

Form Based Code for Newmarket, NH

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GOALS OF FORM-BASED CODE

Our goal is to create two new form-based zoning districts with a zoning code that allows these areas, as they are developed and re-developed, to continue the existing building pattern of a traditional New England small town. Residents do not want a suburban development pattern of big box stores with large parking lots on their Main Street. The districts include the Route 108/Main Street 'spine' and the close-in neighborhoods to that spine.

METHODOLOGY:

We began the project by walking and driving around Newmarket to get a feel for the existing, beloved pattern as well as to understand Newmarket's building types. What we see along the core of Main Street are small lots with buildings that cover the entire lot. Some buildings are as narrow as 17 feet, and many of them touch or almost touch the neighboring building. In the neighborhoods adjacent to Main Street we saw very typical New England residential types: capes, side by side duplexes, cottages, large Victorian-style houses, some of which have already been converted into multi-family units.

Our public process began with an all-town event held at the Elementary School on March 16. We worked with about 20 people.

At that event we offered several exercises for participants. In one exercise we asked participants to place orange dots ● on areas where they thought housing should go and green dots ● where they thought green, open space was appropriate.

[People overwhelmingly wanted to add housing in already existing neighborhoods, as well as along the Main Street corridor.]



METHODOLOGY CONTINUED

In April we mailed postcards to every landowner in the target area and invited them to a series of meetings held at the Mill Space in downtown Newmarket. We scheduled five meetings, Wednesday April 17 at 3, 5, and 7:30 p.m. and Thursday April 18 at 3 and 5 p.m. At these meetings we spoke with approximately 65 residents.

At the April meetings we used the same exercises: sort a set of cards into preferred and not preferred piles, followed by placing flags on the map where those building types might fit.

We presented our results to the planning board in May and with the recommendation of the Newmarket planner, Bart McDonough and the planning board, the subject area was increased. For the Main Street/108 corridor we extended the proposed area from the Durham town line to 92 Exeter Road; for the neighborhood zone we incorporated areas south of Town Hall and the New Village area of Newmarket.

Once the subject area was increased two more rounds of public engagement were scheduled by sending postcards to all the subject properties. Approximately 20 more residents participated in the exercises, confirming our earlier results.

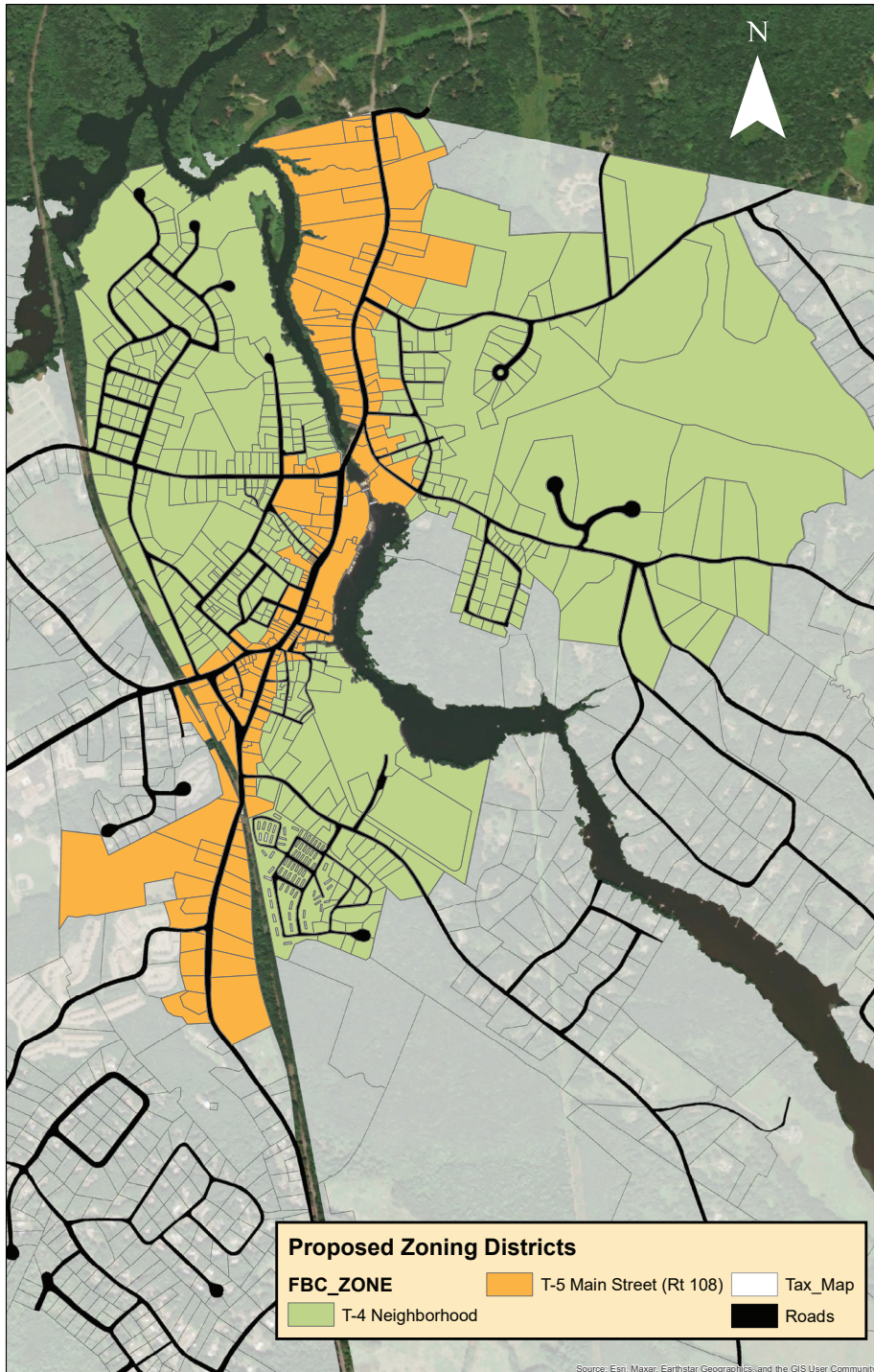
In our conversations with residents it was clear that people cared about the look and feel of any proposed new buildings: they wanted to be sure that the buildings would be appropriate in size and scale for their location. **“I don’t care how many units there are, I just don’t want the building to be too big”** was a common refrain.

ZONING MAP

This map delineates the proposed boundaries of the two new zoning districts.

The orange area is T-5 Main Street, which is intended to produce the same conditions we see in the center of Newmarket: narrow lots with a mixture of building sizes and uses.

The green area is T-4 Neighborhood, a predominately residential district allowing up to six units on a lot served by municipal water and sewer. It is intended to produce a historically appropriate streetscape which encourages walking and bicycling.



ZONING DISTRICT DESCRIPTIONS:

T-5 MAIN STREET DISTRICT

Purpose: To continue the traditional Main Street pattern of Newmarket as parcels are developed and redeveloped along Route 108.

Building Standards:

A. The following building types shall be permitted by right:

- Small apartment building
- Townhouses
- Stacked duplex
- Side by side duplex
- Front-back duplex
- Simple shop
- Live-work
- Apartment house
- Multi-tenant commercial
- Main Street mixed
- Courtyard apartment building
- Apartment building

B. No building or assembly of buildings shall exceed 100 feet of length parallel to the street except between Elm Street and Gerry Avenue where the maximum length shall be 50 feet.

Permitted Uses:

- Residential: Any multi-family residential use up to 16 units
- Commercial: Retail, services, food sales, lodging, restaurant, etc.
- Civic: School, place of worship, public and quasi-public venue, museum, etc.

Lot and Yard Standards:

- Minimum lot size: No minimum lot size
- Minimum frontage: No minimum frontage
- Front setback: Buildings must meet the back of sidewalk or be stepped back a maximum of 50 feet to allow for a sidewalk cafe, civic space, courtyard, forecourt, or patio
- Minimum side and rear setback: No minimum setback
- Maximum building height: 50 feet
- Maximum lot coverage: 100 percent with stormwater infiltration

Parking and Sidewalk Standards:

- Parking may not be located between the building(s) and the street
- Parking shall be shielded from the street
- Sidewalks with a minimum width of 8 feet are required
- No minimum parking requirements

T-4 NEIGHBORHOOD DISTRICT

Purpose: To provide housing choices in existing neighborhoods close to Route 108 by allowing repurposing of existing buildings and the creation of new buildings at the same scale, and to allow creation of new housing in the pattern of existing neighborhoods. Neighborhood scale retail is also permitted.

Building Standards:

A. The following building types shall be permitted by right, in addition to single-family dwellings:

- Small apartment building
- Townhouses
- Stacked duplex
- Side by side duplex
- Front-back duplex
- Simple shop
- Live-work
- Apartment house

B. No building or assembly of buildings shall exceed 50 feet of length parallel to the street.

C. Attached garages shall be stepped back a minimum of 15 feet from the building facade.

D. In the instance that a lot has frontage in two districts the building standards, lot requirements, etc. of the district in which the entry is located shall apply.

Permitted Uses:

A. Any residential use including multi-family up to six units.

B. Neighborhood retail of up to 1,000 square feet with the following conditions:

1. The lot complies with all dimensional requirements of this chapter.
2. All retail activity shall be conducted indoors. There shall be no outdoor product display or sales.
3. Because the use shall be relatively inconspicuous, a wall sign shall be permitted in addition to all other signage otherwise permitted in the district. The message area of the wall sign shall not exceed 12 square feet and shall not be illuminated.
4. The use shall be limited to not more than 1,000 square feet of gross floor area, including all storage and other space associated with the use.
5. The sale of gasoline, diesel, or other fuels shall be prohibited.
6. Site plan review approval shall be required.
7. Neighborhood retail shall be permitted on the same lot as a single-family residence. It may be located in the same structure or in a separate structure.

C. Home businesses are permitted.

Lot and Yard Standards:

- Minimum lot size: 5,000 square feet
- Minimum frontage: 50 feet
- Minimum front setback: 5 feet
- Maximum front setback: 20 feet
- Minimum side and rear setback: 10 feet
- Maximum building height: 35 feet
- Primary building facade will face the public street or a courtyard open to the public street.
- Attached townhouse lots: minimum frontage of 20 feet and minimum total lot area of 1600 square feet
- Maximum lot coverage: 75 percent with stormwater infiltration
- Municipal water and sewer connections are required

Parking Standards:

- Parking may not be located between the building(s) and the street
- Parking shall be shielded from the street
- A minimum of one parking place shall be provided for each dwelling unit. Parking spaces may be off-site

Street Standards:

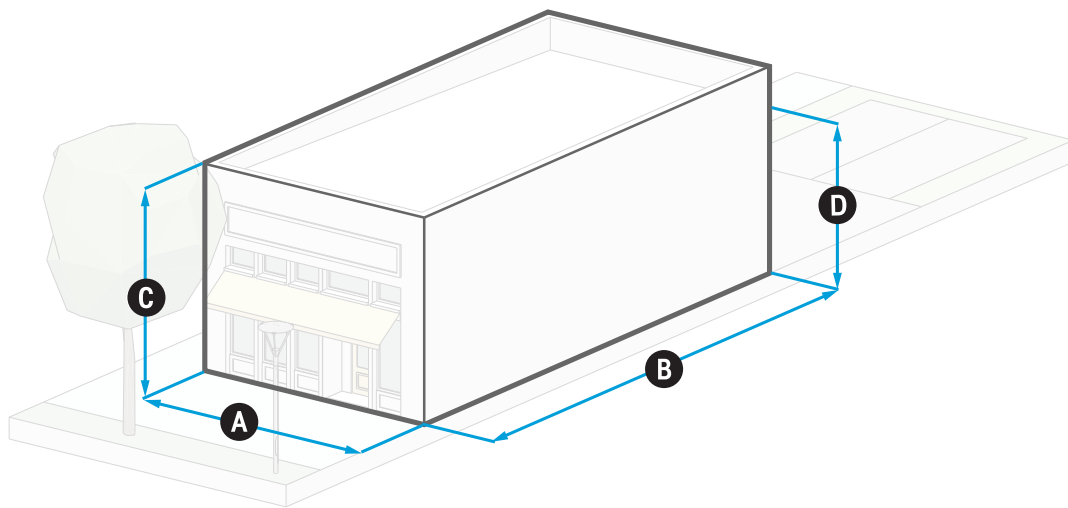
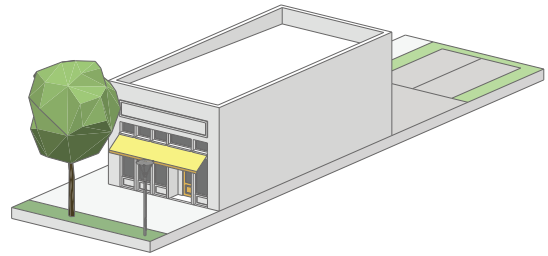
- New streets shall be built in accordance with the town of Newmarket's street standards
- Streets shall be laid out in a connected grid
- Cul de sacs and dead end streets are strongly discouraged
- Pedestrian and bicycle connectivity through sidewalks, bike paths, and trail systems is required

BUILDING TYPES

Building types are an intrinsic part of a form-based code. They govern what form the buildings may take: how high they are, how wide, how many windows are necessary. They are also the mechanism for controlling how many units are permitted to be built on any given parcel.

The following building types were developed after extensive observation of Newmarket's existing built environment and with the help of residents in a series of public events.

1. SMALL AND SIMPLE SHOP



a. DESCRIPTION

A moderately scaled building type comprised of up to 2 units.

b. BUILDING FORM

Building Width	30 ft max	A
Building Length	60 ft max	B
Total Stories	1 stories max	C
First Floor Height	9 ft min, 14 ft max	D
First Floor Elevation	0 ft min	

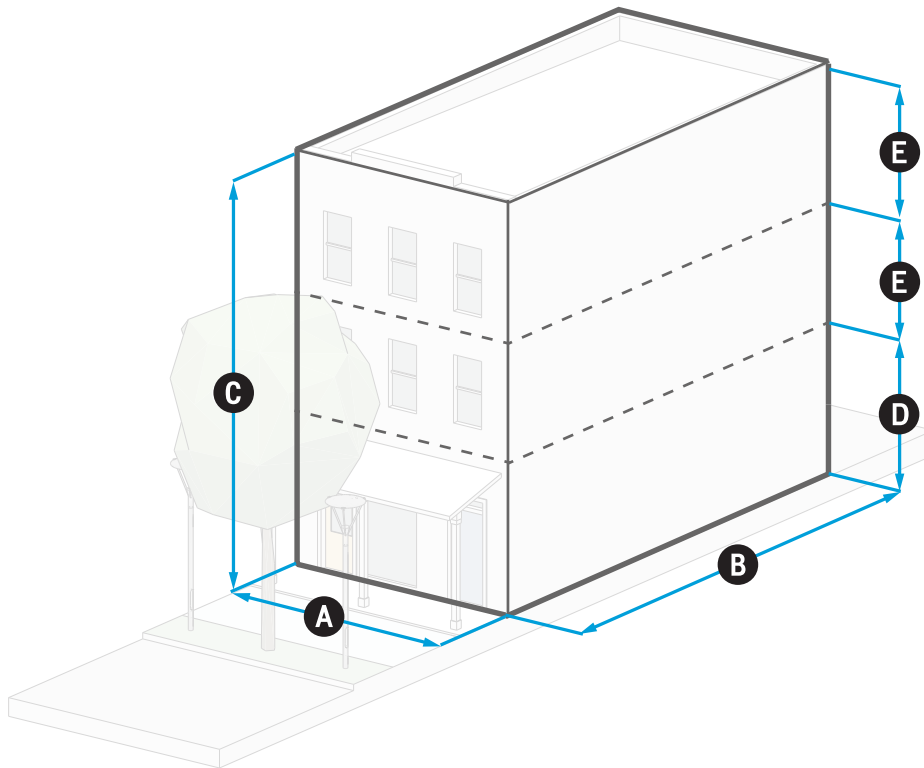
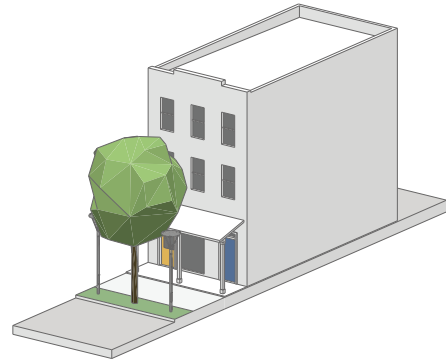
c. ALLOWABLE UNITS

2 units max

d. FENESTRATION

First Floor Fenestration	50% minimum
Front Elevation	50% minimum

2. LIVE / WORK



a. DESCRIPTION

A moderately scaled building type comprised of up to 3 units.

b. BUILDING FORM

Building Width	30 ft max	A
Building Length	60 ft max	B
Total Stories	3 stories max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E

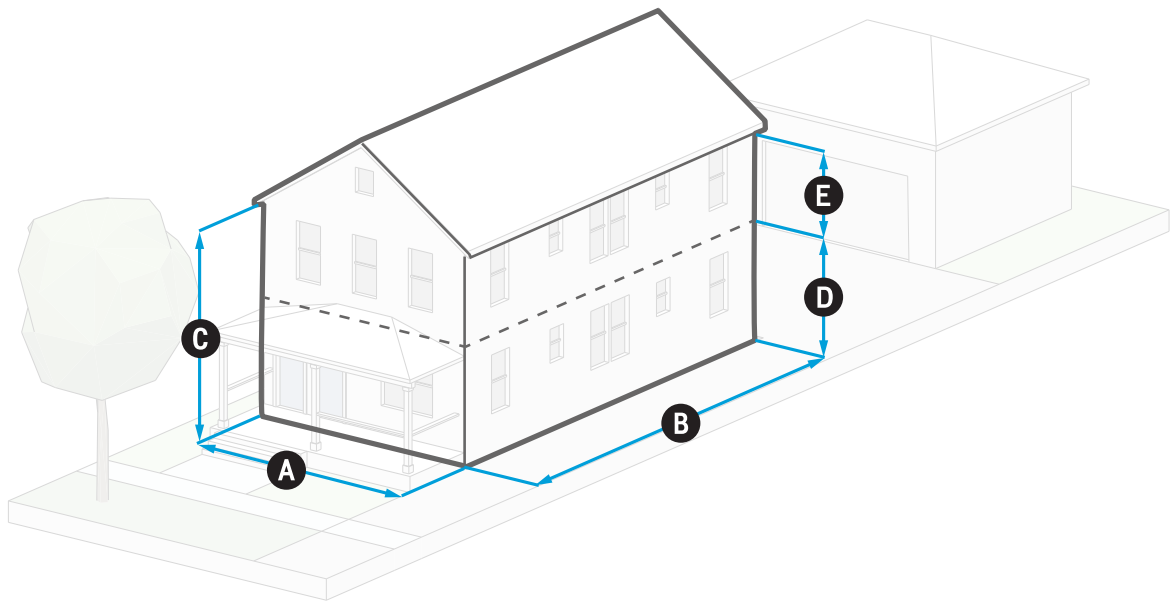
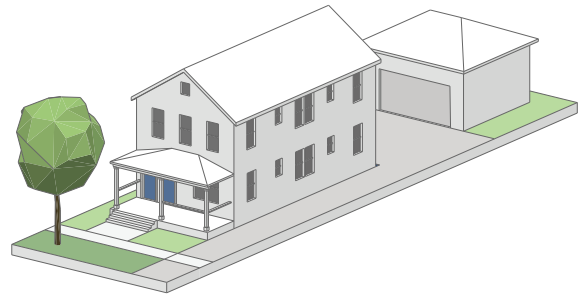
c. ALLOWABLE UNITS

3 units max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

3. STACKED DUPLEX



a. DESCRIPTION

A moderately scaled building type comprised of up to 2 units.

b. BUILDING FORM

Building Width	30 ft max	A
Building Length	60 ft max	B
Total Stories	2 stories max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E
First Floor Elevation	2 ft min	

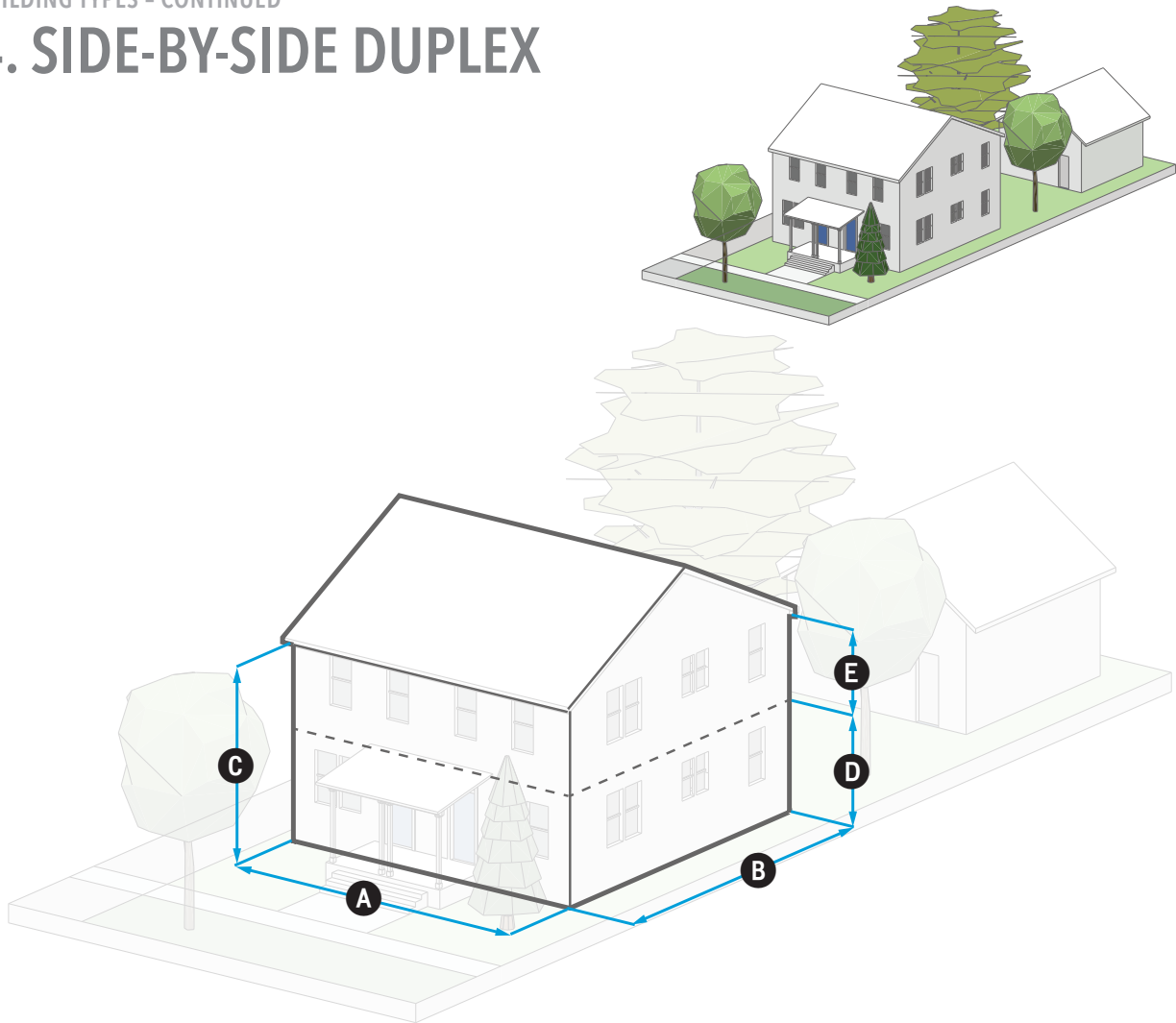
c. ALLOWABLE UNITS

2 units max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

4. SIDE-BY-SIDE DUPLEX



a. DESCRIPTION

A moderately scaled building type comprised of up to 2 units.

b. BUILDING FORM

Building Width	50 ft max	A
Building Length	60 ft max	B
Total Stories	2 stories max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E
First Floor Elevation	2 ft min	

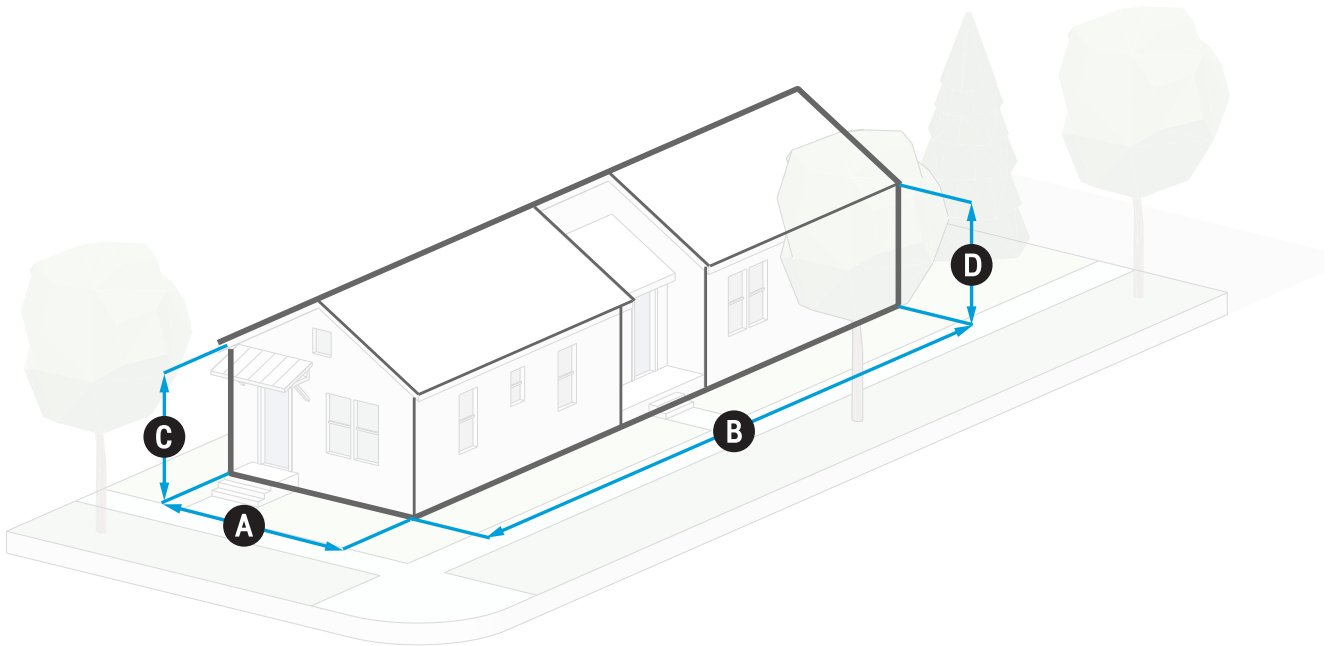
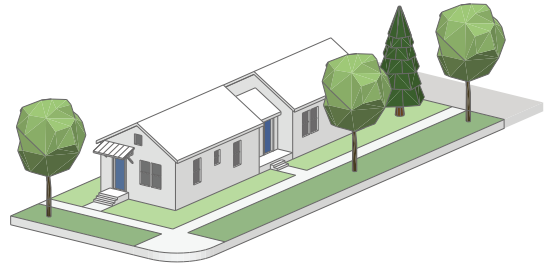
c. ALLOWABLE UNITS

2 units max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

5. FRONT-BACK DUPLEX



a. DESCRIPTION

A moderately scaled building type comprised of up to 2 units.

b. BUILDING FORM

Building Width	36 ft max	A
Building Length	75 ft max	B
Total Stories	1 stories max	C
First Floor Height	9 ft min, 15 ft max	D

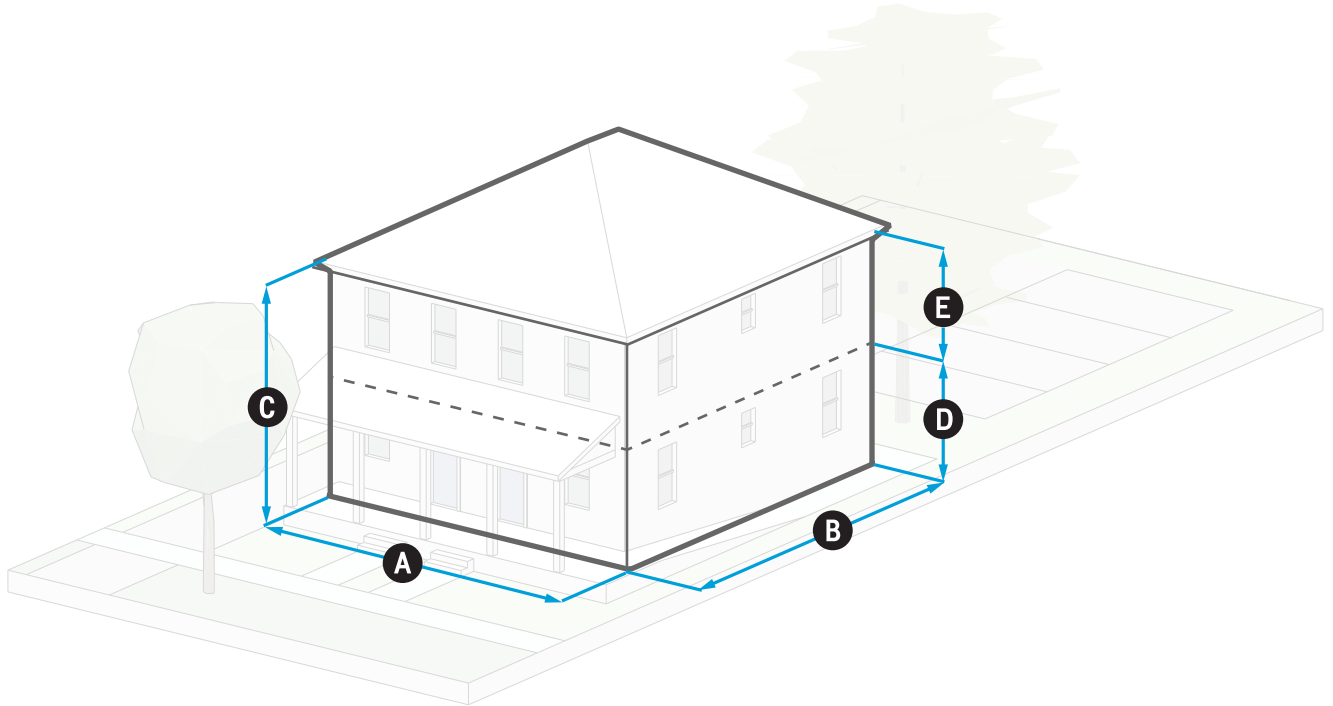
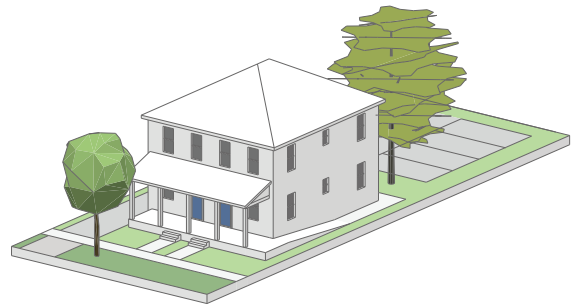
c. ALLOWABLE UNITS

2 units max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

6. PURPOSE-BUILT 4-UNIT APARTMENT HOUSE



a. DESCRIPTION

A moderately scaled building type comprised of up to 4 units.

b. BUILDING FORM

Building Width	50 ft max	A
Building Length	75 ft max	B
Total Stories	2 stories max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E
First Floor Elevation	2 ft min	

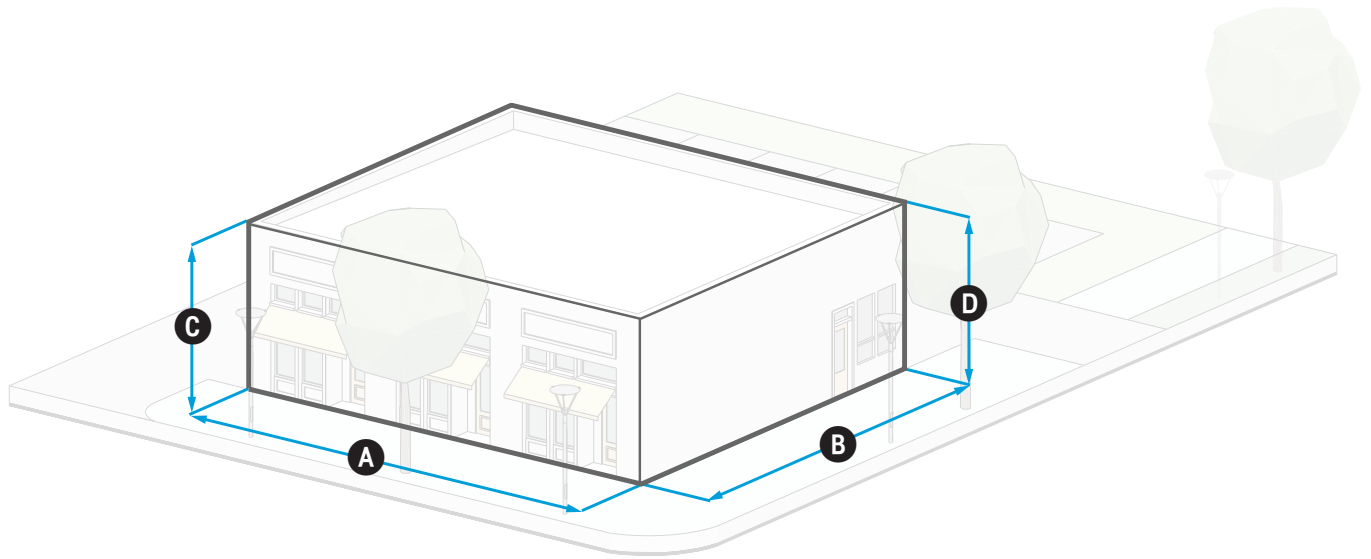
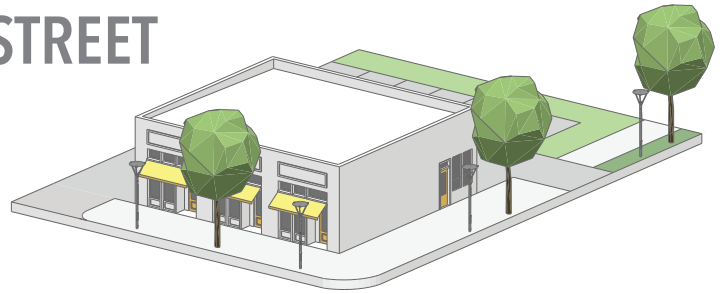
c. ALLOWABLE UNITS

4 units max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

7. MULTI-TENANT MAIN STREET



a. DESCRIPTION

A moderately scaled building type comprised of up to 6 units.

b. BUILDING FORM

Building Width	60 ft max	A
Building Length	75 ft max	B
Total Stories	1 story max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E
First Floor Elevation	0 ft min	

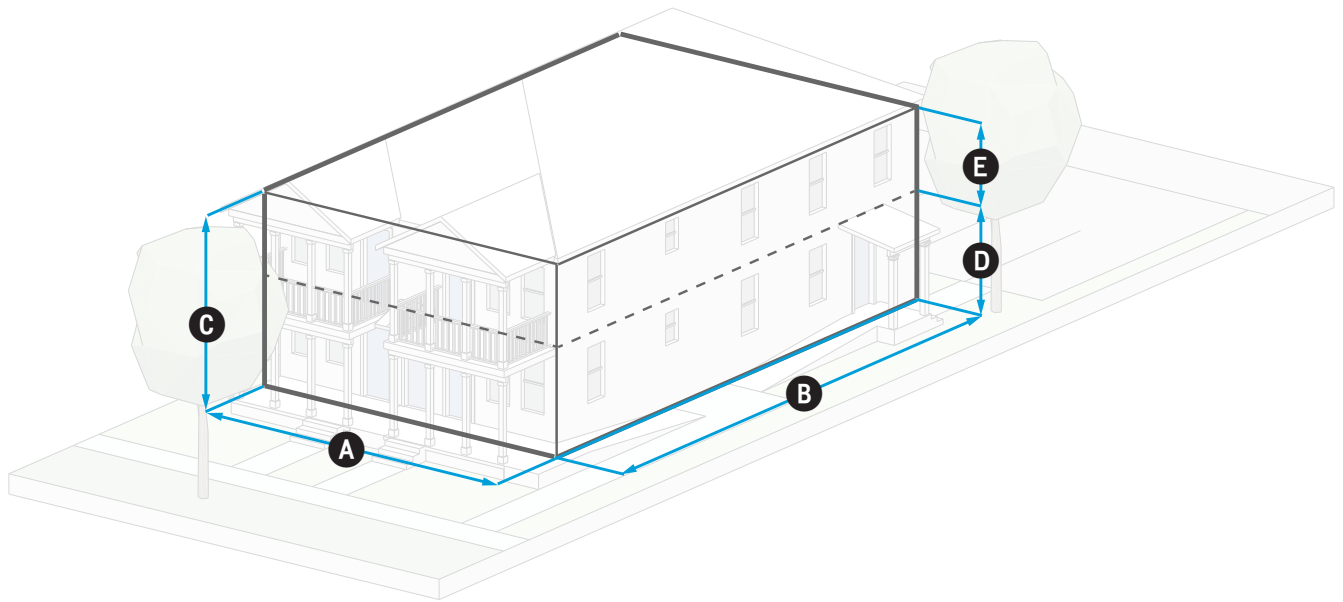
c. ALLOWABLE UNITS

6 units max

d. FENESTRATION

First Floor Fenestration	50% minimum
Front Elevation	50% minimum

8. SMALL APARTMENT BUILDING



a. DESCRIPTION

A moderately scaled building type comprised of up to 6 units.

b. BUILDING FORM

Building Width	60 ft max	A
Building Length	75 ft max	B
Total Stories	2 stories max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E
First Floor Elevation	2 ft min	

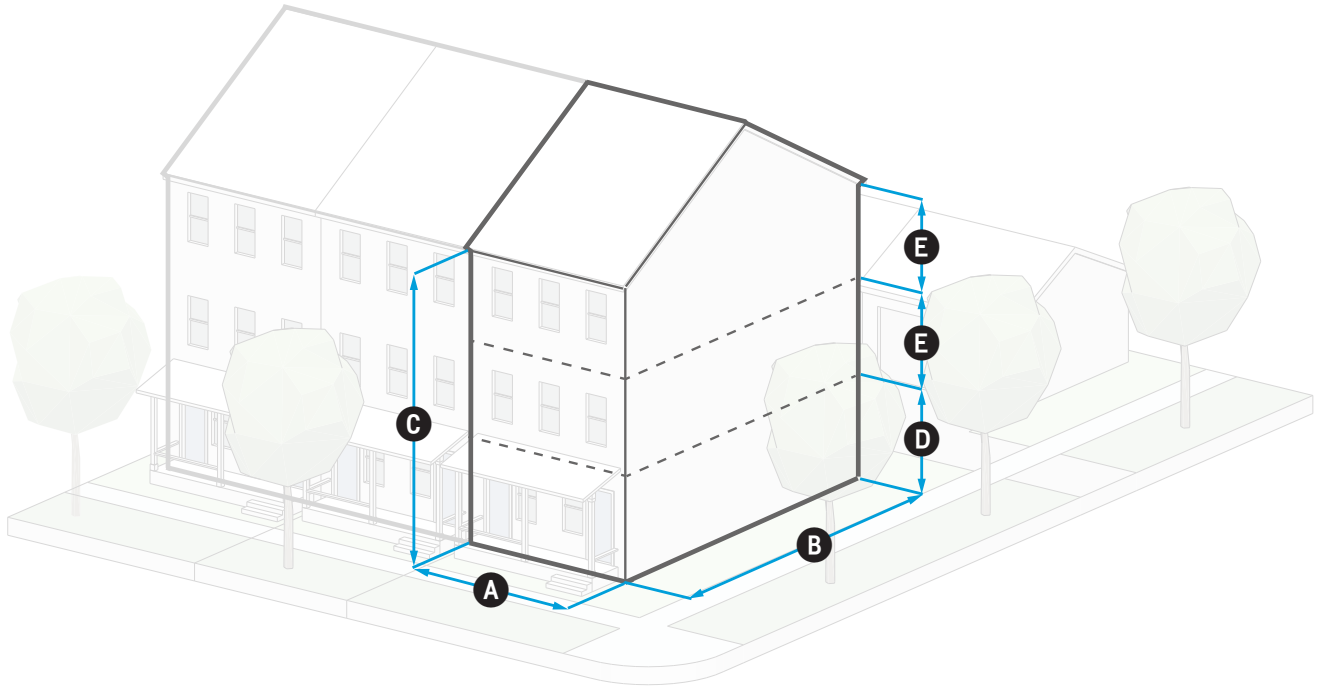
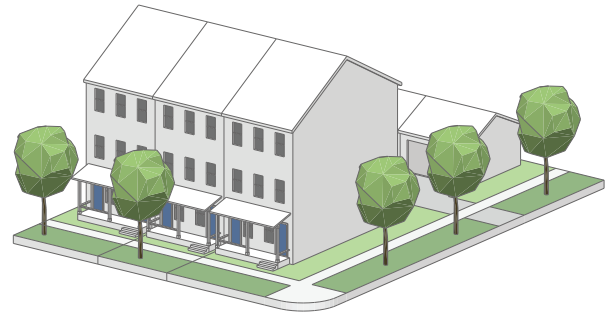
c. ALLOWABLE UNITS

6 units max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

9. TOWNHOUSES



a. DESCRIPTION

A moderately scaled building type comprised of 1 unit.

b. BUILDING FORM

Building Width	25 ft max	A
Building Length	50 ft max	B
Total Stories	2 min, 3 max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E
First Floor Elevation	2 ft min	

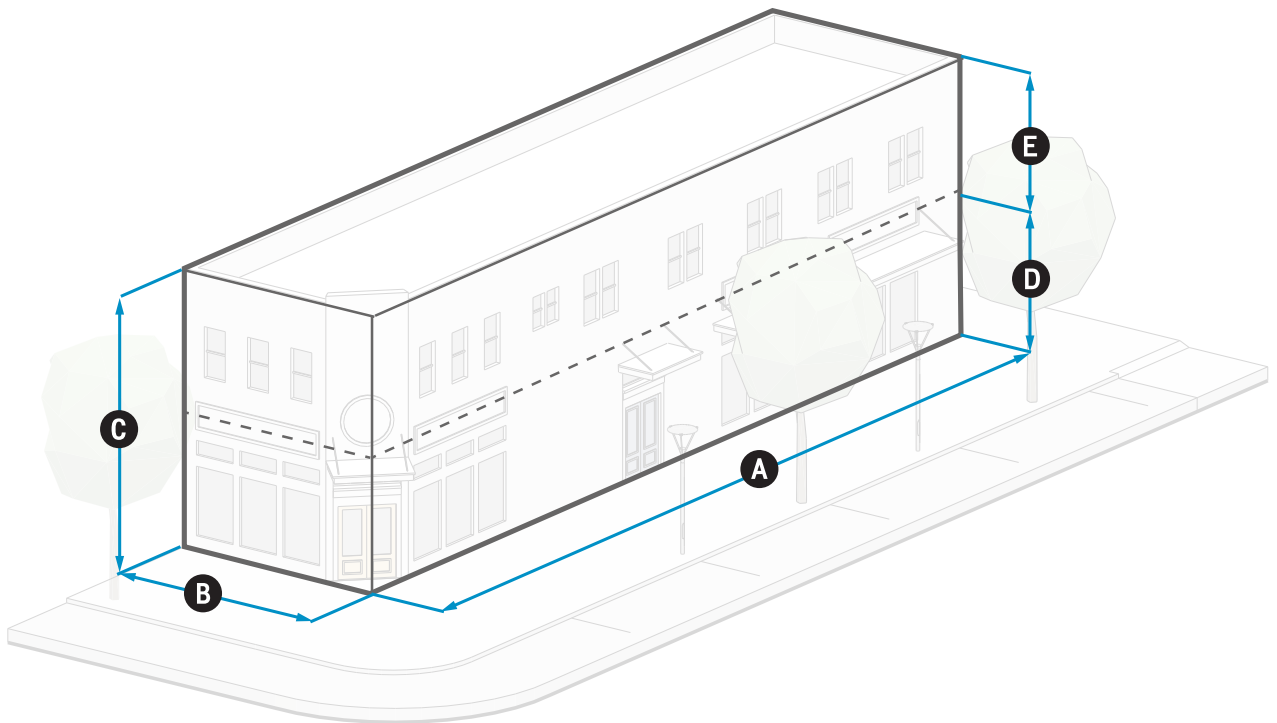
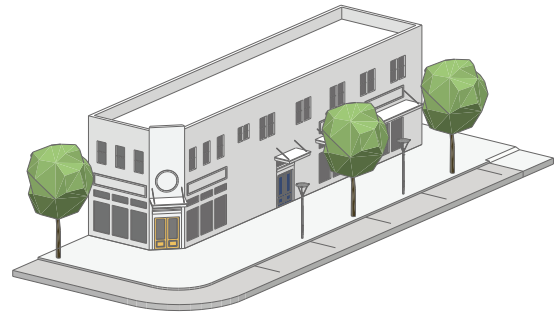
c. ALLOWABLE UNITS

6 townhouses connected max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

10. SMALL MAIN STREET



a. DESCRIPTION

A moderately scaled building type comprised of up to 6 units.

b. BUILDING FORM

Building Width	40 ft max	A
Building Length	75 ft max	B
Total Stories	2 stories max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E
First Floor Elevation	0 ft min	

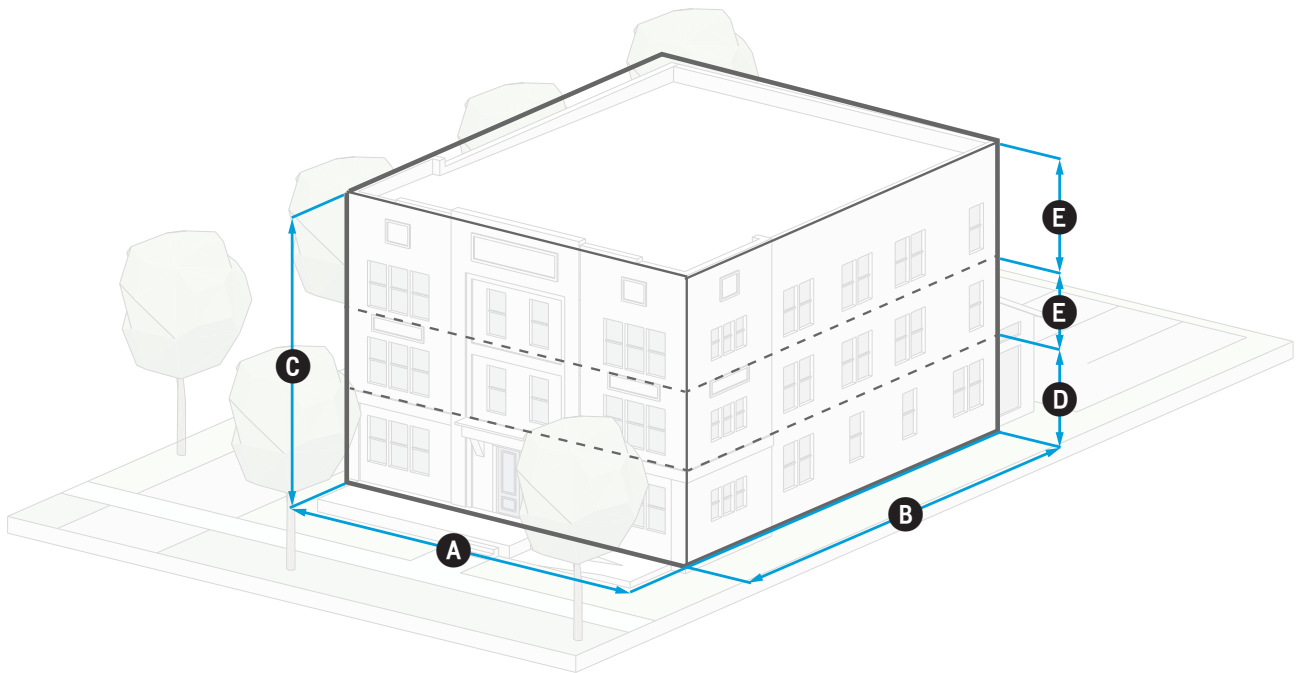
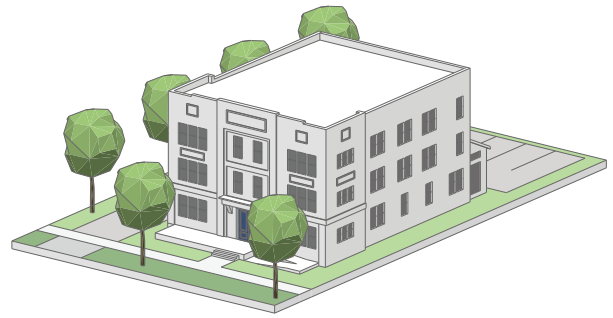
c. ALLOWABLE UNITS

6 units max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

11. WALK-UP APARTMENT BUILDING



a. DESCRIPTION

A moderately scaled building type comprised of up to 8 units.

b. BUILDING FORM

Building Width	60 ft max	A
Building Length	75 ft max	B
Total Stories	3 stories max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E
First Floor Elevation	2 ft min	

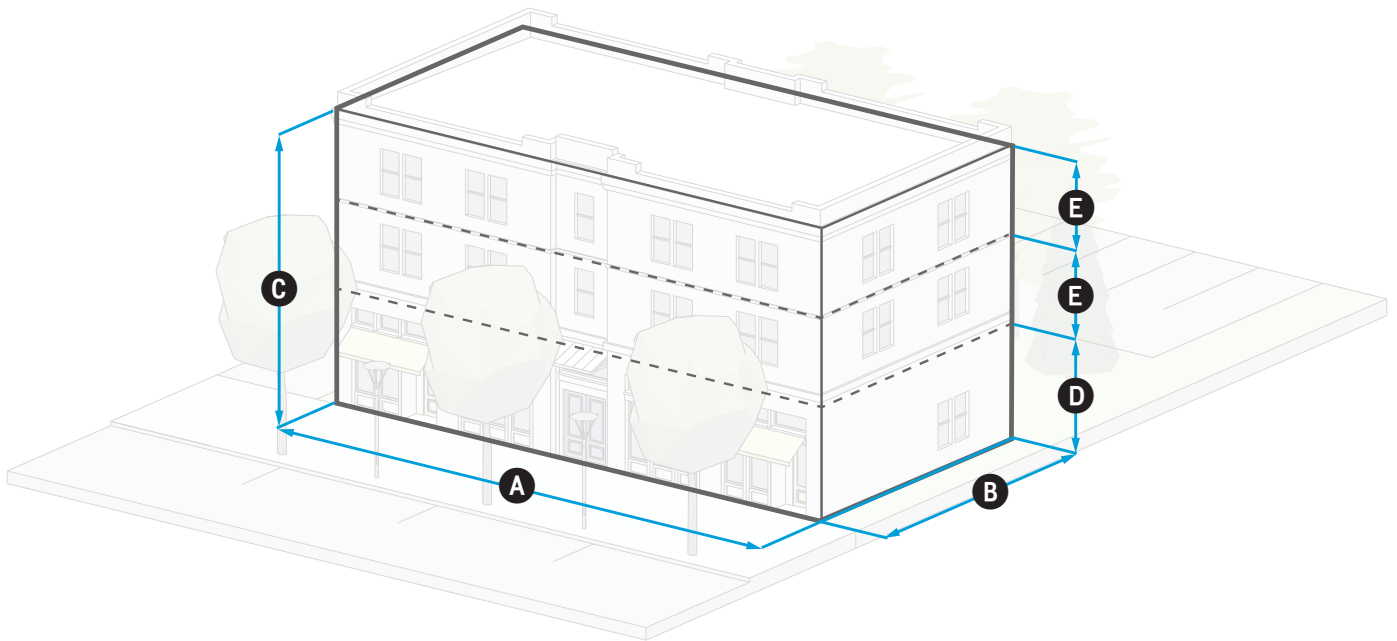
c. ALLOWABLE UNITS

8 units max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

12. LARGE 4-12 UNIT MAIN STREET



a. DESCRIPTION

A moderately scaled building type comprised of up to 12 units.

b. BUILDING FORM

Building Width	80 ft max	A
Building Length	75 ft max	B
Total Stories	3 stories max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E

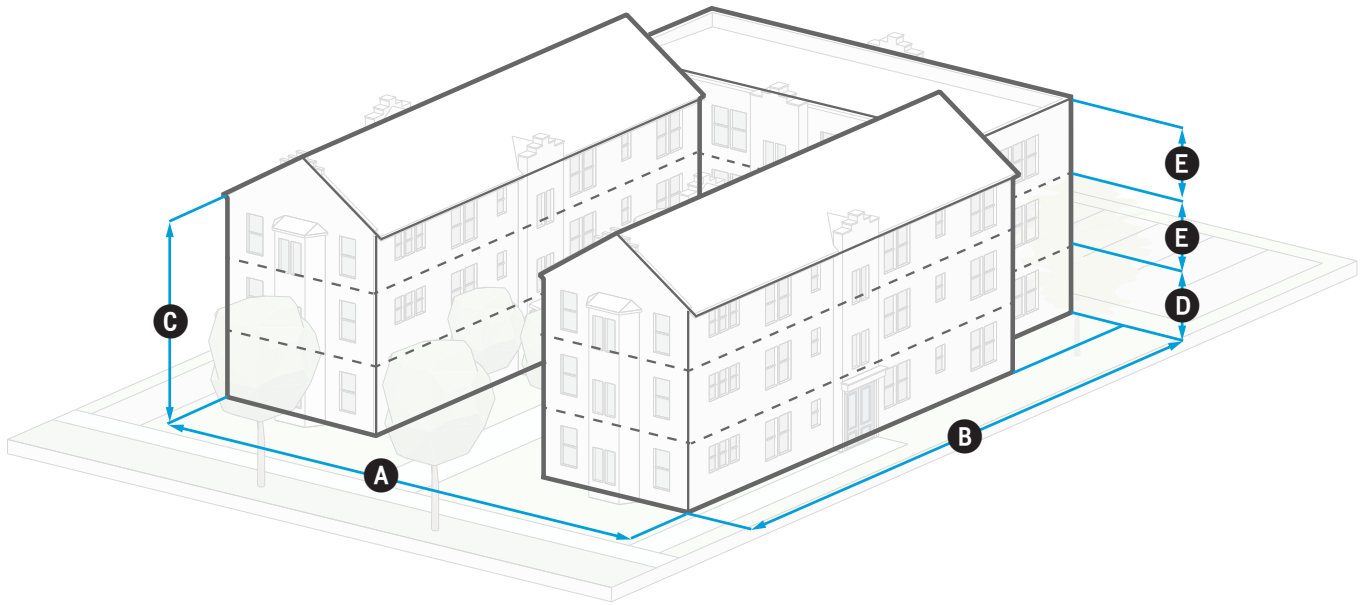
c. ALLOWABLE UNITS

12 units max

d. FENESTRATION

First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

13. WALK-UP COURTYARD APARTMENTS



a. DESCRIPTION

A moderately scaled building type comprised of up to 16 units.

b. BUILDING FORM

Building Width	95 ft max	A
Building Length	100 ft max	B
Total Stories	3 stories max	C
First Floor Height	9 ft min, 15 ft max	D
Upper Floor Height	9 ft min, 12 ft max	E
First Floor Elevation	2 ft min	

c. ALLOWABLE UNITS

16 units max

d. FENESTRATION

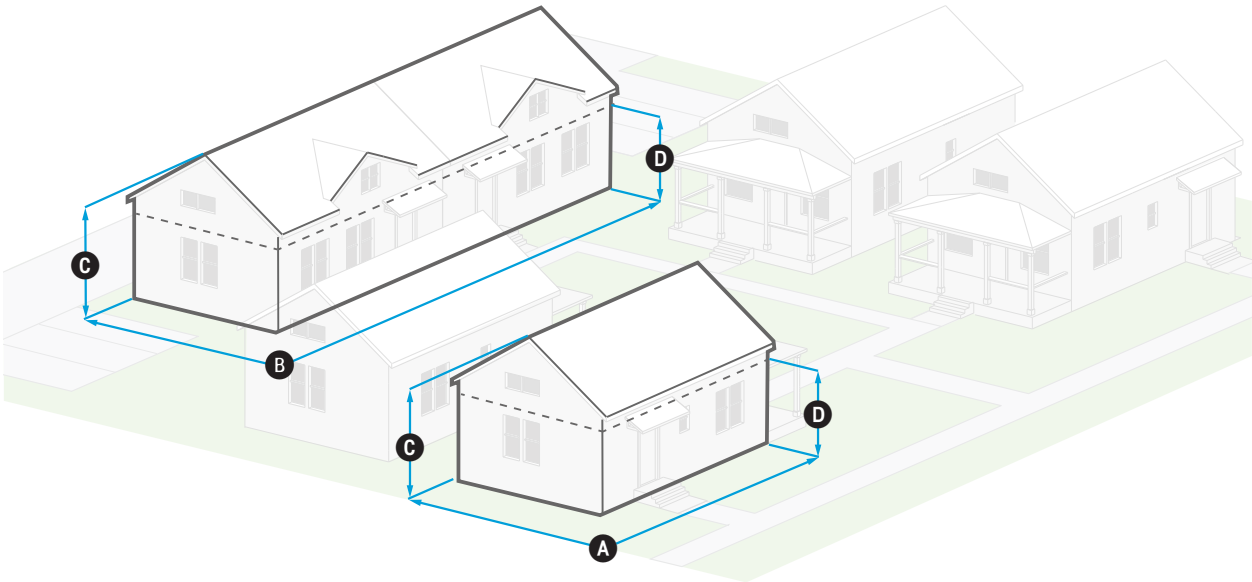
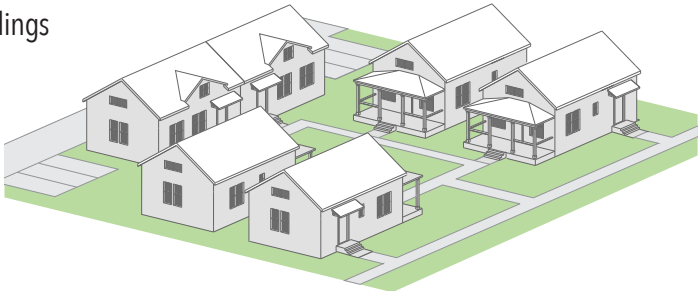
First Floor Fenestration	20% min
Upper Floor Fenestration	20% min

BUILDING CLUSTERS

Building clusters are groups of buildings which have particular rules about how they relate to one another and to the street to ensure that they are contributing positively to the built environment.

Cottage Court:

A cottage court consists of between 4 and 12 buildings arranged to define a shared courtyard. It is sized to fit within existing neighborhoods and may be used to create a pocket neighborhood in a rural setting.



a. DESCRIPTION

4 – 12 buildings arranged to define a shared courtyard. Sized to fit within existing neighborhoods and may be used to create a pocket neighborhood in a rural setting.

c. ALLOWABLE UNITS

12 buildings max

b. BUILDING FORM

Square feet single	800 ft max	A
Square feet duplex	1200 ft max	B
Total Stories	1.5 stories max	C
First Floor Height	9 ft min, 15 ft max	D

Building Standards:

- Buildings may be single unit or duplex.
- Unit sizes shall be less than 800 square feet for a single unit building, less than 600 square feet for a duplex building.
- Buildings shall be separated based on the IBC standards for separation.
- Buildings within 50 feet of a public street shall have street facing facades which include windows.

Lot and Yard Standards:

- Land area requirement per dwelling unit is 2000 square feet where units are connected to municipal water and sewer.
- For projects not connected to municipal water and sewer a cottage court may be placed on a single lot as determined by the underlying district. The plan shall demonstrate adequate land for septic disposal and well protection for the proposed number of units. The buildings shall be clustered as shown in the illustration above.
- Setbacks from the exterior property lines shall be set by the underlying zoning district.
- There is no lot width minimum.
- Building heights are set by the height regulations of the underlying district.

Open Space Standards

- Each unit shall be provided with 250 square feet of private open space contiguous with the dwelling unit for the exclusive use of that dwelling unit. No dimension of the private open space shall be less than 10 feet.
- A minimum of 250 square feet of common open space shall be provided per unit. This may be provided in a courtyard, orchard, landscaped picnic areas, plazas, or gardens. A detailed plan of the common open space depicting the design and the amenities shall be reviewed as part of the site plan approval process.
- Common open space shall be maintained under the common ownership rules.
- Low Impact Development stormwater management facilities (ie rain gardens and/or similar structures) may be placed in the common open space.

Design Standards

- Buildings shall have porches facing the courtyard.

Parking Standards

- Parking may not be located in the courtyard.
- Parking shall be shielded from the street.
- Parking may not be accessed from the courtyard.

Zoning Districts Allowed

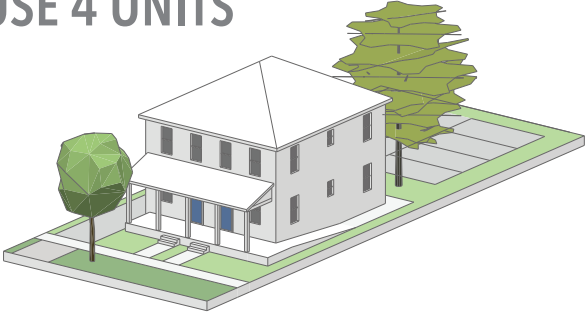
- A cottage court is permitted in any district which permits single family dwellings.

RENDERINGS

Any time that a community begins discussions about making changes to its zoning regulations the first question residents ask is **“What will it look like?”** In this series of renderings the artist has taken the building types developed for Newmarket and placed them on actual Newmarket parcels.

Additionally, we have renderings of the streetscapes that would result from the proposed new codes, as well as a photograph of a neighborhood which was built in another town using the standards proposed in T-4 Neighborhood.

PURPOSE-BUILT APARTMENT HOUSE 4 UNITS



SMALL APARTMENT BUILDING



LARGE 4-12 UNIT MAIN STREET



WALK-UP COURTYARD APARTMENTS



STREETSCAPES

The following illustrations show how a street built under the form-based code would appear. The buildings are spaced using the lot and yard standards for T-4; the buildings shown are permitted building types for T-4.



REAL-LIFE STREETSCAPE

The photographs are of an existing neighborhood created using the same T-4 standards: 50' frontages and 5,000 square foot lots.



FINANCIAL IMPACTS

When we consider zoning regulations one consideration should always be the financial impact to the town. Our goal is to produce buildings and a built environment that produce more in tax revenue than they consume in town expenses. We are also working to achieve a balanced housing market, where choices around unit types and costs are available.

In this first section, Parcel Analysis, we look at four actual Newmarket parcels to see what could be built or rebuilt under the proposed code changes.

In the second section, Deeper Affordability, we look at an analysis of a single parcel to see how housing affordability changes with changes in what is permitted by right..

FINANCIAL IMPACTS – PARCEL ANALYSIS

As part of understanding the financial implications for adopting the proposed form-based code we looked at four parcels in the study area which could be either developed, in the case of the empty lots, or re-developed, in the case of the existing multi-family buildings. We based our likely cost to purchase on recent local sales and the cost to construct on current building costs of \$300 a square foot for new construction. Costs for rehab are an educated guess based on recent projects.

The current tax rate in Newmarket is \$29.49 per \$1,000 in assessed value; and while the town has recently been re-evaluated, which will change the tax rate, the relative tax value will hold steady.

21 NORTH MAIN

- **Current assessed value: \$225,100**
- **Empty lot 1.96 acres**
- **Currently paying \$6638.19 in total property taxes**
- **This lot could accommodate two 16-unit apartment buildings. If two courtyard buildings were placed here it would generate approximately \$336,186 in total property taxes.**



- Cost to purchase lot: \$800,000 (based on recent sales for lots with similar access to infrastructure and similar zoning)
- Cost to construct two 16 unit courtyard building: \$11.4 million dollars (800K for land purchase, \$300/square foot construction cost for 32 1,000 square foot units, 10% soft costs)
- Cost to purchase individual unit: \$400K

1 DAME ROAD

- Current assessed value \$339,800
- Empty lot .46 acres
- Currently paying \$10K in property taxes



With an 8 unit apartment building this lot **would generate approximately \$107,343 in total property taxes**

- This lot could accommodate an 8-unit apartment building
- Cost to purchase lot: \$400K (based on recent sales for lots with similar access to infrastructure and similar zoning)
- Cost to construct 8 unit apartment building: \$3.04 million (400K for land purchase, \$300/ square foot construction cost for 1,000 square foot units, 10% soft costs)
- Cost to purchase individual unit: \$400K

49 NORTH MAIN STREET

- Current assessed value \$471,400
- Front-back duplex
- Currently paying \$13,900 in property taxes



Converted to six units **would pay approximately \$35,000 in total property taxes**

- This building could be converted into six units.
- Cost to purchase: \$700,000 (based on recent sales for similar properties)
- Cost of conversion: \$500,000
- Value of building after conversion: \$1.2 million
- Likely monthly rent of \$2,000

5 FOREST STREET

- Current assessed value \$531,900
- Side by side duplex
- Currently paying \$15,685 in property taxes



Converted to four units **would pay approximately \$26,451 in property taxes**

- This building could be converted into 4 units.
- Cost to purchase: \$600,000 (based on recent sales for similar properties)
- Cost of conversion: \$300,000
- Value of building after conversion: \$900,000
- Likely monthly rent of \$2,250

FINANCIAL IMPACTS – DEEPER AFFORDABILITY

What do AMI and AMI percentages mean?

AMI (Area Median Income) means that half of all workers make less than that amount and half make more – it's not skewed by one or two millionaires.

In Newmarket the HUD AMI is \$131,000. When we say "affordable at X% of AMI" we mean that the unit would cost not more than 1/3 of the gross income of a family making that percentage of the AMI as established by HUD. Utility costs were not included in the following calculations.

FINANCIAL IMPACTS – DEEPER AFFORDABILITY

	Option	Cost	Monthly mortgage & taxes per Unit	Monthly rental per unit
	Existing house: 2,000 square feet	\$600,000 <i>(Purchase price)</i>	\$6,603 <i>(10% down and PMI)</i>	
			Affordable to purchase at 155% of AMI (HUD Family AMI is \$131,000)	
	Convert existing house to duplex: 1,000 square feet for each unit	\$650,000 <i>(Purchase price + renovation cost)</i>	\$3,270 <i>(10% down and PMI)</i>	\$3,250
			Affordable at 84% AMI	Affordable at 80% AMI
	Convert existing 2,400 square foot house to a triplex: 800 square feet for each unit	\$750,000 <i>(Purchase price + renovation cost)</i>	\$2,708 <i>(10% down and PMI)</i>	\$2,500
			Affordable at 70% AMI	Affordable at 68% AMI
	Convert existing 2,400 square foot house to a fourplex: 600 square feet for each unit	\$800,000 <i>(Purchase price + renovation cost)</i>	\$2,007 <i>(10% down and PMI)</i>	\$2,000
			Affordable at 50% AMI	Affordable at 55% AMI
	Build a new 3,000 square foot fourplex: 750 square feet per unit	\$900,000 <i>(Lot purchase + construction cost)</i>	\$2,258 <i>(10% down and PMI)</i>	\$2,250
			Affordable at 58% AMI	Affordable at 62% AMI
	Build a new 3,000 square foot sixplex: 500 square feet per unit	\$1.3 million <i>(Lot purchase + construction cost)</i>	\$2,216 <i>(10% down and PMI)</i>	\$2,200
			Affordable at 57% AMI	Affordable at 60% AMI

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