

REHOUSING:

Missing Middle Plans for Canadian Suburbs

CHBA BC
Info Session

Tuesday, April 11, 2023



UNIVERSITY OF TORONTO
JOHN H. DANIELS FACULTY OF
ARCHITECTURE, LANDSCAPE, AND DESIGN

tuf lab

LGA

architectural
partners

neptis

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Missing Middle Plans for Canadian Suburbs

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PROJECT TEAM

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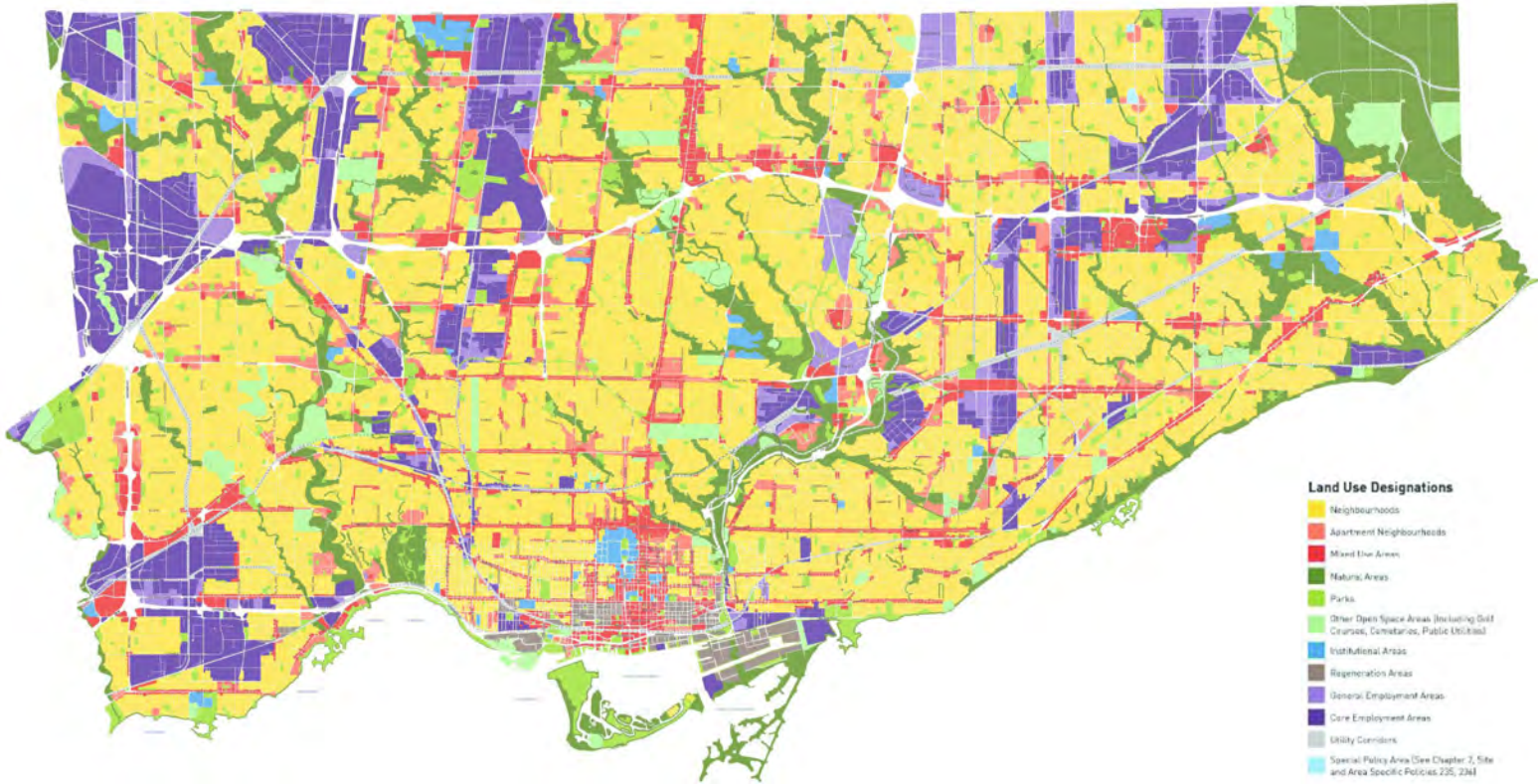
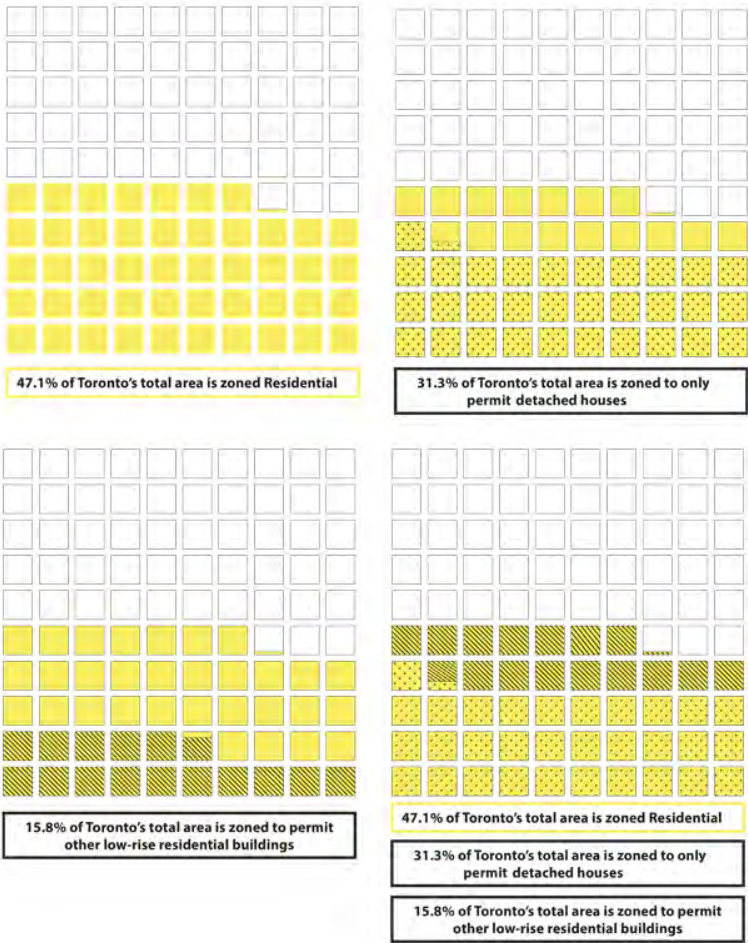


From the Single Family House To Multiplex

REHOUSING



City of Toronto - Zoning By-law Residential Zoning



What is the Yellowbelt?

REHOUSING



Source: Gil Meslin, https://twitter.com/g_meslin/status/882769601938849793

A Brief History of the approvals for adding units to a single family lot...

2000:

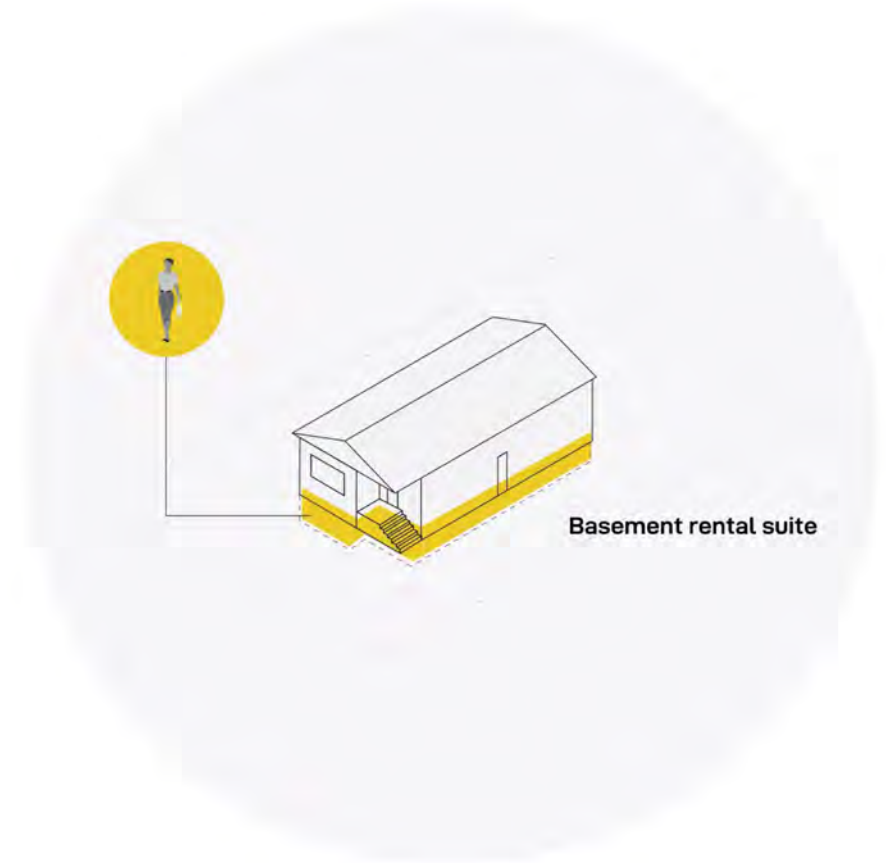
City of Toronto approves Secondary Suites.

A Secondary suite is defined as:

“

Self-contained living accommodation for an additional person or persons living together as a separate single housekeeping unit, in which both food preparation and sanitary facilities are provided for the exclusive use of the occupants of the suite, located in and subordinate to a dwelling unit. ”

**2 units in the main house
(This could be a be anywhere in the house,
commonly a basement suite, or suite on a
upper floor)**



2000

2018

2022

2022

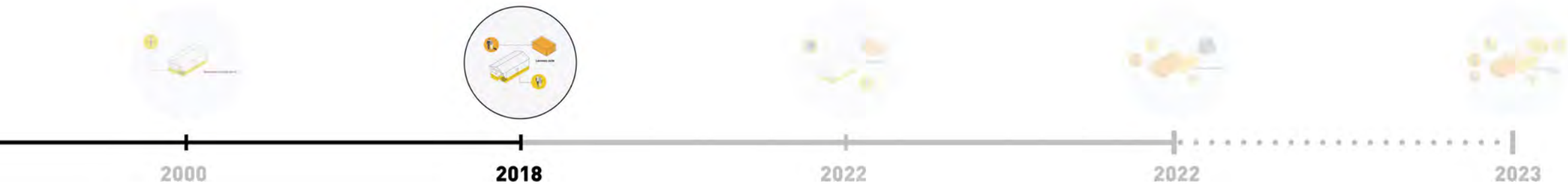
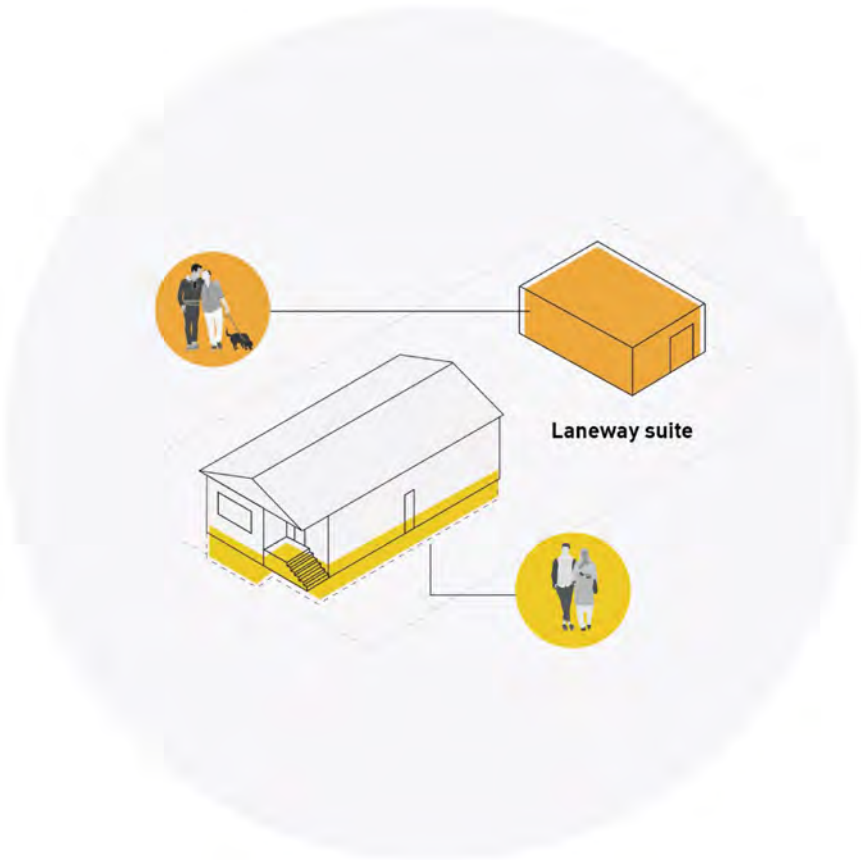
2023

A Brief History of the approvals for adding units to a single family lot...

2018

City of Toronto approves Laneway Suites across the City on residential properties that share a property line with a public lane, subject to By-law requirements.

2 units in the main house &
1 Laneway Suite per lot
(where lots meet specific guidelines)

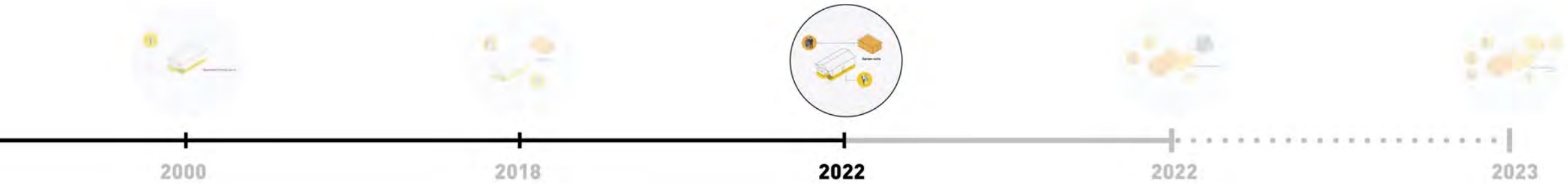
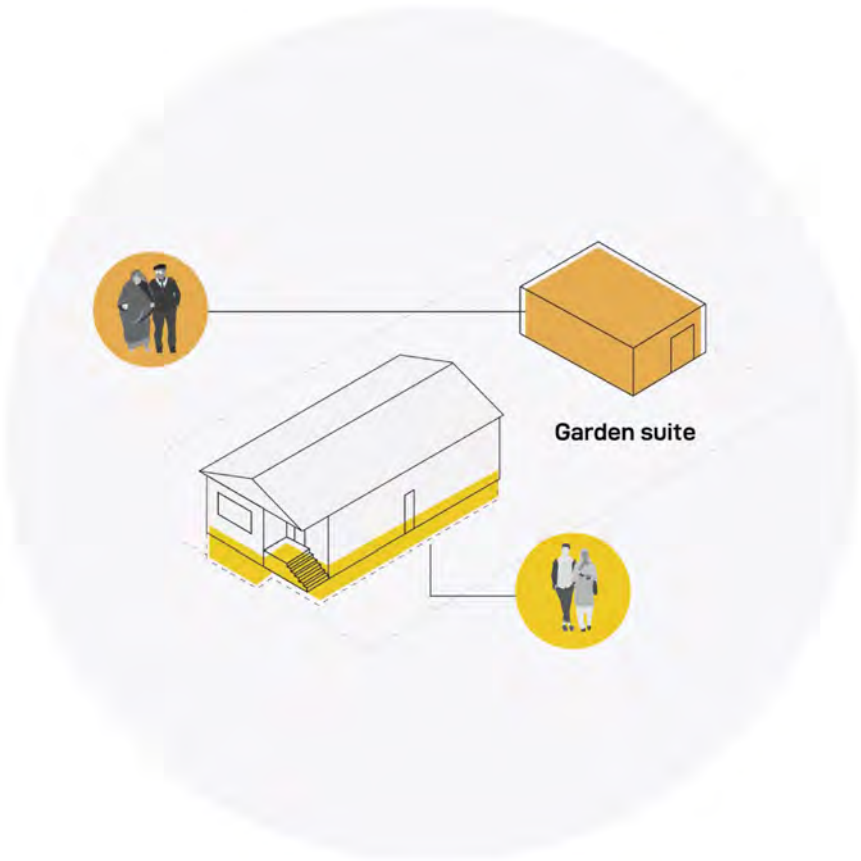


A Brief History of the approvals for adding units to a single family lot...

July 2022:

City of Toronto approves Garden Suites. The new policies and zoning requirements permit Garden Suites on properties in most residential zones across Toronto.

2 units in the main house & 1 Garden or Laneway Suite per lot

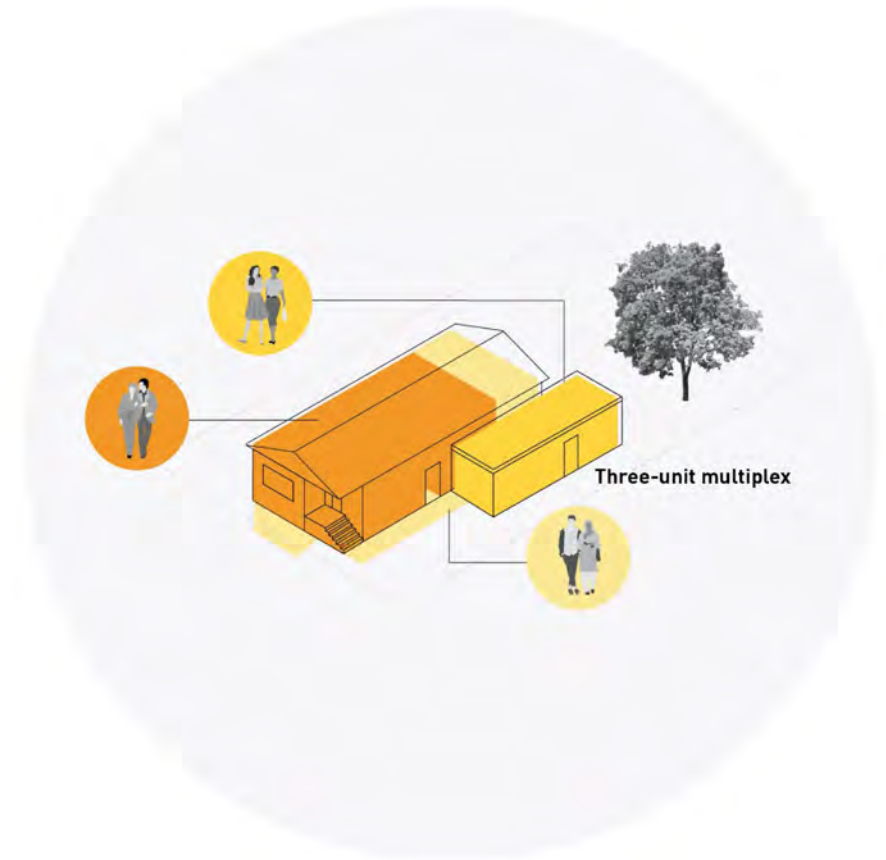


A Brief History of the approvals for adding units to a single family lot...

November 2022:

Province's More Homes Built Faster Act (Bill 23) allows 3 units 'as of right' on lot.

**3 units in the main house
OR
2 units in the main house &
1 Garden or Laneway Suite per lot**

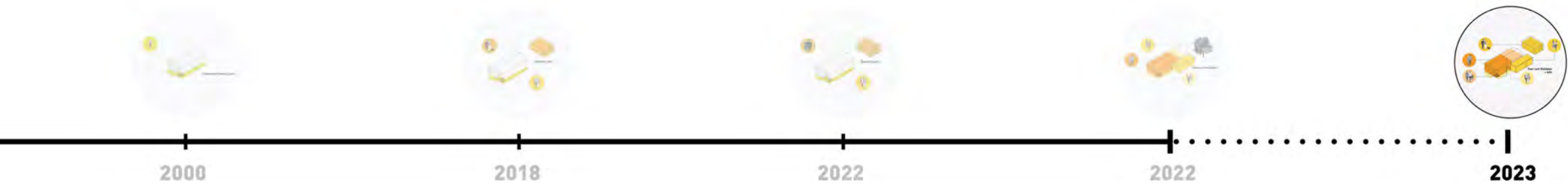
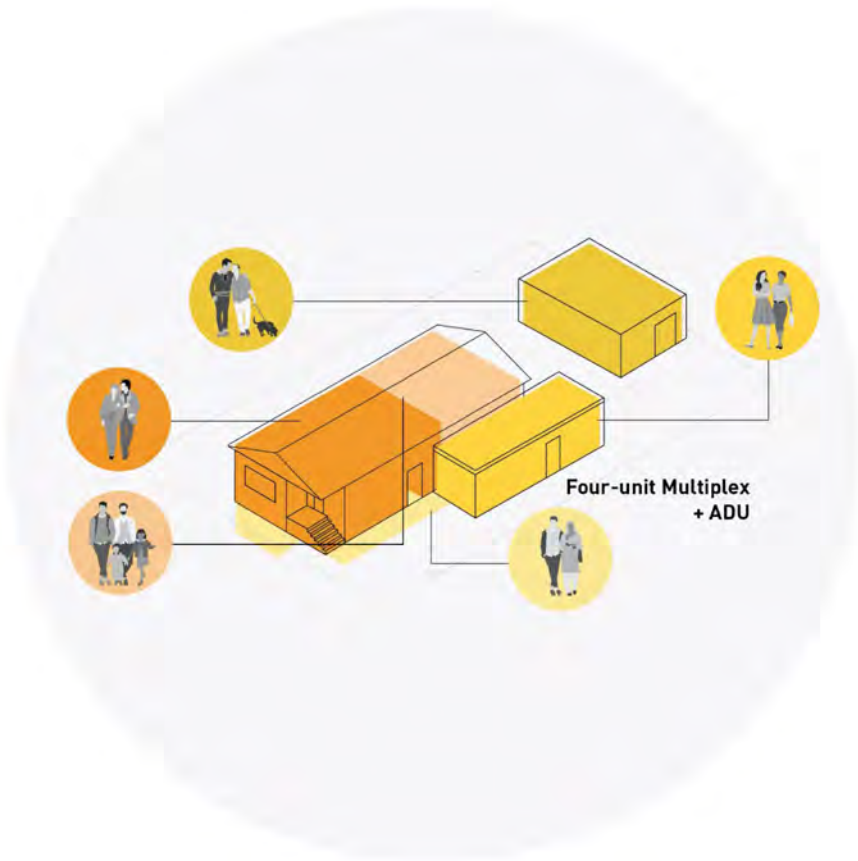


A Brief History of the approvals for adding units to a single family lot...

In the Near Future:

City of Toronto's Expanding Housing Options in Neighbourhoods (EHON) new Multiplex legislation will allow for Multiplexes with more units to be built in neighbourhoods throughout Toronto

4 units in the main house & 1 Garden or Laneway Suite per lot

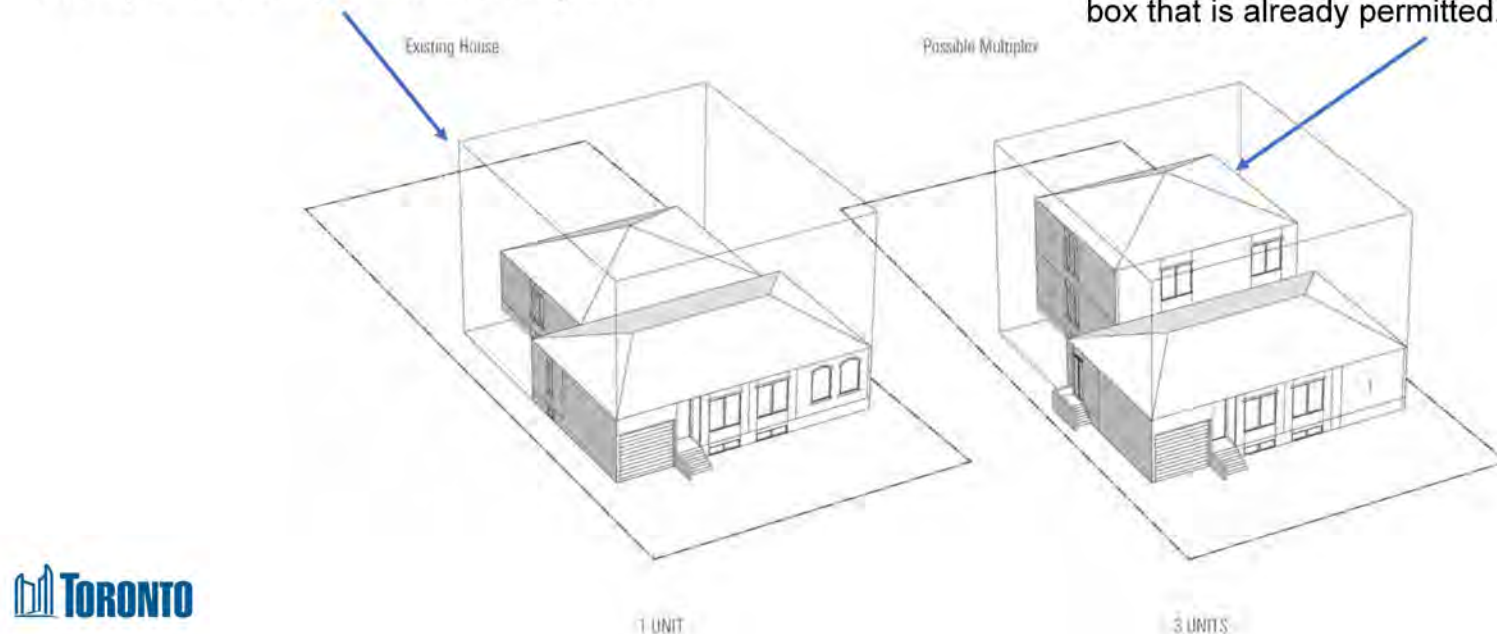


Thinking Inside the Box: More Units, Same Scale

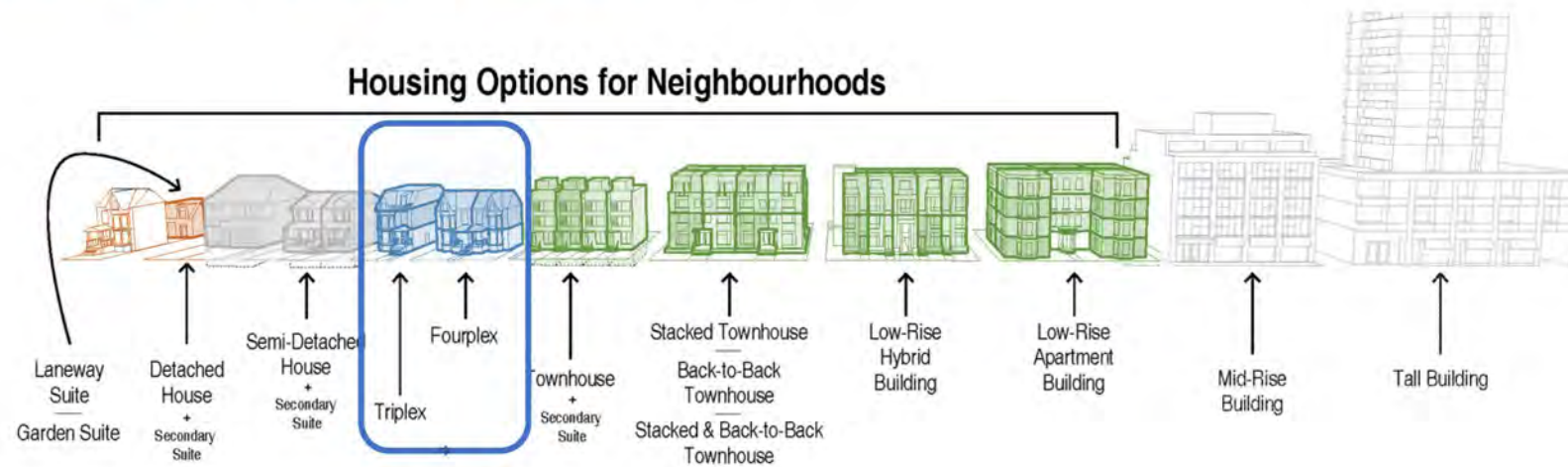
Many homes across the city could be legally expanded to a larger size, but current zoning regulations prevent this extra space from being used as additional units.

Box represents the permitted building size.

More units can be accommodated within the same box that is already permitted.



Multiplex Study Focus



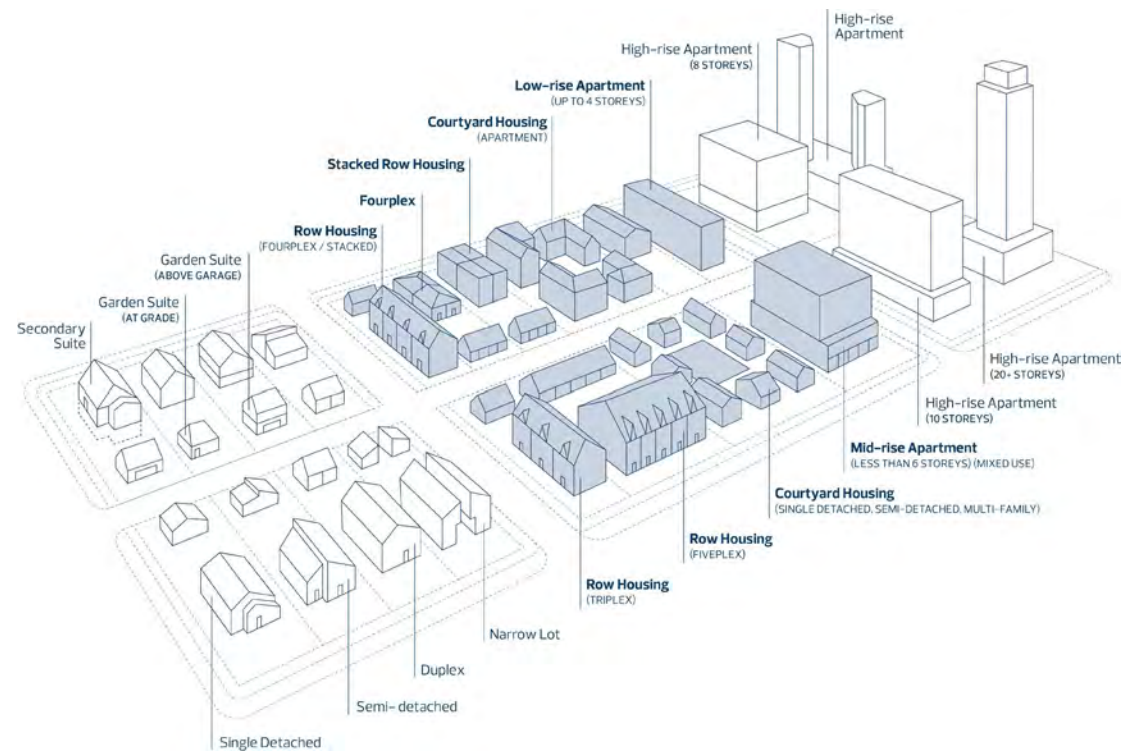
Multiplex Housing

Expanding permissions for duplexes, triplexes and fourplexes within the existing low-rise scale, where they are not currently permitted.



EDMONTON

Missing Middle Zoning Review



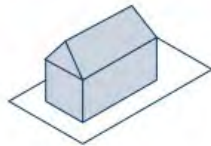
Zoning Bylaw 12900

(RF3) SMALL SCALE INFILL DEVELOPMENT ZONE

Edmonton

The RF3 Zone is to provide for Single Detached Housing and Semi-detached Housing while allowing small-scale conversion and infill redevelopment to buildings containing up to four principal Dwellings under certain conditions, including Secondary Suites and Garden Suites.

	BEFORE	AFTER
Type of housing	<p>Secondary suites, garden suites, single detached, semi-detached, duplex, row, stacked row, and apartment housing</p> <p>Only one secondary or garden suite is allowed with a single detached house</p> <p>Row, stacked row, and apartment housing are only allowed in certain locations</p>	<p>Secondary suites, garden suites, single detached, semi-detached, duplex, row, stacked row, and apartment housing</p> <p>One secondary suite AND one garden suite will be allowed with a single detached house</p> <p>Multi-unit housing will be allowed mid-block, but the maximum building length will be 28.1 metres</p>
Minimum Site Area	<p>150 m² per dwelling for duplex housing</p> <p>221 m² per dwelling for semi-detached housing</p> <p>150 – 186 m² per dwelling for row housing</p> <p>750 m² for apartment and stacked row housing</p>	<p>150m²</p> <p>per dwelling for everything but single detached housing</p>
Maximum number of dwellings	<p>4</p>	<p>The number of units in multi-unit housing will be limited by minimum site area and maximum building size</p>
Maximum site coverage	<p>40–45%</p> <p>Depending on type of housing</p>	<p>42%</p> <p>for low density housing</p> <p>45%</p> <p>for multi-unit housing</p>

**What's Staying the Same?**

The Mature Neighbourhood Overlay will still apply to the RF3 zone

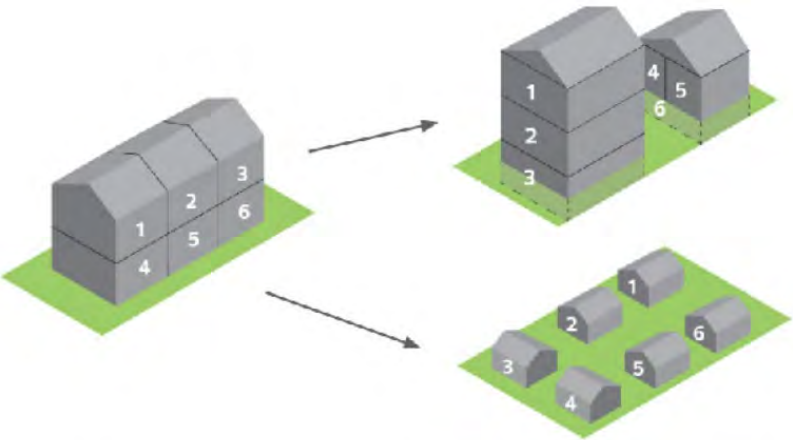
Maximum height: 8.9 metres

Minimum site area for single detached housing

Dwelling units will still have to have a ground-oriented appearance with front doors

www.edmonton.ca/mediumscalezoning

Zoning Bylaw 12900



This diagram shows how Multi-unit Housing can be configured in multiple ways, where six residential units can be located in one, two, or multiple individual buildings.

(RF3) Small Scale Infill Development Zone

Uses

- Multi-unit Housing is introduced as a permitted use
- Allow Multi-unit Housing to be located anywhere that site size requirements are met, including mid-block, to allow mid-block townhouses, for example.
- Single detached, semi-detached, and duplex housing will remain as permitted uses
- Allow a single detached house to have both a garden suite and secondary suite

Appearance

- Require an entrance feature for buildings facing a street
- Require all street-adjacent units with floor area on the main floor to have direct access to ground level in buildings larger than a detached house
- Building facade length limited to less than 28.1m wide

Overlays

- Still subject to all regulations of the Mature Neighbourhood Overlay

Other Regulations

- Remove the four dwelling limit set out in the purpose statement
- Revise allowable activities in rear and side yards, including storage and parking, while ensuring appropriate screening is provided

	Existing (including MNO sites)	New (including MNO sites)
Minimum Site Width	10m – 17m	7.5m
Minimum Site Depth	30m	No change
Minimum Site Area (Single-detached housing)	250.8m ²	225m ²
Minimum Site Area (all other housing forms)	300m ² – 450m ²	300m ²
Maximum Site Coverage (Single, Semi-detached, Duplex Housing)	40% – 42%	42%
Maximum Site Coverage (Multi-unit Housing)	45%	No change

Summary of Changes to Zoning Bylaw 12800

3



VICTORIA

Missing Middle Housing Initiative



Visualizing Houseplex Zoning on Various Lots



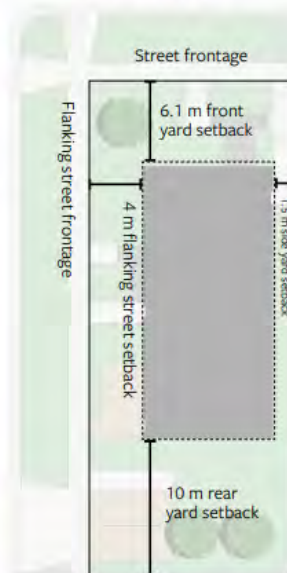
Standard Lot



15 m wide
36 m deep
mid-block lot



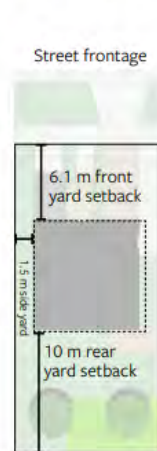
Corner Lot



15 m wide
36 m deep
corner lot



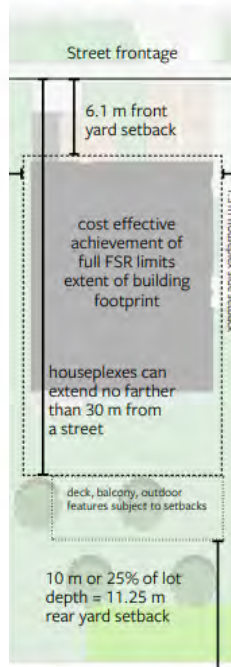
Small Lot



12 m wide
25 m deep
mid-block lot



Large Lot

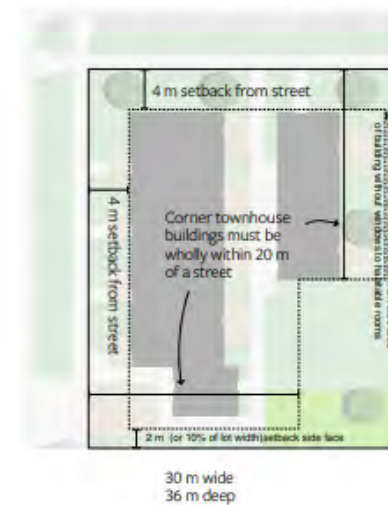


18 m wide by 45 m deep
mid-block lot

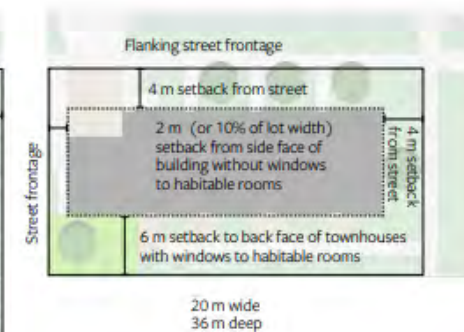
Visualizing Corner Townhouse Zoning on a Variety of Lots



Two Side-by-Side Lots Assembled on a Corner



Wide Corner Lot

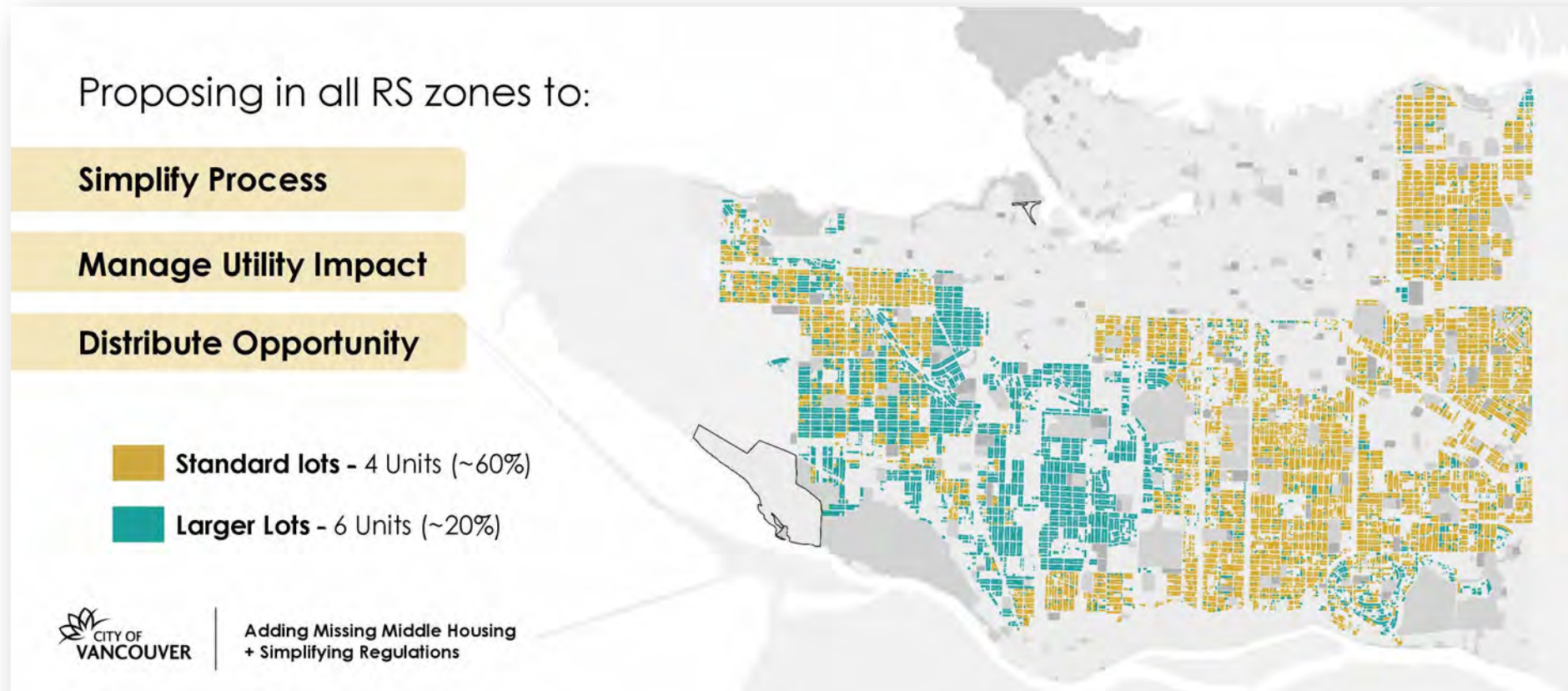


	MISSING MIDDLE REGULATIONS			EXISTING ZONING
	Houseplexes	Corner Townhouses	Heritage Conserving Infill	R1-A/B/G & R-2
Dwelling units (Includes secondary/garden suite)	Up to six per building. *Lots wider than 24 m: two buildings may be permitted	Up to 12	Practical limits depend on lot size and existing building	Single-family home/Duplex: Up to two House conversion: Up to five
Height Sloped roof / Flat roof	10.5 m / 9.5 m	10.5 m / 9.5 m	The greater of 7.6 m or 80% of height of heritage building	7.6 m
Front yard setback (Minimum distance from sidewalk to building)	6.1 m	4 m	4 m	7.5 m *R1-A Zone: on lots deeper than 30 m: 10.5 m
Side yard setback (Minimum distance from side of home to neighbouring property line)	1.5 m or 10% of lot width	2 m or 10% of lot width	5 m one side; 2 m second side If infill is a corner townhouse: 10% of lot width	1.5 m or 10% of lot width (two sides combined total of 4.5 m in R1-B and 5.4 m in R1-6 zone) *R1-A zone: 3 m
Rear yard setback (Minimum distance from rear of home to neighbouring property line)	10 m or 25% of lot depth	6 m	5 m	7.5 m or up to 35% of lot depth *Waterfront lots: 12 m
Flanking street setback (Only applies to homes on corner lots)	4 m	4 m	4 m	3.5 m or up to 15% of lot width *R1-A zone: 6-10.5 m depending on lot width
Open Site Space Minimum (Portion of lot not covered by building, parking or driveway)	45%	45%	30%	Range from no minimum to 50%
Site Coverage Maximum (Portion of the lot that can be covered by buildings)	40%	40%	50%	Range from 30 to 40% *R1-A zone: 25% for a lot with duplex or townhouse
Floor Space Ratio (FSR), Affordability and Amenity Contribution	Achieving full density of 1.1 FSR (1.0 for houseplexes) requires at least one amenity contribution (e.g., cash to housing and amenity funds, below market, affordable or rental housing) Without a contribution, max density is 0.5 FSR		Heritage dedication	No contribution or affordability requirement and a maximum density of 0.5 FSR *R1-B: Max floor area of 300-420 sq m *R1-A: Min floor area of 130 sq m
Family-suitable homes required	Minimum of two, or 30% of all homes, must be three-bedroom homes	Minimum of two 3-bedroom homes or 30% of all homes on lot	No requirement	No requirement
Adaptable dwelling units required	At least one	At least one	No requirement	No requirement
Secondary unit required (To ensure no net loss of on-site rentals)	At least one	At least one	Permitted but not required	Permitted but not required *R-2 zone: not permitted
Design Review and Application Process	Requires a development permit but if it meets Missing Middle Design Guidelines can proceed without Council process			No design guideline review. Can proceed to construction without formal Council rezoning process and public hearing *R-2 zone: Must demonstrate compliance with Neighbourliness Guidelines for Duplexes

VANCOUVER

Adding Missing Middle Housing + Simplifying Regulations





Existing Options



House + Laneway

3 Units
0.86 FSR



Duplex + Suites

4 Units
0.7 FSR



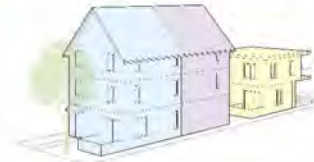
MCD + Infill

6 Units
0.85 FSR



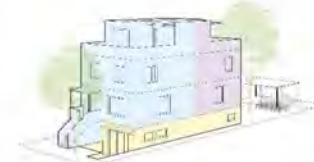
Adding Missing Middle Housing
+ Simplifying Regulations

New Multiplex Options (Illustrative Examples)



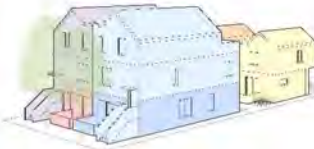
- 3 to 6 units

- 1.0 FSR



- 3 storeys ~36' height

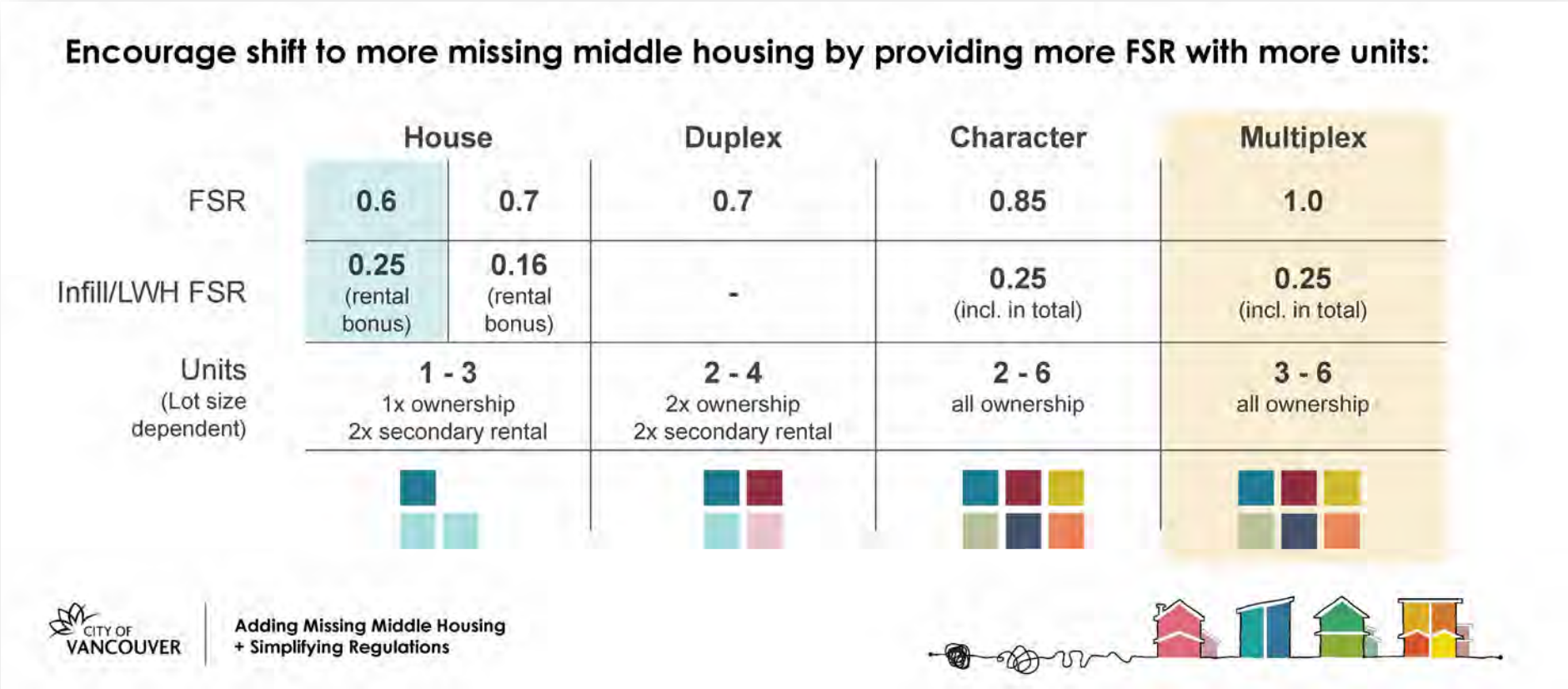
- Focus on family-size units & improved accessibility

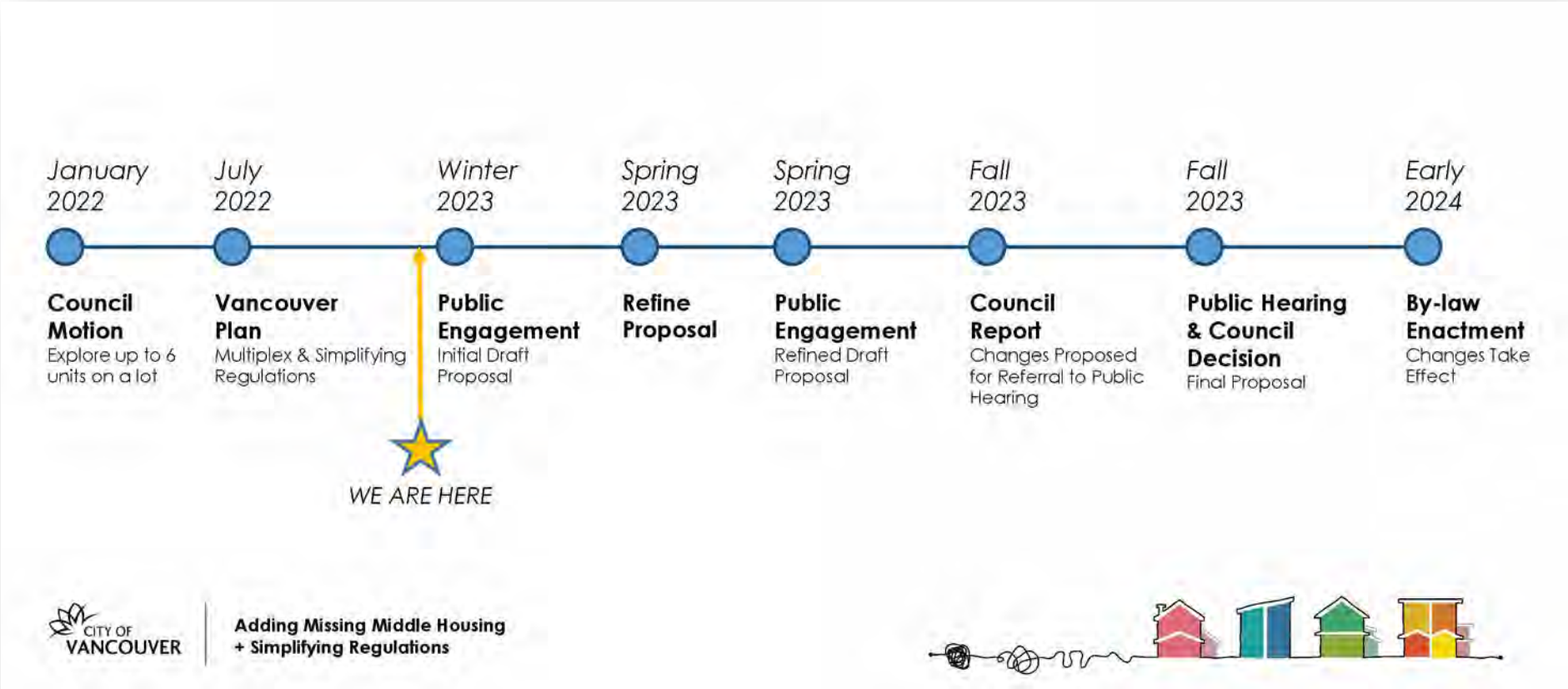


- Low or no on-site car parking

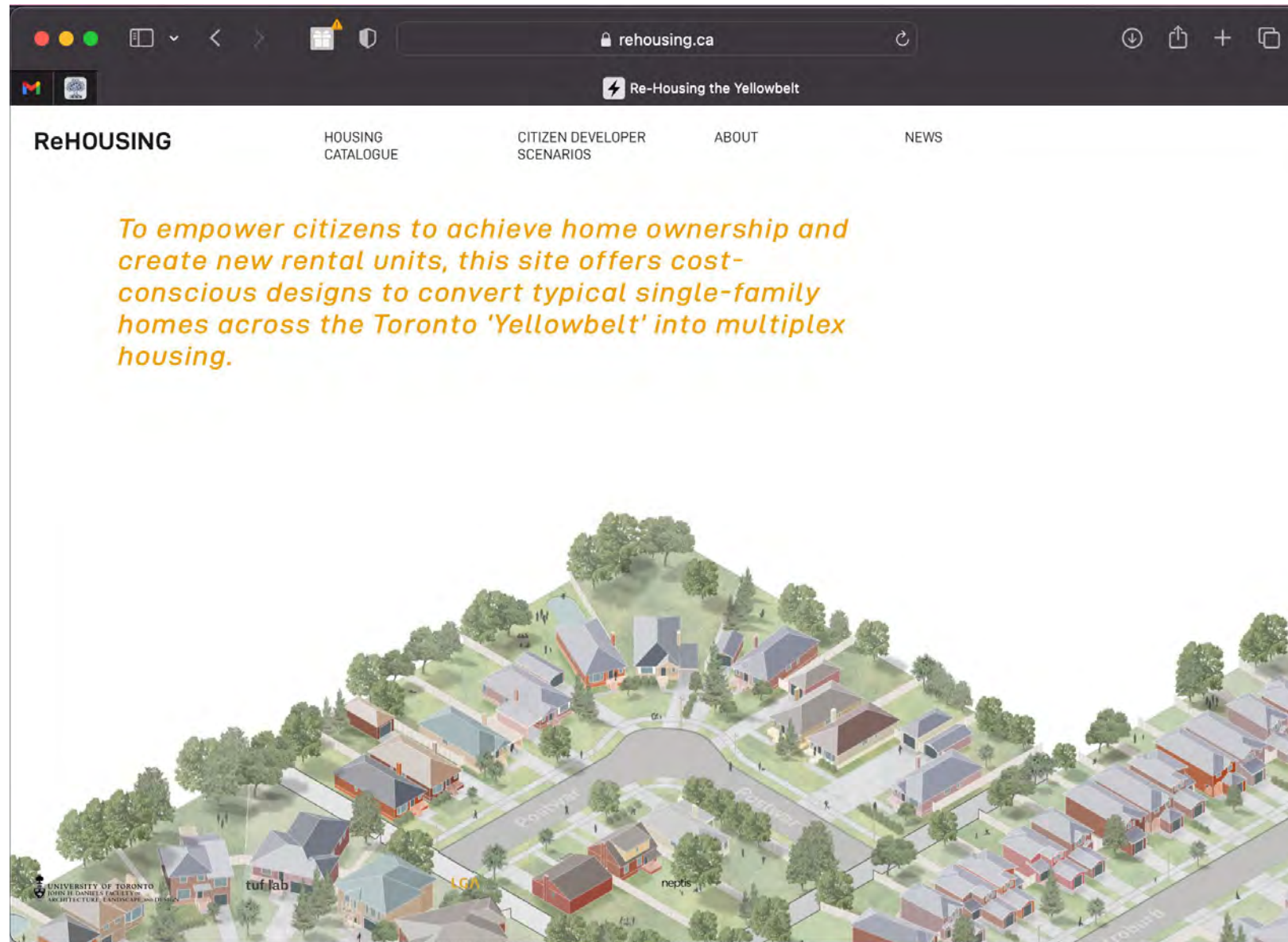
- Set rate density bonus charge or below-market unit







www.REHOUSING.ca

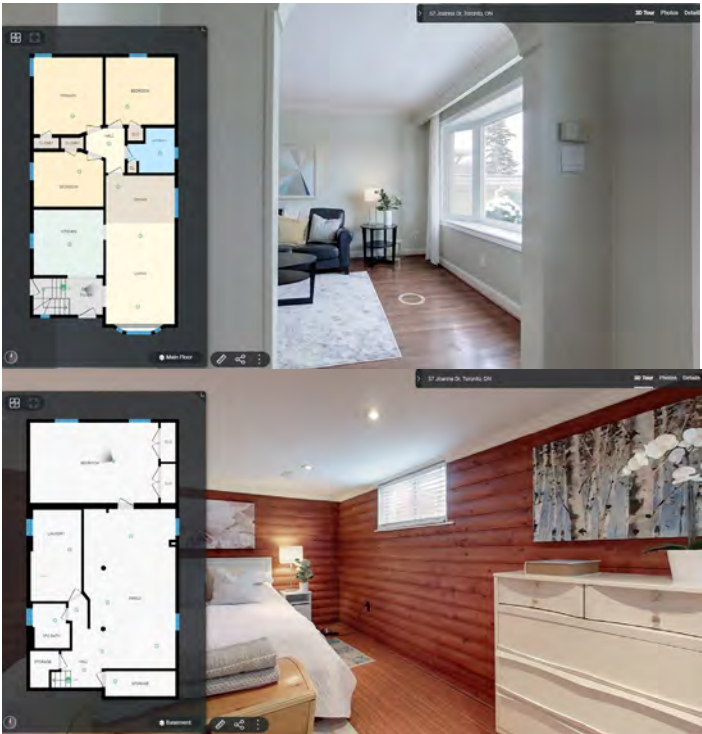




57 Joanna Dr
Scarborough - Westford-Maryvale
Detached

Listed for: \$-999,999 \$-1,999,999
Sold for: **\$1,380,000**
Sold in Mar 2022

Estimated value @
\$1,033,874
As of 2022-09



Guild Hall Drive, Scarborough

Lot Size: 43.0 x 131.0 ft
For Sale: \$1,197,000 (June 2022)



Deanvar Ave, Scarborough

Lot Size: 40.0 x 125.0 ft
Last Sold: \$937,500 (July 2021)



Shier Drive, Scarborough

Lot Size: 42.0 x 120.0 ft
For Sale: \$1,049,000 (May 2022)



Jeanette Street, Scarborough

Lot Size: 40.0 x 142.0 ft
Last Sold: \$1,075,000 (June 2022)



O'Connor Drive, Toronto

Lot Size: 25.0 x 100.0 ft
For Sale: \$1,229,000 (May 2022)



Sunray Crescent, North York

Lot Size: 50.0 x 123.1 ft
Last Sold: \$999,000 (Dec 2021)



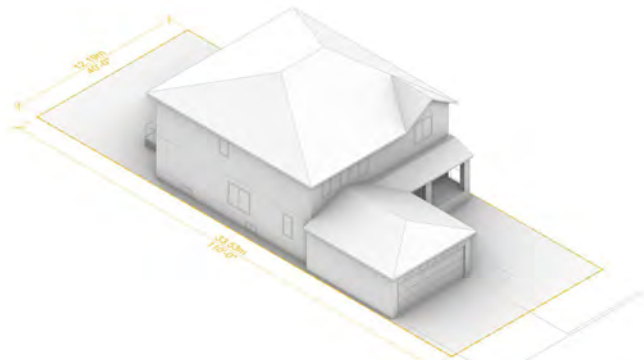
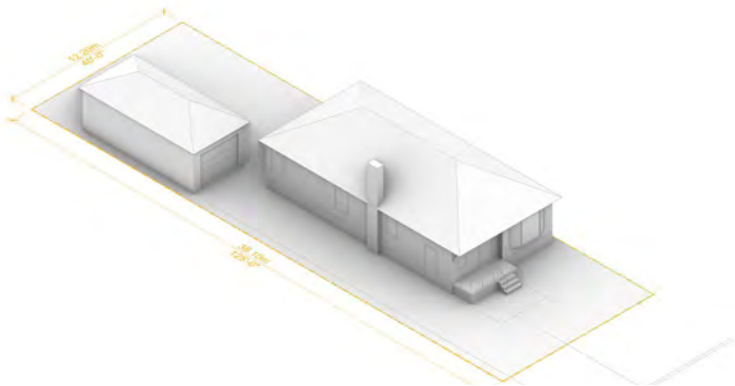
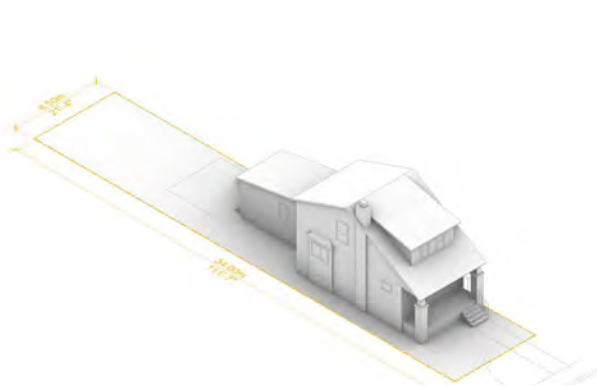
Ranee Ave, North York

Lot Size: 40.0 x 132.0 ft
Last Sold: \$1,250,000 (Oct 2021)

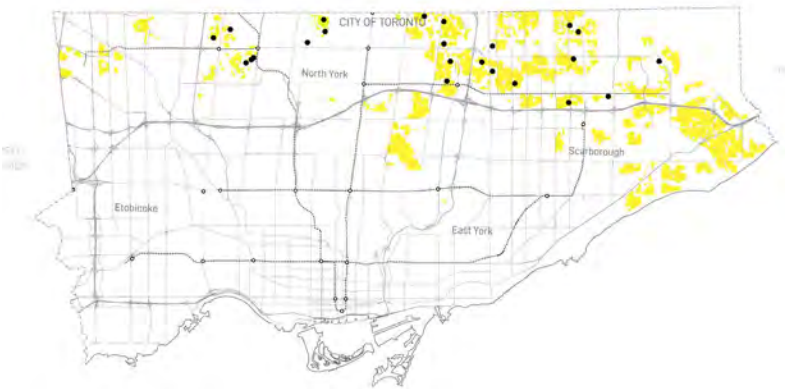
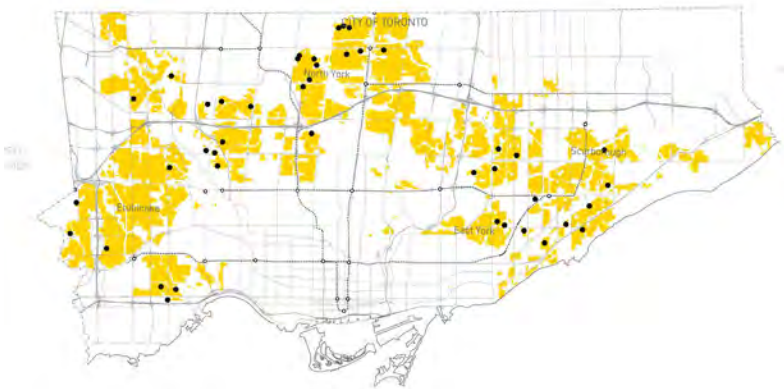
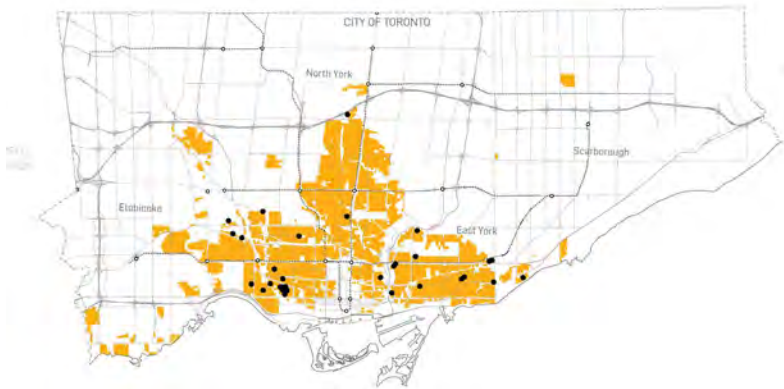


Olive Ave, North York

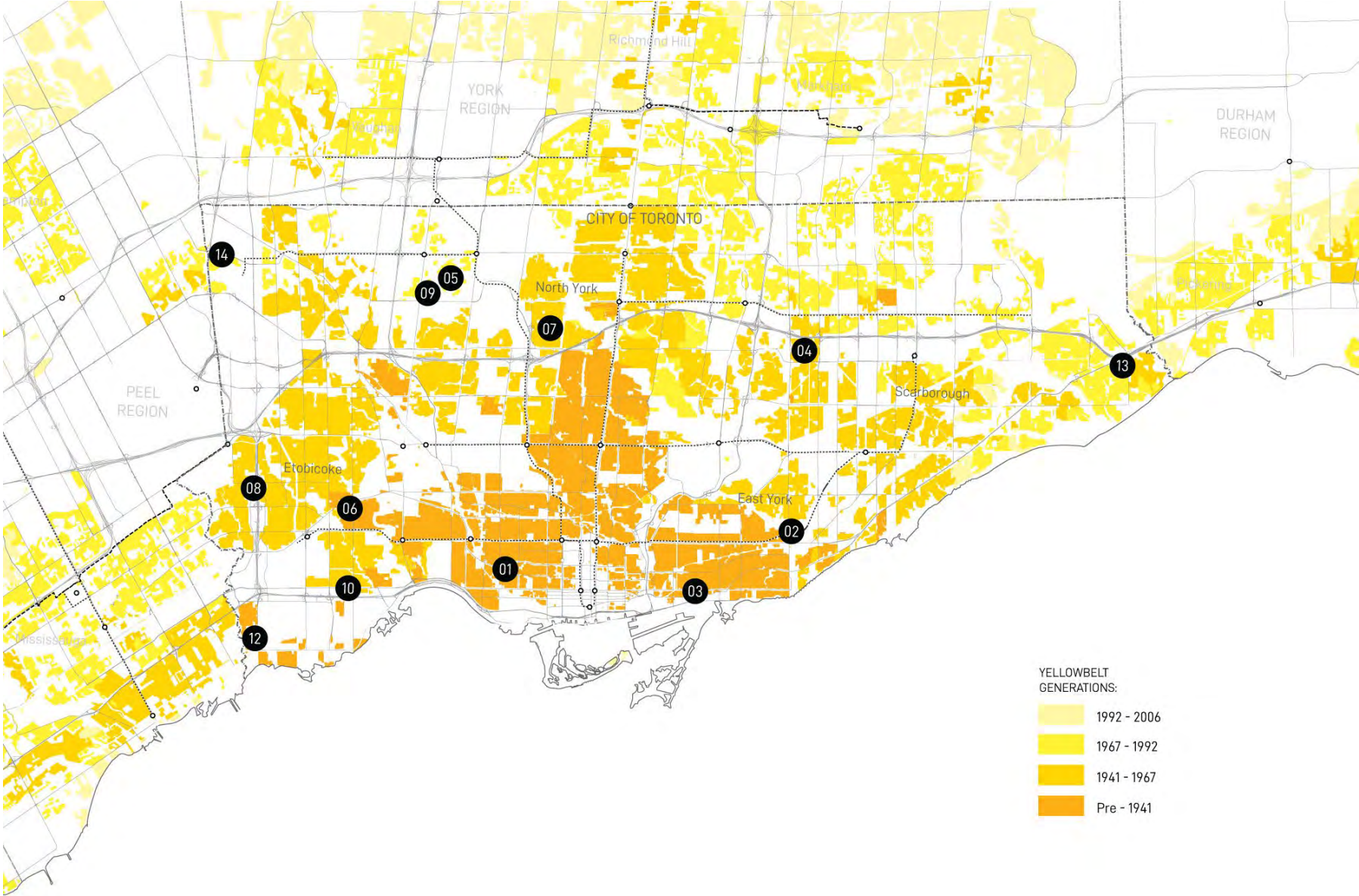
Lot Size: 45.0 x 160.0 ft
For Sale: 1,899,999 (May 2022)

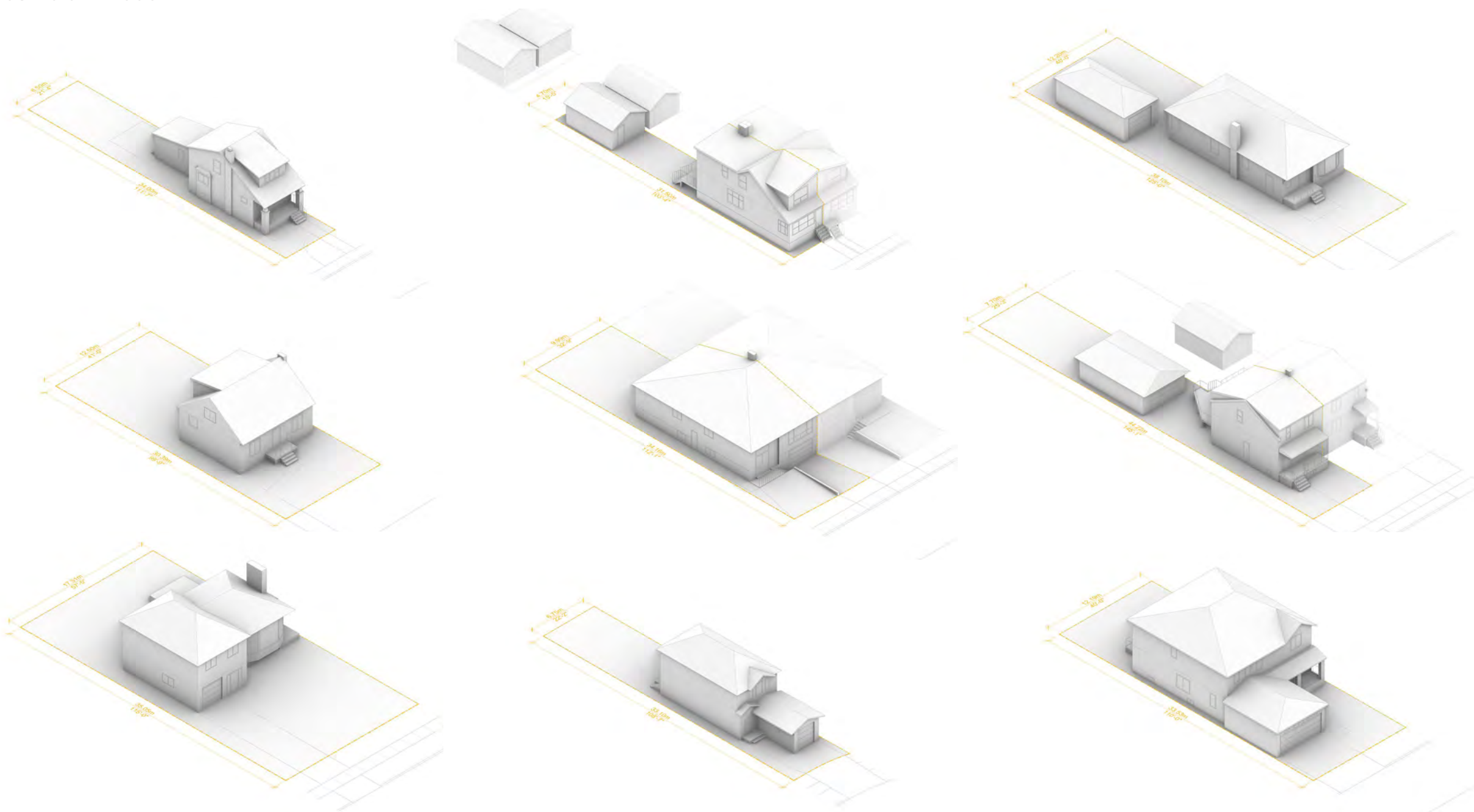


Downtown // - 1941 **Post War Suburb // 1941 - 1967** **Metroburb // 1967 - 1992**



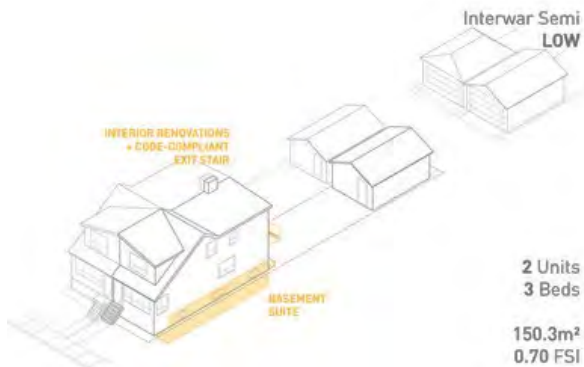
- 01 Prewar Rowhouse
- 02 Interwar Detached
- 03 Interwar Semi
- 04 Postwar Bungalow
- 05 Postwar Backsplit
- 06 Veteran's Cottage
- 07 Postwar Two-Storey
- 08 Postwar Sidesplit
- 09 Postwar Semi 1-Floor
- 10 Postwar Semi 2-Floor
- 11 Metroburb Semi
- 12 Metroburb Narrow
- 13 Metroburb Wide





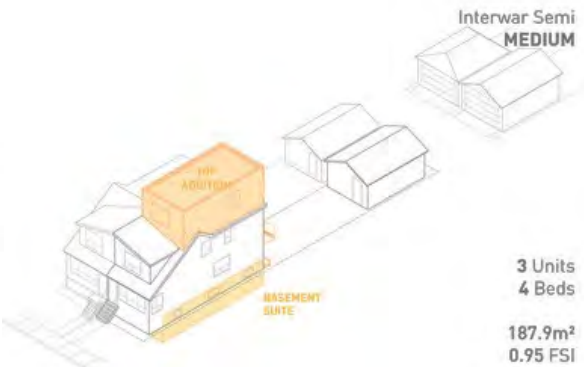
LOW
\$

This scheme is limited to interior renovations within the existing building footprint.



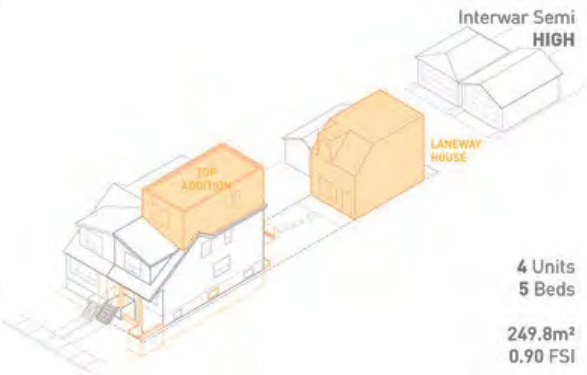
MEDIUM
\$\$

This scheme is limited to minor additions, accessory dwelling units (Garden Suite or Laneway Suite) and renovations within the existing building footprint, and may include the scope of work included in the 'LOW' option.



HIGH
\$\$\$

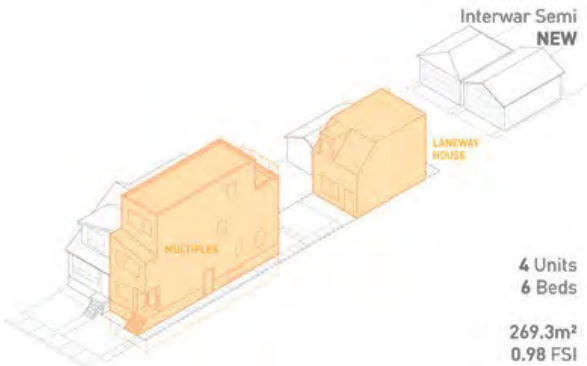
This scheme is limited to major additions or a combination of minor additions, accessory dwelling units (Garden Suite or Laneway Suite) and renovations within the existing building footprint, and may include the scope of work included in the 'LOW' or 'MEDIUM' option.



NEW
\$\$\$\$\$

This scheme assumes demolition of the existing house, and construction of a new multiplex within the permitted building size for a new house (see Zoning Diagram)

Depending on lot size, a Garden Suite or Laneway Suite is also included.



PART 9 BUILDINGS ONLY
max. 3 storeys
max. 600m² building footprint

LOW
\$



Interior Renovation
Michael Piper's House

MEDIUM
\$\$



Laneway Suite
LGA Architectural Partners

HIGH
\$\$\$



Fourplex on Dundas
Gabriel Fain Architects

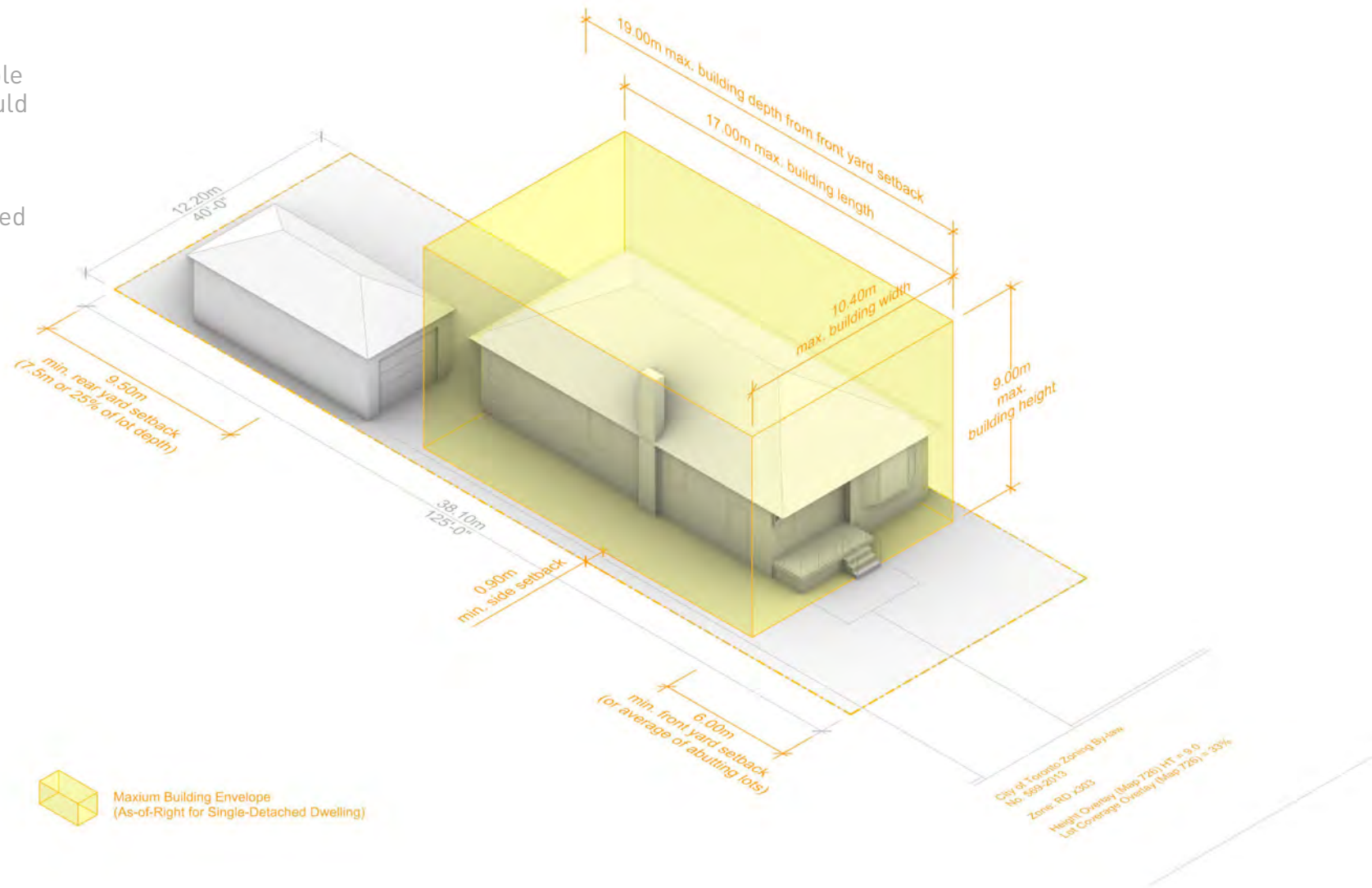
NEW
\$\$\$\$\$

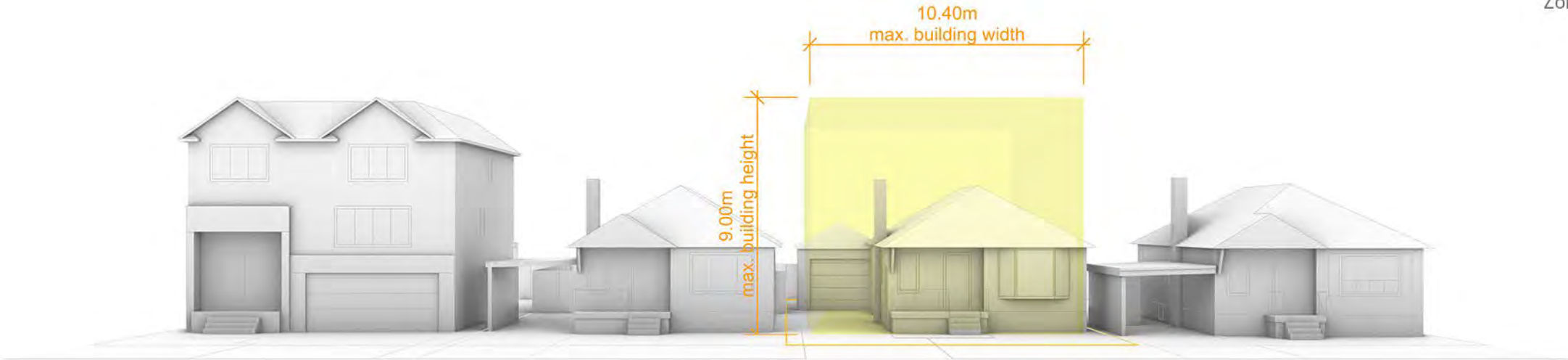


Ulster Condos
LGA Architectural Partners

The housing options were designed with the principle that the permitted building size for a multiplex should be the same, as for a single-detached house.

These zoning overlay diagrams show the allowable “as-of-right” building size for a house, and were used to establish the maximum building size for the multiplex designs.





GROUND FLOOR

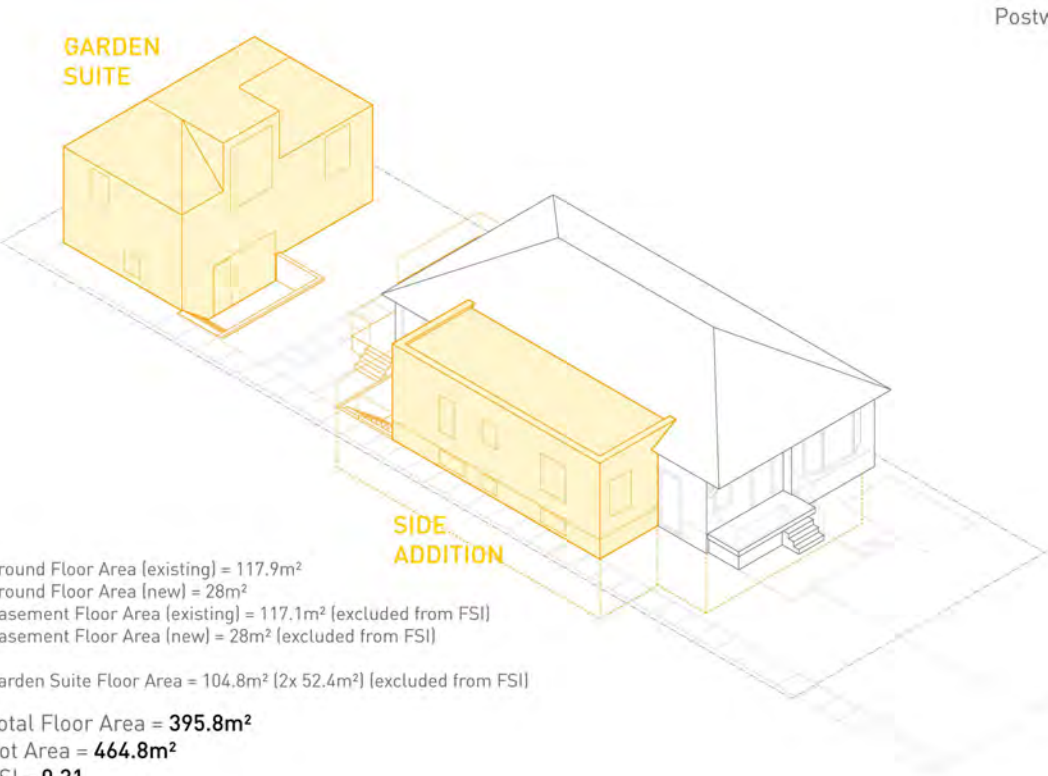
HOUSING OPTION
Postwar Bungalow

Total Unit Count

5 Units (4 + Garden Suite)

Total Occupancy Count

9 Beds

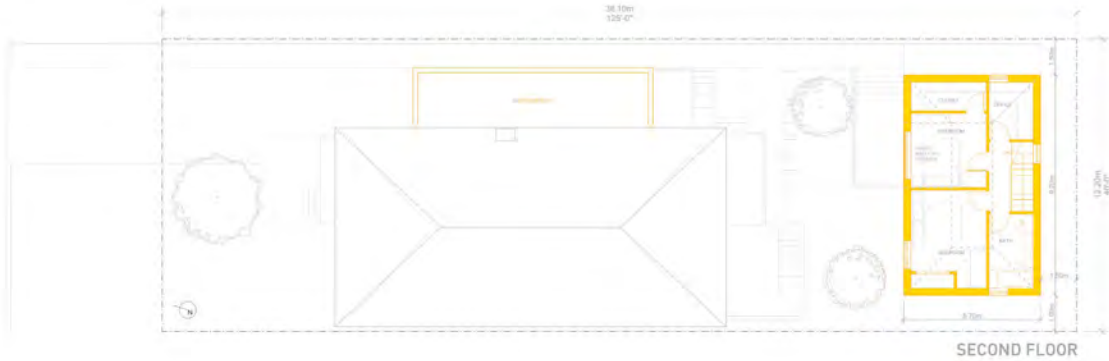


Ground Floor Area (existing) = 117.9m²
Ground Floor Area (new) = 28m²
Basement Floor Area (existing) = 117.1m² (excluded from FSI)
Basement Floor Area (new) = 28m² (excluded from FSI)

Garden Suite Floor Area = 104.8m² (2x 52.4m²) (excluded from FSI)

Total Floor Area = **395.8m²**
Lot Area = **464.8m²**
FSI = **0.31**

Postwar Bungalow
HIGH



Unit Count

1 Unit

Detached House
+ Garage

Occupancy Count

3 Beds



Unit Count

5 Units

Multiplex
+ Garden Suite

Occupancy Count

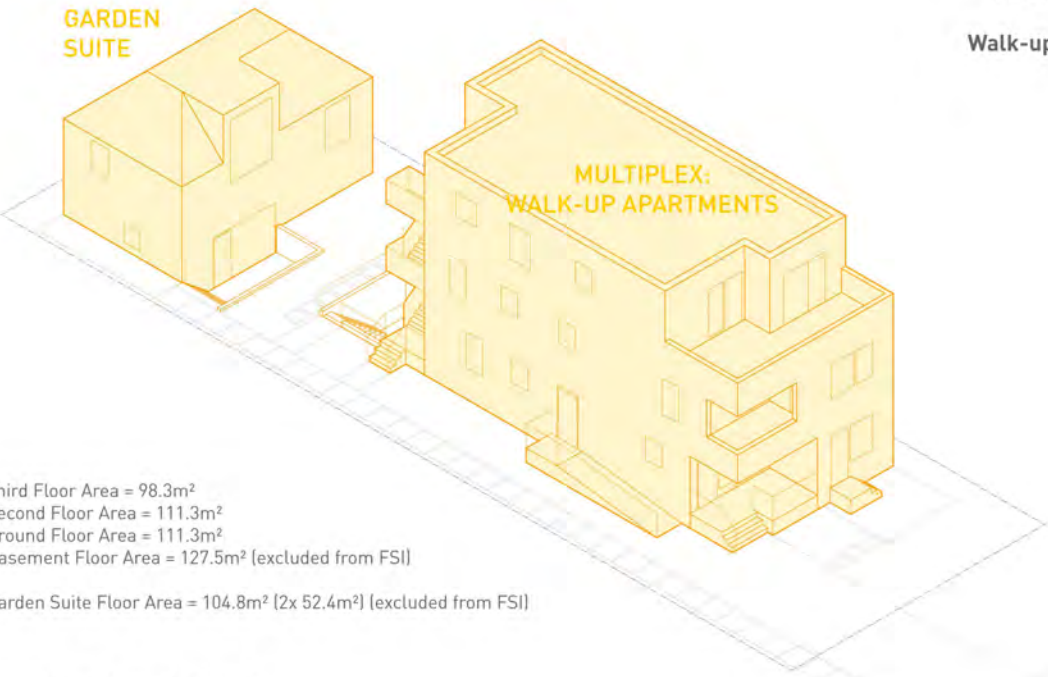
9 Beds



HOUSING OPTION
Postwar Bungalow

Total Unit Count
Total Occupancy Count

5 Units (4 + Garden Suite)
13 Beds

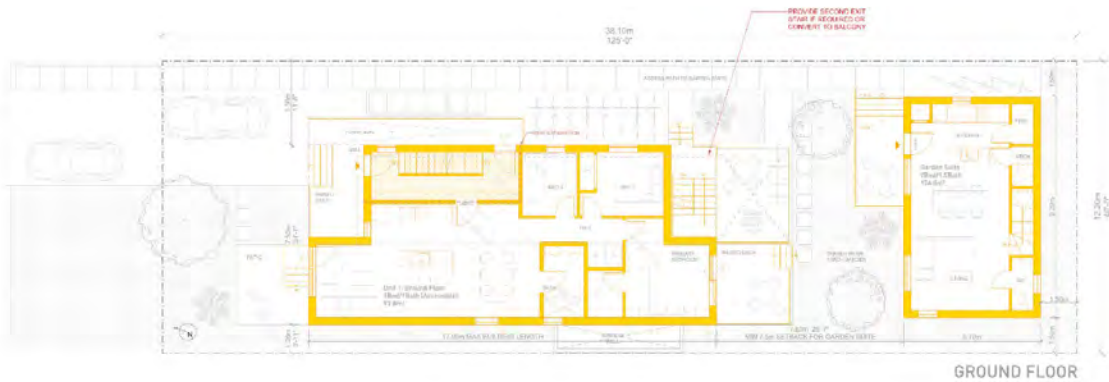
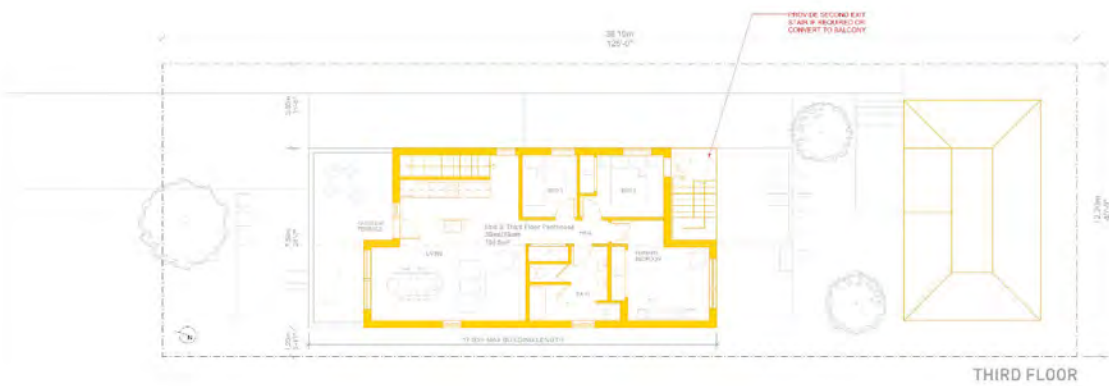


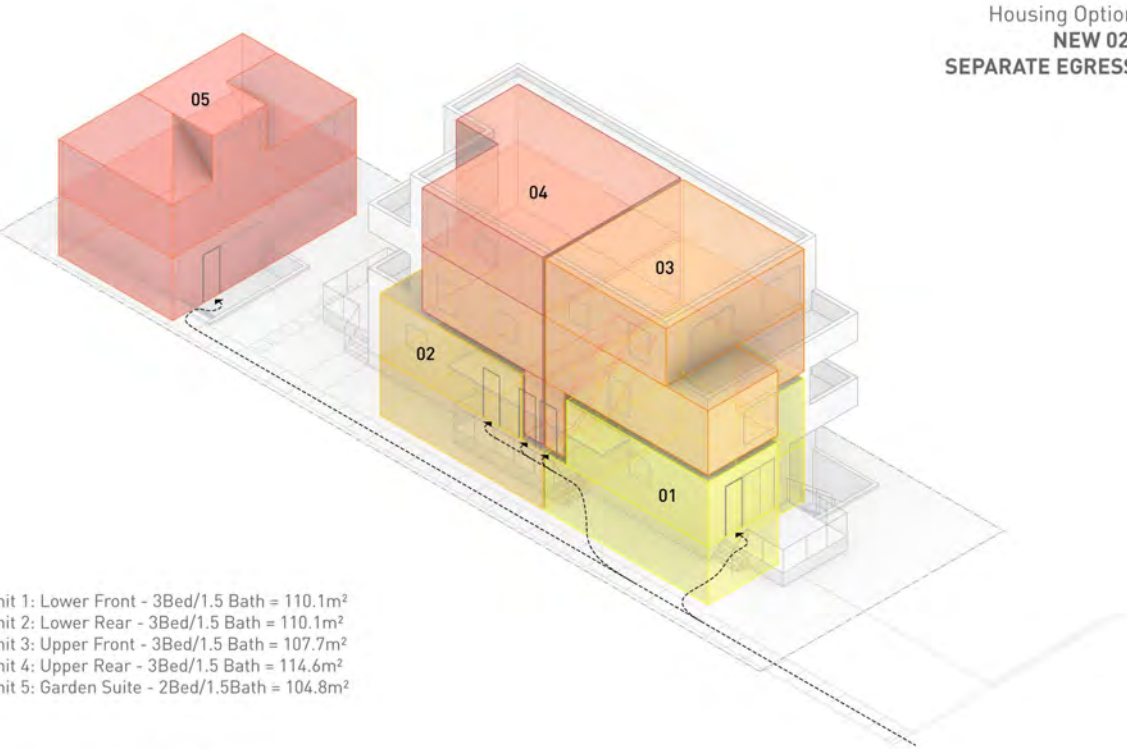
Third Floor Area = 98.3m²
Second Floor Area = 111.3m²
Ground Floor Area = 111.3m²
Basement Floor Area = 127.5m² [excluded from FSI]

Garden Suite Floor Area = 104.8m² [2x 52.4m²] [excluded from FSI]

Total Floor Area = 553.2m²
Lot Area = 464.8m²
FSI = 0.69

Postwar Bungalow
NEW
Walk-up Apartments

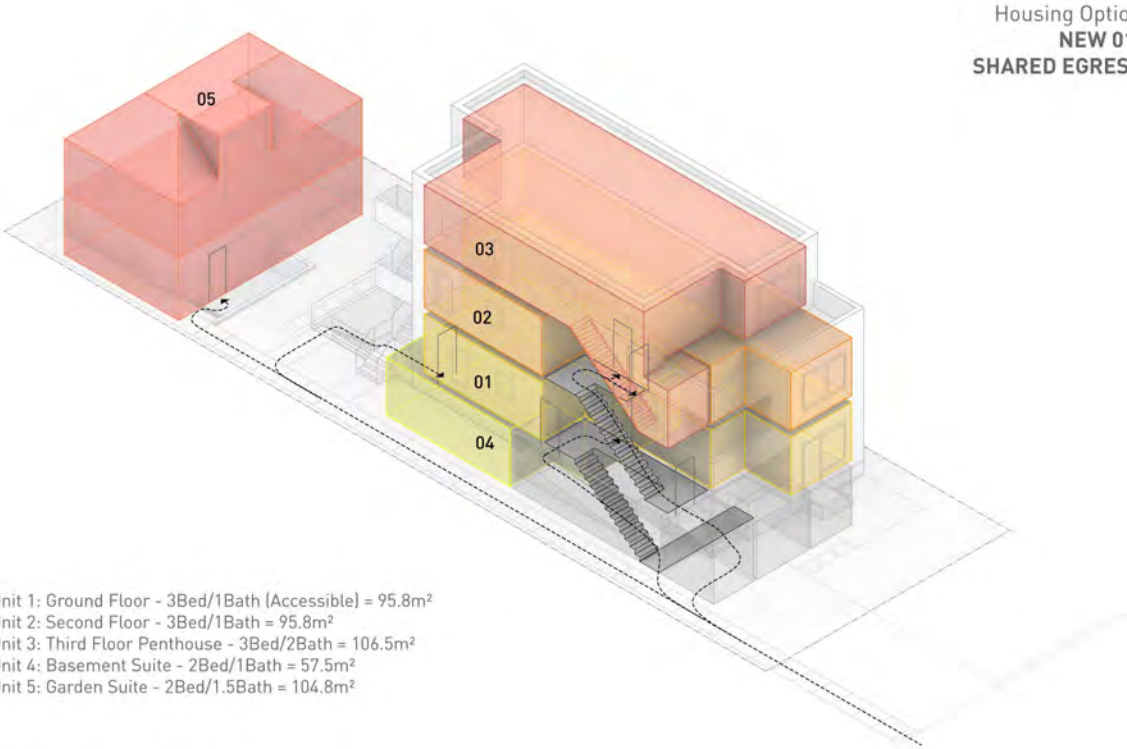




Housing Option
NEW 02:
SEPARATE EGRESS

- Unit 1: Lower Front - 3Bed/1.5 Bath = 110.1m²
- Unit 2: Lower Rear - 3Bed/1.5 Bath = 110.1m²
- Unit 3: Upper Front - 3Bed/1.5 Bath = 107.7m²
- Unit 4: Upper Rear - 3Bed/1.5 Bath = 114.6m²
- Unit 5: Garden Suite - 2Bed/1.5Bath = 104.8m²

Total Unit Count = **5 Units**
Total Occupancy Count = **14 Bedrooms**



Housing Option
NEW 01:
SHARED EGRESS

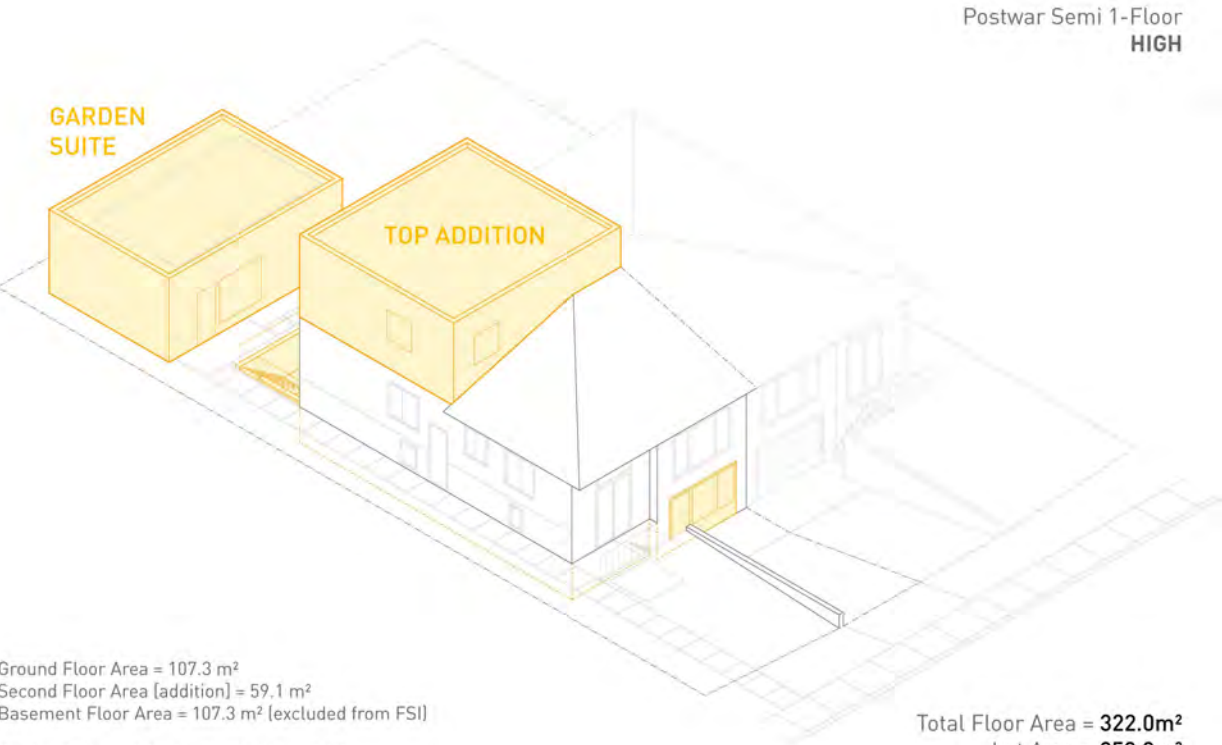
- Unit 1: Ground Floor - 3Bed/1Bath (Accessible) = 95.8m²
- Unit 2: Second Floor - 3Bed/1Bath = 95.8m²
- Unit 3: Third Floor Penthouse - 3Bed/2Bath = 106.5m²
- Unit 4: Basement Suite - 2Bed/1Bath = 57.5m²
- Unit 5: Garden Suite - 2Bed/1.5Bath = 104.8m²

Total Unit Count = **5 Units**
Total Occupancy Count = **13 Bedrooms**



HOUSING OPTION
Postwar Semi 1-Floor

Total Unit Count **5 Units (4 + Garden Suite)**
Total Occupancy Count **8 Beds**

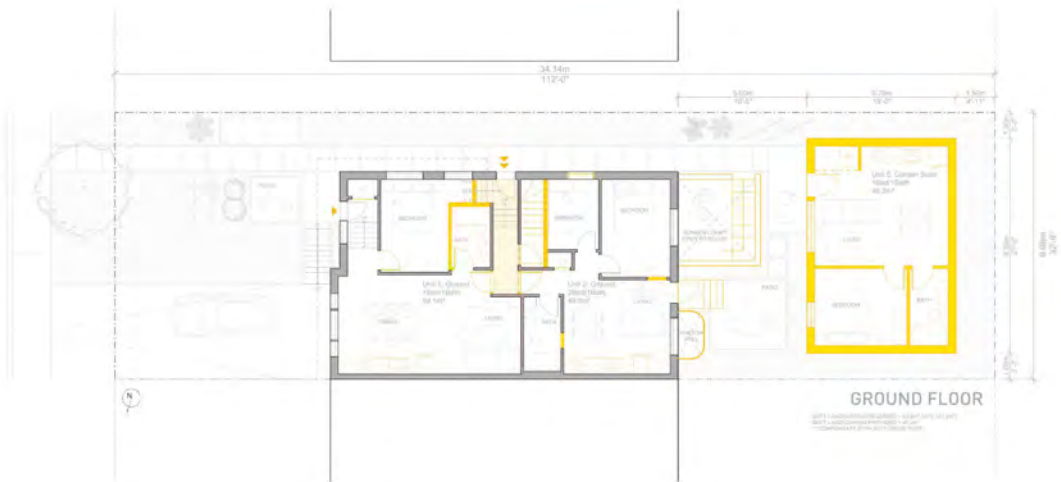


Ground Floor Area = 107.3 m²
Second Floor Area [addition] = 59.1 m²
Basement Floor Area = 107.3 m² [excluded from FSI]

Garden Suite = 48.3m² [excluded from FSI]

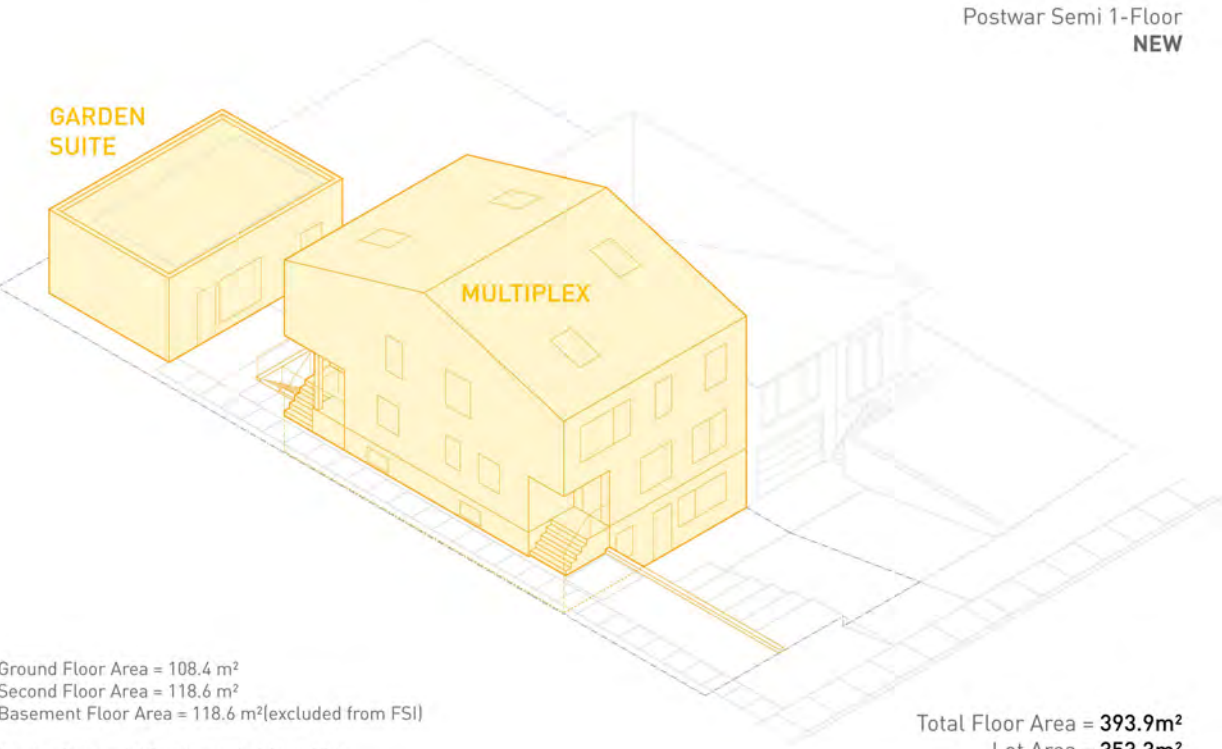
Postwar Semi 1-Floor
HIGH

Total Floor Area = **322.0m²**
Lot Area = **353.3m²**
FSI = **0.47**



HOUSING OPTION
Postwar Semi 1-Floor

Total Unit Count **5 Units (4 + Garden Suite)**
Total Occupancy Count **11 Beds**

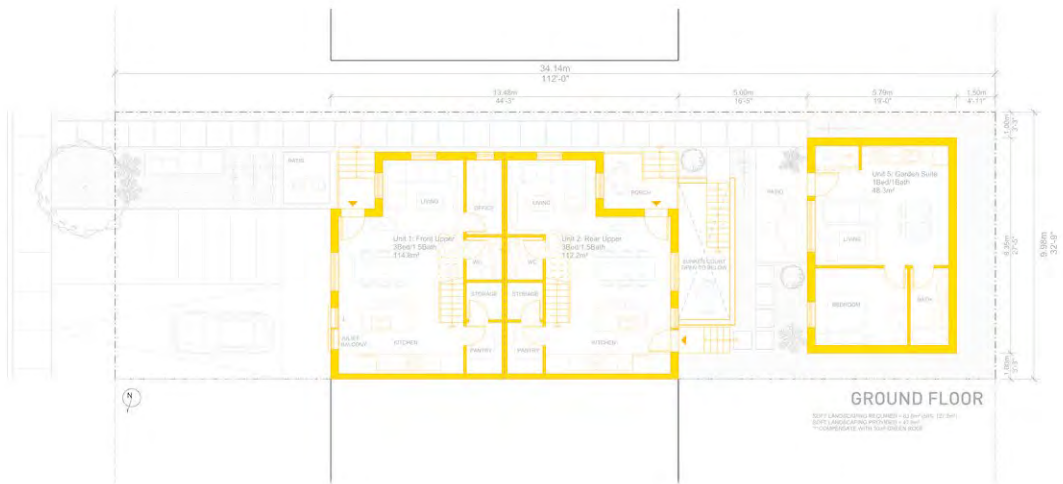


Ground Floor Area = 108.4 m²
Second Floor Area = 118.6 m²
Basement Floor Area = 118.6 m²(excluded from FSI)

Garden Suite = 48.3m² (excluded from FSI)

Postwar Semi 1-Floor
NEW

Total Floor Area = **393.9m²**
Lot Area = **353.3m²**
FSI = **0.64**



Unit Count

1 Unit

Semi-Detached
House + Garage

Occupancy Count

3 Beds



Unit Count
5 Units
Multiplex
+ Garden Suite

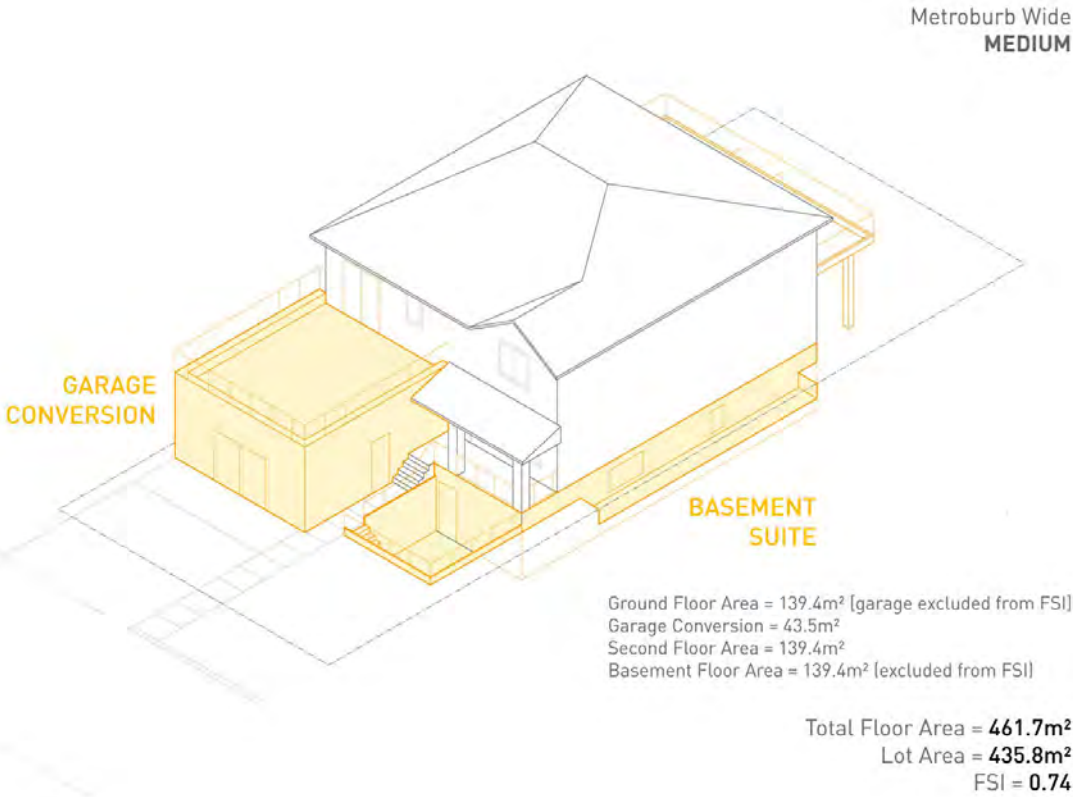
Occupancy Count
11 Beds



HOUSING OPTION
Metroburb Wide

Total Unit Count
Total Occupancy Count

5 Units (4 + Garage Conversion)
9 Beds



Unit Count

1 Unit

Single-Detached
House + Garage

Occupancy Count

4 Beds



Unit Count
5 Units
Multiplex

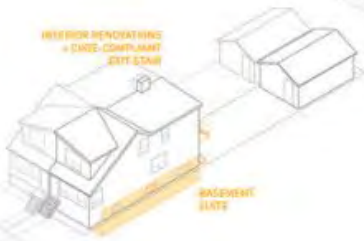
Occupancy Count
9 Beds



HOUSING CATALOGUE

REHOUSING

Interwar Semi
LOW



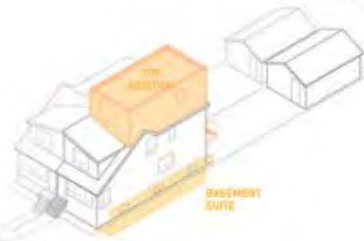
INTERIOR RENOVATIONS
+ CARP-COMPLIANT
EXIT STAIR

2 Units
3 Beds

150.3m²
0.70 FSI

BASEMENT SUITE

Interwar Semi
MEDIUM




TOP ADDITION

3 Units
4 Beds

187.9m²
0.95 FSI

BASEMENT SUITE

Interwar Semi
HIGH



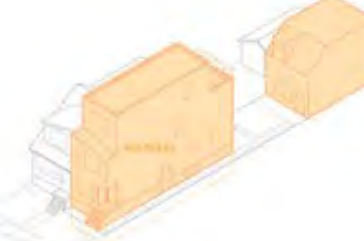
TOP ADDITION

LANEWAY HOUSE

4 Units
5 Beds

249.8m²
0.90 FSI

Interwar Semi
NEW




LANEWAY HOUSE

4 Units
6 Beds

269.3m²
0.98 FSI

Postwar Bungalow
LOW




BASEMENT SUITE

2 Units
6 Beds

235.0m²
0.25 FSI

Postwar Bungalow
MEDIUM




GARDEN SUITE

4 Units
8 Beds

339.8m²
0.25 FSI

Postwar Bungalow
HIGH




GARDEN SUITE

SIDE ADDITION

5 Units
9 Beds

395.8m²
0.31 FSI

Postwar Bungalow
NEW



GARDEN SUITE

MULTIPLEX

5 Units
13 Beds

553.2m²
0.69 FSI

Postwar Backsplit
LOW



BASEMENT SUITE

4 Units
6 Beds

293.3m²
0.39 FSI

Postwar Backsplit
MEDIUM



SIDE ADDITION

BASEMENT SUITE

4 Units
7 Beds

314.1m²
0.43 FSI

Postwar Backsplit
HIGH



GARDEN SUITE


SIDE ADDITION

BASEMENT SUITE

6 Units
9 Beds

403.0m²
0.48 FSI

Postwar Backsplit
NEW



GARDEN SUITE

MULTIPLEX

7 Units
13 Beds

644.1m²
0.80 FSI

Housing Option	INTERWAR SEMI 3 STOREY SEMI-DETACHED MULTIPLEX (3 UNITS) + 2 STOREY LANEWAY SUITE (1 UNIT)	POSTWAR BUNGALOW 3 STOREY DETACHED MULTIPLEX (4 UNITS) + 2 STOREY GARDEN SUITE (1 UNIT)	METROBURB WIDE 3 STOREY DETACHED MULTIPLEX (4 UNITS)
Address	7 MARIGOLD AVE TORONTO, ON M4M 3B1	54 JOANNA DRIVE SCARBOROUGH, ON M1R 4J3	20 DAWN Mist CRESCENT SCARBOROUGH, ON M1V 4K5
ZONING LABEL	R (d1.0) (x807) Height Overlay (Map 644) HT = 12.0 Floor Space Index ("d") - 1.0	RD (x303) Height Overlay (Map 726) HT = 9.0 Lot Coverage Overlay (Map 726) = 33%	RD (x806) Height Overlay (Map 678) HT = 9.0 / ST 2 (2 STOREYS) Lot Coverage Overlay (Map 678) = 40%
Lot Coverage	LOT COVERAGE = 33.7% (PREVIOUSLY 36.60%)	LOT COVERAGE = 25.86%	LOT COVERAGE = 26.1 % (PREVIOUSLY 35.9%)
Floor Space Index	FSI = 0.87 (PREVIOUSLY 1.03) ZBL 10.10.40.40 Floor Area (1) Floor Space Index The design has been revised to comply with the zone label maximum floor space index of 1.0. It still does exceed the standard zoning by-law FSI of 0.6 by a factor of 0.27	FSI = 0.62 (PREVIOUSLY 0.69) ZBL 10.20.40.40 Floor Area (1) Floor Space Index In the RD zone, the permitted maximum floor space index is: (A) the numerical value following the letter "d" in the zone label on the Zoning By-law Map; and (B) if the zone label on the Zoning By-law Map does not include a "d" value on the Zoning By-law Map, the floor space index is not limited by this regulation.	FSI = 0.6 (PREVIOUSLY 0.88) ZBL Exception 900.3.10(1462)(a)(ii) The design has been revised to comply with Site Specific Provisions (A)(ii) the maximum floor space index is greater than the lesser of 0.5 times the lot area of 379 square metres; if the lot area is 408 square metres to 697 square metres.
Building Height	BUILDING HEIGHT = 9.50m (PREVIOUSLY 10.0m)	BUILDING HEIGHT = 9.00m (PREVIOUSLY 9.10m)	BUILDING HEIGHT = 8.10m (PREVIOUSLY 9.00m)
Main Wall Height	ZBL 10.10.40.10 Height (2) Maximum Height of Specified Pairs of Main Walls The design has been revised to comply with the main wall height restriction of 9.50m, determined by subtracting 2.5m from the 12.0m Height Overlay Maximum Building Height.	ZBL 10.20.40.10 Height (2) Maximum Height The design has been revised to comply with the Height Overlay Map limit of 8.0m. (2) Maximum Height of Specified Pairs of Main Walls (A) The design has also been revised to comply with the maximum height of specified pairs of main walls for no less than 60% of the total width of all front and all rear main walls.	ZBL 10.20.40.10 Height (2) Maximum Height The design has been revised to comply with the Height Overlay Map limit of two storeys (4) Restrictions for a Detached House with a Flat or Shallow Roof The design has been revised to comply with the permitted maximum building height of 7.2m for a detached house with a flat roof
Flat Roof Restrictions			
Main Pedestrian Entrance Height	MAIN PEDESTRIAN ENTRANCE HEIGHT = 1.0M	MAIN PEDESTRIAN ENTRANCE HEIGHT = 0.6M	MAIN PEDESTRIAN ENTRANCE HEIGHT = 0.1M
Building Length	BUILDING LENGTH = 17.0m	BUILDING LENGTH = 17.0m	BUILDING LENGTH = 11.50m (PREVIOUSLY 17.0m)
Building Depth	ZBL 10.10.40.30 Building Depth (1) Maximum Building Depth The design follows the permitted maximum building depth of 17.0m for a semi-detached/detached house and does not comply with the 14.0m maximum building depth for a triplex.	ZBL 10.20.40.20 Building Length (1) Maximum Building Length if Required Lot Frontage is in Specified Range The design follows the permitted maximum building depth of 17.0m for a detached house	ZBL 10.20.40.20 Building Length (1) Maximum Building Length if Required Lot Frontage is in Specified Range The design complies with the permitted maximum building depth of 17.0m for a detached house.
Setbacks	SIDE YARD SETBACK = 1.2m (PREVIOUSLY 0.9m) ZBL 10.10.40.70 Setbacks (3) Minimum Side Yard Setback The design has been revised to comply with the 1.2m side yard setback for a triplex.	SIDE YARD SETBACK = 1.2m AND 3.5m ZBL 10.20.40.70 Setbacks (3) Minimum Side Yard Setback The design complies with the minimum side yard setback of 0.9m if the required minimum lot frontage is 6.0m or less, than 12.0m	SIDE YARD SETBACK = 1.2m AND 2.0m ZBL 10.20.40.70 Setbacks (3) Minimum Side Yard Setback The design complies with the minimum side yard setback of 1.2m if the required minimum lot frontage is 12.0m or less than 15.0m
Landscaping	FRONT YARD SOFTSCAPE = 100.0% (PREVIOUSLY 65%) ZBL 10.5.50.10 Landscaping (1) Front Yard Landscaping The design has been revised to comply with the requirement for 75% of the front yard landscaping to be soft landscaping, by shifting the stair to within the building area.	FRONT YARD SOFTSCAPE = 76% (75% REQUIRED) REAR YARD SOFTSCAPE = 50.9% (50.0% REQUIRED) (PREV. 43.3%) ZBL 10.5.50.10 Landscaping (3) Rear Yard Soft Landscaping for Residential Buildings Other Than an Apartment Building The design has been revised to comply with the requirement for 50% of the rear yard landscaping to be soft landscaping. The width of the stair and patio for the garden suite was decreased.	FRONT YARD SOFTSCAPE = 76% (PREVIOUSLY 79%) (75% REQUIRED) REAR YARD SOFTSCAPE = 84.8% (PREVIOUSLY 75.8%) (50% REQUIRED)
Other		ZBL 10.20.40.50 Decks, Platforms and Amenities (1) Platforms at or Above the Second Storey of a Detached House (A) The design has been revised to comply with the requirement for there to be no more than one platform on each of the front, rear and each side of the detached house; and (B) The design has also been revised to comply with the requirement that the maximum area of each platform is 4.0 square metres.	ZBL 10.20.40.50 Decks, Platforms and Amenities (1) Platforms at or Above the Second Storey of a Detached House (A) The design has been revised to comply with the requirement for there to be no more than one platform on each of the front, rear and each side of the detached house; and (B) The design has also been revised to comply with the requirement that the maximum area of each platform is 4.0 square metres.



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ISSUE DATE:

02	NOV 14, 2022 ZONING REVIEW (B)
01	NOV 4, 2022 ZONING REVIEW
NO	DATE DESCRIPTION

HOUSING OPTION:

DRAWING TITLE:
COMPLIANCE CHART (B)
COMPLIANT DESIGNS

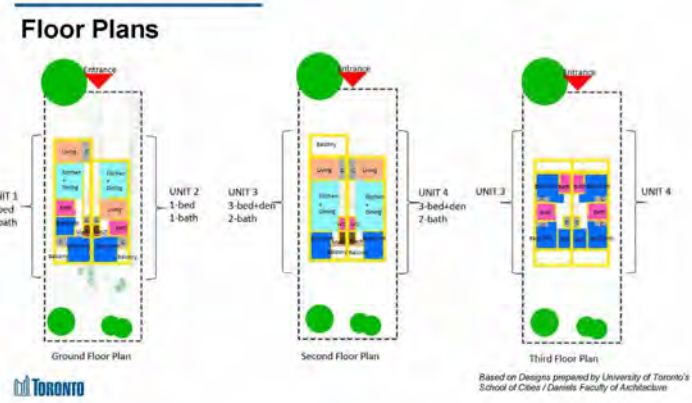
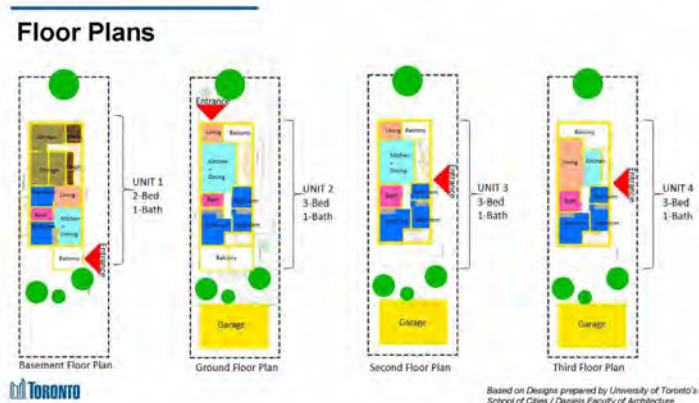
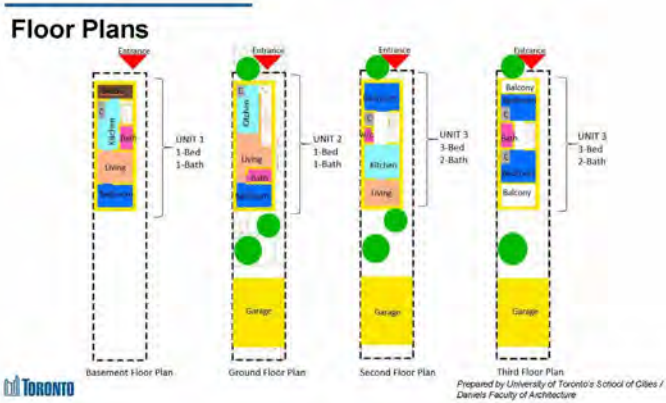
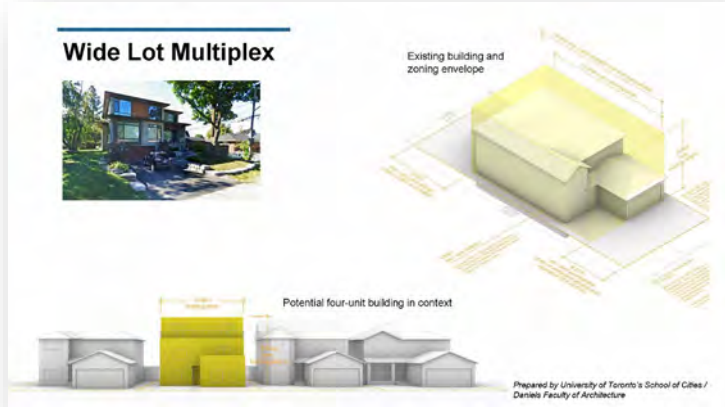
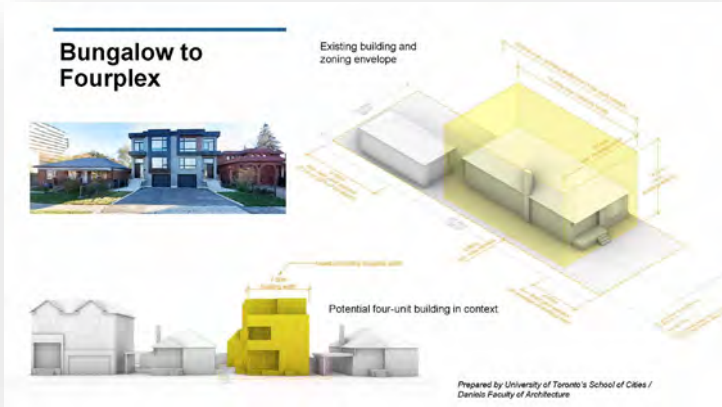
PROJECT: REHOUSING THE YELLOWWATER
SCALE:

DRAWING NO:

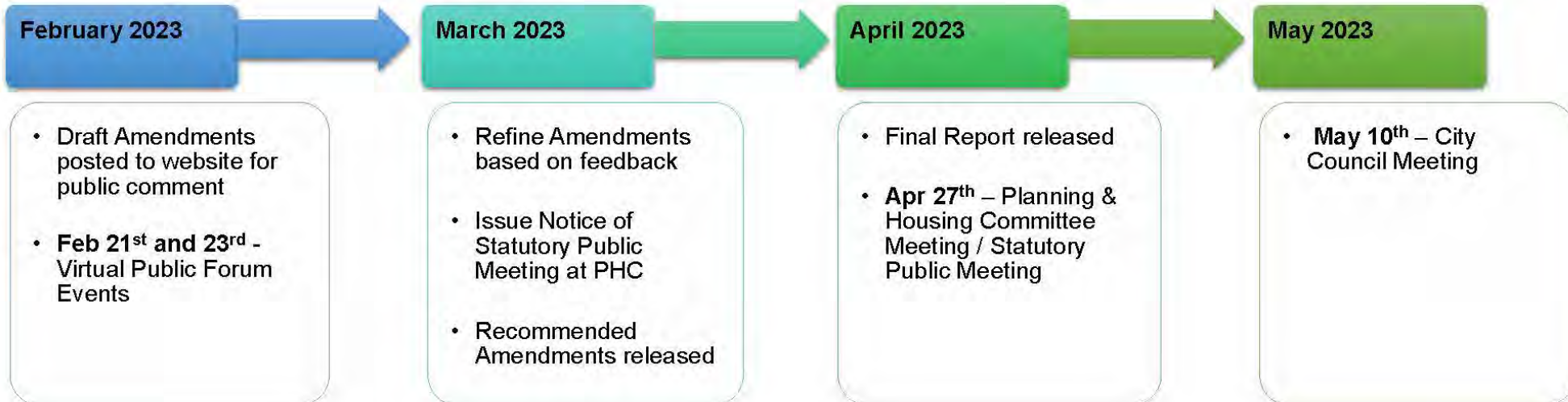
A999

COMPLIANT WITH ZBL 569-2013
ITEMS REVISED TO COMPLY WITH ZBL 569-2013

“How could this look?” Design Scenarios



Next Steps



RECOMMENDATIONS

1. STANDARDIZE MAXIMUM BUILDING SIZE AND SETBACKS

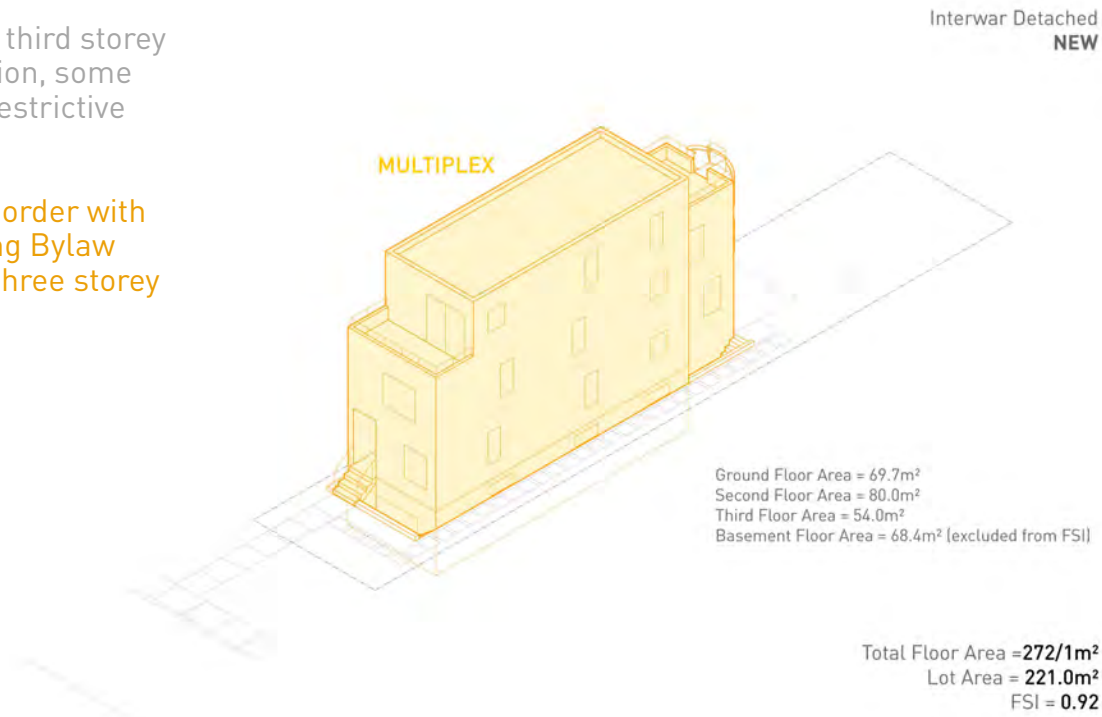
The maximum building length and setback rules for a multiplex should not be more restrictive than those for a single-detached or semi-detached house.

For instance, a maximum building depth of 17m and standard side yard setback of 1.2m would harmonize with the current requirements for single-detached houses.

2. REMOVE RESTRICTIONS ON MAIN WALL HEIGHT AND ROOF GEOMETRY

The as-of-right restrictions on roof geometry make it very difficult to add a third storey without the costly delay of a Committee of Adjustment application. In addition, some zones have additional restrictions and height overlay maps that are more restrictive than the standard 10m maximum building height.

UPDATE: In December 2022, the Ontario Land Tribunal (OLT) issued a final order with regard to the long-standing appeal of the City of Toronto Harmonized Zoning Bylaw 569-2013. The restrictions on 'flat' roofs are effectively removed, allowing three storey buildings so long as the additional height is set back by 1.4m.



Multiplex Housing Option with a Flat Roof.

3. CREATE ADDITIONAL PERMISSIONS FOR CORNER LOTS

The City of Victoria proposes distinct rules for corner sites - better access to daylight and less concern for privacy than mid-block conditions allows more design flexibility.

- Allow more units, additional density, height, reduced setbacks and small ground floor retail/commercial use on corner lots.

4. UPDATE THE DEFINITION OF SOFTCOVER LANDSCAPING

- Allow green roofs as alternative means of providing soft landscaping.
- Allow permeable pavers, gravel and other alternatives to be applied towards a percentage of the required softcover landscaping as functional outdoor space without detracting from the stormwater retention capacity of the site.



Euclid House. LGA Architectural Partners.

5. INCENTIVIZE MULTIPLEXES WITHOUT BASEMENTS

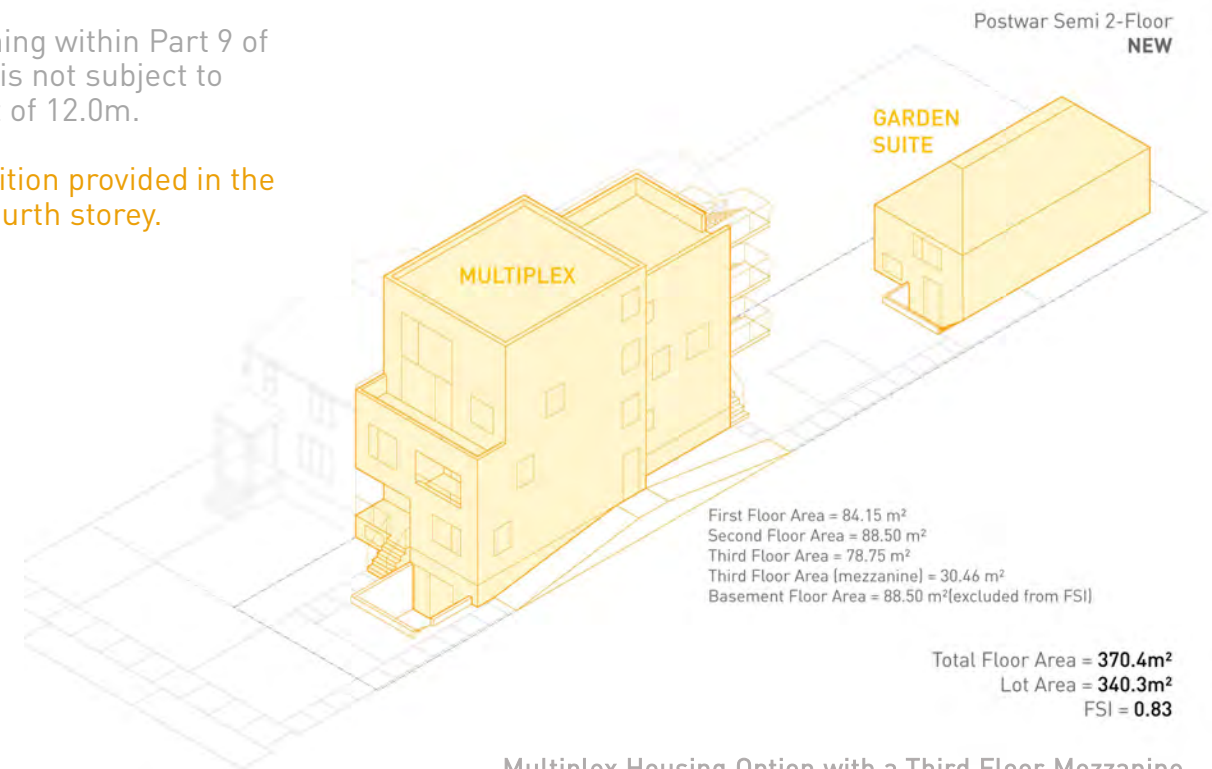
Provide a density or height bonus for buildings with slab-on-grade construction to significantly reduce the embodied carbon footprint of construction. It also incentivizes making the ground floor units wheelchair accessible.

- Allow additional building height for slab-on-grade construction instead of an outright ban on basements.

6. DISTINGUISH MEZZANINES FROM STOREYS TO ALIGN WITH THE BUILDING CODE

Mezzanines maximize the building height of multiplexes while remaining within Part 9 of the building code. This is be particularly beneficial where a multiplex is not subject to height overlay maps and follows a standard maximum building height of 12.0m.

- Include a clarifying provision for mezzanines aligned with the definition provided in the building code to ensure that mezzanines are not interpreted as a fourth storey.



7. EXCLUDE EXTERIOR CONTINUOUS INSULATION FROM GROSS FLOOR AREA AND BUILDING HEIGHT

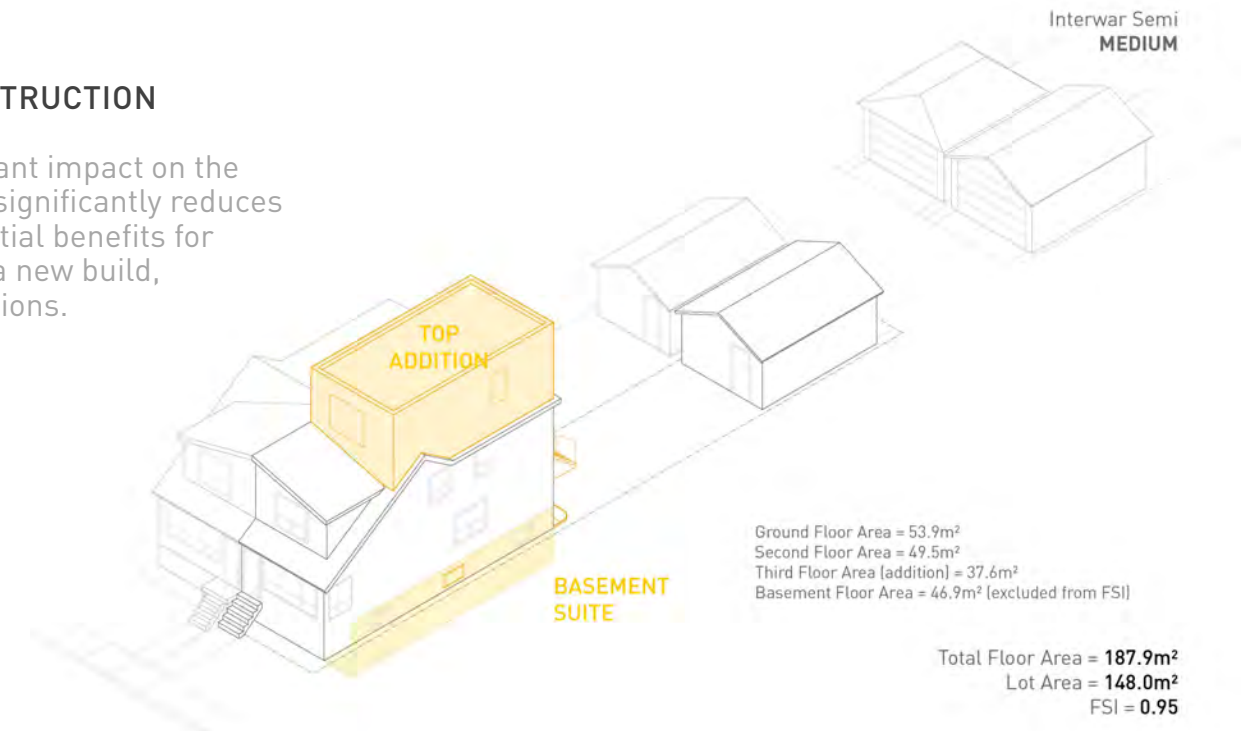
The Zoning By-law should incentivize buildings with all-electric mechanical systems to reduce operational carbon emissions by excluding continuous exterior insulation in the walls from gross floor area calculations – for instance, 50mm (2") of continuous exterior insulation on a three-storey multiplex results in about 7.5m² (80sq. ft.) of floor area.

- Provide a density bonus, reduced fees and expedited approvals for multiplexes with all-electric mechanical systems or achieving Passive House certification, see City of Vancouver's "Floor Area Exclusions for Improved Building Performance."

8. REDEFINE THE SCOPE OF A RENOVATION VERSUS NEW CONSTRUCTION

Renovation instead of demolition and new construction has a significant impact on the carbon footprint of a house. The reuse of existing building materials significantly reduces carbon emissions and demolition waste. Currently, there are substantial benefits for homeowners where a project is considered a renovation rather than a new build, particularly from the grandfathering of non-compliant existing conditions.

- Allow exceptions from the minimum setback requirements to allow existing ground floor walls to be extruded to establish the allowable footprint of the second and third floors.
- Offer density bonuses, and/or reductions of softcover landscape percentages to encourage adaptive reuse of existing building elements.



Multiplex Housing Option as Renovation + Addition.

KEY HIGHLIGHTS FROM EHON'S DRAFT PROPOSED ZONING LEGISLATION

Section on building depth allows up to 19m for duplex, triplex and fourplex, correlated to lots with at least 36m (118ft) depth and no more than 10m (33') width.

Exempts multiplexes from the number of storeys

Minimum for the maximum permitted height of 10.0m and an exemption from height overlay maps

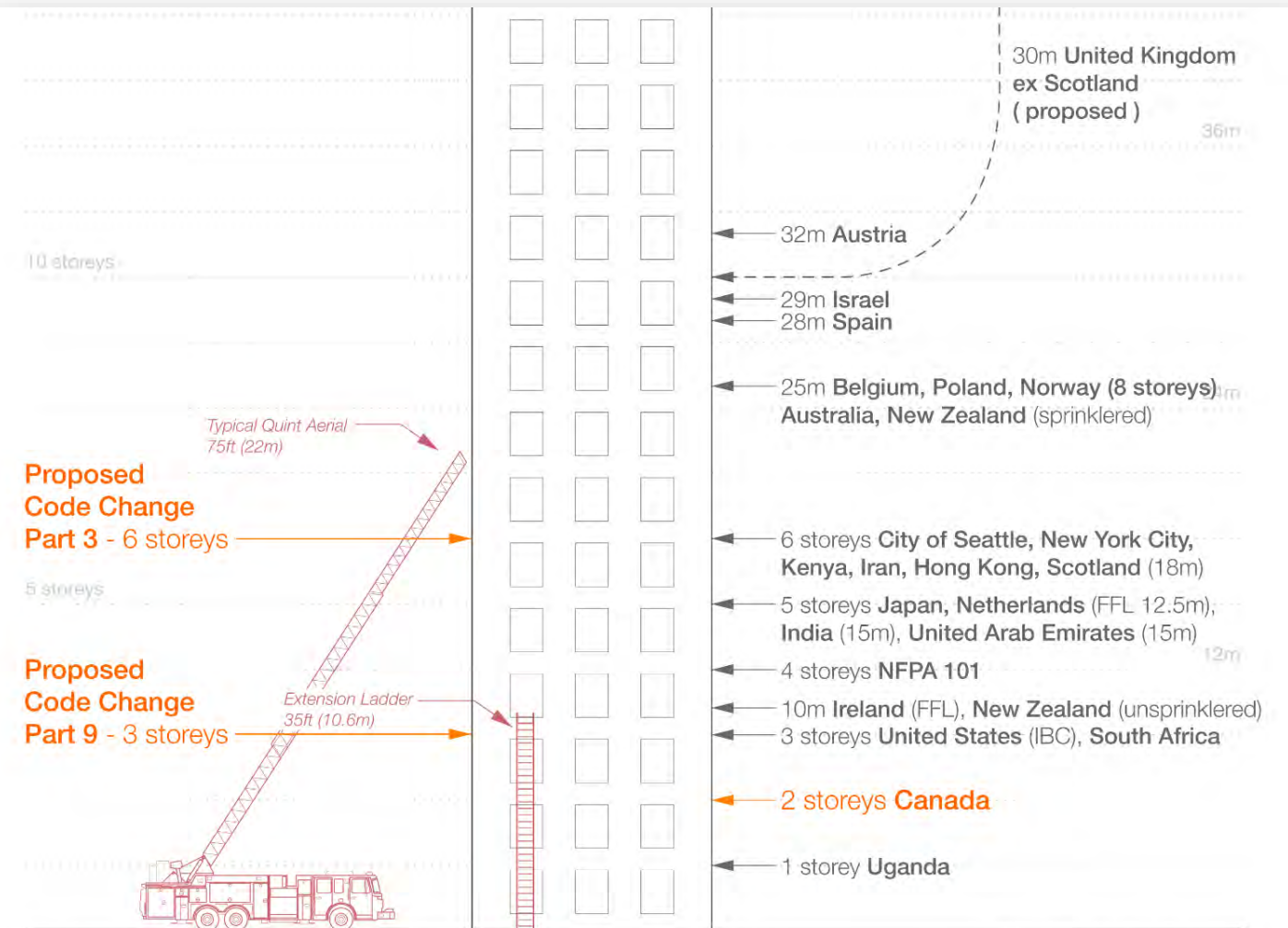
Multiplexes are exempt from FSI restrictions

These requirements apply to new builds and additions to existing buildings in the same way

9. CHANGE THE BUILDING CODE TO ALLOW SINGLE EGRESS

The U.S. model building allows for single exits in residential buildings up to 3 storeys above grade with a maximum of 4 dwelling units per storey.

The National Building Code of Canada is inconsistent with (and does not allow for the same design flexibility as) building codes in other jurisdictions and fails to recognize that a second egress may be unnecessary for 'missing middle' housing typologies where other life safety measures are provided.



Maximum Permitted Height for Single Stair Buildings
(multi-unit residential occupancy only)

Note: the drawing assumes a floor to floor height of 3m

FFL = uppermost finish floor level

9. CHANGE THE BUILDING CODE TO ALLOW SINGLE EGRESS

Proposed Wording for the 2025 National Building Code of Canada:

9.9.8.2 Number of Required Exits

3) A *floor area* classified as Group C *occupancy* in a *building* not more than 3 *storeys* in *building height* is permitted to be served by a single *exit* provided the total *occupant load* served by the *exit* is not more than 60, and

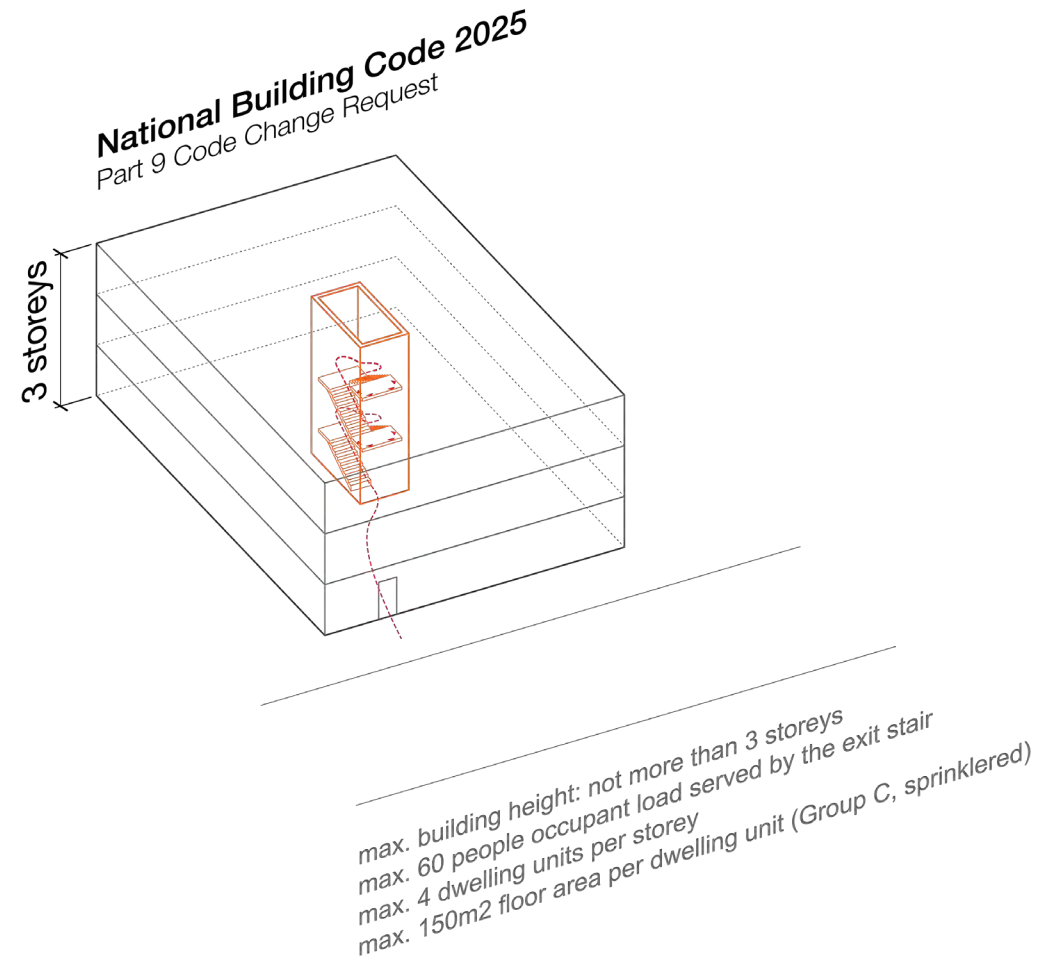
a) there shall be no more than four *dwelling units* on any storey served by the single *exit* and the *floor area* of each *dwelling unit* does not exceed 150m²,

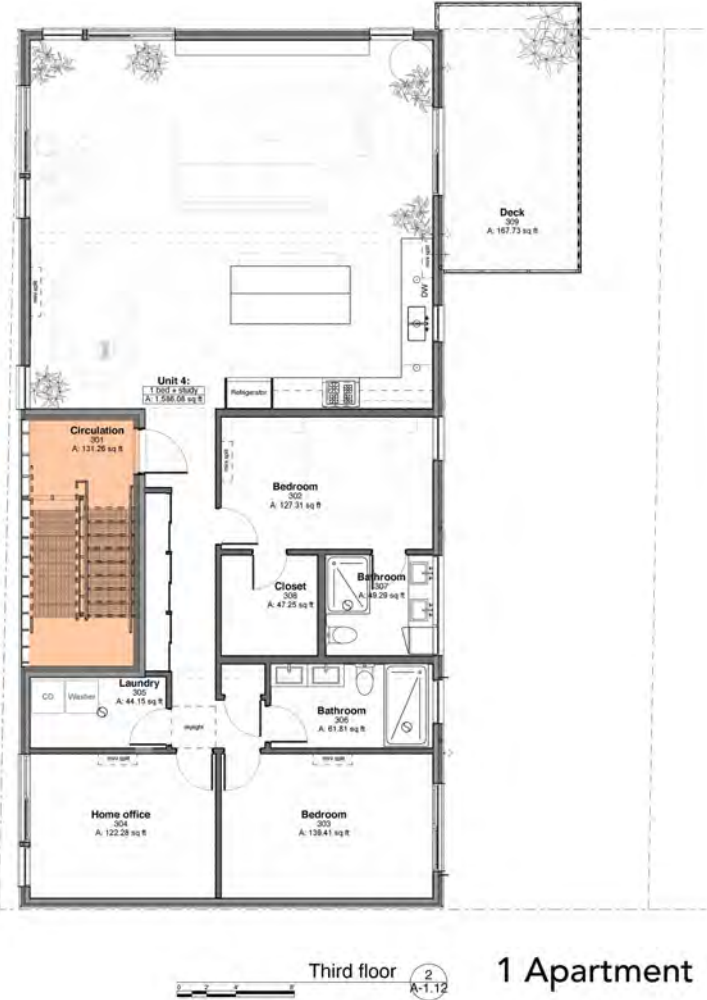
b) the *building* is sprinklered throughout (NFPA 13-R, See 9.10.1.3.),

c) openings in required *fire separations* shall be protected with a *closure* with a *fire-protection rating* of not less than 45 min and shall be installed in conformance with Chapters 2 to 14 of NFPA 80 “Standard for Fire Doors and Other Opening Protectives”,

d) a fire alarm system is provided without exception (See 9.10.18.2.),

e) the floor area classified as Group C *occupancy* served by a *single exit* is not intended for use a retirement home.

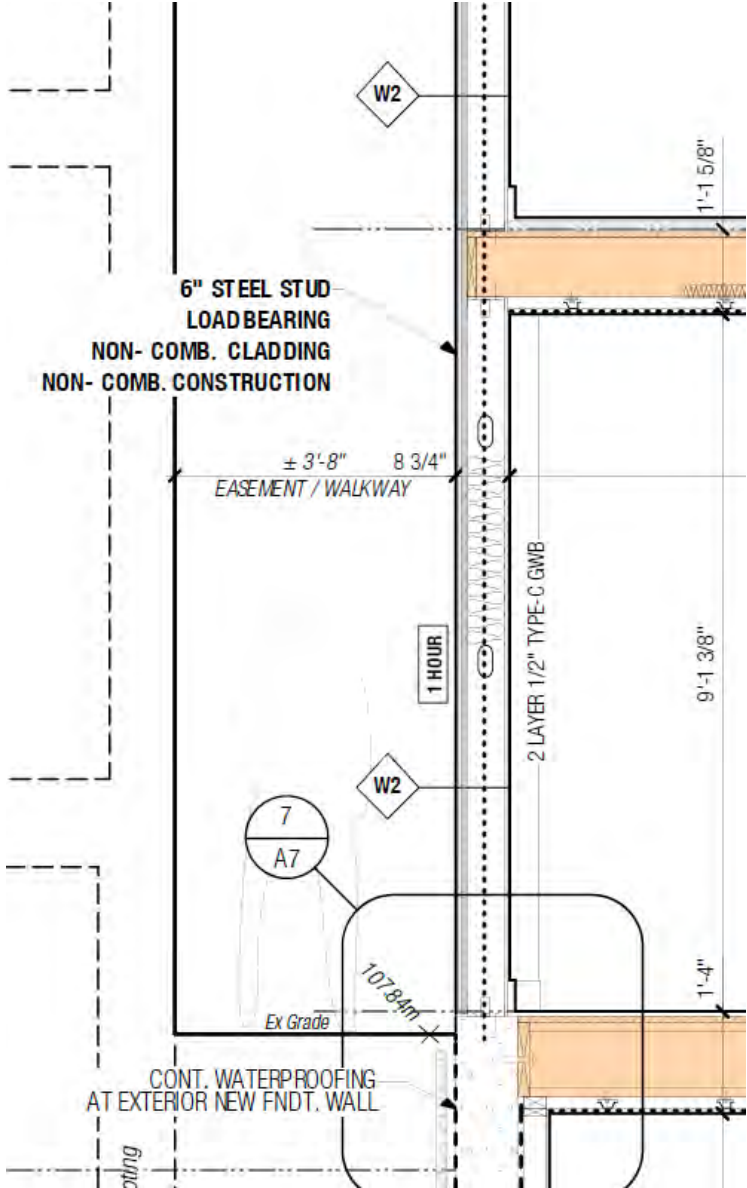




10. CHANGE THE BUILDING CODE TO
ALLOW COMBUSTIBLE SIDE WALL CONSTRUCTION

The side walls of a three-storey single detached house are permitted to be built of wood frame construction, whereas a multiplex is required by code to have non-combustible side walls, typically done as steel stud construction. Rather than requiring non-combustible construction, these walls could instead be required to have a 2-hr fire separation.

The added cost and complexity of having two different above-grade structural systems is an unnecessary burden where a performance-based alternative would provide better fire safety.



Partial Wall Section showing Non-Combustible Side Wall Construction
Three-Storey Multiplex in Toronto.

11. UPDATE LOAD CALCULATION FACTORS IN THE CANADIAN ELECTRICAL CODE

The Ontario Electrical Safety Code does not allow multiplexes and stacked townhouses to apply a reduction factor for additional dwelling units. The code also does not permit the use of 2x 200-amp panels for stacked townhouses or a duplex.

A 400-amp electrical panel is expensive. This perpetuates the selection of natural gas systems and serves as a critical barrier to electrification and reducing operational carbon emissions. Rules for demand load calculations are 30 years old and assume all appliances are running simultaneously.

“The calculations and factors in the electrical code have not been updated in 30 years and do not reflect current efficiency of appliances, or lighting, or use of homes.”

- Mark Bernhardt. CHBA BC.

2) Classification of different types of row-housing

Background

A question had been asked about the classification of different types of row housing for the purpose of applying Rules 8-200 and 8-202.

Question 1

When cities and townships define a block of back-to-back townhouses and/or stacked townhouses as “Apartment”, does the Ontario Electrical Safety Code (OESC) concur with these definitions for the purpose of applying Rules 8-200 and 8-202 to size the main service feeder supplying two or more of those units?

Answer 1

No. The units of a block of back-to-back townhouses fall under the OESC definition of “single dwelling” as a form of row housing. Rule 8-200 shall be used to determine the minimum ampacity for the main service feeder supplying two or more of those units. The same concept applies to stacked townhouses with individual ground access.

Rationale 1

The OESC defines a single dwelling as “a dwelling unit consisting of a detached house, one unit of row housing, or one unit of a semi-detached, duplex, triplex, or quadruplex house.”

Back to back row housing units which do not have back yards and instead share a common rear wall are still considered as row housing (single dwelling units) for application of the OESC. Stacked units of row housing with individual ground access will also be considered as row housing.

Toronto City Council Votes in Favour of Raising Development Charges Nearly 50%

PUBLISHED: 11:09 AM JUL 20, 2022

Toronto City Council voted on Tuesday evening to hike development charges, adding more than \$40,000 in fees to some development application processes.

1a - Motion to Amend Item moved by Councillor Ana Bailão (Final)

That:

1. City Council amend the draft Development Charge By-law in Attachment 1 to the report (June 28, 2022) from the Chief Financial Officer and Treasurer and the Chief Planner and Executive Director, City Planning to exempt from the payment of development charges the second (if necessary), third and fourth residential dwelling unit constructed on a single lot, whether constructed as part of or ancillary to the primary residential dwelling on such lot, and provided that such exemption applies only to a development of no more than 4 units on such lot.

KEY ISSUES IDENTIFIED WITH MULTIPLEX INTENSIFICATION

CARBON IMPACTS

- Renovation vs New Build
- Basements

HYDROLOGY

- Softscape vs hardscape

PARKING

- Minimum parking requirements
- Location relative to transit

GARBAGE

FINANCIAL BARRIERS

- Ability to secure funding for construction
- Splitting mortgages for co-purchasers

AFFORDABILITY

- Affordability Covenants
- Increased density for guaranteed affordable units



Thank you.

