## Workshop One Building Types \&

 Tear DownsArticle 3
03.23.20 - ZAP Committee

## Presentation Tonight

- Why and how Building Types work for Newton
- Changes to the standards since Build Out Analysis
- Case studies


## Agenda

City Coals
Changes from Build Out Analysis
Case Studies

Next Steps
Questions \& Ideas


## Decrease Teardowns

- Teardown assumptions
- 3800 sf
- Cost $=\mathbf{\$ 6 0 0 / s f}$ or less
- Sell for 2.4-2.5x purchase


## Decrease Teardowns



## Decrease Teardowns


\#88-20

## Contextual In-fill Development

Single Family<br>Medium Traditional - 2 level, regular



# Building Types match existing buildings 

- Pattern Book
- Community feedback


## Increase Housing Diversity



## Summary of Changes

- Reduction in allowable bulk (square footage) throughout all districts
- Reduces possible by-right units from October 2018, but still more than current
Ordinance


## House Type A

| Building Width | Building <br> Depth | Building <br> Footprint | Number of <br> Stories | Story <br> Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 25 ft | 100 ft | 100 ft | $\mathbf{2 , 4 0 0} \mathbf{s f} 2,500-\mathrm{sf}$ <br> SP: 3,000 sf | 2.5 stories | Max 12 ft |



## Reduction in by-right building footprint

## House Type B

| Building Width | Building <br> Depth | Building Footprint | Number of <br> Stories | Story <br> Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 15 ft | 65 ft | 90 ft | $\mathbf{1 , 4 0 0} \mathbf{s f} 1,600-\mathrm{sf}$ <br> SP: 2,000 sf $2,200-s f$ | 2.5 stories <br> SP: $\mathbf{3}$ stories | Max 12 ft |
| SP: 14 ft |  |  |  |  |  |



- Reduction in by-right and SP building footprint
- Simplified by-right and SP permit stories in all districts


## House Type C

| Building Width | Building <br> Depth | Building Footprint | Number of <br> Stories | Story <br> Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 12 ft | 65 ft | 80 ft | $\mathbf{1 , 2 0 0} \mathbf{s f} 1,500 \mathrm{sf}$ <br> SP: $1,800 \mathrm{sf}$ | 1.5 stories | Max 12 ft |



## Reduction in by-right building footprint

## House Type D

| Building Width | Building <br> Depth | Building Footprint | Number of <br> Stories | Story <br> Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 30 ft | 120 ft | 100 ft | $3,500 \mathrm{sf}$ <br> SP: $4,00 \mathrm{sf}$ | 1 story | Max 12 ft <br> SP: 14 ft P |

- No dimensional changes
- Only allowed by-right in R1 and by SP in R2



## Two-Unit Residence

| Building Width | Building <br> Depth | Building <br> Footprint | Number of <br> Stories | Story <br> Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 20 ft | 65 ft | 80 ft | $2,000 \mathrm{sf}$ <br> SP: $2,200 \mathrm{sf}$ | 3 stories | Max 12 ft <br> SP: 14 ft l |

## 3-Unit Building

| Building Width | Building <br> Depth | Building <br> Footprint | Number of <br> Stories | Story <br> Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 20 ft | 65 ft | 80 ft | $1,600 \mathbf{s f} 2,500-\mathrm{sf}$ | 2.5 3-stories | Max 12 ft |



- Formerly Apartment House
- Limits overall units and size


## Townhouse Section

| Building Width | Building <br> Depth | Building <br> Footprint | Number <br> of Stories | Story <br> Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 14 ft | 28 ft | -ft | $1,500 \mathrm{sf}$ | 3 stories | Max 12 ft |



## 4-8 Unit Building

| Building Width | Building <br> Depth | Building <br> Footprint | Number of <br> Stories | Story <br> Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 20 ft | $\mathbf{7 5 f t}$ | $\mathbf{9 0} \mathrm{ft}$ | $\mathbf{2 , 5 0 0} \mathbf{s f} \mathbf{4 , 2 0 0} \mathrm{sf}$ | 3 stories | Max 12 ft |



## Formerly Small Apartment Building Limits overall units and size

## Shop House

| Building Width |  | Building Depth | Building Footprint | Number of Stories | Story Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | Ground Story | Upper Stories |
| 20 ft | 40 ft | 80 ft | $\begin{array}{r} 2,000 \mathrm{sf} \\ \mathrm{SP}: 2,500 \mathrm{sf} \end{array}$ | 3 stories | Max 20 f | Max 12 ft SP: 14 ft |
|  |  |  |  |  |  | 20 |

## Small Multi-Use Building



## Small Shop

| Building Width | Building <br> Depth | Building <br> Footprint | Number of <br> Stories | Story Heights |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | Ground Story |
| 18 ft | 100 ft | 100 ft | $7,000 \mathrm{sf}$ | 1.5 stories | Max 12 ft <br> SP: 14 ft l |



## Civic Building



## Existing Ordinance - Building Types

### 1.5.1. Building Types

A. Single-Family, Detached. A building or structure that contains only one dwelling unit.
B. Two-Family, Detached. A building that contains 2 dwelling units and is either divided vertically so that the dwelling units are side by side but separated by a shared wall extending the entire maximum height of one or both units, and/or is divided horizontally so that one dwelling unit is above another.

C. Single-Family, Attached. A building or structure that either:

1. Contains 3 or more dwelling units, attached to one another at the ground level and each having a separate primary and secondary access at ground level; or
2. Contains 2 dwelling units and is not a two-family detached dwelling.
D. Multi-Family. A building or structure containing 3 or more dwelling units.
E. Dwelling Unit. One or more rooms forming a habitable unit for 1 family, with facilities used or intended to be used, in whole or in part, for living, sleeping, cooking, eating and sanitation.

Defined by Use
\#88-20

## Proposed Ordinance - Building Types

### 32.3. House A

A. Description.

A one-unit house with a large footprint and up to 2.5 stories. House $A$ buildin common in several Newton neighborhoods like Chestnut Hill, Waban, and W House A types may have been built in several eras of Nevton's developmen the era vhen Newton was a destination for country estates to the modern de period of the 1980s to the present.
B. Building Dimensional Standards.

| Building Vidth |  | Building Depth | Building Footprint | Number of Stories |
| :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max |
| 25 ft | 100 ft | 100 ft | $\frac{2,4002,500 \mathrm{sf}}{\mathrm{SP}: 3,000 \mathrm{sf}}$ | 2.5 stories |

C. Fenestration on the Front Elevation.
4. Bround Stery Fenestration: 20\%-Minimum, $70 \%$ Mawinnum
2. Upper Stery Fenestration $10 \%$ Minimum, $70 \%$ Maximum
D. Roof Types

All Roof Types are permitted
E. Additional Standards.

1. Only residential use categories are permitted; option for use conve existing building according to Sec. 3.6.1.B.
2. Maximum of 1 Residential Unit; option for Multi-unit conversion ace Sec. 35 f.2
3. Outdoor Amenity Space: $1 /$ dwelling unit

### 3.2.4. House B

A. Description.

A one-unit house with a medium footprint and up to 2.5 stories by-right. House $B$ building types can be found throughout Newton. The House B type includes typical midscale Victorian homes close to village centers, and midscale Colonial homes frequently built in the era of suburban infill between Neviton's historic village centers.
B. Building Dimensional Standards.

| Building Width |  | Building Depth | Building Footprint | Number of Stories | Story Heights |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 15 ft | 65 ft | 90 ft | $\begin{array}{r} 1,4004,600 \mathrm{sf} \\ \mathrm{SP}-2,0002,209 \\ \mathrm{sf} \end{array}$ | $\begin{array}{r} \text { R7, R2 } 2.5 \text { stories } \\ \text { SPR3 N: } 3 \\ \text { stories } \end{array}$ | Max 12 ft SP: 14.ft |

C. Eenestration on the Front Elevation:
4. Ground Story Fensstration: $20 \%$ Mininuum, $70 \%$ Maxirmum
2. Upper Stery Fsiestration: $19 \%$ Mmimum, $70 \%$ Masimurn
D.C. Roof Types.

All Roof Types are permitted
ED.Additional Standards.

1. Only residential use categories are permitted; option for use conversion of an existing building according to $\mathrm{Sec} .3 .6 .1 . \mathrm{B}$.
2. Maximum of 1 Residential Unit
3. Outdoor Amenity Space: $1 /$ dwelling unit

## Defined by Form

iii. Atria, open wells, and other vertical open spaces, where floor area shall be calculated by multiplying the floor level area of such space by a factor equal to the average height in feet divided by 10;
iv. Enclosed porches:
v. Attached garages;
vi. Detached garages and any space above the first story of a detached garage that has a ceiling height of 7 feet or greater;
vii. Other detached accessory buildings, such as sheds or cabanas, except as exempted in paragraph b . below;
viii. A portion of mass below the first story, to be calculated using the formula in paragraph D. below; and
b. Gross floor area shall not include:
i. Unenclosed porches;
ii. Doorway vestibules up to a maximum floor area of 24 square feet;
iii. Exterior insulation added to a building, in which case gross floor area shall be taken from the exterior face of the structural wall;
iv. Carports; and
v. 1 detached accessory building equal to or less than 120 square feet in size.
D. Mass Below First Story. For the purposes of calculating gross floor area, any cellar, crawl space, basement, or other enclosed area lying directly below a first story in a residential structure.

1. Standards. The lesser of 50 percent of the floor area of mass below first story OR:
( $(X / Y)$ floor area of mass below first story)
Where:

- $X=$ Sum of the width of those sections of exposed walls below the first story having an exterior height $\geq 4$ feet as measured from existing or proposed grade, whichever is lower, to the top of the subfloor of the first story.
- $Y=$ Perimeter of exterior walls below first story.
b. Is at least 7 feet in any horizontal dimension, as measured within the area having a wall height of 5 feet or more;
c. Has a minimum ceiling height of 7 feet on at least 50 percent of its required floor area; and
d. Has a floor area of not less than 70 square feet as measured within the area having a wall height of 5 feet or more;


## Proposed Ordinance - Building Types + Discrefzert Standards

### 3.2.4. House B

A. Description.

A one-unit house with a medium footprint and up to 2.5 stories by-right. House B building types can be found throughout Newton. The House B type includes typical midscale Victorian homes close to village centers, and midscale Colonial homes frequently built in the era of suburban infill between Nevion's historic village centers.
B. Building Dimensional Standards.

| Building Width |  | Building Depth | Building Footprint | Number of Stories | Story Heights |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Min | Max | Max | Max | Max | All Stories |
| 15 ft | 65 ft | 90 ft | $\begin{array}{r} \frac{1,4004,500 \mathrm{sf}}{} \\ \mathrm{SP}-2,0002,200 \\ \mathrm{sf} \end{array}$ | Rt. R2: -2.5 stories SPR3, N: 3 stories | Max 12 ft SP: 14ft |

## Q. Ennestration on the Front Elevation:

4. Greurd Stery Fensstration: $20 \%$ Minimum, $70 \%$ Maximum
5. Upper Stery Fsasetration: $\mathbf{4 0 \%}$ Minimum, $70 \%$ Maskinurn
D.C. Roof Types.

All Roof Types are permitted
ED. Additional Standards.

1. Only residential use categories are permitted; option for use conversion of an existing building according to Sec. 3.6.1.B.
2. Maximum of 1 Residential Unit
3. Outdoor Amenity Space: $1 /$ dwelling unit
3.1.3. Residence 2 District (R2)
A. Context Description.

The Residence 2 District contains quintessentially suburban neighborhoods with ample lawns and single-unit homes, developed primarily in the $20^{\circ}$ Century in the spaces between Newton's villages. The intent of this district is to preserve neighbortiood character and to create predictability for homeowners in what they may do with their homes. Many of these neighborhoods are remote from the walkable village centers of the City and therefore do not have nearby gathering places, shops, or services.
B. Purpose.

1. To preserve the scale of these neighborhoods throughout the city.
2. To permit the development of single unit detached residential buildings on individual lots.
3. To permit contextual modifications of existing single unit detached residential buildings.
4. In limited circumstances, to retain or allow neighborhood serving commercial uses in order to enhance walkability and sustainability.
4.5. To pramots, throuch building and lot despari. communify connections:
C. Lot Standards.

The following table contains lot standards for the Residence 2 District:

| Lot Characteristics |  |  |
| :--- | ---: | :---: |
| Frontage: | 80 ft Min. 110 ft Max |  |
| Lot Depth: |  |  |
| Lot Coverage: | $3025 \%$ |  |

D. Setback Standards.

The following table contains setback standards for the Residence 2 District:
$\left.\begin{array}{|c|r|r|}\hline \text { Setbacks } & \text { Contextual Front Setback (See 3.45.1A) } \\ \text { Absolute Min: } 2010 \mathrm{ft}\end{array}\right)$

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## Case Studies

- Previous: What existed on the site previously
- The axonometric diagram shows the current site condition as well as constraints under the zoning envelope.
- Approved Plan: What was approved under current zoning
- Based on the dimensions provided about the approved project, this diagram shows what that approval looks like in terms of massing.
- It also shows where the approved plan does not conform with the new zoning.
- Test Fit: What could happen under the new zoning ordinance
- Based on the new zoning, what could be built that is fully conforming?


## 85 Fuller Terrace <br> House Type B <br> An R2 District Example

## 85 Fuller Terrace Zoning



## 85 Fuller Terrace

## District

- current SR3
- $1^{\text {st }}$ draft R2

Approved major addition, singlefamily

## Prior Building

## Current

 RequirementFrontage
Lot Coverage
Setbacks
Front (Fuller Terrace)
Side (east)
Side (west)
Rear
Lot Size
Min. Open Space
Frontage Buildout
Footprint
Min. Building Width
Max. Building Width
Max Building Depth
Height (Max Stories)
FAR

Min. 70 ft
Max 30\%
(min)
25 ft
7.5 ft
7.5 ft

15 ft
Min 10,000 sf
Max 50\%
-
-

Max 2.5
Max 0.41


## 85 Fuller Terrace

District:

- current SR3
- $1^{\text {st }}$ draft R2

Approved major addition, singlefamily

## Prior Building



## 85 Fuller Terrace

District:

- current SR3
- $1^{\text {st }}$ draft R2

Approved major addition, singlefamily

## Approved Project



## 85 Fuller Terrace

## District:

- current SR3
- $1^{\text {st }}$ draft R2

Approved major addition, singlefamily

## Approved Project



## 85 Fuller Terrace

## District:

- current SR3
- $1^{\text {st }}$ draft R2

Approved major addition, singlefamily

## Approved Project



## 85 Fuller Terrace

## District:

- current SR3
- $1^{\text {st }}$ draft R2

Approved major addition, singlefamily

## Approved Project



## 85 Fuller Terrace

## District:

- current SR3
- $1^{\text {st }}$ draft R2

Approved major addition, singlefamily

## Test Fit

|  | Draft Zoning Requirement | Dimens Test Fit |
| :---: | :---: | :---: |
| Frontage | 60-110 ft | 49 ft |
| Lot Coverage | Max 30\% |  |
| Setbacks | (min or range) |  |
| Front (Fuller Terrace) | 20-40 ft | 20-40 ft |
| Side (east) | 12.5 ft | 19 ft |
| Side (west) | 12.5 ft | 67 ft |
| Rear | 30 ft | 30 ft |
| Lot Size |  |  |
| Min. Open Space |  |  |
| Frontage Buildout | Min 17.5 ft | 17.5 ft |
| Footprint | Max 1400 sf | 1400 sf |
| Min. Building Width | 15 ft |  |
| Max. Building Width | 65 ft | 49 ft |
| Max Building Depth | 90 ft | 38 ft |
| Height (Max Stories) | Max 2.5 | 2.5 |

FAR

## 878-880 Chestnut

Two Unit Residence
An R3 District Example

## 878-880 Chestnut Zoning



## 870-880 Chestnut

District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved two-family development

## Prior Building

Frontage
Lot Coverage
Setbacks
Front (Chestnut)
Side (north)
Side (south)
Rear
Lot Size
Min. Open Space
Frontage Buildout
Footprint
Min. Building Width
Max. Building Width
Max Building Depth
Height (Max Stories)
FAR

Current Requirement

Min. 70 ft Max 30\%
(min)
25 ft
7.5 ft
7.5 ft

15 ft
Min 7,000 sf
Max 50\%
-
-
-
Max 2.5
Max 0.53


## 870-880 Chestnut

District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved two-family development

## Prior Building



## 870-880 Chestnut

District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved two-family development

## Approved Project



## 870-880 Chestnut

District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved two-family development

## Approved Project



## 870-880 Chestnut

District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved two-family development


## 870-880 Chestnut

## District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved two-family development

## Approved Project



## 870-880 Chestnut

## District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved two-family development

## Approved Project

Frontage
Lot Coverage
Setbacks
Front (Chestnut)
Side (north)
Side (south)
Rear
Lot Size
Min. Open Space
Frontage Buildout
Min 16.25 ft
46 ft
Footprint
Min. Building Width
Max. Building Width
65
80 ft
Max 2.5
Height (Max
Stories)
$50-100 \mathrm{ft}$
65 ft
Max 50\%
56\%
(range)
$20 \mathrm{~min} / \mathrm{max}$
30 ft
10 ft
10 ft
20 ft
29.55 ft

Max 2,000 sf
1858 sf
46 ft
46 ft
Max Building Depth
38 ft
2.5

Draft Zoning Approved Project Requirement

## 870-880 Chestnut

## District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved two-family development

## Test Fit

## Frontage

Lot Coverage
Setbacks
Front (Chestnut)
Side (north)
Side (south)
Rear
Lot Size
Min. Open Space
Frontage Buildou
Footprint
Min. Building Width
Max. Building Width
Max Building Depth
80 ft
Max 2.5
$50-100 \mathrm{ft}$
Max 50\%
(range)
$20 \mathrm{~min} / \mathrm{max}$
10 ft
10 ft
20 ft

Min 16.25 ft
Max 2,000 sf
20 ft
65 ft

Height (Max

Draft Zoning Requirement

Stories)


## 36 Salisbury St <br> House Type B <br> an R3 District Example

## 36 Salisbury St Zoning



## 36 Salisbury

## District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved larger single family home

## Prior Building

Frontage
Lot Coverage
Setbacks
Front (Salisbury)
Side (north)
Side (south)
Rear
Lot Size
Min. Open Space
Frontage Buildout
Footprint
Min. Building Width
Max. Building Width
Max Building Depth
Height (Max Stories)
FAR

Current Requirement

Min. 70 ft Max 30\% (min) 25 ft 7.5 ft 7.5 ft 15 ft Min 7,000 sf Min 50\%
-
-
-
-
Max 2.5
Max 0.49


District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved larger single family home

## Prior Building



36 Salisbury
District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved larger single family home

## Approved Project



## 36 Salisbury

## District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved larger single family home

## Approved Project

Draft Zoning Requirement
Frontage
Lot Coverage
Setbacks

Front (Salisbury)

Side (north)
Side (south)
Rear
Lot Size
Min. Open Space

| Frontage Buildout | Min 15 ft | 38 ft |
| :--- | :--- | :--- |
| Footprint | Max 1400 sf | 2052 ft |
| Min. Building Width | 15 ft | 38 ft |
| Max. Building Width | 65 ft | 38 ft |
| Max Building Depth | 90 ft | 54 ft |
| Height (Max Stories) | Max 2.5 | 3.5 |

FAR 50-100 ft 60 ft

Max 50\%
(range)
26-34 ft min/max

10 ft 8.5 ft
9.5 ft
77.5 ft

38 ft
52 ft
38 ft

54 ft
3.5


Approved Project
\#88-20

## 36 Salisbury

## District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved larger single family home

## Approved Project

Draft Zoning Requirement
Frontage

Lot Coverage
Setbacks
Front (Salisbury)
Side (north)
Side (south)

Rear
Lot Size
Min. Open Space

| Frontage Buildout | Min 15 ft | 38 ft |
| :--- | :--- | :--- |
| Footprint | Max 1400 sf | 2052 ft |
| Min. Building Width | 15 ft | 38 ft |
| Max. Building Width | 65 ft | 38 ft |
| Max Building Depth | 90 ft | 54 ft |
| Height (Max Stories) | Max 2.5 | 3.5 |

FAR 50-100 ft

60 ft
Max 50\%
(range)
26-34 ft min/max

10 ft
10 ft
20 ft
77.5 ft

Frontage Buildout
Min 15 ft
38 ft
2052 ft
38 ft

4 ft
3.5


Approved Project
\#88-20

## 36 Salisbury

## District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved larger single family home

## Approved Project

## Draft Zoning

 RequirementFrontage
Lot Coverage
Setbacks

Front (Salisbury)

Side (north)
Side (south)
Rear
Lot Size
Min. Open Space

| Frontage Buildout | Min 15 ft | 38 ft |
| :--- | :--- | :--- |
| Footprint | Max 1400 sf | 2052 ft |
| Min. Building Width | 15 ft | 38 ft |
| Max. Building Width | 65 ft | 38 ft |
| Max Building Depth | 90 ft | 54 ft |
| Height (Max Stories) | Max 2.5 | 3.5 |

FAR
$50-100 \mathrm{ft}$
60 ft
Max 50\% 32\%
(range)
26-34 ft min/max

10 ft 8.5 ft

10 ft
20 ft
77.5 ft
3.5


Approved Project
\#88-20

## 36 Salisbury

## District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved larger single family home

## Approved Project

## Draft Zoning

 RequirementFrontage
Lot Coverage
Setbacks

Front (Salisbury)
$50-100 \mathrm{ft} \quad 60 \mathrm{ft}$
Approved Project

Max 50\% 32\%
(range)
26-34 ft min/max

Side (north)
Side (south)
Rear
10 ft 8.5 ft

10 ft
20 ft
9.5 ft
77.5 ft

Lot Size
Min. Open Space

| Frontage Buildout | Min 15 ft | 38 ft |
| :--- | :--- | :--- |
| Footprint | Max 1400 sf | 2052 ft |
| Min. Building Width | 15 ft | 38 ft |
| Max. Building Width | 65 ft | 38 ft |
| Max Building Depth | 90 ft | 54 ft |
| Height (Max Stories) | Max 2.5 | 3.5 |

## FAR

## 36 Salisbury

## District:

- current MR1
- $1^{\text {st }}$ draft R3

Approved larger single family home

## Test Fit

Frontage
Lot Coverage
Setbacks
Front (Salisbury)

Side (north)
Side (south)
Rear
Lot Size
Min. Open Space

| Frontage Buildout | Min 17.5 ft |  |
| :--- | :--- | :--- |
| Footprint | Max 1400 sf | $1,400 \mathrm{sf}$ |
| Min. Building Width | 15 ft | 38 ft |
| Max. Building Width | 65 ft | 38 ft |
| Max Building Depth | 90 ft | 54 ft |
| Height (Max Stories) | Max 2.5 | 2.5 |

FAR

Draft Zoning Requirement
$50-100 \mathrm{ft}$
Max 50\%
(range)
26-34 ft min/max

10 ft
10 ft
20 ft

Max 2.5

\#88-20

Dimension of Conforming Test Fit

60 ft

34 ft

10 ft
10 ft
96 ft
2.5

## 1081 Washington St

Shop House (commercial ground floor, residential above)
An N District Example

## 1081 Washington St Zoning



## 1081 Washington

## District:

- current BU2
- $1^{\text {st }}$ draft $\mathbf{N}$

Approved commercial building

## Prior Building

Frontage
Lot Coverage
Setbacks
Front (Washington)
Side (west)
Side (east)
Rear

Lot Size
Min. Open Space
Frontage Buildout
Footprint
Min. Building Width
Max. Building Width
Max Building Depth
Height (Max Stories)
FAR

Current Requirement

Min. 80 ft
Max 30\%
(min)
7 ft
0 ft
0 ft
13.3 ft (1/2 height)

Min 10,000 sf -
-
$-$
-

Max 2
Max 1.0


## 1081 Washington

District:

- current BU2
- $1^{\text {st }}$ draft $\mathbf{N}$

Approved commercial building

## Prior Building



## 1081 Washington

District:

- current BU2
- $1^{\text {st }}$ draft $\mathbf{N}$

Approved commercial building

## Approved Project



## 1081 Washington

## District:

- current BU2
- $1^{\text {st }}$ draft $\mathbf{N}$

Approved commercial building

## Approved Project

|  | Draft Zoning Requirement | Approved Project |
| :---: | :---: | :---: |
| Frontage | 50-100 ft | 60 ft |
| Lot Coverage | Max 70\% | 21.8\% |
| Setbacks | (range) |  |
| Front (Washington) | 5 ft min | 7 ft |
| Side (west) | 10 ft | 0.3 ft |
| Side (east) | 10 ft | 12 ft |
| Rear | 20 ft | 71.9 ft |
| Lot Size |  |  |
| Min. Open Space |  |  |
| Frontage Buildout | Min 17.5 ft |  |
| Footprint | Max 1400 sf |  |
| Min. Building Width | 15 ft |  |
| Max. Building Width | 65 ft |  |
| Max Building Depth | 90 ft |  |
| Height (Max Stories) | Max 2.5 | 2 stories both commercial |

FAR

## 1081 Washington

## District:

- current BU2
- $1^{\text {st }}$ draft $\mathbf{N}$

Approved commercial building

## Approved Project



## 1081 Washington

## District:

- current BU2
- $1^{\text {st }}$ draft $\mathbf{N}$

Approved commercial building

## Approved Project



## 1081 Washington

## District:

- current BU2
- $1^{\text {st }}$ draft $\mathbf{N}$

Approved commercial building

## Test Fit

|  | Draft Zoning <br> Requirement | Dimensions of <br> Conforming Test Fit |
| :--- | :--- | :--- |
| Frontage | $50-100 \mathrm{ft}$ | 60 ft |
| Lot Coverage | Max $70 \%$ |  |
| (range) |  |  |
| Setbacks | 5 ft min | 23 ft |
| Front (Washington) | 10 ft | 10 ft |
| Side (west) | 10 ft | 10 ft |
| Side (east) | 20 ft | 76 ft |
| Rear |  |  |
| Lot Size |  |  |
| Min. Open Space | 2000 sf Shop | $2,000 \mathrm{sf}$ |
| Frontage Buildout | Min 17.5 ft |  |
| Footprint | 15 ft | 40 ft |
| Min. Building Width | 65 ft | 52 ft |
| Max. Building Width | 90 ft | 2.5 |
| Max Building Depth | Max 2.5 |  |

FAR


## Recap

- Work in progress
- But what we have begins to achieve our goals
- We want to hear from you: zoningredesign@newtonma.gov


## Next Steps

# Schedule has focus on garages, building components, and accessory structures. 

May need to remain on building types with a focus on alternative lot configurations, particularly small lots, etc.

## Homework

Memo to come for next ZAP meeting. Continue with current readings.

## Thank You!




## Existing Ordinance - Lot Coverage

D. Lot Coverage. The percentage of the lot area which is covered by buildings, including accessory buildings, except in the following cases:

1. The area covered by roof overhangs of up to 2 feet shall not be included in the calculation of lot coverage; and
2. The lot coverage requirements contained in Sec. 3.1 shall not apply to the erection or construction of a private garage in connection with or accessory to a building which was in existence on December 27, 1922, and designed or used as a single- or two-family residence.


## Proposed Ordinance - Lot Coverage

C. Lot Coverage. The percentage of lot area that is covered by structures impermeable surfaces, paving, pavers, and decking. The lot coverage standard is intended to differentiate between the built and unbuilt aspects of a lot. Buildings are measured from the outer edge of the walls and include cantilevered portions of building, exclusive of the area under the eaves. Any area used for parking, no matter the surface material, is counted in the lot coverage

## Existing Ordinance - Height

### 1.5.4. Height

A. Defined:

1. The vertical distance between the elevations of the average grade plane and the highest point of the roof. Not included in such measurements are:
a. Cornices which do not extend more than 5 feet above the roof line:
b. Chimneys, vents, ventilators and enclosures for machinery of elevators which do not exceed 15 feet in height above the roof line;
c. Enclosures for tanks which do not exceed 20 feet in height above the roof line and do not exceed in aggregate area 10 percent of the area of the roof; and
d. Solar panels which do not extend more than 1 foot above the ridgeline or in the case of a flat roof, no more than 4 feet above the parapet, unless greater extensions are allowed by special permit; and
e. Towers, spires, domes and ornamental features.
2. No space above the maximum height shall be habitable.
B. Story. That portion of a building, any part of which is above the ground elevation, excluding basements, contained between any floor and the floor or root next above it.
C. Story, Half. A story directly under a sloping root where the area with a ceiling height of 7 feet or greater is less than $2 / 3$ of the area of the story next below.

D. Basement.
3. Any story in a building in which $2 / 3$ or more of the distance between the floor and the ceiling next above it is below the average grade plane adjacent to the building.

4. In the case of single- and two-family residential uses, any story in a building in which $1 / 2$ or more of the distance between the floor and the ceiling next above it is below the average grade plane adjacent to the building.

E. Grade. In cases where the walls of the building are more than five (5) feet from the nearest street line, the grade shall mean the mean elevation of the ground adjoining said wall; and in all other cases, the mean elevation of the nearest sidewalk.
F. Grade Plane Average. A horizontal reference plane for a building as a whole representing the average of finished grade elevations around the perimeter of a building, as determined by the length-weighted mean formula below. All walls of length greater than 6 feet shall be included in segments of consistent grade or slope.

## Proposed Ordinance - Height

### 2.6.3 Bullding Height Standards

A. The total number of stories of a building is calculated as follows:

1. The maximum number of stories is calculated along the front elevation
2. Ground Story and Basement:
a. A basement is counted as a story in the maximum number of stories when the finished floor of the ground story is 4 feet or more above the average ground level of the loi along the front elevation.
b. An exposed basement story along the front elevation is considered the ground story if it exceeds $50 \%$ of the width of the front elevation. An exposed basement story along the front elevation not exceeding $50 \%$ of the front elevation width is not counted toward the maximum number of stories.
c. A basement story exposed along a side or rear building wall such as a walkout basement, is exempt from the maximum number of stories.
d. For any lot with frontage on 2 or more streets, the number of stories is calculated along the front elevation facing the primary front lot line.
3. Upper Stories:
a. Upper stories must comply with stated minimums and maximum story heights for the building type.
b. A half-story is the space located directly under a roof and is less than a full story. The following standards apply to half-stories:
I. The roof rafters must intersect the wall plate or top of wall frame of the exterior walls at a height no more than 2 feet above the finished floor of the half-story.
ii. Ceiling height of a half story must not exceed 12 feet at any point
iii. Attic space located under a ostory equivalent roof is not counted as a half story (See Sec 2.6.3.E on Roof Types).
4. Interior spaces may be configured to include multiple stories within the same interior volume.

## Proposed Ordinance - Height

5. Stories in Above Grade Structured Parking:
a. Each story of above ground structured parking is counted as 1 story regardless of its relationship to habitable stories, except that up to 2 stories of above ground structured parking may be counted as 1 story when those stories are fully screened by a single ground story with active uses of an equal or greater story height (See Lined Garage Building Type).

日. Story Height

1. Story height is measured vertically from the surface of the finished floor to the surface of the finished floor above. When there is no floor above, story height is measured from the surface of the finished floor to the top of the structural beam or joists above or the top of the wall plate, whichever is higher
2. Minimum story height is not measured for half-stories.
C. Ground Story Elevalion

Ground story elevation is measured from the average ground level at the exterior walls, Subject to Site Plan Approval, a property owner may request that the grade be calculated from the grade of the sidewalk of the abutting street or from the crown of the roadvay of the adjacent street when no sidewalk exists, to the top of the finished floor of the ground story of a building, where this provision will allow a more contextual building
D. Roof Types and Roof Components.

1. Defined primary rooi types and roof components are permifted as indicated for each building type.
2. Primary Roof Types.
a. General Standards.
i. Each Roof Type has a "story equivalent" based on the amount of potential living area available under the roof. The story equivalent, depending upon the roof type, may limit the number of stories in a building. Building types that are permitted to have a 0.5 story may utilize a Roof Type equaling 0 or 1 story only if they do not build that 0.5 story.
3. Buildings may have more than one roof and roof type, provided that one roof type is used for at least $50 \%$ of the building footprint, the "primary roof type."
iii. Any roof type may be used as a secondary roof type as long as the maximum stories is met

## Proposed Ordinance - Height

b. Gable Roof Type.
i. Description. A pitched roof with two sides meeting at a single ridgebeam.
ii. Story Equivalent. 0.5 story
iii. Roof Pitch. - Min pitch $=6: 12$, Max pitch $=14: 12$
c. Low Gable Roof Type.
i. Description. A pitched roof with two sides meeting at a single ridgebeam.
ii. Story Equivalent 0 story
iii. Roof Pitch: Min pitch $=3: 12$, Max pitch $=6: 12$
d. Hipped Roof Type.
i. Description. A roof that is pitched on all sides meeting in a single point or ridge-beam.
ii. Story Equivalent. 0.5 story
iii. Roof Pitch: Min pitch $=6: 12$, Max pitch $=12: 12$
e. Low Hipped Roof Type:
i. Description. A roof that is pitched on all sides meeting in a single point or ridge-beam.
ii. Story Equivalent. 0 story
iii. Roof Pitch: Min pitch $=3: 12$, Max pitch $=6: 12$

## Proposed Ordinance - Height

f. Two-Stage Roof Type.

1. Description. A complex pitched roof consisting of a shallow sloped upper portion and a steeply sloped lower portion meeting either in a single ridge-beam (like a gambre) roof) or a single point (like a mansard roof).
ii. Story Equivalent 1 story
iii. Roof Pitch Upper slope: Min pitch $=1.5: 12$, Max pitch $=3: 12$, Lower slope: Min pitch =9:12, Max pitch $=60: 12$
iv. The point at which slope changes must be at least 8 ft but no more than 12 ft higher than the building eaves.
g. Vault Roof Type.
i. Description. A root formed by an arch, series of arches, or dome.
ii. Story Equivalent. 1 story
iii. The midpoint of the slope of the roof may be no more than 8 ft higher than the building eaves.
h. Flat Roof Type.
i. Description. A roof with almost no pitch and no central ridge.
ii. Story Equivalent. 0 story
iii. Roof Pitch: Min pitch $=1.5: 12$, Max pitch $=3: 12$
2. Shed Roof Type.
i. Description. A pitched roof sloping in one direction from a single high ridge beam to a single low ridge beam.
ii. Story Equivalent. 0.5 story
iii. The midpoint of the slope of the roof may be no more than \& ft higher than the building eaves.
3. Rooftop Mechranicals.

The following rooftop mechanical systems are exempt up to a limit of 3 feet if unscreened or 8 feet if screened by parapet walls or similar opaque screening from view of the street.

