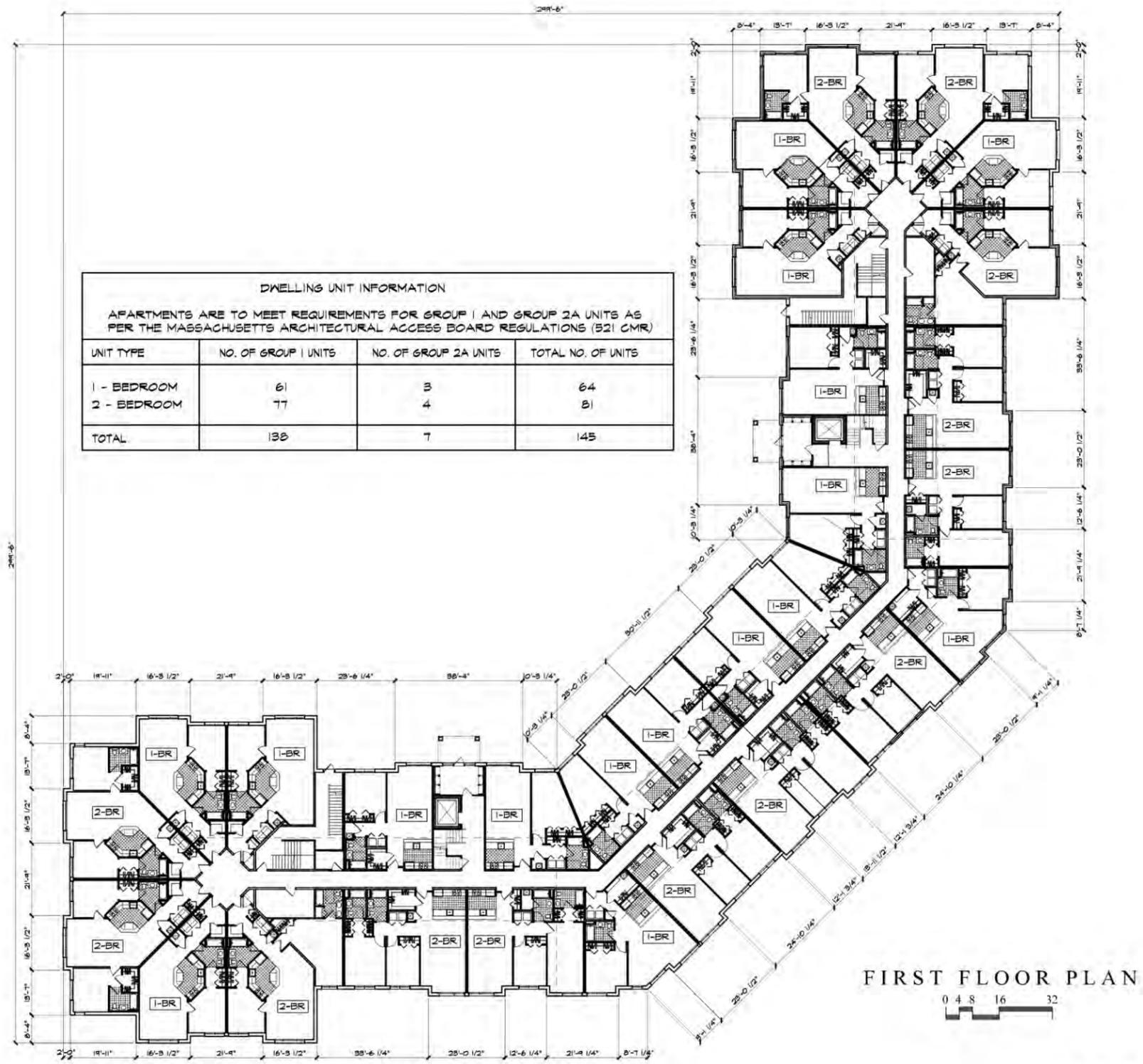


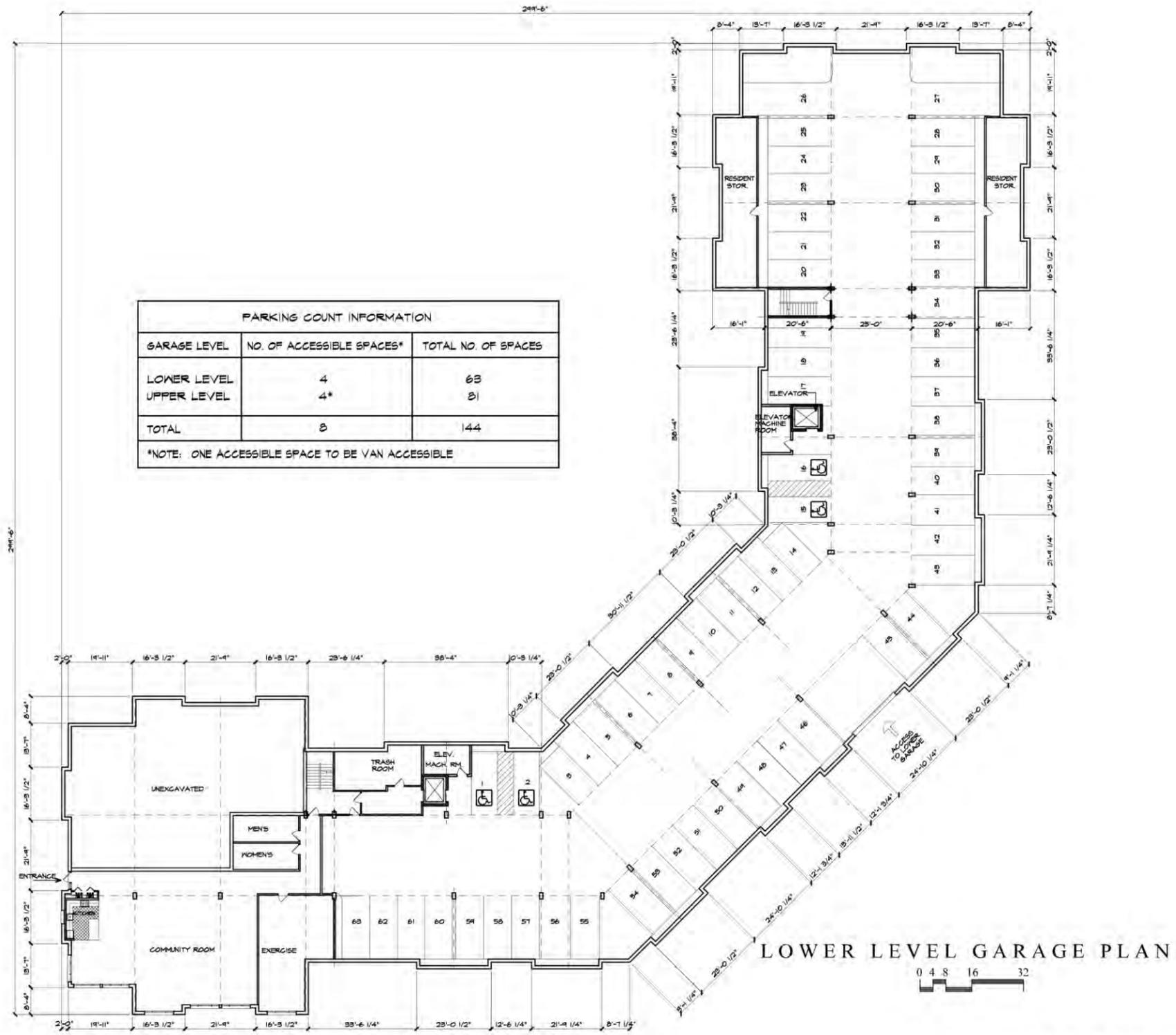


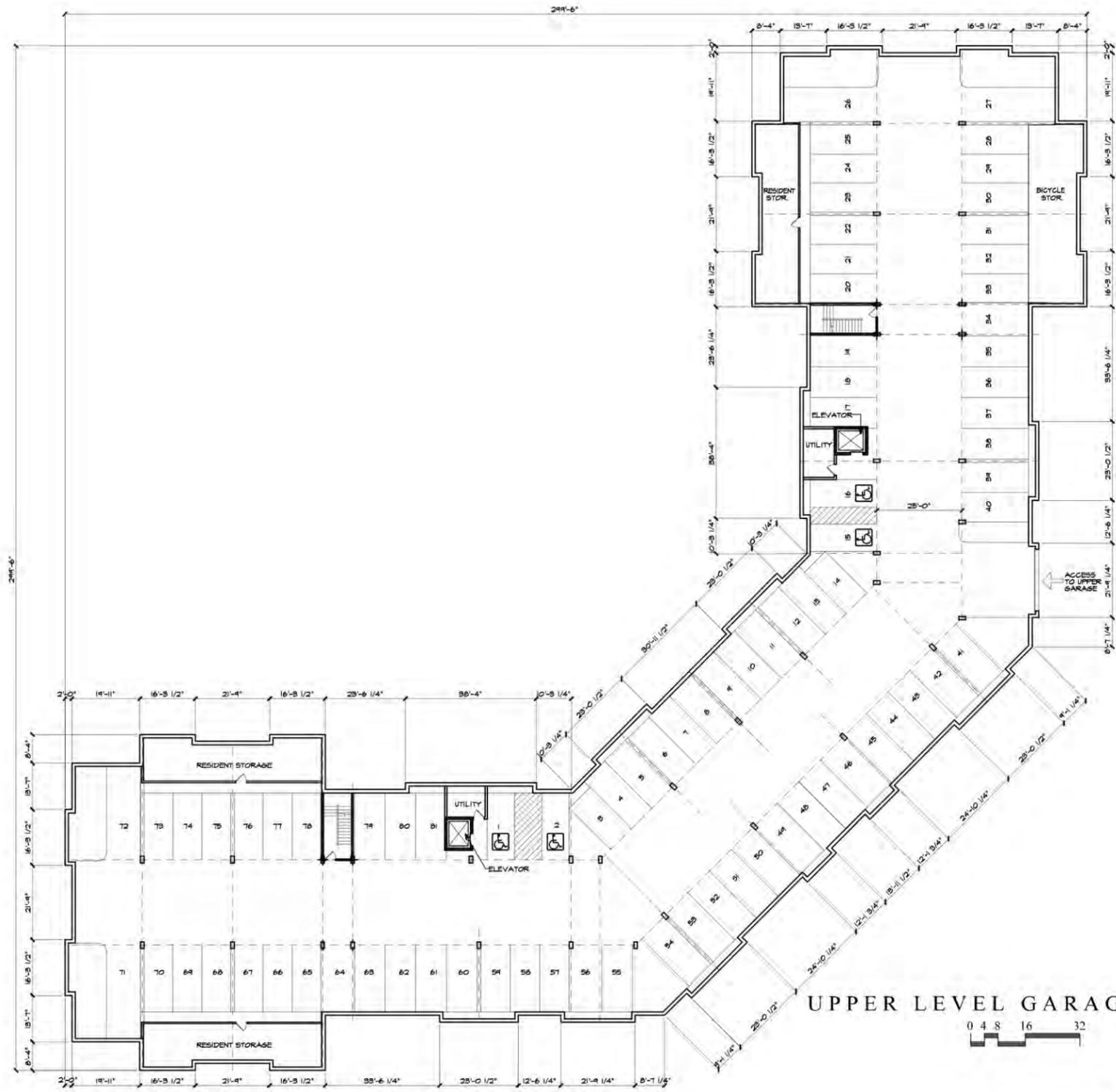
**The Residences of South Brookline - Apartment Building**  
Brookline, Massachusetts

*LOWE ASSOCIATES - Architects, Inc.*  
August 8, 2012







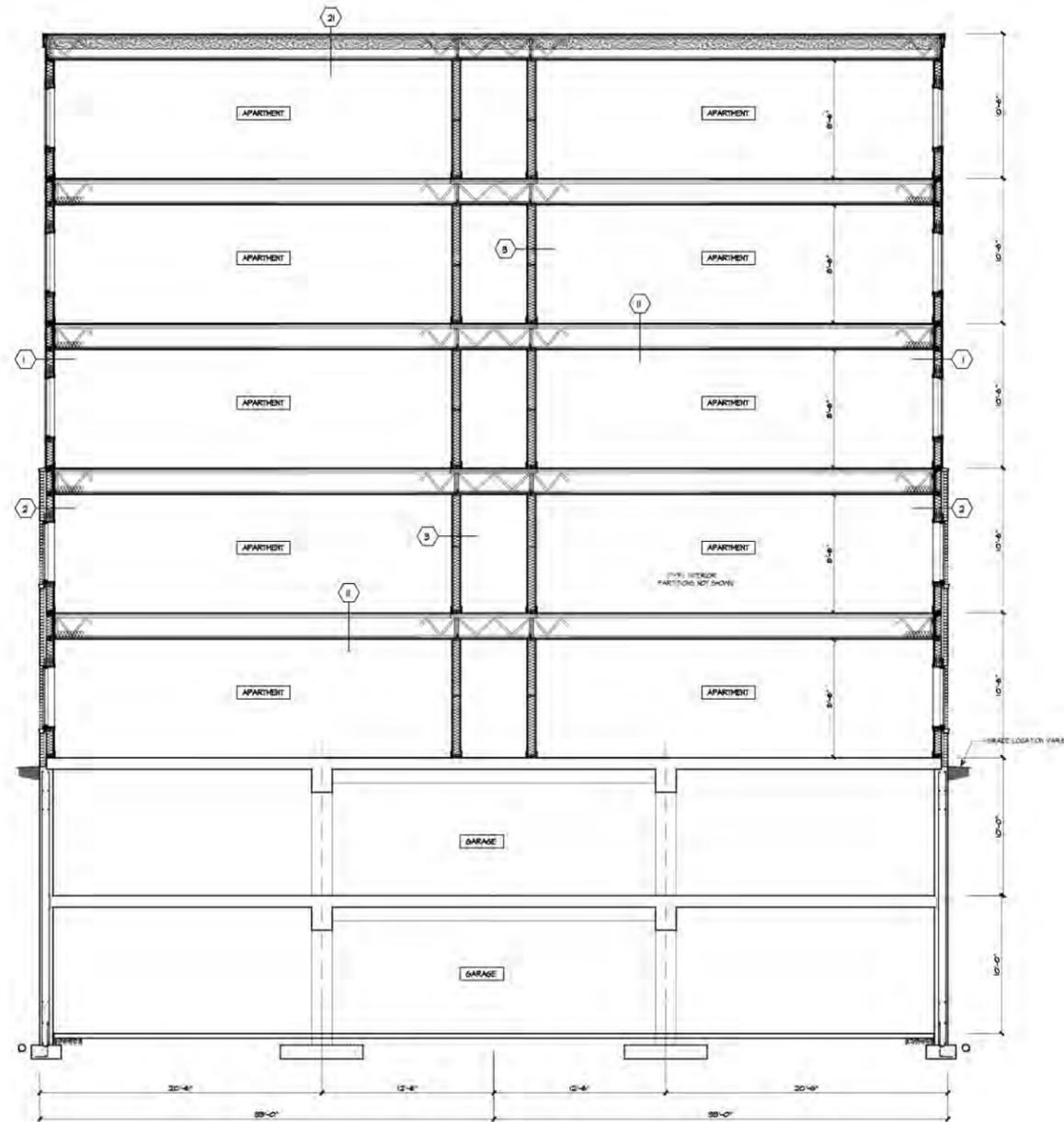


UPPER LEVEL GARAGE PLAN

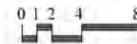


TYPICAL BUILDING ASSEMBLIES

- 1 TYPICAL EXTERIOR WALL ASSEMBLY IV SIDING  
 FIBER CEMENT GLAPBOARD SIDING  
 TYVAR MEMBRANE WRAP  
 FRT FLAMEBLOCK SHEATHING  
 2x6 FRT STUDS @ 16" O.C.  
 5 1/2" FIBERGLASS BATT INSULATION (R-21)  
 7/16" TUFF VAPOR BARRIER  
 2 LAYERS 5/8" TYPE X GYPSUM WALLBOARD
- 2 TYPICAL EXTERIOR WALL ASSEMBLY IV BRICK  
 BRICK VENEER IV TIES @ 24" O.C. HORIZ & VERT.  
 1" AIR SPACE  
 15# FELT PAPER ON  
 FRT FLAMEBLOCK SHEATHING  
 2x6 FRT STUDS @ 16" O.C.  
 5 1/2" FIBERGLASS BATT INSULATION (R-21)  
 7/16" TUFF VAPOR BARRIER  
 2 LAYERS 5/8" TYPE X GYPSUM WALLBOARD
- 3 TYPICAL INTERIOR WALL ASSEMBLY  
 2x4 OR 2x6 STUDS @ 16" O.C.  
 5/8" GYPSUM WALLBOARD EACH SIDE
- II TYPICAL FLOOR / CEILING ASSEMBLY  
 1/2" NONWOVEN 440 SOUND BARRIER (DARK ROCK CEMENT BD. UNDERLAYMENT AT TILE LOCATIONS)  
 3/4" PLYWOOD SUBFLOOR (GLUE & NAIL)  
 WOOD FLOOR TRUSSES  
 5 1/2" SOUND ATTENUATING BATT INSULATION  
 1/2" RESILIENT CHANNELS  
 2 LAYERS 5/8" TYPE X FIRECODE GYPSUM WALLBOARD
- 2I TYPICAL ROOF / CEILING ASSEMBLY  
 MEMBRANE ROOFING SYSTEM  
 3/4" PLYWOOD CDX SHEATHING  
 12" ICYMENE LD-C-50 INSULATION APPLIED DIRECTLY TO UNDERSIDE OF SHEATHING (R=43.2)  
 WOOD TRUSSES  
 1/2" RESILIENT CHANNELS @ 16" O.C.  
 2 LAYERS 5/8" TYPE X FIRECODE GYPSUM WALLBOARD



BUILDING SECTION





Perspective of Apartment Building from Point 3 on Illustrative Site Plan



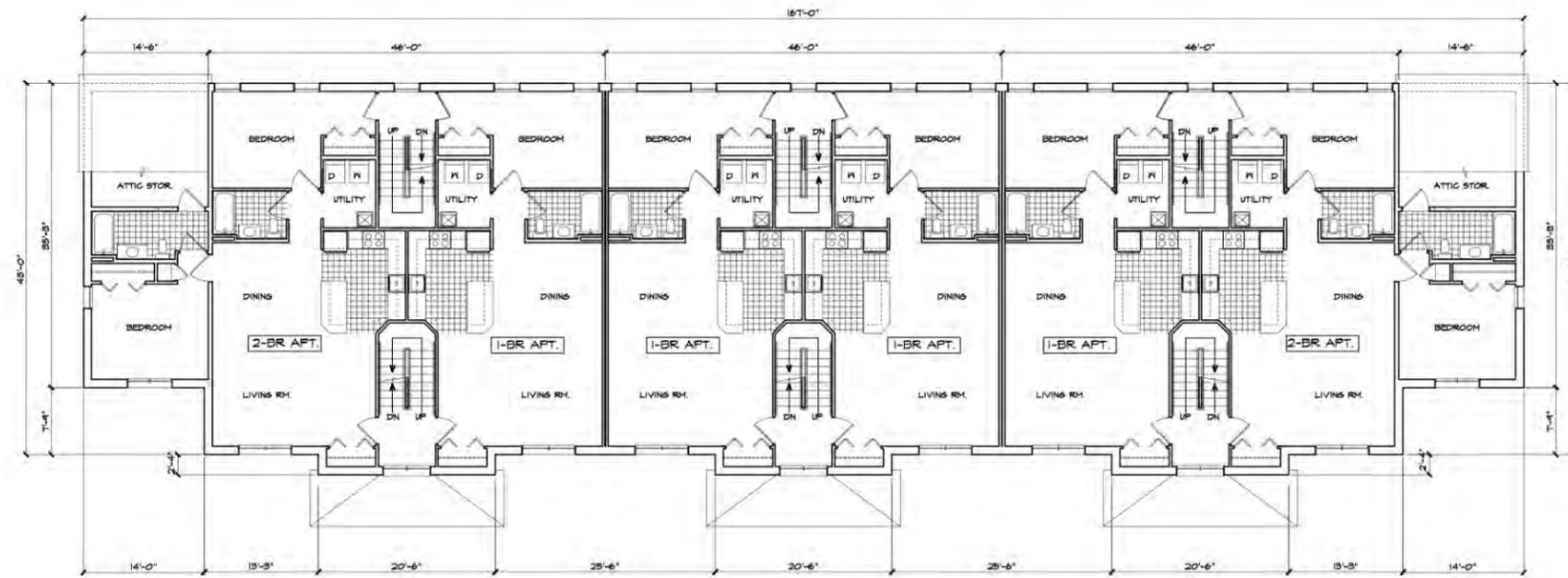
END ELEVATION



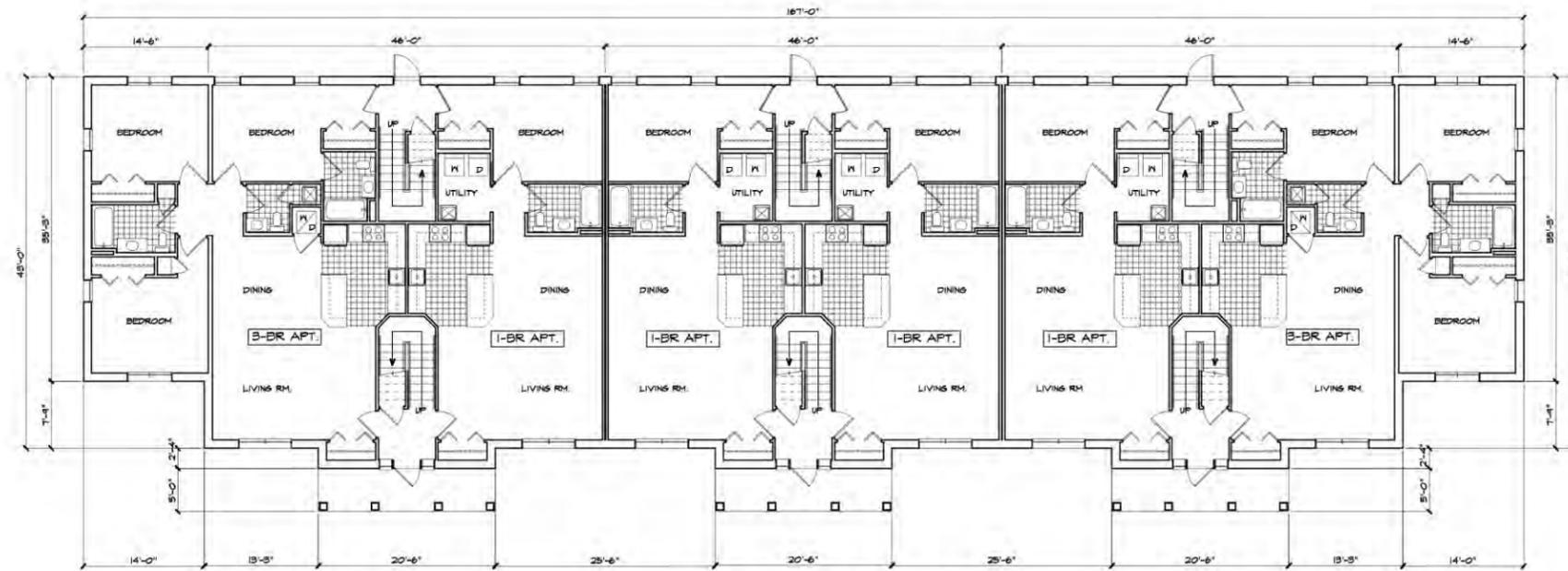
REAR ELEVATION



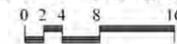
FRONT ELEVATION

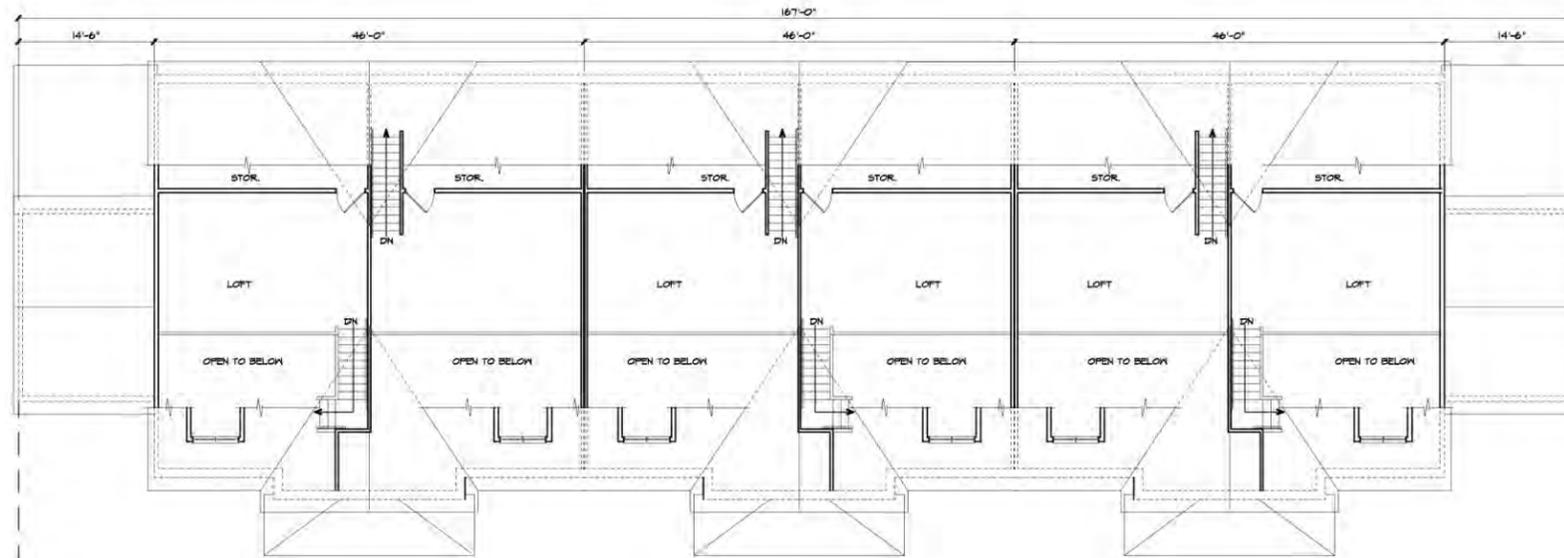


SECOND FLOOR PLAN

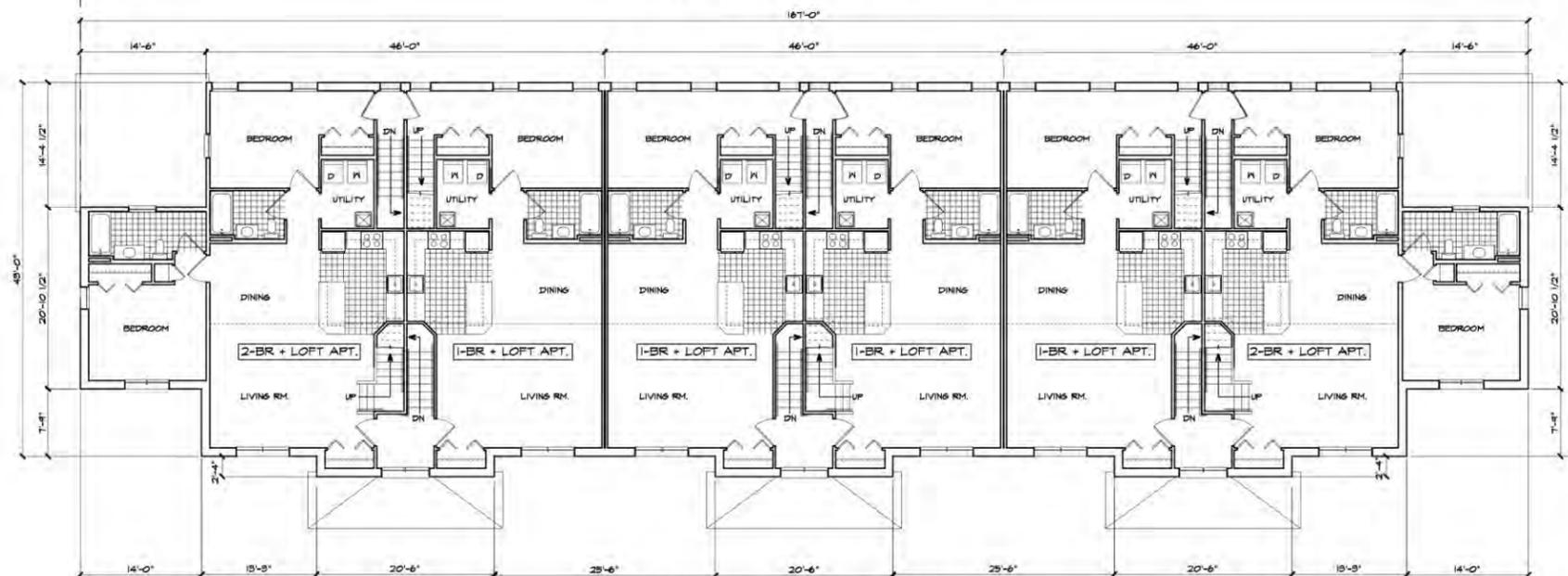


FIRST FLOOR PLAN

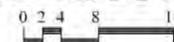




LOFT FLOOR PLAN



THIRD FLOOR PLAN



3-STORY FLATS UNIT COUNT INFORMATION				
NOTE: 5% OF THE TOTAL NUMBER OF APARTMENTS ARE TO MEET REQUIREMENTS FOR GROUP 2A UNITS AS PER THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGULATIONS (521 CMR). THE REMAINDER OF THE FIRST FLOOR UNITS ARE TO MEET REQUIREMENTS FOR GROUP 1 UNITS AS PER THE AAB.				
UNIT TYPE	NO. OF GROUP 1 UNITS (FIRST FLOOR)	NO. OF GROUP 2A UNITS (FIRST FLOOR)	NO. OF UPPER FLOOR UNITS	TOTAL NO. OF UNITS
3 - BEDROOM	18	4	0	22
2 - BEDROOM	0	0	22	22
1 - BEDROOM	18	2	20	40
2 - BEDROOM + LOFT	0	0	22	22
1 - BEDROOM + LOFT	0	0	20	20
TOTAL	36	6	84	126

### TYPICAL BUILDING ASSEMBLIES

#### 1 TYPICAL EXTERIOR WALL ASSEMBLY IV SIDING

FIBER CEMENT CLAPBOARD SIDING  
 TYPAR METROWRAP® BUILDING WRAP  
 1/2" CDX PLYWOOD SHEATHING  
 2x6 STUDS @ 16" O.C. (W/ POLYETHYLENE FOAM SILL SEALER)  
 5 1/2" FIBERGLASS BATT INSULATION (R-21)  
 7/16" TUFF® VAPOR BARRIER  
 1/2" GYPSUM WALLBOARD

#### 2 TYPICAL EXTERIOR WALL ASSEMBLY IV BRICK

BRICK VENEER IV TIES @ 24" O.C. HORIZ. & VERT.  
 1 7/8" AIR SPACE  
 5/8" FELT PAPER ON  
 1/2" CDX PLYWOOD SHEATHING  
 2x6 STUDS @ 16" O.C. (W/ POLYETHYLENE FOAM SILL SEALER)  
 5 1/2" FIBERGLASS BATT INSULATION (R-21)  
 7/16" TUFF® VAPOR BARRIER  
 1/2" GYPSUM WALLBOARD

#### 3 TYPICAL INTERIOR WALL ASSEMBLY

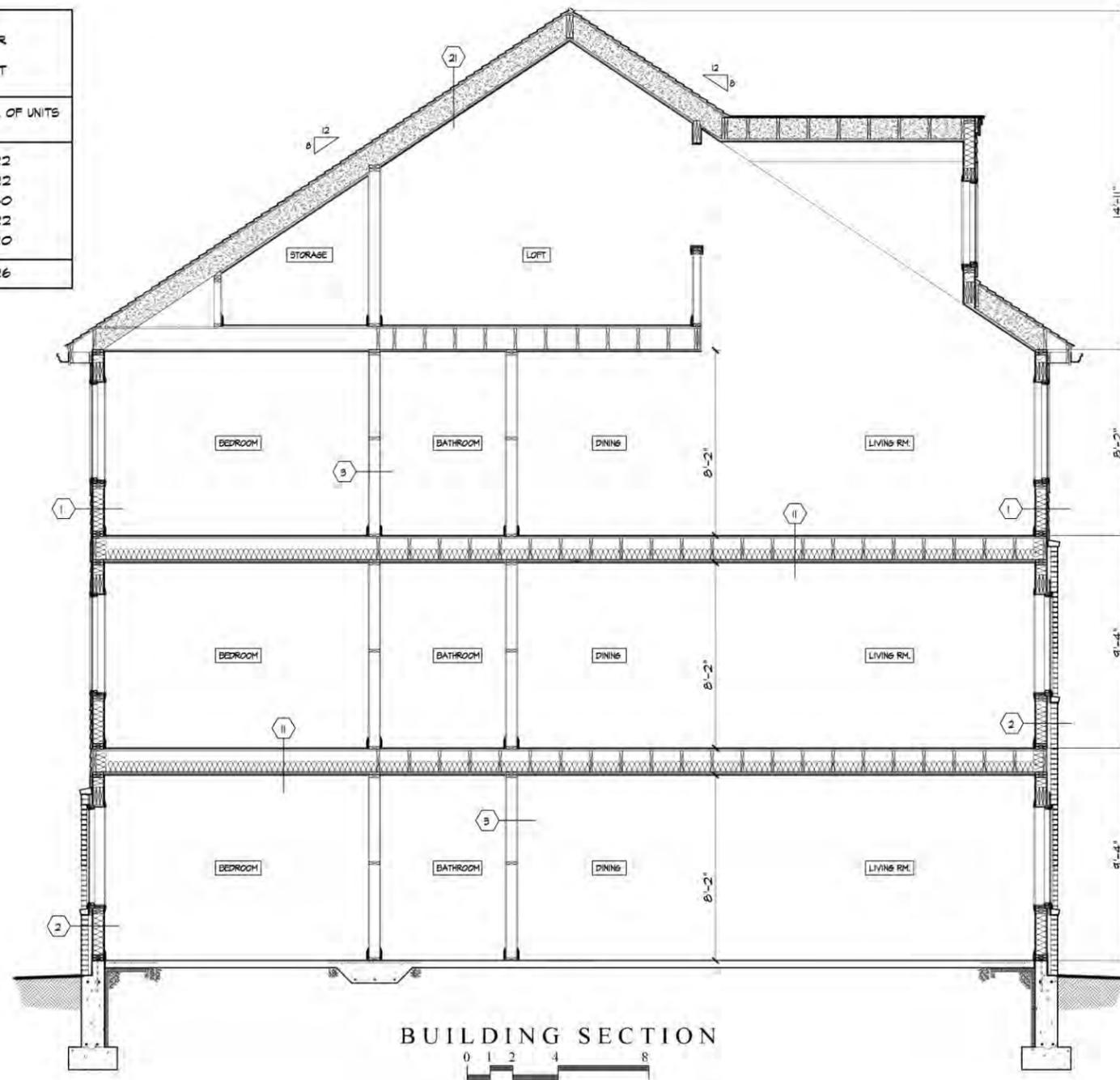
2x4 OR 2x6 STUDS @ 16" O.C.  
 1/2" GYPSUM WALLBOARD EACH SIDE

#### II TYPICAL FLOOR / CEILING ASSEMBLY

(1-HOUR ASSEMBLY BASED ON 6A FILE NO. FC 5100)  
 1/2" HOMASOTE 440 SOUND BARRIER  
 (DURLOCK GEMENT BLD. UNDERLAYMENT AT TILE LOCATIONS)  
 3/4" PLYWOOD SUBFLOOR (GLUE & NAIL)  
 2x JOISTS @ 16" O.C.  
 5 1/2" SOUND ATTENUATING BATT INSULATION  
 1/2" RESILIENT CHANNELS  
 5/8" TYPE X FIRECODE GYPSUM WALLBOARD

#### 2I TYPICAL ROOF / CEILING ASSEMBLY

(BASED ON ANSI / UL 286)  
 FIBERGLASS SHINGLES  
 CONT. SELF-ADHESIVE WATERPROOFING MEMBRANE  
 5/8" PLYWOOD CDX SHEATHING  
 12" LYNESE LD-C-50 INSULATION APPLIED DIRECTLY TO UNDERSIDE OF SHEATHING (R=49.2)  
 2 X 12 RAFTERS OR WOOD TRUSSES  
 1/2" RESILIENT CHANNELS  
 5/8" TYPE X FIRECODE GYPSUM WALLBOARD



# Sustainable Development Compliance Self-assessment

## The Residences of South Brookline

### 1. Concentrate Development and Mix Uses

The Residences of South Brookline is an excellent example of smart growth through creative in-fill. This 271-unit development will be constructed on unutilized land within an existing multifamily housing development known as Hancock Village. As such, the Residences of South Brookline will be able to use existing utility infrastructure components including water, sanitary and storm sewer, natural gas, and electric utility lines. In addition, access to the development will be from existing adjacent roadways. The only roadways required will be those roadways directly serving the new construction.

A public elementary school, convenience retail stores, restaurants, a Harvard Vanguard medical building and other offices are all located adjacent to or within a 5 minute walk from the proposed housing.

Connected roadways and pathways are an integral component of the site design.

### 2. Advance Equity

As a Chapter 40B project, the proposed development will be reviewed through an extensive public hearing process. Prior to submitting the current Chapter 40B proposal, there have been numerous meetings with Town Boards and Committees over an extensive time period to discuss development alternatives for the site. Further details on these public meetings and their outcomes have been provided in the PEL Application.

Based upon an analysis of the "Affordable Housing Developments/Units as of March 2011" table included in the Town of Brookline's "HOUSING BROOKLINE Affordable Housing Policy & Program" publication dated April 1, 2011, it appears that of the 2,104 DHCD-qualified affordable housing units listed within Brookline's Subsidized Housing Inventory no more than 26 of them (or approximately 1.24%) are located in South Brookline neighborhoods. Furthermore, almost all of these 26 units are ownership units.

The residents of North Brookline, where the clear majority of affordable units are concentrated in Brookline, have long argued that new affordable housing opportunities should be created in South Brookline to provide a more equitable distribution of affordable housing throughout the town.

The project meets a regional and local affordable housing need as Brookline has less than 10% of its year round housing units classified as DHCD-qualified affordable housing.

### 3. Make Efficient Decisions

The project will comply with the State's statute, regulations, and guidelines established for Comprehensive Permit developments. Going forward, the project will continue to have numerous public hearings during the Board of Appeals' 180-day public hearing review process.

### 4. Protect Land and Ecosystems

The proposed project is not located in a designated habitat area, wetlands and water bodies or their buffer zones, prime agricultural land, or floodplains. Construction of the project utilizing three story and five story building types will help minimize building footprint sizes. The use of a parking garage located under the midrise building helps minimize impervious services normally created through surface parking.

The storm water management system will be designed to protect local water sources.

## **5. Use Natural Resources Wisely**

Suitable land in Brookline for the development of affordable housing, and affordable rental housing in particular is extremely scarce. When available, any such land is very expensive given that a strong homeownership market exists in Brookline for both detached fee simple units and condominiums. This strong ownership market demand often increases land values beyond the point where affordable housing is economically feasible. Therefore, the availability of this unutilized land within an existing multifamily development creates an unusual opportunity to design and build a multifamily development of 271 units.

The buildings will be mainly constructed with wood, a more sustainable alternative to other building materials such as steel and concrete. Wood has less embodied energy, air and water pollution and carbon footprint compared to other forms of construction.

Floor and roof construction will be framed with wood trusses which more efficiently spans large distances and uses less wood than conventional framing.

High-efficiency heating and cooling systems and equipment will be utilized.

Energy Star appliances will be utilized.

Energy-efficient light fixtures will be utilized.

Low-E and insulating glass windows will be utilized.

## **6. Expand Housing Opportunities**

20% of the proposed units will be Affordable Units that will be affordable to households at 50% of Median Family Income, adjusted for household size. These 55 affordable units will include one, two and three bedroom units that will expand housing opportunities within the Town.

29 of these affordable units will be one bedroom and two bedroom units located in an elevator-serviced building with 100% accessible units. All state Architectural Access Board requirements will be satisfied in both the midrise and three story buildings.

The Residences of South Brookline will provide rental housing choices that are currently limited in South Brookline given that the predominant land use is single family detached ownership homes which sell at very high prices.

## **7. Provide Transportation Choice**

There are three public bus stops on-site, serviced by the MBTA route running between Forest Hills station in Jamaica Plain and Reservoir Station in Brookline. Also, the owner of the existing Hancock Village development provides free van shuttle service for commuting residents during weekday mornings and evenings to the MBTA Reservoir Station Green D-Line trolley station near Cleveland Circle.

Supermarkets and other retail uses are located within easy driving distance in Brookline, Newton, West Roxbury and Jamaica Plain.

## **8. Increase Job and Business Opportunities**

The project will create numerous jobs during the construction period along with property management and on-site maintenance jobs upon completion of construction.

The project will provide attractive, new rental housing to support existing and future economic development in Brookline and the region.

**9. Promote Clean Energy**

The Residences of South Brookline will include elements of “green” design and use energy efficient appliances. Heat and hot water will be fueled with natural gas.  
(See Paragraph 5. above also)

**10. Plan Regionally**

The Residences of South Brookline has been designed to meet both local and regional needs for affordable rental housing.

## Financial Information

### INITIAL CAPITAL BUDGET (Estimated Sources and Uses of Funds)

#### FUNDING (SOURCES):

	Amount
MassDevelopment Tax-exempt Bond	\$58,570,000
MassDevelopment Taxable Bond	
Private Equity	16,793,639
Public Equity/Soft Debt	
Other - Tax Credit Equity	5,000,000
Other	
<b>Total Sources</b>	<b>\$80,363,639</b>

#### DEVELOPMENT COSTS (USES):

	Total Costs	Sq. Ft. Cost
<b>Site Acquisition</b> (N/A - Land Lease)	-	
<b>Hard Costs:</b>		
Site Preparation	\$6,189,944	18.65
Landscaping	750,000	2.26
Residential Construction	47,541,885	143.24
Garage Construction	4,248,000	12.80
<b>Subtotal Hard Costs:</b>	<b>58,729,829</b>	<b>176.95</b>
Contingency	2,936,491	8.85
<b>Total Hard Costs:</b>	<b>61,666,321</b>	<b>185.80</b>
<b>Soft Costs:</b>		
Architectural and Engineering	3,186,423	9.60
Surveys and Testing	15,000	0.05
Permits and Fees	828,483	2.50
Legal	1,097,500	3.31
Insurance	184,999	0.56
Real Estate Taxes	250,000	0.75
Other - FF+E	357,000	1.08
Marketing and Rent Up	270,000	0.81
Construction Inspection Fee	12,000	0.04
Permanent Financing Fee	790,698	2.38
Construction Loan Fee	292,851	0.88
Construction Loan Interest	3,424,731	10.32
<b>Subtotal Soft Costs:</b>	<b>10,709,685</b>	<b>32.27</b>
Soft Cost Contingency	545,484	1.64
<b>Total Soft Costs</b>	<b>\$11,255,169</b>	<b>33.91</b>
<b>Total Hard and Soft Costs</b>	<b>\$72,921,490</b>	<b>219.71</b>

	Total Cost	Sq. Ft Cost
<b>Capitalized Reserves:</b>		
Lease-Up Reserves	200,000	0.60
Other (specify)		
Developer's Fee and Overhead	7,242,149	21.82
<b>Total Development Costs</b>	<b>\$80,363,639</b>	<b>242.13</b>

**INITIAL RENTAL PRO FORMA**  
**Permanent Debt Assumptions**

Massdevelopment Bond Amount	58,570,000	
Annual Rate	5.0%	
Term	30	
Amortization	30	
<b>Gross Rental Income</b>	7,617,066	
Other Income (Parking)	203,700	
<i>Less Vacancy (Vacancy Rate - 5%)</i>	(391,038)	
<b>Gross Effective Income</b>	7,429,728	
<i>Less Operating Expenses</i>	(2,228,464)	
<b>Net Operating Income</b>	5,201,264	
<i>Less Land Lease Payment</i>	(485,000)	
<i>Less Permanent Loan Debt Service</i>	(3,773,011)	
<b>Cash Flow</b>	1,428,253	
<b>Debt Service Coverage</b>	1.25	

**PROPOSED DISTRIBUTION OF MARKET AND AFFORDABLE UNITS  
ASSUMING TAX-EXEMPT BOND FINANCING  
WITH 20% OF UNITS AFFORDABLE AT 50% OF MEDIAN FAMILY INCOME**

**APARTMENT BUILDING**

Unit Type	NSF	Market Units	Affordable Units	Total Units	Market Rent	Affordable Rent
1BR/1BA	826	15	5	20	\$2,106	\$869
1BR/1BA	839	8	2	10	\$2,139	\$869
1BR/1BA	853	9	3	12	\$2,175	\$869
1BR/1BA	894	16	4	20	\$2,280	\$869
1BR/1BA	971	2	0	2	\$2,476	\$869
2BR/1BA	1031	6	2	8	\$2,526	\$1,037
2BR/2BA	1102	8	2	10	\$2,700	\$1,037
2BR/2BA	1127	21	4	25	\$2,761	\$1,037
2BR/2BA	1169	16	4	20	\$2,864	\$1,037
2BR/2BA	1285	<u>15</u>	<u>3</u>	<u>18</u>	\$3,148	\$1,037
		116	29	145		

**3-STORY BUILDINGS**

Unit Type	NSF	Market Units	Affordable Units	Total Units	Market Rent	Affordable Rent*
1BR/1BA	879	29	11	40	\$2,154	\$869
1BR/1BA w/Loft	1237	17	3	20	\$3,031	\$869
2BR/2BA	1164	16	6	22	\$2,735	\$1,037
2BR/2BA w/Loft	1522	20	2	22	\$3,577	\$1,037
3BR/2.5BA	1359	<u>18</u>	<u>4</u>	<u>22</u>	\$3,058	\$1,192
		100	26	126		

\*After deducting Utility Allowance

**\*UTILITY ALLOWANCES (BROOKLINE HOUSING AUTHORITY UTILITY ALLOWANCE SCHEDULE DATED 10/01/2011)**

**ALL BUILDINGS**

	<u>1 BR</u>	<u>2 BR</u>	<u>3 BR</u>
Heating (Gas) (BY OWNER)	\$0.00	\$0.00	\$0.00
Hot Water (Gas) (BY OWNER)	\$0.00	\$0.00	\$0.00
Cooking (Electric) (BY RESIDENT)	\$11.00	\$14.00	\$18.00
Electricity (BY RESIDENT)	\$38.00	\$50.00	\$62.00
Air Conditioning (BY RESIDENT BUT INCLUDED ABOVE IN ELECTRICITY)	\$0.00	\$0.00	\$0.00
Water (BY OWNER)	\$0.00	\$0.00	\$0.00
Sewer (BY OWNER)	\$0.00	\$0.00	\$0.00
	\$49.00	\$64.00	\$80.00

**Market Study**

(Submitted under separate cover to MassDevelopment. Copies available upon request)

**Site Assessments Chapter 21E**

(Submitted under separate cover to MassDevelopment. Copies available upon request)

**Chapter 40B Land Value Appraisal**

(Submitted directly to MassDevelopment by its appraiser)



## Chestnut Hill Realty

August 10, 2012

Aaron Gornstein, Undersecretary  
Massachusetts Department of Housing  
and Community Development (DHCD)  
100 Cambridge Street, Suite 300  
Boston, MA 02114

Dear Mr. Gornstein:

Chestnut Hill Realty (CHR) is pleased to submit a copy of its Project Eligibility Letter application for The Residences of South Brookline to DHCD. The Project Eligibility Letter application was submitted to MassDevelopment on August 10, 2012.

The Residences of South Brookline has been designed to provide 271-units of multifamily, unrestricted occupancy, rental housing under the state's Comprehensive Permit program. We feel that The Residences of South Brookline will serve as an excellent model for Smart Growth through Creative Infill, in that the proposed building sites are located on unutilized land in our Hancock Village rental development at Independence Drive in South Brookline. The development will greatly expand mixed-income housing opportunities in South Brookline given that almost all DHCD-qualified affordable housing in Brookline has been concentrated in North Brookline. Public transportation will be available at three public bus stops adjacent to the site, serviced by the MBTA route running between Forest Hills Station in Jamaica Plain and Reservoir Station in Brookline. In addition, CHR provides free van shuttle service for commuting residents on weekday mornings and evenings to the MBTA Reservoir Green D-Line station.

Detailed site, engineering, design and financial information is included in the Project Eligibility Letter application. If you have any questions or desire additional information, please do not hesitate to contact me or our Chapter 40B Advisor, Edward Marchant (617) 739-2543 or [emarchant@msn.com](mailto:emarchant@msn.com)).

Sincerely yours,

Marc L. Levin  
Direction of Development

**617-323-8800**

**Executive Offices**

Box 67377, Chestnut Hill, MA 02467-0004

FAX 617-323-8801

[chestnuthillrealty.com](http://chestnuthillrealty.com)



## Chestnut Hill Realty

August 10, 2012

Betsy DeWitt, Chair  
Board of Selectmen  
Town of Brookline  
Brookline Town Hall  
333 Washington Street  
Brookline, MA 02445

Dear Ms. DeWitt:

Chestnut Hill Realty (CHR) is pleased to submit a copy of its Project Eligibility Letter (PEL) application for The Residences of South Brookline to DHCD. The Project Eligibility Letter application was submitted to MassDevelopment on August 10, 2012.

The Residences of South Brookline has been designed to provide 271-units of multifamily, unrestricted occupancy, rental housing under the state's Comprehensive Permit program. This development should greatly expand mixed-income housing opportunities in South Brookline given that almost all DHCD-qualified affordable housing in Brookline has been concentrated in North Brookline.

Detailed site, engineering, design and financial information is included in the Project Eligibility Letter application. If you have any questions or desire additional information, please do not hesitate to contact me or our Chapter 40B Advisor, Edward Marchant (617) 739-2543 or [emarchant@msn.com](mailto:emarchant@msn.com)).

Sincerely yours,

Marc L. Levin  
Director of Development

**617-323-8800**

**Executive Offices**

Box 67377, Chestnut Hill, MA 02467-0004

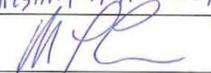
FAX 617-323-8801

[chestnuthillrealty.com](http://chestnuthillrealty.com)

**Applicant Certification**

The undersigned Applicant hereby certifies that the information requested above for the project known as The Residences of South Brookline contained in this application to MassDevelopment is true and correct to the best of Applicant's knowledge.

Applicant Chestnut Hill Realty Date 8/10/12

By:   
Name: Marc Levin  
Title: Director of Development

**Please submit five (5) copies of this application to:**

Anthony E. Fracasso  
Senior Vice President, Investment Banking  
MassDevelopment  
160 Federal Street, 7<sup>th</sup> Floor  
Boston, MA 02110

**With one copy to each of the following:**

Director  
Massachusetts Department of Housing and  
Community Development  
One Congress Street, 10<sup>th</sup> Floor  
Boston, MA 02114

**A copy has also been submitted to:**

Board of Selectmen  
Town of Brookline  
333 Washington Street  
Brookline, MA 02445