of Decision is required.
2. That the requested modifications are granted.

This approval shall be recorded in the Norfolk District Registry of Deeds. This Major Site Plan Special Permit amendment shall not take effect until the Petitioner has delivered written evidence of recording to the Board.

Witness our hands this 21<sup>st</sup> day of February, 2012.

NEEDHAM PLANNING BOARD

Bruce T. Eisenhut, Chairman

Sam Bass Warner

Martin Jacobs

Jeanne S. McKnight

Ronald W. Ruth

COMMONWEALTH OF MASSACHUSETTS

Norfolk, ss Feb. 21, 2012

On this 21 day of February, 2012, before me, the undersigned notary public, personally appeared Bruce Eisenhut, one of the members of the Board of the Town of Needham, Massachusetts, proved to me through satisfactory evidence of identification, which was in the form of a state issued drivers license, to be the person whose name is signed on the proceeding or attached document, and acknowledged the foregoing to be the free act and deed of said Board before me.

Alyson A. Clea  
Notary Public

My commission expires April 2, 2015

Copy sent to:

Petitioner - Certified Mail #  
Town Clerk  
Building Inspector  
Director, PWD  
Board of Health  
Conservation Commission  
Board of Selectmen  
Engineering  
Fire Department  
Police Department  
Steven Popper





# **APPENDIX G**

## **UMASS BOSTON PLANNING STUDY**





# **Town of Needham Center at the Heights Planning Study**

June, 2020

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Commissioned by The Town of Needham & the  
Department of Health & Human Services

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Center for Social and Demographic Research on Aging  
Gerontology Institute  
John W. McCormack Graduate School of Policy & Global Studies  
University of Massachusetts Boston



## Contributors and Acknowledgements

This report was produced by the Center for Social and Demographic Research on Aging (CSDRA), a research unit within the Gerontology Institute at UMass Boston's McCormack School. The CSDRA provides resources and research expertise to communities, non-governmental organizations, and other agencies through the Commonwealth.

Caitlin Coyle, PhD is primarily responsible for the contents of this report. Other UMass Boston researchers contributing to the project include Jan Mutchler, PhD, Beth Rouleau, Nidya Velasco Roldan and Ceara Somerville. We gratefully recognize our partners in this effort, Ana Julien and Valerie Fletcher from the Institute for Human Centered Design.<sup>1</sup>

We offer our appreciation to Timothy McDonald, Director of Health & Human Services, and LaTanya Steele, Director of the Needham Council on Aging, who provided important guidance and leadership for this project. We acknowledge with gratitude the staff of the Center at the Heights for their input. As well we are deeply grateful to the many Needham residents who shared their thoughts as part of the data collection.

Thanks also to Peer Community COA directors: Carol Hamilton (Marshfield), Susan Ramsey (Natick), Hemali Shah (Lexington), Jamie Gutner (formerly of Needham), and Jayne Colino (Newton) for sharing information about their respective senior centers and experiences.

### For more information, contact:

The Center for Social and Demographic Research on Aging  
Gerontology Institute  
University of Massachusetts Boston  
[CSDRA@umb.edu](mailto:CSDRA@umb.edu) | 617.287.7413

### Recommended Citation

Coyle, Caitlin, "Town of Needham Center at the Heights Needs Assessment" (June, 2020). *Center for Social and Demographic Research on Aging Publications*

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<sup>1</sup> [www.HumanCenteredDesign.org](http://www.HumanCenteredDesign.org)

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## Executive Summary

This report describes research undertaken by the Center for Social & Demographic Research on Aging within the Gerontology Institute at the University of Massachusetts Boston and the Institute for Human Centered Design (IHCD), on behalf of the Town of Needham's Department of Health & Human Services. The purpose of this study is to identify the aspects of the programming and environment that can be adjusted to ensure that, according to the Mission of the Needham Council on Aging, a "welcoming, inclusive, and secure" environment is maintained for Needham residents.

This study was conducted over the course of 10 weeks (April 2020-June 2020). At this time, the world was responding to the global COVID-19 pandemic; as a result, nearly all activities associated with this project were done remotely. A demographic profile was completed, based on existing, publicly available data about Needham from the US Census Bureau and projections from the Donahue Institute at the University of Massachusetts and the Metropolitan Area Planning Council (MAPC). Two tours of the Center at the Heights (CATH) were completed—one via video conferencing and one building survey that was conducted in-person by partners from IHCD. The project included a web-based survey of residents age 60 and older. In May of 2020, all residents age 60 or older received a postcard inviting them to participate in the online survey. The survey generated a total of 679 responses from residents in this age category (18 responses came from residents younger than 60). Two focus groups were conducted via video conferencing with staff of the CATH and board members from the Council on Aging. These conversations provided first-hand accounts of the ways in which the spaces are used. Finally, peer community interviews were conducted with directors of five senior centers that have recently undergone a building design process and could provide their experiences and suggestions for how to capitalize the use and benefit of newly constructed space.

### Key Findings in Brief:

- It is clear that the CATH is an important resource to the Town of Needham. In fact, 75% of survey respondents reported that the CATH plays an important role in their lives or the lives of their loved ones.
- Population projections suggest steady increases in the number of older residents between 2010 and 2030, resulting in an age 60+ population numbering between 8,000 and 10,000 by 2030.
- 33% of survey respondents reported that finding parking has been a challenge to accessing the CATH and 15% of respondents that they have not been able to participate because programming is offered at an inconvenient time.



- When asked about which existing programs or services are most important to them or members of their family, respondents across age groups were consistent with their number one choice—fitness activities (e.g., yoga, Zumba). Other highly valued programs include professional services; information and referral; educational opportunities; physical health and wellness programs; and assistance with state or local programs (e.g., fuel assistance).
- Half of survey respondents have visited the CATH within the past year. Among them, 32% report attending on at least a weekly basis.
- When asked about priorities for expanding the programs available at the CATH, those who have not visited the CATH within the past year offered the same top priorities as those who had participated in the previous year, each group listing educational programs, fitness opportunities, and performances and presentations most frequently.
- Key informants described ways in which the physical space of the Center could be used differently to accommodate more or different types of programming.
  - Outdoor patio space is underutilized as is the kitchen space.
  - Fitness programming is currently very full and in high-demand for additional space.
- Needs of staff and other administrative functions of the space were highlighted.
  - Currently, the two social workers on staff share an office space. When seeing clients, they are required to find additional meeting space to ensure privacy of the residents.
  - Two members of the programming staff currently have no desk or office space.

### Recommendations for the Town of Needham Center at the Heights

In addition to the recommendations for safety and accessibility outlined in the IHCD report (**Appendix D**). We make the following recommendations to the Town of Needham's Department of Health & Human Services. These recommendations are for the consideration of the Town and the staff of the CATH. These recommendations are listed in no particular order and some will be attainable in the short-term while others may take longer range planning.

#### Programming and Social Engagement Space

- Increase opportunities for access to fitness equipment and classes. Physical activity came through as an interest, valued activity, priority for expansion, observation by staff, COA board, other COA directors—it was a very clear message that additional space and capacity is needed to meet the demands of the community.

- Consider swapping the fitness room (Room 123) with the larger sized game room (Room 118).
- \*Consider increasing the square footage of the existing fitness room by reducing hallway access and incorporating all of the square footage from Room 125 and partial square footage from the pantry. (Break room access would shift to the hallway).<sup>2</sup>
- \*Consider merging two of the second-floor programming rooms (room 216 and 217) for secondary, non-equipment, fitness space. This space would increase opportunities for larger classes including yoga.
- Consider replacing the desktop computers in the computer lab (room 212) with laptops that can be checked-out and used around the CATH. This would still allow for tax preparation and SHINE counseling to take place in the computer lab room, but would open space for additional programming space needs.
  - Further, a dividing wall could be purchased to create two smaller spaces for meeting or programs.
- Ensure that all programming space and group meeting space is equipped with the ability to have residents join by video conference. In addition, complete the process of making the Great Room accessible for those who are deaf or hard of hearing.
- Enlist volunteers to generate ideas for patio programming. See additional detail for outdoor space opportunities below.
- Consider increasing the frequency of the hot breakfast program to promote use of the kitchen space. In addition, revise rental policies to encourage other community partners to host fundraisers or events using the kitchen and dining area.
  - Encourage private residents or businesses to use the space on evenings or weekends for a small fee. Revenue from these events could be used to expand the building monitor position or other fees associated with keeping the building open after operating hours.
- Expand areas for small social gathering and seating. Consider space in oversized hallway 215 for additional social engagement seating. For example, install a small comfortable couch with reading light.
- \*Consider reducing two story lobby to expand programming and social engagement space at the 2<sup>nd</sup> level reading landing (220) adjacent to the deck.

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<sup>2</sup> \*Suggestions for re-purposed space that involve minor structural changes are conceptual and an architect should be consulted to evaluate proposed revisions.

**Programming Storage Space**

- Increase interior wall storage in programming rooms. Convenient in-room storage reduces the need to move equipment and tables among room and increases opportunities to repurpose existing standalone closet storage.
- Identify conditions that would make the basement space adequate for additional storage use. Consider using this space for seasonal items or extra tables and chairs used for large events.
- Install storage shelving or cabinetry inside of the coat room (room 102).

**Business Administration Schedule and Space**

- **Schedule**

- Consider the expansion of evening and weekend hours to maximize opportunities for programming during less crowded hours and to meet the needs of residents with schedules that are restricted on weekdays. Consider use of volunteers to staff these piloted hours.
- Consider online registration for programming to decrease traffic at front lobby reception area during high volume attendance.
- Install a secondary *MySeniorCenter* kiosk in the receiving area (room 127) to ensure that all participants are being counted.

- **Office Space**

- Modify the health clinic room (221) to include a small meeting area and/or multiple workstation spaces. Consider removing the exam table.
- Create an additional workstation adjacent to the current administration area (225) outside of the health clinic room. Consider a portable divider to create a desk space.
- Consider relocating the copier (Room 111) to an alternate space to create a workspace adjacent to the smaller transportation office.
- Consider re-purposing storage areas for office space (Rooms 102, 125, 130, 218 and 220). This possibility is contingent on creating additional storage along interior walls of programming rooms. Room 102 offers potential for a secondary reception area.

**Outdoor Space**

- **Outdoor Patio**

- Revise building policies to allow for food and beverage consumption on the outdoor deck. A small food service area in adjacent space or a mobile food cart could offer snacks and beverages.

- Increase programming that is suitable for outdoor space including chair exercise, gardening classes, and outdoor dining. Enlist participants, board members, or volunteers to generate a list of possible programs to be held on the patio, pilot-test these ideas.
  - Consider an awning or shade structure such as a pergola or trellis to offer protection from sunlight, rain, and wind.
  - Provide “age-friendly” seating (e.g., with arms, backs and weather resistant cushion) with access to tables for programming and potential dining.
  - Improve acoustics to reduce undesirable sounds and incorporate appealing soundscape elements. Consider the use of dense plants or faux planters for noise reduction purposes; these could take the shape of dividers to increase the number of seating areas on the patio and also offer audio support for those with trouble hearing while outdoors.
  - Explore the opportunity to create an outdoor fireplace at the location of existing library fireplace. Alternatively, purchase outdoor heat lamps to provide some heat in cooler months. This could extend the seasonality of the space.
- **Parking**
    - Identify on-street parking spots and designate them as giving priority to CATH participants.
    - Explore opportunities to create a satellite lot that is within walking distance or provides opportunity for pickup coordinated with existing CATH transportation services.
    - Create incentives for car-pooling (e.g., program discounts, gift cards to local businesses, or gift shop credit).



## Introduction

The Town of Needham is approximately 12.75 square miles in area and is home to a population of just over 30,000 residents. As a suburb of Boston, it falls in close proximity to major thoroughfares like the Massachusetts Turnpike and Interstate 95. Train and bus service to Boston and surrounding towns is available in Needham via the Massachusetts Bay Transportation Authority (MBTA). As a community that strives for excellence, it is not surprising that Needham consistently receives the highest bond rating for its fiscal responsibility, and in 2015 the Town of Needham opened a newly constructed, state of the art senior center. Referred to as the Center at the Heights (CATH), this 20,000 square foot building is home to social, recreational, professional, health, and social service programs serving the Town of Needham.

Establishment of the CATH represents fulfillment of a promise following 20 years of planning and substantial input from the community, architects, and aging service professionals. The design focused on the Council on Aging's mission to serve the community. The building has several "multipurpose" rooms that can host a variety of programs ranging from a movie night to fitness classes, art classes or bridge. Most rooms in the CATH are equipped with a television screen that is capable of meeting basic audio visual needs. Natural light abounds in the space and there are several areas for sitting and visiting (e.g., the café and the lobby).

According to annual reports from Fiscal Year (FY) 2019, on any given day the CATH welcomes approximately 200 visitors for programs and services. Over the course of the year, nearly 2,000 individuals visit the center for a total of nearly 70,000 visits. According to attendance records from FY 2019, popular programs include social events like luncheons or parties, educational programming and fitness offerings. In addition, crucial social services are administered through the CATH, with staff offering assistance for like MassHealth applications, fuel assistance, tax preparation, transportation services, and other programs and services.

Having been open to the public for 5 years, the Town decided to review the utilization of the CATH space and its alignment with the needs of the community as well as to identify any areas where accessibility and safety could be improved for the benefit of the public. Thus, a two-part study was commissioned by the Town to address possible adjustments meant to ensure that the CATH space remains a point of pride for the Town of Needham. To accomplish this task, two expert partners were enlisted by the Town of Needham.

The Institute for Human Centered Design<sup>3</sup> (IHCD) was hired to conduct a comprehensive accessibility and inclusive design assessment of the Center at the Heights (CATH). In addition to

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<sup>3</sup> <https://www.humancentereddesign.org/>

being home to the New England Americans with Disabilities Act (ADA) Center, which provides access to information and guidance on disability rights laws and codes, IHCD provides education and consultation about best practices that go beyond legal requirements to design places, things, communication and policy that promote design that works for everyone across the spectrum of ability and age and enhances human experience.

To assess the use of space in meeting the needs and preferences of the aging population of Needham, the Center for Social & Demographic Research on Aging<sup>4</sup> (CSDRA) within the Gerontology Institute at the University of Massachusetts was included to gather data about the needs and preferences of residents and to draw on the existing knowledge about high-quality senior center spaces.

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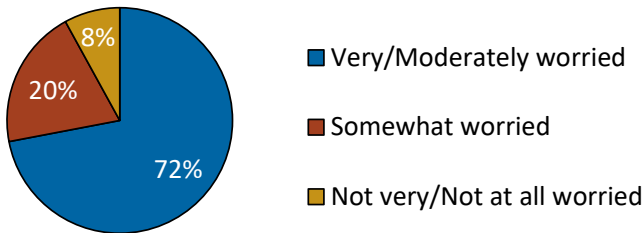
<sup>4</sup> [www.umb.edu/demographyofaging](http://www.umb.edu/demographyofaging)

Important Context: responding to the COVID-19 pandemic

This project was commissioned in the Spring of 2020, at the same time as the world was responding to the COVID-19 pandemic. Residents of Needham were asked to remain at home, wear face coverings when in public, and the CATH (like many other public spaces) was closed to the public in response to public health guidelines. The components of this project were largely carried out remotely using electronic mechanisms. Although learning about the impact of the pandemic was not the stated purpose of this report, it is important to recognize the impact of this unprecedented crisis on the data collected.

A small number of questions were included regarding how residents are experiencing the COVID-19 pandemic. To illustrate, we are including results from the community survey (N=679 residents age 60 and older). One-third of survey respondents reported being “very worried” about the pandemic and 42% reported being “moderately worried” (see **Figure 1**). This highlights the impact of the pandemic on the lives of Needham residents age 60 or older.

**Figure 1.** How worried are you about the COVID-19 pandemic?



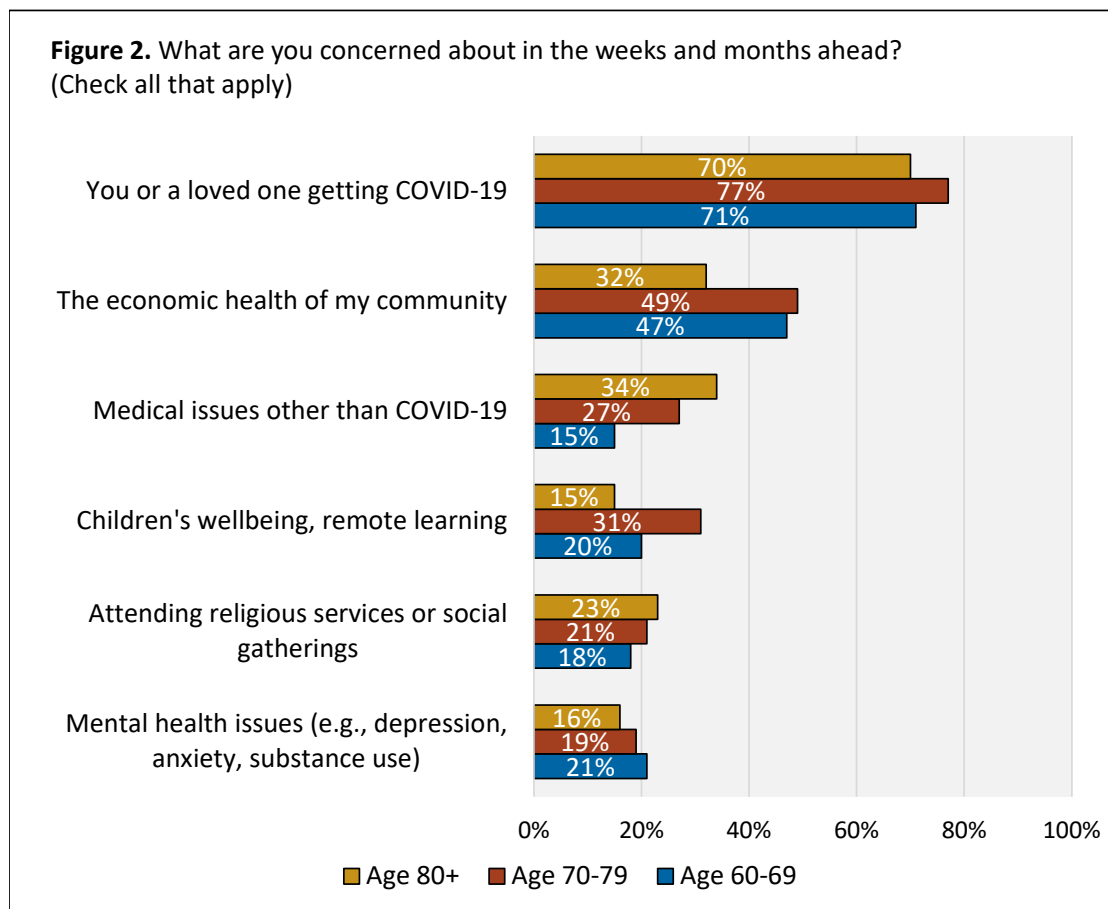
About 18% of survey respondents took the time to write in other concerns they had about the weeks and months. Themes and verbatim responses are shown in **Table 1**.

**Table 1. Write-in responses about other concerns about the weeks and months ahead.**

|                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inability to be with family, friends, and neighbors during difficult times.                                                                                                               |
| (I'm concerned about...) not being able to be with our loved ones not being able to hold our grandchild.                                                                                  |
| We decided not to care for our 3 grandchildren age 5, 8 & 11 every Tuesday as we had been doing - we miss them so much!                                                                   |
| (I'm concerned about) loneliness.                                                                                                                                                         |
| My 89-year-old mother has it (COVID-19). I am concerned about losing her.                                                                                                                 |
| (I'm concerned about) coordinating family matters to support my mother who is 97.                                                                                                         |
| Limitations on engaging with the community.                                                                                                                                               |
| (I'm concerned about...) how to be confident that it is safe to attend a meeting or concert.                                                                                              |
| (I'm concerned about...) having so many things unavailable like the senior center, the library, the gym etc. etc. I understand it was necessary but it was and continues to be very hard. |
| Concerned about not attending religious services or social gatherings.                                                                                                                    |
| Economic impact on individuals and family/friends.                                                                                                                                        |
| I fear for my adult children's job security, now that they are starting families.                                                                                                         |
| My adult children's careers and mental health and child care for our grandchildren in another state.                                                                                      |
| General financial health as I approach retirement....including real estate taxes that are quite high.                                                                                     |
| (I'm concerned about...) my business, having to declare bankruptcy.                                                                                                                       |

### Important Context: responding to the COVID-19 pandemic CONT...

Across age groups, respondents reported being most concerned about themselves or their loved ones getting the virus (73%). Additionally, respondents reported concerns about the economic health of their community (45%), medical issues other than COVID-19 (23%), and children's wellbeing, including remote learning (23%) (see **Figure 2**). Additional concerns were rated by fewer respondents, these are listed in **Appendix A**.



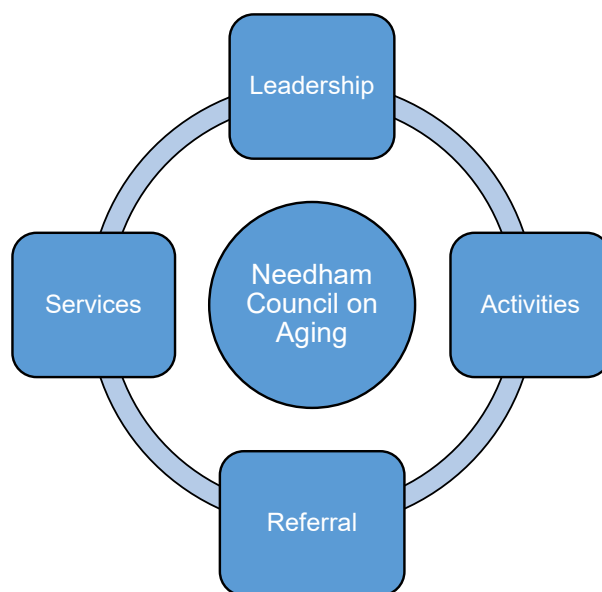


### The Needham Council on Aging & the CATH

In Massachusetts, Councils on Aging (COAs) are municipally-appointed agencies meant to link older residents to needed resources. Virtually every city and town in Massachusetts has a COA, and in most communities they serve as the only public social service agency. Each COA is expected to establish its own priorities based on local needs and resources. Many COAs are responsible for operating a Senior Center, a community facility housing senior services and programs, along with the staff and volunteers offering them. The Needham COA is tasked with providing information and some direct services to Needham residents age 60 and older. The Needham COA's mission includes "to respond to its older residents' needs by providing a welcoming, inclusive, and secure environment where individuals and families benefit from programs, services, and resources that enhance their quality of life, and provide opportunities for growth and knowledge."<sup>5</sup> The purpose of this study is to identify the aspects of the environment that can be adjusted to ensure that a "welcoming, inclusive, and secure" environment is maintained for Needham residents.

In general, when considering the mission of COAs, observers commonly think of two sets of responsibilities. First, COAs promote well-being among older residents by offering activities that appeal specifically to older adults and that promote personal growth and social engagement. Exercise classes, late-life learning programs, and informational programs are good examples. Second, COAs provide services to older residents and their families that promote physical and emotional wellness. Blood pressure clinics and

transportation services are common examples of such services. Many observers are not aware of two additional important responsibilities of COAs. COA staff members link older residents in the community to existing programs for which they may be eligible by providing needed information and referring residents to appropriate programs and services. For example, staff may help residents apply for income support programs or health insurance made available through



<sup>5</sup> Retrieved from <https://www.needhamma.gov/525/Who-We-Are>

the state or federal government. Finally, COAs provide leadership within the community around issues faced by older adults, by serving on municipal boards, interacting with other municipal offices, and serving as resources to residents and organizations.

The Needham COA offers programs and services at the CATH and also serves as the regional hub for the SHINE program. The Needham COA is supported with support from the Town, funds from the State's Executive Office of Elder Affairs and other grants.

The CATH operates Monday through Friday from 8:30am-5p. There are 16 staff members and many volunteers. The CATH Board of Directors is made up of 12 resident members, acting as an advisory committee to the COA Director.

### Methods

Methods used in compiling this report include analysis of existing data as well as developing data specifically for this project. Demographic material used in this report was drawn from the U.S. Census Bureau (the decennial censuses and the American Community Survey), from projections generated by the Donahue Institute at the University of Massachusetts and the Metropolitan Area Planning Council, and from the Healthy Aging Data Report for Needham (Massachusetts Healthy Aging Collaborative, n.d.). Additional information about the Needham COA was retrieved from material drawn from the COA's 2019 Annual Report as well as several types of original data collected for this study. Given that this study took place in the Spring of 2020 during the height of the COVID-19 pandemic, all data collection was carried out remotely. These methods are described in detail in this section.

### Demographic Profile

As an initial step toward understanding characteristics of the Town of Needham's older population through quantitative data, we generated a demographic profile of the Town using data from the decennial U.S. Census and the American Community Survey (ACS)—a large, annual survey conducted by the U.S. Census Bureau. For purposes of this assessment, we primarily used information drawn from the most current 5-year ACS files (2014-2018), along with U.S. Census data for the Town of Needham to summarize demographic characteristics including growth of the older population, shifts in the age distribution, gender, race and education distributions, householder status, living arrangements, household income, and disability status.

### Community Survey

In collaboration with the Town of Needham, a community survey was developed for this study and made available online and over the telephone for Needham residents age 60 and older. A mailing list was obtained from the Needham Town Clerk, based on the most current municipal census and omitting residents of nursing homes and those who had recently moved (N=8,288).

Postcards were mailed to participants alerting them about the survey and providing details to access the survey online and by telephone. The survey was provided through the *SurveyMonkey* website. A total of 679 responses to the survey were obtained, representing a return rate of 8%. In **Appendix A**, response distributions are shown by age group.

#### Peer Community Comparison

We conducted interviews with directors of senior centers in Marshfield, Lexington, Natick, Newton, and the former director of the Needham Council on Aging. The directors were chosen due to their professional experiences and/or their town having built a new senior center building in the previous 10 years. Directors were asked about features of the senior centers they operate, including programming and staffing. Requests for information were issued by email, and a designated time to talk by telephone was determined. Additional information on selected COAs was retrieved from their websites.

#### IHCD Building Assessment

Staff from IHCD reviewed architectural plans for the CATH for accessibility compliance and overall safety. In May 2020, a virtual “walk-through” of the space was facilitated by the Town of Needham for project team members from both IHCD and UMass Boston Gerontology. This video tour of the building was done via Zoom. An in-person survey of the space was completed by IHCD in June 2020. The survey concentrated on all public entrances, emergency exits, accessible routes to elements, areas used by members of the public such as the community room, the café, the art room, etc. Also included in the IHCD survey were the toilet rooms and the parking area.

#### Focus Groups

In order to understand the current utilization of the space, two focus groups were conducted via Zoom in June 2020. One of the focus groups included 6 members of the Needham Council on Aging board and the second included 7 members of the staff from the Center at the Heights. Both conversations centered around features of the building that facilitated participation or created challenges for patrons. Discussion sparked conversations about ideas for maximizing the space moving forward. Both focus groups were recorded and notes were taken by members of the UMB research team.

#### Data Analysis

Data collected for the resident survey were analyzed using simple descriptive statistics, including frequencies and cross-tabulations, and are reported in full in tables contained in **Appendix A** and throughout the results section of this report. Some responses elicited through open-ended questions were extracted and cited verbatim within this report (e.g., “From your perspective, how could the space at the Center at the Heights (CATH) be better utilized?”). Notes taken during the study’s qualitative components (e.g., focus group, peer community interviews) were

reviewed by project staff and used to characterize and categorize salient ways in which aging issues are impacting older adults and individuals who work with older adults in Needham. Information collected about the selected peer community COAs was used to inform recommendations made to the Town of Needham. We used information from all sources of data to develop recommendations reported in the final section of this report.

# Results

## Demographic Profile of Needham

### Age Structure and Population Growth

According to American Community Survey (ACS), there were about 30,735 residents living in the town of Needham in 2018. About 40% of the population (12,426) were age 50 and older (See **Table 1**). Residents who were age 50 to 59 made up 16% of the population; residents age 60 to 79 comprised around 18%, and another 6% were age 80 and older.

**Table 1.** Number and percentage distribution of Needham’s population by age category, 2018

| Age Category     | Number        | Percentage  |
|------------------|---------------|-------------|
| Under age 18     | 8,231         | 27%         |
| Age 18 to 49     | 10,078        | 33%         |
| Age 50 to 59     | 4,930         | 16%         |
| Age 60 to 79     | 5,744         | 18%         |
| Age 80 and older | 1,752         | 6%          |
| <b>Total</b>     | <b>30,735</b> | <b>100%</b> |

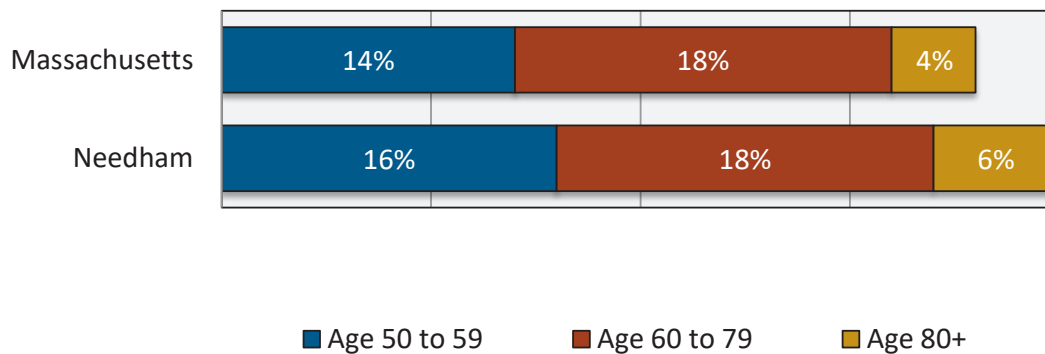
*Source: American Community Survey, 2014-2018, Table B01001. Numbers are calculated from 5-year survey estimates.*

Across all age groups, women make up a majority of Needham’s population (52%) (ACS, 2014–2018, Table B01001). However, the percentage female differs across age groups. For instance, among people under 18 in Needham, 48% are female; in contrast, among Needham’s population age 80 and over 65% are female. The greater number of older women is due in large part to longer life expectancies of women compared to men—a demographic disparity that is widely observed in older populations globally.

The share of the population age 50 and older is larger in Needham than in the state of Massachusetts overall (**Figure 1**). About 36% of the Massachusetts population was in the 50+ age group in 2018, compared to 40% of the Needham population. Compared to the Commonwealth, Needham had also a higher proportion of residents age 60 and older. In 2018, Massachusetts

residents age 60 and over comprised about 22% of the population, including 4% age 80 and over. In Needham, about 24% of the population was 60 or older, including 6% who were 80 years or older.

**Figure 1.** Age distribution in Needham and Massachusetts



*Source: American Community Survey, 2014–2018, Table B01001. Numbers are calculated from 5-year survey estimates*

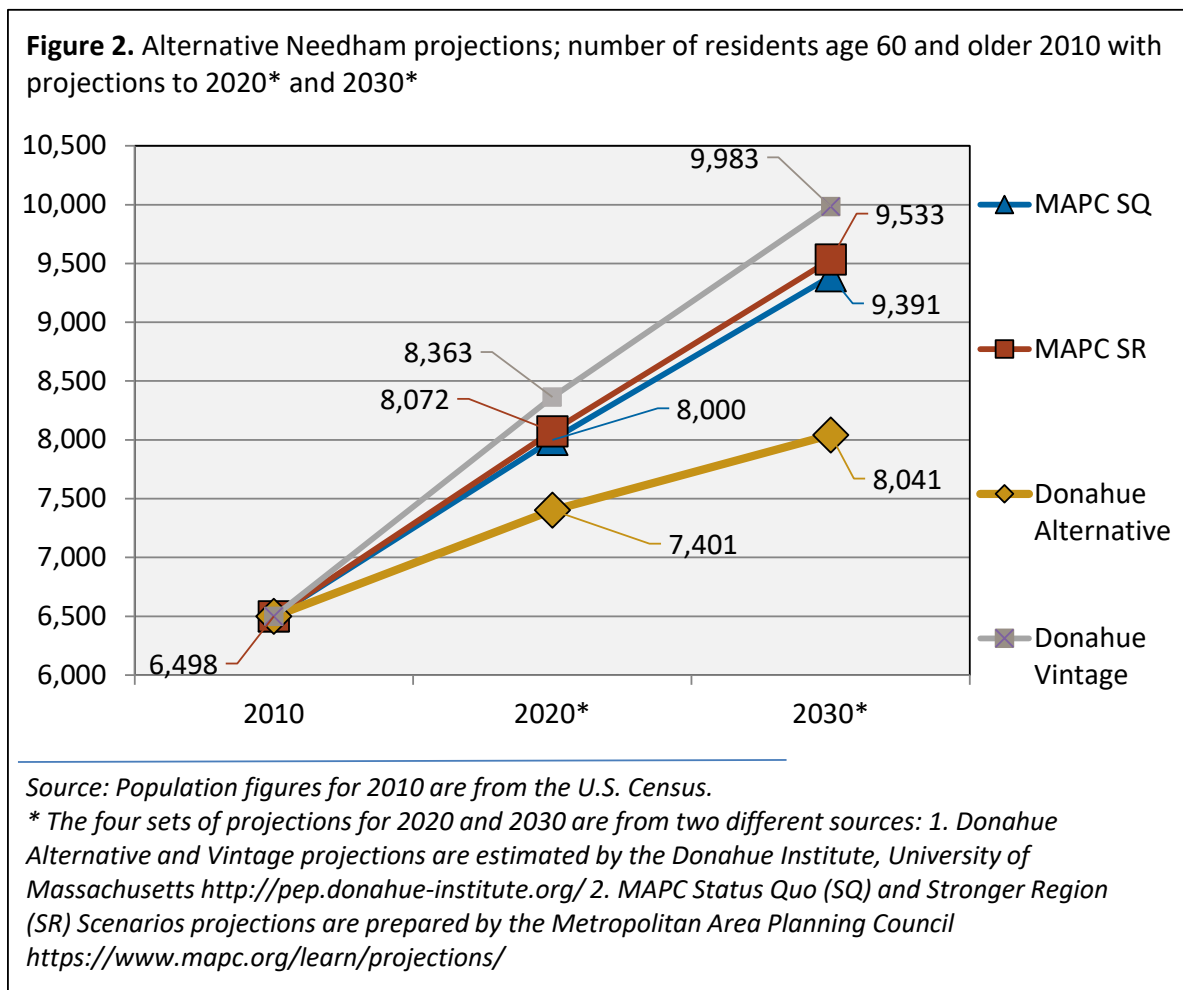
Population growth in both Massachusetts and the town of Needham has been concentrated in older age groups. Between the decennial censuses of 2000 and 2010, the all-age population increased by 3% in the state as a whole but had virtually no change in Needham (*US Census for 2000 and 2010, Table QT-P1*). For the age 60 and older group, Needham’s growth represents a sharp contrast from the state. Between the 2000 and 2010 decennial censuses, the population of residents who are age 60 and older increased by 16% for the state, but just 2% for Needham. However, the number of residents age 50-59 increased by 24% in Needham, and it is likely that many of these individuals stayed in Needham as they “aged in place.” Indeed, if the 2018 population estimate from the ACS for 2018 is correct, the population of residents age 60 and older represents an increase of 18% over what was counted in the 2010 Census.<sup>6</sup> Projections suggest that the number of older residents will grow in the coming decade. **Figure 2** shows four sets of projections for Needham’s population age 60 and over. Two sets are generated by the Donahue Institute at the University of Massachusetts, and two by the Metropolitan Area Planning Council (MAPC). All of them suggest steady increases in the number of older residents between

<sup>6</sup> Similarly, the Town Census for Needham, dated March 3, 2020, shows 8,179 residents age 60+ as of that date, which reflects 26% growth in the population age 60 and older following the 2010 US Census.



2010 and 2030, resulting in an age 60+ population numbering between 8,000 and 10,000 by 2030.<sup>7</sup>

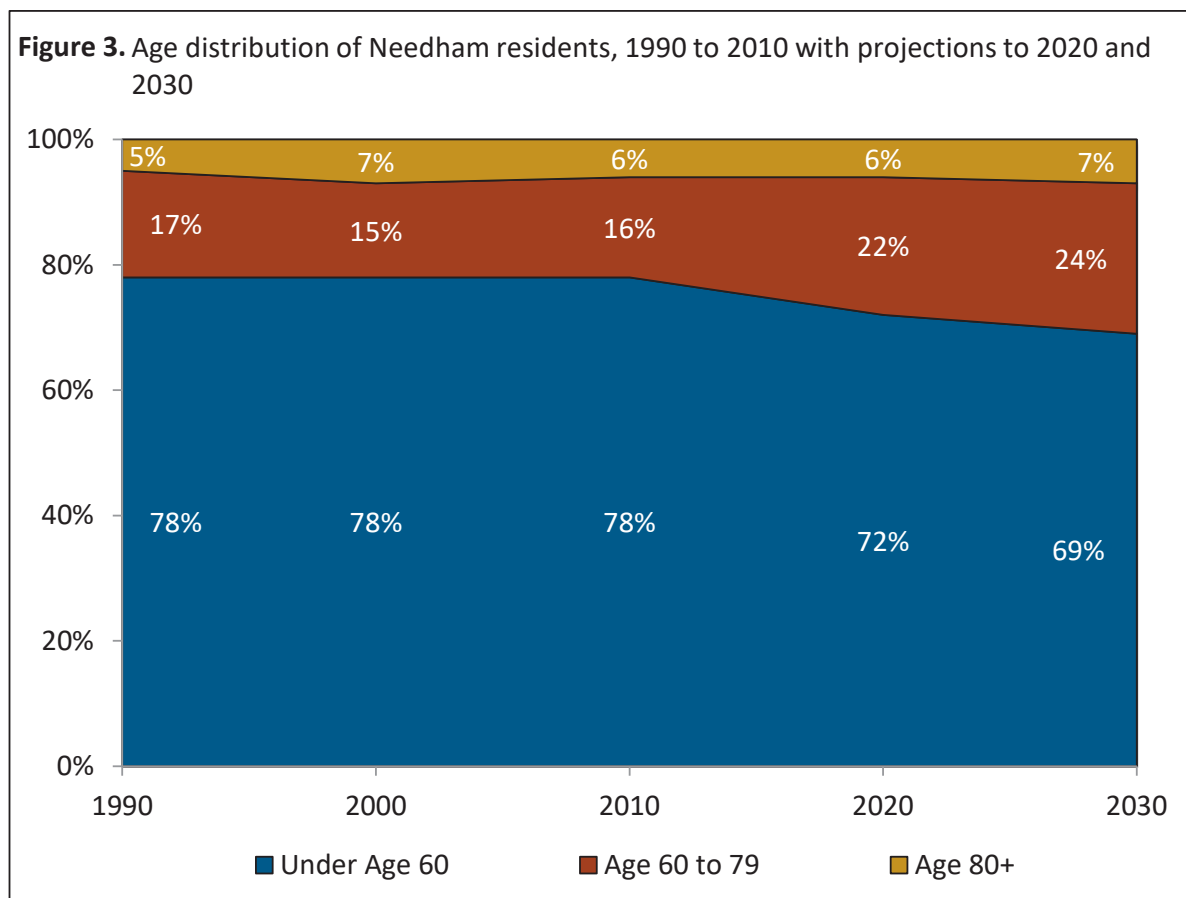
**Figure 3** shows the age distribution of Needham's population from 1990 to 2010, and population projections for 2020 and 2030<sup>8</sup>. In 1990, about 22% of the town's population was age 60 and older; this percentage stayed the same in 2000 and 2010.



<sup>7</sup> The most recent data from the American Community Survey offers an estimate of about 7,500 Needham residents age 60 or older as of 2018, suggesting that the MAPC projections may be tracking the best with available. Moreover, as noted, the Town Census for Needham has the age 60+ population at just over 8,100 in March 2020. Together, these observations suggest that the Donahue Alternative projections are probably too low, and Needham appears to be on track to have between 9,400 and 10,000 residents age 60+ in 2030.

<sup>8</sup> Population projections are shaped by assumptions about birth rates and death rates, as well as domestic and international in-migration and out-migration. The projections used here also account for population change associated with aging of the population, which is a strong predictor of future growth and decline of populations.

According to projections created by the Metropolitan Area Planning Council (MAPC) (Stronger Region Scenario), a trend toward an older population is expected in future decades. Projections suggest that by 2030, more than three out of ten Needham residents will be age 60 or older—24% of the Town’s population will be between the ages of 60 and 79, with an additional 7% age 80 and older.



Source: Population figures for 1990 thru 2010 are from the U.S. Census. Figures for 2020 and 2030 are from MAPC Stronger Region (SR) Scenarios prepared by the Metropolitan Area Planning Council <https://www.mapc.org/learn/projections/>

### Socio-Demographic Composition of Needham’s Older Population

Needham’s population is less diverse than the state with respect to race. For all ages combined, about 83% of Needham residents are White race and not Hispanic, compared to 72% in Massachusetts (ACS, 2014–2018, Table B01001). Among older adults, Needham is less diverse. **Table 2** displays the race and ethnicity of Needham residents age 65 and older. The large majority of older residents report their race as White (94%). The remaining percentage of the population

age 65 and older reported their race as Asian (4%) or Black (2%). Fewer than 1% report Hispanic ethnicity (not shown).

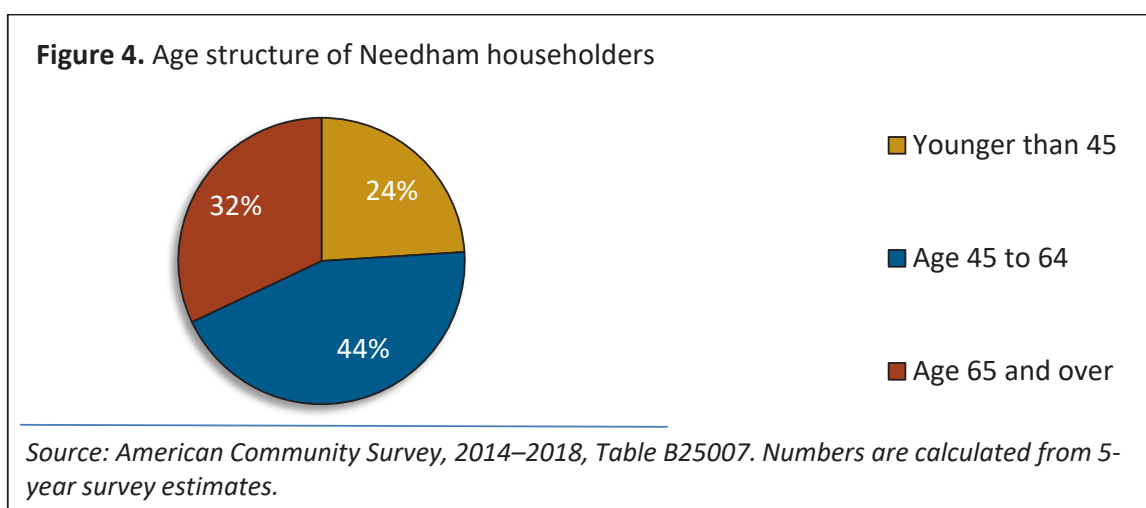
**Table 2.** Race distribution of residents who are age 65 and older in Needham

| Race         | Number       | Percent     |
|--------------|--------------|-------------|
| White        | 5246         | 94%         |
| Asian        | 198          | 4%          |
| Black        | 116          | 2%          |
| <b>Total</b> | <b>5,560</b> | <b>100%</b> |

Source: American Community Survey, 2014–2018, Tables B01001A-I. Numbers are calculated from 5-year survey estimates.

Additionally, almost 13% of older Needham residents speak a language other than English at home (ACS, 2014–2018, Table B16004), including 8% who speak an Indo-European language, 3% who speak an Asian or Pacific Island language, and an additional 1% who speak another language.

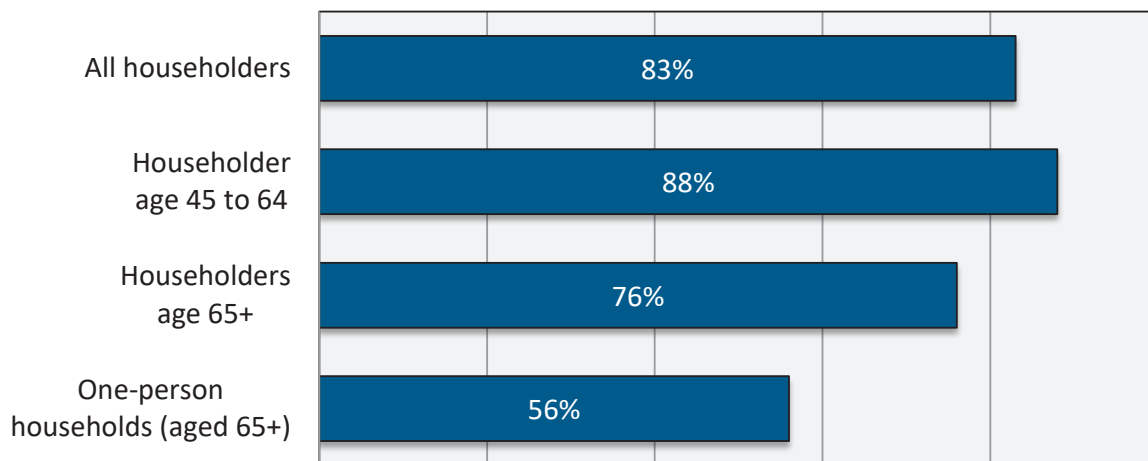
A majority of Needham’s households have householders who are middle-aged or older. According to the U.S. Census Bureau, a “householder” is the person reported as the head of household, typically the person in whose name the home is owned or rented. Residents age 45 and older are householders of 76% of all households in Needham including 32% who are age 65 and over (**Figure 4**).



A large share of Needham residents lives in homes that they own or are purchasing (83%; **Figure 5**). Eighty-eight percent of residents age 45 to 64 and 76% of householders 65 and older own their homes. More than half of Needham’s residents who are 65 and older and live alone, also

own their home (56%). Home maintenance and supports are often necessary for older homeowners—especially those who live alone—in order to maintain comfort and safety in their homes.

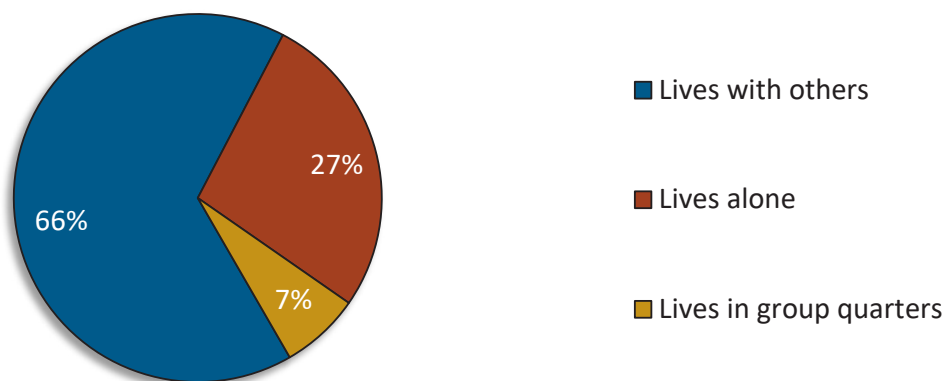
**Figure 5.** Percent of Needham householders who are homeowners by age category



*Source: American Community Survey, 2014–2018, Tables B25007 and B25011. Numbers are calculated from 5-year survey estimates.*

Additionally, 45% of Needham’s households have at least one individual who is age 60 or older (ACS 2014–2018, Table B11006). This high proportion— which is likely to increase in the future— generally reflects the widespread demand for programs, services, and other considerations that address aging-related concerns, including health and caregiving needs, transportation options, and safe home environments.

About 27% of Needham residents who are age 65 and older live alone in their household whereas two-thirds (66%) live in households that include other people, such as a spouse, parents, children, or grandchildren (**Figure 7**). Additionally, around 7% of older Needham residents live within group quarters.

**Figure 7.** Living arrangements of Needham residents, age 65 and older

Source: American Community Survey, 2014–2018, Table B09020. Numbers are calculated from 5-year survey estimates.

American Community Survey estimates on education suggest that Needham residents are well educated on average. About 63% of persons 65 and older have obtained at least a bachelor's degree (ACS, 2014–2018, Table B15001). This educational profile contributes to the vitality and character of the community, which depends on older adults who value opportunities to be involved through volunteer and civic engagement activities, as well as late-life learning opportunities—activities that are often present in highly educated communities (Fitzgerald & Caro, 2014).

Similar to older adults living in communities throughout the U.S., a sizable proportion of Needham residents aged 65 and over remain in the workforce. Almost 43% of adults age 64 to 74 are participating in the labor force. Of those age 75 and older, nearly 10% remain in the workforce (ACS, 2014–2018, Table S2301).

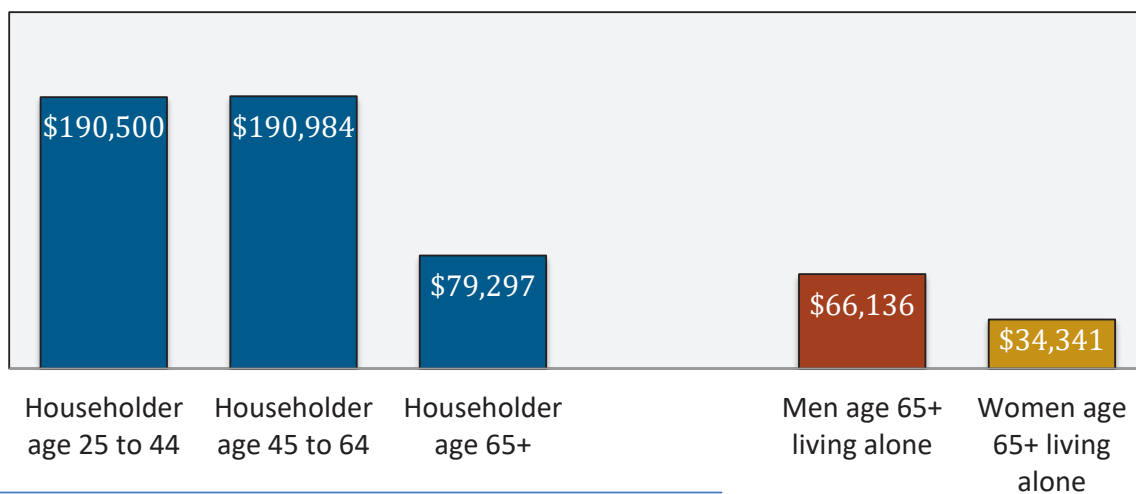
More than 30% of men age 65 and older report veteran status, along with a small number of older women (ACS, 2014–2018, Table B21001). As a result, many of the Town's older residents may be eligible to receive some benefits and program services based on their military service or that of their spouses.

Needham residents' median household income is nearly twice as high as that estimated for Massachusetts as a whole, \$153,032 compared to \$77,378. Needham's householders age 45 to 64 have the highest median income at \$190,984 (see **Figure 8**)—which is also greater than the statewide median for this age group (\$96,031). Among Needham householders 65 and older, the median income is \$79,297, also higher than the statewide median for this age group (\$47,486).



Older residents living alone have lower incomes, particularly women living alone. Older men age 65 and over living alone have higher median income compared to older women living alone in Needham.

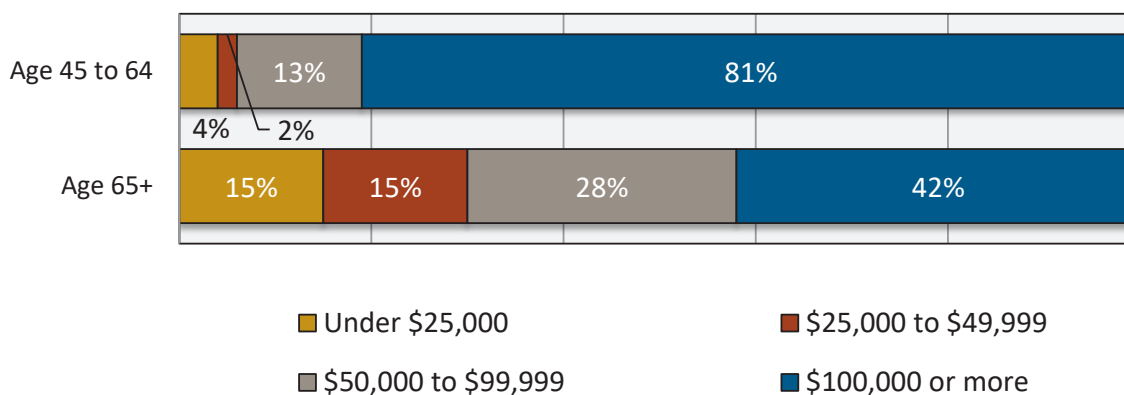
**Figure 8.** Median household income in Needham by age and living situation of householder (in 2018 inflation-adjusted dollars)



Source: American Community Survey, 2014–2018, Tables B19049 and B19215. Numbers are calculated from 5-year survey estimates.

Note: Includes only community households, not group quarters such as nursing homes.

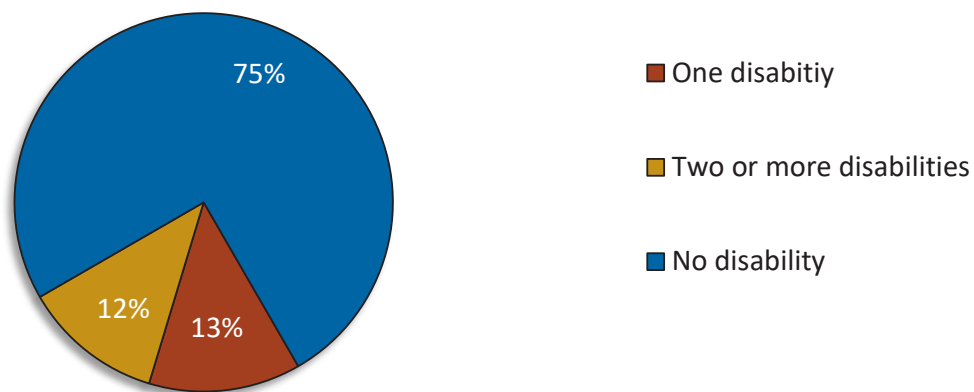
The economic profile of older Needham residents relative to younger residents is further illustrated in **Figure 9**, which shows that a share of the older adult population lives on a modest income. Although about 42% of Needham residents age 65 and older report incomes of \$100,000 or more, 15% report annual incomes under \$25,000 in comparison to 4% of households headed by individuals age 45 to 64 reporting the same household income. These figures make clear that a large share of Needham residents have adequate incomes, although some segments may be struggling financially.

**Figure 9.** Household income distribution in Needham by age of householder (in 2018)

Source: Source: American Community Survey, 2014–2018, Table B19037. Numbers are calculated from 5-year survey estimates.

Note: Includes only community households, not group quarters such as nursing homes.

Many Needham residents age 65 and older experience some level of disability that could impact their ability to function independently in the community. About 13% of Needham’s residents age 65 and older have one disability, and nearly 12% report two or more disabilities (**Figure 10**). Among the different types of disability that are assessed in the ACS, the most commonly cited by older Needham residents age 65 and older were ambulatory difficulties (difficulty walking or climbing stairs; 16%), hearing problems (12%), and independent living limitations (difficulty doing errands alone, such as visiting a doctor’s office or shopping; 10%). Other disabilities experienced by older Needham residents include self-care difficulties (6%), cognitive difficulty (6%), and vision difficulty (4%) (ACS 2014–2018, Table S1810).

**Figure 10.** Disability among Needham residents age 65+

Source: U.S. Census Bureau; American Community Survey, 2014–2018, Table C18108.  
 Percentages by age group do not sum to 100% because people may report multiple difficulties and

According to data from the Massachusetts Healthy Aging Collaborative<sup>9</sup>, an estimated 15% of Needham residents age 65 and older have Alzheimer’s disease or a related dementia and 56% have four or more chronic conditions. Considering a large number of health dimensions, Needham’s health profile is similar to the Massachusetts average along most, although better on some and worse on others compared to Massachusetts as a whole. These health indicators suggest that the physical needs among Needham older adults are quite varied across residents.

### Hearing from Focus Group Participants

Two focus groups were facilitated via video conferencing in June 2020. One group included 6 members of the Needham Council on Aging Board and the second included 7 members of the staff of the Needham Center at the Heights. Conversations focused on the ways that the current space is being utilized and identifying opportunities to make more efficient and effective use of the space to meet the needs and preferences of older residents. Participants shared many challenges associated with the building’s design and offered some solutions. Themes from these two conversations are summarized in this section.

A few overarching challenges were identified by participants in these groups. These challenges warrant consideration as the CATH moves forward with planning for the future. Participants

<sup>9</sup>[https://mahealthyagingcollaborative.org/wpcontent/themes/mhac/pdf/community\\_profiles/MA\\_Towncode199\\_Needham.pdf](https://mahealthyagingcollaborative.org/wpcontent/themes/mhac/pdf/community_profiles/MA_Towncode199_Needham.pdf)

agree that the CATH is a great asset to the community of residents who cross its threshold. However, focus group participants believe that a sizable segment of the community has not been reached and could potentially benefit from participation. Another major challenge identified by focus group participants is the lack of accessible and convenient parking. Out-of-town guests are drawn to the CATH because of its beautiful space and welcoming staff; but they also take up parking spots that could be used by Needham residents. With nearly 200 visitors daily, and only 83 parking spots, the remaining alternatives for getting to the CATH include utilizing the shuttle service, carpooling, or parking on the side-streets and walking over to the Center. An additional theme from these conversations is the agreement that the CATH is currently operating at capacity, and any additions to programming or services would need to be accompanied by expanded staffing and space. Finally, lack of storage and staff to take-down and re-assemble tables and chairs were identified by CATH center staff as being a barrier to multipurpose use of rooms (e.g., there is nowhere to store equipment when room is being used for another purpose). The coat room was identified as possibly being re-purposed as a storage space. A position is currently open for a building monitor staff person, who could take responsibility for the physical tasks associated with moving equipment and furniture as spaces are converted to multiple uses during the day. However, that position is planned for just 10 hours per week, or less than one-third of the total programming time each week. In both focus group conversations, specific spaces were named as places that could be possibly repurposed or improved upon. As well, suggestions were made as to how to accomplish these goals. Spaces identified for re-purposing or expanded use are described below:

**Outdoor Patio:** According to focus group participants, the second-floor outdoor deck and outdoor seating areas are valuable but underutilized. Efforts to make the space more accessible may include the installation of an awning to block sunlight and noise cancelling planters or dividers to create smaller spaces to gather with better acoustics. Additionally, a focused effort to develop programming specifically for this outdoor space is needed to maximize its use. It could be possible to enlist current participants or volunteers to generate ideas for programming to be pilot-tested. Finally, relaxing the policy of “no food or beverage” in this outdoor space could attract participants to use the space for gathering informally, weather permitting.

**Office spaces:** Currently, the two social workers on staff share an office space (room 206, see **Appendix B**). This means that if someone is seeing a client, the other has to leave the room and find another place to work. Similarly, if they both have client meetings, one has to find private meeting space to conduct this confidential business. While this is usually successful, it is not always reliable. Two members of the programming team do not have office or desk space of their own.

**Fitness Room:** In response to increasing demand, and now the need for “social distancing” due to the COVID-19 pandemic, additional space for fitness and exercise is paramount. Given that the game room (room 118, see **Appendix B**) is 300 square feet larger than the fitness room (room 123, see **Appendix B**), one option would be to switch the use of the two rooms. This change would also align with the growing trend in senior centers for expanding fitness resources for participants.

**Game Room:** Currently, the game room (room 123, see **Appendix B**) contains two billiards tables and one ping-pong table. In addition, a computer station and a storage closet are included in this space. Given that the tables and computers cannot be moved easily, when games are not underway, this sizeable space is left unused for segments of the day. If the fitness room and the game room were switched, it would be necessary (due to space constraints) to reduce the number of tables in use at a given time. For example, purchasing a folding ping-pong table that could be stored when not in use or obtaining a ping-pong “conversion top” to be used on top of a billiards table could accommodate both pool players and ping-pong players alike.

**Computer Lab:** During open enrollment for Medicare (12 weeks) and tax preparation season (10 weeks), the computer lab is used at full capacity. In the remaining weeks of the year, it is less utilized.

**Kitchen:** Aside from a monthly hot breakfast, prepared by staff of the CATH, no on-site meal preparation occurs. The daily lunches and home-delivered meals are prepared off-site by Springwell<sup>10</sup> and delivered to the CATH for warming and distribution. This 540 square foot commercial kitchen space is also used for cooking demonstrations and food-related programs. According to the current rental policy<sup>11</sup>, the kitchen can be used by outside organizations to prepare meals if they obtain a permit from the Board of Health and retain a custodian for use of this area; but focus groups participants stated that it is infrequently rented by outside entities.

Ideas about the expansion of hours and off-site programming were discussed as a potential mechanism for attracting new patrons and alleviating parking concerns; but it was made clear by focus group participants that additional staffing would be required to cover those additional hours of operation. Although other spaces in town exist, it would require additional staff time to operate at those locations as well as additional building management responsibilities. Finally, it was discussed that when registration for programs begin, the front desk/lobby space becomes very crowded with long lines.

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<sup>10</sup> <https://springwell.com/>

<sup>11</sup> <https://www.needhamma.gov/3728/Renting-the-Center-at-the-Heights>



### Hearing from Peer Communities

In an additional step to obtain insight about the use of senior center space, five directors (or former directors) of Massachusetts senior centers were interviewed. The communities chosen for this comparison were selected jointly by the Director of Needham's Health and Human Services Division and research staff at UMass Boston. In June 2020, interviews were conducted by phone with Council on Aging Directors in Marshfield, Lexington, Natick, and Newton, and the former director of the Needham Senior Center, to learn about their experiences adapting to new space and considerations for space utilization moving into the future. A summary of analogous characteristics, peer highlights and dissimilarities are detailed below.

Needham has the smallest amount of physical space compared to its peers (see **Table 3**). Both Lexington and Natick operate as community centers that also house the senior center activities and programs. Common challenges faced by nearly all of the peer communities included a need for additional storage and lack of parking (except for Lexington). As well, gift shops were present in each of the peer communities and served as a revenue generator for senior center programming. A final similarity across peer communities was the recognition of increasing programming schedules to evenings and weekends.

**Table 3.** Summary of Peer Communities

| Town           | Population Age 60+* | Size of Space                                       | Year Built              |
|----------------|---------------------|-----------------------------------------------------|-------------------------|
| <b>Needham</b> | <b>7,496</b>        | <b>20,000 square feet</b>                           | <b>2015</b>             |
| Natick         | 7,791               | 36,000 square feet                                  | 2012                    |
| Marshfield     | 6,264               | 12,600 square feet,<br>11,200 square foot expansion | 2003, 2020<br>expansion |
| Lexington      | 8,435               | 32,000 square feet                                  | 2015                    |
| Newton         | 21,039              | Proposed 36,888 square feet                         | Expected<br>2022        |

*\*Sources: American Community Survey, 2014–2018, Table B01001. Numbers are calculated from 5-year survey estimates. Size of space and year built obtained from COA Directors.*

In conversation with Directors of other newly built senior centers, there was universal acknowledgement that the growing level of participation at the centers has driven programming growth and required shifts in planned use of originally designed space. Directors shared with us the following types of adjustments that have been required to accommodate these changes and they highlighted some of the challenges that still remain.

**There is increasing need for multi-purpose space; and yet multipurpose space creates challenges for schedules, turnover, and storage.**

- Multipurpose space requires staffing to switch over space (move tables, chairs etc.). In one case, a peer community reports having at least 3 programs in their multipurpose room per day, meaning that multiple times per day there is need for re-arranging tables, chairs, equipment and getting any necessary technology set up. These transitions require staff support, which may take them away from other duties. Alternatively, hiring additional staff for this particular position can be a useful way to address the challenge, recognizing that a sufficient amount of time is needed for this person to contribute significantly to reducing the burden of these transitions on existing professional staff.
- Occasionally, space needs drive use of multi-purpose rooms. For example, if a knitting group needs space and the only available room is the computer lab, then that computer lab becomes “multi-purpose” unintentionally. Alternatively, assessing how each of the existing spaces can be used for multiple programming allows for more flexibility in scheduling.

**Fitness space is a highly used focal point in all peer towns. Reducing multi-purpose use is important for highly used and in-demand spaces, especially fitness space.**

- With dedicated fitness space, Natick and Lexington reported that needs are generally met and fitness space is available. Typically, there is no wait time and scheduling tends to attract older adults during mid-day hours. In Lexington, their fitness space is in the basement and open to residents of all ages. In Natick, an annual fee of \$50 (or \$25 for 6 months) covers the costs of equipment maintenance and new purchases. Marshfield outgrew their fitness space and is incorporating dedicated space for fitness through expansion project

**Competing needs for space create challenges in balancing different interests.**

- In most peer communities, it was discussed that a balance is required between programs that bring in large, consistent attendance and those that provide a meaningful experience for fewer participants. One director said, *“Success is not defined by numbers but quality of experience.”* As an example, she noted that the space used for showing movies is underutilized with only a few people attending movies. However, people meet friends while attending, and the space offers an informal social outlet. The movie room also draws people in the evenings who do not attend during the day. Thus, a low-attendance program yields meaningful experiences and opportunity for exposure to new participants.
- As peer community directors discussed efforts to balance multiple interests, it became clear that participants’ becoming proprietary over particular spaces was problematic. For example, card players only willing to use one particular room for their games. It cannot be assumed

that one particular space is always used for cards. To address this issue, one director described changing policy to require that each and every use of a room be reserved in advance of its planned use. In other words, space that is used for scheduled programming is reserved by the staff and if patrons would like to use the space to meet with friends or have impromptu meetings, that space must also be reserved prior to its use.

### Hearing from Residents: Results from the Community Survey

In this section we report key findings from each section of the survey. Tables illustrating results in detail are included in **Appendix A**.

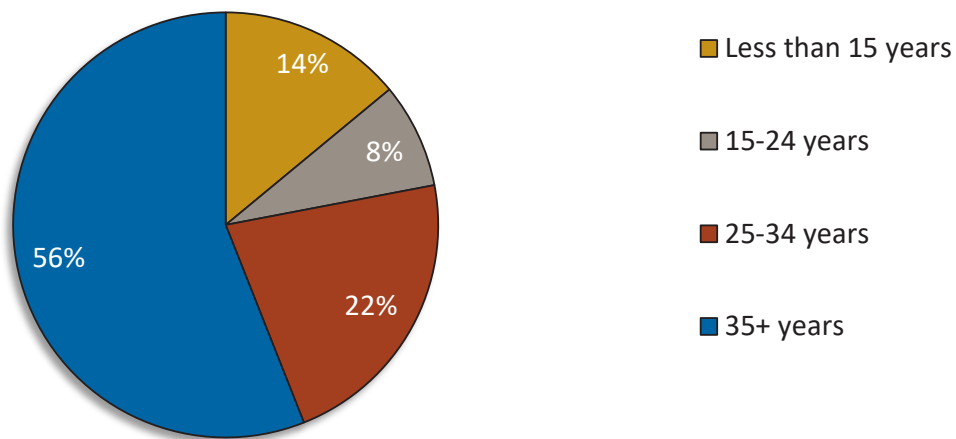
Respondents to the community survey included 679 individuals age 60 and older<sup>12</sup>, representing a response rate of 8% (see **Table 4**). To facilitate comparison of younger and older segments of the population with respect to needs and interests, we often present results grouped into three age groups; age group 60-69, age group 70-79 and age group 80 and older.

**Table 4.** Age Distribution of Survey Respondents

| Age          | Number of Responses | Percentage  |
|--------------|---------------------|-------------|
| Under Age 60 | 18                  | 2%          |
| Age 60-69    | 286                 | 42%         |
| Age 70-79    | 266                 | 38%         |
| Age 80+      | 127                 | 18%         |
| <b>Total</b> | <b>697</b>          | <b>100%</b> |

Among survey respondents, 22% reported living alone and 7% reported some level of economic insecurity (see Appendix A). In addition, the majority of respondents were female (59%) and 11% of survey respondents reported having a condition that limits their ability to participate in the community as they would like to. Less than 3% of respondents reported speaking a language other than English at home (results not shown). Most survey respondents are long-time residents of Needham, with 56% indicating they have lived in Needham for at least 35 years (see **Figure 11**).

<sup>12</sup> An additional 18 respondents were younger than age 60, too few to support separate analysis of this age group. As a result, those responses were omitted from the analysis—limiting it to those age 60 and older.

**Figure 11.** “How long have you lived in Needham?”

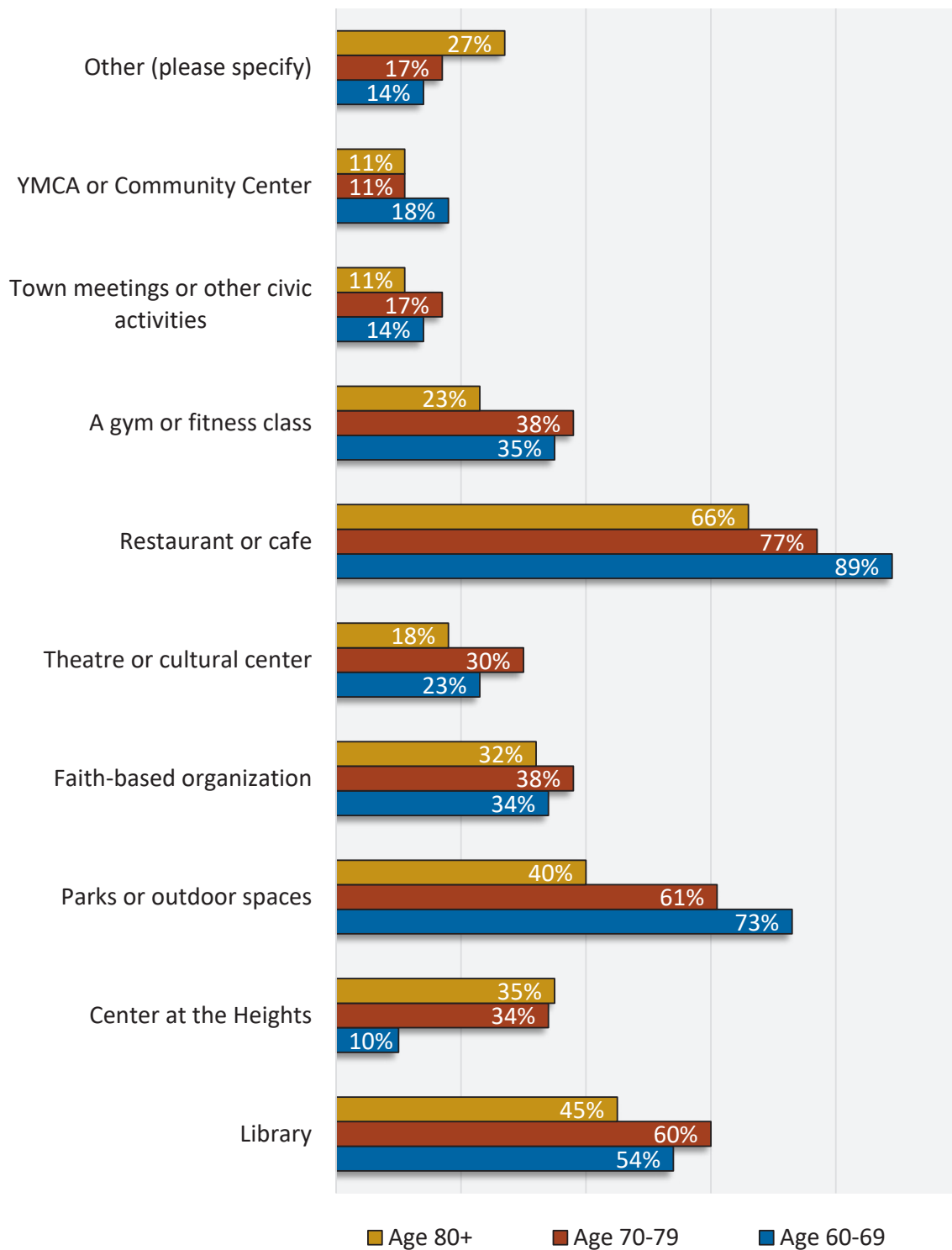
### Experience with the Center at the Heights

Needham is a community with many assets, including the CATH. Survey respondents were asked about where in Needham they go to socialize with others and/or where they go for leisure<sup>13</sup>. Across all age groups, going to restaurants or cafes (66-89%%) as well as spending time at parks and outdoor spaces (40-73%) and the library (45-54%) were most commonly reported (see **Figure 12**).

Older survey respondents were more likely to report spending time at the CATH for socialization or leisure. Alternatively, only 10% of respondents in their 60s reported spending time at the Center (see **Figure 12**).

<sup>13</sup> Here I would put a footnote making clear that respondents were directed to answer most questions based on their “usual life” before the COVID-19 pandemic.

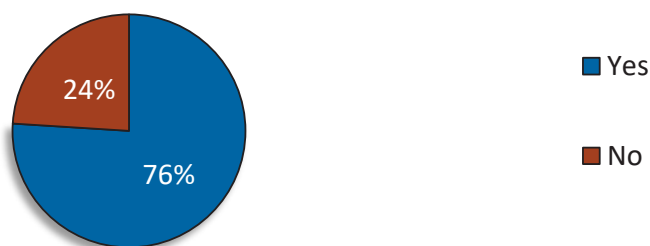
**Figure 12.** “Thinking about your usual life (before COVID-19 pandemic), where in Needham do you go to socialize or go for leisure? (check all that apply).”





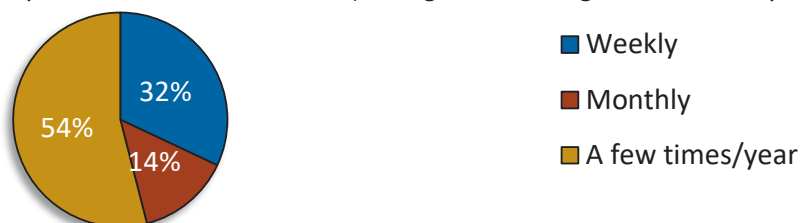
More than three-quarters of survey respondents reported that the CATH plays a role in the lives of themselves and people they know (see **Figure 13**). This positive assessment of the CATH was consistently offered across age groups (see **Appendix A**). This finding highlights that the CATH is widely considered as a community asset and a piece of what makes Needham a good place to age.

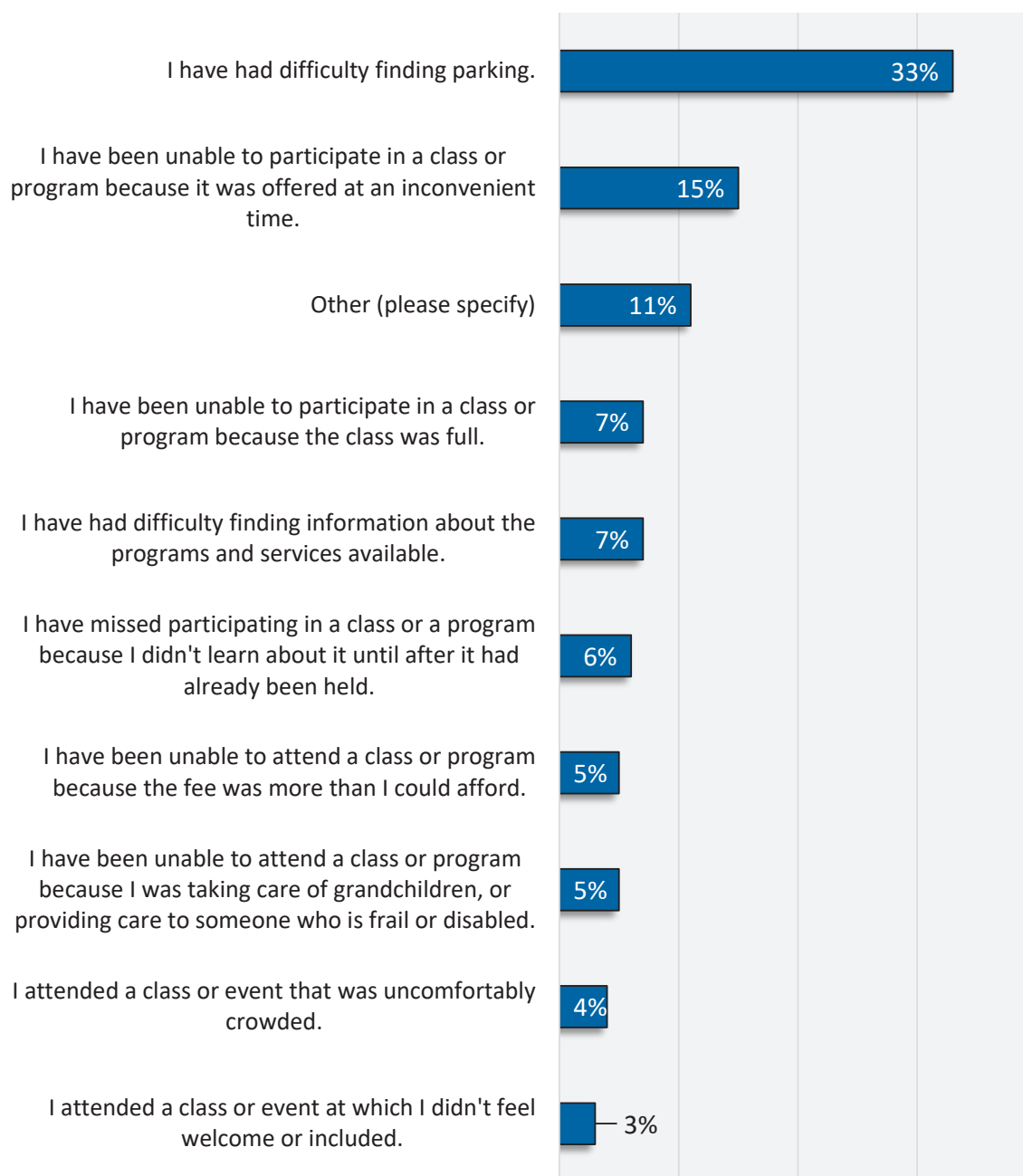
**Figure 13.** “Do you see the Center at the Heights as playing a role in the lives of yourself, loved ones, friends, or neighbors?”



Half of survey respondents have visited the CATH within the past year. Participation rates are highest among the respondents age 70-79 (66%) and age 80 or older (61%), and lower among those age 60-69 (31%). Among those who have visited the CATH, 32% report attending on at least a weekly basis (see **Figure 14**). Among those 80 and older, 47% reported attending on at least a weekly basis (see **Appendix A**). More than half of CATH visitors report attending a few times a year for events. These results highlight the varied relationships that residents have with the center. Among those who reported having visited the CATH in the previous year, 74% of respondents reported being satisfied or completely satisfied with the programs and services offered (see **Appendix A**), and this proportion was slightly higher among the older age groups. That being said, 23% of those who reported having been to the center in the previous year reported that they were not familiar enough to judge their satisfaction (see **Appendix A**). One assumption that could be made is that those who are actively connected to the CATH are highly satisfied, and others that may have only dropped in for a particular event or class may not be as aware of the full breadth of what is offered.

**Figure 14.** Frequency of attendance at the CATH (among those visiting within the last year)



**Figure 15.** Challenges encountered when accessing the CATH, among those who have visited

An important aspect of this study was to understand the accessibility issues with the CATH. We asked about challenges that have been faced when attending the CATH. Half of the respondents who had used the CATH in the prior year indicated that they had experienced no issues when

accessing the CATH or its programs. However, one-third reported that finding parking was a barrier to accessing the building and its services (see **Figure 15**). There are approximately 83 parking spots in the building parking lot and as previously mentioned, nearly 200 residents come to the center on a daily basis. While some use the provided transportation services, others have to park on the streets surrounding the building and walk to the entrance. In inclement weather, or for those with mobility impairments, this can become a barrier to accessing the programs and services that the CATH provides. One survey respondent wrote, *“the parking is a real issue or I would go more (often)”*. The second most frequently reported (15%) challenge to accessing the CATH was the timing of the programs. According the American Community Survey (Table S2301), 71% of Needham residents age 60-64 and 43% of those age 65-74 report still working. Taken together, these two findings could mean that additional evening or weekend programming would increase accessibility to residents in younger age groups. Of course, these expansions of operating hours would also have implications for staff needs. Finally, 107 respondents took the time to write-in an “other” challenge they have faced when accessing the CATH. About half of these comments described the individual having never been to the CATH or being unaware of the programs or services offered there. Other comments described challenges to participation because of employment. For example, one participant wrote, *“I am still working full time. Nothing is open at night or on the weekends.”* Others described physical mobility impairments that prohibited them from getting to the CATH or the cost of programs keeping them from being able to participate.

When asked how the space could be better used, 124 of those respondents who have been to the CATH took the time to write in an answer. These responses are summarized in **Table 4**. Respondents identified the need for more flexibility with current space, citing the need for increased capacity to meet demand for fitness and exercise classes and expanded hours. As well, comments were made about the “institutional” or “cold” feeling of the space and ways that it could be more inviting.

**Table 4.** Summary of respondents' comments about ways that the CATH space could be better utilized.

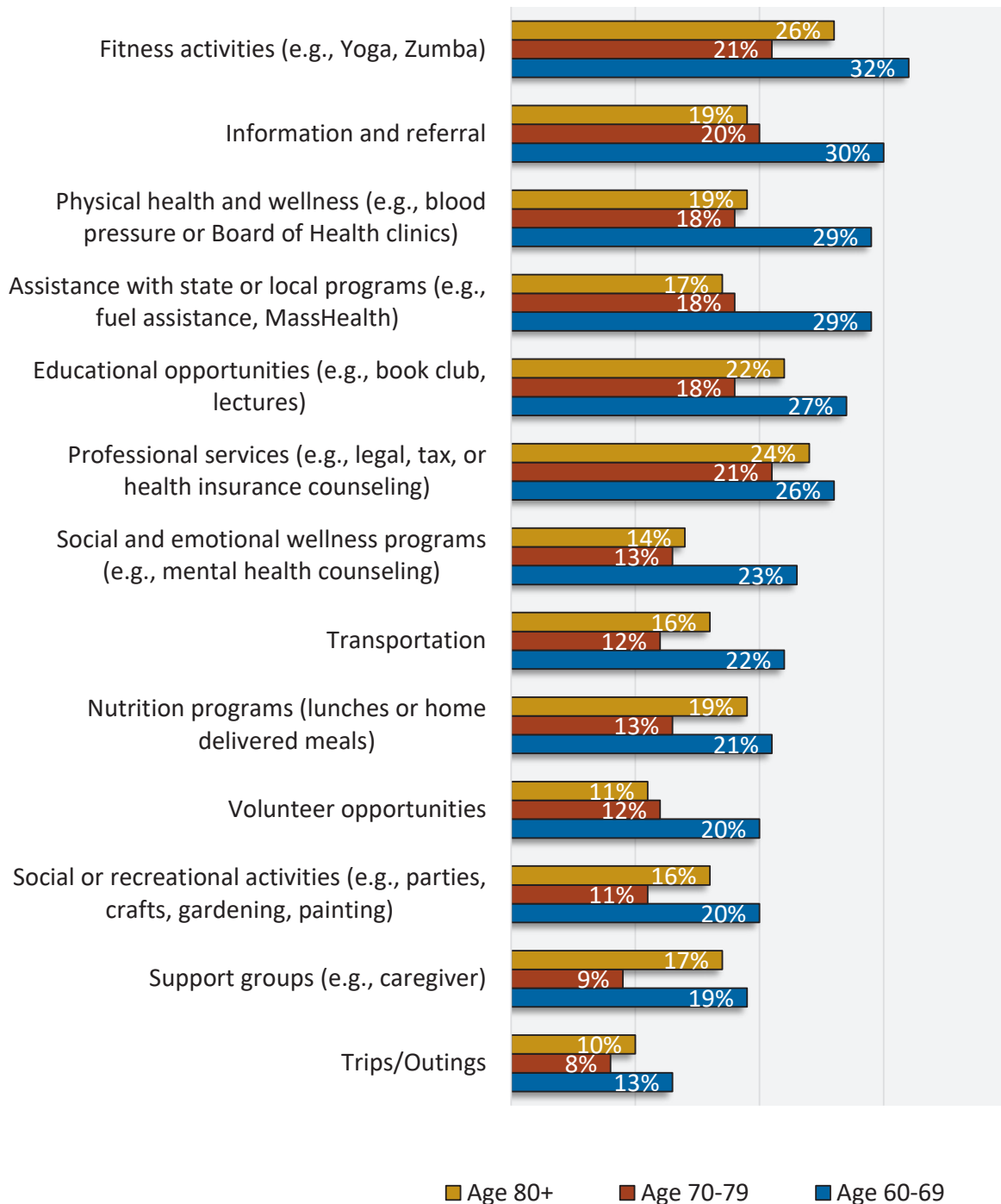
|                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Expanded hours would draw in different segments of the older adult population and make the space available to the community more widely.                             |
| Since the space isn't used weekends and very little in the evening, members - or any Needham residents - should be able to rent a room for private or family events. |
| Even more evening/weekend hours. Community activities with different age groups.                                                                                     |
| Additional space for exercise classes is needed to meet demand by expanding the number of people able to be in the gym.                                              |
| For seniors like myself who are still working, and my husband works part-time, we would like to see physical fitness classes offered in the evening                  |
| Bigger gym area and more bikes to use.                                                                                                                               |
| A yoga class that I like is way too crowded.                                                                                                                         |
| Create a more inviting environment by improving signage and creating spaces for people to gather informally.                                                         |
| Redecorate/restyle it so it's pleasant to spend time there. The place looks so cold and uninviting.                                                                  |
| Relaxing lounges, perhaps spaces where small groups could gather                                                                                                     |
| Better signage for specific areas/departments and signage info for specific classes/programs.                                                                        |

Respondents were asked to rate the importance to themselves or members of their families of the CATH's existing programs and services. In their ratings, respondents across age groups were consistent with their number one choice: fitness activities (e.g., yoga, Zumba) (see **Figure 16**). This result, coupled with the report that most existing fitness classes and sessions are filled regularly, suggests that an increase in space for exercise opportunities would be welcomed.

When it came to the second most valued service, those age 70 and older reported that professional services (e.g., legal, tax, or health insurance counseling) was very important to them. Among those in their 60s, information and referral was named as the second most valued service offered by the CATH. As those embarking on older age or possibly caring for loved ones, it is logical that having a local hub of information and resources to navigate this next part of life is valuable. Educational opportunities were named as a valuable for those age 80 and older—suggesting the importance of lifelong learning opportunities.

In summary, these findings tell us that when it comes to the kinds of programming that are most important to survey respondents are related to **help** (information and referral, assistance with professional services) and **health** (fitness, wellness, and education).

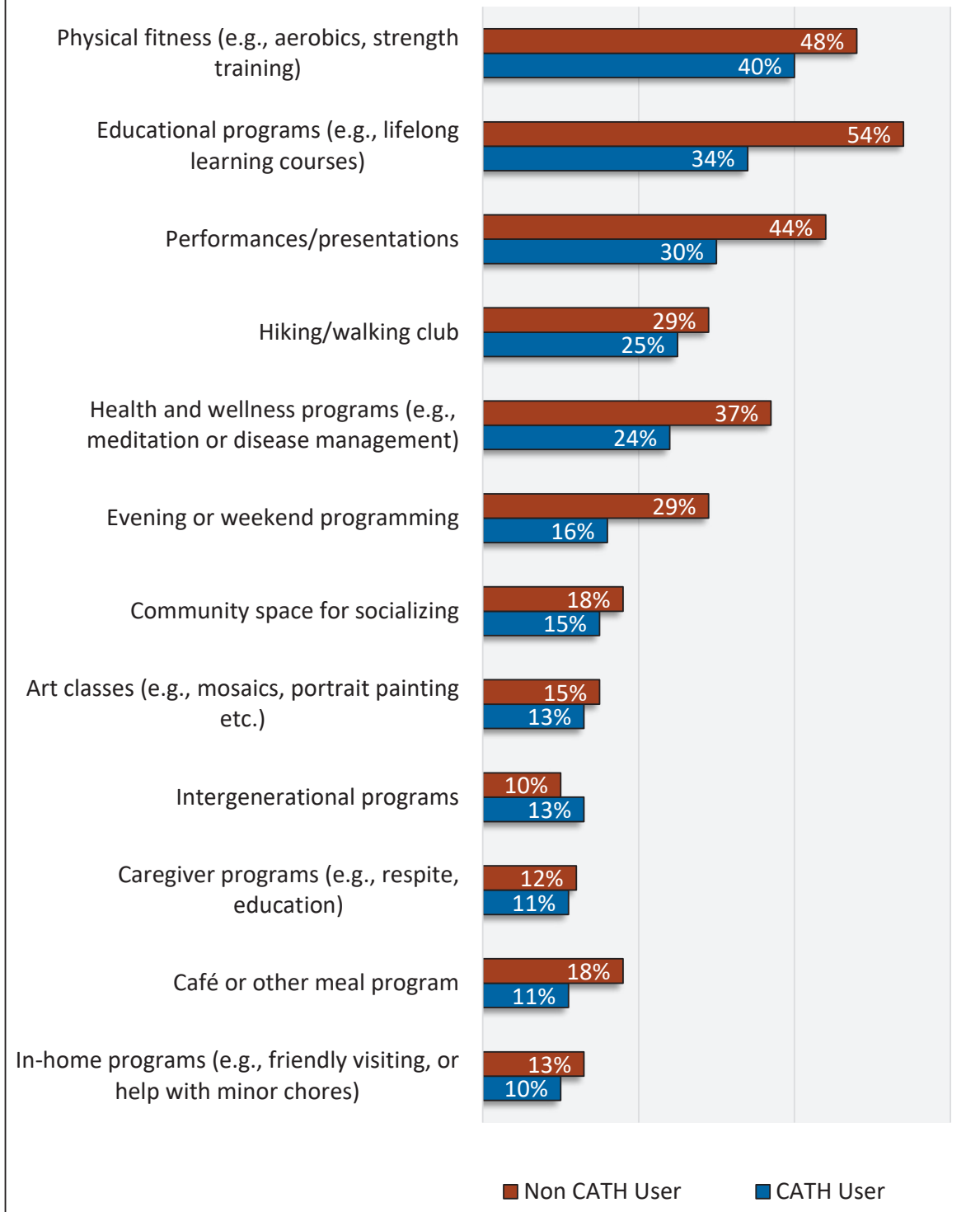
**Figure 16.** “Please rate the importance of each type of program/service to you or a member of your family.” (% reporting very important, by age category)





In a similar vein, respondents were asked about their future needs and interests with respect to programs and services offered by the CATH. Overall, fitness opportunities (44%), educational opportunities (44%), and performances/presentations (37%) were most commonly reported preferences for future programming (see Appendix A). **Figure 17** shows responses among those who reported having been to the CATH in the previous year and those who had not. This comparison could be useful in considering how to reach out to those residents who are not already active users. Interestingly, the priorities among non-participants are very similar to those reported by those who have been to the CATH during the previous year. Both groups rated educational programs and physical fitness as the top two priorities. Among both groups, performances and presentations were identified third most frequently, with health and wellness programs and a hiking/walking club receiving the fourth and fifth most frequent listing as priorities. Age comparisons on this question reinforce the desire for physical fitness and educational opportunities—regardless of age (see Appendix A). For those in their 60s, a hiking or walking club was selected as an area of interest (38%) and for those in their 70s or over age 80, performances and presentations were a highly prioritized set of programs (42% and 25% respectively). These findings suggest that strengthening programming to align more closely with the interests and priorities of people who do not currently attend the CATH, and younger residents, can be accomplished while simultaneously benefitting current participants and residents who are older.

**Figure 17.** “Thinking about your possible future needs and interests, which of the following areas would you prioritize in expanding the programs available at the CATH?”, by user status



Some write-in responses suggested additional educational opportunities or performances. For example, one respondent wrote, “*perhaps taking in plays and concerts would encourage more attendance*”. Other priorities named in these comments included continuation of fitness programs, movies, trips, and table games (e.g., bridge and mahjong).

## Conclusion and Recommendations

Needham’s population of older residents is large and growing. Since 2012, the CATH has provided a strong foundation through which staff expertise, programming, and resources are offered to the community. The Center continues to evolve while recognizing the needs of a growing population of older adults with a wide spectrum of needs and interests. The following recommendations highlight opportunities to maximize space and build upon resources to support aging in place and promote physical, social, and emotional wellbeing among residents.

### Recommendations for the Town of Needham Center at the Heights

The report completed by IHCD (see **Appendix D**) includes a number of important recommendations to creating more accessible and safe space for CATH patrons. In addition to these technical changes, this report supports a number of recommendations about how the space is used and what types of programs are provided.

We make the following recommendations to the Town of Needham’s Department of Health & Human Services. These recommendations are for the consideration of the Town and the staff of the CATH. These recommendations are listed in no particular order and some will be attainable in the short-term while others may take longer range planning.

#### **Programming and Social Engagement Space**

- Increase opportunities for access to fitness equipment and classes. Physical activity came through as an interest, valued activity, priority for expansion, observation by staff, COA board, other COA directors—it was a very clear message that additional space and capacity is needed to meet the demands of the community.
- Consider swapping the fitness room (Room 123) with the larger sized game room (Room 118).
- \*Consider increasing the square footage of the existing fitness room by reducing hallway access and incorporating all of the square footage from Room 125 and

partial square footage from the pantry. (Break room access would shift to the hallway).<sup>14</sup>

- \*Consider merging two of the second-floor programming rooms (room 216 and 217) for secondary, non-equipment, fitness space. This space would increase opportunities for larger classes including yoga.
- Consider replacing the desktop computers in the computer lab (room 212) with laptops that can be checked-out and used around the CATH. This would still allow for tax preparation and SHINE counseling to take place in the computer lab room, but would open space for additional programming space needs.
  - Further, a dividing wall could be purchased to create two smaller spaces for meeting or programs.
- Ensure that all programming space and group meeting space is equipped with the ability to have residents join by video conference. In addition, complete the process of making the Great Room accessible for those who are deaf or hard of hearing.
- Enlist volunteers to generate ideas for patio programming. See additional detail for outdoor space opportunities below.
- Consider increasing the frequency of the hot breakfast program to promote use of the kitchen space. In addition, revise rental policies to encourage other community partners to host fundraisers or events using the kitchen and dining area.
  - Encourage private residents or businesses to use the space on evenings or weekends for a small fee. Revenue from these events could be used to expand the building monitor position or other fees associated with keeping the building open after operating hours.
- Expand areas for small social gathering and seating. Consider space in oversized hallway 215 for additional social engagement seating. For example, install a small comfortable couch with reading light.
- \*Consider reducing two story lobby to expand programming and social engagement space at the 2<sup>nd</sup> level reading landing (220) adjacent to the deck.

### **Programming Storage Space**

- Increase interior wall storage in programming rooms. Convenient in-room storage reduces the need to move equipment and tables among room and increases opportunities to repurpose existing standalone closet storage.

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<sup>14</sup> \**Suggestions for re-purposed space that involve minor structural changes are conceptual and an architect should be consulted to evaluate proposed revisions.*

- Identify conditions that would make the basement space adequate for additional storage use. Consider using this space for seasonal items or extra tables and chairs used for large events.
- Install storage shelving or cabinetry inside of the coat room (room 102).

### **Business Administration Schedule and Space**

- **Schedule**

- Consider the expansion of evening and weekend hours to maximize opportunities for programming during less crowded hours and to meet the needs of residents with schedules that are restricted on weekdays. Consider use of volunteers to staff these piloted hours.
- Consider online registration for programming to decrease traffic at front lobby reception area during high volume attendance.
- Install a secondary *MySeniorCenter* kiosk in the receiving area (room 127) to ensure that all participants are being counted.

- **Office Space**

- Modify the health clinic room (221) to include a small meeting area and/or multiple workstation spaces. Consider removing the exam table.
- Create an additional workstation adjacent to the current administration area (225) outside of the health clinic room. Consider a portable divider to create a desk space.
- Consider relocating the copier (Room 111) to an alternate space to create a workspace adjacent to the smaller transportation office.
- Consider re-purposing storage areas for office space (Rooms 102, 125, 130, 218 and 220). This possibility is contingent on creating additional storage along interior walls of programming rooms. Room 102 offers potential for a secondary reception area.

### **Outdoor Space**

- **Outdoor Patio**

- Revise building policies to allow for food and beverage consumption on the outdoor deck. A small food service area in adjacent space or a mobile food cart could offer snacks and beverages.
- Increase programming that is suitable for outdoor space including chair exercise, gardening classes, and outdoor dining. Enlist participants, board members, or volunteers to generate a list of possible programs to be held on the patio, pilot-test these ideas.



- Consider an awning or shade structure such as a pergola or trellis to offer protection from sunlight, rain, and wind.
- Provide “age-friendly” seating (e.g., with arms, backs and weather resistant cushion) with access to tables for programming and potential dining.
- Improve acoustics to reduce undesirable sounds and incorporate appealing soundscape elements. Consider the use of dense plants or faux planters for noise reduction purposes; these could take the shape of dividers to increase the number of seating areas on the patio and also offer audio support for those with trouble hearing while outdoors.
- Explore the opportunity to create an outdoor fireplace at the location of existing library fireplace. Alternatively, purchase outdoor heat lamps to provide some heat in cooler months. This could extend the seasonality of the space.
- **Parking**
  - Identify on-street parking spots and designate them as giving priority to CATH participants.
  - Explore opportunities to create a satellite lot that is within walking distance or provides opportunity for pickup coordinated with existing CATH transportation services.
  - Create incentives for car-pooling (e.g., program discounts, gift cards to local businesses, or gift shop credit).

## Appendix A: Survey Results

## Q1. What is your age range?

| Age 60-69 |      |
|-----------|------|
| Age 60-69 | 42%  |
| Age 70-79 | 39%  |
| Age 80+   | 19%  |
| Total%    | 100% |

*\*18 respondents reported that they were under the age of 60. These responses are not included in analyses included in this report.*

## Q2. How long have you lived in Needham?

|                    | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|--------------------|-----------|-----------|---------|----------|
| Fewer than 5 years | 6%        | 3%        | 12%     | 6%       |
| 5-14 years         | 8%        | 5%        | 13%     | 8%       |
| 15-24 years        | 13%       | 6%        | 3%      | 8%       |
| 25-34 years        | 39%       | 10%       | 7%      | 22%      |
| 35-44 years        | 25%       | 38%       | 7%      | 27%      |
| 45 years or longer | 9%        | 38%       | 58%     | 29%      |
| Total%             | 100%      | 100%      | 100%    | 100%     |

## Q3. Thinking about your usual life (before the COVID-19 pandemic), where in Needham do you go to socialize or go for leisure? (Check all that apply)

|                                         | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|-----------------------------------------|-----------|-----------|---------|----------|
| Library                                 | 54%       | 60%       | 45%     | 76%      |
| Center at the Heights                   | 10%       | 34%       | 35%     | 24%      |
| Parks or outdoor spaces                 | 73%       | 61%       | 40%     | 62%      |
| Faith-based organization                | 34%       | 38%       | 32%     | 35%      |
| Theatre or cultural center              | 23%       | 30%       | 18%     | 25%      |
| Restaurant or cafe                      | 89%       | 77%       | 66%     | 80%      |
| A gym or fitness class                  | 35%       | 38%       | 23%     | 34%      |
| Town meetings or other civic activities | 14%       | 17%       | 11%     | 15%      |
| YMCA or Community Center                | 18%       | 11%       | 11%     | 14%      |
| Other (please specify)                  | 14%       | 17%       | 27%     | 18%      |

*\*Totals do not sum to 100% because respondents could check multiple responses.*

**Q4. Have you visited the Center at the Heights (CATH) over the last year?**

|               | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|---------------|-----------|-----------|---------|----------|
| <b>Yes</b>    | 31%       | 66%       | 61%     | 50%      |
| <b>No</b>     | 69%       | 34%       | 39%     | 50%      |
| <b>Total%</b> | 100%      | 100%      | 100%    | 100%     |

**Q5. In your usual life, how frequently do you use programs or services offered by the Center at the Heights(CATH)? (CATH USERS ONLY)**

|                                                  | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|--------------------------------------------------|-----------|-----------|---------|----------|
| <b>Two or more times a week</b>                  | 11%       | 16%       | 36%     | 20%      |
| <b>About once a week</b>                         | 6%        | 16%       | 11%     | 12%      |
| <b>A few times a month</b>                       | 6%        | 8%        | 8%      | 8%       |
| <b>About once a month</b>                        | 8%        | 6%        | 6%      | 6%       |
| <b>A few times a year (e.g., special events)</b> | 69%       | 54%       | 39%     | 54%      |
| <b>Total%</b>                                    | 100%      | 100%      | 100%    | 100%     |

**Q6. Do you see the Center at the Heights (CATH) as playing a role in the lives of yourself, loved ones, friends, or neighbors?**

|               | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|---------------|-----------|-----------|---------|----------|
| <b>Yes</b>    | 74%       | 79%       | 77%     | 76%      |
| <b>No</b>     | 26%       | 21%       | 23%     | 24%      |
| <b>Total%</b> | 100%      | 100%      | 100%    | 100%     |

**Q7. The following items refer to programs and services that are *usually* offered through the CATH. Please rate the importance of each type of program/service to you or to a member of your family.****Q7a. Assistance with state or local programs (e.g., fuel assistance, MassHealth)**

|                             | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|-----------------------------|-----------|-----------|---------|----------|
| <b>Very Important</b>       | 29%       | 18%       | 17%     | 23%      |
| <b>Moderately Important</b> | 9%        | 8%        | 8%      | 8%       |
| <b>Somewhat Important</b>   | 10%       | 12%       | 11%     | 11%      |
| <b>Not Very Important</b>   | 18%       | 21%       | 12%     | 18%      |
| <b>Not at all Important</b> | 34%       | 41%       | 52%     | 40%      |
| <b>Total%</b>               | 100%      | 100%      | 100%    | 100%     |

**Q7b. Transportation**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 22%       | 12%       | 16%     | 17%      |
| Moderately Important | 12%       | 7%        | 11%     | 10%      |
| Somewhat Important   | 15%       | 10%       | 9%      | 12%      |
| Not Very Important   | 15%       | 21%       | 11%     | 17%      |
| Not at all Important | 36%       | 50%       | 53%     | 44%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7c. Fitness activities (e.g., Yoga, Zumba)**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 32%       | 21%       | 26%     | 27%      |
| Moderately Important | 20%       | 20%       | 12%     | 19%      |
| Somewhat Important   | 19%       | 20%       | 9%      | 17%      |
| Not Very Important   | 12%       | 14%       | 13%     | 13%      |
| Not at all Important | 17%       | 25%       | 40%     | 24%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7d. Physical health and wellness (e.g., blood pressure or Board of Health clinics)**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 29%       | 18%       | 19%     | 23%      |
| Moderately Important | 19%       | 17%       | 19%     | 18%      |
| Somewhat Important   | 20%       | 21%       | 12%     | 19%      |
| Not Very Important   | 15%       | 17%       | 14%     | 15%      |
| Not at all Important | 17%       | 27%       | 36%     | 25%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7e. Social and emotional wellness programs (e.g., mental health counseling)**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 23%       | 13%       | 14%     | 17%      |
| Moderately Important | 20%       | 13%       | 8%      | 15%      |
| Somewhat Important   | 16%       | 16%       | 13%     | 15%      |
| Not Very Important   | 16%       | 23%       | 14%     | 19%      |
| Not at all Important | 25%       | 35%       | 51%     | 34%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7f. Nutrition programs (lunches or home delivered meals)**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 21%       | 13%       | 19%     | 17%      |
| Moderately Important | 16%       | 11%       | 6%      | 12%      |
| Somewhat Important   | 10%       | 8%        | 7%      | 9%       |
| Not Very Important   | 17%       | 22%       | 13%     | 19%      |
| Not at all Important | 36%       | 46%       | 55%     | 43%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7g. Professional services (e.g., legal, tax, or health insurance counseling)**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 26%       | 21%       | 24%     | 24%      |
| Moderately Important | 23%       | 15%       | 10%     | 17%      |
| Somewhat Important   | 14%       | 16%       | 12%     | 14%      |
| Not Very Important   | 13%       | 22%       | 12%     | 17%      |
| Not at all Important | 24%       | 26%       | 42%     | 28%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7h. Social or recreational activities (e.g., parties, crafts, gardening, painting)**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 20%       | 11%       | 16%     | 16%      |
| Moderately Important | 18%       | 17%       | 15%     | 17%      |
| Somewhat Important   | 21%       | 23%       | 15%     | 21%      |
| Not Very Important   | 18%       | 21%       | 15%     | 18%      |
| Not at all Important | 23%       | 28%       | 39%     | 28%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7i. Support groups (e.g., caregiver)**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 19%       | 9%        | 17%     | 15%      |
| Moderately Important | 16%       | 13%       | 6%      | 13%      |
| Somewhat Important   | 17%       | 14%       | 14%     | 15%      |
| Not Very Important   | 19%       | 25%       | 9%      | 19%      |
| Not at all Important | 29%       | 39%       | 54%     | 38%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |



**Q7j. Educational opportunities (e.g., book club, lectures)**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 27%       | 18%       | 22%     | 23%      |
| Moderately Important | 29%       | 29%       | 21%     | 27%      |
| Somewhat Important   | 18%       | 23%       | 17%     | 20%      |
| Not Very Important   | 12%       | 13%       | 14%     | 13%      |
| Not at all Important | 14%       | 17%       | 26%     | 17%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7k. Trips/Outings**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 13%       | 8%        | 10%     | 11%      |
| Moderately Important | 21%       | 22%       | 14%     | 20%      |
| Somewhat Important   | 19%       | 18%       | 17%     | 18%      |
| Not Very Important   | 19%       | 21%       | 15%     | 19%      |
| Not at all Important | 28%       | 31%       | 44%     | 32%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7l. Volunteer opportunities**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 20%       | 12%       | 11%     | 15%      |
| Moderately Important | 25%       | 16%       | 13%     | 20%      |
| Somewhat Important   | 23%       | 24%       | 19%     | 22%      |
| Not Very Important   | 14%       | 21%       | 11%     | 16%      |
| Not at all Important | 18%       | 27%       | 46%     | 27%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q7m. Information and referral**

|                      | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------|-----------|-----------|---------|----------|
| Very Important       | 30%       | 20%       | 19%     | 24%      |
| Moderately Important | 27%       | 24%       | 21%     | 25%      |
| Somewhat Important   | 19%       | 21%       | 17%     | 19%      |
| Not Very Important   | 10%       | 15%       | 16%     | 13%      |
| Not at all Important | 14%       | 20%       | 27%     | 19%      |
| Total%               | 100%      | 100%      | 100%    | 100%     |

**Q8. Below is a list of issues one could encounter when accessing the Center at the Heights (CATH) or its programs. Have you experienced any of the following issues? (Check all that apply) (CATH USERS ONLY)**

|                                                                                                                                                    | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|---------|----------|
| I have experienced no issues when accessing the CATH or its programs.                                                                              | 46%       | 48%       | 59%     | 50%      |
| I have had difficulty finding parking.                                                                                                             | 27%       | 36%       | 33%     | 33%      |
| I have had difficulty finding information about the programs and services available.                                                               | 10%       | 5%        | 8%      | 7%       |
| I have been unable to participate in a class or program because it was offered at an inconvenient time.                                            | 18%       | 14%       | 13%     | 15%      |
| I have been unable to participate in a class or program because the class was full.                                                                | 6%        | 8%        | 7%      | 7%       |
| I have been unable to attend a class or program because the fee was more than I could afford.                                                      | 5%        | 5%        | 5%      | 5%       |
| I have been unable to attend a class or program because I was taking care of grandchildren, or providing care to someone who is frail or disabled. | 7%        | 6%        | 3%      | 5%       |
| I have missed participating in a class or program because I did not have transportation.                                                           | 1%        | 0%        | 0%      | 0%       |
| I have missed participating in a class or a program because I didn't learn about it until after it had already been held.                          | 8%        | 5%        | 5%      | 6%       |
| I attended a class or event that was uncomfortably crowded.                                                                                        | 3%        | 5%        | 5%      | 4%       |
| I attended a class or event at which I didn't feel welcome or included.                                                                            | 0%        | 4%        | 4%      | 3%       |
| Other (please specify)                                                                                                                             | 12%       | 11%       | 9%      | 11%      |

*\*Totals do not sum to 100% because respondents could check multiple responses.*

**Q9. Thinking about your possible future needs and interests, which of the following areas would you prioritize in expanding the programs available at the CATH? (Check all that apply)**

|                                                                       | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|-----------------------------------------------------------------------|-----------|-----------|---------|----------|
| Cafe or other meal programs                                           | 13%       | 14%       | 20%     | 15%      |
| Performances/presentations                                            | 37%       | 42%       | 25%     | 37%      |
| Health and wellness programs (e.g., meditation or disease management) | 33%       | 34%       | 17%     | 31%      |
| Physical fitness programs (e.g., aerobics, strength training)         | 46%       | 48%       | 32%     | 44%      |
| Intergenerational programs                                            | 14%       | 9%        | 9%      | 11%      |
| Art classes (e.g., mosaics, portrait painting, etc.)                  | 17%       | 11%       | 13%     | 14%      |
| Hiking/walking club                                                   | 38%       | 21%       | 15%     | 27%      |
| Caregiver programs (e.g., respite, education)                         | 14%       | 10%       | 9%      | 12%      |
| Community space for socializing                                       | 19%       | 13%       | 16%     | 16%      |
| Evening or weekend programming                                        | 26%       | 21%       | 17%     | 22%      |
| Educational programs (e.g., lifelong learning courses)                | 45%       | 46%       | 38%     | 44%      |
| In-home programs (e.g., friendly visiting or help with minor chores)  | 13%       | 11%       | 9%      | 12%      |
| Day trips                                                             | 23%       | 23%       | 15%     | 22%      |
| Overnight trips                                                       | 5%        | 4%        | 3%      | 4%       |
| Other (please specify)                                                | 3%        | 9%        | 11%     | 7%       |

*\*Totals do not sum to 100% because respondents could check multiple responses.*

**Q10. How satisfied are you with the programs and services offered through the Center at the Heights (CATH)? (CATH USERS ONLY)**

|                              | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|------------------------------|-----------|-----------|---------|----------|
| Completely satisfied         | 14%       | 19%       | 32%     | 21%      |
| Satisfied                    | 54%       | 54%       | 52%     | 53%      |
| Dissatisfied                 | 4%        | 0%        | 3%      | 2%       |
| Very dissatisfied            | 1%        | 1%        | 0%      | 1%       |
| Not familiar enough to judge | 27%       | 26%       | 13%     | 23%      |
| Total%                       | 100%      | 100%      | 100%    | 100%     |

**Q11. How worried are you about the COVID-19 pandemic?**

|                           | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|---------------------------|-----------|-----------|---------|----------|
| <b>Very worried</b>       | 25%       | 32%       | 37%     | 30%      |
| <b>Moderately worried</b> | 41%       | 46%       | 34%     | 42%      |
| <b>Somewhat worried</b>   | 25%       | 17%       | 18%     | 20%      |
| <b>Not very worried</b>   | 8%        | 5%        | 9%      | 7%       |
| <b>Not at all worried</b> | 1%        | 0%        | 2%      | 1%       |
| <b>Total%</b>             | 100%      | 100%      | 100%    | 100%     |

**Q12. What are you concerned about in the weeks and months ahead? (Check all that apply)**

|                                                                        | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|------------------------------------------------------------------------|-----------|-----------|---------|----------|
| <b>You or a loved one getting COVID-19</b>                             | 71%       | 77%       | 70%     | 73%      |
| <b>Paying rent/mortgage</b>                                            | 5%        | 3%        | 1%      | 3%       |
| <b>Paying other bills</b>                                              | 6%        | 4%        | 4%      | 5%       |
| <b>Medical issues other than COVID-19</b>                              | 15%       | 27%       | 34%     | 23%      |
| <b>Attending religious services or social gatherings</b>               | 18%       | 21%       | 23%     | 20%      |
| <b>Children's wellbeing, remote learning</b>                           | 20%       | 31%       | 15%     | 23%      |
| <b>Adequate childcare</b>                                              | 3%        | 6%        | 2%      | 4%       |
| <b>Getting food and other things I need</b>                            | 14%       | 12%       | 15%     | 13%      |
| <b>The economic health of my community</b>                             | 47%       | 49%       | 32%     | 45%      |
| <b>Mental health issues (e.g., depression, anxiety, substance use)</b> | 21%       | 19%       | 16%     | 19%      |
| <b>Other (please specify)</b>                                          | 15%       | 18%       | 10%     | 15%      |

*\*Totals do not sum to 100% because respondents could check multiple responses.*

**Q13. Do you have an impairment/condition that limits your ability to participate in your community?**

|               | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|---------------|-----------|-----------|---------|----------|
| <b>Yes</b>    | 3%        | 13%       | 25%     | 11%      |
| <b>No</b>     | 97%       | 87%       | 75%     | 89%      |
| <b>Total%</b> | 100%      | 100%      | 100%    | 100%     |

**Q14. Do you currently live alone?**

|               | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|---------------|-----------|-----------|---------|----------|
| <b>Yes</b>    | 16%       | 20%       | 40%     | 22%      |
| <b>No</b>     | 84%       | 80%       | 60%     | 78%      |
| <b>Total%</b> | 100%      | 100%      | 100%    | 100%     |

**Q15. Please select your gender.**

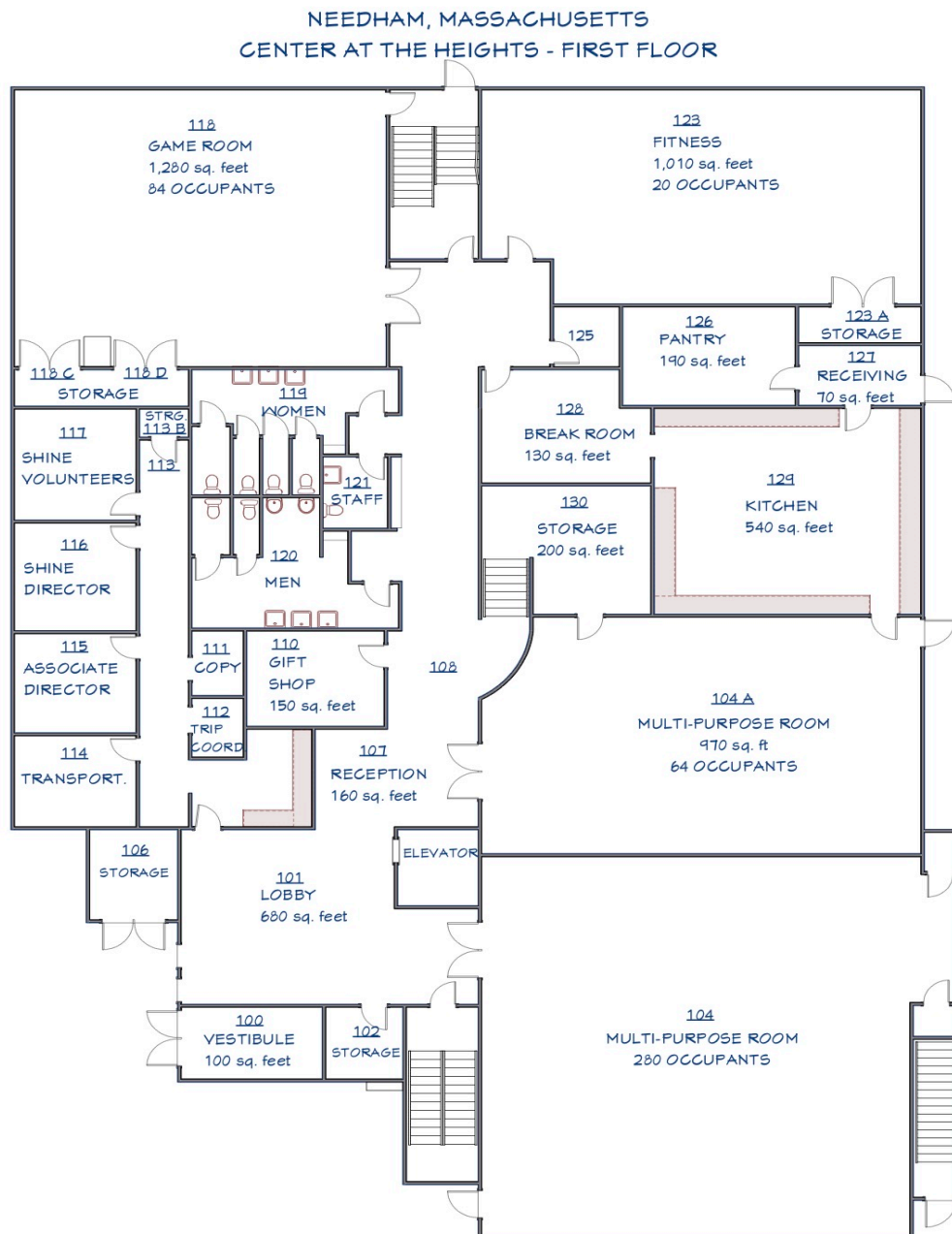
|               | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|---------------|-----------|-----------|---------|----------|
| <b>Male</b>   | 40%       | 40%       | 46%     | 41%      |
| <b>Female</b> | 60%       | 60%       | 54%     | 59%      |
| <b>Other</b>  | --        | --        | --      | --       |
| <b>Total%</b> | 100%      | 100%      | 100%    | 100%     |

**Q16. Please indicate your level of agreement with the following statement, "I have adequate resources to meet my financial needs, including home maintenance, personal healthcare, and other expenses."**

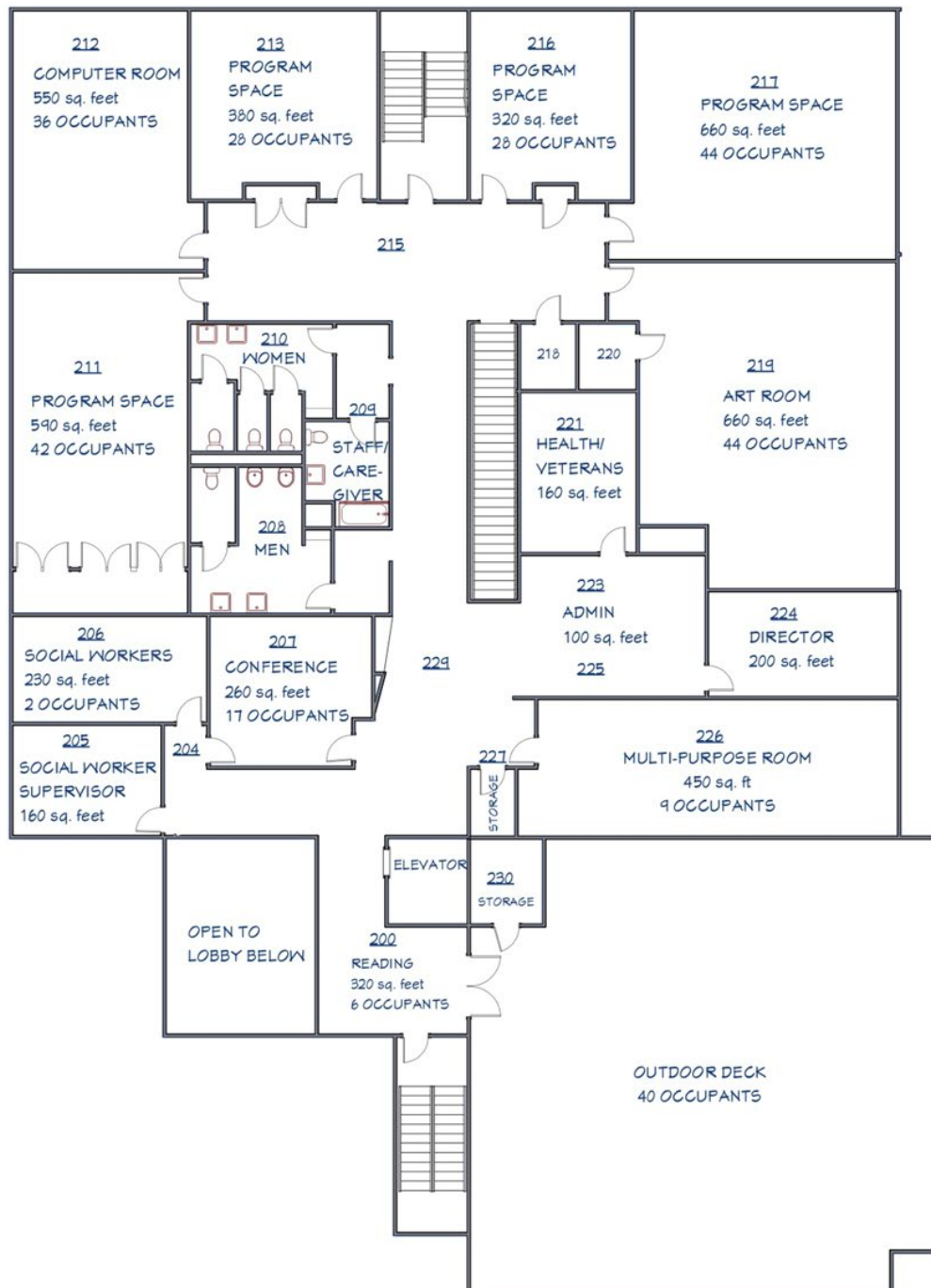
|                          | Age 60-69 | Age 70-79 | Age 80+ | All Ages |
|--------------------------|-----------|-----------|---------|----------|
| <b>Strongly agree</b>    | 55%       | 51%       | 43%     | 51%      |
| <b>Agree</b>             | 38%       | 43%       | 49%     | 42%      |
| <b>Disagree</b>          | 5%        | 4%        | 7%      | 5%       |
| <b>Strongly disagree</b> | 2%        | 2%        | 1%      | 2%       |
| <b>Total%</b>            | 100%      | 100%      | 100%    | 100%     |



## Appendix B: Floor Plan of the CATH



NEEDHAM, MASSACHUSETTS  
CENTER AT THE HEIGHTS - SECOND FLOOR



## Appendix C: Room Directory

**Needham, Massachusetts**  
**Center at the Heights – Space Directory**

| ROOM | LEVEL ONE                       | ROOM | LEVEL 2                 |
|------|---------------------------------|------|-------------------------|
| 100  | Vestibule                       | 200  | Reading                 |
| 101  | Lobby                           | 204  | Hallway                 |
| 102  | Storage                         | 205  | Social Work, Supervisor |
| 104  | Multi-purpose room              | 206  | Social workers          |
| 104A | Multi-purpose room              | 207  | Conference Room         |
| 106  | Storage                         | 208  | Men's                   |
| 107  | Reception                       | 209  | Caregiver               |
| 108  | Oversized Hallway               | 210  | Women's                 |
| 110  | Gift Shop                       | 211  | Program Space           |
| 111  | Copy Room                       | 212  | Computer Room           |
| 112  | Trip Coordinator                | 213  | Program Space           |
| 113  | Hallway and Storage             | 215  | Oversized Hallway       |
| 114  | Transportation                  | 216  | Program Space           |
| 115  | Associate Director, Programming | 217  | Program Space           |
| 116  | Shine Director                  | 218  | Custodian Closet        |
| 117  | Shine Volunteers                | 219  | Art Room                |
| 118  | Game Room                       | 220  | Art Room Closet         |
| 118  | C/D Storage                     | 221  | Health/Veterans         |
| 119  | Women's                         | 223  | Admin                   |
| 120  | Men's                           | 224  | Director's Office       |
| 121  | Staff                           | 225  | Hallway                 |
| 123  | Fitness                         | 226  | Multi-purpose room      |
| 123A | Storage                         | 227  | Storage                 |
| 125  | Custodian Closet                | 229  | Oversized Hallway       |
| 126  | Pantry                          | 230  | Storage                 |
| 127  | Receiving                       | n/a  | Outdoor Deck            |
| 128  | Break Room                      | n/a  | Two Story Lobby         |
| 129  | Kitchen                         |      |                         |
| 130  | Storage                         |      |                         |

**Note: Basement** –Not for programming use.

## Appendix D: Institute for Human Centered Design (IHCD) Report

## The Center at the Heights



### Town of Needham Assessment of Accessibility

June 2020



Institute for Human Centered Design

200 Portland Street, Boston, MA 02114  
www.IHCDesign.org • info@IHCDesign.org  
617-695-1225 voice/tty

## Executive Summary

### Overview of the Project

The Institute for Human Centered Design (IHCD) was hired to conduct a comprehensive accessibility and inclusive design assessment of the Center at the Heights (CATH). On April 27, 2020, IHCD had a conference call with Caitlin E. Coyle, professor at the University of Massachusetts Boston Gerontology Institute, to discuss the elements to improve accessibility at CATH. This conversation resulted in a virtual walkthrough with senior staff at the Gerontology Institute and CATH on May 18, and a survey conducted by IHCD on June 8.

The survey concentrated on all public entrances, emergency exits, accessible routes to elements, areas used by members of the public such as the community room, the café, the art room, etc. Also included in the survey were the toilet rooms and the parking area.

### Overview of Program Accessibility

The Center at the Heights is operated by the Town of Needham Council on Aging. As such the requirements of Title II of the ADA applies, including the requirement to provide program accessibility. Title II of the Americans with Disabilities Act requires that when services, programs or activities are offered, they must be provided in the most integrated setting possible.

When a public entity provides accessibility to its programs, it must ensure:

- That policies, practices and procedures are in place to provide equal opportunity to programs for people with disabilities and, if needed, modifications are made to policies, practices, and procedures if they result in discrimination against people with disabilities;
- That physical access to spaces is provided so a person with a mobility disability can enter the building, travel through the facilities, use the toilet rooms, and participate in the programs in the program space;
- That auxiliary aids and services for programs are provided so a person who is deaf/hard of hearing, blind/has low vision, or has a speech disability can experience equally effective

communication as well as a person without a disability in order to understand and participate in the programs.

### Overview of the Standards

The CATH was built in 2013. Based on the date of construction, areas were surveyed for compliance with the ADA 2010 Standards for Accessible Design and 521 CMR of the Massachusetts Architectural Access Board. Recommendations were provided for compliance with the code that provides the greatest level of accessibility. Best practice and inclusive design recommendations were also provided. Best practice and inclusive design recommendations include elements that are not required in the accessibility standards but may create enhanced experiences for all users.

### Action Plan

The CATH's commitment to creating an inclusive environment is clear from the work the Center has done to date. In order to address completely the items identified in this survey, IHCD recommends that the Center create an action plan for renovations to be done.

The following pages include a list of some of the accessibility issues that IHCD identified in its survey of the Center, a full illustrated catalog detailing noncompliant elements and recommendations for remediation. Individual accessibility concerns were photographed and recorded, with numerical information included wherever possible. In order to minimize the amount of information, elements not included in this report may be assumed to be compliant with regard to the applicable accessibility regulations.

A spreadsheet with priority for program access and a glossary of some of the terms used in describing features of accessible facilities is also included.

All recommendations in this report will assist the Center in meeting their responsibilities under the federal and state accessibility codes, provide equal opportunity for people with disabilities, and increase inclusion for a diverse public.



The Center at the Heights

Background

Year Built: 2013

The Center at the Heights is located at 300 Hillside Avenue and is open to the public Monday through Saturday. The Center provides information and services for seniors as well as a variety of classes and programs including computer classes, exercise, yoga, etc. The Center also serves as one of the polling place locations for the Town.

The Center is a three (3) story building with one (1) accessible entrance located on Hillside Avenue (west side of the building). In addition to the accessible entrance/exit there are three (3) accessible emergency egresses. The parking lot is located on the north and east sides of the building; there are 64 parking spaces including three (3) accessible parking spaces. There are also two (2) drop-off areas. One is located on Hillside Avenue, and one is located on the south side of the building.

The building floors are connected by an elevator, two (2) sets of fire stairwells and a central stairway near the gift shop. A reception area, a gift shop, a multipurpose room, a café, a kitchen, a game room and the fitness center are located on the first floor. The library, an art room, a computer room, four (4) program space rooms (used for yoga, meditation or therapy classes) and a deck are located on the second floor. Multi-user men's and women's toilet rooms are located on both floors, a single-user toilet room is located on the first floor and a single-user companion bathroom is located on the second floor.

Staff offices are located on both floors. The transportation office, the director and volunteers' offices for the SHINE program are located on the first floor. Two social worker offices, a staff conference room, the nurse's office and the director's office are located on the second floor. A staff break room is located off the kitchen area on the first floor.

**Note:** The basement level is not open to the public and therefore was not surveyed.

Key Accessibility Issues

Drop-off Areas

Accessibility issues include lack of the required sign with the International Symbol of Accessibility (ISA) at the drop-off areas.

Signage

Accessibility issues include signs not located on the latch side of the door at many locations, lack of tactile signs (braille and raised characters) at the emergency egresses and lack of illuminated signs with the International Symbol of Accessibility (ISA) at the accessible emergency exits. Another accessibility issue is the lack of signs with the International Symbol for Hearing Loss at the rooms having an assistive listening system.

Kitchen Area

Accessibility issues include lack of knee clearance at the cook range and lack of insulated pipes at the sink located at the preparation counter.

Toilet Rooms

Accessibility issues include toilet paper dispensers located above the grab bars. 521 CMR requires dispensers and other devices not to be mounted above the grab bars. Another accessibility issue includes accessible wheelchair compartments slightly shorter than the minimum depth allowed.

Drinking Fountains

Accessibility issues include lack of the required drinking fountain for standing users on both floors. The Standards require that no fewer than two drinking fountains be provided; one for seated users and one for standing users.

Fitness Room

An accessibility issue includes lack of the minimum 30 inches by 48 inches clear floor space at each type of exercise machine. The clear floor space is required to be positioned for a transfer or use by an individual seated in a wheelchair.

Doors

An accessibility issue includes lack of the required maneuvering clearance at the egress door located in the café area. 521 CMR requires maneuvering clearance to be provided when any obstruction within the 12 inches of the latch side of the door projects more than 6 inches beyond the face of the door. Another accessibility issue is the lack of maneuvering clearance at the emergency egress located in the game room due to the location of a computer table.

**Additional Accessibility Issues**

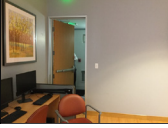
- Lack of accessible work surfaces (with knee clearance) in the library (one of the tables) and the art room.
- Lack of knee clearance at the sink located in the art room.
- Lack of a securely attached walk-off mat at the main entrance.

**Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- Recommend providing a planter with knee clearance positioned for a forward approach (deck).
- Recommend using floor markers, intended to help with social distancing, that are wider and that also have a high contrast with the surface on the floor.

Town of Needham  
The Center at the Heights

| ID                           | Location                                        | Floor | Room | Element                 | Type     | Photo                                                                             | Issues                            | Current Measure | Recommendations                                                                                                                                                                                                  | Quantity | Citations                        |
|------------------------------|-------------------------------------------------|-------|------|-------------------------|----------|-----------------------------------------------------------------------------------|-----------------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------|
| Approach and Entrance        |                                                 |       |      |                         |          |                                                                                   |                                   |                 |                                                                                                                                                                                                                  |          |                                  |
| Exterior Access Route        |                                                 |       |      |                         |          |                                                                                   |                                   |                 |                                                                                                                                                                                                                  |          |                                  |
| 1                            | Passenger Loading Zone - Near the Main Entrance | Ext.  |      | Exterior Access Route   | Exterior |  | Level changes > 1/4"              | -               | Beveled sections of the curb that is higher than a 1/4".                                                                                                                                                         | 1        | ADA 2010: 303<br>521 CMR: 20.10  |
| Passenger Loading Zones      |                                                 |       |      |                         |          |                                                                                   |                                   |                 |                                                                                                                                                                                                                  |          |                                  |
| 2                            | Passenger Loading Zone - Near the Main Entrance | Ext.  |      | Passenger Loading Zones | N/A      |  | Sign with ISA not provided (MAAB) | -               | Provide a sign that includes the International Symbol of Accessibility (ISA) at the head of the space. Locate the sign so that the bottom is 60" min. above the ground and the top is 96" max. above the ground. | 1        | 521 CMR 41.1.3                   |
| 3                            | Passenger Loading Zone - Hillside Street        | Ext.  |      | Passenger Loading Zones | N/A      |  | Sign with ISA not provided (MAAB) | -               | Provide a sign that includes the International Symbol of Accessibility (ISA) at the head of the space. Locate the sign so that the bottom is 60" min. above the ground and the top is 96" max. above the ground. | 1        | 521 CMR 41.1.3                   |
| Access to Goods and Services |                                                 |       |      |                         |          |                                                                                   |                                   |                 |                                                                                                                                                                                                                  |          |                                  |
| Means of Egress              |                                                 |       |      |                         |          |                                                                                   |                                   |                 |                                                                                                                                                                                                                  |          |                                  |
| 4                            | Game Room                                       | 1     | 118  | Means of Egress         | N/A      |  | Tactile exit sign not provided    | -               | Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48" - 60" above the finished floor located on the latch side of the door.                             | 1        | ADA 2010: 703.2<br>521 CMR: 41.5 |

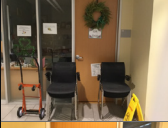
Town of Needham  
The Center at the Heights

| ID                    | Location          | Floor | Room | Element               | Type | Photo                                                                             | Issues                                                                       | Current Measure | Recommendations                                                                                                                                                                                                                                                    | Quantity | Citations                                 |
|-----------------------|-------------------|-------|------|-----------------------|------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------|
| 5                     | Main Entrance     | 1     |      | Means of Egress       | N/A  |  | Tactile exit sign not provided<br>Illuminated ISA symbol not provided (MAAB) | -<br>-          | Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48"- 60" above the finished floor located on the latch side of the door.<br>Provide an illuminated sign with the International Symbol of Accessibility. | 1        | ADA 2010: 703.2<br>521 CMR: 41.5 & 41.1.3 |
| 6                     | Multipurpose Room | 1     | 104  | Means of Egress       | N/A  |  | Tactile exit sign not provided<br>Illuminated ISA symbol not provided (MAAB) | -<br>-          | Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48"- 60" above the finished floor located on the latch side of the door.<br>Provide an illuminated sign with the International Symbol of Accessibility. | 1        | ADA 2010: 703.2<br>521 CMR: 41.5 & 41.1.3 |
| 7                     | Near Game Room    | 1     |      | Means of Egress       | N/A  |  | Tactile exit sign not provided<br>Illuminated ISA symbol not provided (MAAB) | -<br>-          | Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48"- 60" above the finished floor located on the latch side of the door.<br>Provide an illuminated sign with the International Symbol of Accessibility. | 1        | ADA 2010: 703.2<br>521 CMR: 41.5 & 41.1.3 |
| 8                     | Cafe              | 1     | 104A | Means of Egress       | N/A  |  | Tactile exit sign not provided<br>Illuminated ISA symbol not provided (MAAB) | -<br>-          | Ensure a tactile exit sign with raised characters and braille is provided at exit door. Mount sign between 48"- 60" above the finished floor located on the latch side of the door.<br>Provide an illuminated sign with the International Symbol of Accessibility. | 1        | ADA 2010: 703.2<br>521 CMR: 41.5 & 41.1.3 |
| Interior Access Route |                   |       |      |                       |      |                                                                                   |                                                                              |                 |                                                                                                                                                                                                                                                                    |          |                                           |
| 9                     | Lobby             | 1     |      | Interior Access Route | N/A  |  | Surface not stable, firm, and slip-resistant                                 | -               | Install an ADA-compliant walk-off mat.                                                                                                                                                                                                                             | 1        | ADA 2010: 302<br>521 CMR: 29.00           |

Town of Needham  
The Center at the Heights

| ID                            | Location          | Floor | Room | Element                       | Type             | Photo                                                                              | Issues                                                       | Current Measure | Recommendations                                                                                                                                                                                                                                                 | Quantity | Citations                             |
|-------------------------------|-------------------|-------|------|-------------------------------|------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|
| Doors, Doorways, & Gates      |                   |       |      |                               |                  |                                                                                    |                                                              |                 |                                                                                                                                                                                                                                                                 |          |                                       |
| 10                            | Game Room         | 1     | 118  | Doors, Doorways, & Gates      | Emergency Egress |   | Maneuvering clearance(s) not provided                        | -               | Relocate table to maintain the required maneuvering clearance at the door.                                                                                                                                                                                      | 1        | ADA 2010: 404.24<br>521 CMR: 26.00    |
| 11                            | Cafe              | 1     | 104A | Doors, Doorways, & Gates      | Emergency Egress |   | Maneuvering clearance not provided at recess > 6"            | 6.5"            | Install an automatic door opener.                                                                                                                                                                                                                               | 1        | 521 CMR: 26.6.2                       |
| Exercise Machines & Equipment |                   |       |      |                               |                  |                                                                                    |                                                              |                 |                                                                                                                                                                                                                                                                 |          |                                       |
| 12                            | Fitness Room      | 1     | 123  | Exercise Machines & Equipment | N/A              |   | Clear floor space not provided                               | -               | Ensure that one of each type of equipment has a 30" min. by 48" min. clear floor space positioned for transfer or for use by an individual seated in a wheelchair. Clear floor space required at exercise machines and equipment shall be permitted to overlap. | 1        | ADA 2010: 1004.1                      |
| Signage                       |                   |       |      |                               |                  |                                                                                    |                                                              |                 |                                                                                                                                                                                                                                                                 |          |                                       |
| 13                            | Game Room         |       | 118  | Signage                       | Designation      |   | Sign not located on the latch side of the door               | -               | Locate sign at permanent rooms alongside the door on the latch side.                                                                                                                                                                                            | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2    |
| 14                            | Multipurpose Room | 1     | 104  | Signage                       | N/A              |  | International Symbol of Access for Hearing Loss not provided | -               | Provide a sign with the International Symbol for Hearing Loss to notify patrons that an assistive listening system is provided.                                                                                                                                 | 1        | ADA 2010: 703.7.2.4<br>521 CMR: 41.10 |

Town of Needham  
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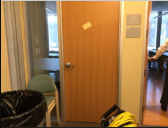
| ID | Location          | Floor | Room    | Element | Type        | Photo                                                                             | Issues                                         | Current Measure | Recommendations                                                      | Quantity | Citations                          |
|----|-------------------|-------|---------|---------|-------------|-----------------------------------------------------------------------------------|------------------------------------------------|-----------------|----------------------------------------------------------------------|----------|------------------------------------|
| 15 | Multipurpose Room | 1     | 104     | Signage | Designation |  | Sign location not compliant                    |                 | Locate sign to the right of the right hand door.                     | 1        | ADA 2010: 703.4.2                  |
| 16 | Gift Shop         | 1     | 110     | Signage | Designation |  | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side. | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2 |
| 17 | Fitness Room      | 1     | 123     | Signage | Designation |  | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side. | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2 |
| 18 | Staff Office      | 2     | 205/206 | Signage | Designation |  | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side. | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2 |
| 19 | Conference Room   | 2     | 207     | Signage | Designation |  | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side. | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2 |



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| ID | Location       | Floor | Room | Element | Type        | Photo                                                                             | Issues                                         | Current Measure | Recommendations                                                      | Quantity | Citations                          |
|----|----------------|-------|------|---------|-------------|-----------------------------------------------------------------------------------|------------------------------------------------|-----------------|----------------------------------------------------------------------|----------|------------------------------------|
| 20 | Library        | 2     | 226  | Signage | Designation |  | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side. | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2 |
| 21 | Yoga Classroom | 2     | 211  | Signage | Designation |  | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side. | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2 |
| 22 | Computer Room  | 2     | 212  | Signage | Designation |  | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side. | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2 |
| 23 | Meeting Room   | 2     | 213  | Signage | Designation |  | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side. | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2 |
| 24 |                | 2     | 216  | Signage | Designation |  | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side. | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2 |

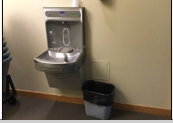
Town of Needham  
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| ID                      | Location        | Floor | Room | Element                 | Type         | Photo                                                                              | Issues                                         | Current Measure | Recommendations                                                                                                                                                                                                                                                            | Quantity | Citations                                             |
|-------------------------|-----------------|-------|------|-------------------------|--------------|------------------------------------------------------------------------------------|------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------|
| 25                      |                 | 2     | 217  | Signage                 | Designation  |   | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side.                                                                                                                                                                                                       | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2                    |
| 26                      | Art Room        | 2     | 219  | Signage                 | Designation  |   | Sign not located on the latch side of the door | -               | Locate sign at permanent rooms alongside the door on the latch side.                                                                                                                                                                                                       | 1        | ADA 2010: 703.4.2<br>521 CMR: 41.2<br>ADA 2010: 902.2 |
| Dining or Work Surfaces |                 |       |      |                         |              |                                                                                    |                                                |                 |                                                                                                                                                                                                                                                                            |          |                                                       |
| 27                      | Library         | 2     | 226  | Dining or Work Surfaces | Work Surface |   | Knee or toe clearance not provided             | 24"             | Provide at least 1 work surface with 27" min. high knee clearance underneath.                                                                                                                                                                                              | 1        | ADA 2010: 902.2                                       |
| 28                      | Art Room        | 2     | 219  | Dining or Work Surfaces | Work Surface |   | Knee or toe clearance not provided             | 24"             | Provide at least 1 work surface with 27" min. high knee clearance underneath.                                                                                                                                                                                              | 1        | ADA 2010: 902.2                                       |
| Assembly Area           |                 |       |      |                         |              |                                                                                    |                                                |                 |                                                                                                                                                                                                                                                                            |          |                                                       |
| 29                      | Conference Room | 2     | 207  | Assembly Area           | N/A          |  | Assistive listening devices not provided       | -               | Where audio amplification is provided and audible communication is integral to the use of the space, provide an assistive listening system. If an assistive listening system is present, a sign with the International Symbol of Access for Hearing Loss must be provided. | 1        | ADA 2010: 703.7.2.4<br>521 CMR: 41.10                 |

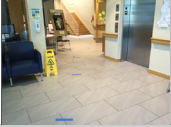
Town of Needham  
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| ID                        | Location           | Floor  | Room | Element                   | Type                   | Photo                                                                             | Issues                                                                    | Current Measure | Recommendations                                                                                                                                                                                                                                                  | Quantity | Citations                             |
|---------------------------|--------------------|--------|------|---------------------------|------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|
| 30                        | Computer Room      | 2      | 212  | Assembly Area             | N/A                    |  | Assistive listening devices not provided                                  | -               | Where audio amplification is provided and audible communication is integral to the use of the space, provide an assistive listening system. If an assistive listening system is present, a sign with the International Symbol for Hearing Loss must be provided. | 1        | ADA 2010: 703.7.2.4<br>521 CMR: 41.10 |
| Kitchens and Kitchenettes |                    |        |      |                           |                        |                                                                                   |                                                                           |                 |                                                                                                                                                                                                                                                                  |          |                                       |
| 31                        | Kitchen            | 1      |      | Kitchens and Kitchenettes | N/A                    |  | Knee/toe clearance not provided at cooktop                                | -               | Provide a cooktop with knee and toe clearance positioned for a forward approach.<br><br>Ensure hardware can be operable with a closed fist and does not require tight grasping, pinching or twisting of the wrist.                                               | 1        | 521 CMR: 32.8.1                       |
| Toilet & Bathing Rooms    |                    |        |      |                           |                        |                                                                                   |                                                                           |                 |                                                                                                                                                                                                                                                                  |          |                                       |
| Single-User Toilet        |                    |        |      |                           |                        |                                                                                   |                                                                           |                 |                                                                                                                                                                                                                                                                  |          |                                       |
| 32                        | Companion Bathroom | 2      | 221  | Single-User Toilet        | N/A                    |  | Toilet paper dispenser is not compliant                                   | -               | Relocate toilet paper so that it is 24" min. high, located under the grab bar, and between 7" and 9" from the front of the toilet.                                                                                                                               | 1        | 521 CMR: 30.8.5 & 30.6.1              |
| Toilet Compartment        |                    |        |      |                           |                        |                                                                                   |                                                                           |                 |                                                                                                                                                                                                                                                                  |          |                                       |
| 33                        | Men's Toilet Room  | 1<br>2 |      | Toilet Compartment        | Accessible Compartment |  | Non-compliant toilet paper dispenser<br>Depth of compartment < 72" (MAAB) | -<br>70"        | Relocate toilet paper so that it is 24" min. high, located under the grab bar, and between 7" and 9" from the front of the toilet.<br>Provide a wheelchair accessible compartment that is 60" wide and 72" deep.                                                 | 2        | 521 CMR: 30.8.5 & 30.6.1              |

Town of Needham  
The Center at the Heights

| ID                 | Location            | Floor  | Room | Element            | Type                   | Photo                                                                              | Issues                                                                    | Current Measure | Recommendations                                                                                                                                                                                                  | Quantity | Citations                          |
|--------------------|---------------------|--------|------|--------------------|------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------|
| 34                 | Women's Toilet Room | 1<br>2 |      | Toilet Compartment | Accessible Compartment |   | Non-compliant toilet paper dispenser<br>Depth of compartment < 72" (MAAB) | -<br>-          | Relocate toilet paper so that it is 24" min. high, located under the grab bar, and between 7" and 9" from the front of the toilet.<br>Provide a wheelchair accessible compartment that is 60" wide and 72" deep. | 2        | 521 CMR: 30.8.5 & 30.6.1           |
| Additional Access  |                     |        |      |                    |                        |                                                                                    |                                                                           |                 |                                                                                                                                                                                                                  |          |                                    |
| Drinking Fountains |                     |        |      |                    |                        |                                                                                    |                                                                           |                 |                                                                                                                                                                                                                  |          |                                    |
| 35                 | Near Fitness Room   | 1      | 123  | Drinking Fountains | Low                    |   | No drinking fountain provided for standing users                          | -               | Provide an additional drinking fountain for standing users or install a Hi-Lo drinking fountain.                                                                                                                 | 1        | ADA 2010: 211.2                    |
| 36                 | Near Room 221       | 2      |      | Drinking Fountains | Low                    |   | No drinking fountain provided for standing users                          | -               | Provide an additional drinking fountain for standing users or install a Hi-Lo drinking fountain.                                                                                                                 | 1        | ADA 2010: 211.2                    |
| Sink               |                     |        |      |                    |                        |                                                                                    |                                                                           |                 |                                                                                                                                                                                                                  |          |                                    |
| 37                 | Kitchen             | 1      |      | Sink               | N/A                    |   | Exposed plumbing underneath sink                                          | -               | Insulate or otherwise configure pipes at sink to protect against contact.                                                                                                                                        | 1        | ADA 2010: 606.5<br>521 CMR: 32.7.4 |
| 38                 | Art Room            | 2      | 219  | Sink               | Classroom              |  | Knee clearances not provided                                              | 26"             | Ensure there is a 27" high knee clearance for a depth of 8" under the sink.<br><br>Ensure hardware can be operable with a closed fist and does not require tight grasping, pinching or twisting of the wrist.    | 1        | ADA 2010: 306.3<br>521 CMR: 32.7   |

Town of Needham  
The Center at the Heights

| ID            | Location | Floor | Room | Element       | Type | Photo                                                                             | Issues | Current Measure | Recommendations                                                                                                                                          | Quantity | Citations                     |
|---------------|----------|-------|------|---------------|------|-----------------------------------------------------------------------------------|--------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------|
| Best Practice |          |       |      |               |      |                                                                                   |        |                 |                                                                                                                                                          |          |                               |
| Floor Markers |          |       |      |               |      |                                                                                   |        |                 |                                                                                                                                                          |          |                               |
| 39            | Lobby    | 1     |      | Floor Markers | N/A  |  |        |                 | Recommend using floor markers, intended to help with social distancing, that are wider and that also have a high contrast with the surface on the floor. | 1        | ADA 2010: N/A<br>521 CMR: N/A |
| Planters      |          |       |      |               |      |                                                                                   |        |                 |                                                                                                                                                          |          |                               |
| 40            | Deck     | 2     |      | Planters      | N/A  |  |        |                 | Recommended providing a planter with 27" high knee clearance positioned for a forward approach.                                                          | 1        | ADA 2010: N/A<br>521 CMR: N/A |







## **APPENDIX H**

### **SOCOTEC KITCHEN REPORT**

**Feasibility Study & Conceptual Design**  
SOCOTEC Project Number: CB213041.4

**The Center at the Heights**

**300 Hillside Avenue  
Needham, Massachusetts 02494**

**January 23, 2023**





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- 1.4: Program Requirements & Scope of work

### Section 2 – Foodservice Consultant's Report

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**Appendix A** – Proposed Foodservice Layout by ColburnGuyette





## Project Team

|                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OWNER</b><br><br>Barry Dulong<br>Director of Building Maintenance<br><i>Building Maintenance Division</i><br>500 Dedham Ave, Needham, MA 02492<br>Tel: (617) 988-5012<br>Cell: (617) 308-1309<br><a href="mailto:Karl.Pops@bostonhousing.org">Karl.Pops@bostonhousing.org</a> | <b>PRIME DESIGN ARCHITECT</b><br><br>Robert Kuhn<br>Project Manager<br><i>SOCOTEC AE CONSULTING LLC</i><br>250 Dorchester Ave, Boston, MA 02127<br>Tel: (617) 268-8977<br>Cell: (508) 680-2658<br><a href="mailto:Robert.Kuhn@socotec.us">Robert.Kuhn@socotec.us</a>                                                                         |
| <b>MEP-FP CONSULTANT</b><br><br>Michael Denommee, P.E, LEED AP.<br>Principal<br><i>BLW Engineers, Inc.</i><br>311 Great Road, Littleton, MA 01460<br>Tel: (978) 486-4301<br><a href="mailto:mdenommee@blwengineers.com">mdenommee@blwengineers.com</a>                           | <b>FOOD SERVICE CONSULTANT</b><br><br>Edward Arons, FCSI<br>Partner / Associate Principal<br>Joan Olivero, Associate<br>Associate Partner<br><i>ColburnGuyette Foodservice Design</i><br>100 Ledgewood Place, #104,<br>Rockland, MA 02370<br>Tel: (784) 347-2831<br><a href="mailto:earons@colburnguyette.com">earons@colburnguyette.com</a> |
| <b>COST ESTIMATOR</b><br><br>Peter Bradley, LEED AP<br>President<br><i>PM&amp;C</i><br>20 Downer Ave, Suite 5, Hingham, MA 02043<br>(781) 740-8007<br><a href="mailto:peterbradley@pmc-ma.com">peterbradley@pmc-ma.com</a>                                                       |                                                                                                                                                                                                                                                                                                                                              |

H



January 23, 2023

Mr. Barry Dulong  
Director of Building Maintenance  
*Building Maintenance Division*  
**Town of Needham**  
500 Dedham Ave  
Needham, MA 02492

Tel: 781-801-5937  
Email: [bdulong@needhamma.gov](mailto:bdulong@needhamma.gov)  
Proj: Center at the Heights Senior Center  
Re: Investigative Report  
CBI Job No. CB213041.4

Dear Mr. Dulong:

In accordance with our contract, SOCOTEC AE CONSULTING, LLC is pleased to present the following Feasibility Study for the kitchen renovations at the Center at the Heights facility (i.e.: "CATH"), located at 300 Hillside Avenue in Needham, Massachusetts.

This Feasibility Study was commissioned in detail the layout of the existing kitchen, and to provide recommendations for updating the design in order to accommodate a high volume meal service for the Town of Needham.

This study includes a review of the existing conditions and deficiencies in the current kitchen design, and a conceptual plan depicting an alternate commercial kitchen layout and the related equipment.

This report provides the Town of Needham with a proposed project scope, work, equipment options and budget for the commercial kitchen renovation at the Center At The Heights, 300 Hillside Avenue, in Needham, MA.

If should have any questions or comments on the above, please do not hesitate to contact me.

Best regards,  
**SOCOTEC AE Consulting, LLC**

Robert Kuhn, Project Manager  
[Robert.Kuhn@socotec.us](mailto:Robert.Kuhn@socotec.us)

# SECTION ONE

## Project Narrative

- 1.1: Facility Description & Existing Conditions
- 1.2: Existing Conditions Pictures
- 1.3: Existing Building Code Analysis
- 1.4: Program Requirements & Scope of Work





## 1.1 Facility Description and Existing Conditions

The **Center at the Heights** is located at 300 Hillside Avenue, in Needham, Massachusetts. The existing facility is a two story senior center of approximately 30,000 square feet. The existing building was permitted and built in or around January 4<sup>th</sup>, 2012. The CATH center is a steel framed building, with a cold formed metal stud substructure, insulation, sheathing and clad with a mixture of fiber cement siding / trim with a manufactured stone veneer.



Figure 1: The main entrance to the CATH center

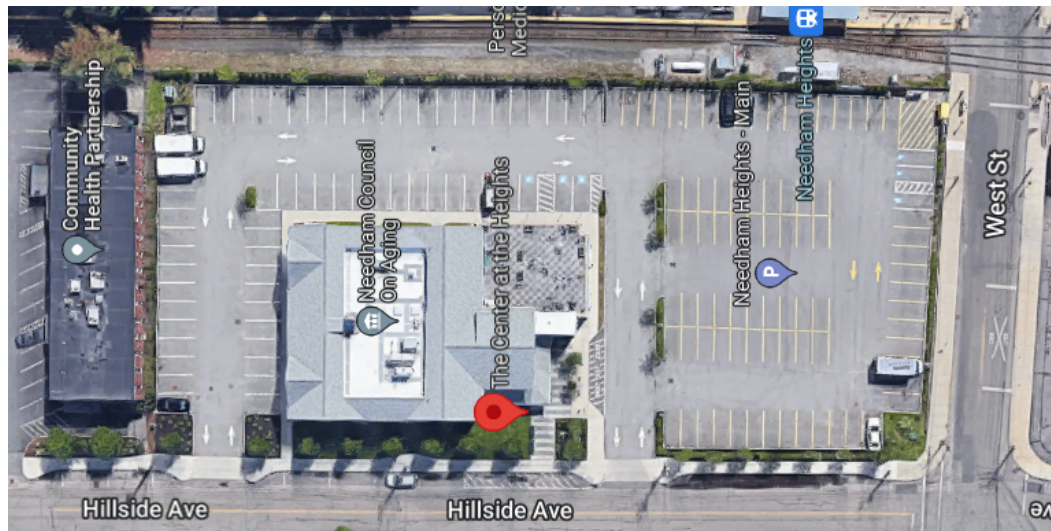


Figure 2: Site Circulation, with Main Entrance at Right



The existing full service Kitchen area is generally separated into four areas: Preparation, Cooking, Washing and Serving. The current layout appears inadequate for the current use as well as the proposed use. Additionally, the kitchen is being used in conjunction with off-site food services to prepare and serve meals to the public. This process is inefficient and adds to the per meal cost.

Within the kitchen there is an oversized center island with storage cabinets below, and a provision for interior seating at all sides. At one point, this island was to be used as a teaching space, so many could gather and watch a cooking instructor to replicate their techniques. We were advised by several of the workers that this does not currently happen in this space, and that they do not remember if it was ever used as a teaching space. Furthermore, the large island confines the path of travel greatly and makes working in this area tight and inefficient.

Mimicking the large kitchen island on the ceiling is a painted soffit, with a large pot rack and recessed accent lighting. A soffit encircles the perimeter of the Kitchen and has indirect fixtures mounted to it's face, with provide the majority of the lighting. The remainder of the ceiling is an acoustic tile set within a suspended metal grid. The space does take advantage of what little natural light it receives from a window above the Washing station.

The existing floor is a slab on grade and clad with 12x24" porcelain tile laid in a running bond pattern, which runs throughout the main Kitchen & the immediately adjacent storage areas. The surface should have a honed finish to prevent slipping, but it appears to have been worn away and has therefore extended past its lifecycle.

The cooking area is comprised of two (2) small and residential type wall ovens (assumed ventless), a four burner commercial range cooktop and an induction burner. There is a hood above the range, however workers reported that it is too high to catch any rising steam & fumes being emitted from the range.

The existing counters, upper cabinets and lower cabinets in the space are ample. However, the majority of the countertops are only 32" high which, makes working on them a challenge for some users. Only the Washing station is the standard 36" high. The existing counter tops are a mixture of materials, with stainless steel along the wet areas, and different types of granite at the Preparation, Cooking and Serving areas.

The existing floor and wall cabinet carcasses are finished with plastic laminate, and overall seem in relatively good shape for their frequency of use. The amount of wall cabinets are expansive, with the remaining wall space finished with ceramic tile along the Serving & Cooking area, and stainless steel protecting the walls at the Washing area.

All appliances in the Kitchen are high-end stainless steel, rather than commercial grade. Insufficient refrigeration space is provided by three residential style units with glass shelving, rather than heavy duty wire shelving. There is only one (1), three-door freezer located in the Dry Storage room, which is less than optimal for an existing Kitchen of this size.

In the existing Break Room (immediately adjacent to this space), there is an existing natural gas shut off. (see pictures 1 and 2), which is typically covered (assumed for protection) by a plywood box and labeled on the wall above. Physically, there are two or three green colored pieces (the "solenoids") that are hot to the touch, whether or not the gas is being used or not. This draws very little power to operate; in fact, it uses low voltage – so there needs to be more investigation into why these solenoids are heating up.





## 1.2 Existing Condition Pictures

| No. | Photo | Description                                                                                                                                                                                                                                                                                                                   |
|-----|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  |       | <p>An overall picture of the existing Kitchen, showing the existing Serving area, the existing Cooking area, the partial extents of the upper / lower cabinets and countertops, and entrance to the existing Break Room.</p> <p>Note the expansive center island which makes the kitchen less efficient than it could be.</p> |
| 2.  |       | <p>Another overall picture of the existing kitchen, showing the existing Washing area, as well as ingress into the space from the existing Cafeteria.</p> <p>Note that the countertop height at the Washing area changes to accommodate the appliances.</p>                                                                   |
| 3.  |       | <p>A view of the Preparation area. These countertops are not the standard, comfortable working height.</p>                                                                                                                                                                                                                    |



|    |                                                                                     |                                                                                                                                                                             |
|----|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4. |    | View of the existing gas shut off, located at counter height in proximity to the working surface                                                                            |
| 5. |   | An enlarged picture of the existing gas shut off. Note that the solenoid (colored green) is hot to the touch regardless of whether or not natural gas is being used or not. |
| 6. |  | View of the existing Break Room. This space is under utilized in the existing design.                                                                                       |



|    |                                                                                     |                                                                                                                                                                                                                                                                                                                                      |
|----|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7. |    | <p>View of the existing range and exhaust hood, and two existing wall ovens.</p>                                                                                                                                                                                                                                                     |
| 8. |   | <p>View of the front of the existing kitchen, including the existing center island (with storage below), existing serving window, partial extents of the upper / lower cabinets and existing stainless-steel countertops.</p> <p>These existing countertops are 2-4" lower than the standard, comfortable working height of 36".</p> |
| 9. |  | <p>Partial rear elevation of the kitchen, showing one of the existing refrigerators, and the entrance to the existing Break Room on the left.</p>                                                                                                                                                                                    |



|     |                                                                                     |                                                                                                                                                                                   |
|-----|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10. |    | Rear elevation of the existing kitchen, showing the existing refrigerator, cabinetry and countertops, handwashing sink, and entrance to the existing Receiving area to the right. |
| 11. |   | An existing floor sink (circled in red) and drain from an existing handwashing sink on the existing rear countertop.                                                              |
| 12. |  | The existing dishwash station, with an integral three compartment sink and two existing commercial dishwashers.                                                                   |



|     |                                                                                    |                                                                                                                                                                                                                                                                                                                                             |
|-----|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13. |   | <p>The existing storage area incorporates the existing three door freezer, as well as the existing dry storage.</p>                                                                                                                                                                                                                         |
| 14. |  | <p>The existing ceiling is comprised of acoustic ceiling panels, as well as gypsum wallboard bulkheads above the cabinets &amp; a gypsum drop ceiling over the island.</p> <p>Lighting is insufficient for the space, with downlights above the island, sconces on the face of the bulkhead and task lighting below the upper cabinets.</p> |





### 1.3: EXISTING BUILDING CODE ANALYSIS

The work shall comply with the following, applicable codes:

1. Building 780 CMR - Massachusetts State Building Code 9th Edition, which is an amended version of the 2015 International Building Code (IBC). 780 CMR 34.00 is deleted and replaced by the Massachusetts Existing Building Code (MEBC), which is an amended version of the 2015 International Existing Building Code (IEBC).
2. Energy Code - The standard "non-stretch" energy provisions of the code will be based on the 2018 International Energy Conservation Code (IECC) – Commercial Provisions.

### 2015 INTERNATIONAL BUILDING CODE

#### CHAPTER THREE – USE & OCCUPANCY CLASSIFICATIONS

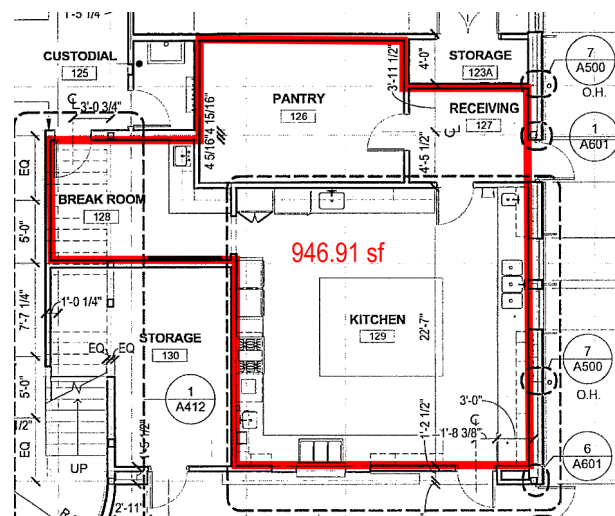
Section 302.1 General: Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed in this section. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.

#### 2. Business (see Section 304): **Group B**

Section 304.1 Business Group B: Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Food processing establishments and commercial kitchens not associated with restaurants, cafeterias, and similar dining facilities not more than 2,500 square feet in area.

(NOTE: Approximate area of work: 947 square feet)



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## CHAPTER SIX – TYPES OF CONSTRUCTION

Section 602 Construction Classification:

602.3 Type III: **Type III** construction is that type of construction in which the *exterior walls are of noncombustible materials and the interior building elements are of any material permitted by this code.*

## 2015 INTERNATIONAL EXISTING BUILDING CODE

### CHAPTER THREE – PROVISIONS FOR ALL COMPLAINEE METHODS

Section 301.1.1 Prescriptive Compliance Method: Repairs, alterations, additions, and changes of occupancy complying with **Chapter 4** of this code in buildings complying with the International Fire Code shall be considered in compliance with the provisions of this code.

***The Prescriptive Compliance Method has been selected for use on this project. The scope of work for this project is defined as both a Repair and a Level 1 Alteration (see Chapter Four). Chapters 5 through 14 are not***

Section 301.1.2 Work Area Compliance Method and Section 301.1.3 Performance Compliance Method: do not apply to this project, as the Prescriptive Compliance Method has been chosen.

### CHAPTER FOUR – PRESCRIPTIVE COMPLIANCE METHOD

Section 401.1 Scope: The provisions of this chapter shall control the alteration, repair, addition and change of occupancy or relocation of existing buildings and structures, as referenced in section 301.1.1.

***The work is limited to alteration & repair of the existing Kitchen space. No change of occupancy, relocation of the existing building / structure, or addition is being proposed as part of the work.***

Section 402 Additions: No additions are being proposed as part of the work.

Section 403 Alterations:

Section 403.1: Except as provided by Section 401.2 or this section, alterations to any building or structure shall comply with the requirements of the IBC for new construction. Alterations shall be such that the existing building or structure is no less conforming to the provisions of the IBC than the existing building or structure was prior to the alteration.

***It is our intent to comply with this section.***

Section 403.2: Flood Hazard Areas:

***The existing building is not in a flood hazard area.***

Section 403.3: Existing Structural Elements Carrying Gravity Load:

***There will be no alterations to the existing structural elements of the building.***

Section 403.4: Existing Structural Elements Carrying Lateral Load:

***There will be no alterations to the existing structural elements of the building.***

Section 403.5: Bracing for Unreinforced Masonry Parapets upon Reroofing:

***There will be no alterations to the existing roof.***

Section 403.6: Wall Anchorage for Unreinforced Masonry Walls in Major Alterations:

***This is not a major alteration where the unreinforced masonry walls will require anchorage.***

Section 403.7: Bracing for Unreinforced Masonry Parapets in Major Alterations:



*This is not a major alteration where the unreinforced masonry parapet will require anchorage.*

Section 403.8: Roof Diaphragms Resisting Wind Loads in High Wind Regions:

*There is no work proposed at the roof level.*

Section 403.9: Voluntary Seismic Improvements:

*There will be no alterations to the existing structural elements of the building.*

Section 403.10: Smoke Alarms:

*There are no dwelling or sleeping units in the existing building.*

Section 403.11: Refuge Areas:

*There are no alterations proposed to the existing refuge areas.*

Section 404 Repairs: Buildings, structures and parts thereof shall be repaired in compliance with Sections 401.2 & 404. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to the requirements for alterations in this chapter. Routine maintenance required by section 401.2, ordinary repairs exempt from permit in accordance with Section 105.2, and abatement of wear due to normal service conditions shall not be subject to the requirements of this section.

*It is our intent to comply with this section.*

Section 405 Fire Escapes:

*There are no fire escapes proposed as part of this work.*

Section 406 Glass Replacement and Replacement Windows:

*There are no glass replacements proposed as part of this work.*

Section 407 Change of Occupancy:

*There is no change of occupancy proposed as part of this work.*

Section 408 Historic Buildings:

*The existing building is not listed on the National Register of Historic Places.*

Section 409 Moved Structures:

*Moving the existing structure is not proposed as part of this work.*

Section 410 Accessibility for Existing Buildings:

*The existing building's accessibility will not be affected by this work*



## 1.4 Program Requirements and Scope of Work

The Town of Needham has expressed their need to consolidate the meal preparation to this single location, rather than to one of the hospitals, schools, and similar venues around town. Doing so would allow the town to save on costs of food preparation by have greater control of the end product, and be more serviceable to their customers by having a dedicated staff on hand.

This report details the significant alteration to the existing spaces and provide a solution that not only exceeds the current capacity and maximizes the kitchen output. The Town's goal is to provide 160 meals per day from this space:

|                  | To go      | In house  | <i>Subtotal</i>              |
|------------------|------------|-----------|------------------------------|
| Breakfasts       | 0          | 30        | 30                           |
| Lunches          | 50         | 30        | 80                           |
| Dinners          | 50         | 0         | 50                           |
| <b>Subtotals</b> | <b>100</b> | <b>60</b> | <b>160 Total Meals / day</b> |

The center marble island, while being a beautiful piece, makes the space proportionately smaller and that much less efficient. Removing this would greatly improve the capability of the space and it's staff. Also, there is an abundance of counter and cabinet space that seems to be underutilized due to its size and location; wall cabinets fill quickly yet become forgotten if the end users are incapable of reaching them. The lack of commercial refrigerators, freezers, and cooking equipment lead to downtimes due to their low capacity and sturdiness which lead to additional downtimes.

Therefore, SOCOTEC proposes an alteration of the existing Kitchen, Dry Storage area, as well as the underutilized Employee Break Room. The existing Preparation, Cooking, Washing and Serving areas will remain in place, while the equipment in those areas will be improved upon and a Staging area added. The existing residential appliances will be replaced with commercial grade convection oven, griddle, skillet and ranges in order to better handle capacity and control of the final product; this includes a food warmer. The existing refrigeration and freezers will be removed and consolidated into one large walk-in unit. With the center island removed, we now have ample space to use stainless steel tables and racks on casters, so they may be wheeled around the space and not be in the way all the time.

A thorough review of the existing ancillary cooking devices (i.e.: knives, pots and pans, utensils, etc.) will need to be performed prior to buying new units. Also, we will need to provide for the employees as well and provide microwaves, coffee makers, etc. to replace those that are being removed from the existing Breakroom.

The existing Breakroom will be maximized into a Dry Storage area, with wire racking at the perimeter. This will help with the organization of equipment and ingredients. However, this will not be the only storage options: we will endeavor to include as many wall and base cabinets as possible along the Serving and Preparation areas, with the countertops being a more comfortable height.

We have made some assumptions regarding finishes, and have taken design cues from commercial kitchen design which will help control costs. While utilitarian, we feel that a stainless steel backsplash along the Cooking area & the Washing area is a more practical and cost effective approach. Fiberglass reinforced panels will be installed at the Locker & Dry Storage areas. Along the rear wall of the Preparation area we have an opportunity to use ceramic tile to soften the area. At this time, we are not proposing decorative soffits.

It should be noted that the existing door and hardware into the space should be reviewed as well, to be sure it can handle the high capacity, and general wear and tear on the door. As far as I can tell, this door is original to the building and is used fairly frequently.

# SECTION TWO

## Foodservice Consultant Report

2.1 – Feasibility Study by ColburnGuyette





## INTRODUCTION

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The following is a report and evaluation of the existing foodservice operation at the Needham Senior Center. The foodservice operation is comprised of a Main Kitchen, Receiving Area, Storage Room, and an Employee Break Room. The intent is to evaluate the existing conditions and recommend improvements for the facility to be self-sufficient and to not rely on outside sources for daily meals which are currently prepared and brought in through Springwell's catering service, one of the local hospitals, or similar facilities. The goal is to prepare one-hundred sixty meals per day. The one-hundred-sixty meals comprise of approximately fifty hot lunches to go, fifty dinners to go, thirty in-house breakfasts, and thirty lunches.

## EXISTING CONDITIONS

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The existing overall project is approximately nine-hundred-twenty-eight square feet. Of that square footage, the Main Kitchen is five-hundred-thirty-three square feet, the Receiving Area is seventy-eight square feet, the Storage Room is one-hundred-eight-nine square feet, and the balance one-hundred-twenty-eight square feet is in the Employee Breakroom.

The Main Kitchen has a mix of equipment from high-end residential to commercial. It has a large central island counter that accounts for about twenty percent of the square footage and is neither ideal nor useful for the space. It impedes the flow of the kitchen, needing to walk around it for any task, and most of it is unusable due to the far reach. There is a large ceiling mounted pot rack above the island, as well.

The cooking line, in the Main Kitchen, is comprised of a high-end residential thirty-six-inch range and a drop-in induction range. All of which are beneath a sixty-inch by thirty-six-inch commercial exhaust hood. There are also two residential built-in wall ovens. The thirty-six-inch range is the only gas cooking equipment in the facility. All other cooking equipment is electrical. Other equipment includes a built-in residential refrigerator, a small built-in three-compartment sink, a prep sink, hand sinks, two commercial dishwashers, and other smallware's such as microwaves, coffee brewers, and dispensers. The Main Kitchen is not lacking in storage due to the amount of base and wall cabinets. However, they would not be adequate for the intended operation going forward. Finally, there is a large pass-through window with a sneeze guard and hot food well to serve diners in the Dining Room.

The Receiving Area has two more residential type refrigerators, a couple of employee lockers, trash holding, coat hangers, and it houses a recessed grease trap.

The Storage Room has a large commercial three-door freezer, ice machine, and 4-tier wire shelving all around.

Finally, the Break Room simply consists of tables and chairs, a counter with a sink, coffee equipment and a couple of microwaves. This room is where the electrical panels, fire suppression Ansul system and gas shut off valve are located.

## DEFICIENCIES AND PROPOSED IMPROVEMENTS

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As mentioned in the existing conditions, the large central counter is not proportionally correct to be considered useful or an asset to the space. It impedes workflow and takes up too much valuable square footage. A more

functional solution would be to remove the island and the pot shelving above and replace them with back-to-back stainless-steel worktables and a table mounted over shelf with an integrated utensil and pot rack. The table mounted over shelf should effectively reduce construction costs, since there will not be a need to ceiling mount the unit. The shelf will also provide some storage and a more adequate reach for the operator. The table facing the cooking line will host hot wells for holding food coming off the cooking line and undercounter refrigeration to support the cooking line. Adjacent to the tables will be two heated holding cabinets - one for holding items coming off the cooking line and the other used to requisition to-go orders.

The existing cooking equipment is not adequate for the intended operation. It is hardly used today except for cooking seldom breakfasts. For an operation that will produce one-hundred-sixty meals per day, there will need to be infrastructure changes. For one, the existing cooking equipment will need to be removed and replaced with commercial grade equipment that can handle bulk production such as a tilt skillet, also known as a braising pan, a six-burner range, a griddle, also known as a flat top, and a double stack combi oven. A combi oven, short for combination oven, is a very effective hybrid oven that has both convection and steaming capabilities. It allows the operator to use it in one of three ways, convection only, steam only, or convection and steam. This allows for the ultimate flexibility of the menu. The introduced steam, coupled with smart controls, create consistent product for a wide range of menu items in a foolproof manner. Since the only gas equipment is the existing range, it is recommended to remove the gas and replace with an electric range. This would effectively change the kitchen to be all electric. An all-electric kitchen leans towards a net-zero approach as it will reduce greenhouse emissions caused by equivalent gas equipment. There is a higher upfront cost for electric equipment, however, if reducing the facilities carbon footprint or keeping up with the latest trends is a concern.

The existing gas shutoff valve, located in the existing Employee Breakroom, was noted to have issues during the site visit. Not only was it located in a non-ideal location – right above the countertop as you walk into to the space – it was also noted to be overheating and was being protected by a makeshift plywood box that was also warm to the touch. The general recommendation would be to remove the gas valve as it is unsafe and move towards an all-electric kitchen.

With the changes in cooking equipment will come the need to update the exhaust hood and potentially the fan and ductwork, as well as the Ansul system. The hood will need to be larger to capture the heat and effluents coming from the equipment and the fire suppression tank sizes and drop locations will need to be reworked. Ventless technology could be used for the double combi oven to reduce the hood size, if need be. However, the ventless hood option comes at a premium and may not make sense depending on the cost and structural requirements.

The current refrigeration is also inadequate. All three refrigerators are residential size and will not be able to handle the demand for larger cooking volumes. The recommendation is to remove the standalone reach-in units and replace with a combination walk-in cooler and freezer box. To achieve this the existing Storage Room will need to be removed and its equipment relocated as this is the ideal location for a walk-in.

The existing Employee Break Room should ideally be converted to a dry storage room. With a high-density shelving system storage can be maximized in this space. This room can also host a small table or mobile cart with a microwave and coffee brewer for the employees to use, if management does not feel comfortable with employees reheating in the microwave or grabbing coffee from the dispensers provided for customer use. The fire suppression Ansul box and the electrical boxes will remain in this room to minimize impacts to the infrastructure.

Holding and serving equipment will also need to be incorporated. At the serving window there is currently a three well hot food unit which is appropriately sized. However, there have been some advances in technology, and it may be appropriate to replace the hot wells with a combination hot and cold food well. These wells can be independently set to be hot or cold at the individual wells allowing for maximum flexibility and changes in the menu. Undercounter heated cabinets and refrigerators will also be needed to maintain food safety temperatures for any products that will be packaged or held for later use. The ice machine will be relocated next to the serving counter as you walk into the kitchen from the dining room. This is an ideal location if needing to grab ice quickly.

The existing ware washing area will need to be reworked. The two existing undercounter dishwashers appear to be in good condition and could potentially be reused, if desired, with minimal impact to the proposed plan. However, given the production requested, larger pots and sheet pans will need to be used, meaning a new three-compartment sink that can manage larger pots/pans will be required. If there is a desire to not manually wash larger pots/pans, it is recommended to upgrade the two undercounter dish machines to one stand up ventless dish machine with the proper associated clean and soiled dish tables, as represented in the proposed layout. To conserve on space the pot sink can be incorporated into the clean dish table. With these changes, the grease trap, located in the existing Receiving Area, will likely need to be resized by the plumbing engineer.

Food Preparation, shown in the ideal location, on the proposed plan, between cold storage, dry storage, and cooking, will need to be updated to comprise of a large stainless-steel worktable with two-compartment sinks. A two-bay prep sink is typically used to separate produce from proteins. Other prep equipment will be required such as a mixer, a slicer, food processors, etc. Moreover, the existing millwork counters are under the ideal height to work on at thirty-three inches. Typically, kitchen worktables are a minimum of thirty-four to thirty-six inches high, with thirty-four inches used in areas where accessibility may be a concern but is not explicitly required in employee work areas per the ADA. The American with Disabilities Act (ADA) notes in chapter 2 section 203.9 Employee Work Areas that the accessibility requirements that need to be met for employee work areas apply to the approach, entrance, and exits of the work area, an accessible means of egress, wiring for visual/audible alarms, accessible common use circulation paths in most work areas of at least one-thousand square feet. Nevertheless, the current design is mostly accessible in the kitchen with appropriate turning radii and circulation paths. The potential exception would be worktable heights if using thirty-six-inch-high tables.

The existing Receiving area is its own confined room, and the proposed plan is to completely open it up to have direct access into the kitchen and create a large short-term landing area. It will host trash holding and recycling bins and the employee lockers, as well.

Finally, in the dining room it is proposed to update the counter for a deeper millwork counter that can be used for condiments, trash, and pick-up, largely the same way it is today. The exception being that the new counter would also host self-serve hot and cold beverages, including an ice and water dispenser. This will help cut down on the number of employees needed as customers can simply serve themselves and improve turnaround time.

## ESTIMATED COSTS

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The estimated foodservice budget is based on a square foot price and considers the current supply-chain issues, as well as the median dealer discount, mark-up, freight rates, and final delivery and set-in-place of the foodservice equipment and millwork. Due to the volatility of the current supply-chain market, the rapid changes in rates, and variations in dealer discounts, mark-ups, and freight rates the estimated costs shown are subject

to change. Moreover, some equipment is experiencing delayed lead times that can range anywhere from six months to a year and a project turnover timeline should take this timeframe into account. The costs reflected do not include MEP connections by trades or any other “hard” construction costs.

Given an overall square footage of approximately nine-hundred twenty-eight square feet the estimated cost will range anywhere from \$200,000 - \$255,000. This budget is for use with the order of magnitude only. Itemized budget numbers will be provided during the design development and construction document phase of the project.

Furthermore, the operation would require at least three employees working in the space at any one time. That includes a foodservice manager, will need to be ServeSafe (or equivalent) certified, a cook, and a support worker for tasks such as dishwashing, cleaning, aiding in prep, packaging, and serving.

## CONCLUSION

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Though the foodservice space at the Needham Senior Center seems small at only nine-hundred-twenty-eight square feet a high-level overview indicates that the space can accommodate the operations for a production kitchen that can handle one-hundred-sixty meals per day. The deficiency today being wasted space in the main kitchen, due to the center island, and the mix use of commercial and residential equipment which is not adequate for bulk production. With improvements to the overall flow, adjacencies, and equipment the end goal for a small production kitchen of approximately one-hundred-sixty meals per day can be achieved.

# SECTION THREE

## Feasibility Cost Estimate

3.1 – Conceptual Design Estimate by PM&C







## Feasibility Estimate

# Needham Senior Center Kitchen Renovations

Needham, MA

**PMC LLC**  
20 Downer Avenue, Suite 5  
Hingham  
MA 02043  
(ph) 781-740-8007  
(f) 781-740-1012

Prepared for:

**Socotec AE Consulting, LLC**

November 11, 2022



**Needham Senior Center**  
Kitchen Renovations  
Needham, MA

11-Nov-22

**Feasibility Estimate**

**MAIN CONSTRUCTION COST SUMMARY**

|                                   | <b>Construction<br/>Start</b> | <b>\$/SF</b> | <b>Estimated Construction<br/>Cost</b> |
|-----------------------------------|-------------------------------|--------------|----------------------------------------|
|                                   | Summer 2023                   |              |                                        |
| <b>KITCHEN RENO</b>               |                               |              | \$665,631                              |
| <b>HAZ MAT Removal</b>            |                               |              | NIC                                    |
| <hr/>                             |                               |              |                                        |
| SUBTOTAL TRADE COSTS              |                               |              | \$665,631                              |
| Design and Estimating Contingency | 15.0%                         |              | \$99,845                               |
| Escalation                        | 5.3%                          |              | \$35,278                               |
| <hr/>                             |                               |              |                                        |
| SUBTOTAL                          |                               |              | \$800,754                              |
| General Conditions/GR's -         |                               |              | \$100,000                              |
| Insurances                        | 2.0%                          |              | \$18,015                               |
| Bond                              | 1.00%                         |              | \$8,008                                |
| Fee                               | 10.0%                         |              | \$92,678                               |
| Building Permit                   |                               |              | Assume by Owner                        |
| <hr/>                             |                               |              |                                        |
| <b>TOTAL CONSTRUCTION COSTS</b>   |                               |              | <b>\$1,019,455</b>                     |
| <hr/>                             |                               |              |                                        |

**Needham Senior Center**

Kitchen Renovations

Needham, MA

11-Nov-22

**Feasibility Estimate**

This Feasibility estimate was produced from drawings prepared by Socotec AE Consulting dated October 11, 2022. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be negotiated pricing to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufacturers.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

**ITEMS NOT CONSIDERED IN THIS ESTIMATE**

Items not included in this estimate are:

- All professional fees and insurance
- Building Permit costs
- Land acquisition, feasibility, and financing costs
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)
- Construction or occupancy phasing or off hours' work - except as noted in the estimate



Needham Senior Center  
Kitchen Renovations  
Needham, MA

Feasibility Estimate

**CONSTRUCTION COST SUMMARY IN CSI FORMAT**

|                |                                                     | <i>Subtotal</i> | <i>Total</i>    |
|----------------|-----------------------------------------------------|-----------------|-----------------|
| <b>DIV. 2</b>  | <b>EXISTING CONDITIONS</b>                          |                 | <b>\$32,355</b> |
|                | 024100 Selective Demolition                         | \$32,355        |                 |
|                | 025000 Haz Mat Removal                              | N.I.C.          |                 |
| <b>DIV. 3</b>  | <b>CONCRETE</b>                                     |                 | <b>\$7,500</b>  |
|                | 031000 Concrete                                     | \$7,500         |                 |
| <b>DIV. 4</b>  | <b>MASONRY</b>                                      |                 | <b>\$0</b>      |
|                | 042000 Unit Masonry                                 | \$0             |                 |
| <b>DIV. 5</b>  | <b>METALS</b>                                       |                 | <b>\$2,823</b>  |
|                | 055000 Metal Fabrications                           | \$2,823         |                 |
| <b>DIV. 6</b>  | <b>WOODS, PLASTICS &amp; COMPOSITES</b>             |                 | <b>\$4,705</b>  |
|                | 061000 Rough Carpentry                              | \$1,882         |                 |
|                | 062000 Finish Carpentry                             | \$2,823         |                 |
| <b>DIV. 7</b>  | <b>THERMAL &amp; MOISTURE PROTECTION</b>            |                 | <b>\$941</b>    |
|                | 070001 Joint Sealants, Waterproofing & Dampproofing | \$941           |                 |
| <b>DIV. 8</b>  | <b>DOORS &amp; WINDOWS</b>                          |                 | <b>\$0</b>      |
|                | 081110 Doors, Frames and Hardware                   | \$0             |                 |
| <b>DIV. 9</b>  | <b>FINISHES</b>                                     |                 | <b>\$76,817</b> |
|                | 090002 Tile                                         | \$0             |                 |
|                | 090003 Acoustical Tile                              | \$56,851        |                 |
|                | 090007 Painting                                     | \$6,084         |                 |
|                | 090003 Resilient Flooring                           | \$0             |                 |
|                | 096800 Carpet                                       | \$1,000         |                 |
|                | 092900 GWB Assemblies                               | \$12,882        |                 |
| <b>DIV. 10</b> | <b>SPECIALTIES</b>                                  |                 | <b>\$29,720</b> |
|                | 101100 Visual Display Boards                        | \$0             |                 |
|                | 101400 Signage                                      | \$1,000         |                 |
|                | 102113 Toilet Compartments                          | \$0             |                 |
|                | 102600 Wall Protection                              | \$27,720        |                 |
|                | 102813 Toilet Accessories                           | \$0             |                 |
|                | 104400 Fire Protection Specialties                  | \$1,000         |                 |



Needham Senior Center  
Kitchen Renovations  
Needham, MA

Feasibility Estimate

**CONSTRUCTION COST SUMMARY IN CSI FORMAT**

|                                     | <i>Subtotal</i> | <i>Total</i>     |
|-------------------------------------|-----------------|------------------|
| <b>DIV. 11 EQUIPMENT</b>            |                 | <b>\$254,070</b> |
| 114000 Food Service Equipment       | \$254,070       |                  |
| <b>DIV. 12 FURNISHINGS</b>          |                 | <b>\$28,800</b>  |
| 123000 Casework                     | \$28,800        |                  |
| 126000 Window Treatments            | \$0             |                  |
| <b>DIV. 13 SPECIAL CONSTRUCTION</b> |                 | <b>\$0</b>       |
| 139000 Special Construction         | \$0             |                  |
| <b>DIV. 14 CONVEYING</b>            |                 | <b>\$0</b>       |
| 142000 Conveying                    | \$0             |                  |
| <b>DIV.21 FIRE PROTECTION</b>       |                 | <b>\$4,705</b>   |
| 210000 Fire Protection              | \$4,705         |                  |
| <b>DIV.22 PLUMBING</b>              |                 | <b>\$85,775</b>  |
| 220000 Plumbing                     | \$85,775        |                  |
| <b>DIV.23 HVAC</b>                  |                 | <b>\$64,018</b>  |
| 230000 HVAC                         | \$64,018        |                  |
| <b>DIV.26 ELECTRICAL</b>            |                 | <b>\$61,402</b>  |
| 260000 Electrical                   | \$61,402        |                  |
| <b>DIV.32 EARTHWORK</b>             |                 | <b>\$12,000</b>  |
| 320000 Earthwork                    | \$12,000        |                  |
| <b>SUBTOTAL DIRECT (TRADE) COST</b> |                 | <b>\$665,631</b> |



# SOCOTEC KITCHEN REPORT

# APPENDIX



Needham Senior Center  
Kitchen Renovations  
Needham, MA

11-Nov-22

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

## Kitchen Renovation

Renovation area

Kitchen

941

**TOTAL**

**941 gsf**

### 02 EXISTING CONDITIONS

#### 021500 DEMOLITION

Remove SOG for new below grade grease trap and floor drains

300

sf

15.00

4,500

Demo and remove ceramic tile floor finishes and bases

941

sf

6.00

5,646

Demo and remove ceiling (tile and gwb)

941

sf

3.00

2,823

Demo and remove door, frame and hardware

NIC

GWB from one side of ETR framing

200

lf

36.00

7,200

Miscellaneous interior demolition - counters, casework and accessories etc.

941

gsf

2.00

1,882

Remove cut and capped fixtures and fittings

941

gsf

4.00

3,764

Remove existing kitchen equipment

By owner

Temp partition

30

lf

108.00

3,240

Temp door

1

loc

800.00

800

Dust control & protection of existing to remain - allowance

1

ls

2,500.00

2,500

SUBTOTAL

32,355

#### 025000 HAZARDOUS COMPONENTS ABATEMENT

HAZ MAT removal

By Owner

SUBTOTAL

-

### TOTAL EXISTING CONDITIONS

\$32,355

### 03 CONCRETE

#### 031000 CONCRETE

Replace slab on grade with new-

300

sf

25.00

7,500

SUBTOTAL

7,500

### TOTAL CONCRETE

\$7,500

### 04 MASONRY

#### 042000 UNIT MASONRY

SUBTOTAL

-

### TOTAL MASONRY

\$0

### 05 METALS

#### 055000 METAL FABRICATIONS

Misc. metals allowance

941

gsf

3.00

2,823

SUBTOTAL

2,823

### TOTAL METALS

\$2,823

### 06 WOOD & PLASTICS

#### 061000 ROUGH CARPENTRY

Misc. blocking allowance

941

gsf

2.00

1,882

SUBTOTAL

1,882

#### 064020 INTERIOR ARCHITECTURAL WOODWORK

Allowance for miscellaneous finish carpentry patching

941

gsf

3.00

2,823



Needham Senior Center  
Kitchen Renovations  
Needham, MA

11-Nov-22

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | ESTD<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|--------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|--------------|--------------|---------------|

### Kitchen Renovation

|     |                                                                       |              |     |          |        |          |                 |
|-----|-----------------------------------------------------------------------|--------------|-----|----------|--------|----------|-----------------|
| 54  | SUBTOTAL                                                              |              |     |          |        | 2,823    |                 |
| 55  |                                                                       |              |     |          |        |          |                 |
| 56  | <b>TOTAL WOOD &amp; PLASTICS</b>                                      |              |     |          |        |          | <b>\$4,705</b>  |
| 57  |                                                                       |              |     |          |        |          |                 |
| 58  | <b>07 THERMAL &amp; MOISTURE PROTECTION</b>                           |              |     |          |        |          |                 |
| 59  |                                                                       |              |     |          |        |          |                 |
| 60  | <b>070001 WATERPROOFING, DAMPPROOFING &amp; CAULKING</b>              |              |     |          |        |          |                 |
| 61  | Sealant allowance                                                     | <b>941</b>   | gsf | 1.00     | 941    |          |                 |
| 62  | SUBTOTAL                                                              |              |     |          |        | 941      |                 |
| 63  |                                                                       |              |     |          |        |          |                 |
| 64  | <b>TOTAL THERMAL AND MOISTURE PROTECTION</b>                          |              |     |          |        |          | <b>\$941</b>    |
| 65  |                                                                       |              |     |          |        |          |                 |
| 66  | <b>08 DOORS &amp; WINDOWS</b>                                         |              |     |          |        |          |                 |
| 67  |                                                                       |              |     |          |        |          |                 |
| 68  | <b>081100 DOORS, FRAMES AND HARDWARE</b>                              |              |     |          |        |          |                 |
| 69  | No work assumed                                                       |              |     |          |        |          |                 |
| 70  | SUBTOTAL                                                              |              |     |          |        | -        |                 |
| 71  |                                                                       |              |     |          |        |          |                 |
| 72  | <b>TOTAL DOORS AND WINDOWS</b>                                        |              |     |          |        |          | <b>\$0</b>      |
| 73  |                                                                       |              |     |          |        |          |                 |
| 74  | <b>09 FINISHES</b>                                                    |              |     |          |        |          |                 |
| 75  |                                                                       |              |     |          |        |          |                 |
| 76  | <b>0900002 TILE</b>                                                   |              |     |          |        |          |                 |
| 77  | Ceramic wall tile backsplash                                          | <b>84</b>    | sf  | 40.00    | 3,360  |          |                 |
| 78  | Quarry floor tile                                                     | <b>941</b>   | sf  | 38.00    | 35,758 |          |                 |
| 79  | Quarry floor tile base                                                | <b>201</b>   | lf  | 18.00    | 3,618  |          |                 |
| 80  | SUBTOTAL                                                              |              |     |          |        | -        |                 |
| 81  |                                                                       |              |     |          |        |          |                 |
| 82  | <b>0900003 ACOUSTIC CEILING TILE</b>                                  |              |     |          |        |          |                 |
| 83  | Acoustic ceiling tile; washable                                       | <b>941</b>   | sf  | 15.00    | 14,115 |          |                 |
| 84  | SUBTOTAL                                                              |              |     |          |        | 56,851   |                 |
| 85  |                                                                       |              |     |          |        |          |                 |
| 86  | <b>0900007 PAINTING AND COATING</b>                                   |              |     |          |        |          |                 |
| 87  | Prepare, prime and paint existing to remain walls and doors allowance | <b>1</b>     | ls  | 1,500.00 | 1,500  |          |                 |
| 88  | New sheetrock walls                                                   | <b>764</b>   | sf  | 6.00     | 4,584  |          |                 |
| 89  | SUBTOTAL                                                              |              |     |          |        | 6,084    |                 |
| 90  |                                                                       |              |     |          |        |          |                 |
| 91  | <b>096500 RESILIENT FLOORING</b>                                      |              |     |          |        |          |                 |
| 92  | No work assumed                                                       |              |     |          |        |          |                 |
| 93  | SUBTOTAL                                                              |              |     |          |        | -        |                 |
| 94  |                                                                       |              |     |          |        |          |                 |
| 95  | <b>096800 CARPET</b>                                                  |              |     |          |        |          |                 |
| 96  | Allowance to patch and repair assumed carpet at dinning               | <b>1</b>     | ls  | 1,000.00 | 1,000  |          |                 |
| 97  | SUBTOTAL                                                              |              |     |          |        | 1,000    |                 |
| 98  |                                                                       |              |     |          |        |          |                 |
| 99  | <b>092900 GYPSUM BOARD ASSEMBLIES</b>                                 |              |     |          |        |          |                 |
| 100 | Apply new MR GWB to existing studs                                    | <b>1,800</b> | sf  | 5.00     | 9,000  |          |                 |
| 101 | Allowance to patch ETR partitions disturbed by new MEP work           | <b>941</b>   | gsf | 2.00     | 1,882  |          |                 |
| 102 | GWB ceilings and soffits allowance                                    | <b>1</b>     | ls  | 2,000.00 | 2,000  |          |                 |
| 103 | SUBTOTAL                                                              |              |     |          |        | 12,882   |                 |
| 104 |                                                                       |              |     |          |        |          |                 |
| 105 | <b>TOTAL FINISHES</b>                                                 |              |     |          |        |          | <b>\$76,817</b> |
| 106 |                                                                       |              |     |          |        |          |                 |
| 107 | <b>10 - SPECIALTIES</b>                                               |              |     |          |        |          |                 |
| 108 |                                                                       |              |     |          |        |          |                 |
| 109 | <b>101100 VISUAL DISPLAY SURFACES</b>                                 |              |     |          |        | No scope |                 |
| 110 | SUBTOTAL                                                              |              |     |          |        | -        |                 |
| 111 |                                                                       |              |     |          |        |          |                 |

# SOCOTEC KITCHEN REPORT

# APPENDIX



Needham Senior Center  
Kitchen Renovations  
Needham, MA

11-Nov-22

| CSI<br>CODE               | DESCRIPTION                                                                             | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST    |
|---------------------------|-----------------------------------------------------------------------------------------|-----|------|--------------|---------------|--------------|------------------|
| <b>Kitchen Renovation</b> |                                                                                         |     |      |              |               |              |                  |
| 112                       | <b>101400 SIGNAGE</b>                                                                   |     |      |              |               |              |                  |
| 113                       | Signage and graphics allowance                                                          | 1   | ls   | 1,000.00     | 1,000         |              |                  |
| 114                       | SUBTOTAL                                                                                |     |      |              |               | 1,000        |                  |
| 115                       |                                                                                         |     |      |              |               |              |                  |
| 116                       | <b>102110 TOILET COMPARTMENTS</b>                                                       |     |      |              |               |              |                  |
| 117                       | SUBTOTAL                                                                                |     |      |              |               | -            |                  |
| 118                       |                                                                                         |     |      |              |               |              |                  |
| 119                       | <b>102600 WALL Protection</b>                                                           |     |      |              |               |              |                  |
| 120                       | Stainless steel wall panel (8' high)                                                    | 256 | sf   | 50.00        | 12,800        |              |                  |
| 121                       | FRP wall panel (8' high)                                                                | 696 | sf   | 20.00        | 13,920        |              |                  |
| 122                       | Allowance for wall protection                                                           | 1   | ls   | 1,000.00     | 1,000         |              |                  |
| 123                       | SUBTOTAL                                                                                |     |      |              |               | 27,720       |                  |
| 124                       |                                                                                         |     |      |              |               |              |                  |
| 125                       | <b>102800 TOILET ACCESSORIES</b>                                                        |     |      |              |               |              |                  |
| 126                       | No work assumed                                                                         |     |      |              |               |              |                  |
| 127                       | SUBTOTAL                                                                                |     |      |              |               | -            |                  |
| 128                       |                                                                                         |     |      |              |               |              |                  |
| 129                       | <b>104400 FIRE PROTECTION SPECIALTIES</b>                                               |     |      |              |               |              |                  |
| 130                       | Fire extinguisher cabinets                                                              | 1   | ls   | 1,000.00     | 1,000         |              |                  |
| 131                       | SUBTOTAL                                                                                |     |      |              |               | 1,000        |                  |
| 132                       |                                                                                         |     |      |              |               |              |                  |
| 133                       | <b>TOTAL - SPECIALTIES</b>                                                              |     |      |              |               |              | <b>\$29,720</b>  |
| 134                       |                                                                                         |     |      |              |               |              |                  |
| 135                       | <b>11 - EQUIPMENT</b>                                                                   |     |      |              |               |              |                  |
| 136                       |                                                                                         |     |      |              |               |              |                  |
| 137                       | <b>114000 FOOD SEWRVICE EQUIP.</b>                                                      |     |      |              |               |              |                  |
| 138                       | Food service equipment budget per Colburn Guyette report dated 8-12-22                  | 941 | sf   | 270.00       | 254,070       |              |                  |
| 139                       | SUBTOTAL                                                                                |     |      |              |               | 254,070      |                  |
| 140                       |                                                                                         |     |      |              |               |              |                  |
| 141                       | <b>TOTAL - EQUIPMENT</b>                                                                |     |      |              |               |              | <b>\$254,070</b> |
| 142                       |                                                                                         |     |      |              |               |              |                  |
| 143                       | <b>12 - FURNISHINGS</b>                                                                 |     |      |              |               |              |                  |
| 144                       |                                                                                         |     |      |              |               |              |                  |
| 145                       | <b>123000 CASEWORK</b>                                                                  |     |      |              |               |              |                  |
| 146                       | Pickup, base and counter                                                                | 15  | lf   | 550.00       | 8,250         |              |                  |
| 147                       | Prep cabinet, base and counter                                                          | 11  | lf   | 550.00       | 6,050         |              |                  |
| 148                       | Prep upper shelf                                                                        | 11  | lf   | 350.00       | 3,850         |              |                  |
| 149                       | Serving cabinet, base and counter                                                       | 14  | lf   | 550.00       | 7,700         |              |                  |
| 150                       | Serving upper shelf                                                                     | 5   | lf   | 350.00       | 1,750         |              |                  |
| 151                       | Misc. casework at serve window                                                          | 6   | lf   | 200.00       | 1,200         |              |                  |
| 152                       | SUBTOTAL                                                                                |     |      |              |               | 28,800       |                  |
| 153                       |                                                                                         |     |      |              |               |              |                  |
| 154                       | <b>126000 WINDOW TREATMENTS</b>                                                         |     |      |              | Assume ETR    |              |                  |
| 155                       | SUBTOTAL                                                                                |     |      |              |               | -            |                  |
| 156                       |                                                                                         |     |      |              |               |              |                  |
| 157                       | <b>TOTAL - FURNISHINGS</b>                                                              |     |      |              |               |              | <b>\$28,800</b>  |
| 158                       |                                                                                         |     |      |              |               |              |                  |
| 159                       | <b>21 - FIRE PROTECTION</b>                                                             |     |      |              |               |              |                  |
| 160                       |                                                                                         |     |      |              |               |              |                  |
| 161                       | <b>210000 FIRE PROTECTION</b>                                                           |     |      |              |               |              |                  |
| 162                       | Remove and reinstall branch piping and sprinkler heads as required for renovated spaces | 941 | gsf  | 5.00         | 4,705         |              |                  |
| 163                       | SUBTOTAL                                                                                |     |      |              |               | 4,705        |                  |
| 164                       |                                                                                         |     |      |              |               |              |                  |
| 165                       | <b>TOTAL - FIRE PROTECTION</b>                                                          |     |      |              |               |              | <b>\$4,705</b>   |



Needham Senior Center  
Kitchen Renovations  
Needham, MA

11-Nov-22

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

### Kitchen Renovation

#### 22 - PLUMBING

##### 220000 PLUMBING

##### Plumbing Fixtures

Connect to new kitchen equipment

25

ea

800.00

20,000

Replace Gas Shutoff / Ansul System

1

ea

BY OWNER

Floor drains

4

ea

1,200.00

4,800

##### Domestic Water Piping

Extend or repair fixture rough-in piping

25

ea

250.00

6,250

##### Pipe Insulation

Pipe insulation or replace, as required

25

ea

75.00

1,875

##### Sanitary Waste And Vent Pipe

New sanitary underground pipe

80

lf

130.00

10,400

Extend fixture rough-in piping at fixtures

30

ea

300.00

9,000

Grease tank and pump (50 gmp), recessed

1

ls

15,000.00

15,000

Connect to exiting sanitary system, underground

1

loc

800.00

800

Clean existing sanitary pipe allowance

1

ls

4,500.00

4,500

##### Miscellaneous

Coordination & management

1

ls

10,000.00

10,000

Coring, sleeves & fire stopping

1

ls

1,500.00

1,500

Testing and sterilization

1

ls

600.00

600

Fees & permits

1

ls

1,050.00

1,050

SUBTOTAL

85,775

#### TOTAL - PLUMBING

\$85,775

#### 23 HVAC

##### 230000 HVAC, GENERALLY

##### Equipment

VRF Heat Pump

1

ea

7,500.00

7,500

VRF Branch Controller

1

ea

4,500.00

4,500

VRF 4-Way Cassette w/ Grill

2

ea

2,800.00

5,600

Kitchen Exhaust Fan KEF-1

1

ea

6,500.00

6,500

Kitchen Makeup Air Fan, MAU-1

1

ea

6,500.00

6,500

##### Sheet metal & Accessories

Grease Duct, Welded

80

lf

30.00

2,400

Insulation, Fyre Wrap

80

lf

8.00

640

##### HVAC Piping

##### Refrigerant Piping

Refrigerant Piping with inline components

240

ea

35.00

8,400

##### Condensate Drain Piping

Copper pipe type L with fittings & hangers

2

ea

700.00

1,400

##### Piping Insulation

Piping insulation, Refrigerant

240

lf

13.00

3,120

##### Temperature Controls (DDC)

Provide and connect new VRF controls to BMS

941

sf

4.50

4,235

##### Balancing

System testing & balancing

941

sf

3.00

2,823

##### Miscellaneous

Coordination & management

1

ls

8,000.00

8,000

Coring, sleeves & fire stopping

1

ls

1,000.00

1,000

Testing and sterilization

1

ls

600.00

600

Fees & permits

1

ls

800.00

800

SUBTOTAL

64,018

# SOCOTEC KITCHEN REPORT

# APPENDIX



Needham Senior Center  
Kitchen Renovations  
Needham, MA

11-Nov-22

| CSI<br>CODE | DESCRIPTION | QTY | UNIT | UNIT<br>COST | EST'D<br>COST | SUB<br>TOTAL | TOTAL<br>COST |
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-------------|-----|------|--------------|---------------|--------------|---------------|

## Kitchen Renovation

|                    |  |  |  |  |  |  |                 |
|--------------------|--|--|--|--|--|--|-----------------|
| <b>TOTAL, HVAC</b> |  |  |  |  |  |  | <b>\$64,018</b> |
|--------------------|--|--|--|--|--|--|-----------------|

## 26 ELECTRICAL

### Power:

|                                                               |   |    |          |       |
|---------------------------------------------------------------|---|----|----------|-------|
| Modify and make connections at existing gear and distribution | 1 | ls | 5,000.00 | 5,000 |
|---------------------------------------------------------------|---|----|----------|-------|

### Equipment Wiring:

|                                    |   |    |          |       |
|------------------------------------|---|----|----------|-------|
| MAU feed and connections           | 1 | ea | 4,500.00 | 4,500 |
| VRF/Heat pump feed and connections | 1 | ea | 4,500.00 | 4,500 |
| VRF/Cassette feed and connections  | 2 | ea | 1,200.00 | 2,400 |
| DDC feed and connections           | 1 | ea | 500.00   | 500   |

### Kitchen equipment Wiring:

|                                 |   |    |          |       |
|---------------------------------|---|----|----------|-------|
| Exhaust fan feed and connection | 1 | ea | 1,500.00 | 1,500 |
| Combi oven (Gas)                | 1 | ea | 1,000.00 | 1,000 |
| Dishwasher feed and connection  | 2 | ea | 2,500.00 | 5,000 |
| 20A feed and connections        | 7 | ea | 1,000.00 | 7,000 |

### Lighting:

|                                                  |     |    |       |        |
|--------------------------------------------------|-----|----|-------|--------|
| New Kitchen lighting, installation and circuitry | 941 | sf | 12.00 | 11,292 |
| Lighting controls                                | 941 | sf | 2.00  | 1,882  |
| Branch devices and circuitry not depicted        | 941 | sf | 8.00  | 7,528  |

### Fire Alarm:

|                                                      |   |    |          |       |
|------------------------------------------------------|---|----|----------|-------|
| Allow for modifications to existing FACP and testing | 1 | ls | 2,500.00 | 2,500 |
| Devices, modules and cabling                         | 1 | ls | 2,500.00 | 2,500 |

### Telecommunications (assumes ETR)

ETR

### Security system (assumes ETR)

ETR

### Miscellaneous:

|                    |   |    |          |       |
|--------------------|---|----|----------|-------|
| Demo and make safe | 1 | ls | 3,500.00 | 3,500 |
| Fees and permits   | 1 | ls | 800.00   | 800   |

### SUBTOTAL

61,402

|                         |  |  |  |  |  |  |                 |
|-------------------------|--|--|--|--|--|--|-----------------|
| <b>TOTAL ELECTRICAL</b> |  |  |  |  |  |  | <b>\$61,402</b> |
|-------------------------|--|--|--|--|--|--|-----------------|

## 32 - EARTHWORK

### 320000 EARTHWORK

|                                                                      |    |    |          |       |
|----------------------------------------------------------------------|----|----|----------|-------|
| Allowance to remove and reinstall soils for new grease trap          | 1  | ls | 4,000.00 | 4,000 |
| Allowance for E&B at new sanitary                                    | 60 | lf | 50.00    | 3,000 |
| Allowance for misc. disposal, dewatering, bedding and fill materials | 1  | ls | 5,000.00 | 5,000 |

### SUBTOTAL

12,000

|                          |  |  |  |  |  |  |               |
|--------------------------|--|--|--|--|--|--|---------------|
| <b>TOTAL - EARTHWORK</b> |  |  |  |  |  |  | <b>12,000</b> |
|--------------------------|--|--|--|--|--|--|---------------|



# SECTION FOUR

## Engineering Feasibility Report

4.1 – MEP Feasibility report by BLW Engineers, Inc.





**Needham Senior Center  
300 Hillside Avenue  
Needham, MA**

## **MEP Feasibility Study**



***Prepared For:***

**SOCOTEC AE Consulting, LLC  
250 Dorchester Avenue  
Boston, MA 02127**

**October 11, 2022**



BLW Engineers, Inc., 311 Great Road, P.O. Box 1551, Littleton, MA 01460  
Tel: 978.486.4301 Fax: 978.428.0067  
[www.blwengineers.com](http://www.blwengineers.com)



## FIRE PROTECTION

### *Summary*

The following is a report of the existing Fire Protection systems serving the CATH center kitchen based on 09.15.2022 site visit. The objective to determine feasibility of a kitchen renovation and upgrade.

### *Fire Protection Existing Conditions*

Existing sprinkler grid in the kitchen.

### *Fire Protection Recommendations*

Sprinkler heads & branch piping will be relocated as required for any modifications made to the walls and ceilings to ensure complete sprinkler head coverage for 100% of the renovated space.

### *End of Fire Protection Section*

## PLUMBING

### *Summary*

The following is a report of the existing Plumbing systems serving the CATH center kitchen based on 09.15.2022 site visit. The objective to determine feasibility of a kitchen renovation and upgrade.

### *Plumbing Existing Conditions*

Cold water service in basement. A central hot water heater system in basement supplies hot water to the entire building. Cold & Hot water distribution in the kitchen to the existing fixtures. Existing fixtures include three-compartment sink, prep sink, and hand sinks, & two commercial dishwashers. A grease interceptor installed in floor of kitchen. Sanitary connection to main below the floor. Vent piping from all fixtures above the ceiling. An ansul system and gas shut off valve to one range.

### *Plumbing Recommendations*

Preliminary plumbing information for the proposed kitchen is estimated to have 1 ¼" cold water feeding the kitchen space. Hot water requirement of 90 gallons per hour recovery. The space will require a 3" vent connection, a 4" sanitary connection to the sanitary in the building, and a 50-gpm grease interceptor for all grease waste fixtures (3 bay sinks, dish machines, prep sinks, floor drains).

### *End of Plumbing Section*



## MECHANICAL

### Summary

The following is a report of the existing HVAC systems serving the CATH center kitchen based on 06.08.2022 site visit. The objective to determine feasibility of a kitchen renovation and upgrade

### Mechanical Existing Conditions

The existing HVAC system serving the kitchen consists of the following components:

- Make up Air Unit
- Exhaust Fan
- Fan Coil Unit

The make-up air unit and the exhaust fan are located on the roof. The Fan coil unit is located in the plenum space above the acoustical ceiling tiles. There is one thermostat located in the kitchen. The FCU provides heating or cooling to the zone to satisfy the thermostat. The MAU and the fan serve the kitchen exhaust hood.

See below for the performance data of the existing units obtained from the original 01/04/2012 drawings.

| Existing FCU                 |                |
|------------------------------|----------------|
| Total Cooling Capacity (MBH) | 20.3           |
| Heating Capacity (MBH)       | 15             |
| Manufacturer                 | Mitsubishi     |
| Model                        | PEFY-P24NMAU-E |

| Existing Gas Fired Make Up Air Unit |             |
|-------------------------------------|-------------|
| Total CFM                           | 1200        |
| Outside Air CFM                     | 1200        |
| MBH In/Out                          | 150/120     |
| Manufacturer:                       | Greenheck   |
| Model:                              | IGX-109-H12 |



| Existing Kitchen Hood Exhaust Fan |           |
|-----------------------------------|-----------|
| CFM                               | 1200      |
| HP                                | 3/4       |
| SP                                | 1         |
| Manufacturer:                     | Greenheck |
| Model:                            | CUB-141-7 |

### ***Mechanical Recommendations***

Kitchen space shall be provided with heating and cooling by a variable refrigerant volume fan coil units interconnected to heat recovery type variable refrigerant volume heat pump. Each fan coil unit shall be a ceiling-mounted type unit. Each heat pump unit shall be interconnected to the several system fan coil units through an insulated refrigerant piping system and be able to provide simultaneous heating and cooling. A condensate drain piping system will also be required to transport condensate from each unit to storm drain or to the outdoors.

Fan coil units shall be controlled by a wall mounted programmable thermostat.

New kitchen grease hood shall be provided with welded steel grease ductwork, grease duct wrap and roof mounted exhaust fan. Make-up air shall be provided through hood PSP, insulated supply ductwork and roof mounted outdoor air ductwork. The make-up air shall be heated from 0-60 degrees F.

Cooking hood shown on Proposed Foodservice Layout, Appendix A is approximately 12 feet in length. At 300 cfm/lf of hood approximately 3600 cfm of grease exhaust (KE) is required.

### ***End of Mechanical Section***

## **ELECTRICAL**

### ***Summary***

The following is a report of the existing Electrical systems serving the CATH center kitchen based on 06.08.2022 site visit. The objective to determine feasibility of a kitchen renovation and upgrade.

### ***Electrical Existing Conditions***

#### **Electrical Distribution**

The existing building's service is 800 Amp, 120/208 Volt, 3-phase, 4-wire. The service equipment consists of a 800 Amp main distribution switchboard containing internal breakers distributing power to lighting and power panels. The main panel also serves the normal side of a 400Amp automatic transfer switch. The emergency side is fed from a stand-by





exterior generator. The load side of the transfer switch feeds a stand-by panel SBP. There is a 150Amp/3-pole circuit breaker in SBP which serves the existing kitchen panel.

The kitchen is equipped with an existing 150Amp, 120/208V, 3-phase, 4-wire 42 pole panel. The panel has minimal spare physical capacity.

Condition: The general condition of the electrical equipment was observed to be in good condition.

*Electrical distribution equipment and components are expected to have a useful life of 30 years. Switchboards, Panelboards, transformers, generators, and wiring systems are typically serviceable for 10 to 20 years beyond this time if properly maintained and not subjected to repeated overloading or short-circuiting conditions.*

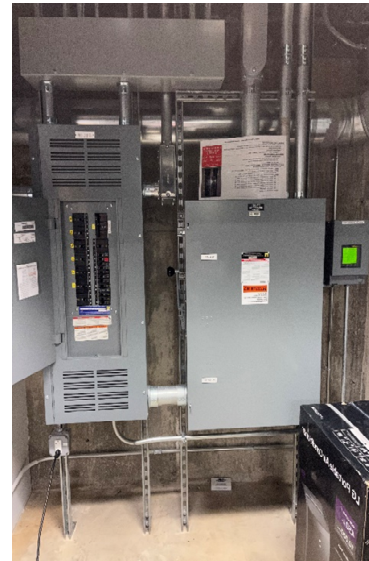
Capacity: The existing 800Amp service at 208V/3-phase equates to 288kW. From the bills provided the max demand is 85.6kW. This equates to approximately 237Amps or 30% of the overall service capacity.

#### Fire Alarm System

The facility is equipped with an addressable fire alarm system. The system is a Gamewell FCI E3 Series. The system appeared to be installed in accordance with NFPA 72 National Fire Alarm Code, Fire Protection and Life Safety Systems, ADA and Town of Needham Code and Bylaws for Life Safety and Fire Alarm



**Existing Kitchen Panel**



**Stand-By Panel and ATS**



***Existing Fire Alarm Control Panel***

## ***Electrical Recommendations***

### **Electrical Distribution**

Preliminary electrical information for the proposed kitchen equipment is estimated to be an additional 65kW of connected load. The proposed renovation/addition will also require additional mechanical and plumbing (refer to mechanical and plumbing sections of report). The estimated load for this equipment is 75kW. These estimated loads equate to a connected load of 140 kW or 389 Amps at 208V/3-phase. Applying a demand factor of 65% for the Kitchen equipment (allowable demand per NEC) brings the estimated load to 117 kW (325Amps). Adding the proposed demand to the existing demand of 85.6 kW equates to a total building demand load of 202.6 kW or 563 Amps at 208V/3-phase. This would indicate that the existing electrical service is capable of serving the proposed estimated kitchen loads.

The kitchen shall be provided with estimated 400Amp, 208Volt, 3-phase service fed from the existing switchboard. Kitchen shall be provided with dedicated panelboards located within the space. The panels will service all mechanical, plumbing and kitchen equipment. The equipment under the hood shall be connected to shunt trip circuit breakers which will be shut down during the activation of the hood fire suppression system. The remainder of the kitchen equipment shall be connected to the kitchen panels. All 120V, 15A and 20A receptacles shall be Ground Fault Protected.

### **Fire Alarm**

The existing fire alarm system shall be expanded utilizing addressable terminal cabinets and remote power supplies in the kitchen as required to provide code compliant coverage. Fire alarm devices shall include pull stations at exits, interconnection with the hood suppression system and audio/visual device for notification. Provide audio/visual notification device coverage throughout the facility that meets the requirements of NFPA and ADA. Utilize strobe only devices in public bathrooms and other small rooms where ample audible notification is present.

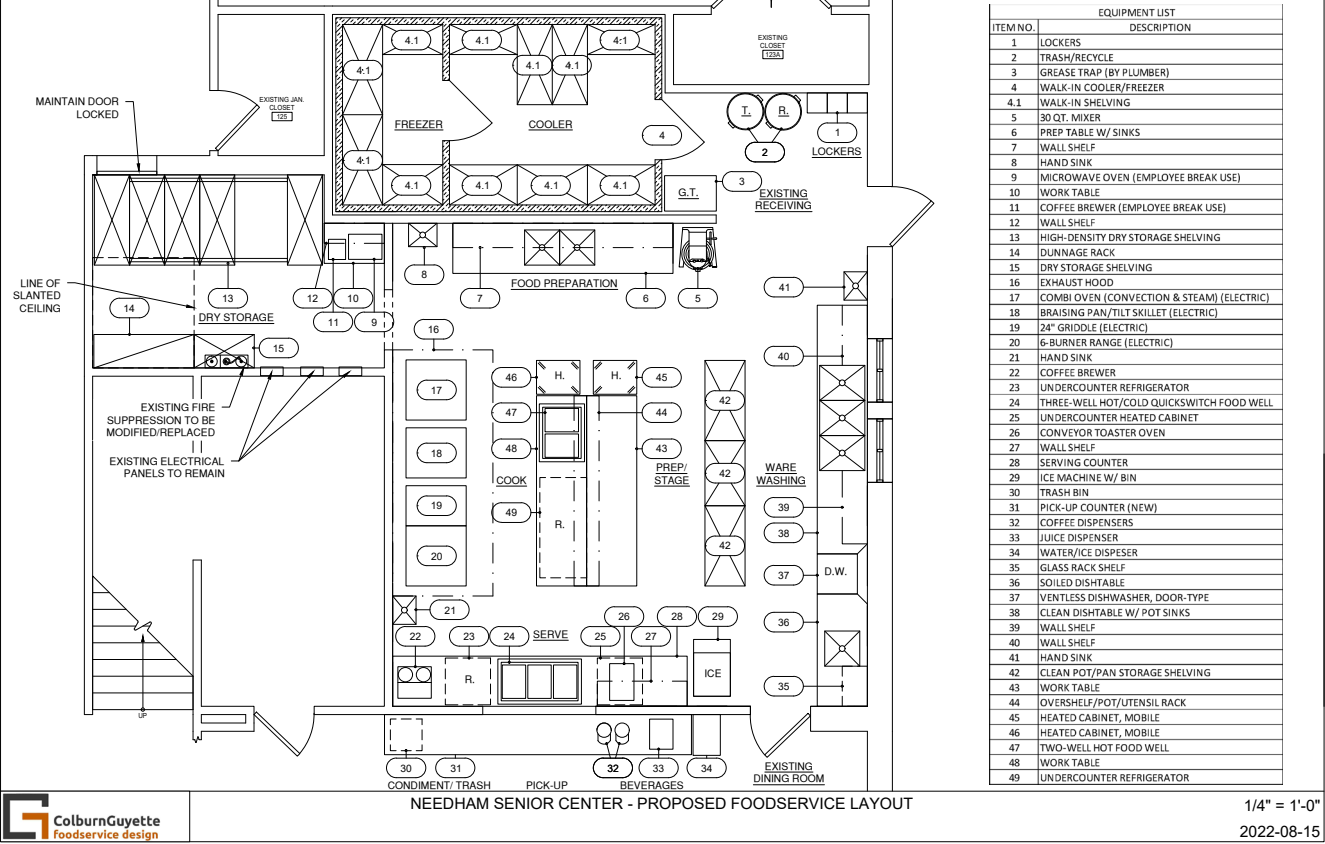


# APPENDIX A

## Proposed Foodservice Layout

by ColburnGuyette









**APPENDIX I**  
**NEEDHAM CATH SPACE UTILIZATION STUDY**  
**QUESTIONNAIRE RESULTS**

## NEEDHAM CATH SPACE UTILIZATION STUDY SURVEY

**The following question was posed to attendees at the space utilization study presentations:**

*Please share any information about the center you think would be helpful to this study.  
Are there any spaces, indoors or outdoors, that you think can be improved?*

*23 responses were received.*

**Reply 1:**

The gym could be improved by dedicating more available space. The pool room space is underutilized and does not accommodate handicap members whereas the gym serves a very much larger population including the handicapped.

**Reply 2:**

Switch the pool room and the gym.

**Reply 3:**

Move access door in dining room to attached room (movie/music room) depletes temp. Front 1st floor main door needs handicapped access openers (already at bathrooms).

**Reply 4:**

Center is fine as is with me.

**Reply 5:**

More Parking!!! Leave kitchen clean after cooking lessons.

**Reply 6:**

The gym needs more space and extended hours.

**Reply 7:**

More free weights in gym, longer hours in gym, more space for gym.

**Reply 8:**

1. Switch game room & fitness room 2. No basement use.

**Reply 9:**

Computers should be spread around to another area because room is off limits when SHINE is in session. Perhaps 1 or 2 more in library.

**Reply 10:**

An upgraded computer system so clients can sign up for functions online.

**Reply 11:**

Keep it the way it is.



**Reply 12:**

1. No industrial kitchen – will lose the “hominess” it has now. 2. No kitchenette in pool room. It’s for pool. 3. Gift shop could be bigger. 4. Roof is fine.

**Reply 13:**

No industrial kitchen needed. No changes needed. CATH is great as is.

**Reply 14:**

Bocce court would be great! Retractable awnings on roof deck .

**Reply 15:**

1. Deck needs shady areas. 2. Fitness Center needs more space. 3. Library seems underused – use that for something else? 4. Bathroom doors have signs to keep them open. But the doors will not stay open, no matter how they are caught on door stoppers.

**Reply 16:**

Make the fitness room larger. Have the van leave about 3:30pm instead of 2 or 2:30pm. Need more shelves for the library room. More hp parking spaces. Maybe 2 to 3 more.

**Reply 17:**

Provide shade for outside patio. Open on weekends. Very lonely on weekends. Limited parking.

**Reply 18:**

1. Bigger gym. 2. Cover the decks so it can be used in bad weather and in the colder seasons. 3. Make the lobby cozier. 4. Make the meals here. 5. Open fitness center at 8:30.

**Reply 19:**

Heat the space we have now. Do not shrink the deck.

**Reply 20:**

1. Add TV to pool room. Have events watching special shows, like Red Sox games. 2. More movies, events – not just Friday.

**Reply 21:**

Outside daily/weekly events board, front & back entrances. Keep a number of chairs outside year round – porch deck. 8 seat tables in lunch room. Large flag over front wall above reception area. Outside porch gathering area similar to Wellesley Center. Art room to have movie screen to use when downstairs movie room has a conflicting event. Lobby rug, comfortable chairs, welcoming living room – currently looks like a bus station waiting area.

**Reply 22:**

1. Fitness center needs more space. 2. Pool room could move into fitness room. 3. Portico on side of building needs a roof. 4. Put up building board listing daily activities.

**Reply 23:**

Unused space should be utilized for daily activities i.e. pool room could be moved to gym?





# **APPENDIX J**

## **GETTING BACK TO THE CENTER**

### **QUESTIONNAIRE RESULTS**

## APPENDIX

## GETTING BACK TO THE CENTER QUESTIONNAIRE RESPONSES

| How did you come to the Center?                                                                                                       | Pre-COVID I came to the Center...                 | Since the onset of COVID I came to the Center... | I am hesitant to come to the Center because... | In the future I would like the Center to... | I would come to the Center more if...                                                                                                                                                                                                                                                                                                            | New Programs/Events I would like to see at the Center are...                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|------------------------------------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Be social, To Play Pool                                                                                                               | Daily                                             | Daily                                            | I still come to the Center                     | stay the same                               | I have open on at least one evening each week                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                |
| Never came                                                                                                                            | didn't go to the Center                           | Never                                            | Not interested                                 | have more in-person programs                | I wasn't working                                                                                                                                                                                                                                                                                                                                 | N/A                                                                                                                                                                            |
| SHINE Counselor                                                                                                                       | Once a week                                       | Never                                            | COVID in general                               | stay the same                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Exercise Classes                                                                                                                      | Once a week                                       | Once a week                                      | COVID in general                               | stay the same                               | There was no Covid                                                                                                                                                                                                                                                                                                                               | Sarah Levy's back at Center                                                                                                                                                    |
| Be social, Bridge                                                                                                                     | A few times a week                                | Never                                            | COVID in general                               | stay the same                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Exercise Classes                                                                                                                      | Only when there was a program I was interested in | Never                                            | COVID in general                               | stay the same                               | I've computer help was offered                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                |
| Exercise Classes, SHINE/Tax Prep                                                                                                      | Only when there was a program I was interested in | Never                                            | COVID in general                               | stay the same                               | proof of vaccination was mandated and people were wearing masks consistently and properly.                                                                                                                                                                                                                                                       | More zoom programming                                                                                                                                                          |
| Exercise Classes, Fitness Room, Social Services                                                                                       | Once a week                                       | Only when there is a program I am interested in  | I still come to the Center                     | have more fitness/exercise programs         | Personnel really was controlled in general                                                                                                                                                                                                                                                                                                       | Field trips for culture and sport                                                                                                                                              |
| Exercise Classes, Fitness Room                                                                                                        | Once a week                                       | Once a week                                      | I don't really know anyone there               | have more fitness/exercise programs         |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Fitness Room                                                                                                                          | A few times a week                                | A few times a week                               | COVID in general                               | stay the same                               | Once I have my surgery and I'm healed. Do not want any test to show positive before my appointed surgery                                                                                                                                                                                                                                         |                                                                                                                                                                                |
| Current Events, Book Story Group                                                                                                      | Once a week                                       | Never                                            | COVID in general                               | stay the same                               | Mask and immunizations were required                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                |
| Exercise Classes, SHINE/Tax Prep                                                                                                      | Once a week                                       | Never                                            | COVID in general                               | stay the same                               | There were in-person exercise & dance classes (in-person)                                                                                                                                                                                                                                                                                        | More group fitness programs                                                                                                                                                    |
| Fitness Room                                                                                                                          | A few times a week                                | A few times a week                               | I still come to the Center                     | have more fitness/exercise programs         |                                                                                                                                                                                                                                                                                                                                                  | if I could play bridge with just my friends.                                                                                                                                   |
| Never/none yet                                                                                                                        | didn't go to the Center                           | Never                                            | COVID in general                               | have more cultural/educational programs     | awareness of others being vaccinated and wearing masks                                                                                                                                                                                                                                                                                           | More zoom until COVID diminishes                                                                                                                                               |
| I don't come in person                                                                                                                | A few times a week                                | Never                                            | COVID in general                               | have more cultural/educational programs     | COVID wasn't surging                                                                                                                                                                                                                                                                                                                             | History of art series, cultural or historical programs                                                                                                                         |
| Be social, From, Speaker Presentations                                                                                                | A few times a week                                | Never                                            | COVID in general                               | stay the same                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Exercise Classes, SHINE/Tax Prep                                                                                                      | Once a week                                       | Never                                            | COVID in general                               | stay the same                               | COVID was not still raging. My husband and I do no indoor activities with other people                                                                                                                                                                                                                                                           |                                                                                                                                                                                |
| Exercise Classes                                                                                                                      | A few times a week                                | Never                                            | COVID in general                               | have more in-person programs                | COVID diminishes                                                                                                                                                                                                                                                                                                                                 | Friday movies                                                                                                                                                                  |
| Be social, Exercise Classes, Speaker Presentations                                                                                    | A few times a week                                | Never                                            | People aren't good about wearing masks         | have more fitness/exercise programs         |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Exercise Classes, Speaker Presentations, volunteer at front desk                                                                      | Only when there was a program I was interested in | Once a week                                      | COVID in general                               | stay the same                               | I could depend on everyone complying with the team masking mandate                                                                                                                                                                                                                                                                               | No suggestions. Would like exercise programs to have the zoom option.                                                                                                          |
| Fitness Room                                                                                                                          | Only when there was a program I was interested in | A few times a week                               | I still come to the Center                     | stay the same                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, volunteer                                                                                                                  | Only when there was a program I was interested in | A few times a week                               | I still come to the Center                     | have more cultural/educational programs     | I did not have to wear a mask                                                                                                                                                                                                                                                                                                                    | invite attendees current updates and people new or potentially new to the Center to share a unique skill or life story                                                         |
| Fitness Room                                                                                                                          | A few times a week                                | A few times a week                               | I still come to the Center                     | have more fitness/exercise programs         |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, Speaker Presentations                                                                                                      | Only when there was a program I was interested in | Only when there is a program I am interested in  | I still come to the Center                     | stay the same                               | I liked the Center as it was. The Covid has driven people away That is the fault of no one. I could be wrong but I think the food service was a big attraction. The social programs are crippled by the Covid and necessary rules. We can't help it so far yet.                                                                                  | How to tell them out. Put up a suggestion box.                                                                                                                                 |
| Exercise Classes                                                                                                                      | Once a week                                       | Never                                            | COVID in general                               | stay the same                               | Covid-19 is no longer a pandemic.                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                |
| Be social, Exercise Classes                                                                                                           | A few times a week                                | Never                                            | COVID in general                               | have more cultural/educational programs     | The world in general was in a suffer, less Covid focused place                                                                                                                                                                                                                                                                                   | Art appreciation/discussions                                                                                                                                                   |
| Be social, Exercise Classes, Speaker Presentations, SHINE/Tax Prep, Blood Pressure Clinic                                             | Once a week                                       | Never                                            | Weather conditions                             | have more in-person programs                | as soon as I get my tests done                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                |
| Be social, Movies                                                                                                                     | Once a week                                       | Only when there is a program I am interested in  | I still come to the Center                     | have more musical programs                  | Movies on Friday                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                |
| Be social, Speaker Presentations                                                                                                      | Only when there was a program I was interested in | Only when there is a program I am interested in  | People aren't good about wearing masks         | have more in-person programs                |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Speaker Presentations, SHINE/Tax Prep, Computer Access / Library, Blood Pressure Clinic, Volo                                         | didn't go to the Center                           | Only when there is a program I am interested in  | I still come to the Center                     | have more in-person programs                | Movie, Guest speakers (health/wellness), D. Garlick, update from the Housing Plan Work Group, Needham Business Assn. now are we attracting new businesses, how has COVID impacted businesses, Needham Exchange Club - what is their scope/plans for 2022, Fire dept-importance of smoke detectors, carbon monoxide, update on Public Safety Blog | Group Games is BINGO                                                                                                                                                           |
| Exercise Classes                                                                                                                      | A few times a week                                | Never                                            | COVID in general                               | stay the same                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, Food, Fitness Room                                                                                                         | A few times a week                                | A few times a week                               | I still come to the Center                     | have more musical programs                  | No change                                                                                                                                                                                                                                                                                                                                        | Film                                                                                                                                                                           |
| Exercise Classes, Fitness Room, Social Services, Speaker Presentations                                                                | A few times a week                                | Never                                            | COVID in general                               | have more cultural/educational programs     | COVID masks and/or people wear masks                                                                                                                                                                                                                                                                                                             | I would like to see a mix of in-person & Zoom.                                                                                                                                 |
| Be social, To Play Pool, Social Services                                                                                              | didn't go to the Center                           | Never                                            | I don't really know anyone there               | stay the same                               | I don't know WHERE the center is located nor do I know anybody there.                                                                                                                                                                                                                                                                            |                                                                                                                                                                                |
| See Jessica Moss                                                                                                                      | Only when there was a program I was interested in | Never                                            | COVID in general                               | have more cultural/educational programs     |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Food, Fitness Room, Speaker Presentations, Knitting                                                                                   | A few times a week                                | A few times a week                               | I still come to the Center                     | have more musical programs                  | Art programs, live movies, concerts.                                                                                                                                                                                                                                                                                                             | Plans playing                                                                                                                                                                  |
| Be social, Volunteer                                                                                                                  | Only when there was a program I was interested in | Once a week                                      | I still come to the Center                     | have more in-person programs                |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Fitness Room, Speaker Presentations, SHINE/Tax Prep                                                                                   | Only when there was a program I was interested in | Never                                            | COVID in general                               | stay the same                               | when the risk of indoor gathering subsides.                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                |
| Be social, SHINE/Tax Prep, Computer Access / Library                                                                                  | A few times a week                                | A few times a week                               | I still come to the Center                     | have more cultural/educational programs     |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, Speaker Presentations                                                                                                      | Once a week                                       | A few times a week                               | COVID in general                               | stay the same                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, Speaker Presentations                                                                                                      | Once a week                                       | COVID in general                                 | COVID in general                               | have more cultural/educational programs     | COVID and variants and                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                |
| Speaker Presentations                                                                                                                 | Only when there was a program I was interested in | Never                                            | Prefer Zoom Programming                        | have more cultural/educational programs     | COVID wasn't around                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                |
| Be social, Exercise Classes, Speaker Presentations, Computer Access / Library, Blood Pressure Clinic, to get away to a pleasant place | Daily                                             | Only when there is a program I am interested in  | I still come to the Center                     | have more cultural/educational programs     | If I had free time and less responsibility                                                                                                                                                                                                                                                                                                       | more elementary classes relating to computer and media technology I                                                                                                            |
| Exercise Classes, Speaker Presentations                                                                                               | Only when there was a program I was interested in | Never                                            | Prefer Zoom Programming                        | stay the same                               | Waiting for Covid to retreat again                                                                                                                                                                                                                                                                                                               | Drumming group                                                                                                                                                                 |
| Be social, Fitness Room, Open art studio                                                                                              | A few times a week                                | Only when there is a program I am interested in  | COVID in general                               | have more cultural/educational programs     |                                                                                                                                                                                                                                                                                                                                                  | Multi cultural, multi lingual events, learning classes                                                                                                                         |
| Be social, Play Bridge                                                                                                                | A few times a week                                | A few times a week                               | I still come to the Center                     | have more in-person programs                | People were better about wearing masks (which is better now with mask mandates)                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, Food, Exercise Classes, Social Services, Speaker Presentations, SHINE/Tax Prep, Computer Access / Library                  | A few times a week                                | A few times a week                               | I still come to the Center                     | have more cultural/educational programs     | Some volunteer opps were available                                                                                                                                                                                                                                                                                                               | the morning at activities, more >300 for activities for a while, not too long.                                                                                                 |
| Exercise Classes                                                                                                                      | A few times a week                                | Never                                            | COVID in general                               | stay the same                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, Food, Exercise Classes, Fitness Room, Social Services                                                                      | A few times a week                                | Only when there is a program I am interested in  | Insurance of those who are vaccinated          | have more fitness/exercise programs         | Increased proof of vaccination and boosters.                                                                                                                                                                                                                                                                                                     | Work classes                                                                                                                                                                   |
| Exercise Classes                                                                                                                      | Only when there was a program I was interested in | Never                                            | COVID in general                               | have more fitness/exercise programs         |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Exercise Classes, Speaker Presentations, Pre pandemic programs such as Ron Diamond's programs and Current Events                      | Only when there was a program I was interested in | Only when there is a program I am interested in  | COVID in general                               | have more cultural/educational programs     | Not it was concerned about the health of the attendees.                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                |
| Exercise Classes, Fitness Room, Speaker Presentations, SHINE/Tax Prep, Meetings                                                       | A few times a week                                | Only when there is a program I am interested in  | COVID in general                               | stay the same                               | COVID disappears                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                |
| Be social, volunteer                                                                                                                  | Once a week                                       | Once a week                                      | COVID in general                               | stay the same                               | There was something I was interested in                                                                                                                                                                                                                                                                                                          | Classes                                                                                                                                                                        |
| Be social, Exercise Classes, Fitness Room                                                                                             | Only when there was a program I was interested in | Only when there is a program I am interested in  | Insurance of those who are vaccinated          | have more in-person programs                | I knew everyone was vaccinated and wore good masks (such as N95 masks). Covid infections in the elderly are high risk and I don't understand why we don't have any assurance that Center is as safe as possible.                                                                                                                                 |                                                                                                                                                                                |
| Be social                                                                                                                             | Only when there was a program I was interested in | Only when there is a program I am interested in  | I don't really know anyone there               | have more cultural/educational programs     |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Exercise Classes, Speaker Presentations, Marling                                                                                      | Only when there was a program I was interested in | Never                                            | COVID in general                               | have more fitness/exercise programs         | COVID was over                                                                                                                                                                                                                                                                                                                                   | Book club                                                                                                                                                                      |
| Speaker Presentations                                                                                                                 | Once a week                                       | Never                                            | COVID in general                               | have more cultural/educational programs     |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, Exercise Classes, Fitness Room, Speaker Presentations                                                                      | A few times a week                                | A few times a week                               | I don't have transportation                    | have more fitness/exercise programs         | transportation is my biggest problem. Vans are not always available.                                                                                                                                                                                                                                                                             |                                                                                                                                                                                |
| Zoom (events)                                                                                                                         | Only when there was a program I was interested in | Only when there is a program I am interested in  | Prefer Zoom Programming                        | stay the same                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, Speaker Presentations                                                                                                      | Only when there was a program I was interested in | Only when there is a program I am interested in  | COVID in general                               | have more cultural/educational programs     | When Covid is done                                                                                                                                                                                                                                                                                                                               | History and health issues                                                                                                                                                      |
| Classes                                                                                                                               | Only when there was a program I was interested in | Never                                            | COVID in general                               | have more in-person programs                | COVID numbers go down                                                                                                                                                                                                                                                                                                                            | Drumming group, African drumming                                                                                                                                               |
| None                                                                                                                                  | A few times a week                                | Never                                            | COVID in general                               | stay the same                               | Not safe from covid                                                                                                                                                                                                                                                                                                                              | Was enjoying carolee class before COVID shut down the Center.                                                                                                                  |
| Be social, Exercise Classes, Speaker Presentations                                                                                    | Only when there was a program I was interested in | Never                                            | Insurance of those who are vaccinated          | have more cultural/educational programs     | COVID takes a downturn and fully will be there                                                                                                                                                                                                                                                                                                   | You guys offer so very much. It would be difficult to add any more programs.                                                                                                   |
| Be social, Speaker Presentations, SHINE/Tax Prep                                                                                      | A few times a week                                | Never                                            | People aren't good about wearing masks         | have more cultural/educational programs     | I could feel relatively safe regarding COVID. Too many falls are too casual about the light way to behave.                                                                                                                                                                                                                                       |                                                                                                                                                                                |
| Fitness Room, Speaker Presentations, SHINE/Tax Prep                                                                                   | A few times a week                                | A few times a week                               | I still come to the Center                     | have more fitness/exercise programs         |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Be social, Food, Speaker Presentations, Blood Pressure Clinic                                                                         | Only when there was a program I was interested in | Never                                            | Prefer Zoom Programming                        | have more cultural/educational programs     | people were vaccinated and wore masks                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                |
| When current events and book group were live, I attended every one.                                                                   | Only when there was a program I was interested in | COVID in general                                 | COVID in general                               | have more in-person programs                | Was first question. Current events, book group, movies fun, etc. MASH                                                                                                                                                                                                                                                                            | Discussion groups                                                                                                                                                              |
| Speaker Presentations                                                                                                                 | Only when there was a program I was interested in | Never                                            | Weather conditions                             | have more cultural/educational programs     |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Fitness Room                                                                                                                          | Only when there was a program I was interested in | Only when there is a program I am interested in  | People aren't good about wearing masks         | have more fitness/exercise programs         | something really exciting was to come in                                                                                                                                                                                                                                                                                                         | Something totally different. I have not been using the fitness room so I didn't check that off however, I would be using it and plan to use it in the future for my well being |
| Be social, Food, Exercise Classes                                                                                                     | Daily                                             | Daily                                            | Weather conditions                             | have more in-person programs                |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Exercise Classes, Speaker Presentations                                                                                               | A few times a week                                | Never                                            | COVID in general                               | have more musical programs                  | Someone wore masks correctly                                                                                                                                                                                                                                                                                                                     | There is a variety already, thank you. I prefer music, history (not war based) programs.                                                                                       |
| Be social, Exercise Classes, Speaker Presentations                                                                                    | A few times a week                                | Once a week                                      | I still come to the Center                     | have more musical programs                  |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Exercise Classes                                                                                                                      | A few times a week                                | Never                                            | COVID in general                               | have more fitness/exercise programs         | Will come back to the center when the art/film classes are held at the center.                                                                                                                                                                                                                                                                   |                                                                                                                                                                                |
| Exercise Classes                                                                                                                      | Once a week                                       | Never                                            | Not interested                                 | have more in-person programs                | My wife was in person again                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                |
| Be social, Shop in the gift shop! My favorite                                                                                         | Once a week                                       | Never                                            | COVID in general                               | have more cultural/educational programs     | COVID was over. When COVID continues to be a problem, I'm not going back at all anymore. But I love the CATH programs on ZOOM!                                                                                                                                                                                                                   | Zoom arts and crafts and Sunrise great ZOOM classes. COVID IS NOT OVER                                                                                                         |
| Library                                                                                                                               | Only when there was a program I was interested in | Never                                            | Not interested                                 | have more fitness/exercise programs         | realistically wouldn't except to borrow books                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                |
| Be social, Exercise Classes, concerts                                                                                                 | Once a week                                       | Never                                            | Insurance of those who are vaccinated          | have more musical programs                  | You were about vaccines and masking                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                |
| Be social, Exercise Classes                                                                                                           | didn't go to the Center                           | Never                                            | Prefer Zoom Programming                        | have more fitness/exercise programs         |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| Exercise Classes, SHINE/Tax Prep                                                                                                      | Only when there was a program I was interested in | Never                                            | People aren't good about wearing masks         | have more cultural/educational programs     | Masks were required                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                |

# GETTING BACK TO THE CENTER QUESTIONNAIRE RESPONSES

# APPENDIX

|                                                                                                                                  |                                                   |                                                 |                                        |                                         |                                                                                                                                                                                                 |                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------|----------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exercise classes normally since the pandemic, I don't come in.                                                                   | Only when there was a program I was interested in | Never                                           | Prefer Zoom Programming                | say the same                            | COVID was over                                                                                                                                                                                  |                                                                                                                                                         |
| Play contract bridge                                                                                                             | Once a week                                       | Never                                           | COVID in general                       | say the same                            | NIS masks and vaccinations were required.                                                                                                                                                       |                                                                                                                                                         |
| Be social, SHINE/Tax Prep, Play cards                                                                                            | Once a week                                       | Once a week                                     | still come to the Center               | have more musical programs              |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social                                                                                                                        | Daily                                             | A few times a week                              | still come to the Center               | have more in-person programs            | Have more in-person current events.                                                                                                                                                             | Books                                                                                                                                                   |
| Exercise Classes, Yoga, Chair yoga not zoom                                                                                      | Once a week                                       | Not interested                                  | Not interested                         | have more fitness/exercise programs     | Zoom in-person exercise programs esp chair yoga                                                                                                                                                 |                                                                                                                                                         |
| Be social                                                                                                                        | I didn't go to the Center                         | A few times a week                              | still come to the Center               | have more in-person programs            | There were more in-person programs.                                                                                                                                                             | Anything in-person - unfortunately, fear of the virus is going to continue for a while longer.                                                          |
| Be social, Food, Speaker Presentations, Blood Pressure Clinic                                                                    | Only when there was a program I was interested in | Never                                           | COVID in general                       | have more cultural/educational programs | Not interested. A resident of my building caught COVID from visiting the center.                                                                                                                | Study on Zoom                                                                                                                                           |
| Exercise Classes                                                                                                                 | Once a week                                       | Never                                           | Not interested                         | have more fitness/exercise programs     | In-person parties and classes                                                                                                                                                                   |                                                                                                                                                         |
| Be social, Exercise Classes, SHINE/Tax Prep, Blood Pressure Clinic                                                               | A few times a week                                | Once a week                                     | COVID in general                       | say the same                            | am planning to come to the Center more since the COVID situation has improved, i.e. once life is more normal again, once the COVID situation has improved, i.e. once life is more normal again. |                                                                                                                                                         |
| Fitness Room, Speaker Presentations, Movies, musical programs                                                                    | A few times a week                                | Never                                           | say the same                           | say the same                            | People had to show proof of vaccination and were required to wear a mask.                                                                                                                       |                                                                                                                                                         |
| Be social, Fitness Room, Speaker Presentations                                                                                   | A few times a week                                | Never                                           | COVID in general                       | have more cultural/educational programs |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social                                                                                                                        | Once a week                                       | Never                                           | COVID in general                       | say the same                            | in-person meetings                                                                                                                                                                              | Virtual classes, online                                                                                                                                 |
| Exercise Classes, Speaker Presentations                                                                                          | Once a week                                       | Never                                           | COVID in general                       | say the same                            | have more fitness/exercise programs                                                                                                                                                             |                                                                                                                                                         |
| Be social, Social Services, Speaker Presentations, Bridge, garden club, Kelli's Crafts                                           | Only when there was a program I was interested in | Only when there is a program I am interested in | Prefer Zoom Programming                | have more cultural/educational programs | nothing was needed at the present time                                                                                                                                                          | See how we can shipping - could include theater                                                                                                         |
| any bridge and volunteer at shop                                                                                                 | A few times a week                                | A few times a week                              | unsure of those who are vaccinated     | have more cultural/educational programs |                                                                                                                                                                                                 | See how we can shipping - could include theater                                                                                                         |
| Be social, Exercise Classes, Fitness Room, Social Services, SHINE/Tax Prep                                                       | A few times a week                                | A few times a week                              | People aren't good about wearing masks | have more in-person programs            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Speaker Presentations                                                                                                 | Only when there was a program I was interested in | Never                                           | Prefer Zoom Programming                | say the same                            | More people came.                                                                                                                                                                               |                                                                                                                                                         |
| Be social, Fitness Room, SHINE/Tax Prep, Computer Access / Library                                                               | Only when there was a program I was interested in | Never                                           | Prefer Zoom Programming                | say the same                            | Zoom was pre-COVID - hate masks and feel uncomfortable in a group setting                                                                                                                       | not sure with covid at this point                                                                                                                       |
| Exercise Classes, Speaker Presentations                                                                                          | A few times a week                                | Never                                           | still come to the Center               | have more cultural/educational programs | Zoom was pre-COVID and I was not able to take classes via zoom.                                                                                                                                 | Paraglosses, more                                                                                                                                       |
| Be social, To Play Pool, Blood Pressure Clinic                                                                                   | Daily                                             | Never                                           | I don't have transportation            | have more musical programs              | Zoom is much easier for me as I have ALS and can no longer drive. I do miss going to the Center.                                                                                                | Self-motivation, motivation                                                                                                                             |
| Exercise Classes, Fitness Room, Speaker Presentations                                                                            | A few times a week                                | Only when there is a program I am interested in | still come to the Center               | have more fitness/exercise programs     |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Exercise Classes, Social Services, Speaker Presentations                                                              | A few times a week                                | Only when there is a program I am interested in | don't really know anyone there         | have more cultural/educational programs |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Fitness Room, Speaker Presentations                                                                                   | Daily                                             | A few times a week                              | unsure of those who are vaccinated     | have more fitness/exercise programs     |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Food, Speaker Presentations, Computer Access / Library, Blood Pressure Clinic                                         | A few times a week                                | Never                                           | COVID in general                       | have more cultural/educational programs | was clear that all present are fully vaccinated. Now I am present.                                                                                                                              | Presentations on travel experiences                                                                                                                     |
| Be social                                                                                                                        | A few times a week                                | Never                                           | COVID in general                       | have more cultural/educational programs | did not feel safe after Covid as happened to another resident in my apartment house                                                                                                             |                                                                                                                                                         |
| Exercise Classes, Speaker Presentations                                                                                          | Only when there was a program I was interested in | Never                                           | still come to the Center               | say the same                            |                                                                                                                                                                                                 | Open meetings                                                                                                                                           |
| Be social, Exercise Classes, Speaker Presentations                                                                               | Once a week                                       | Once a week                                     | COVID in general                       | have more fitness/exercise programs     |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Social Services, Speaker Presentations, SHINE/Tax Prep                                                                | Only when there was a program I was interested in | Never                                           | don't really know anyone there         | say the same                            | in-person programs, not zoom                                                                                                                                                                    | online                                                                                                                                                  |
| Be social, Fitness Room, Speaker Presentations                                                                                   | Only when there was a program I was interested in | Only when there is a program I am interested in | COVID in general                       | say the same                            |                                                                                                                                                                                                 | Virtual meetings, online                                                                                                                                |
| Speaker Presentations                                                                                                            | A few times a week                                | Only when there is a program I am interested in | COVID in general                       | have more cultural/educational programs | Full staff.                                                                                                                                                                                     | Lessons from fall - the staff will share their experiences.                                                                                             |
| Be social, Exercise Classes, Speaker Presentations, SHINE/Tax Prep                                                               | A few times a week                                | Never                                           | COVID in general                       | have more in-person programs            | Current events group or yoga were there                                                                                                                                                         |                                                                                                                                                         |
| Speaker Presentations, Line Dance classes                                                                                        | Once a week                                       | Never                                           | don't really know anyone there         | have more fitness/exercise programs     |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Exercise Classes, Fitness Room, Speaker Presentations                                                                 | A few times a week                                | Only when there is a program I am interested in | Weather conditions                     | say the same                            | The Covid-19 is not an issue and weather is good.                                                                                                                                               | More clubs and how government agencies work.                                                                                                            |
| Current Events                                                                                                                   | Only when there was a program I was interested in | Never                                           | People aren't good about wearing masks | have more in-person programs            | Wear masks and establish vaccinated once in office. No proof, not allowed to enter.                                                                                                             | The pandemic programming was just like                                                                                                                  |
| Only for zoom meetings.                                                                                                          | I didn't go to the Center                         | Never                                           | Prefer Zoom Programming                | say the same                            | Never, I don't live in Needham.                                                                                                                                                                 | Continue zoom meetings                                                                                                                                  |
| Be social, Fitness Room, Fitness Room, Speaker Presentations, SHINE/Tax Prep                                                     | Once a week                                       | Only when there is a program I am interested in | still come to the Center               | say the same                            | not need to wear a mask. I have trouble breathing in a N95 mask.                                                                                                                                |                                                                                                                                                         |
| Be social, Blood Pressure Clinic                                                                                                 | Daily                                             | A few times a week                              | unsure of those who are vaccinated     | say the same                            |                                                                                                                                                                                                 | In-person current events with social distancing                                                                                                         |
| Be social, Current Events                                                                                                        | Daily                                             | A few times a week                              | still come to the Center               | have more in-person programs            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Exercise Classes, Play Bridge                                                                                                    | Once a week                                       | Once a week                                     | Prefer Zoom Programming                | say the same                            | couldn't exercise with Peet online                                                                                                                                                              |                                                                                                                                                         |
| Current Events                                                                                                                   | Only when there was a program I was interested in | Never                                           | COVID in general                       | say the same                            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social                                                                                                                        | Daily                                             | Daily                                           | still come to the Center               | say the same                            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, SHINE/Tax Prep                                                                                                        | Daily                                             | Daily                                           | still come to the Center               | say the same                            | were was heart                                                                                                                                                                                  |                                                                                                                                                         |
| Be social, Food, To Play Pool, Computer Access / Library                                                                         | A few times a week                                | Daily                                           | still come to the Center               | say the same                            | One people                                                                                                                                                                                      |                                                                                                                                                         |
| Be social, To Play Pool                                                                                                          | Daily                                             | Daily                                           | still come to the Center               | say the same                            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Food, Exercise Classes, Fitness Room, To Play Pool, Speaker Presentations, Computer Access / Library                  | Daily                                             | Daily                                           | still come to the Center               | have more musical programs              |                                                                                                                                                                                                 | Anything                                                                                                                                                |
| Be social, Food, Speaker Presentations, Blood Pressure Clinic, Creative writing, current events, art, chess, chess, chess, chess | A few times a week                                | A few times a week                              | COVID in general                       | say the same                            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Food, Computer Access / Library                                                                                       | A few times a week                                | A few times a week                              | I don't have transportation            | have more musical programs              |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Fitness Room                                                                                                          | Daily                                             | Daily                                           | still come to the Center               | have more musical programs              | More programs                                                                                                                                                                                   |                                                                                                                                                         |
| Be social, Food, Exercise Classes, Fitness Room, Social Services, Speaker Presentations, SHINE/Tax Prep                          | Daily                                             | Daily                                           | still come to the Center               | have more musical programs              |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Exercise Classes, Speaker Presentations                                                                               | A few times a week                                | Only when there is a program I am interested in | Weather conditions                     | have more cultural/educational programs |                                                                                                                                                                                                 |                                                                                                                                                         |
| Fitness Room                                                                                                                     | A few times a week                                | A few times a week                              | still come to the Center               | have more fitness/exercise programs     |                                                                                                                                                                                                 |                                                                                                                                                         |
| Exercise Classes, Fitness Room                                                                                                   | Once a week                                       | A few times a week                              | Prefer Zoom Programming                | have more fitness/exercise programs     |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Food, Exercise Classes, Speaker Presentations                                                                         | A few times a week                                | A few times a week                              | Weather conditions                     | have more fitness/exercise programs     |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Food                                                                                                                  | A few times a week                                | A few times a week                              | still come to the Center               | have more cultural/educational programs |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social                                                                                                                        | Daily                                             | Daily                                           | still come to the Center               | say the same                            | More people came                                                                                                                                                                                |                                                                                                                                                         |
| Be social, Exercise Classes, Speaker Presentations, Bridge                                                                       | A few times a week                                | Once a week                                     | still come to the Center               | have more in-person programs            | Now that COVID is easing and 90% of Needham Residents are vaccinated - I will be coming more                                                                                                    |                                                                                                                                                         |
| Be social, Food, Social Services, Speaker Presentations, SHINE/Tax Prep, Computer Access / Library                               | Daily                                             | Daily                                           | COVID in general                       | have more musical programs              | invited keep the coffee                                                                                                                                                                         | historical/archaeological                                                                                                                               |
| Be social, To Play Pool, Speaker Presentations                                                                                   | A few times a week                                | A few times a week                              | still come to the Center               | say the same                            | There was heart                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Exercise Classes, Speaker Presentations                                                                               | Once a week                                       | Once a week                                     | Prefer Zoom Programming                | say the same                            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Exercise Classes, Fitness Room, Speaker Presentations                                                                            | Daily                                             | Daily                                           | still come to the Center               | say the same                            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Fitness Room                                                                                                                     | A few times a week                                | Only when there is a program I am interested in | Prefer Zoom Programming                | have more fitness/exercise programs     | am fine with Zoom Programming - more convenient                                                                                                                                                 |                                                                                                                                                         |
| Speaker Presentations                                                                                                            | A few times a week                                | Only when there is a program I am interested in | Prefer Zoom Programming                | say the same                            |                                                                                                                                                                                                 | More zooms                                                                                                                                              |
| Exercise Classes                                                                                                                 | Once a week                                       | Never                                           | Not interested                         | have more musical programs              |                                                                                                                                                                                                 |                                                                                                                                                         |
| Speaker Presentations                                                                                                            | Only when there was a program I was interested in | Never                                           | Prefer Zoom Programming                | say the same                            |                                                                                                                                                                                                 | Keep Zoom as an option, it's convenient                                                                                                                 |
| Association class                                                                                                                | I didn't go to the Center                         | Never                                           | I don't really know anyone there       | have more in-person programs            | The CATH users were welcoming. Folks tend to stay in their own circles of friends and don't welcome newcomers.                                                                                  | If a user doesn't see a club or activity they are interested in, then that user should feel they can form a club or activity that they feel is missing. |
| Exercise Classes                                                                                                                 | Once a week                                       | Only when there is a program I am interested in | still come to the Center               | have more in-person programs            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Speaker Presentations, SHINE/Tax Prep, Get a COVID vaccine                                                                       | I didn't go to the Center                         | Only when there is a program I am interested in | Prefer Zoom Programming                | have more fitness/exercise programs     | COVID was not a problem. I prefer remote access for the foreseeable future.                                                                                                                     |                                                                                                                                                         |
| Be social, Food, Speaker Presentations                                                                                           | A few times a week                                | A few times a week                              | Weather conditions                     | have more musical programs              |                                                                                                                                                                                                 |                                                                                                                                                         |
| SHINE/Tax Prep                                                                                                                   | I didn't go to the Center                         | Never                                           | Not interested                         | say the same                            | There were activities for younger seniors                                                                                                                                                       | More help on SS, Medicare, etc.                                                                                                                         |
| Exercise Classes                                                                                                                 | I didn't go to the Center                         | Never                                           | Prefer Zoom Programming                | say the same                            | People wore their masks correctly and if Covid wasn't still an issue                                                                                                                            | about assistance that is offered for the elderly                                                                                                        |
| Food, SHINE/Tax Prep, Blood Pressure Clinic                                                                                      | Only when there was a program I was interested in | Never                                           | COVID in general                       | say the same                            |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Exercise Classes, Fitness Room, Social Services, SHINE/Tax Prep, Blood Pressure Clinic                                | A few times a week                                | Once a week                                     | still come to the Center               | have more fitness/exercise programs     |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Social Services, Speaker Presentations, Computer Access / Library                                                     | Once a week                                       | Never                                           | don't really know anyone there         | have more musical programs              | Games - available                                                                                                                                                                               |                                                                                                                                                         |
| Speaker Presentations                                                                                                            | Only when there was a program I was interested in | Never                                           | Prefer Zoom Programming                | have more fitness/exercise programs     | People wore masks during a pandemic.                                                                                                                                                            | I hope exercise classes and speakers will continue on Zoom                                                                                              |
| Speaker Presentations                                                                                                            | Only when there was a program I was interested in | Once a week                                     | COVID in general                       | have more cultural/educational programs |                                                                                                                                                                                                 |                                                                                                                                                         |
| Exercise Classes                                                                                                                 | I didn't go to the Center                         | Never                                           | unsure of those who are vaccinated     | have more fitness/exercise programs     | exercise classes were after 11 am or after noon                                                                                                                                                 |                                                                                                                                                         |
| Be social, Speaker Presentations                                                                                                 | A few times a week                                | Once a week                                     | Prefer Zoom Programming                | have more musical programs              | COVID was behind us                                                                                                                                                                             |                                                                                                                                                         |
| Be social, Exercise Classes                                                                                                      | Daily                                             | A few times a week                              | Not interested                         | have more musical programs              |                                                                                                                                                                                                 |                                                                                                                                                         |
| Be social, Food, Social Services, Speaker Presentations, Computer Access / Library                                               | Daily                                             | Daily                                           | still come to the Center               | have more cultural/educational programs |                                                                                                                                                                                                 |                                                                                                                                                         |

## APPENDIX

## GETTING BACK TO THE CENTER QUESTIONNAIRE RESPONSES

|                                                                                                   |                                                   |                                                 |                                         |                                         |                                                                                         |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------|
| SHINE/Tax Prep, Speaking                                                                          | I don't go to the Center                          | Only when there is a program I am interested in | I still come to the Center              | stay the same                           | More strenuous exercises program                                                        |
| Fitness Room, Speaker Presentations                                                               | Only when there was a program I was interested in | None                                            | People aren't proud about wearing masks | have more cultural/educational programs | Cardio/kick class - we need more laughter in our lives. Perhaps taught by Bob Lefkowitz |
| Re social, Exercise Classes, Fitness Room, Speaker Presentations                                  | Daily                                             | Daily                                           | I still come to the Center              | stay the same                           |                                                                                         |
| Re social, Food, Social Services, SHINE/Tax Prep, Computer Access / Library                       | Daily                                             | A few times a week                              | I still come to the Center              | have more in-person programs            | I didn't have to work                                                                   |
| Exercise Classes, Speaker Presentations, Volunteer at gift shop                                   | Once a week                                       | Once a week                                     | Prefer Zoom Programming                 | stay the same                           | Whatever the wonderful staff chooses                                                    |
| Re social, Speaker Presentations, Computer Access / Library                                       | A few times a week                                | Once a week                                     | Prefer Zoom Programming                 | stay the same                           |                                                                                         |
| Re social, Food, Social Services, Speaker Presentations, Computer Access / Library                | Daily                                             | A few times a week                              | Prefer Zoom Programming                 | stay the same                           |                                                                                         |
| Re social, Food, Exercise Classes, To Play Pool, Speaker Presentations, Computer Access / Library | A few times a week                                | A few times a week                              | I still come to the Center              | stay the same                           | movies were back                                                                        |
| Re social, Food, Exercise Classes, Fitness Room, To Play Pool, Speaker Presentations              | Daily                                             | Daily                                           | I still come to the Center              | have more musical programs              | movies, historical lectures, cash prize drawings                                        |
| Re social, Food, Speaker Presentations, SHINE/Tax Prep                                            | A few times a week                                | A few times a week                              | Ursure of those who are vaccinated      | have more musical programs              | I didn't have to wear a mask                                                            |
| Re social, Exercise Classes, Fitness Room, Social Services, Speaker Presentations, SHINE/Tax Prep | A few times a week                                | A few times a week                              | I don't have transportation             | have more cultural/educational programs |                                                                                         |
| Fitness Room, To Play Pool                                                                        | A few times a week                                | A few times a week                              | Prefer Zoom Programming                 | stay the same                           | more trips                                                                              |







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