

Unpacking Form-based Codes in a British Columbia Planning Context

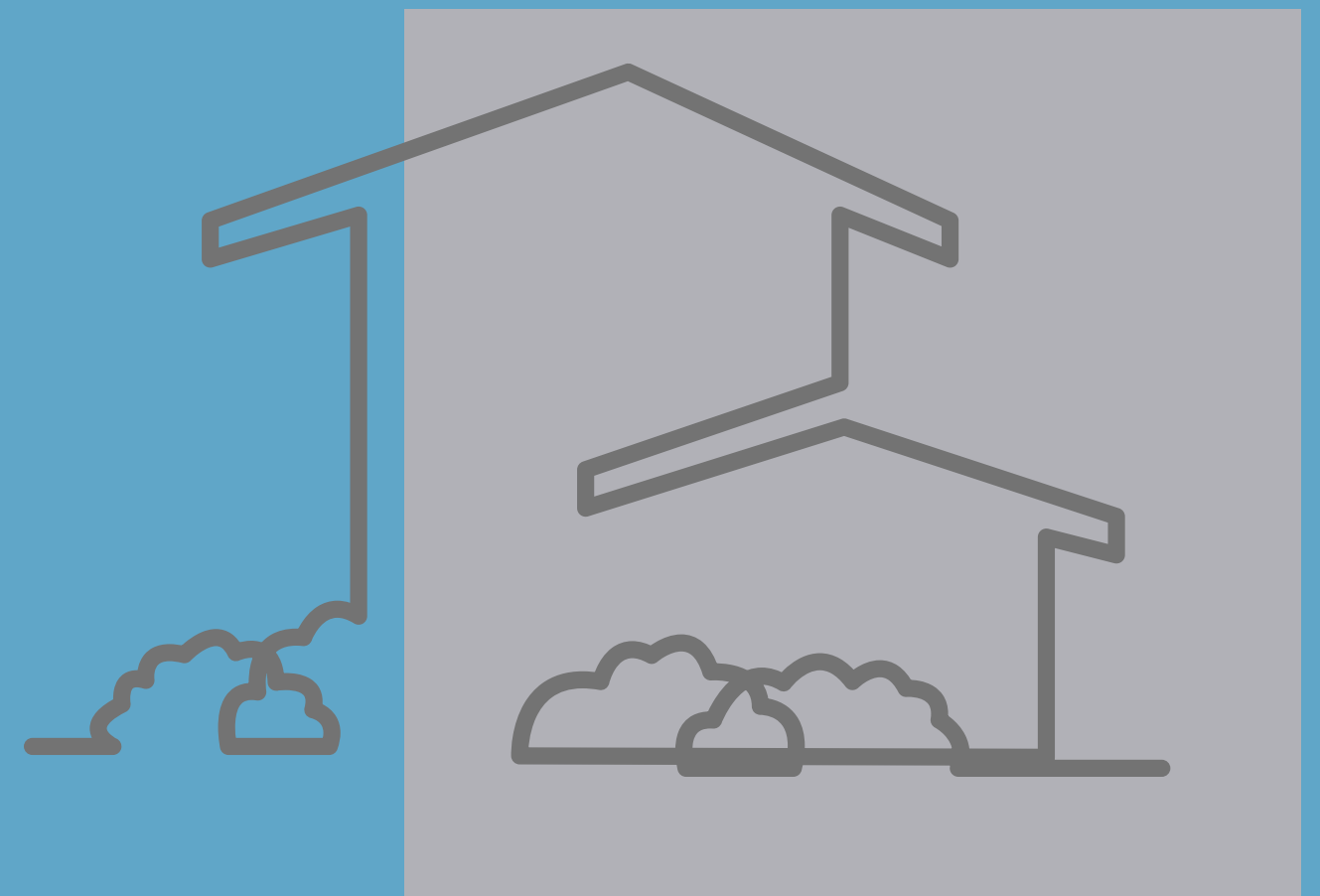


Thesis Defense: Kristina Bell

Master of Community Planning

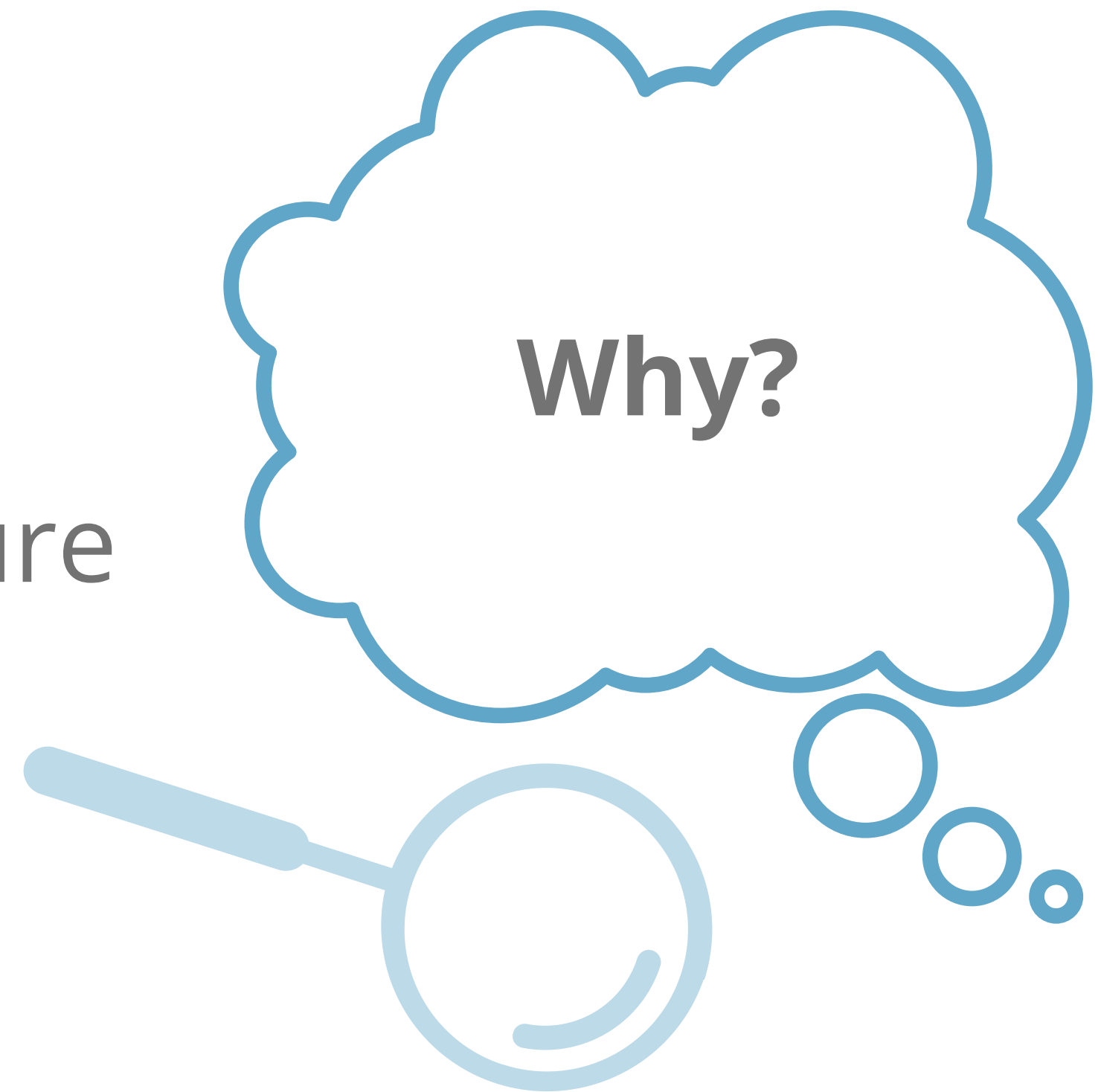
- Introduction
- Research Questions
- Methodology
- Findings
- Recommendations
- Closing

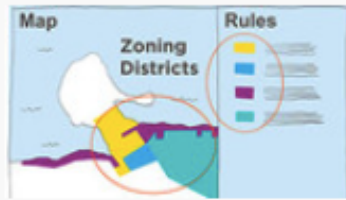
Points of Discussion



Research Purpose

- Curiosity & Zoning
- Theory-practice gap
- Minimal existing literature
- Where are BC's Form-based Codes?





Zoning and Development By-law

The Zoning and Development By-law 3575 establishes regulations for the development of land in the City of Vancouver.



City of Vancouver

Rezoning

REZONING APPLICATION

5812-5844 Cambie Street

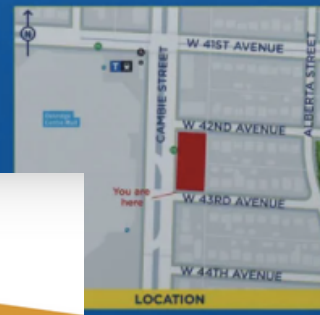
DETAILS:

To rezone this site to permit a mixed-use development with a 32-storey market residential tower and a 12-storey office tower over a four-storey podium. The proposal includes:

- 257 strata-titled units;
- 9,902 sq. m (106,589 sq. ft.) of office space;
- Commercial use at grade;
- A 37-space public childcare facility and a youth centre;
- A total floor area of 28,548 sq. m (307,283 sq. ft.);
- A total floor space ratio (FSR) of 9.85; and
- 303 parking spaces and 536 Class A bicycle spaces over four levels of underground parking.



PROPOSED DEVELOPMENT



LOCATION

What's happening:

Rezoning application submitted
Application review by City staff

Open House:
Wednesday, February 5, 2020
5:00-7:30pm
Peretz Centre
6184 Ash Street

Further application review
Public Hearing:
Information to come

Decision by Council

For more information:
vancouver.ca/rezapps
or phone 3-1-1



City Hall Watch



City of Vancouver

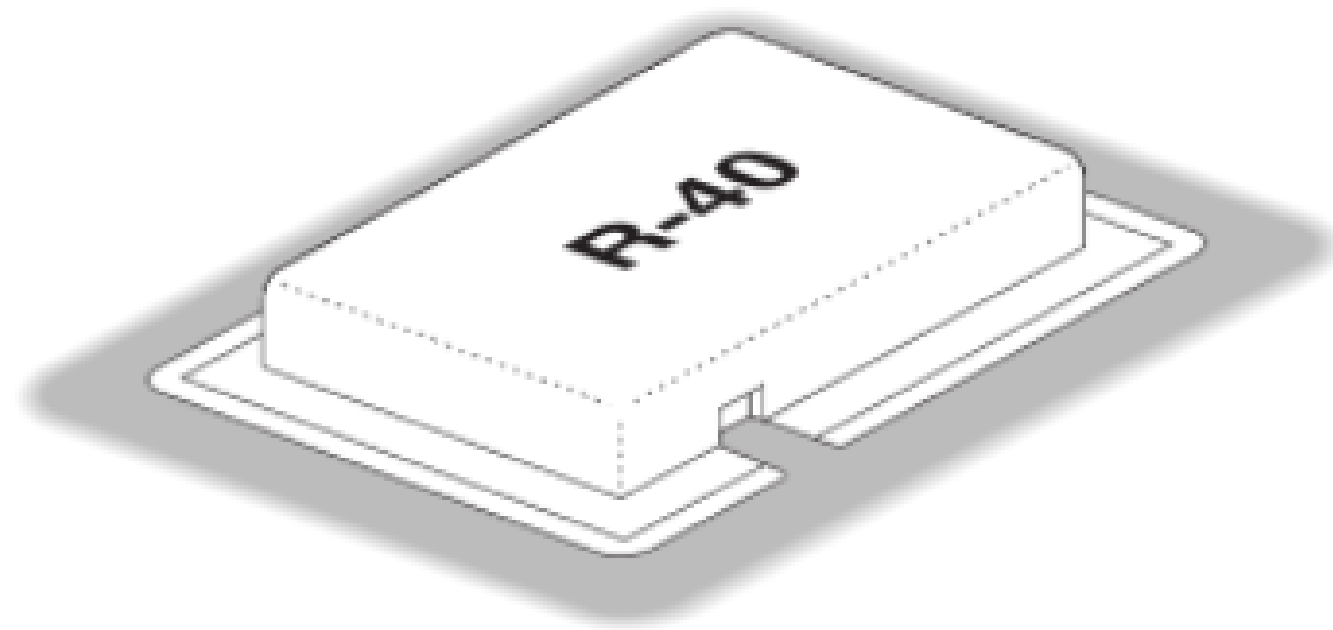
What is Zoning?

- Euclidean Zoning
 - Use-based
- Form-based Codes
 - Form-based

What is Zoning?

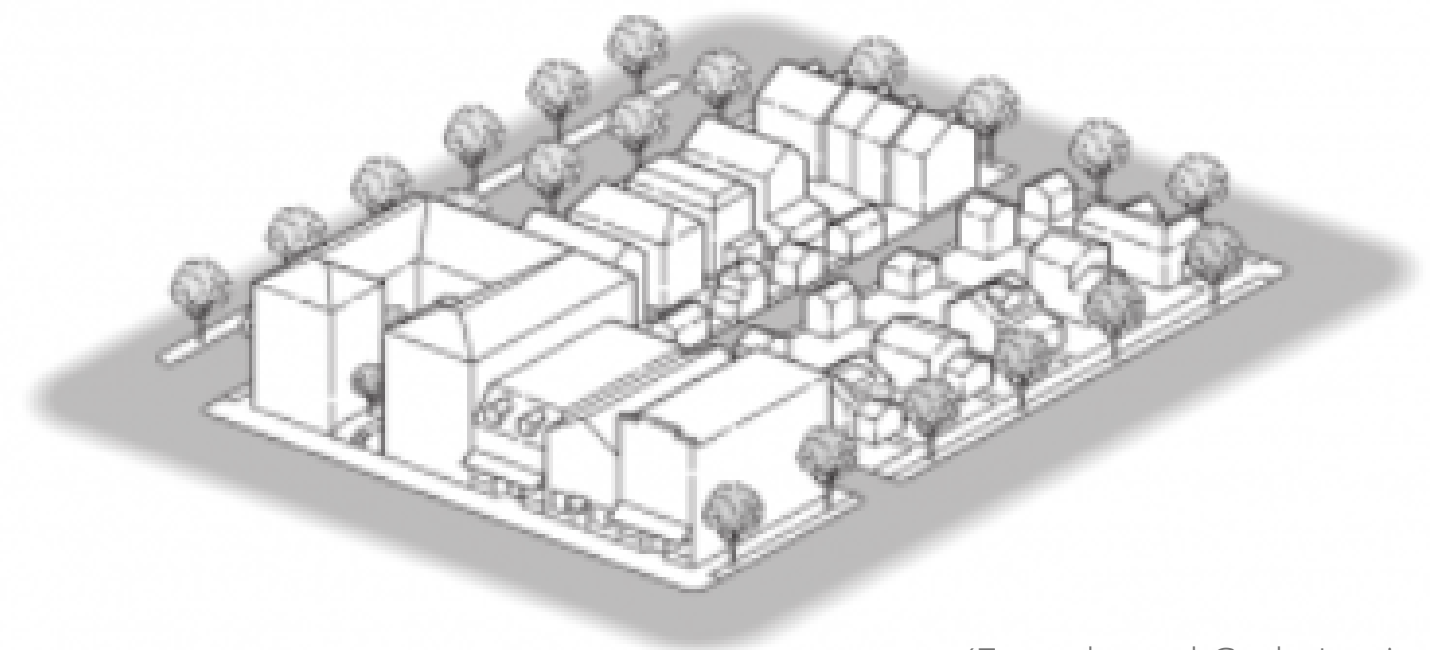
Conventional Zoning

Density use, FAR (floor area ratio), setbacks, parking requirements, maximum building heights specified



Form-Based Codes

Street and building types (or mix of types), build-to lines, number of floors, and percentage of built site frontage specified.



(Form-based Code Institute, n.d.)

Research Questions



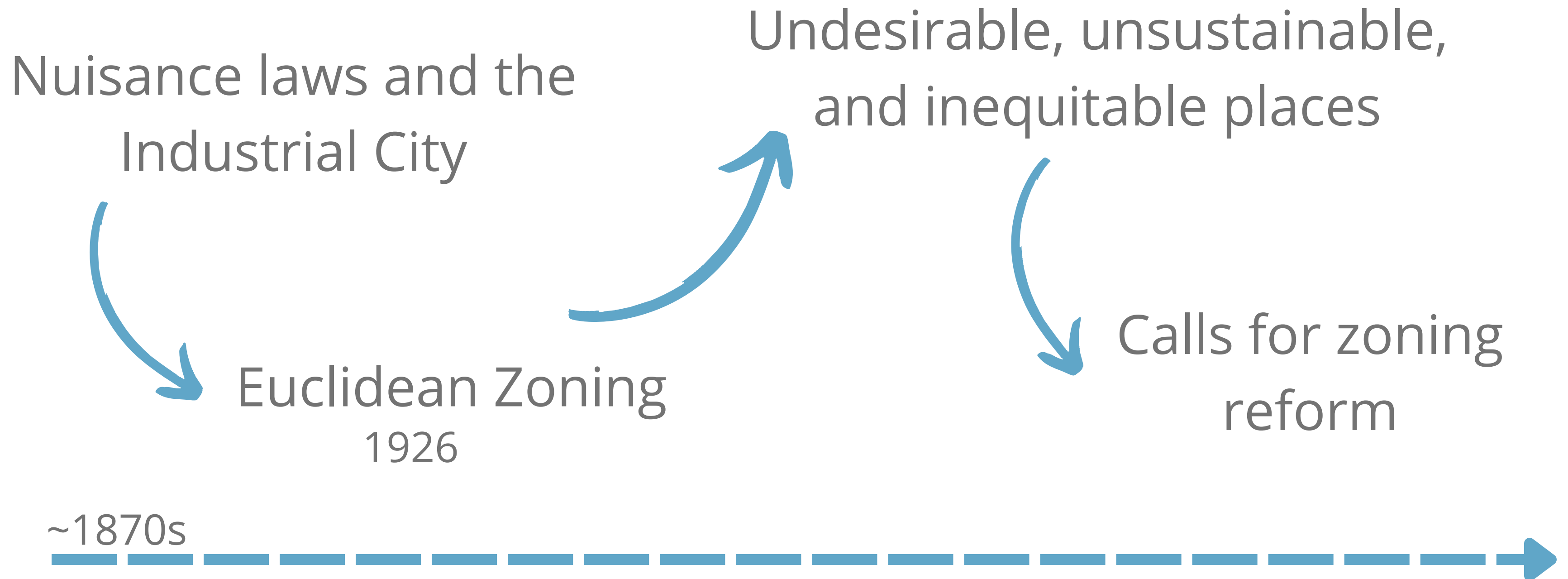
1. Is there consensus around defining FBCs?
2. Why has there been a lack of uptake of FBCs in British Columbia?
3. What other planning tools are local governments using to approximate FBCs in BC and how do they compare?

Form-based Code (FBC)

Research Methods

- Literature Review
 - The History of Zoning
 - Recent research
- Legal Perspective
 - *The Local Government Act*
- Case Study
 - Comparative analysis
 - Seaside, Florida
 - Whistler, British Columbia
 - Form-based Code Institute
FBC checklist

Literature Review: The History of Zoning



Literature Review

The History of Zoning

- New Urbanism & the Form-based Code
-1980's, 1990's
- Separation for 'mutual good'?

The History of Zoning

- Uptake of FBCs sporadic
- Minimal research done on the success of FBCs

Legal Perspective: Barriers

Local Government Act (LGA): Part 14

S.479(c) :

- i) the use of land, buildings and structures,
- ii) the density of the use of land, buildings and structures,
- iii) the siting, size and dimensions of
 - a) buildings and structures, and
 - b) uses that are permitted on the land, and
- iv) the location of uses on the land and within buildings and structures.

Legal Perspective: Other Tools

LGA Part 14
S.488, S.491

- Development Permit Areas (DPAs)
 - = Requirements in regard to character
 - ≠ Particulars of design or finish of buildings
- Heritage Conservation Areas
- Signage bylaws
- Covenants

Defining FBCs

- Lack of a strong understanding
- Lack of universal definition
- Form-based Code Institute
(FBCI) with the best definition
- Placemakers - The Codes Study



Defining FBCs

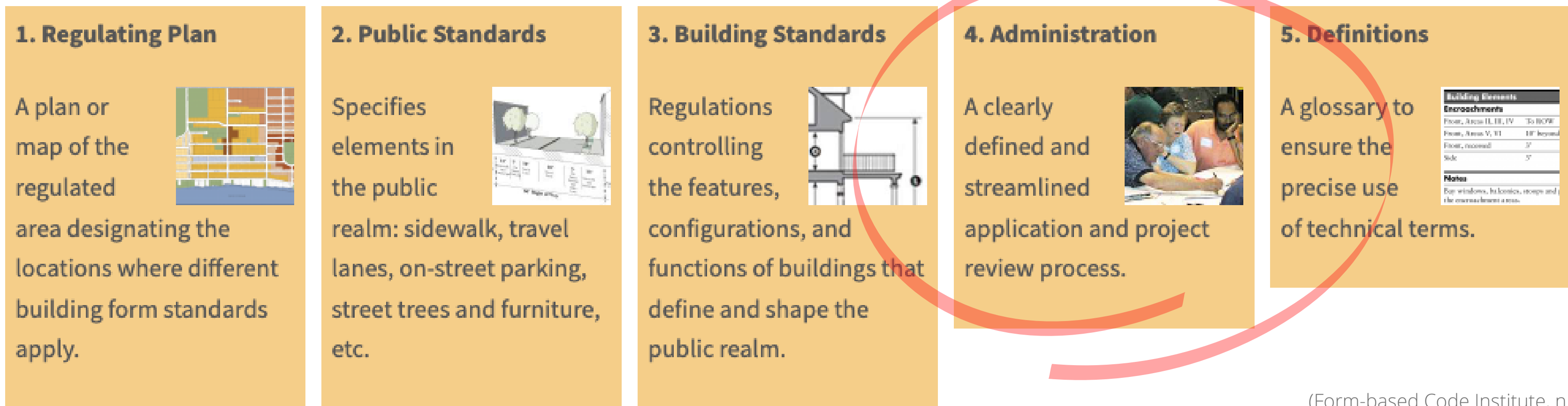
Placemakers - The Codes Study

Municipality	Scale	Implementation	Date Adopted
Kelowna: Vintage Landing Resort	Neighbourhood	Private	2011
New Westminster	City	Local Government	1998
Revelstoke	City	Local Government	Unknown
Delta: Tsawwassen Southlands	Neighbourhood	Private	Unknown

Table 1. Municipalities in BC using a FBC according to the Codes Study.

Framing the Issue: Implications

- A layered development approach
- Lengthy, costly development process



(Form-based Code Institute, n.d.)

Case Studies

Seaside, Florida



Whistler, British Columbia

Introduction

The Issue

Findings

Conclusion

Seaside, Florida



(Congress for New Urbanism, n.d.)



(DPZ, n.d.)

Introduction

The Issue

Findings

Conclusion

Seaside, Florida

THE SEASIDE CODE (2014) ★ URBAN CODE

DUANY PLATER-ZYBERK & CO.
TOWN PLANNERS

	TYPE I MIXED USE	TYPE II & IIa RESIDENTIAL	TYPE III MIXED USE	TYPE IV RESIDENTIAL	TYPE V RESIDENTIAL	TYPE VI & VIa RESIDENTIAL	TYPE VII RESIDENTIAL	TYPE VIII RESIDENTIAL	SPECIFICATIONS
YARD The area outside the Principal Building.					SEE APPLICABLE SUB-CODE				<ol style="list-style-type: none"> The street facade shall extend along the front yard line a minimum of the designated percentage of the lot width. Chimneys and bay windows may encroach up to half the yard specified. Picket fences are required for Types IV and VI along the street and footpath property lines. Type VII shall have picket fences at the front of the building setback line and all other street and path property lines. At Type VII on corner lots, the setback along the side street property line shall be 10 ft.
PORCH An unglazed roofed structure.					SEE APPLICABLE SUB-CODE				<ol style="list-style-type: none"> The front porch or balcony shall be the designated depth and width. Balconies are optional in Type I and required in Type III. "Porch" in Type I is a continuous arcade which shall not be enclosed, screened, or have railings.
BALCONY An unglazed overhanging structure.									
OUTBUILDING Roofed structure(s) located within the designated portion of the yard.					SEE APPLICABLE SUB-CODE				<ol style="list-style-type: none"> The enclosed upper floor of an outbuilding shall not exceed the footprint of the ground floor. Outbuildings shall not exceed 22 ft. in height. The combined footprint area of multiple outbuildings on a single lot shall not exceed the designated footprint area. Larger outbuildings may be permitted on a Type VI / Via if the primary building is underbuilt. Preservation, rather than replacement, of older homes is encouraged to maintain the character of the street. Therefore, for Types VI and Via the Outbuilding footprint in excess of 240 sq. ft. must occupy the available unbuild footprint of the Principal Building, be separate from it by a minimum of 4 feet, and, must not exceed 800 sq. ft.
PARKING An open area intended for the parking of automobiles.					SEE APPLICABLE SUB-CODE				<ol style="list-style-type: none"> The parking requirement may be met by street parking along the front or side of the lot. If additional parking is required or desired, parking may occur in the garage portion of an outbuilding, or within the shaded area of the lot as shown. Size is dependent on access and configuration, but is approximately 8.5 ft. by 18 ft. for head-in parking and 7 ft. by 23 ft. for parallel parking along the right-of-way. A garage is considered an outbuilding and shall follow the specifications of outbuildings.
HEIGHT The vertical distance between the crown of the road at the centerline of the lot (unless otherwise noted) and a specified point on a structure.					SEE APPLICABLE SUB-CODE				<ol style="list-style-type: none"> Heights shall be as designated. There shall be no height limit on structures or portions of structures with a footprint of less than 200 sq. ft. and no dimension exceeding 14 ft. Towers in Type II shall be set back at least 10 ft. from the front and rear facade.

These lots define the large Central Square with a decisive spatial act. Type I buildings are the tallest in Seaside, up to 49 feet in height, although a great deal of variation is permitted. There is no setback on the side lot lines, where one building abuts the next, or at the front, where a large arcade is required. Type I buildings are intended for retail on the ground floor with office and/or residential above. Normally, Type I buildings will be a maximum of four stories, but a mezzanine, or a fifth floor within the attic, may be permitted. The prototype for this type is found in main streets throughout the South, although seldom in so continuous a manner. To codify existing practices and to allow innovative structures to continue to be used, structures on Type I lots that are no more than 37 feet in height are exempt from all requirements of the Code.

Type II lots define a small green known as the Lyceum, which is dedicated to learning, expression of the arts and ideas. Gallery and roof heights are measured from the top of a common boardwalk that connects all buildings. The heights shown are approximate; new structures shall match the existing ones with regards to gallery heights. The lots for the taller Type II buildings alternate with the Type IIA lots, which generate smaller buildings and which must leave some open yard space. Both Type II and IIA buildings have pitched roofs and are to be painted white. The prototype is found in Thomas Jefferson's Academical Village at the University of Virginia.

Type III lots form two rows of buildings that define Ruskin Place, an intimately-scaled square. These rowhouse buildings, sometimes known as live-work units, have ground floor spaces intended for small shops and arts studios and are intended for residential use above. The space they enclose marks the pedestrian route axis between the Central Square and the Seaside Chapel. Type III buildings on Ruskin Place step-down in the back to make them more compatible with the smaller scale buildings on adjacent streets.

These are large lots that line Seaside Avenue connecting the Central Square to the Swim and Tennis Club. Type IV coding generates large free-standing buildings with substantial out-buildings at the rear. This type is available for large private houses, small apartment buildings or bed and breakfast inns, although uses may be restricted by recorded covenants and restrictions. The setback on all sides, together with a continuous porch mandated for the street front, should result in buildings of some grandeur. The prototype is the Greek Revival mansion of the antebellum South.

This type is a special category for lots along Seaside's gulf front and eastern boundary. All Type V lots now have a specific Sub-Code tied to the plot for that lot.

These lots are the suburban section of Seaside. They occur on north-south streets where there is a view of the sea at the end of the street corridor. Lots become slightly smaller and buildings become slightly taller toward the center of town for a gradual increase of density. Type VI generates freestanding houses and encourages small outbuildings at the rear to become guesthouses and service units. Required front yards secure the sea view of the inland units. Picket fences and street trees give spatial definition to streets that would otherwise be perceived as too wide by pedestrians. The prototype is found everywhere in the suburban and rural South.

Type VII lots occur along the east-west streets along Seaside's northern boundary where no view of the sea is possible. Since a view corridor is unnecessary, the front setbacks are minimal. Instead, the house, including its porch, is oriented toward the side yard. To create a more useable side yard, houses are shifted to one side of the lot with a minimal setback on one side. The porch then faces the more generous and private yard on the other side, and borrows visually from the neighboring property's five-foot setback, where no structures are permitted to be built. The Charleston single house is the prototype.

Type VIII lots are dispersed throughout the residential areas of the town. These uniquely-shaped lots occur at locations that require some degree of acknowledgment as gateways or special places. Type VIII provisions are more liberal than those of Type VI and Type VII, permitting greater freedom of placement on the lot. This provides meaningful variety within the relatively homogeneous residential district.

Seaside, Florida

THE SEASIDE CODE (2014) ★ REGULATING PLAN

DUANY PLATER-ZYBERK & CO.
TOWN PLANNERS

LOT TYPES

- TYPE I
Mixed Use
- TYPE II & IIa
- TYPE III
Mixed Use
- TYPE IV
Residential
- TYPE V
Residential
- TYPE VI & VIa
Residential
- TYPE VII
Residential
- TYPE VIII
Residential

LEGEND

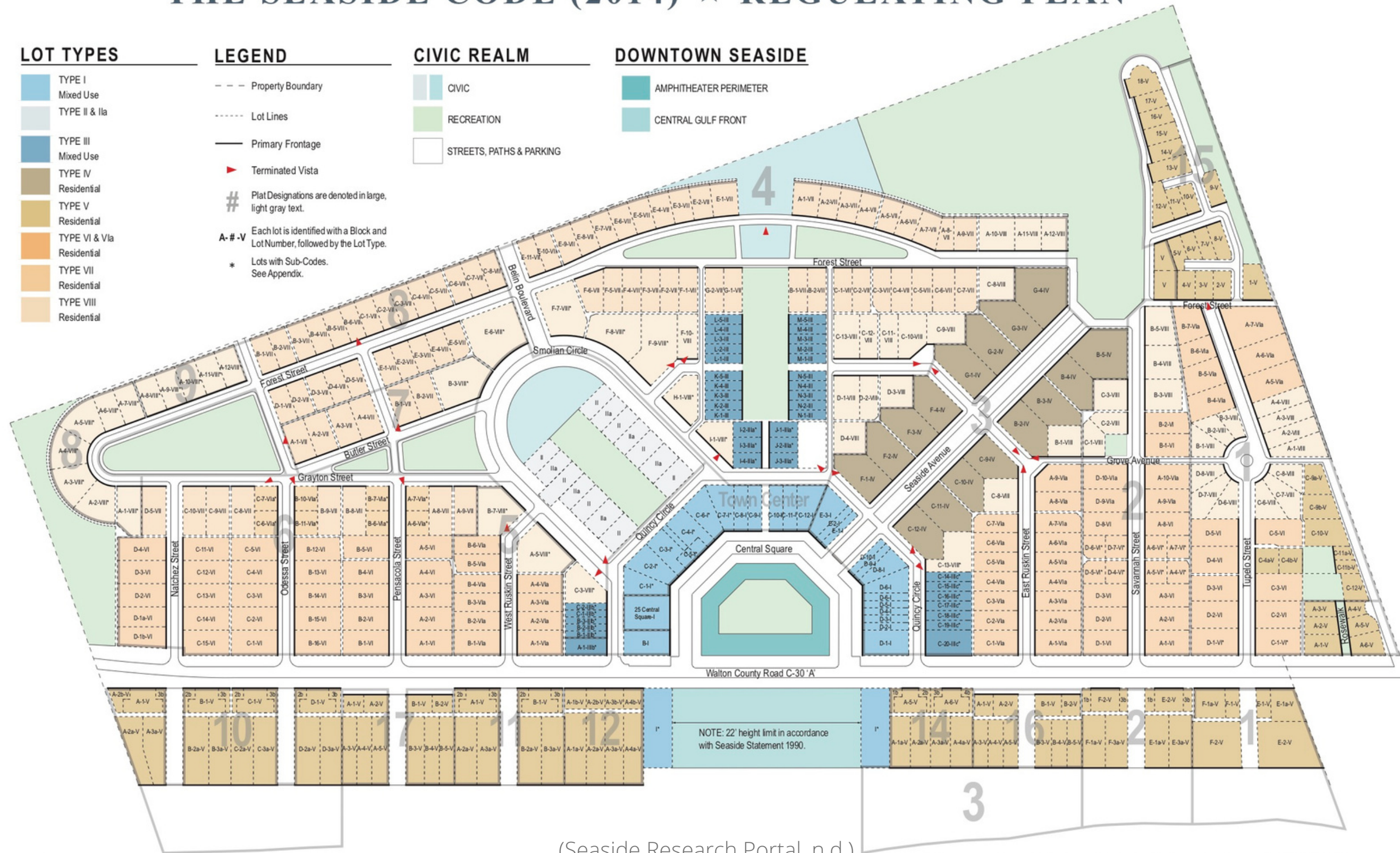
- Property Boundary
- Lot Lines
- Primary Frontage
- Terminated Vista
- # Plat Designations are denoted in large, light gray text.
- A-#-V Each lot is identified with a Block and Lot Number, followed by the Lot Type.
- * Lots with Sub-Codes. See Appendix.

CIVIC REALM

- CIVIC
- RECREATION
- STREETS, PATHS & PARKING

DOWNTOWN SEASIDE

- AMPHITHEATER PERIMETER
- CENTRAL GULF FRONT



NOTE: This map is for illustrative purposes only and is not intended to define legal boundaries

(Seaside Research Portal, n.d.)

This document may be amended from time to time. Users should verify current version.

DECEMBER 28 2014

Seaside, Florida

Legislative Context:

- One private owner
- Master-planned
- Unincorporated = no municipality had planning jurisdiction



(Seaside Research Portal, n.d.)

Whistler Village, British Columbia



(Tourism Whistler, n.d.)

Introduction

The Issue

Findings

Conclusion

Whistler Village, British Columbia

- Zoning and Parking Bylaw No.303, 2015
 - ~600 pages
 - ~33 zones pertaining to the village
- Whistler Village DPA
 - 170 pages long
 - Design-oriented details

Whistler Village, British Columbia

Legislative Context

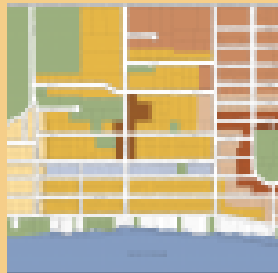
- *Resort Municipality of Whistler Act*
 - Established the Resort Municipality of Whistler (RMOW) in 1975
 - Inclusion of the particulars of design in DPAs

Analysis

FBC Key Elements:

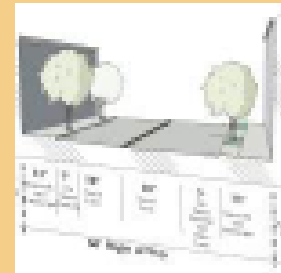
1. Regulating Plan

A plan or map of the regulated area designating the locations where different building form standards apply.



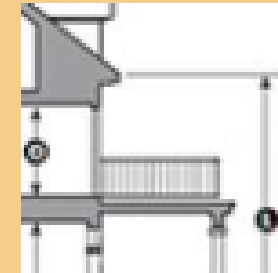
2. Public Standards

Specifies elements in the public realm: sidewalk, travel lanes, on-street parking, street trees and furniture, etc.



3. Building Standards

Regulations controlling the features, configurations, and functions of buildings that define and shape the public realm.



4. Administration

A clearly defined and streamlined application and project review process.



5. Definitions

A glossary to ensure the precise use of technical terms.

Building Elements	
Encroachments	
Floor, Areas II, III, IV	To ROW
Floor, Areas V, VI	18' beyond
Floor, recessed	3'
Side	3'

Notes
For windows, hi-lights, stoops and the overhang areas.

(Form-based Code Institute, n.d.)

Analysis

Seaside, Florida: Urban Code				
Regulating Plan	Public Standards	Building Standards	Administration	Definitions
Yes	n/a	Yes	Yes	Yes

Table 3. Seaside Urban Code analyzed against FBC key elements.

Whistler, British Columbia: Zoning Bylaw & Whistler Village DPA				
Regulating Plan	Public Standards	Building Standards	Administration	Definitions
No	n/a	Yes	No	Yes

Table 5. Whistler's zoning bylaw and DPA analyzed against FBC key elements.

Findings

Seaside



Replaced conventional zoning



Streamlined process

Whistler Village



Replaced conventional zoning



Streamlined process

Implications

- Whistler = reflective of the process many BC municipalities use today
- Desire for predictable development process
- Desire for increased control over form

Recommendations

Themes:

- **Stop the Segregation of Uses**
- **Process Matters**

Recommendations

1. Remove single-use zones that no longer serve a purpose

Recommendations

2. Focus more on building form rather than use as the organizing principle of the zoning bylaw where possible

Recommendations

3. Incorporate images and diagrams into zoning bylaws, not just DPAs

Recommendations

**4. Zoning should become
proactive rather than reactionary**

Recommendations

5. Make streamlining the application and review process a priority



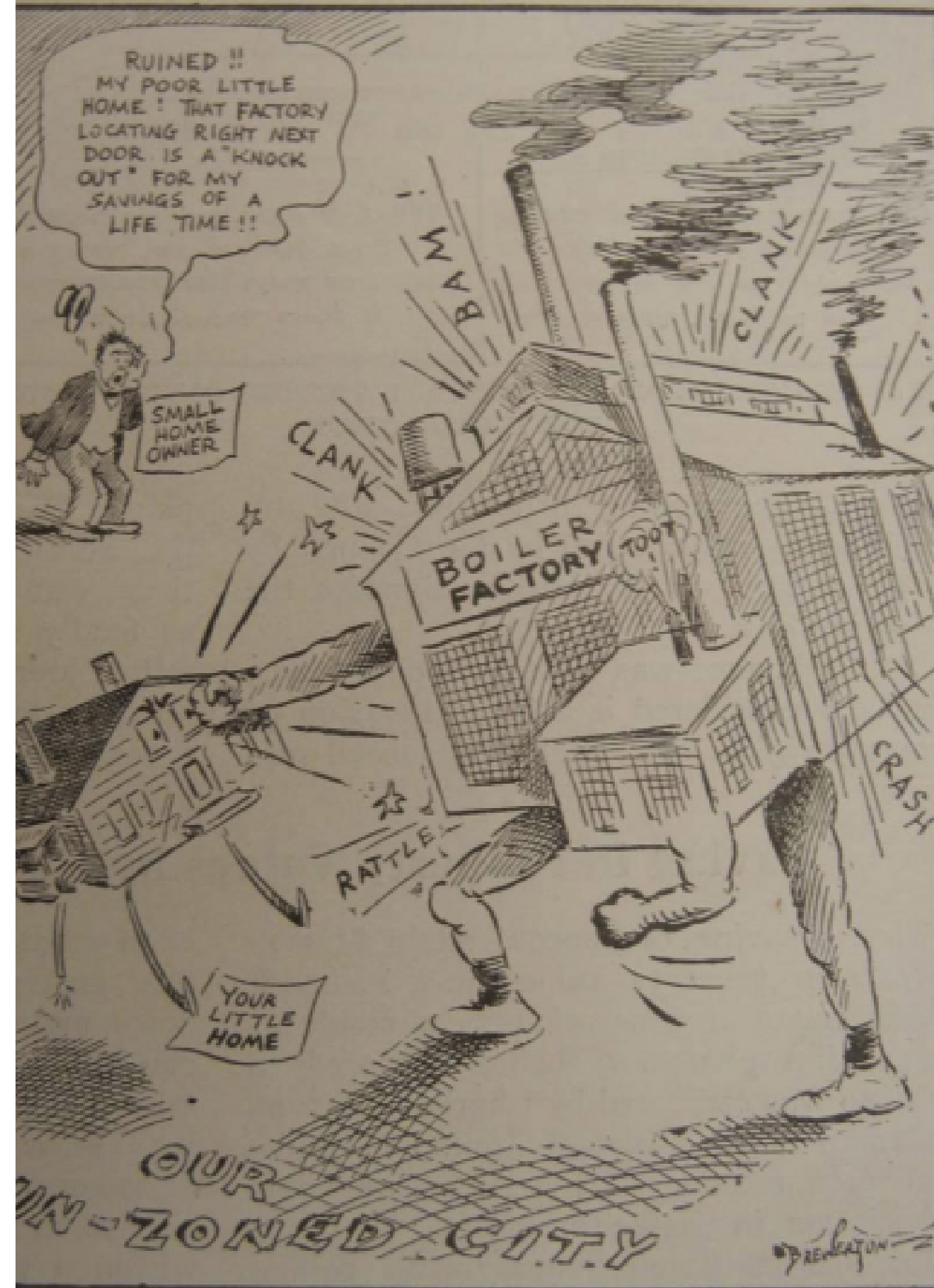
Closing Comments

Thank-you!



Seaside Urban Code	Whistler Zoning and Parking Bylaw NO. 303, 2015
<ul style="list-style-type: none"> • One page poster, 8 building types • Organized by building type • Dimension and design standards for buildings, yards, porches, balconies, outbuildings, and parking • Descriptions in the form of diagrams and short statements • Keyed to a regulating plan 	<ul style="list-style-type: none"> • 33 zones pertaining to the village • Organized by permitted building uses • Standards for density, height, site area, site coverage, setbacks, off-street <u>parking</u> and loading • Descriptions in the form of words • No clear regulating plan
Seaside Architectural Standards	Whistler Village Development Permit Area
<ul style="list-style-type: none"> • 13 pages • Design and materials standards for walls; doors and windows; porches and balconies; roofs; attachments; signage; lighting; colours, for each building type identified in the Urban Code • No application <u>process</u> 	<ul style="list-style-type: none"> • 170 pages • Standards for building siting, form, and massing; pedestrian and outdoor activity areas; grading, draining, design of servicing infrastructure; particulars to landscaping, lighting, and signage; particulars of building design, pedestrian level design, upper floor design, roof design, building materials, building colour • Additional application and review process

"ZONING" WILL PREVENT THIS!



CARTOON FROM THE ATLANTA JOURNAL OF MARCH 30 1922, PROVED TO BE A "KNOCK-OUT"