UNLOCKING EAST BROOKLYN'S AFFORDABLE HOUSING POTENTIAL

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X - INFO MODELING B

INTRODUCTION
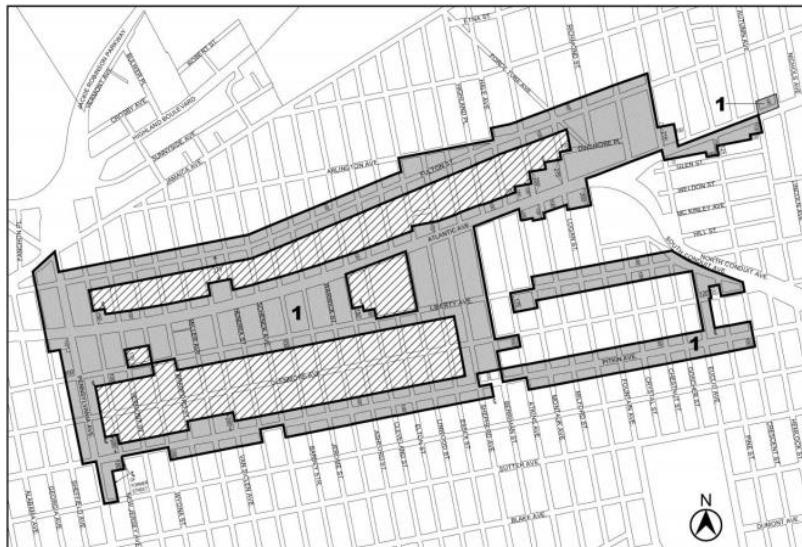
- On March 22, 2016, the City Council approved the Mandatory Inclusionary Housing under Mayor Bill De Blasio. This initiated rezoning within the city which would permit significant increase in amount of residential floor area.

- Largest rezoning by area occurred in East New York, Brooklyn Community District 5.

- This study is to analyse the affordable housing potential within this rezoned area.

Brooklyn Community District 5

In the R6A, R6B, R7, R7A and R8A Districts within the areas shown on the following Map 1:

Map 1 — (4/20/16)
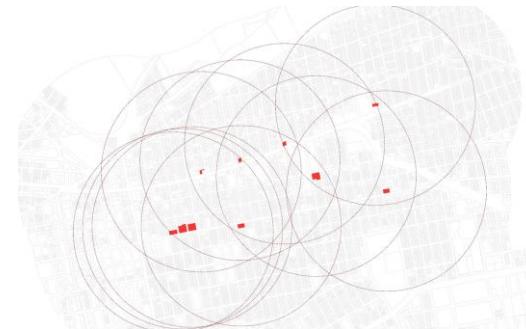
Mandatory Inclusionary Housing Program Area *see Section 23-154(d)(3)*
Area **1** — 4/20/16 MIH Program Option 1 and Deep Affordability Option

Excluded area

The MIH program allows developers to avail a 1.25 sqft. of bonus per sqft. of affordable housing they build. To avail the bonus the developers could two types of development.

ON SITE : Delegate minimum **25%** of square foot area of proposed building to affordable housing built **ON-SITE** (their own site).

OFF SITE : Delegate minimum **30%** of square foot area of proposed building to affordable housing built **OFF-SITE**, or a site within ½ mile radius of the project.

The **AIM** of this project is to compare the potential of a residential development to generate on-site units vs off-site units.

PART A - UNDERSTANDING THE SITE

This research aims at understanding the potential of **EAST NEW YORK REZONING** and the amount of affordable housing it can contribute towards the New York City housing stock.
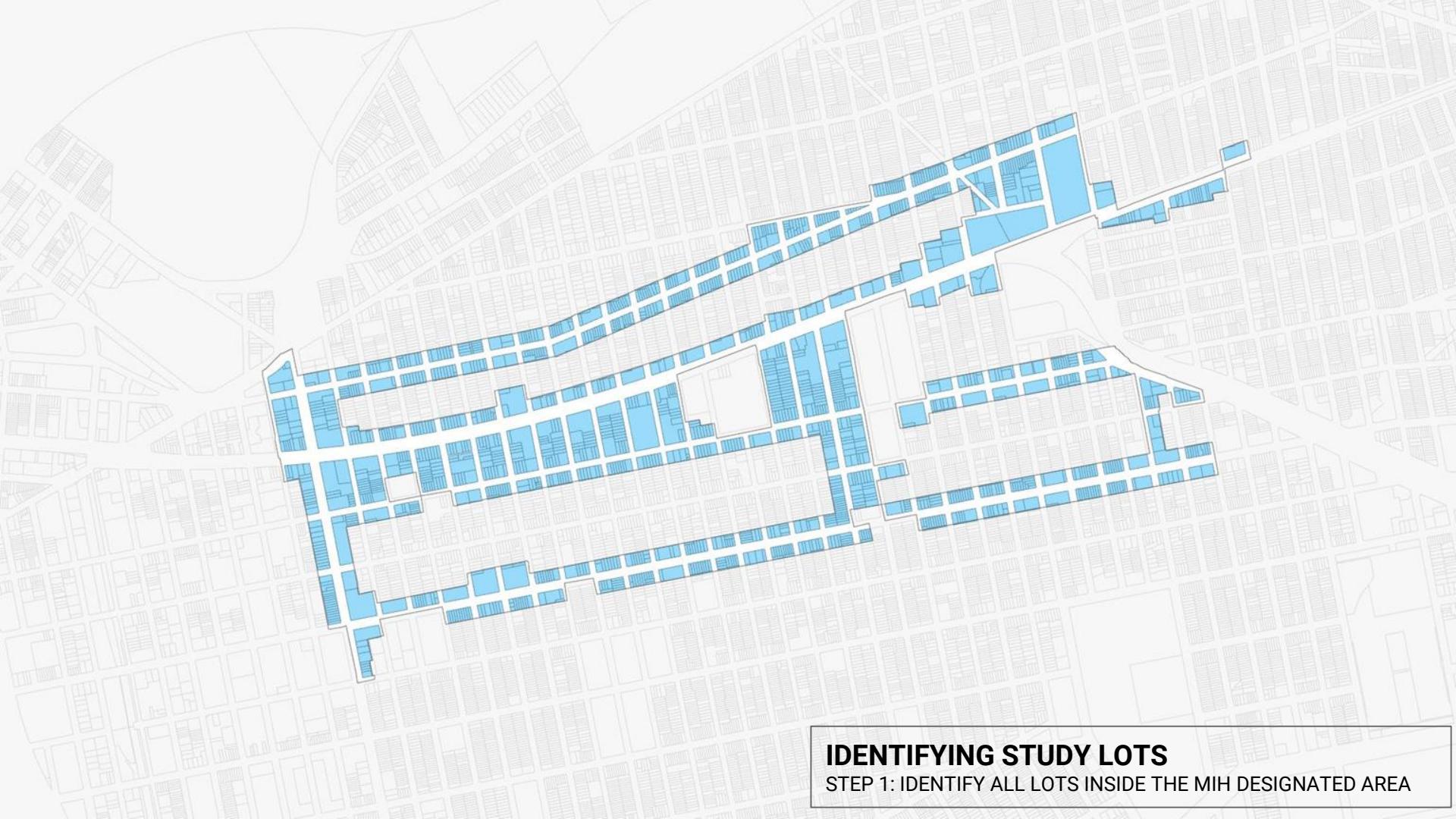
THE SITE

EAST NY - BROOKLYN
COMMUNITY DISTRICT 5

MANDATORY INCLUSIONARY
HOUSING DESIGNATED AREA

IDENTIFYING STUDY LOTS
STEP 1: IDENTIFY ALL LOTS INSIDE THE MIH DESIGNATED AREA

RESIDENTIAL ZONING
R6 - R8

**IDENTIFYING STUDY LOTS**
STEP 2: IDENTIFY RESIDENTIAL AND VACANT LOTS

NARROW STREET

WIDE STREET

IDENTIFYING STUDY LOTS
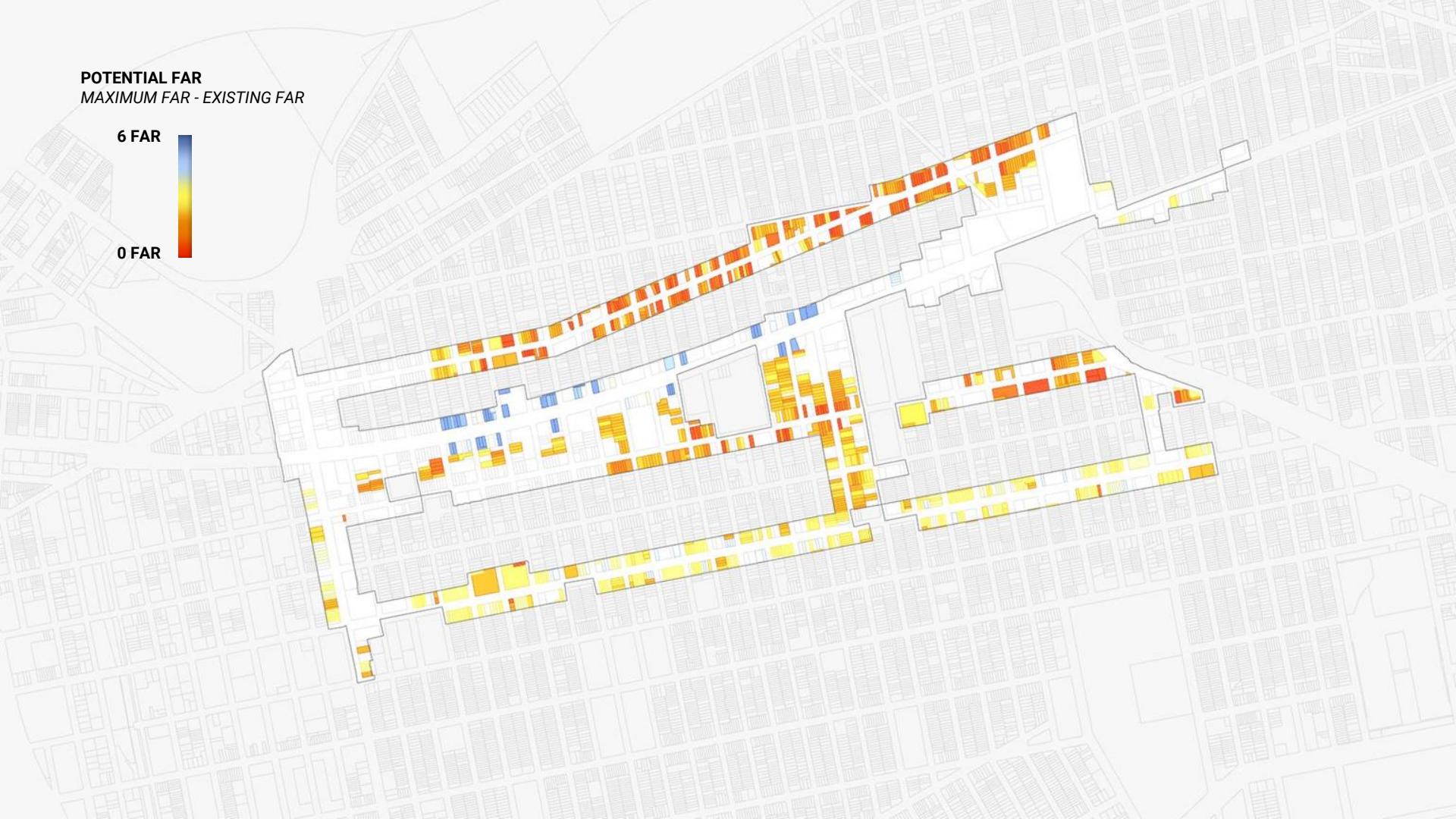
STEP 3: CLASSIFY THE LOTS ON BASIS OF STREET THEY ARE
LOCATED ON - WIDE STREET >= 75', NARROW STREET<75'

POTENTIAL FAR
MAXIMUM FAR - EXISTING FAR

6 FAR

0 FAR
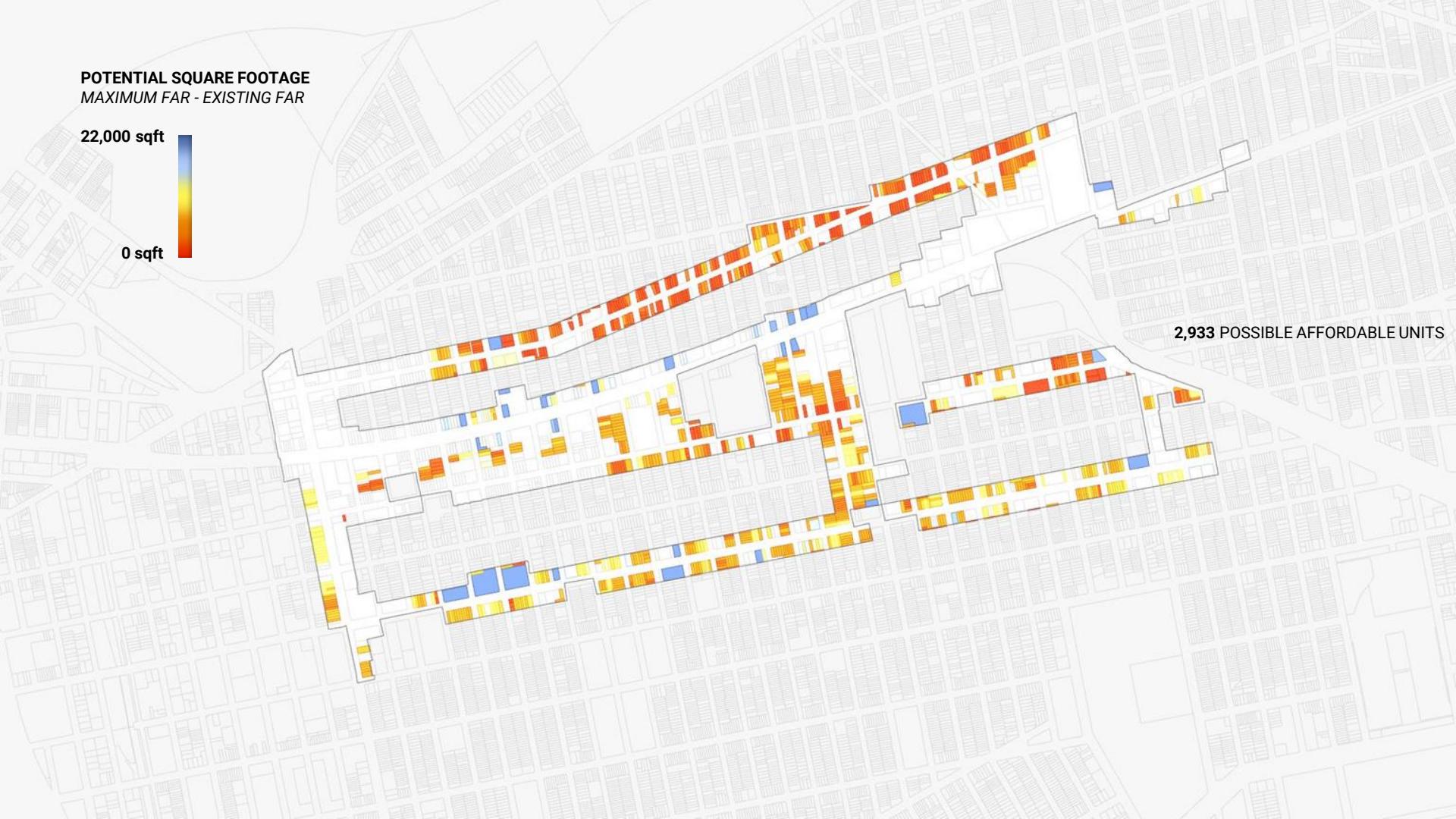
POTENTIAL SQUARE FOOTAGE
MAXIMUM FAR - EXISTING FAR
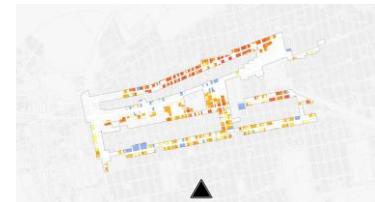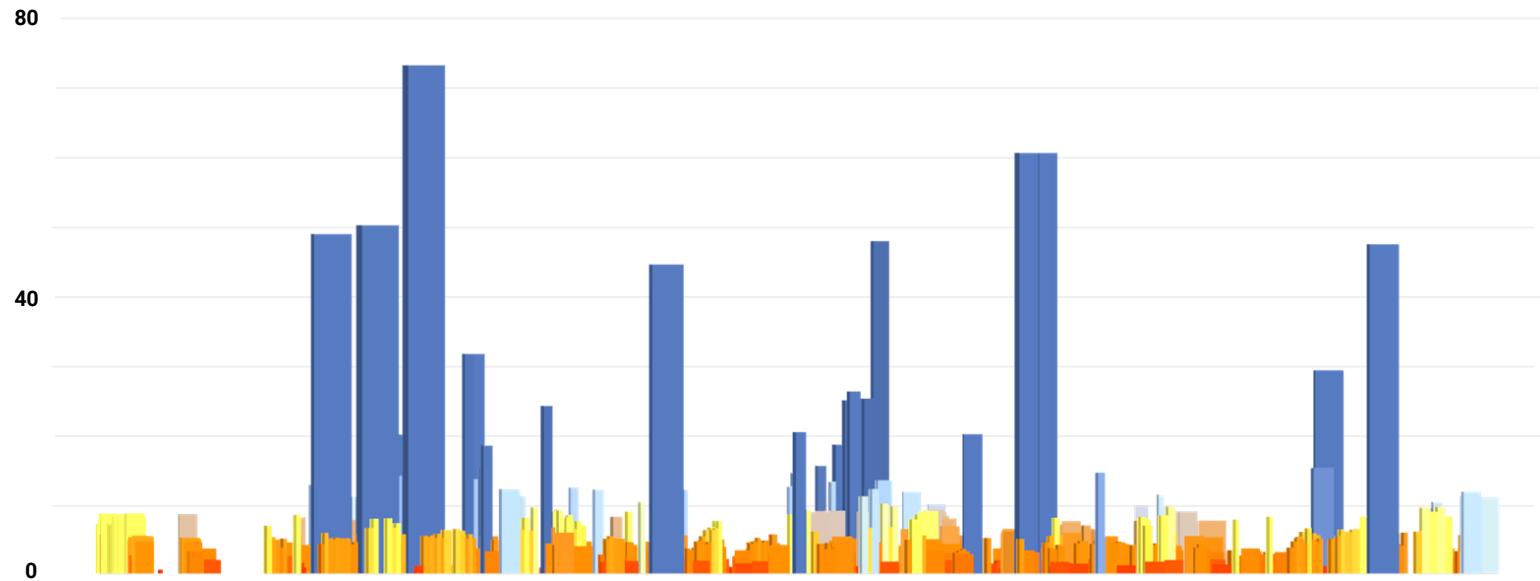
22,000 sqft

0 sqft

2,933 POSSIBLE AFFORDABLE UNITS

POTENTIAL HOUSING UNITS PER LOT

AFFORDABLE HOUSING UNITS
ASSUMING UNIT SIZE OF 325 sqft (as per ZQA)
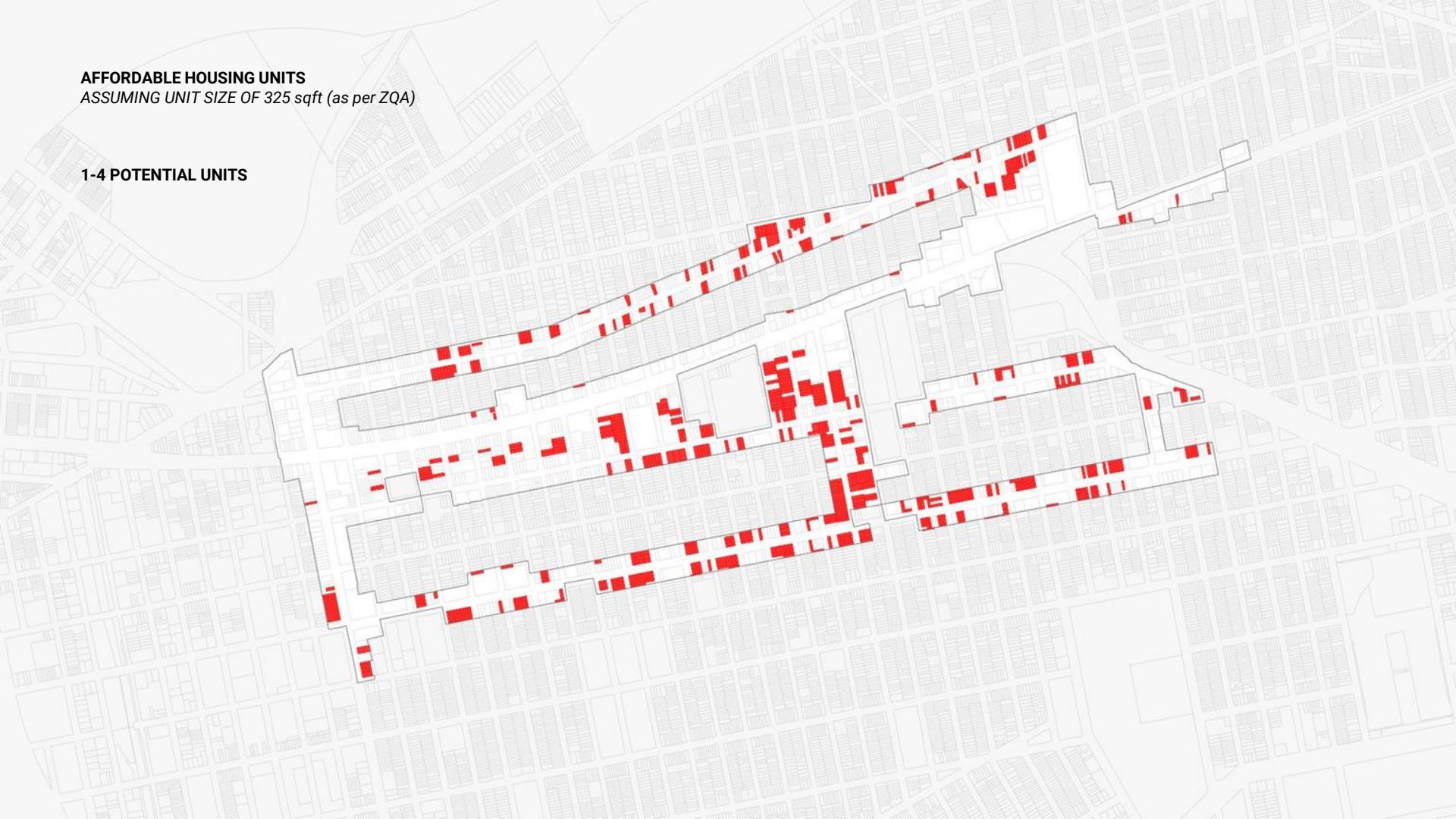
0 POTENTIAL UNITS

AFFORDABLE HOUSING UNITS
ASSUMING UNIT SIZE OF 325 sqft (as per ZQA)
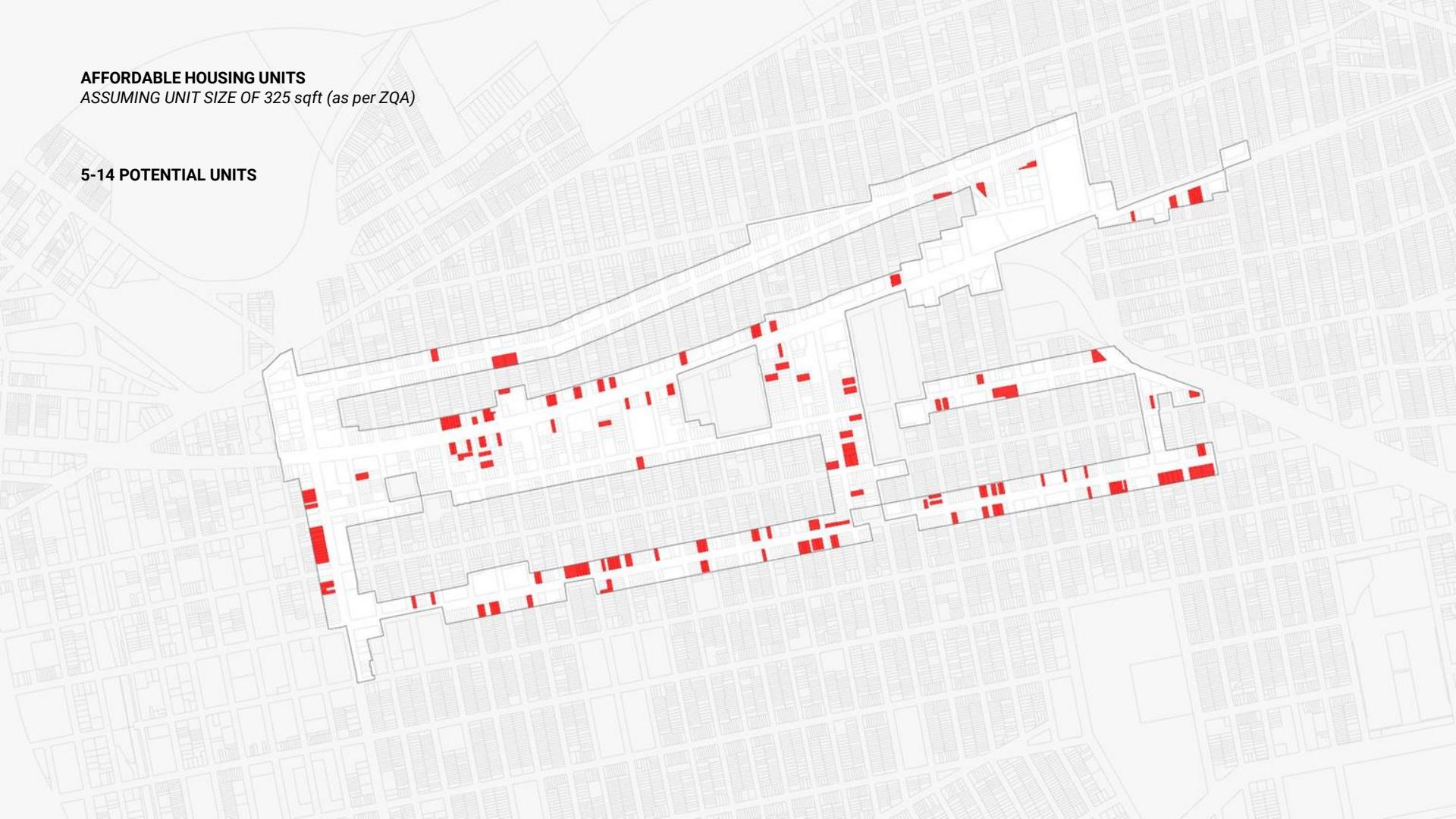
1-4 POTENTIAL UNITS

AFFORDABLE HOUSING UNITS
ASSUMING UNIT SIZE OF 325 sqft (as per ZQA)

**5-14 POTENTIAL UNITS**

AFFORDABLE HOUSING UNITS
ASSUMING UNIT SIZE OF 325 sqft (as per ZQA)

15-24 POTENTIAL UNITS

AFFORDABLE HOUSING UNITS
ASSUMING UNIT SIZE OF 325 sqft (as per ZQA)

25+ POTENTIAL UNITS

AFFORDABLE HOUSING UNITS
ASSUMING UNIT SIZE OF 325 sqft (as per ZQA)


25+ POTENTIAL UNITS

423 AFFORDABLE UNITS
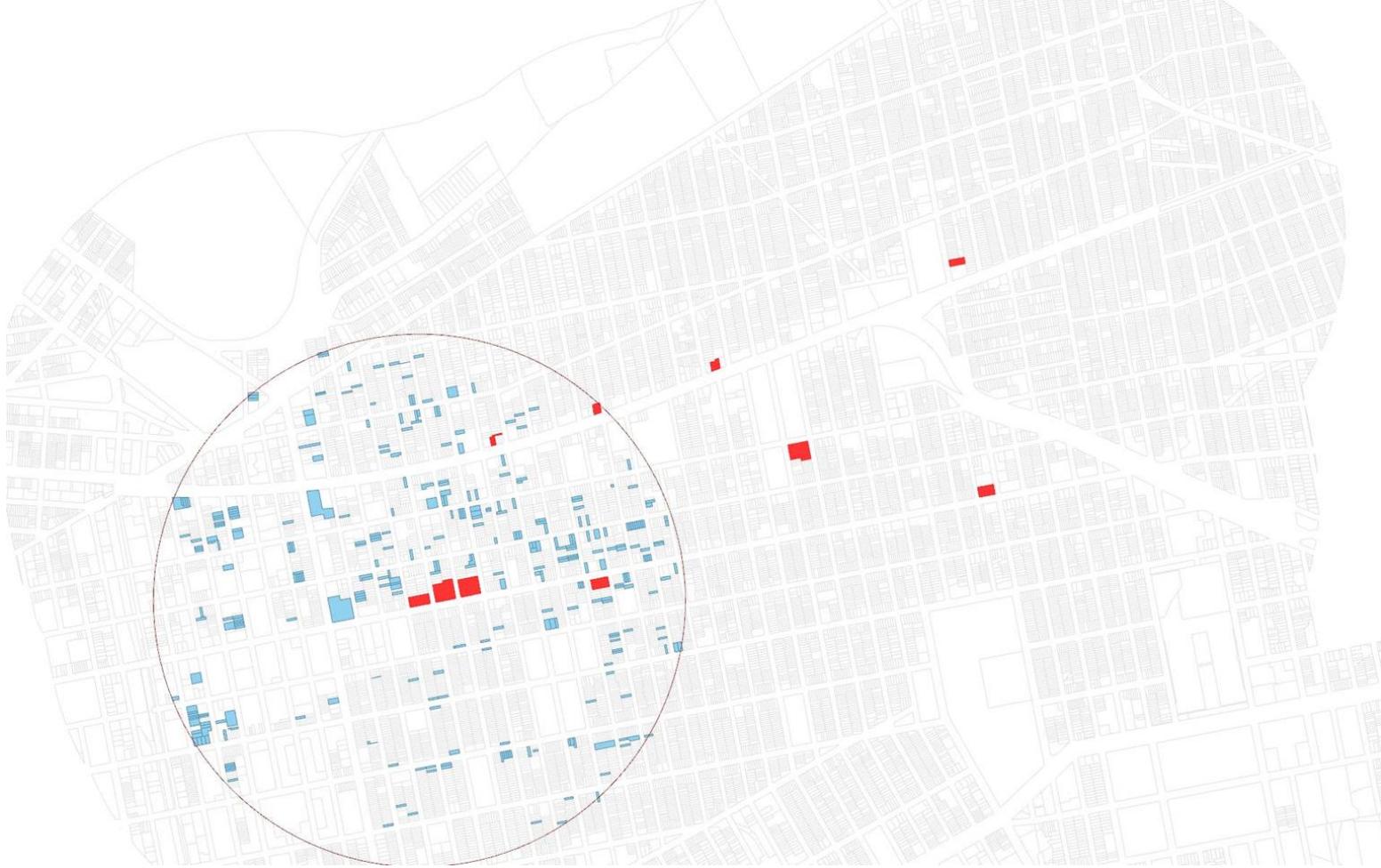
ON SITE
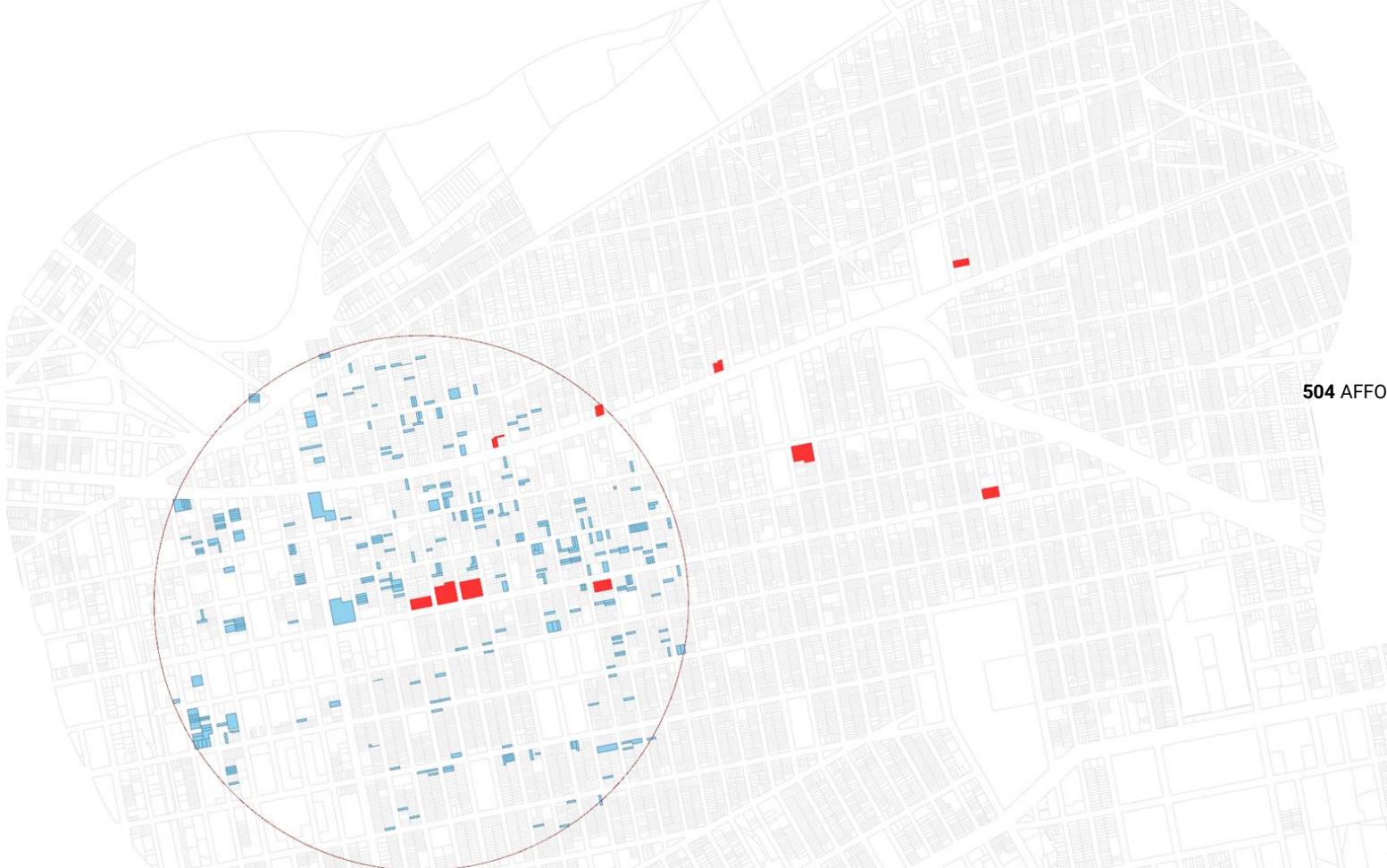
OFF SITE

OFF SITE

OFF SITE
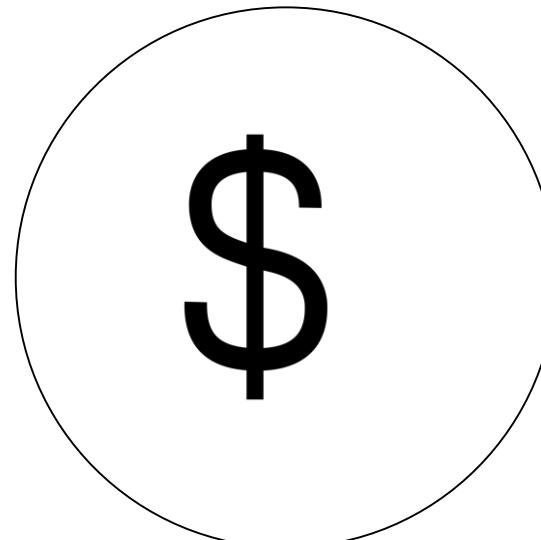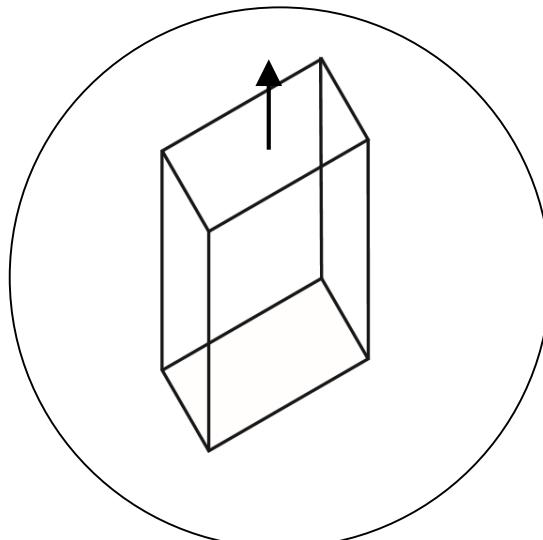
504 AFFORDABLE UNITS

OFF SITE

PART B - THE OPTIMIZED SOLUTION

OPTIMIZED CONDITIONS FOR DEVELOPMENT OF AFFORDABLE HOUSING UNITS

- Maximize the square footage of units produce.
- Maximize the return on investment for the developers.

ONSITE   **OFFSITE**

$$0.75 \cdot R_M + 0.25 \cdot R_A - A_M \ = \ 1 \cdot R_M - A_M + 0.3 \cdot R_A - A_A$$

REVENUE OF **MARKET RATE** UNITS
$/sqft

TOTAL ASSESSED VALUE OF
OFF SITE LOT

REVENUE OF **AFFORDABLE UNITS**
$/sqft

TOTAL ASSESSED VALUE OF
ONSITE LOT

| ONSITE | OFFSITE |

$$0.75 \cdot R_M + 0.25 \cdot R_A - A_M \; = \; 1 \cdot R_M - A_M + 0.3 \cdot R_A - A_A$$

$$0.75 \cdot (331 \cdot x) + 0.25 \cdot (116 \cdot x) - A_M \; = \; 1 \cdot (331 \cdot x) - A_M + 0.3 \cdot (116 \cdot x) - A_A$$

$R_M = $ **\$331** /sqft $\cdot$ **x**

$R_A = $ **\$116** /sqft $\cdot$ **x**

A_M and A_M, from PLUTO (varies by lot)

x = total onsite floor area (sqft)

ONSITE **OFFSITE**

$$0.75 \cdot R_M + 0.25 \cdot R_A - A_M \ = \ 1 \cdot R_M - A_M + 0.3 \cdot R_A - A_A$$

$$0.75 \cdot (331 \cdot x) + 0.25 \cdot (116 \cdot x) - A_M \ = \ 1 \cdot (331 \cdot x) - A_M + 0.3 \cdot (116 \cdot x) - A_A$$

$$\mathbf{88.55 \cdot x \ = \ A_A}$$

$R_M = \mathbf{\$331}$ /sqft $\cdot$ $\boldsymbol{x}$
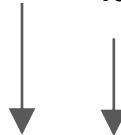
$R_A = \mathbf{\$116}$ /sqft $\cdot$ $\boldsymbol{x}$

A_M and A_M, from PLUTO (varies by lot)

$\boldsymbol{x}$ **= total onsite floor area (sqft)**

total onsite floor area (sqft)

value of off-site lot

$$88.55 \cdot x \;=\; A_A$$

$R_M = \$331 \text{ /sqft} \cdot X$
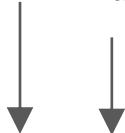
$R_A = \$116 \text{ /sqft} \cdot X$

A_M and A_M, from PLUTO (varies by lot)

x = total onsite floor area (sqft)

total onsite floor area (sqft)

value of off-site lot

$$88.55 \cdot x = A_A$$

ONSITE $88.55 \cdot x < A_A$

$88.55 \cdot x > A_A$ **OFF-SITE**

$R_M = $ **\$331** /sqft $\cdot$ X

$R_A = $ **\$116** /sqft $\cdot$ X

A_M and A_M, from PLUTO (varies by lot)

x = **total onsite floor area (sqft)**

ASSUMPTIONS

- In this area there are numerous opportunities to develop on vacant lots without replacing existing units. Thus, this definition only considers vacant lots as potential off-site lots. We assume that these lots will receive zoning variance to build affordable housing.

- The vacant lots are excessively underpriced as compared to the assessed values of the residential lots. We assume that once they are rezoned to residential, their prices will get inflated.
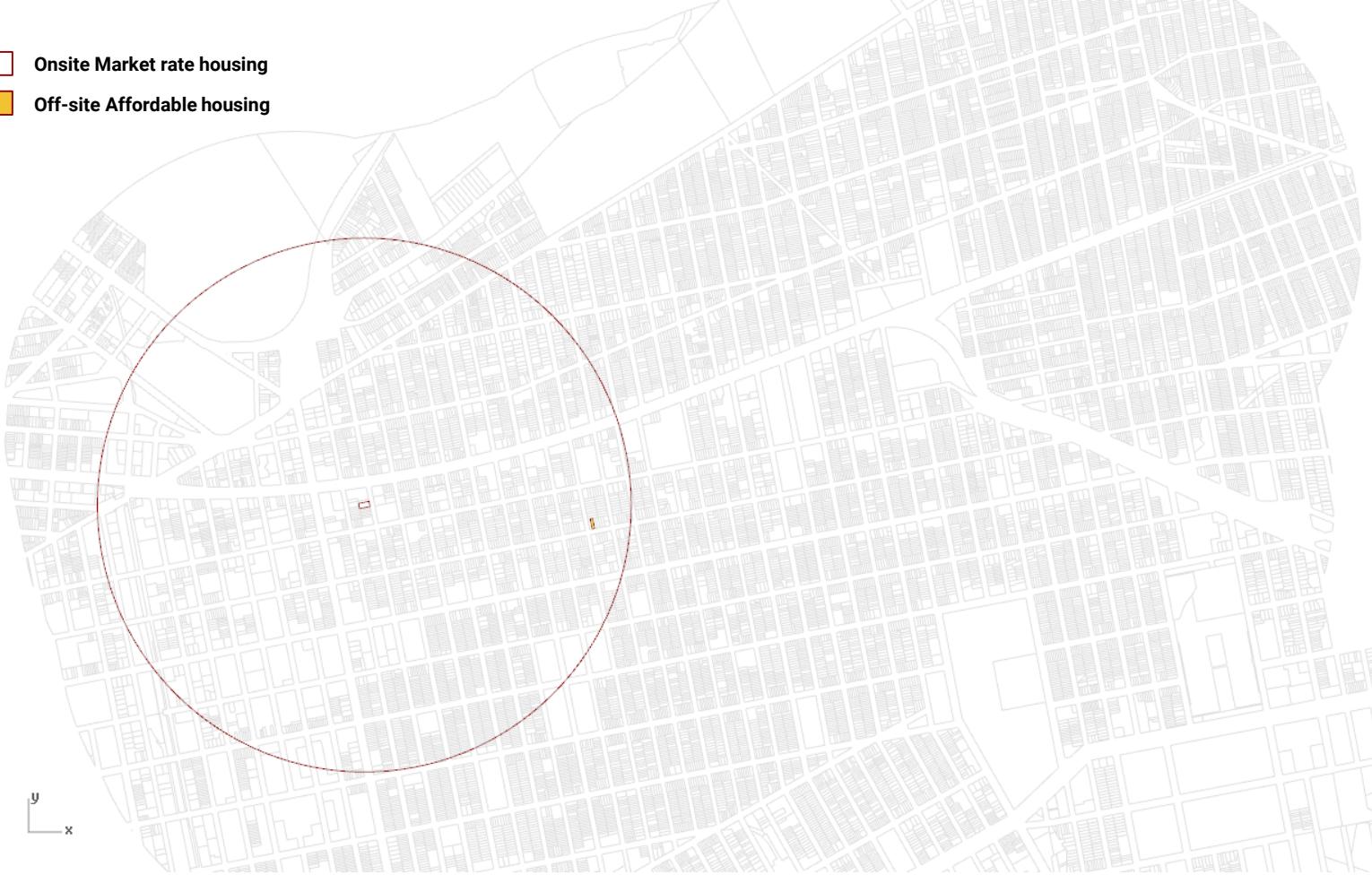
FOCUS OF STUDY

- This study will allow us to understand the efficacy of this housing policy in the East New York area.

- It will also help us understand if the policy promotes inclusivity within the proposed rezoning.

- What F.A.R.s are ideal for the developers to render maximum return for themselves and maximum affordable housing for the community.
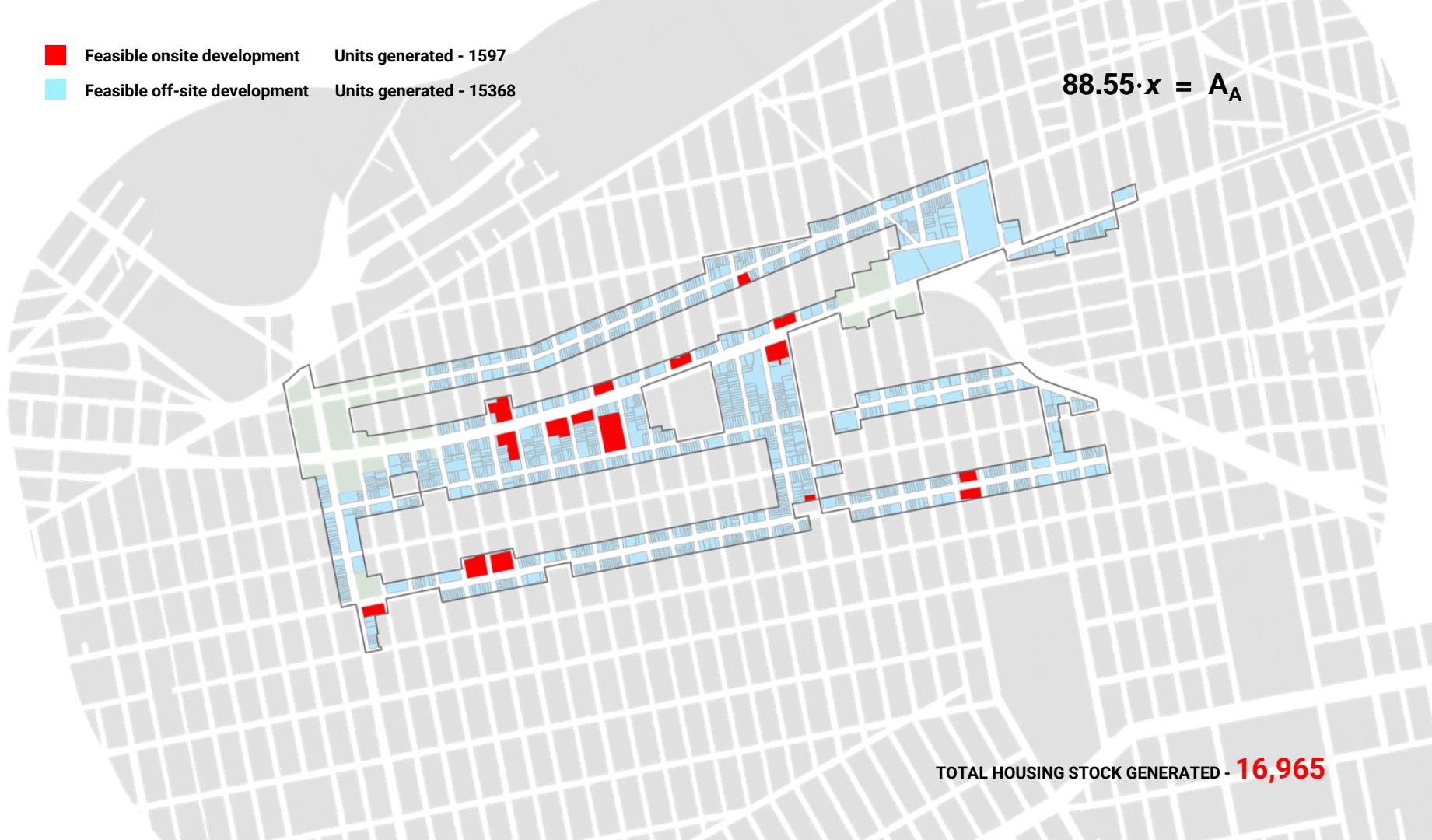
**WILL THIS POLICY EXACERBATE NON-INCLUSIVE DEVELOPMENT WITHIN BROOKLYN COMMUNITY DISTRICT 5?**

Onsite Market rate housing

Off-site Affordable housing

Feasible onsite development — Units generated - 1597

Feasible off-site development — Units generated - 15368

$$88.55 \cdot x = A_A$$

TOTAL HOUSING STOCK GENERATED - 16,965

Feasible onsite development   Units generated - 139

Remaining R6 sites   Units generated - 5245

Feasible onsite development   Units generated - 467

Remaining R7 sites   Units generated - 5326

Feasible onsite development — Units generated - 990

Remaining R8 sites — Units generated - 4796

CONCLUSION

- The cost of off-site lots were excessively underpriced therefore number of lots. Thus, there were limited onsite development as compared to off-site development.

- The idea of this policy is to generate inclusive housing therefore, however, in the East New York Area, the developers can easily generate separate buildings for market price housing and affordable housing.

- To maximize return on on-site development, developers can take advantage of other policies such as the 421A tax programs. (Which carries uncertainty with it as it needs to be reviewed every three years).

- Government should do more to incentivize on-site development. Especially in R7.

WILL THIS POLICY EXACERBATE NON-INCLUSIVE DEVELOPMENT WITHIN BROOKLYN COMMUNITY DISTRICT 5? YES

THANK YOU!

QUESTIONS?