TASK 4.2

Zoning Recommendations
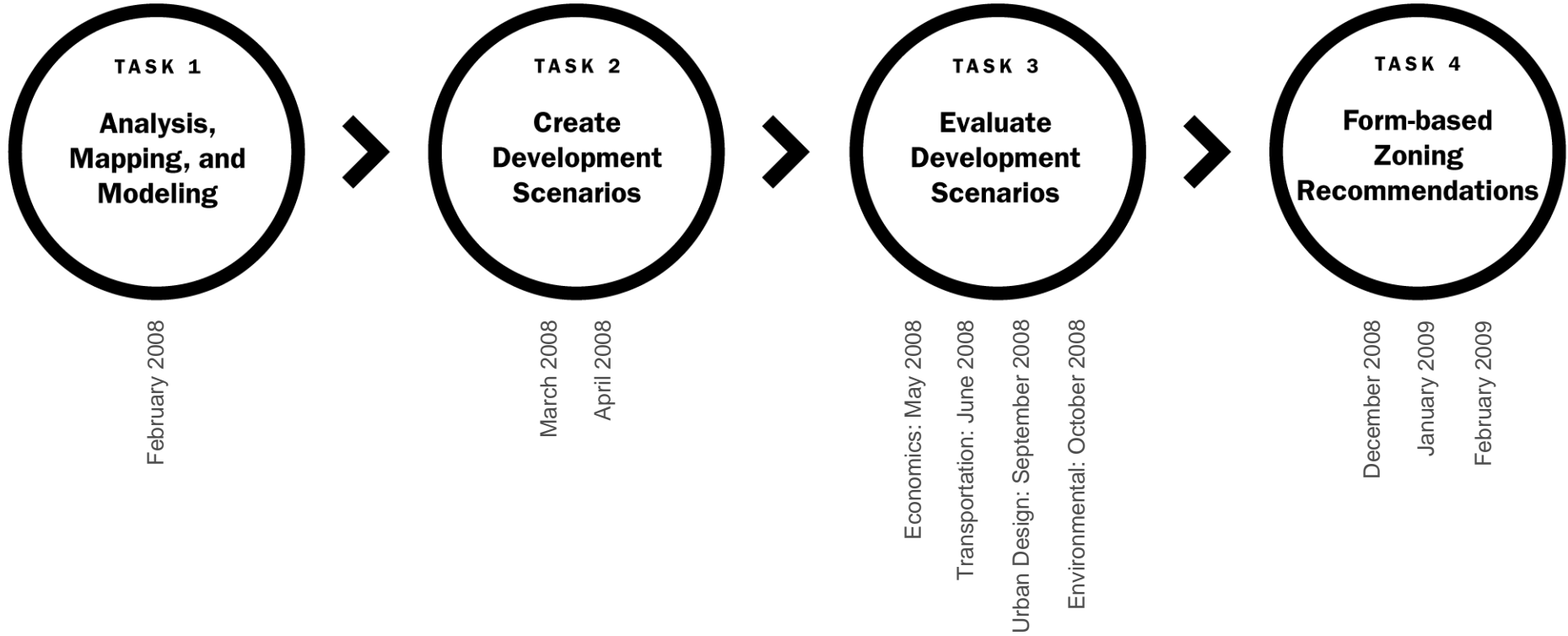
1: Project Summary and Recommendations

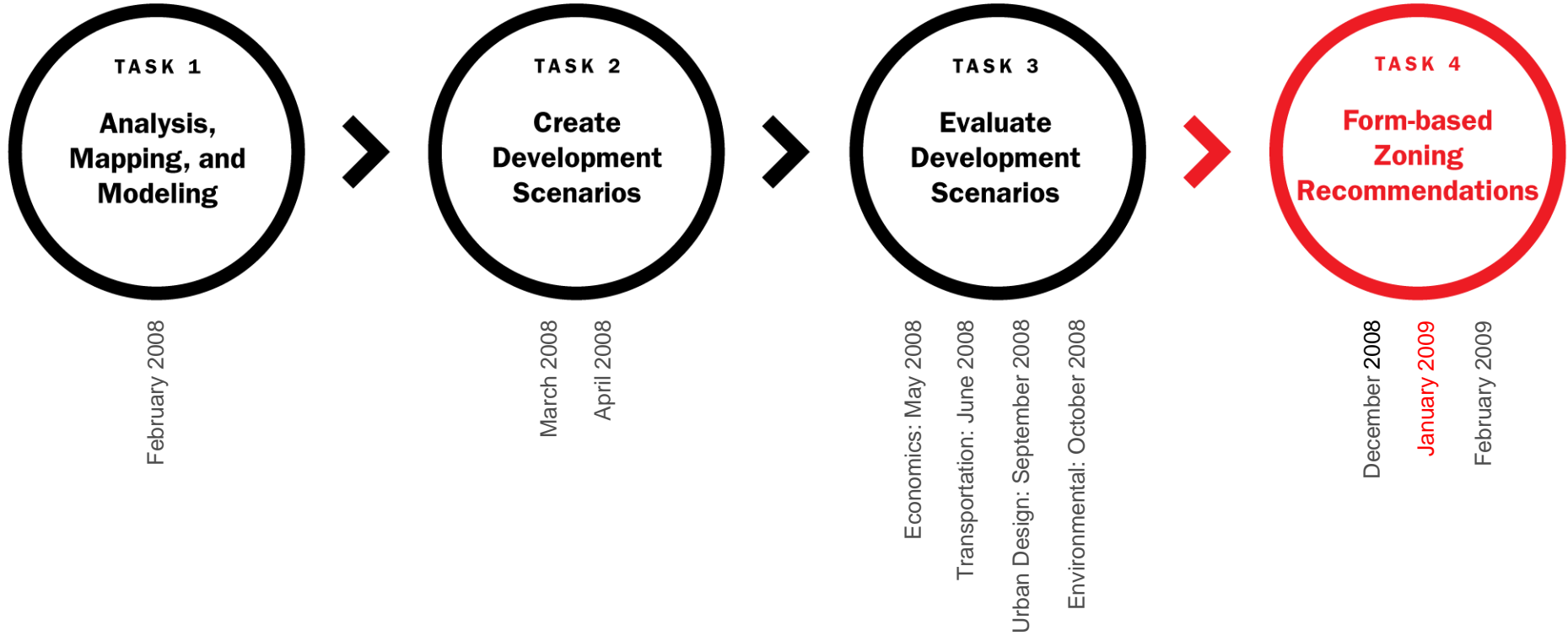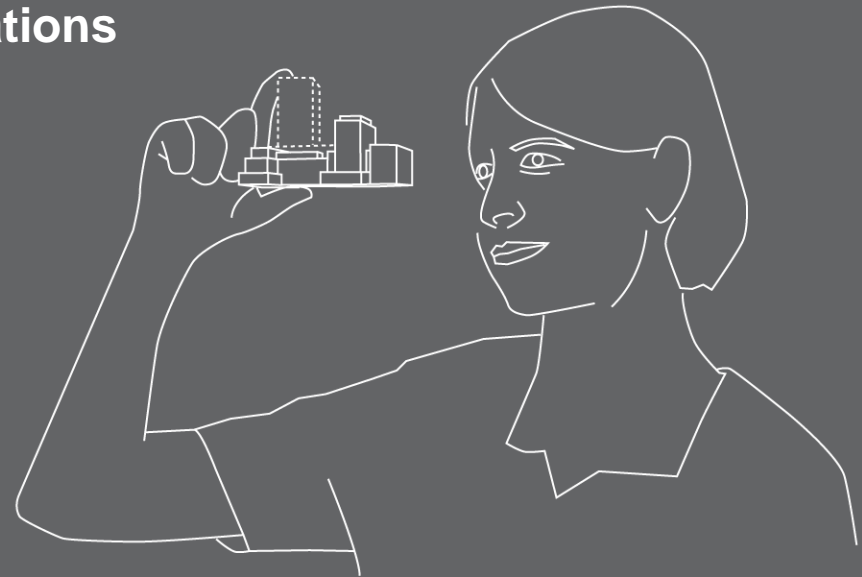**2: Existing Zoning**

3: Proposed Zoning

4: Density and Public Benefit

Stuart Street Planning Study

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Boston
Redevelopment
Authority

TASK 1
**Analysis,
Mapping, and
Modeling**

TASK 2
**Create
Development
Scenarios**

TASK 3
**Evaluate
Development
Scenarios**

TASK 4
**Form-based
Zoning
Recommendations**

February 2008

March 2008
April 2008

Economics: May 2008
Transportation: June 2008
Urban Design: September 2008
Environmental: October 2008

December 2008
January 2009
February 2009

Project Timeline

TASK 1

Analysis, Mapping, and Modeling

February 2008

TASK 2

Create Development Scenarios

March 2008
April 2008

TASK 3

Evaluate Development Scenarios

Economics: May 2008
Transportation: June 2008
Urban Design: September 2008
Environmental: October 2008

TASK 4

Form-based Zoning Recommendations

December 2008
January 2009
February 2009

Project Timeline

3

TASK 4.2

Zoning Recommendations

1: Project Summary and Recommendations

2: Existing Zoning

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4

The Stuart Street Study Area offers opportunities for sustainable, mixed-use, urban growth.

Recommendation
Encourage urban growth in the Study Area in order to:

01 Create

a new, vibrant, mixed-use district that connects and protects established, existing neighborhoods and districts

Local Historic Districts

Assets near Study Area

Boylston Street photograph
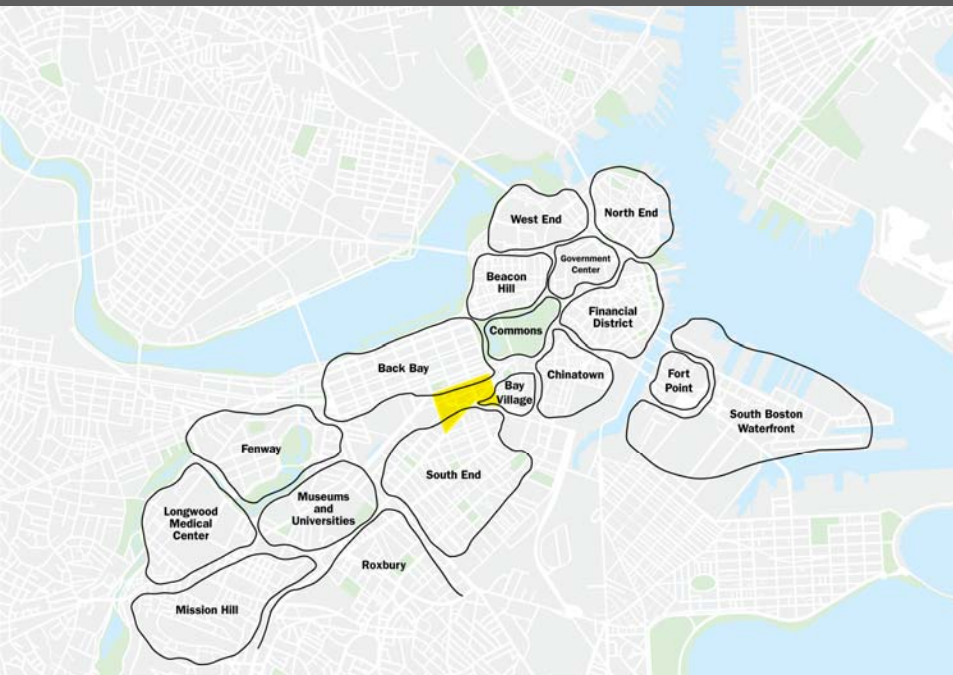
02 Reinforce

the imageability of Boston's urban form at the city-scale

City of Boston building heights
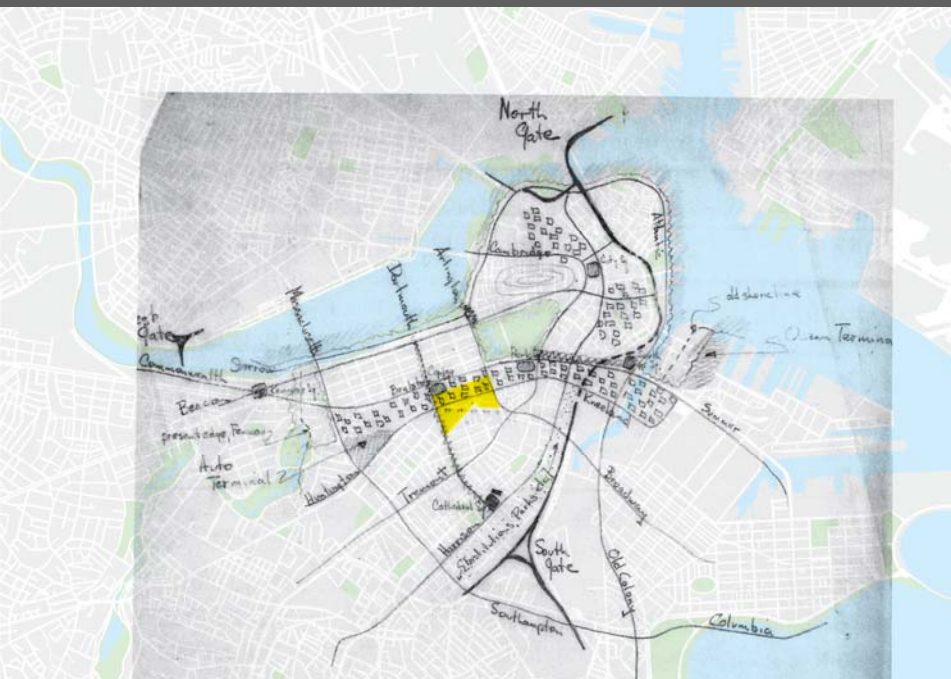
High Spine concept sketch by Kevin Lynch

Study area photograph from Prudential Tower

03 Leverage

existing transportation and urban infrastructure to reduce energy consumption and improve air quality
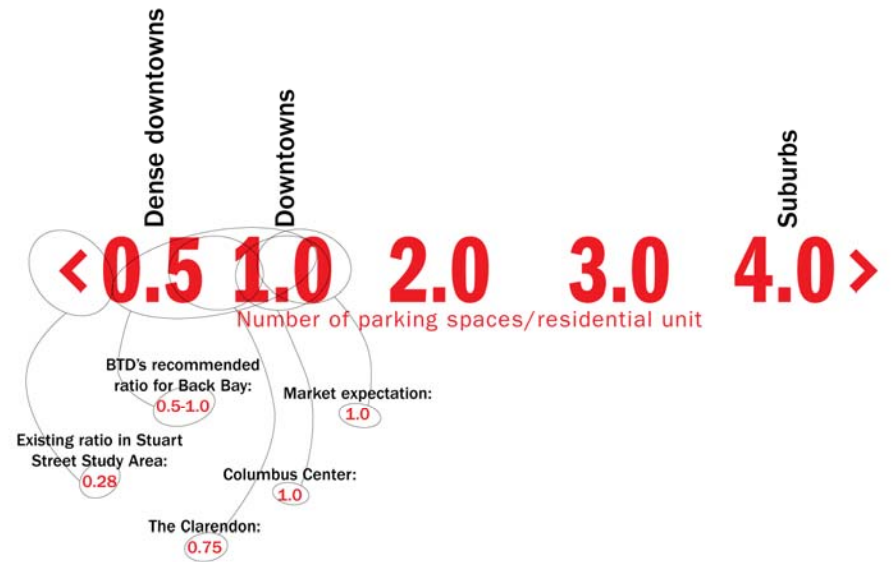
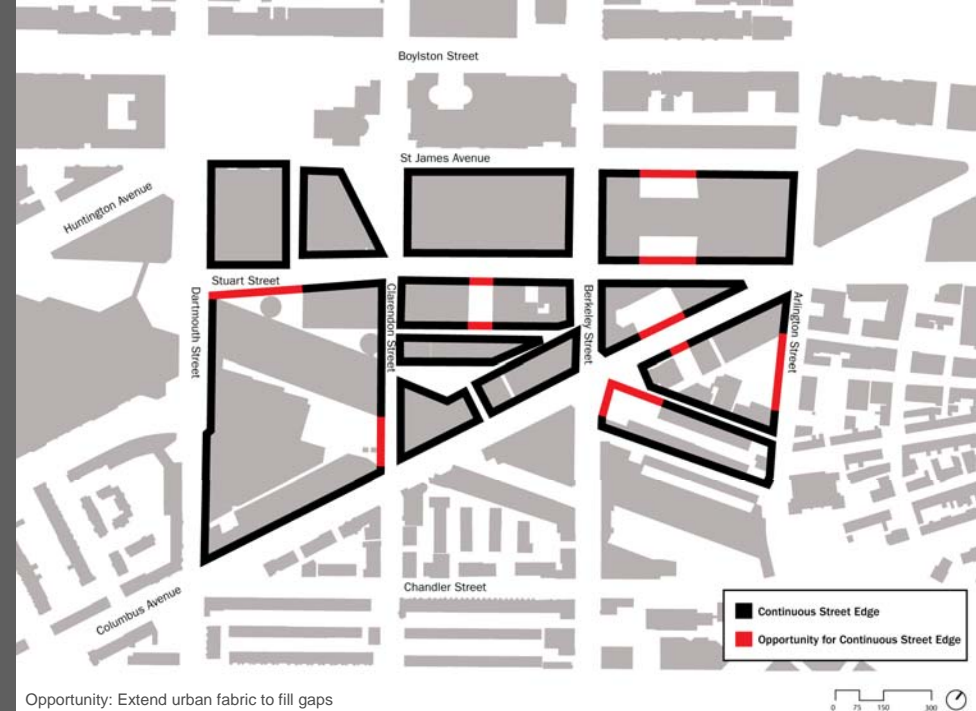Maximum parking allowances: Residential
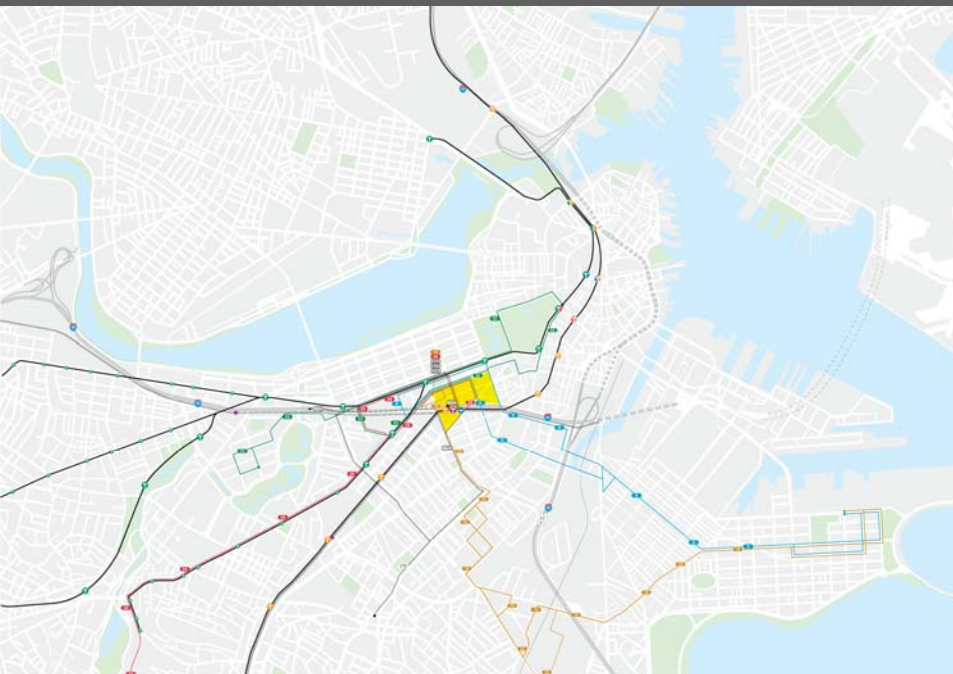
Transit connections between Study Area and City of Boston

Back Bay MBTA station

04 Enhance

the district's urban realm and pedestrian experience by building on the publicly accessible, human-scaled pedestrian environments adjacent to the study area
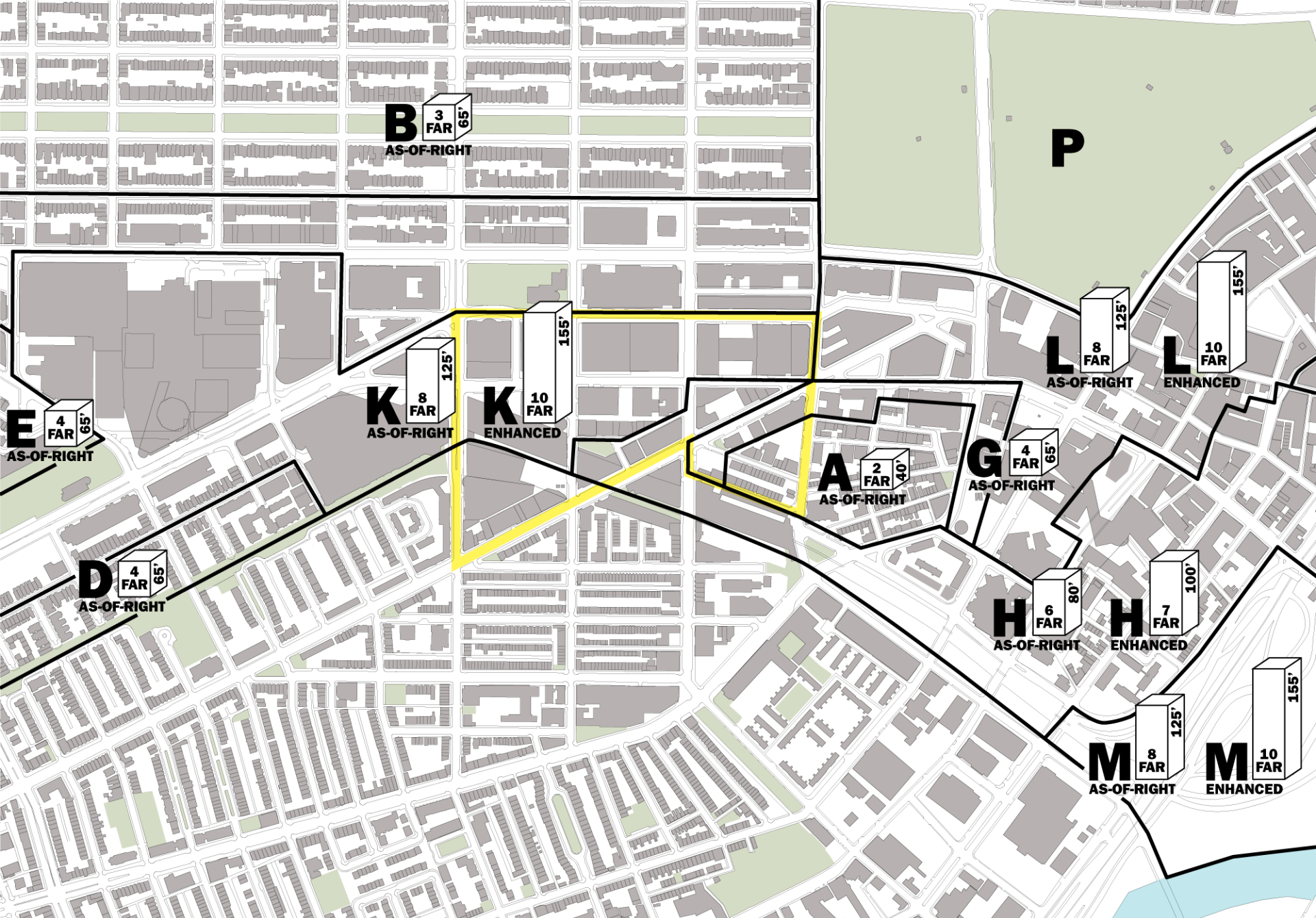

Opportunity: Extend urban fabric to fill gaps

Continuous Street Edge
Opportunity for Continuous Street Edge

Existing and proposed indoor arcades or winter gardens

Winter garden, Sheffield, UK

Zoning Recommendations

1: Project Summary and Recommendations

2: Existing Zoning

3: Proposed Zoning

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11

B | 3 FAR | 65'
AS-OF-RIGHT

P

E | 4 FAR | 65'
AS-OF-RIGHT

K | 8 FAR | 125'
AS-OF-RIGHT

K | 10 FAR | 155'
ENHANCED

L | 8 FAR | 125'
AS-OF-RIGHT

L | 10 FAR | 155'
ENHANCED

A | 2 FAR | 40'
AS-OF-RIGHT

G | 4 FAR | 65'
AS-OF-RIGHT

D | 4 FAR | 65'
AS-OF-RIGHT

H | 6 FAR | 80'
AS-OF-RIGHT

H | 7 FAR | 100'
ENHANCED

M | 8 FAR | 125'
AS-OF-RIGHT

M | 10 FAR | 155'
ENHANCED

1987: Downtown IPOD Subdistricts Established

0   175   350   700

Huntington Avenue/ Prudential Center

Midtown Cultural District

Bay Village

Chinatown District

South End

1990's and 2000's: Zoning Districts Replace IPOD Subdistricts

Source: Boston Zoning Code

0   175   350   700

B 3 FAR 65'
AS-OF-RIGHT

P

K 8 FAR 125'
AS-OF-RIGHT

K 10 FAR 155'
ENHANCED

Midtown Cultural District

Huntington Avenue / Prudential Center

Bay Village

H 6 FAR 80'
AS-OF-RIGHT

H 7 FAR 100'
ENHANCED

Chinatown District

South End
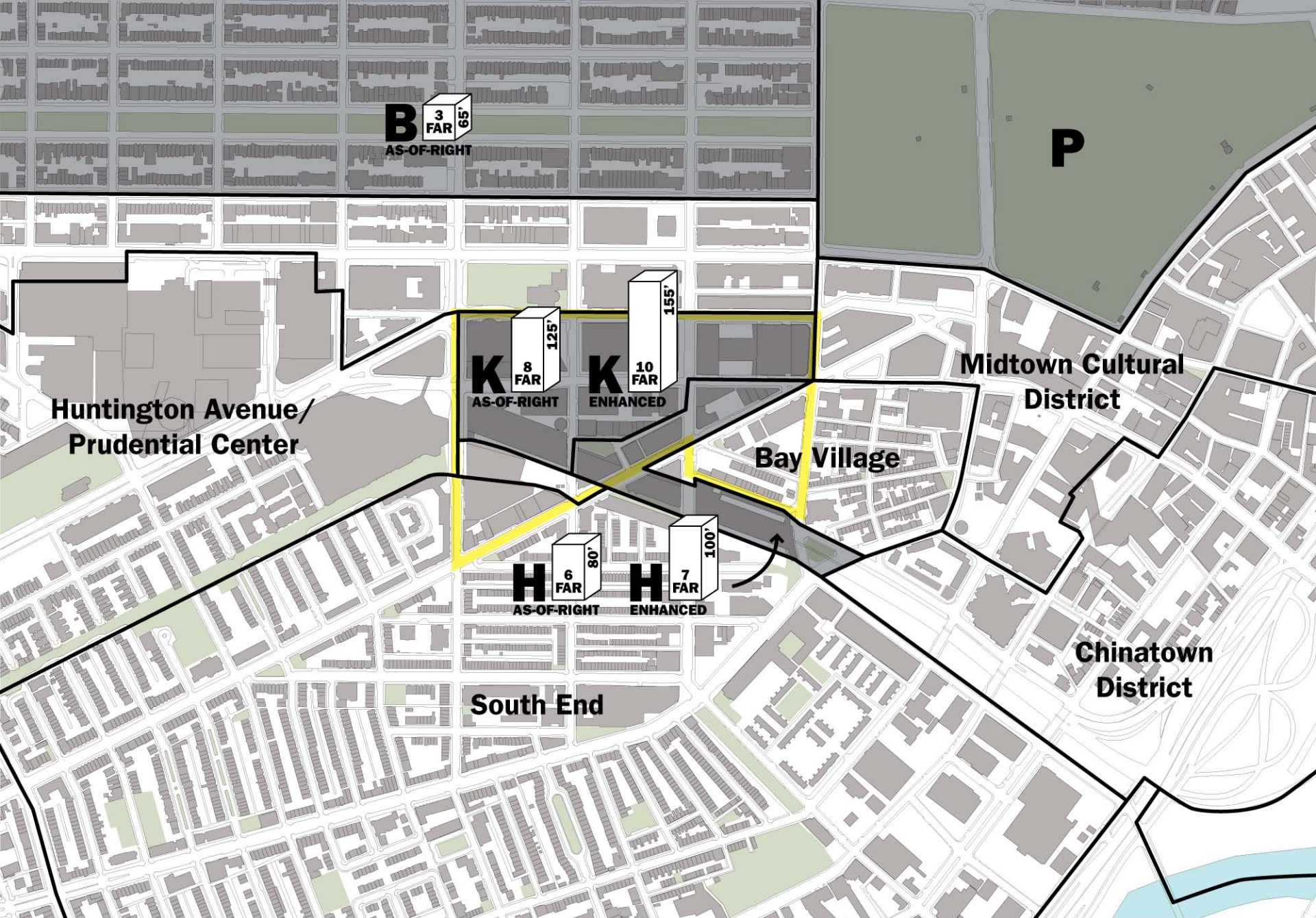
Today: Pockets of IPOD Subdistricts Remain
Source: Boston Zoning Code

0   175   350   700

14
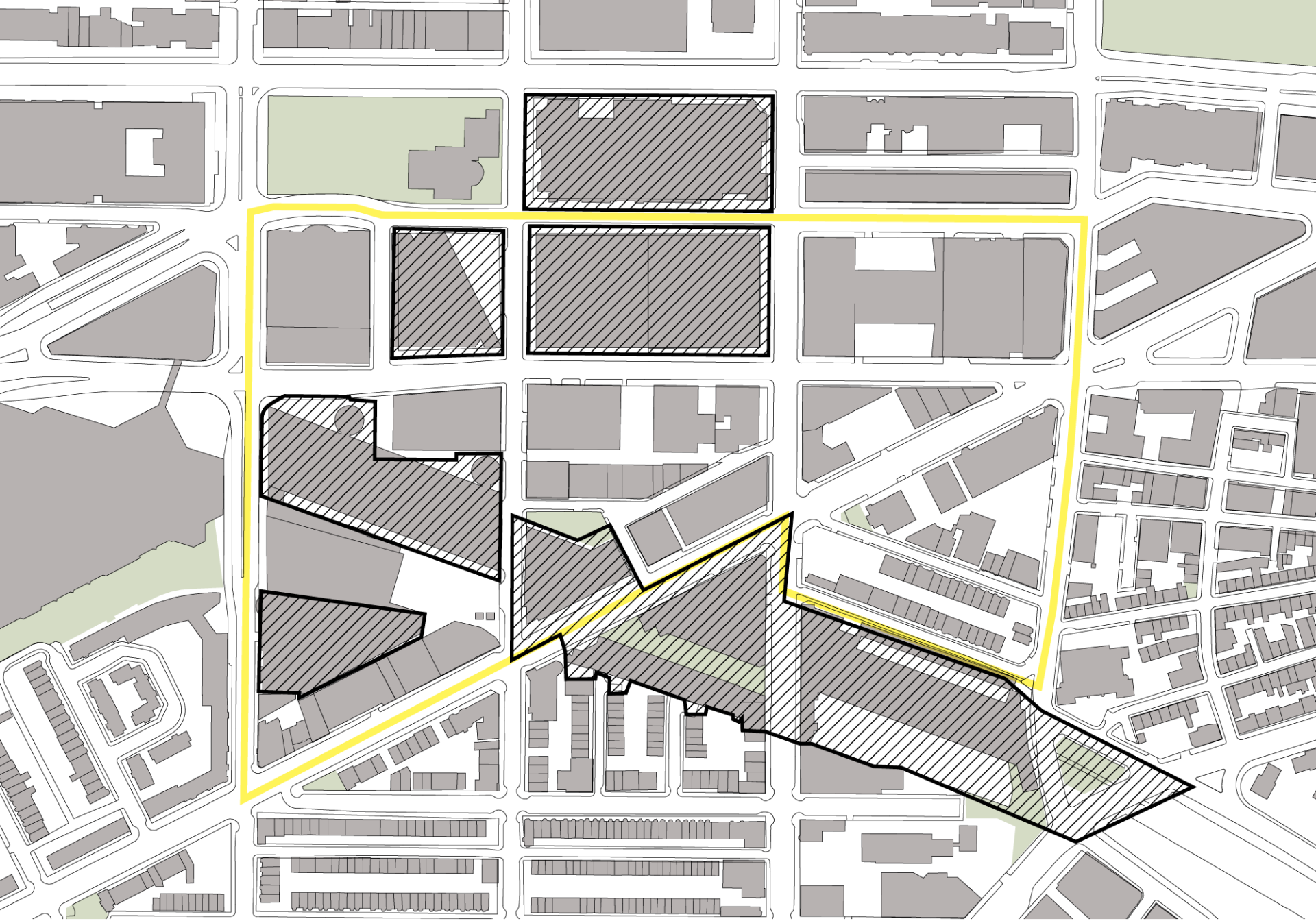
Planned Development Areas

Source: Boston Zoning Code
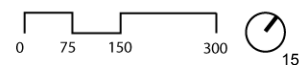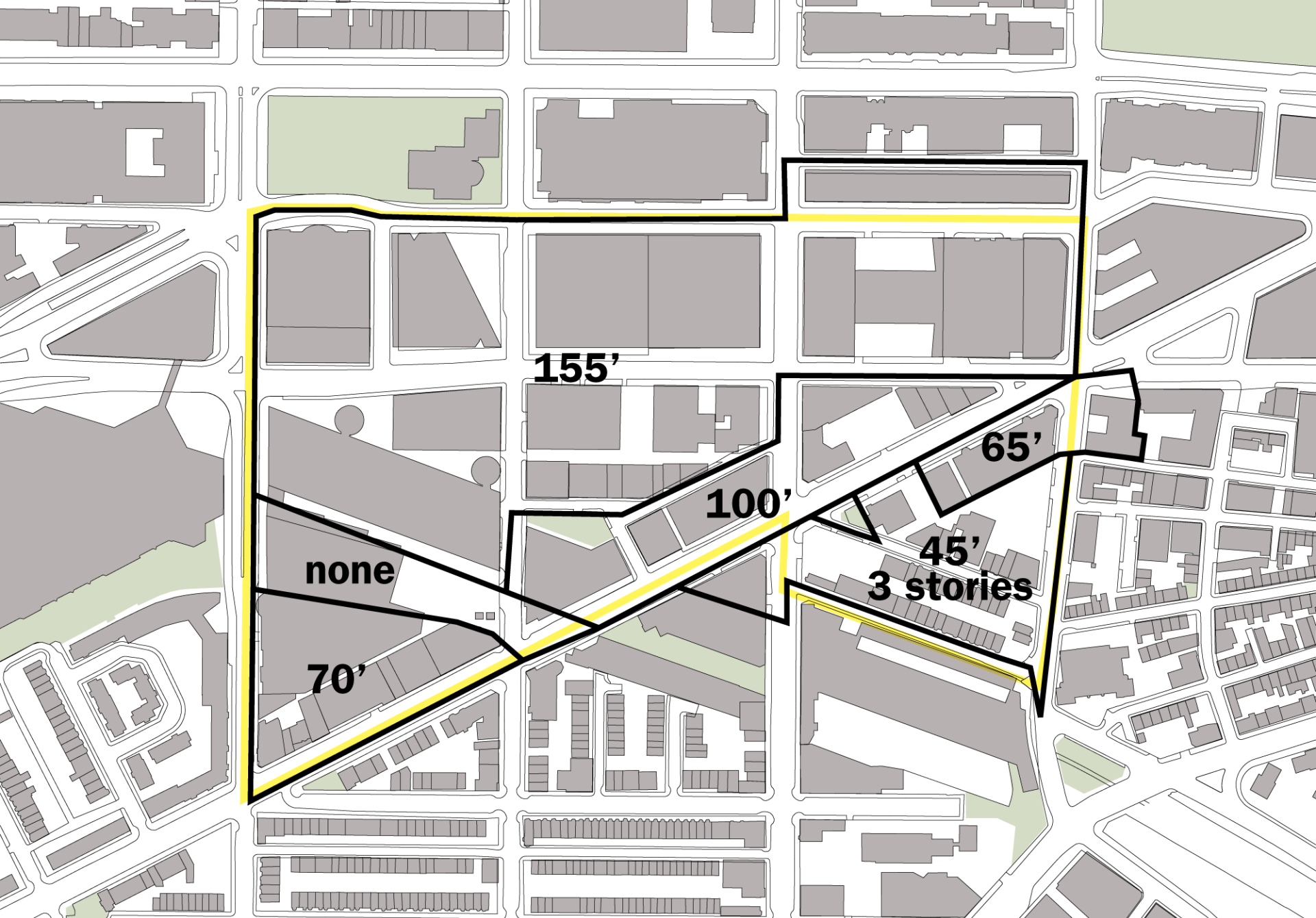
0   75   150   300

15

155'

65'

100'

none

**45'
3 stories**

70'

Maximum Allowable Heights

Source: Boston Zoning Code; Based on base zoning and IPOD where applicable (PDA heights are not included)
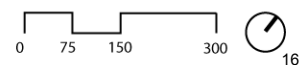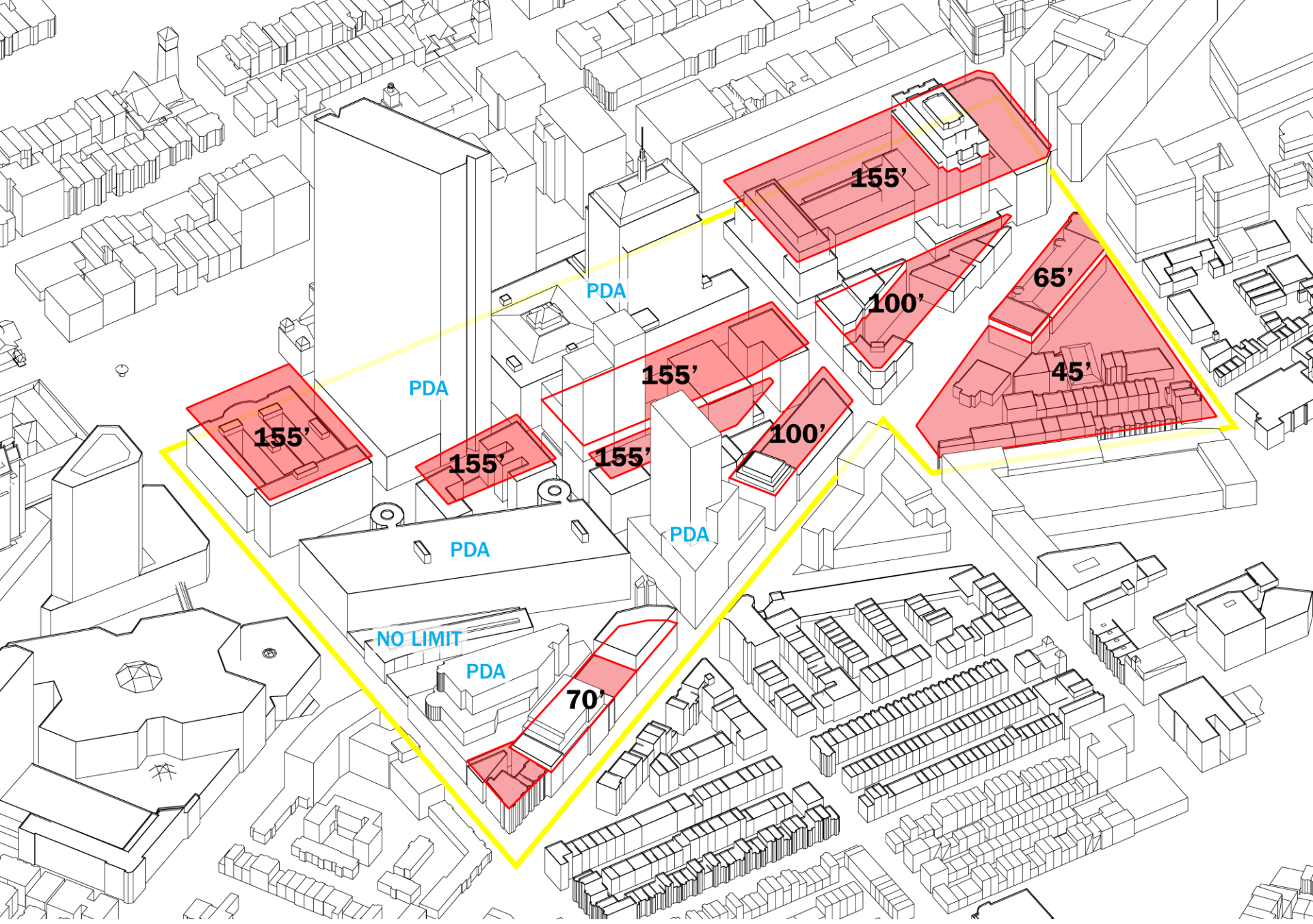
0   75   150   300

155'

PDA

PDA

100'

65'

155'

155'

155'

100'

45'

PDA

PDA

PDA

NO LIMIT

PDA

70'

Maximum Allowable Heights

Source: Boston Zoning Code; Based on base zoning and IPOD where applicable

10.0

8.0

6.0

3.0

2.0

4.0

Maximum Allowable FAR

0   75   150   300

Front Yard: 0

Parapet: $\dfrac{H+L^1}{8}$

Front Yard: 0

Parapet: $\dfrac{H+L^1}{7}$

Match existing building alignments

Front Yard: 0

Parapet: $\dfrac{H+L^1}{6}$

Front Yard: 0

Parapet: 0

H = Height of building above the height below which no setback is required.
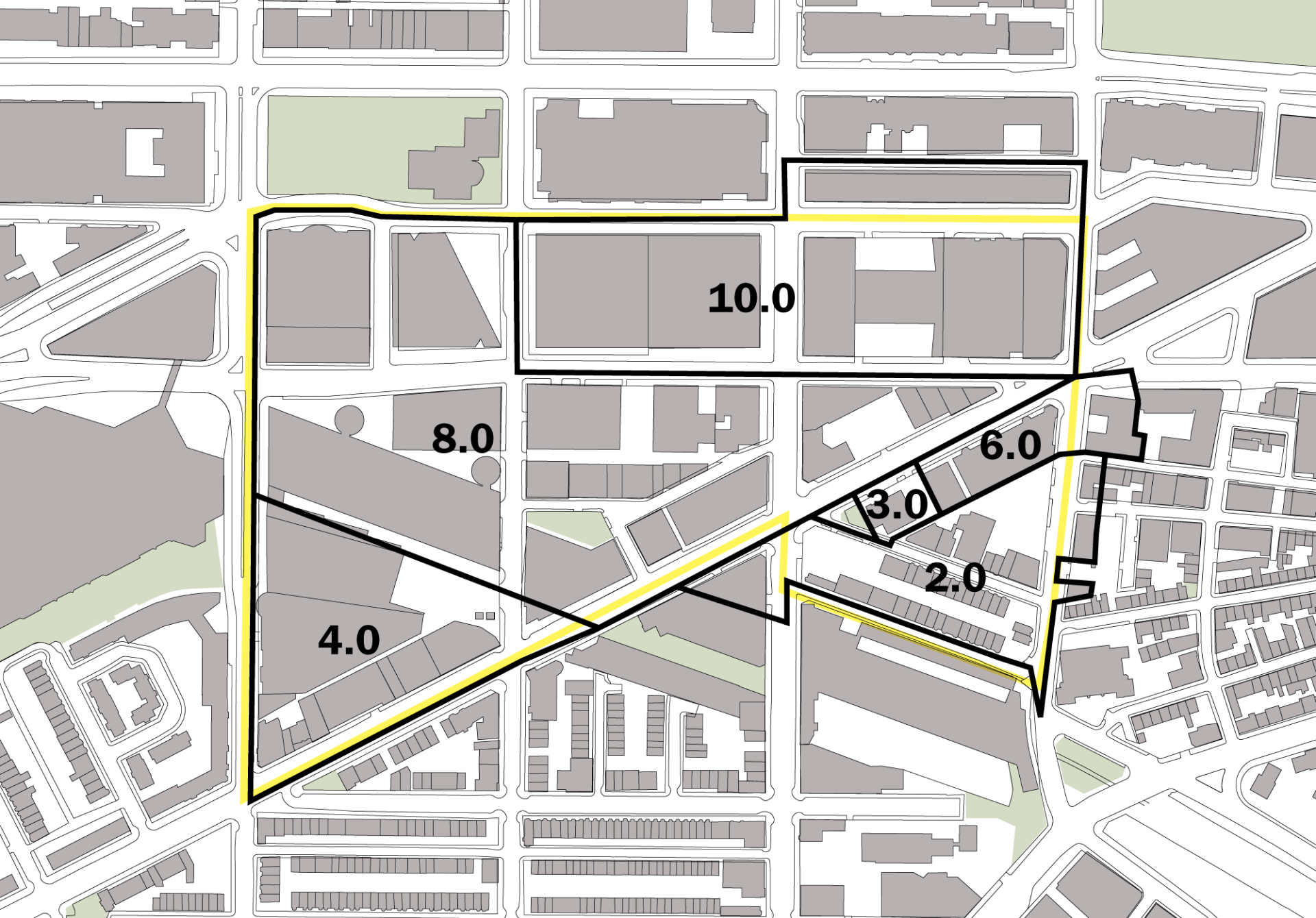
L^1 = Length of wall parallel (or within 45° of parallel) to lot line, measured parallel to lot line at greatest length above the height below which no setback is required.

Minimum Setback

0   75   150   300

Varies
(based on length and
height of tower)

2 stories or 25ft

Existing Plinth

Minimum Setback

Existing Plinth

Varies
(based on length and
height of tower)

2 stories or 25ft

Recommended Street Wall

Constant

Context-appropriate
(determined by adjacent buildings)

Minimum Setback

Source: Boston Zoning Code
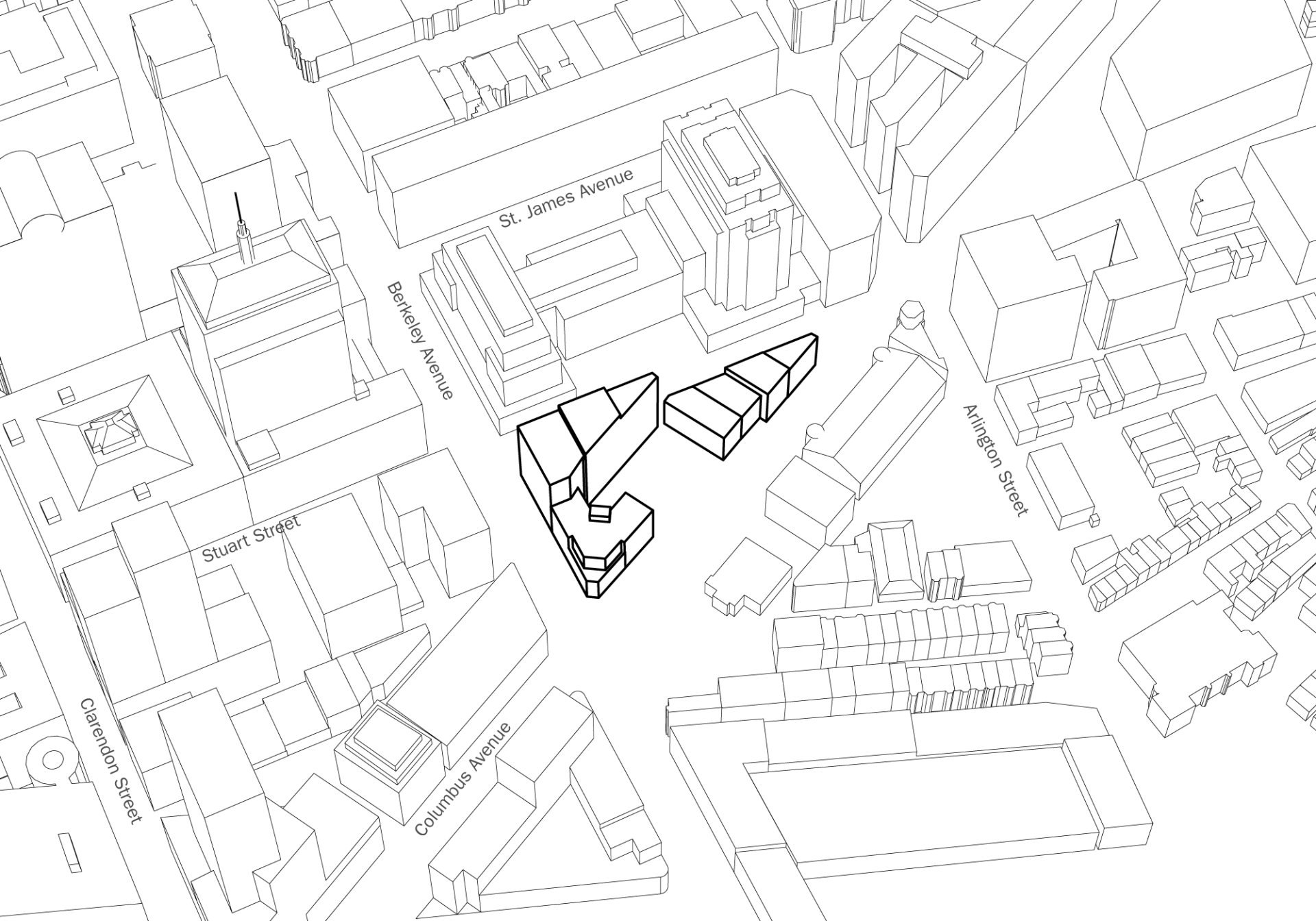
Existing Condition
Source: BRA 3D model and field verification
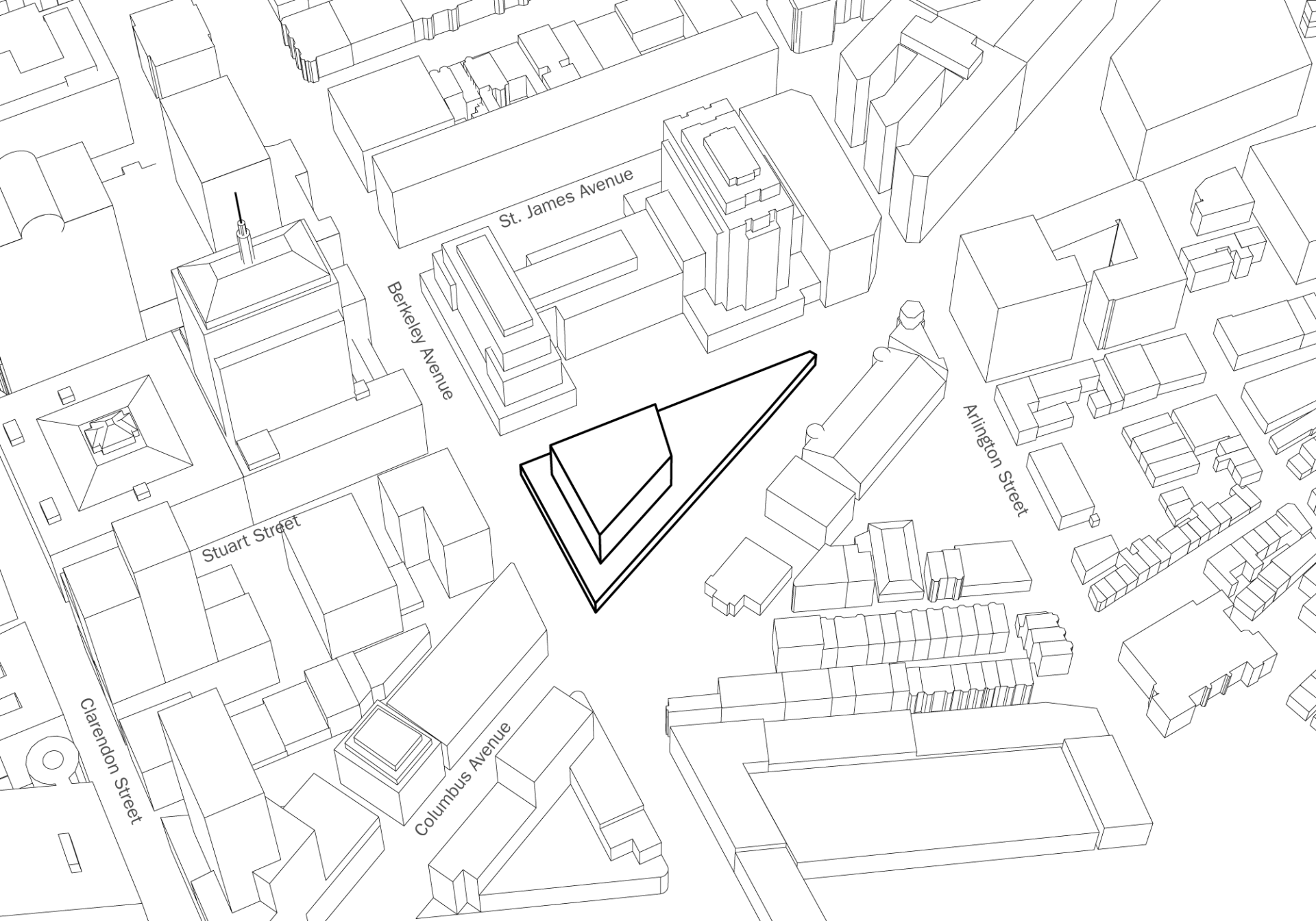
Existing Code Build-out Scenario
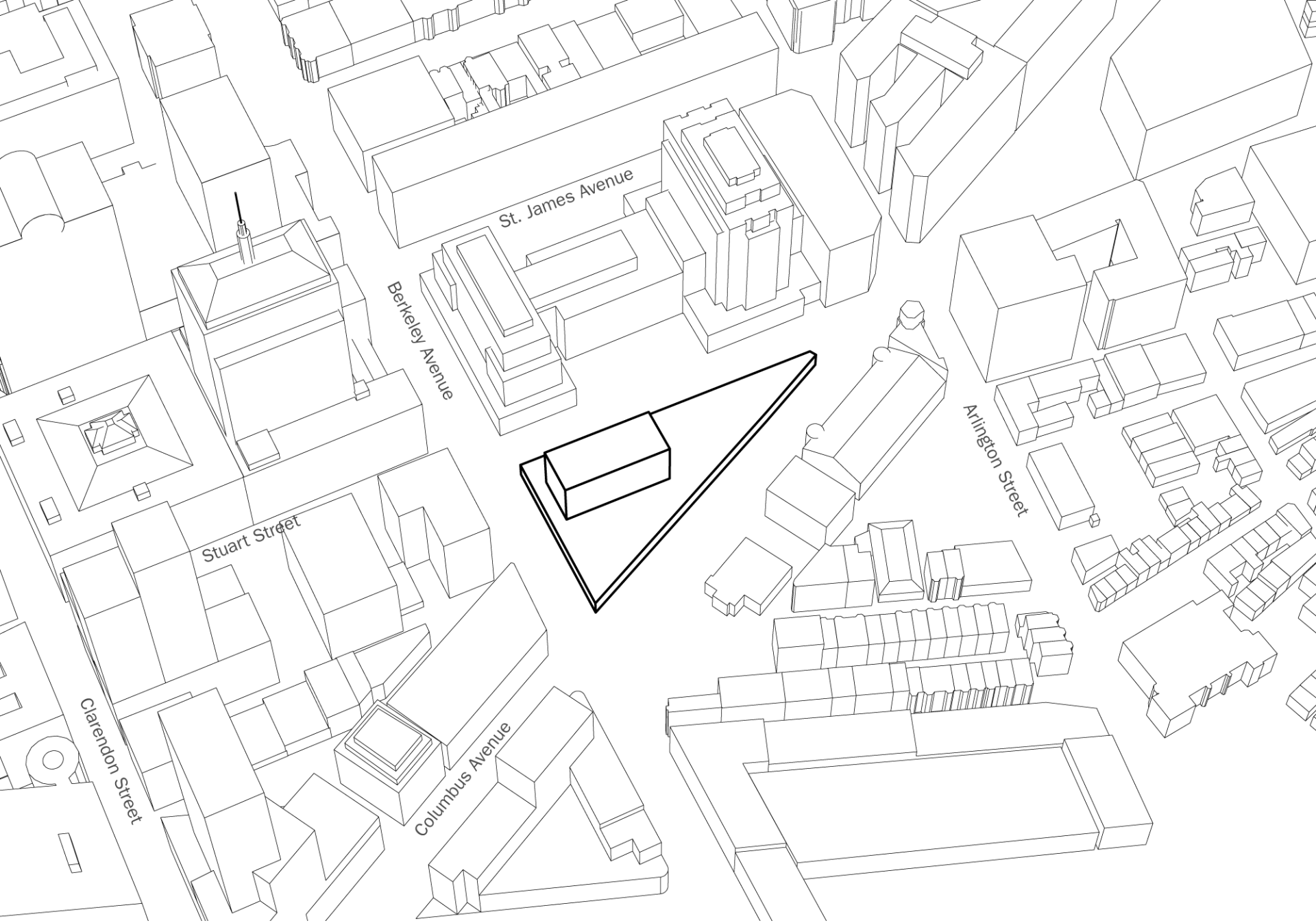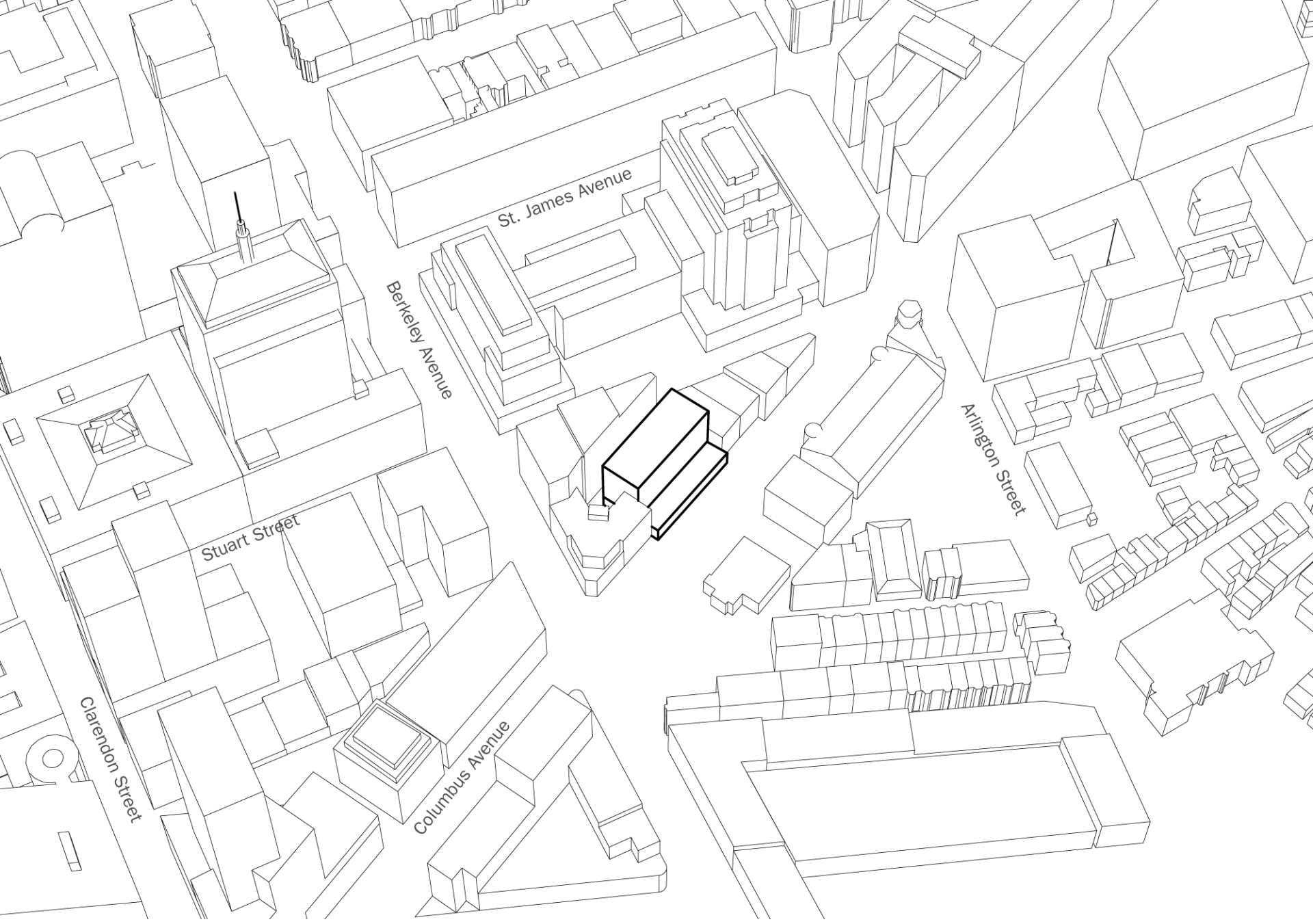
St. James Avenue

Berkeley Avenue

Arlington Street

Stuart Street

Clarendon Street

Columbus Avenue

Existing Code Build-out Scenario

St. James Avenue

Berkeley Avenue

Stuart Street

Clarendon Street

Columbus Avenue

Arlington Street

Existing Code Build-out Scenario

Zoning Recommendations

1: Project Summary and Recommendations

2: Existing Zoning

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Stuart Street Planning Study

29 January 2009

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Boston
Redevelopment
Authority

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Street

Ground Floor

Street Wall
(definition of urban space)

Skyline

Rigid form-based code strategies
ensure high-quality urban realm

Flexible code strategies
enable economic viability
and architectural creativity

Zoning Concept
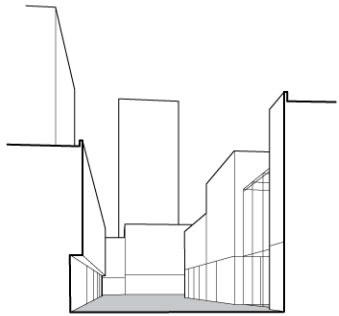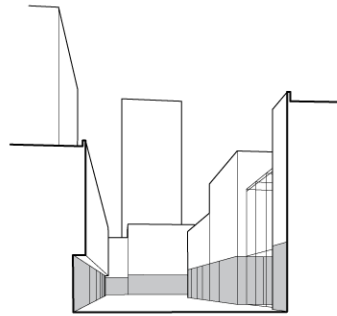
Street

Ground Floor
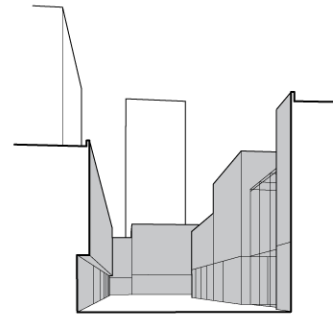
Street Wall
(definition of urban space)
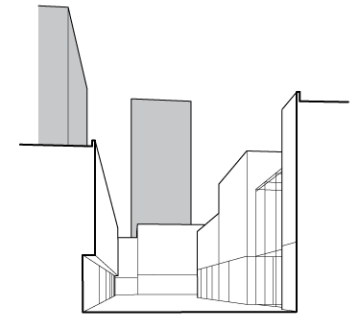
Skyline
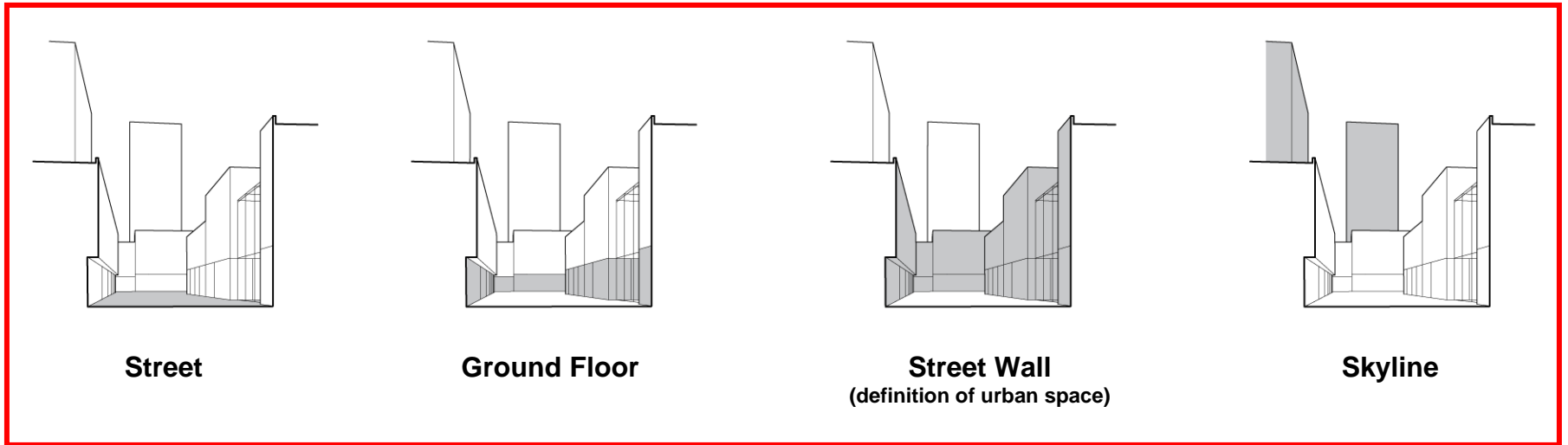
Performance standards mitigate environmental
impacts and ensure sustainable architecture

Zoning Concept

Recommendation

Use rigid form-based code principles to ensure a high-quality public realm

Street
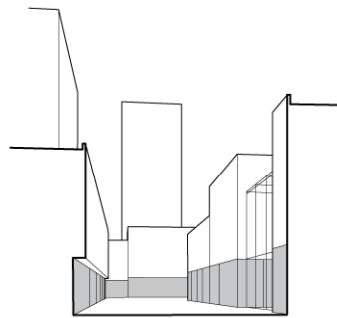
Ground Floor
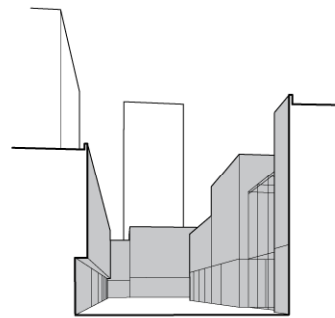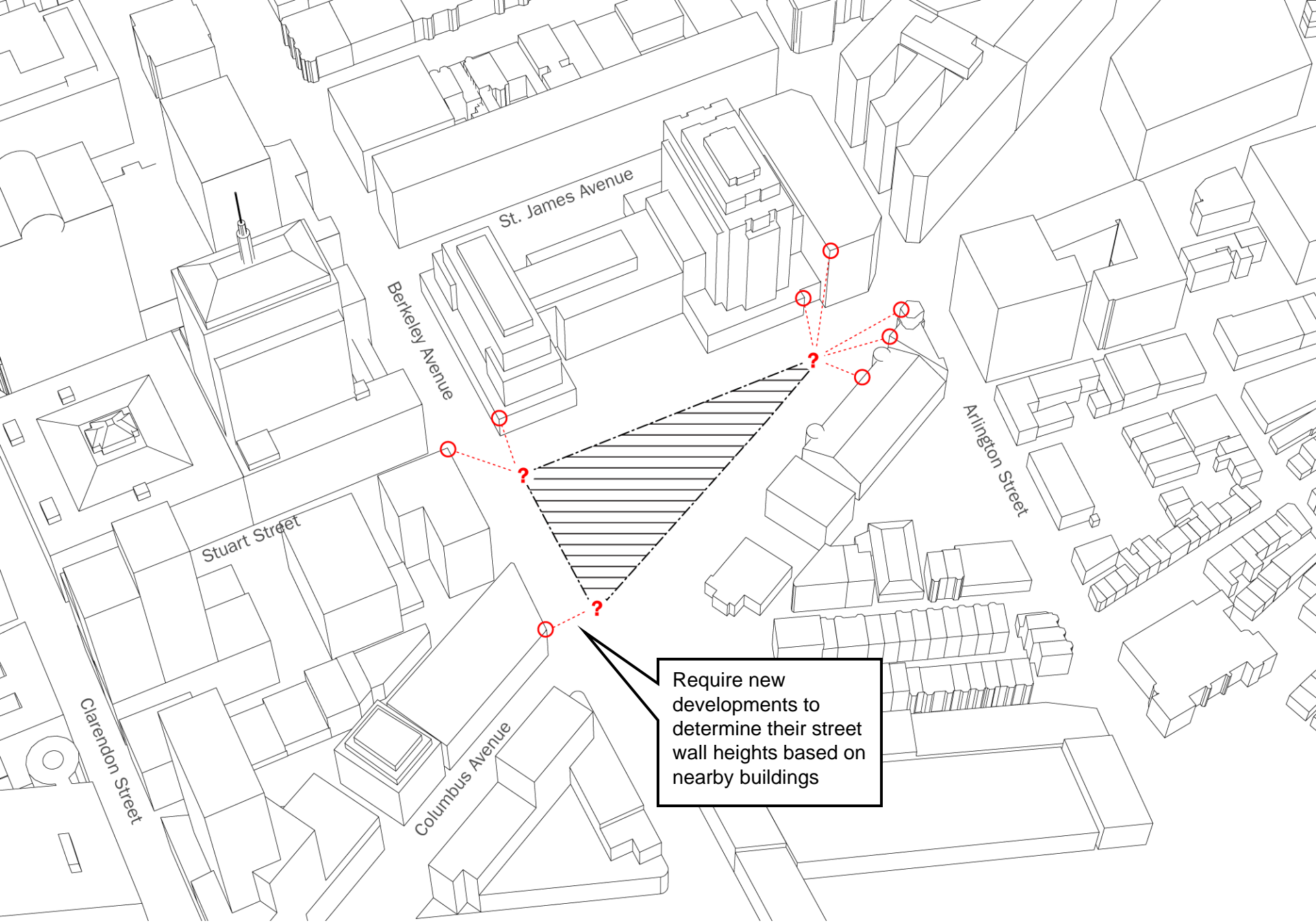
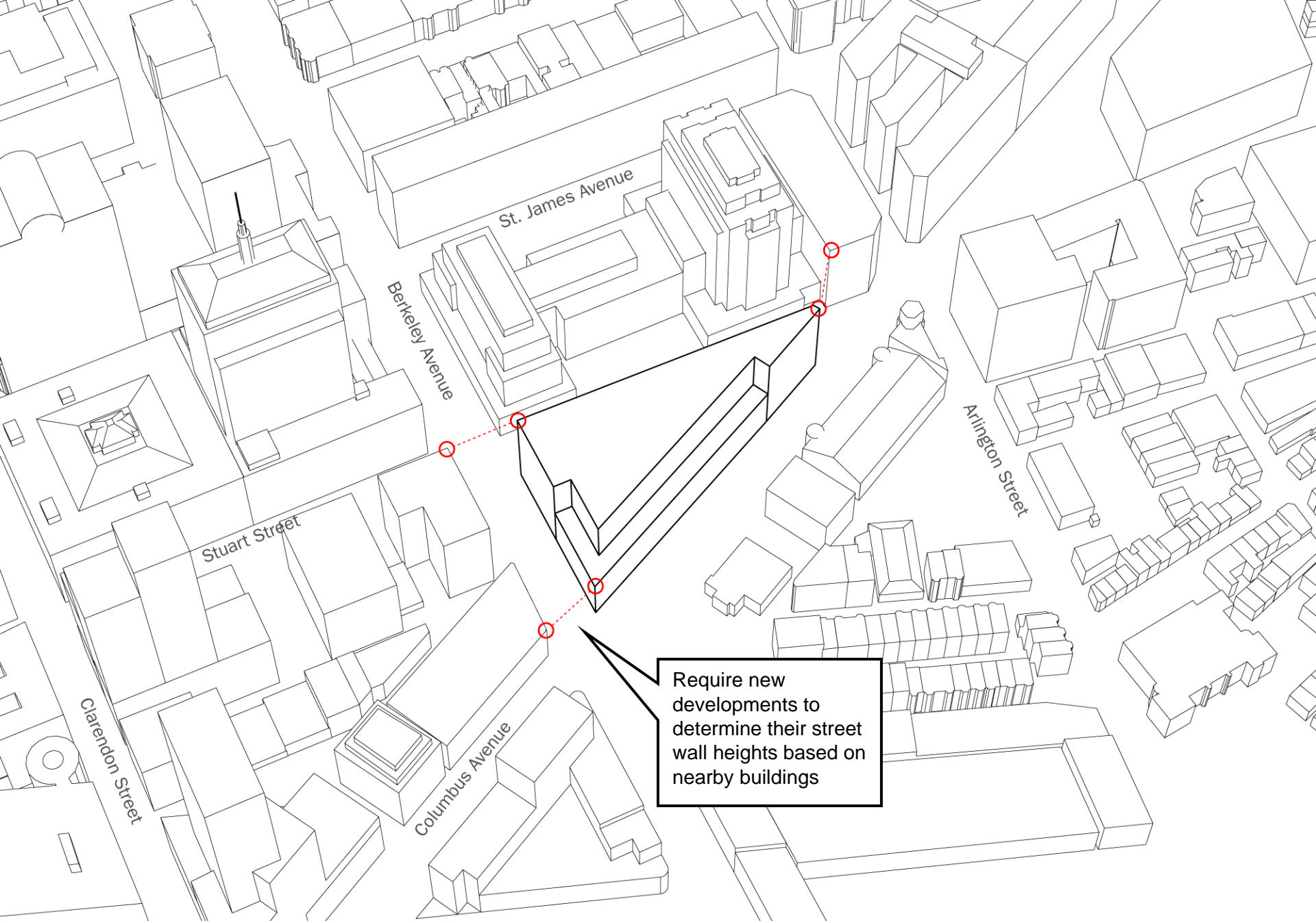**Street Wall**
(definition of urban space)

Skyline

Require new developments to determine their street wall heights based on nearby buildings
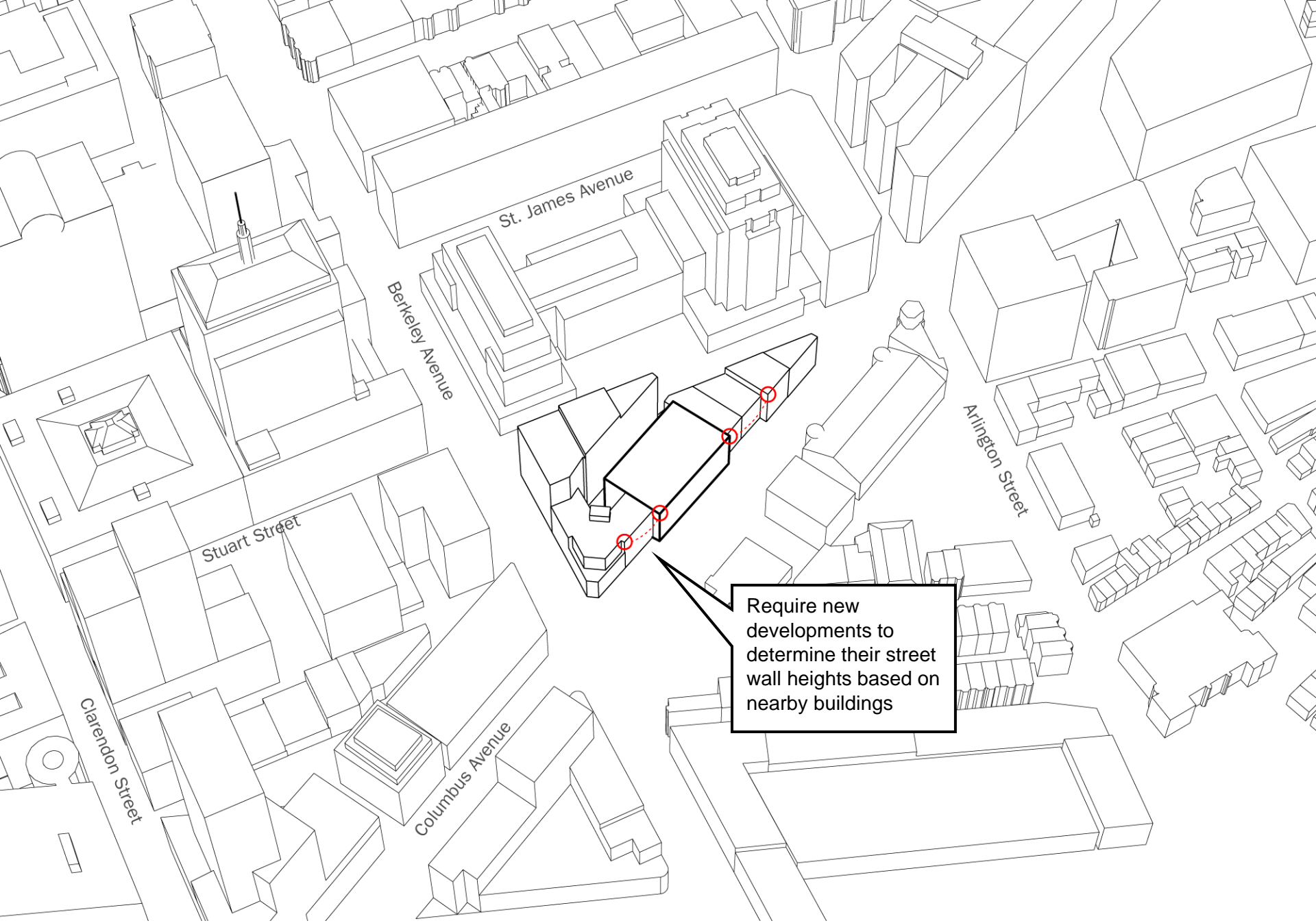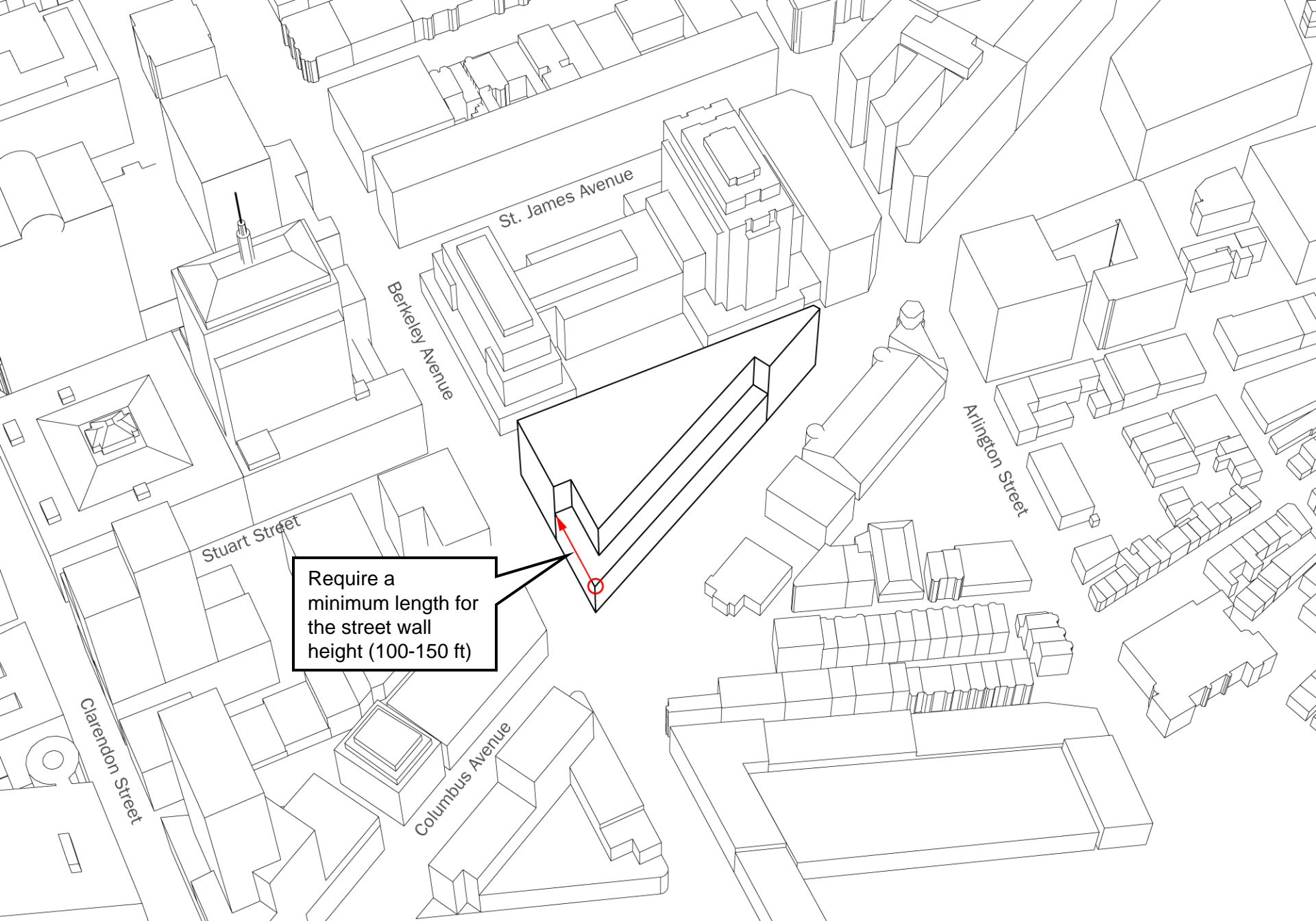
Establish street wall height based on nearby buildings

St. James Avenue

Berkeley Avenue

Arlington Street
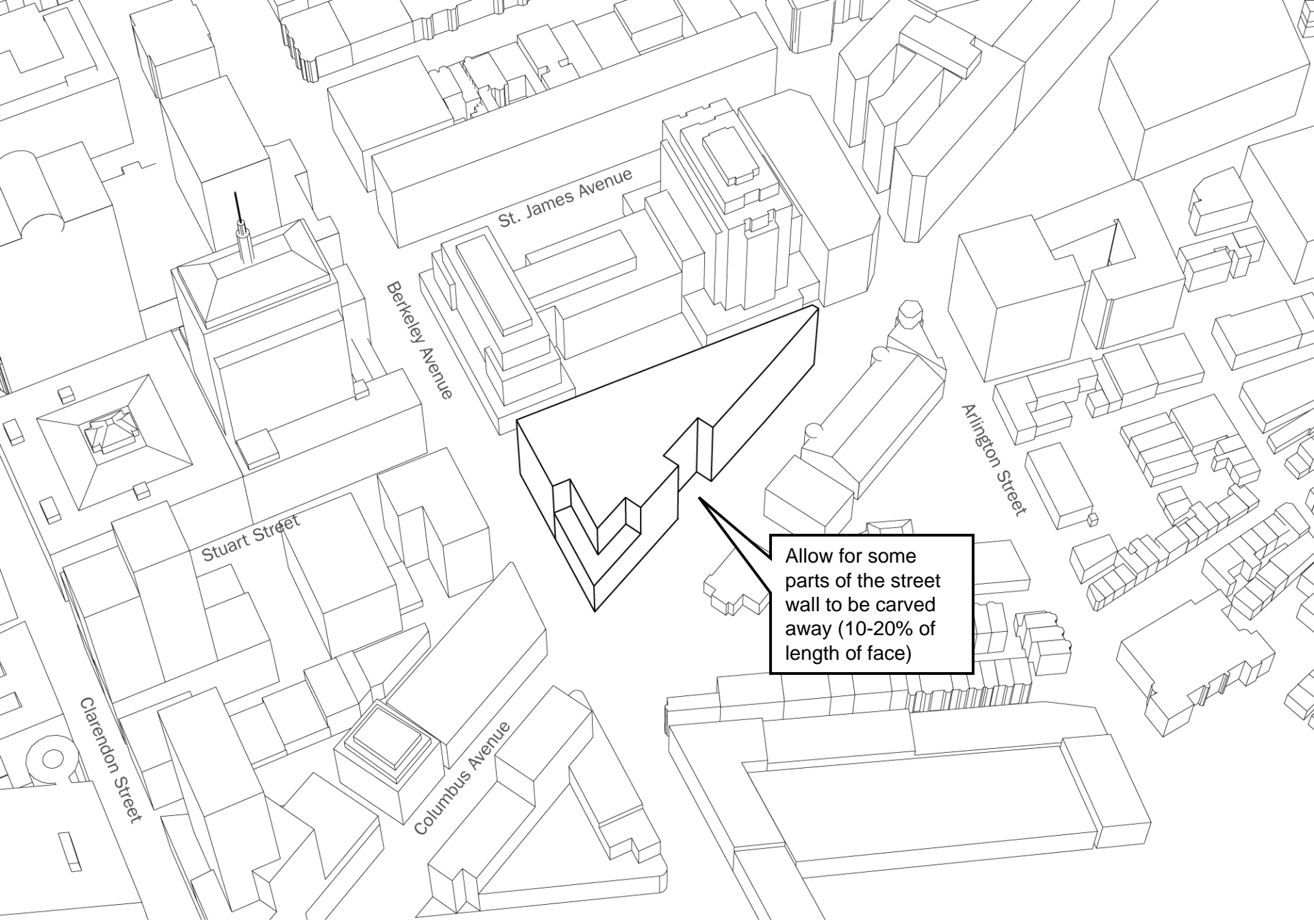
Stuart Street

Clarendon Street

Columbus Avenue

Require new developments to determine their street wall heights based on nearby buildings

Establish street wall height based on nearby buildings
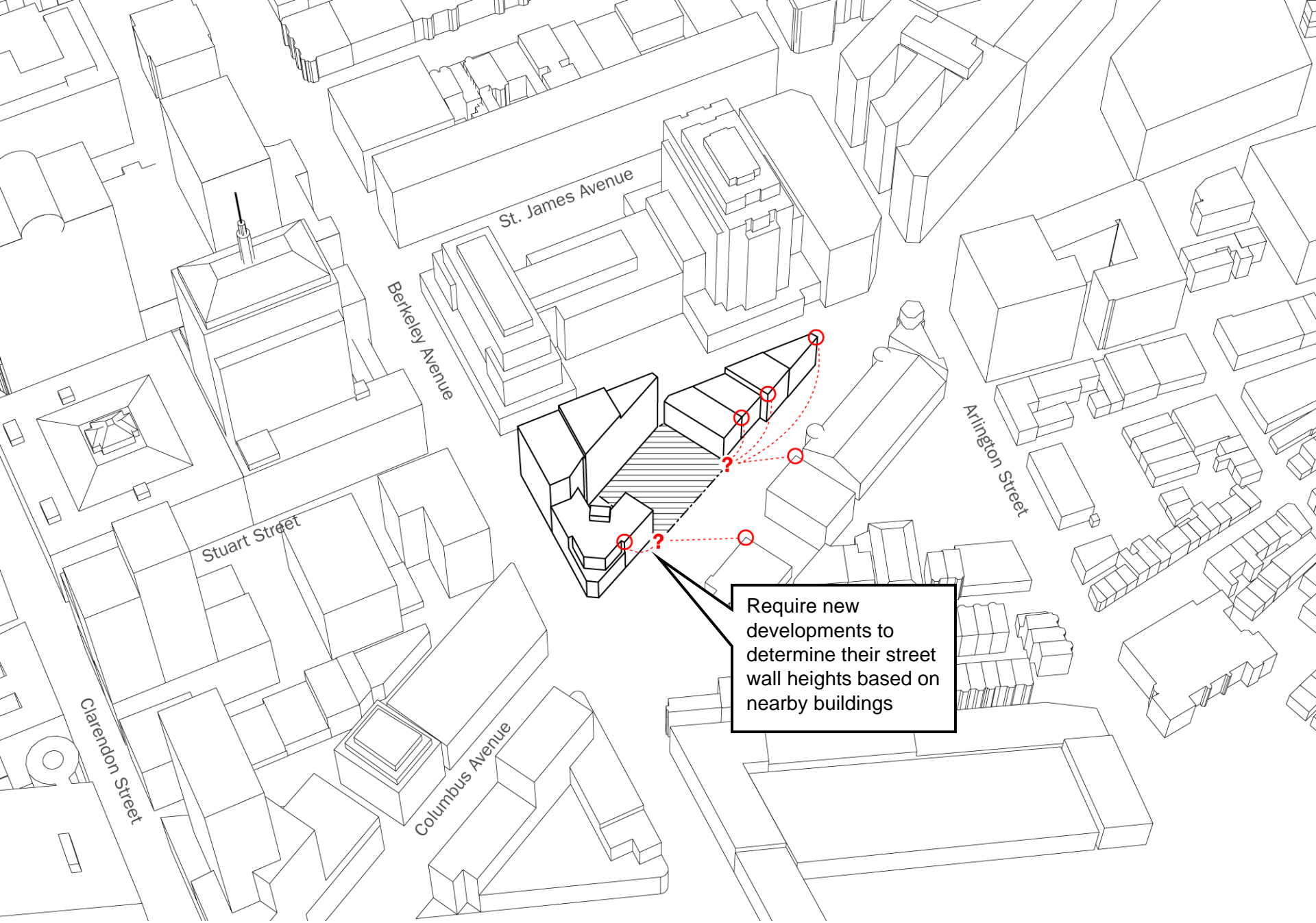
Require new developments to determine their street wall heights based on nearby buildings

Establish street wall height based on nearby buildings

Require new developments to determine their street wall heights based on nearby buildings

Establish street wall height based on nearby buildings

Require a minimum length for the street wall height (100-150 ft)

Establish street wall height based on nearby buildings

St. James Avenue

Berkeley Avenue

Arlington Street

Stuart Street

Clarendon Street

Columbus Avenue

Allow for some parts of the street wall to be carved away (10-20% of length of face)

Street wall must fill majority of lot frontage
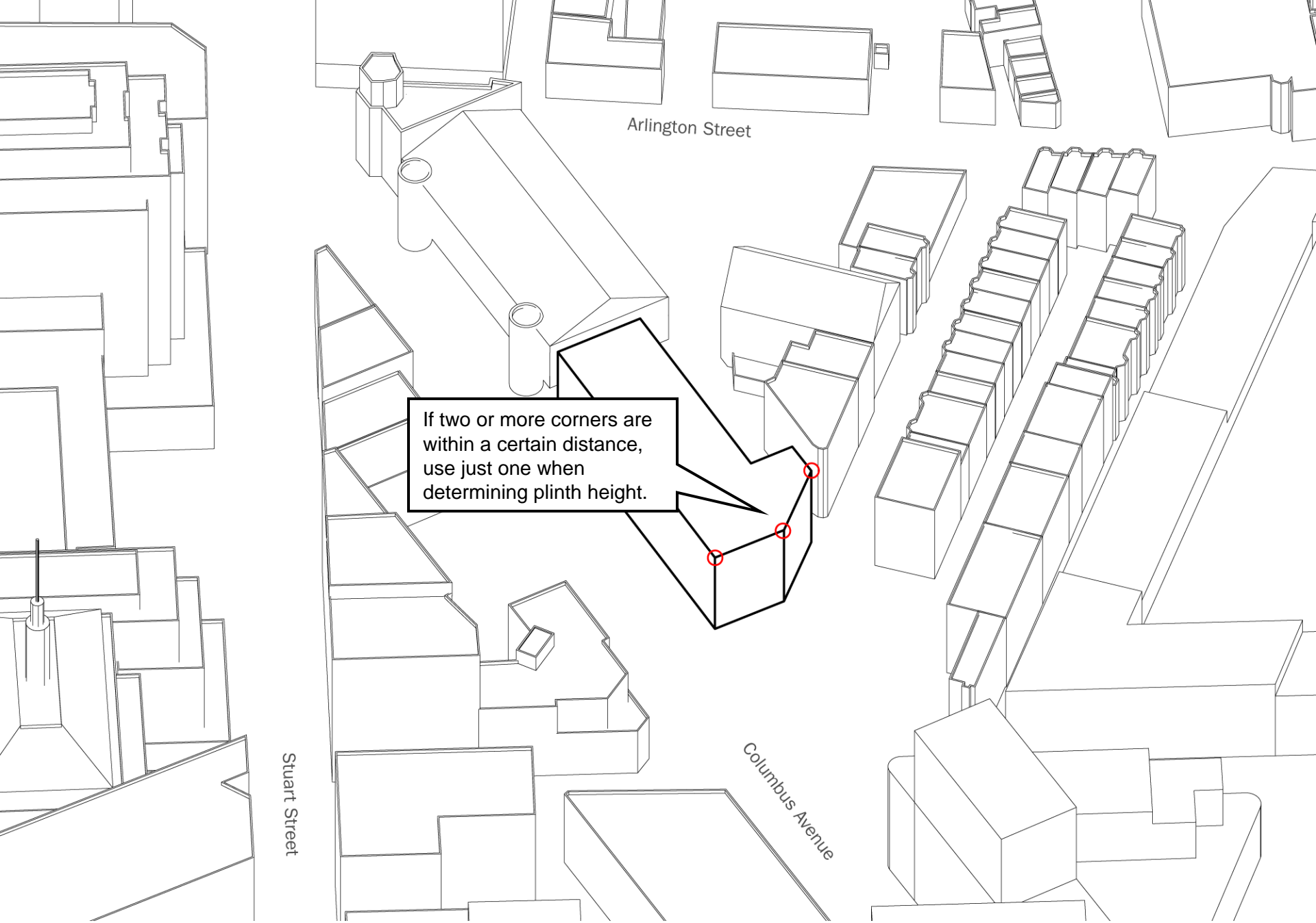
If two or more corners are within a certain distance, use just one when determining plinth height.

Arlington Street

Stuart Street

Columbus Avenue

Simplifying the street wall height

If two or more corners are within a certain distance, use just one when determining plinth height.

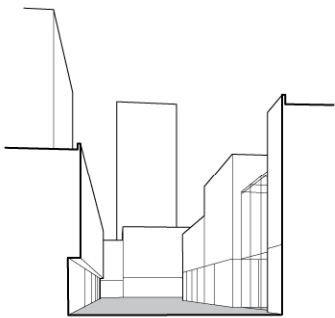Arlington Street

Stuart Street

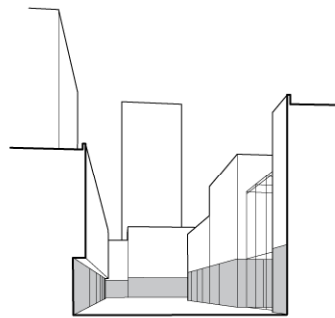Columbus Avenue
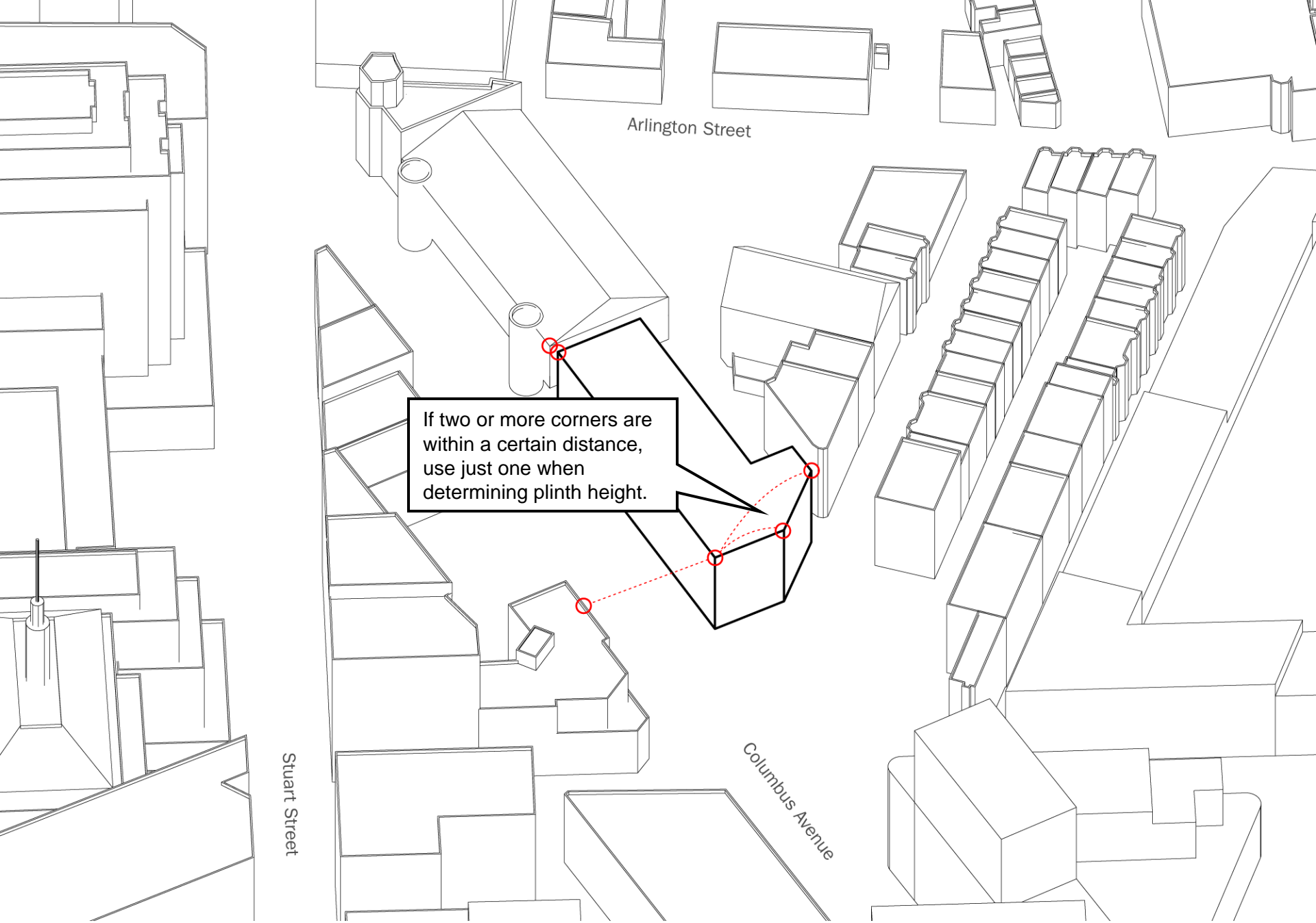
Simplifying the street wall height
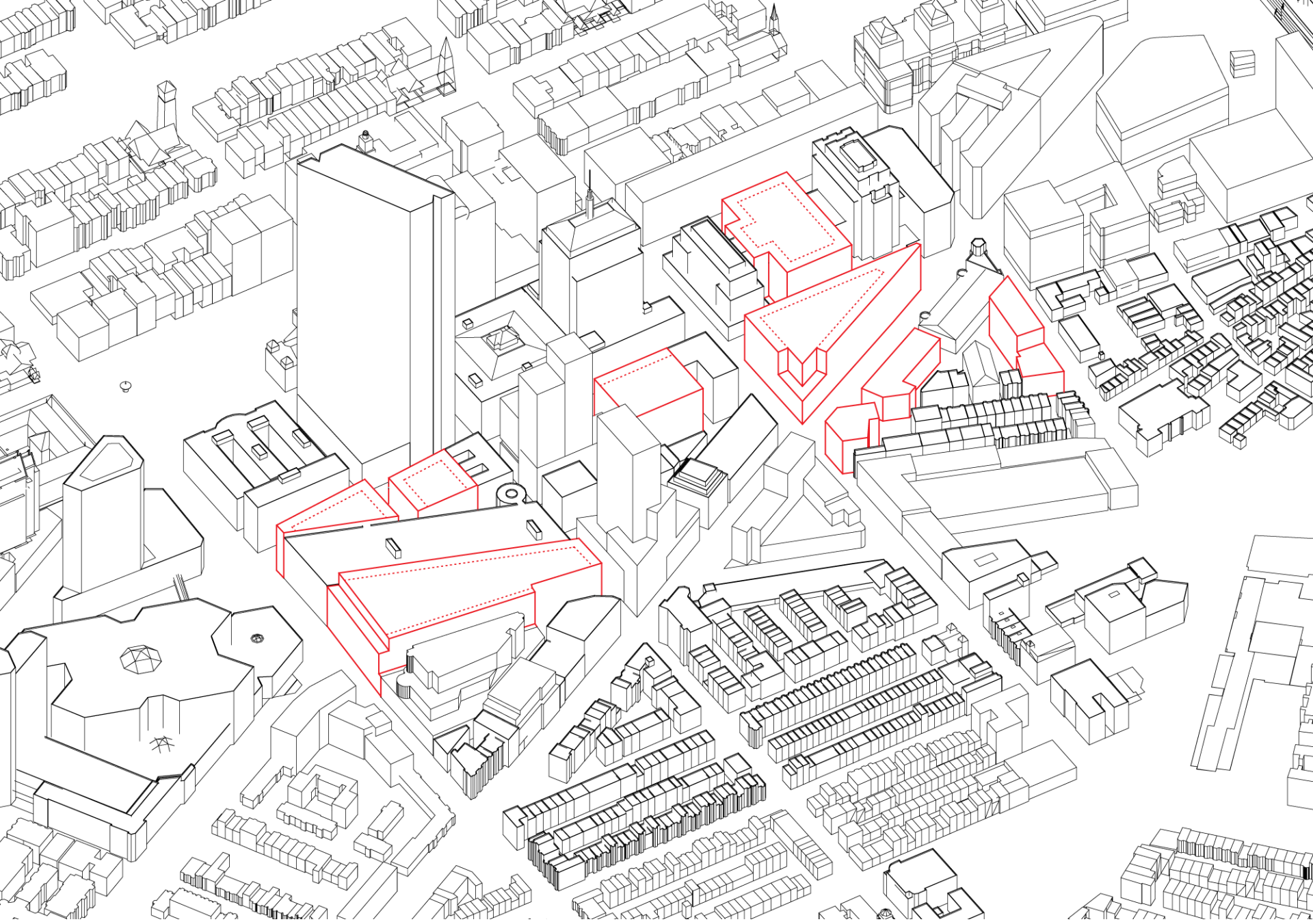
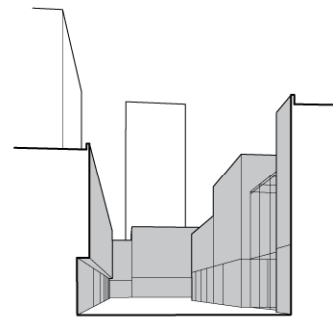Build-out of street walls on development sites

Recommendation

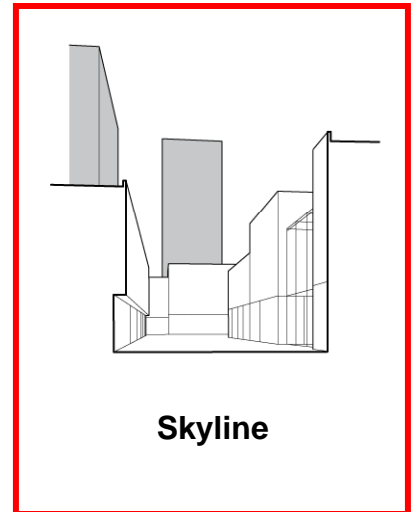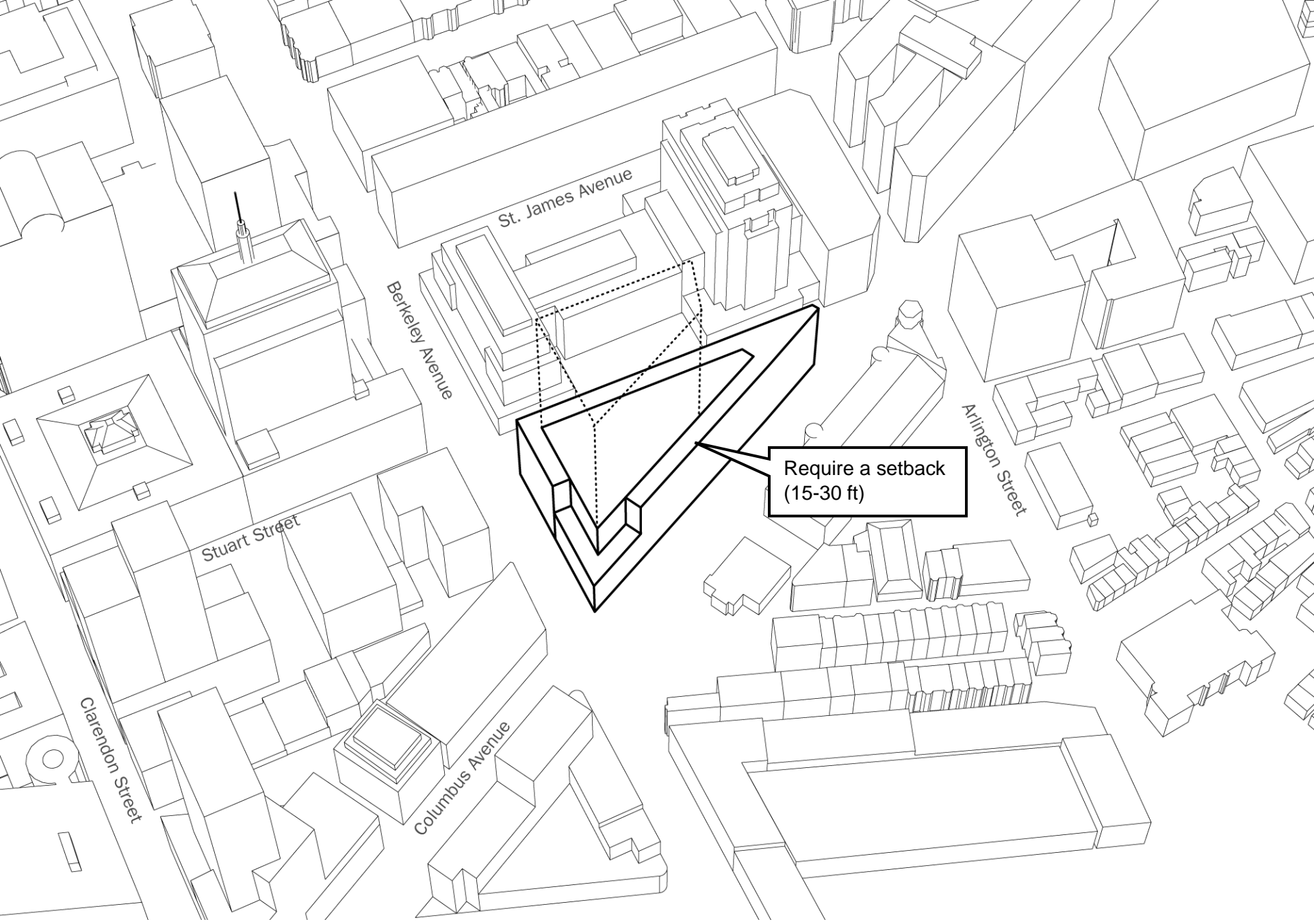Use flexible code strategies to enable economic viability and architectural creativity

| Street | Ground Floor | Street Wall (definition of urban space) | Skyline |

St. James Avenue

Berkeley Avenue

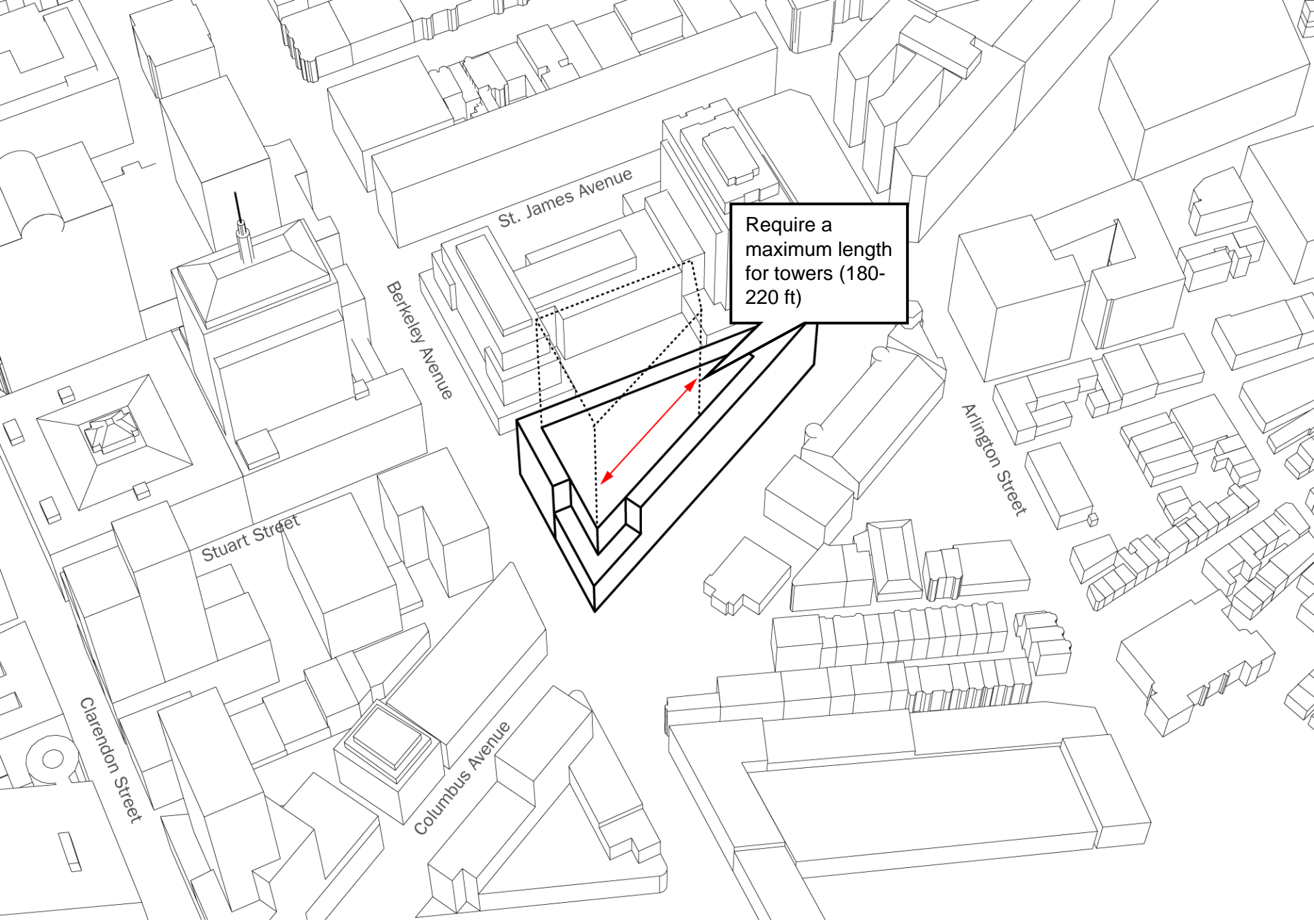Arlington Street
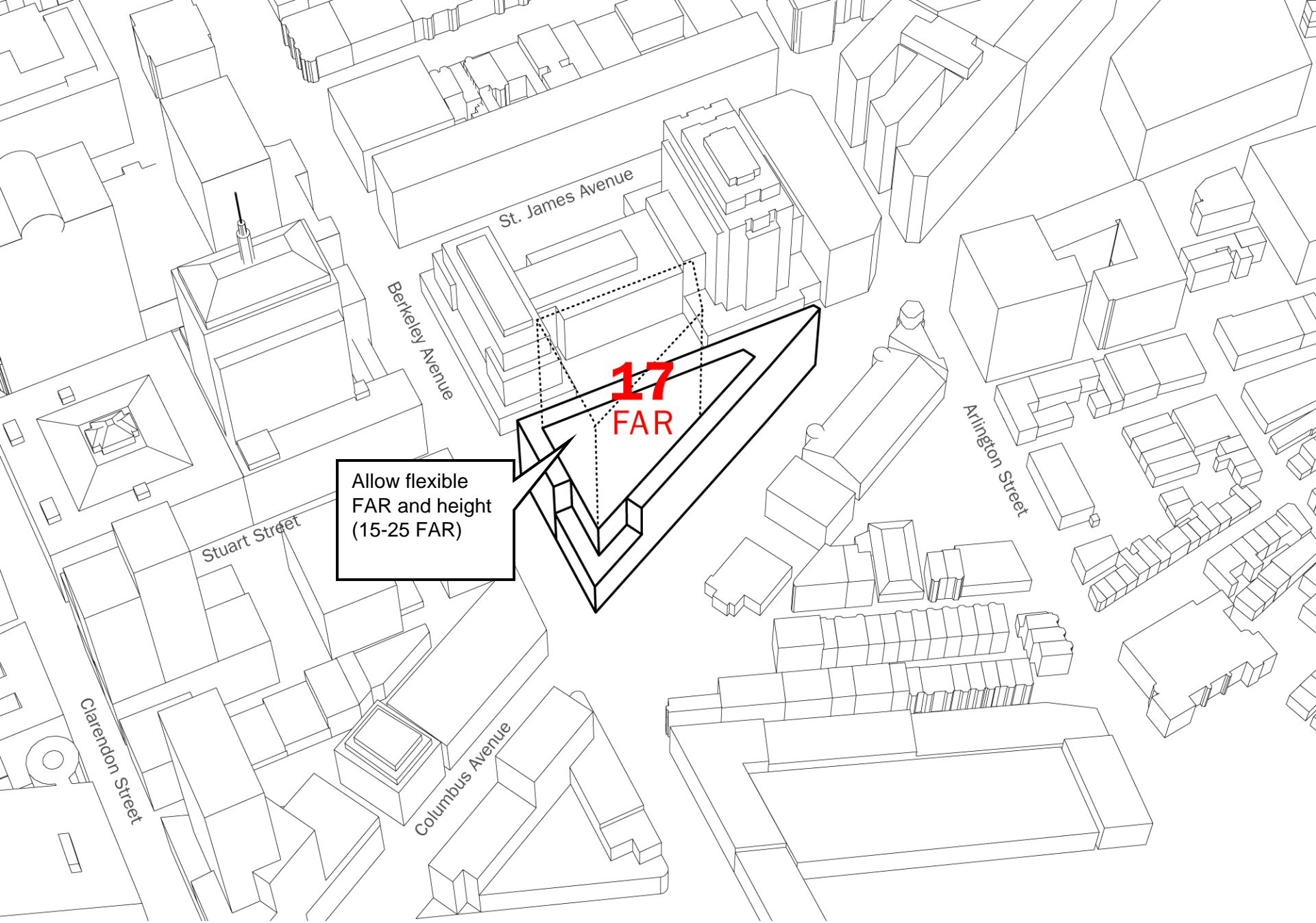
Stuart Street

Clarendon Street

Columbus Avenue

Require a setback
(15-30 ft)

Require deep setbacks to help mitigate wind, shadow and urban design impacts
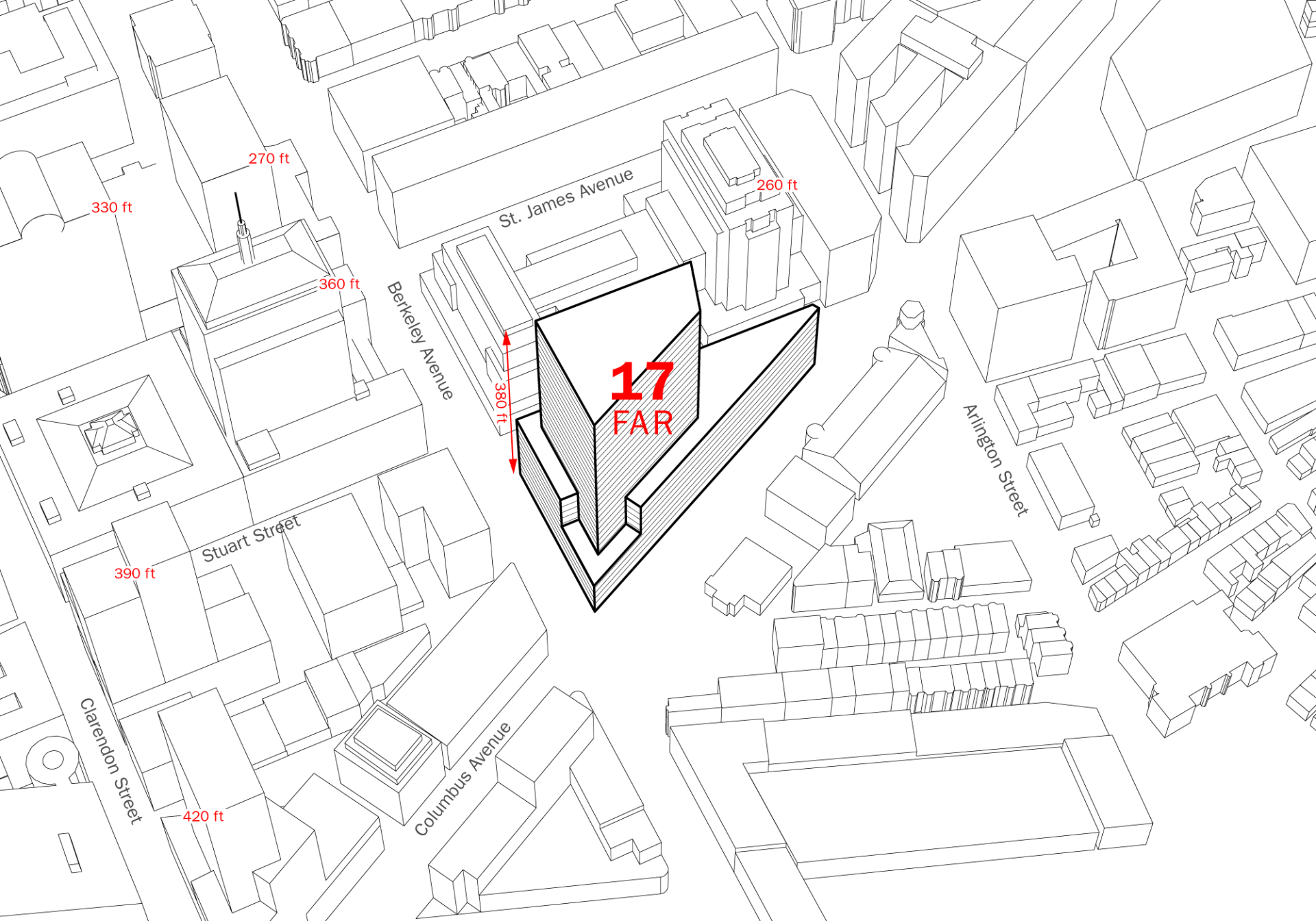
Require a maximum length for towers (180-220 ft)

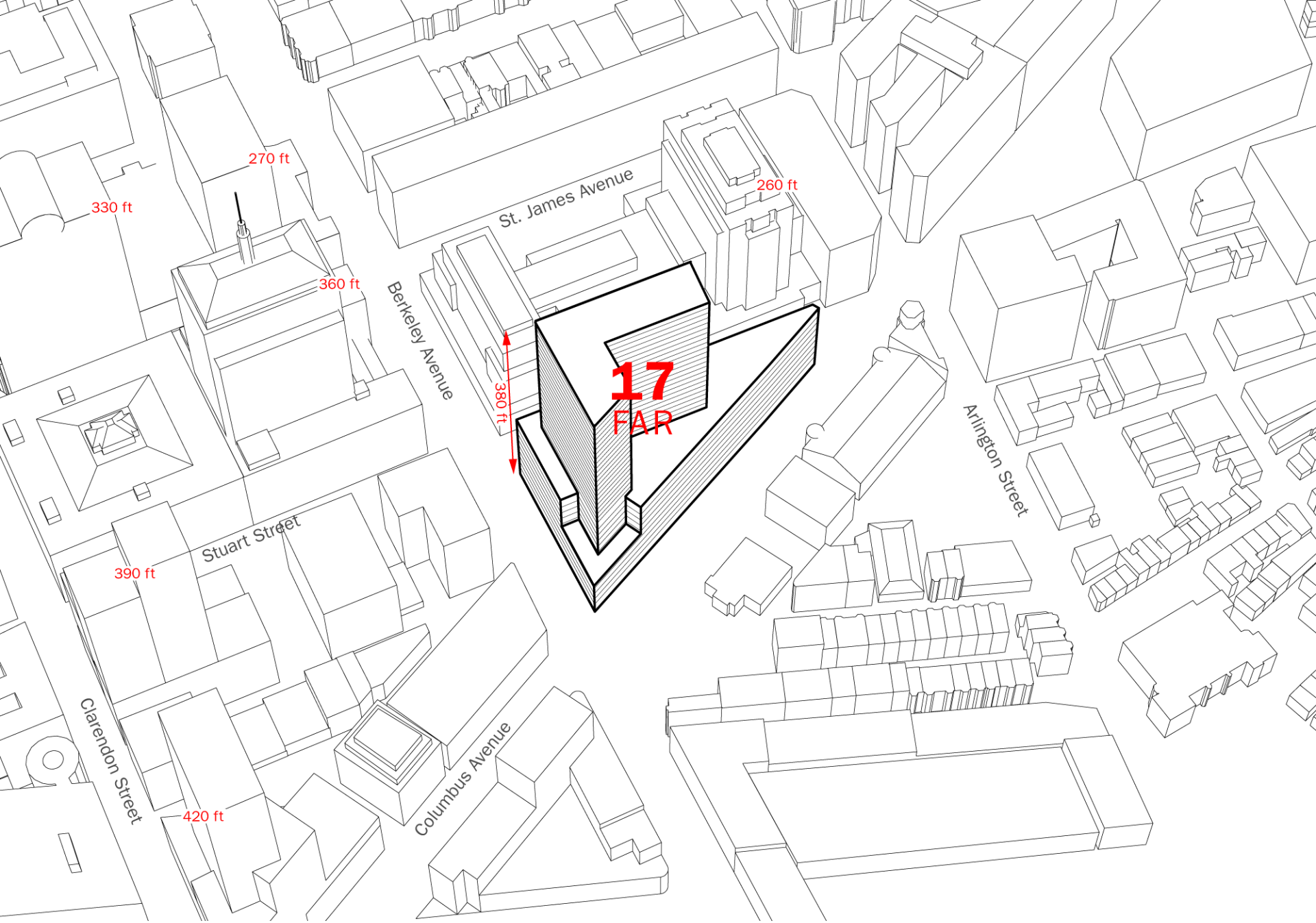Limit length of towers to mitigate wind, shadow and urban design impacts

17
FAR

Allow flexible FAR and height (15-25 FAR)

St. James Avenue

Berkeley Avenue

Arlington Street

Stuart Street

Clarendon Street

Columbus Avenue

Create flexible height and FAR requirements

270 ft

330 ft

360 ft

St. James Avenue

260 ft

Berkeley Avenue

380 ft

17
FAR

Arlington Street

Stuart Street

390 ft

Clarendon Street

Columbus Avenue

420 ft

Create flexible height and FAR requirements

270 ft

330 ft

St. James Avenue

260 ft

360 ft

Berkeley Avenue

380 ft

17
FAR

Arlington Street

Stuart Street

390 ft

Clarendon Street

Columbus Avenue

420 ft

Create flexible height and FAR requirements

330 ft

270 ft

360 ft

260 ft

565 ft

17 FAR

St. James Avenue

Berkeley Avenue

Arlington Street

Stuart Street

390 ft

Clarendon Street

Columbus Avenue

420 ft

Create flexible height and FAR requirements

16 FAR

17 FAR

20 FAR

23 FAR

23 FAR

13 FAR

Scenario Density for High-rise Projects (Floor-Area-Ratio)

16 FAR

17 FAR

20 FAR

23 FAR

23 FAR

11 FAR
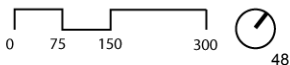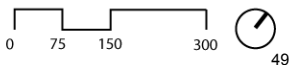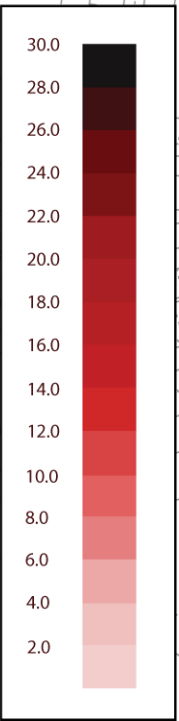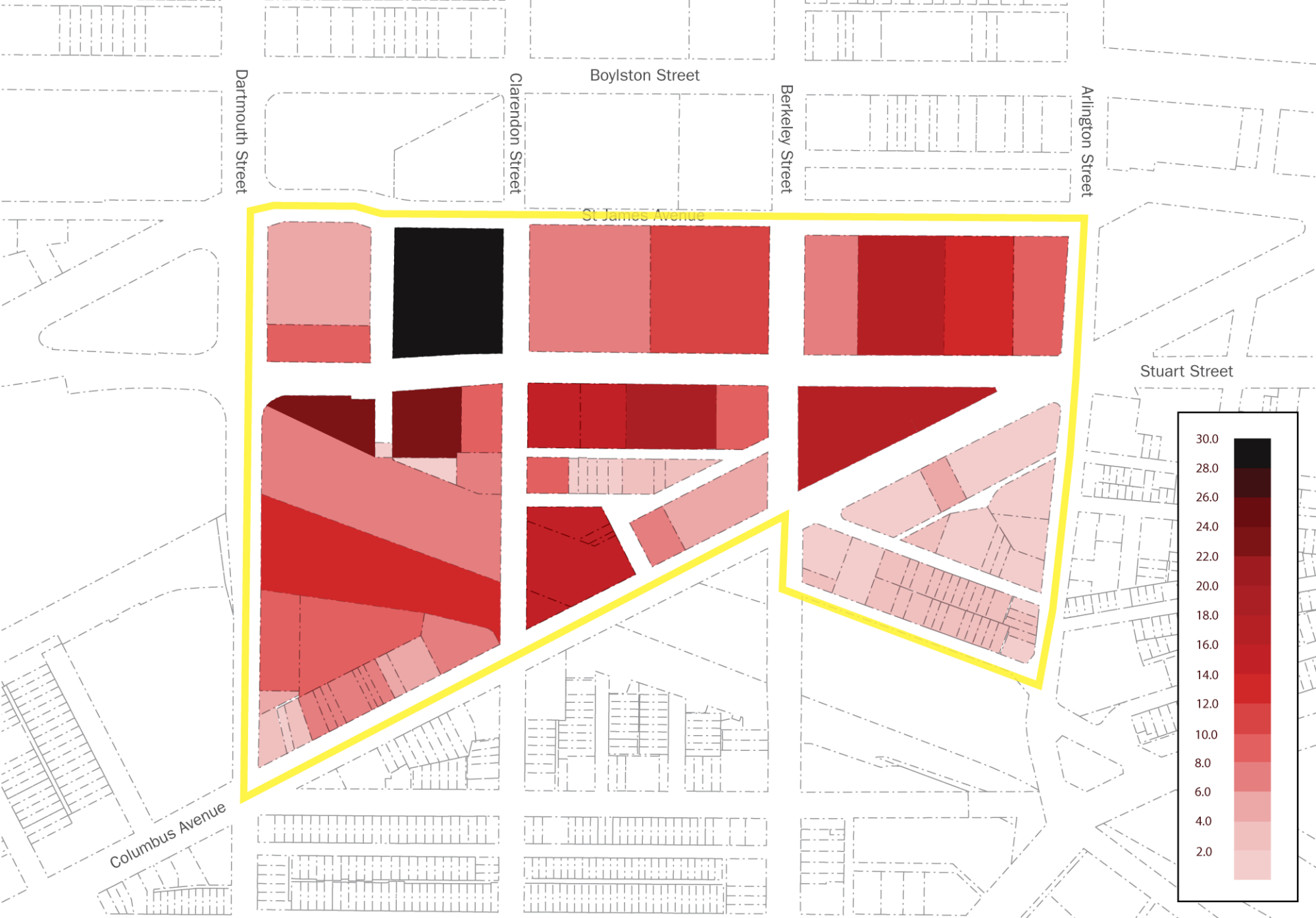
Scenario Density for High-rise Projects (Floor-Area-Ratio)

47
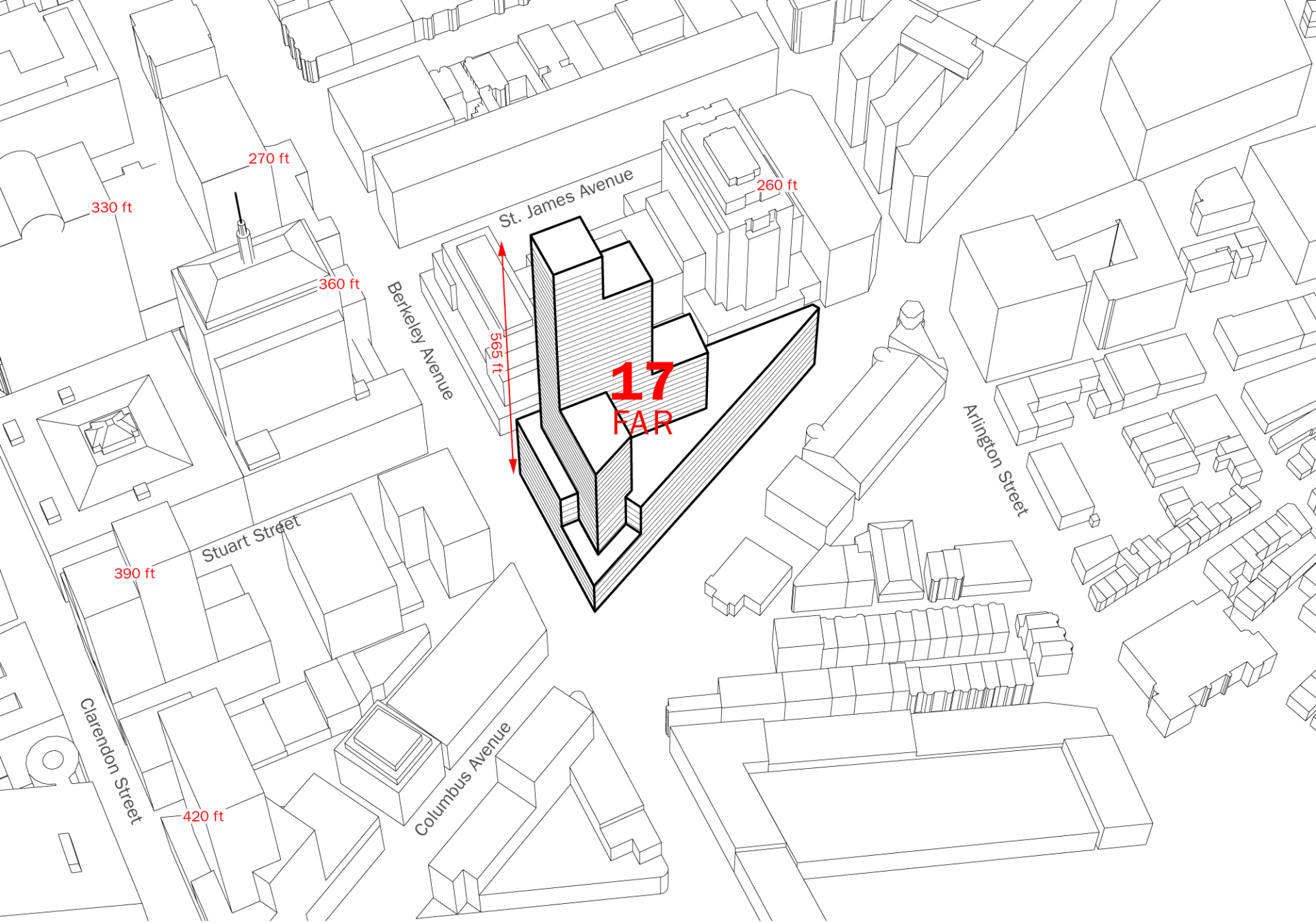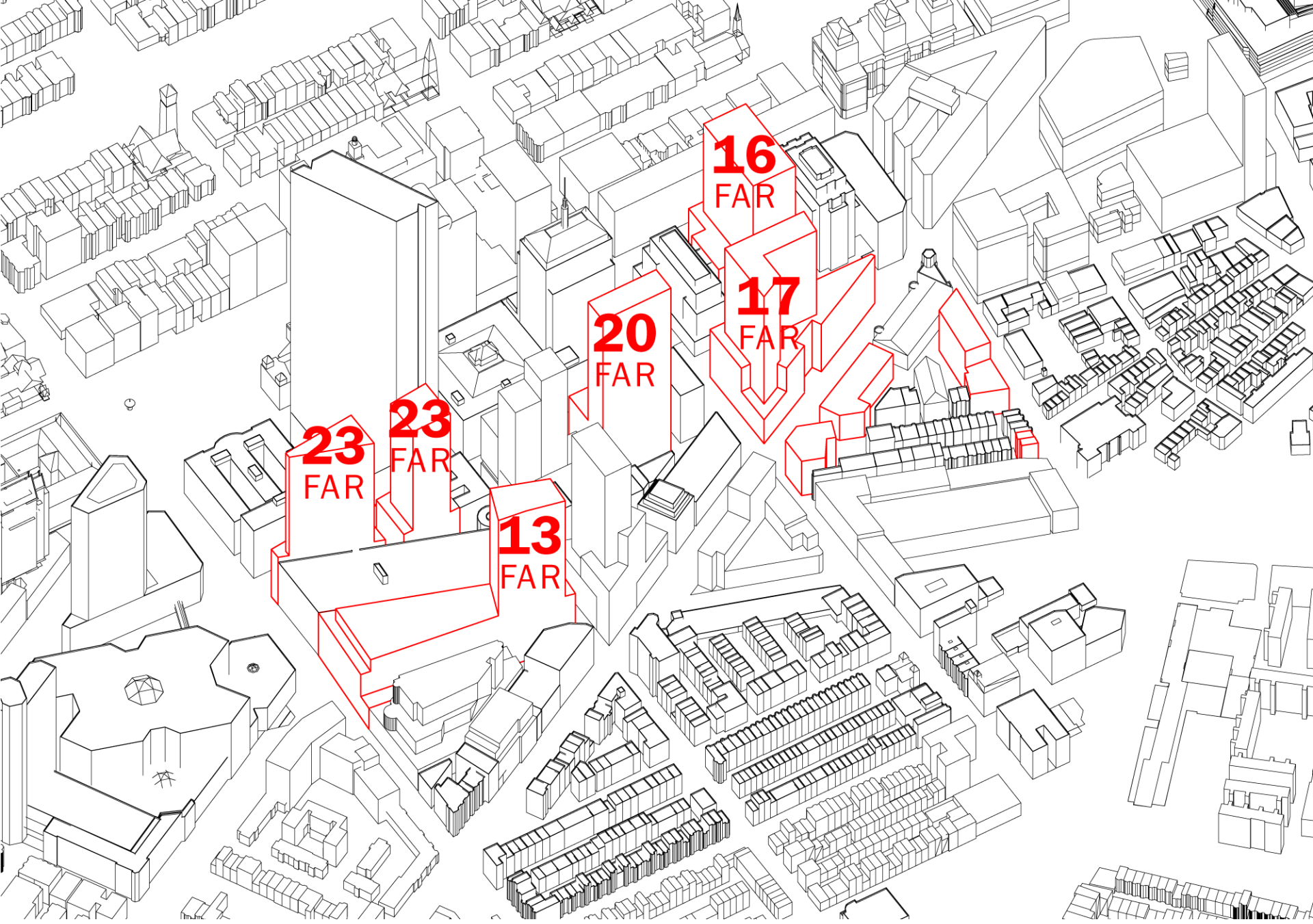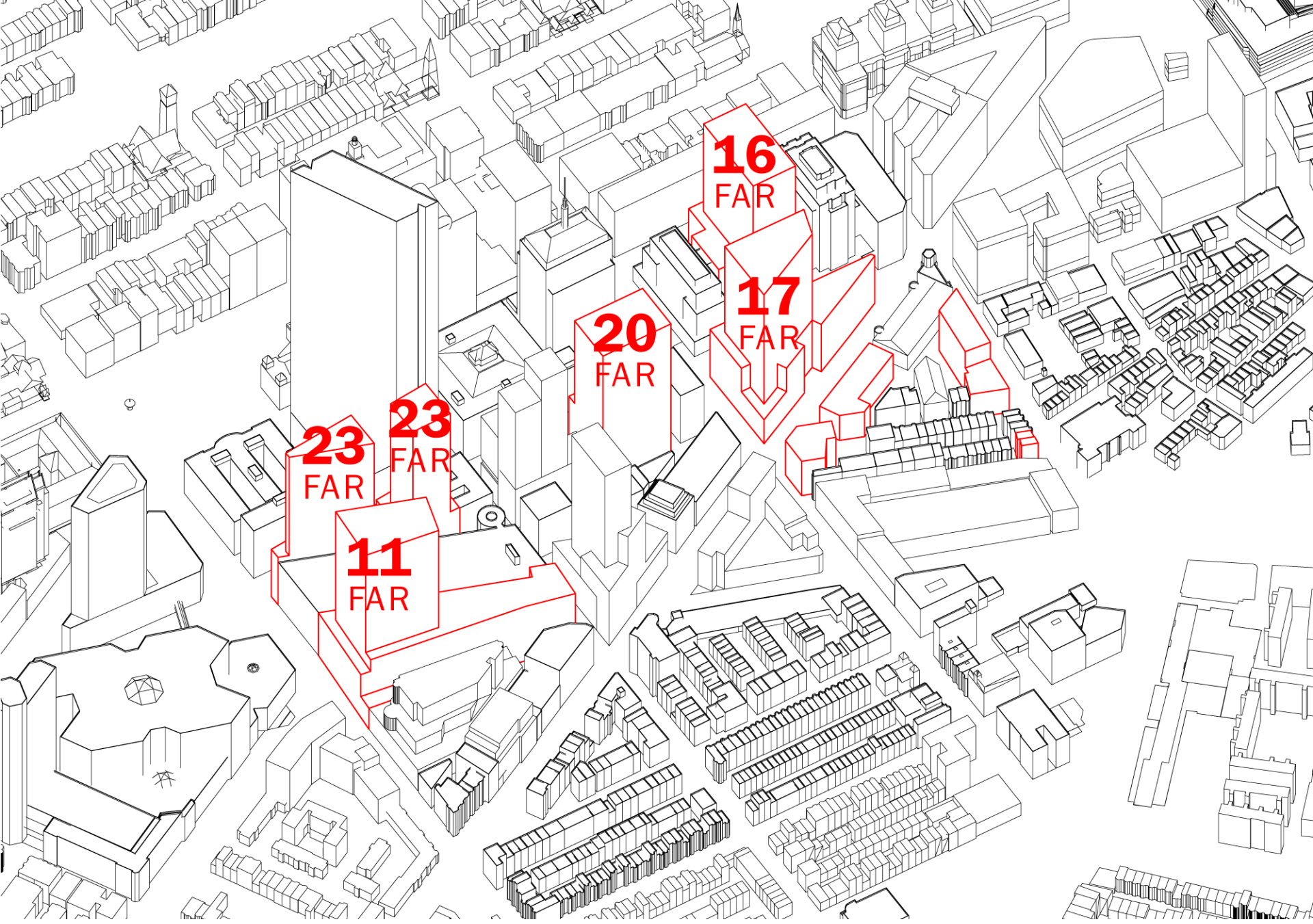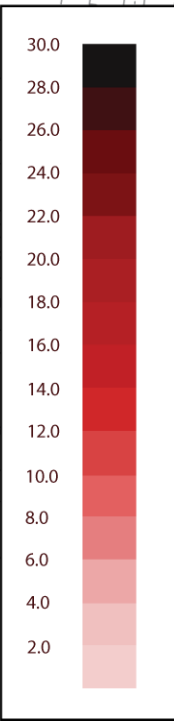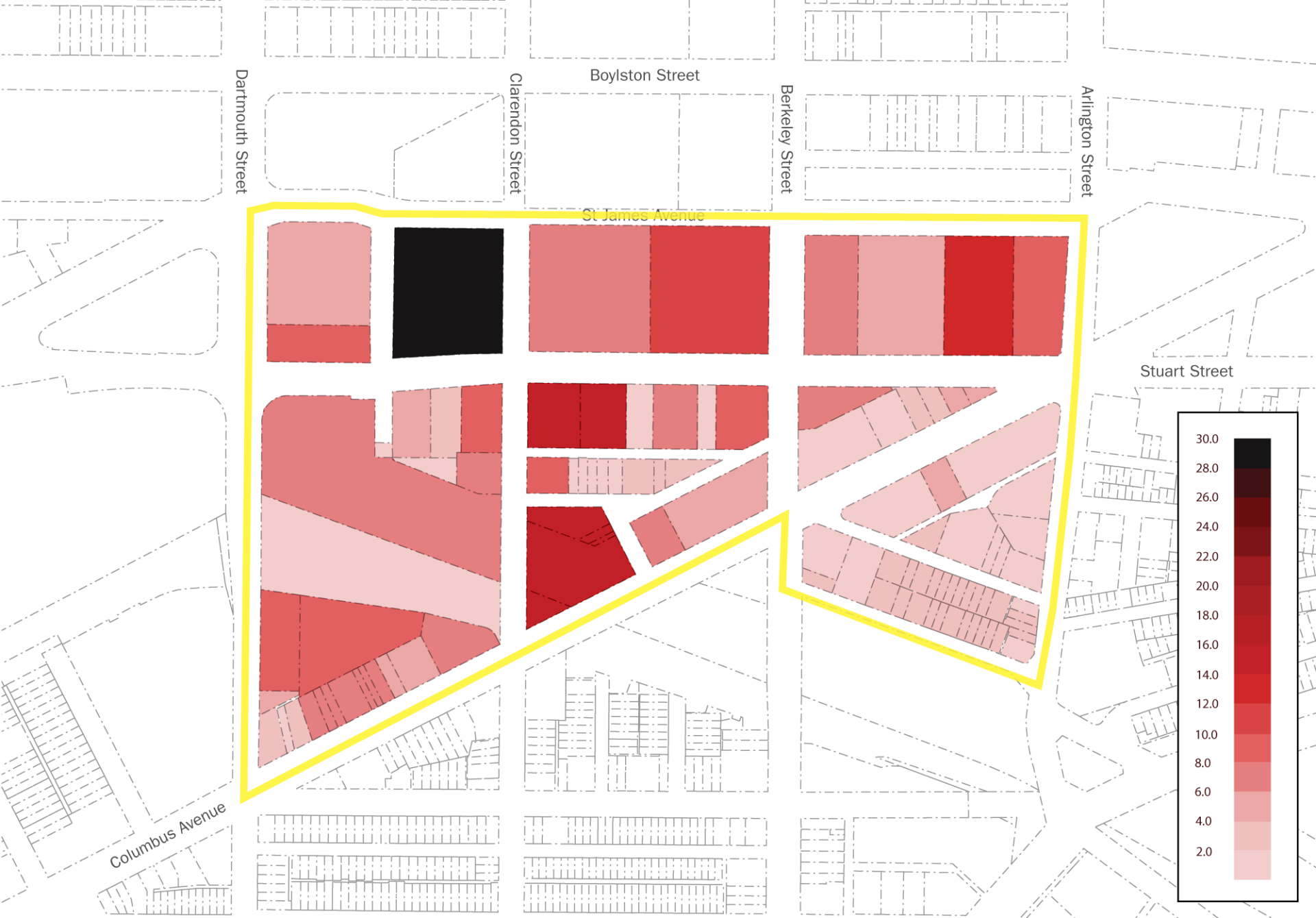
Existing Density (Floor-Area-Ratio)

Source: Drawing and calculations by Utile, Parcel Data from BRA, FAR calculations based on building footprint (BRA), digital model (BRA) and number of stories (Live Local and site observations)

Boylston Street

Dartmouth Street

Clarendon Street

Berkeley Street

Arlington Street

St James Avenue

Stuart Street

Columbus Avenue

30.0
28.0
26.0
24.0
22.0
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0

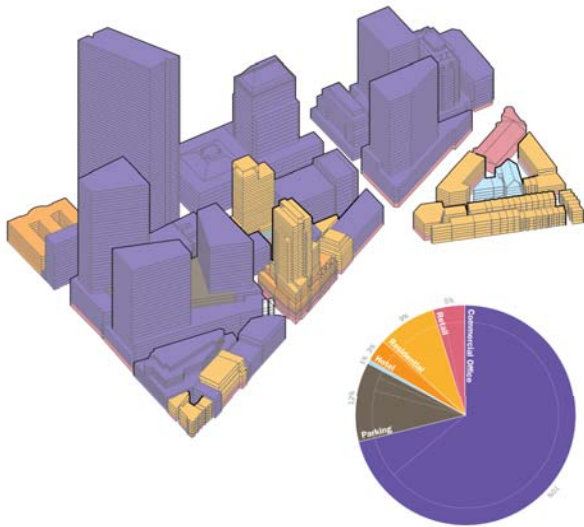# Scenario Density for High-rise Projects (Floor-Area-Ratio)

Source: Drawing and calculations by Utile, Parcel Data from BRA, FAR calculations based on building footprint (BRA), digital model (BRA) and number of stories (Live Local and site observations)

0   75   150   300

Scenario A
Commercial-oriented

13,469,662 gsf
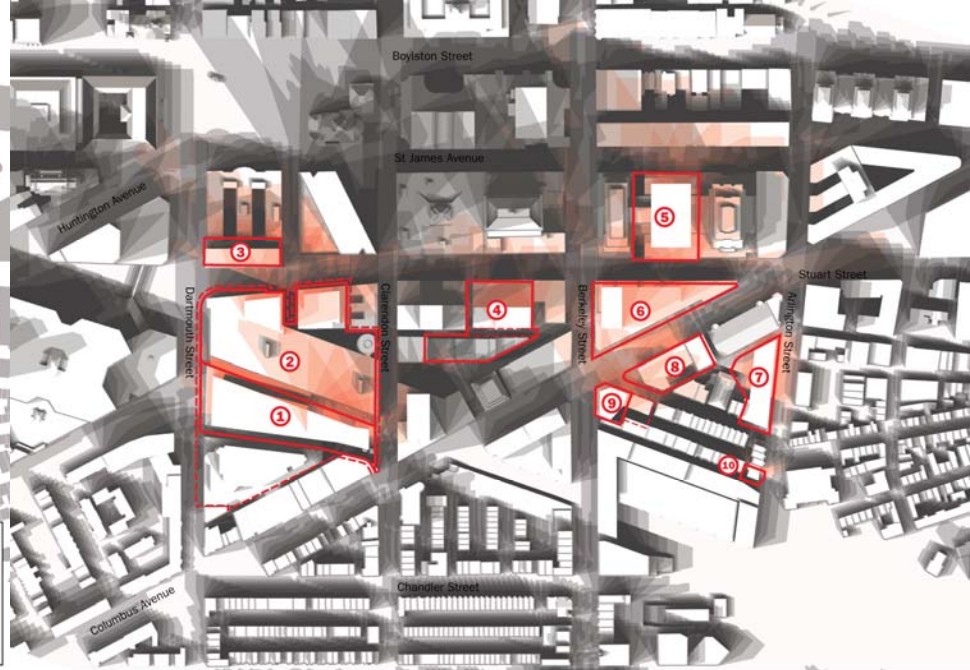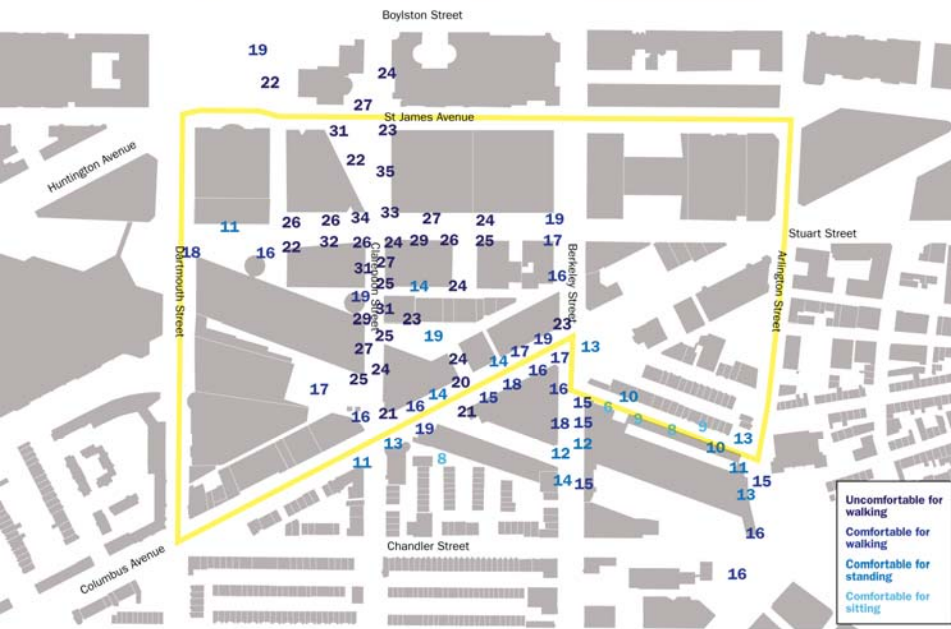MXI 9*

Additional 3,850,000 GSF

existing GSF for the Study Area is about 9,600,000 (including the
Clarendon and approved Columbus Center tower)
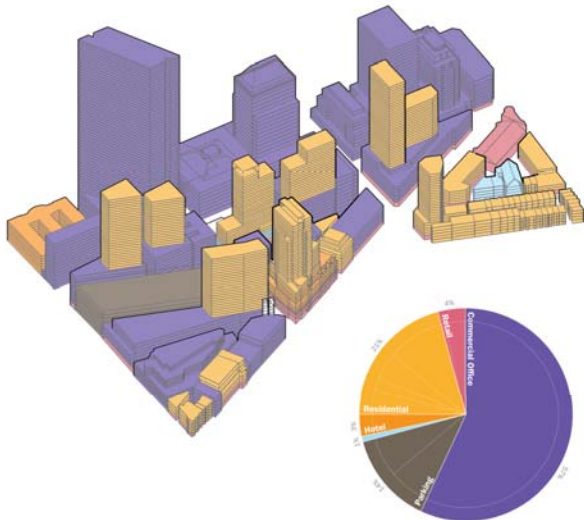
Scenario B
Residential-oriented

12,646,225 gsf
MXI 21*

Additional 3,025,000 GSF

existing GSF for the Study Area is about 9,600,000 (including the
Clarendon and approved Columbus Center tower)

Additional GSF

Stuart Street Planning Study
**Planning - Level Trip Generation Comparison**

Program Summary	Existing (Proposed Parcels)	Remaining Existing	TOTAL Existing	Scenario A	Scenario B
U Club (sf)	92,090	85,817	177,907	0	0
Day Care (sf)	30,746	0	30,746	0	0
Fire station (sf)	13,294	0	13,294	0	0
Commercial Office (sf)	755,226	5,386,355	6,141,581	4,780,631	2,227,449
Retail (sf)	30,991	291,632	322,623	336,762	278,588
Residential (units)	0	898	898	202	1,753
Hotel (units)	0	717	717	0	0
Person Trip Generation	**Existing (Proposed Parcels)**	**Remaining Existing**	**TOTAL Existing**	**Scenario A**	**Scenario B**
Daily	19,030	104,689	123,719	82,143	57,919
AM Peak Hour	2,049	11,535	13,584	9,432	5,560
PM Peak Hour	2,424	12,536	14,960	10,213	6,540
Auto Trip Generation*	**Existing (Proposed Parcels)***	**Remaining Existing***	**TOTAL Existing***	**Scenario A***	**Scenario B***
Daily	4,099	23,180	27,278	18,838	11,710
AM Peak Hour	407	2,301	2,708	1,919	1,040
PM Peak Hour	474	2,468	2,942	2,052	1,201

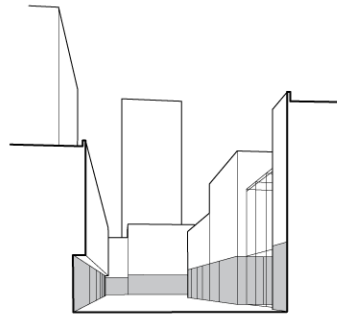* Assumes a 1/3 Trip Reduction due to internal and shared trips

Supporting additional density
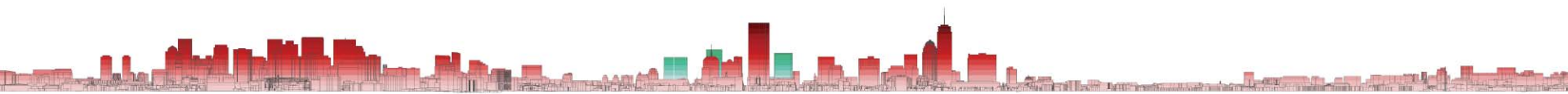
Skyline view south from Charles River
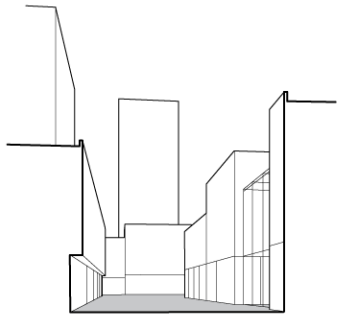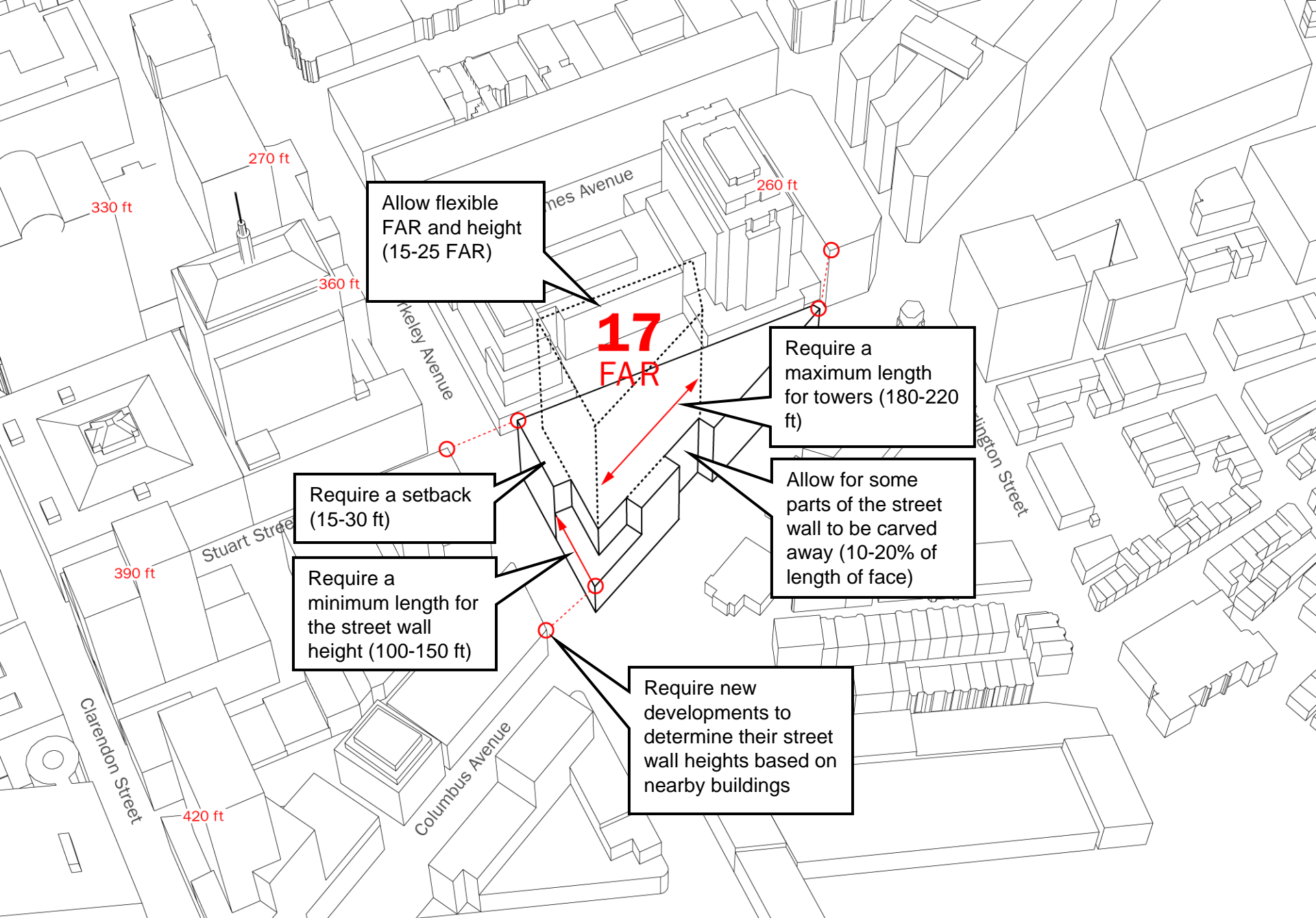
Street

Ground Floor
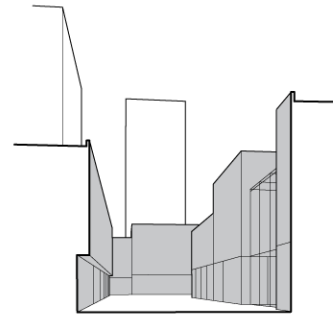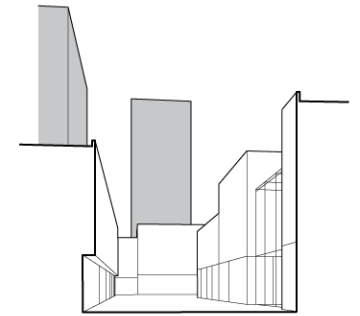
Street Wall
(definition of urban space)

Skyline

Rigid **form-based code strategies**
ensure high-quality urban realm

Flexible **code strategies**
enable economic viability
and architectural creativity

Summary of Zoning Concept

270 ft

330 ft

360 ft

260 ft

mes Avenue

rkeley Avenue

ington Street

Allow flexible FAR and height (15-25 FAR)

17 FAR

Require a maximum length for towers (180-220 ft)

Require a setback (15-30 ft)

Allow for some parts of the street wall to be carved away (10-20% of length of face)

Stuart Stree

390 ft

Require a minimum length for the street wall height (100-150 ft)

Require new developments to determine their street wall heights based on nearby buildings

Clarendon Street

Columbus Avenue

420 ft

Summary of form-based code recommendations

54

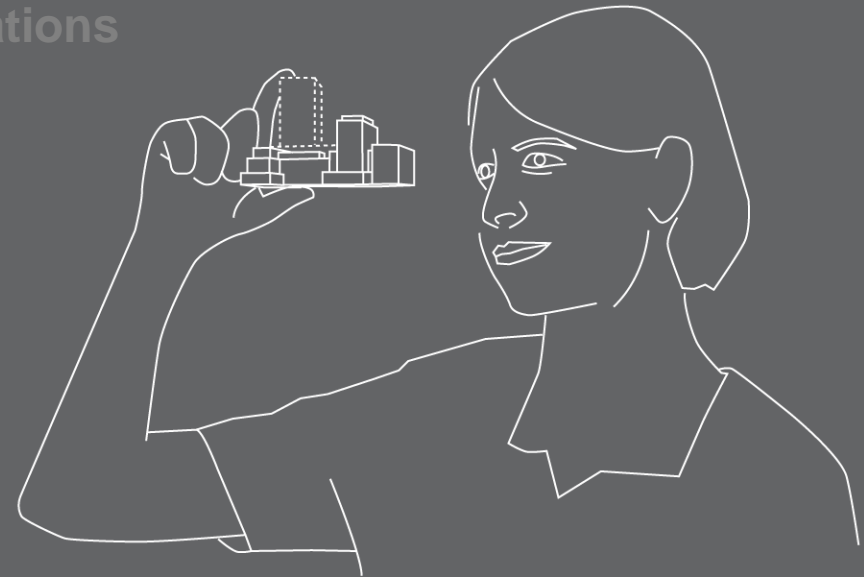# Zoning Recommendations

1: Project Summary and Recommendations

2: Existing Zoning

3: Proposed Zoning

4: Density and Public Benefit

Stuart Street Planning Study

29 January 2009

utile

Boston
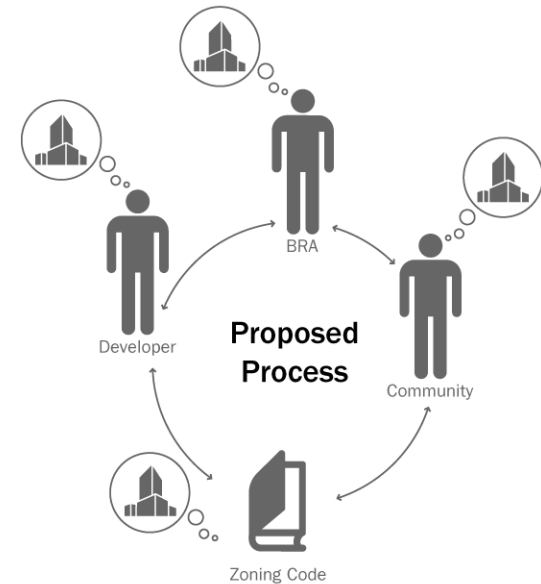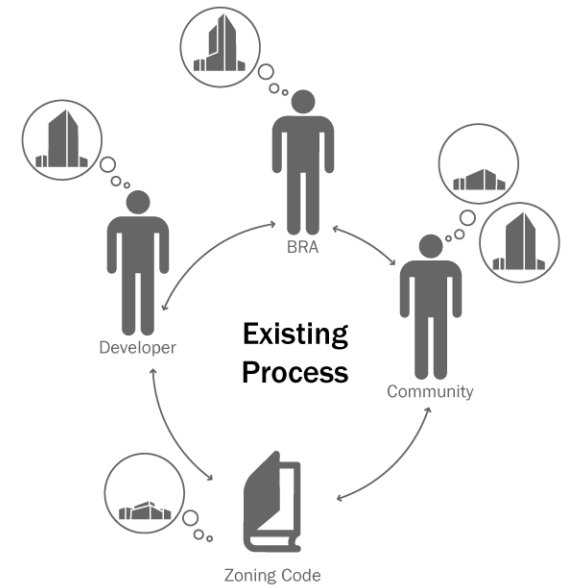Redevelopment
Authority

55

Recommendation Encourage additional height and density in exchange for **public benefits:**

Public Benefit:

Create more certainty in the development, permitting and approvals processes

Existing Process

Developer — BRA — Community — Zoning Code

Proposed Process

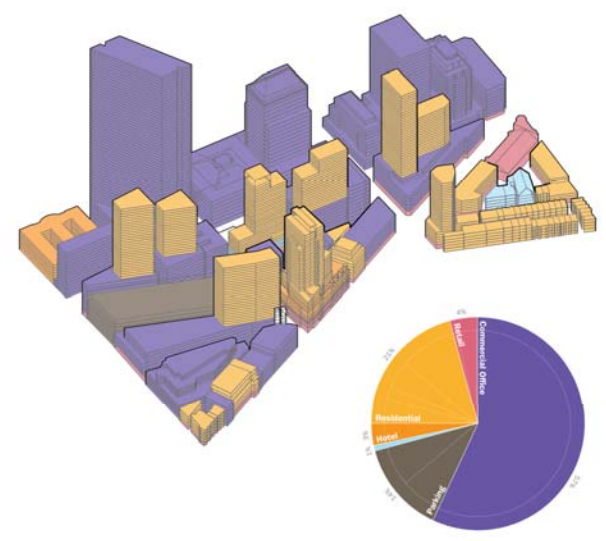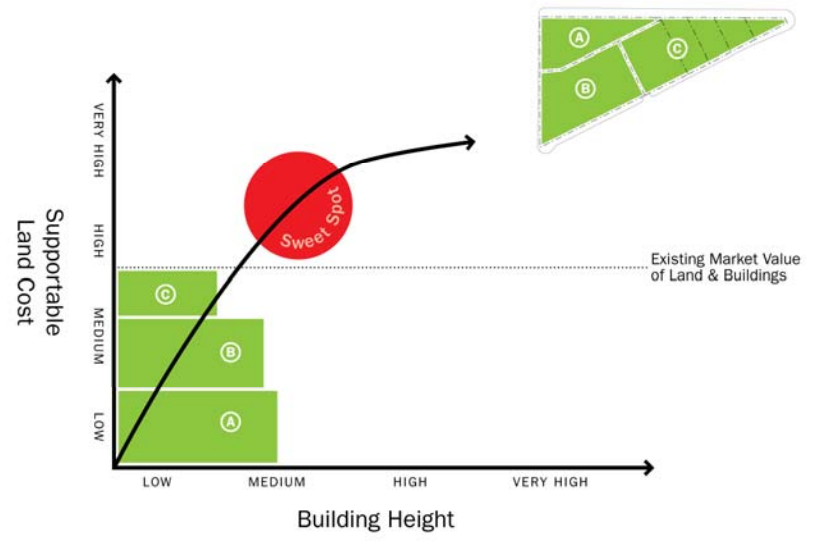Developer — BRA — Community — Zoning Code

Public Benefit:

Preserve and protect adjacent neighborhoods

Back Bay
Bay Village
South End
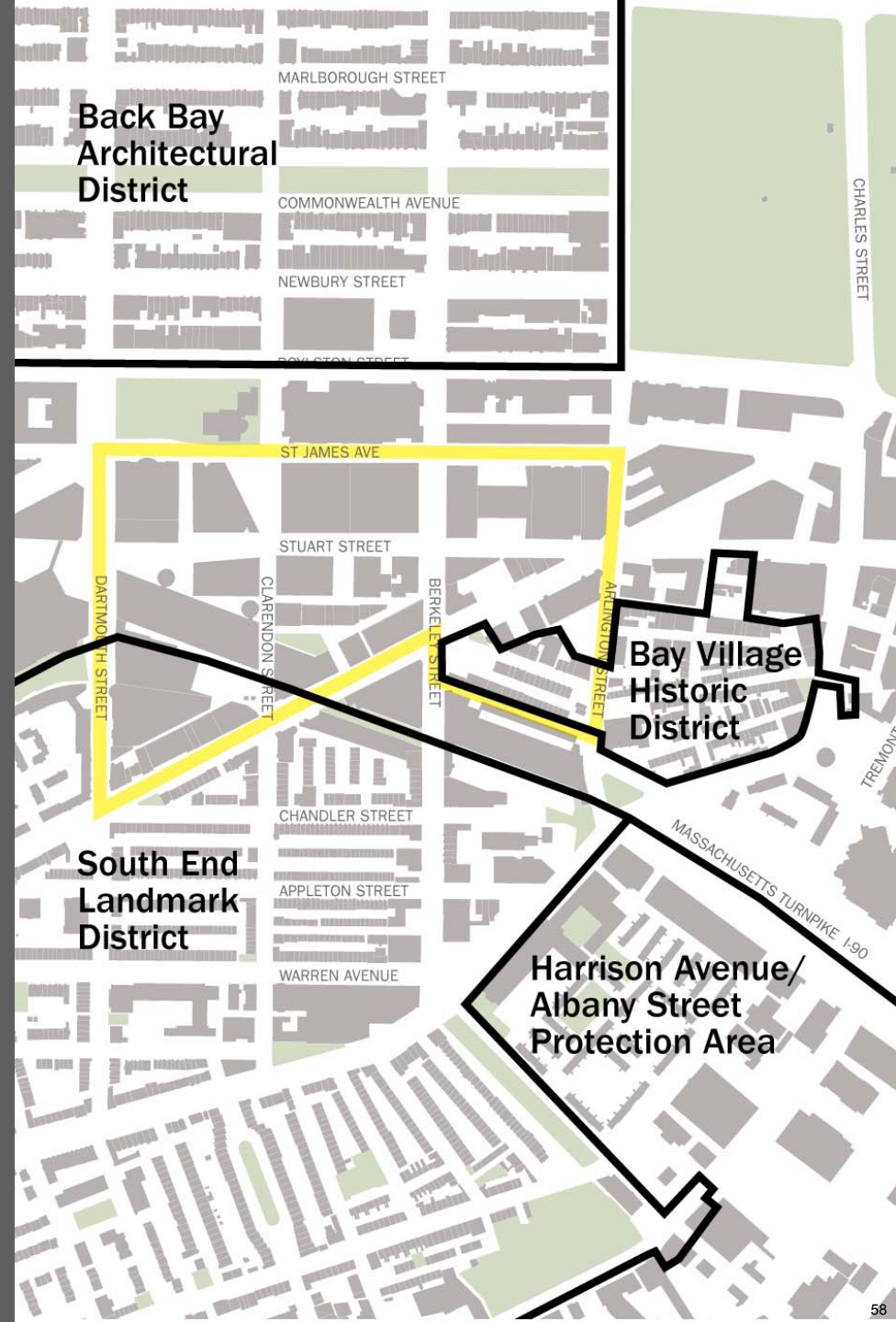
Public Benefit:

Provide an area for urban growth and economic vitality

Public Benefit:

Improve the district's urban design, public realm and environmental sustainability