

**BACKYARD  
COTTAGE  
PATTERN  
BOOK**

LEWISVILLE, TX

# BACKYARD COTTAGES

In November 2022, the city of Lewisville adopted a supplemental use regulation as part of their Unified Development Code (UDC) permitting backyard cottages in most single-family residential areas. Lewisville defines a backyard cottage as “a detached, self-contained dwelling unit that is secondary to the principal building and is subordinate in area, extent, or purpose to the principal building or principal use served.” All accessory buildings that contain shower or bath and kitchen facilities are considered backyard cottages.

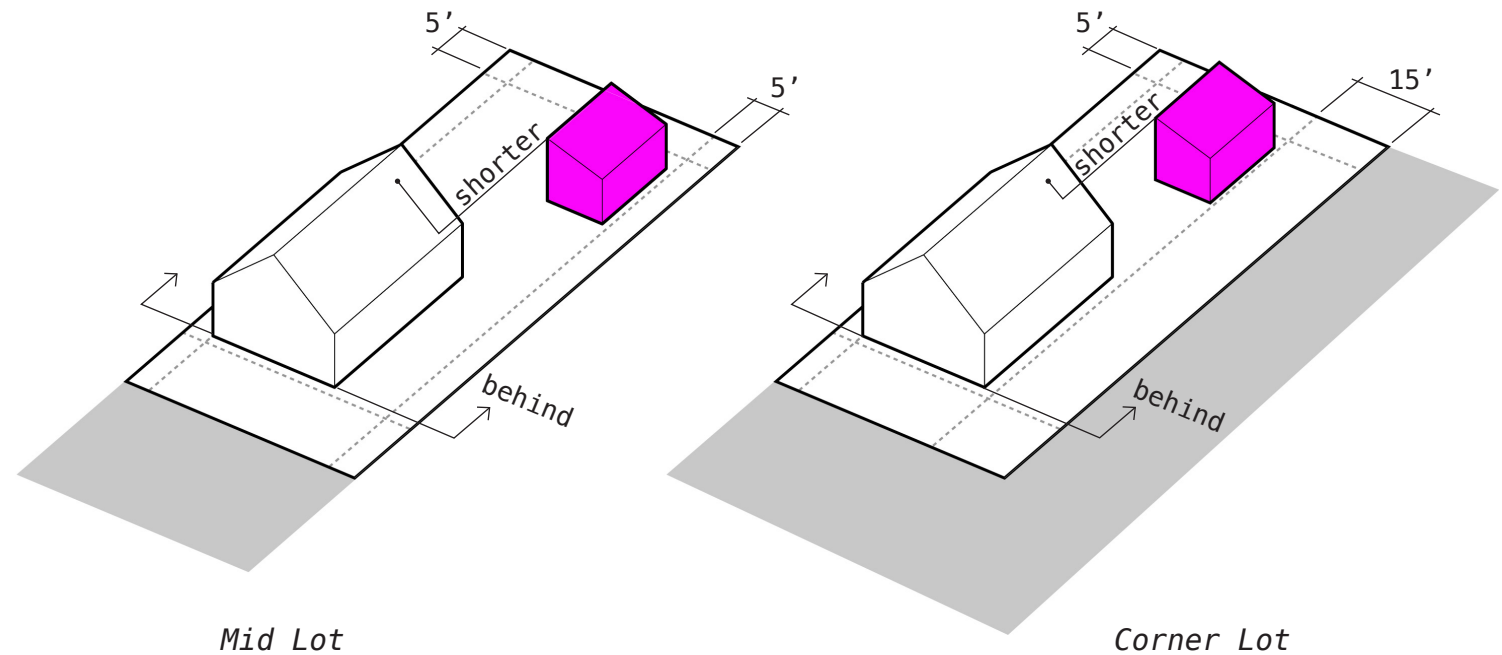
Lewisville’s backyard cottage provision was adapted in response to escalating housing prices and limited unit production that is unable to keep pace with market demand. Backyard cottages are an affordable housing option that provide additional rental income or an extra living space for a family member or caregiver. Accessory dwelling units can serve as an anti-displacement tool to allow residents to remain in their home, age in place over time, and increase one’s property value.

All backyard cottages must adhere to the following:

- Max of 1 cottage allowed per residential lot
- Cottage must be located on the same lot as principal building
- Property owner must occupy cottage or principal building as primary residence
- Cottage cannot be sold separately from principal building
- Cottage must be placed on a permanent foundation

## Use Regulations

Size	400sf – 800sf
Front setback	Behind principal building
Rear setbacks	5'
Side setbacks	5' (corner side yard setback must match zoning)
Separation	10' min from principal building
Lot coverage	Cannot exceed base zoning
Height	Cannot exceed height of principal building
Parking	1 space per cottage (no tandem parking allowed)



# PERMITTED LOCATIONS

Lewisville permits backyard cottages by right in single-family zoned lots zoned R-7.5 and larger as outlined below.

Zoning	Approx Area	Allowed	Number
R-5	5,000sf	SUP	--
R-6	6,000sf	SUP	--
<b>R-7.5</b>	<b>7,500sf</b>	<b>Y</b>	<b>9,392</b>
R-9	9,000sf	Y	460
R-12	12,000sf	Y	274
R-18	18,000sf	Y	81

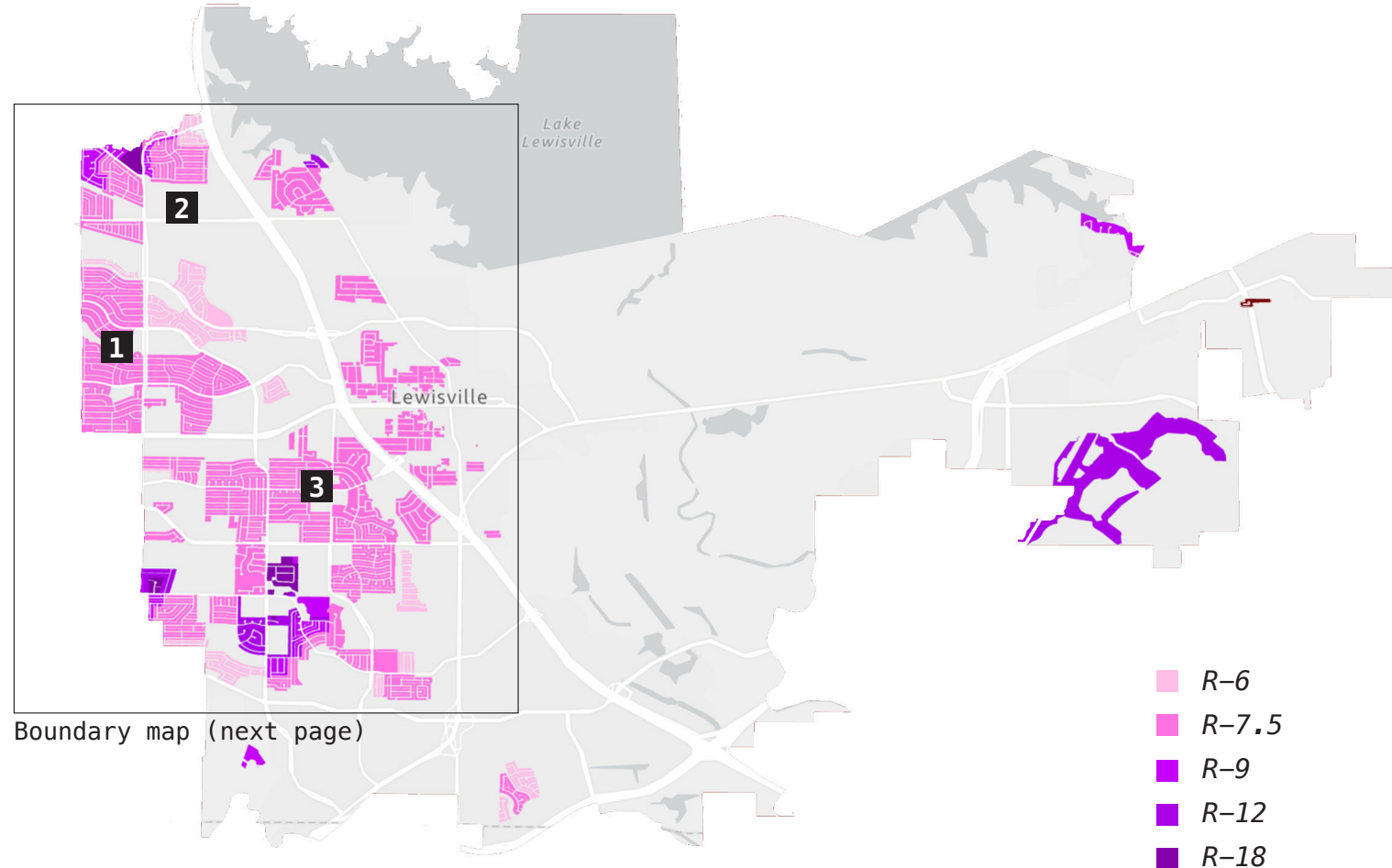
SUP = Special Use Permit

Of the parcels that allow backyard cottages by-right, **92% are zoned R-7.5**. R-7.5 lots typically present greater construction constraints than larger sized lots due to buildable area limitations and are therefore ideal for backyard cottage test-fits. Focus neighborhoods identified for this study are located in areas zoned R-7.5 and represent a range of housing types, block configurations, and financial parameters.

Design Parameter

**BACKYARD COTTAGES SHOULD BE DESIGNED TO FIT ON R-7.5 LOTS.**

## Zoning Map

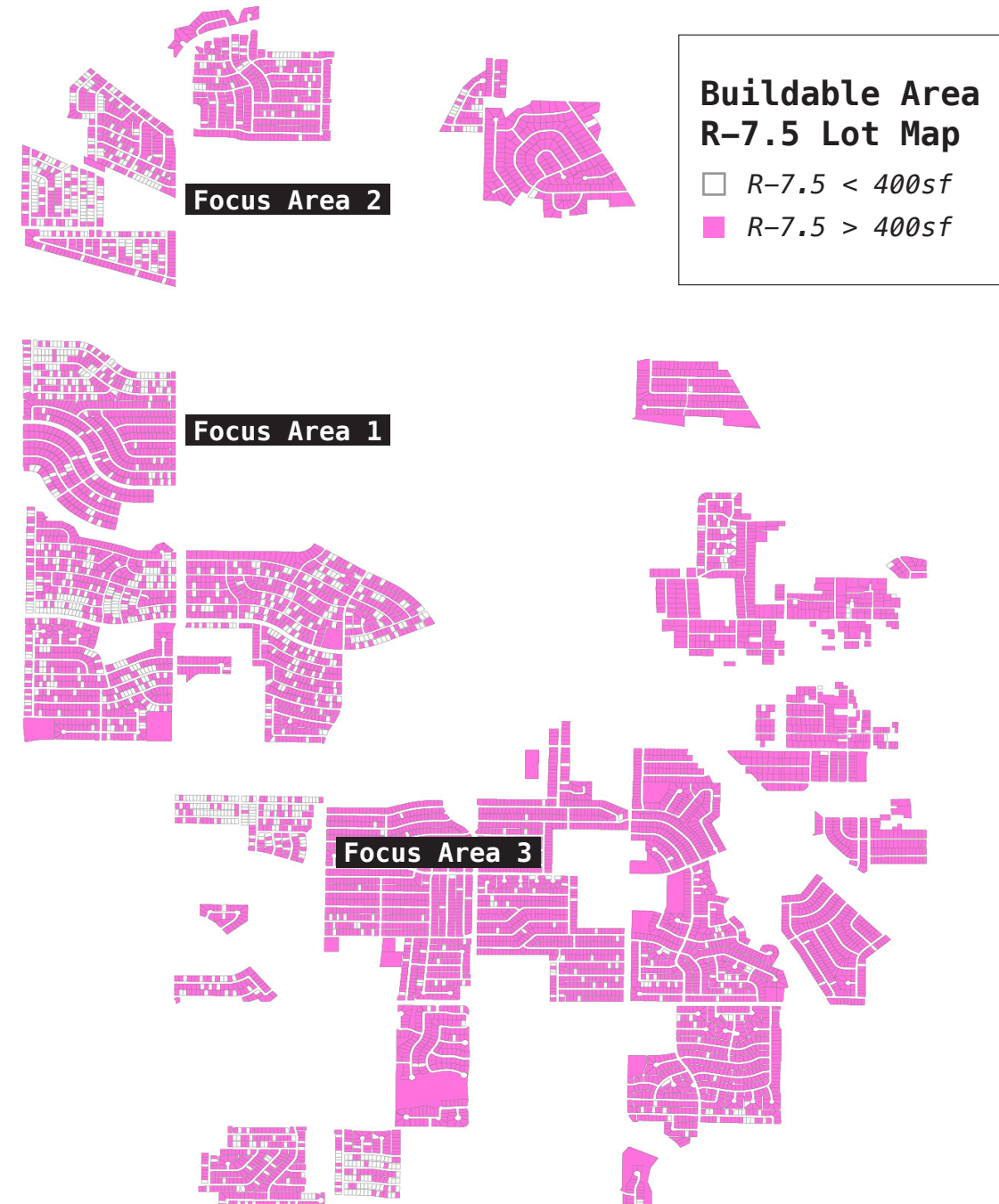


# OPPORTUNITY LOCATIONS

Of all the R-7.5 zoned lots in Lewisville (9,392 parcels in total), **84% (7,858 parcels) have enough buildable land to accommodate the minimum required 400sf backyard cottage.** 16% of R-7.5 zoned lots do not have enough available land to build a cottage when taking setbacks, building separation boundaries, and maximum lot coverage (40% in R-7.5 areas) into consideration. Even within the percentage of lots that are buildable, many are impractical for backyard cottages due to their dimensions of buildable space (see lot diagrams on focus area pages). Opportunities for backyard cottage development diminish as unit size increases.

Design Parameter

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# R-7.5 ECONOMICS

Given that Lewisville requires property owners to live on site in either the principle building or backyard cottage, cottages are projected to be built on lots occupied by property owners rather than renters. Homeowner owned homes make up only **41.6% of Lewisville's housing units** (the lowest rate in the DFW region). The average value of R-7.5 properties is \$245,600.

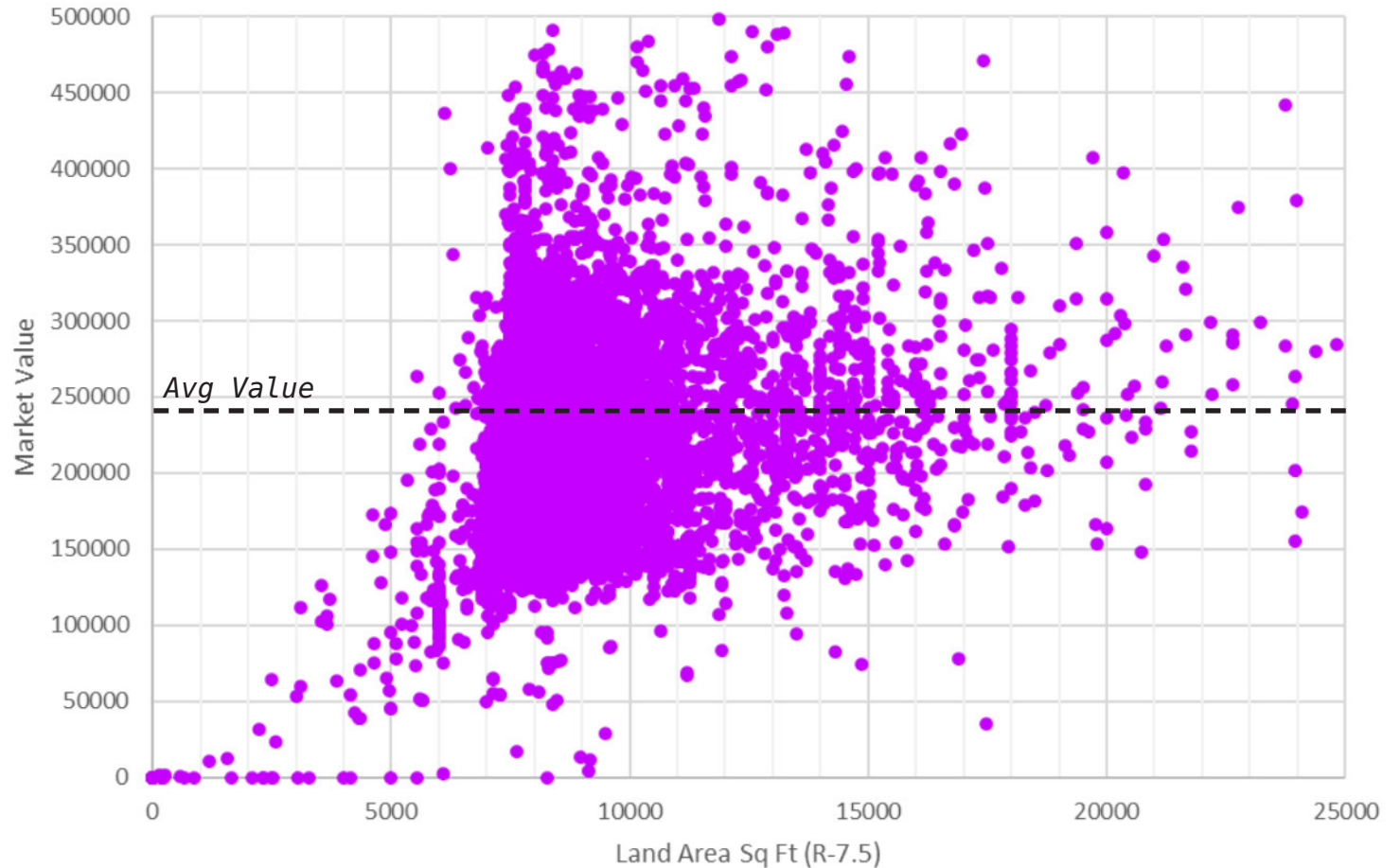
Research shows that homeowners leverage the following payment options to cover ADU expenses (listed in order of popularity):(1)bank loan including home equity line of credit, property refinancing, construction loan, or personal loan, (2)cash or personal savings, (3)money from family or friends, (4)credit card or unsecured debt, or (5)other.

Given that most homeowners will likely leverage financing to pay for backyard cottages, we can calculate cottage costs in relation to rental income and by local cost per square footage construction prices (see chart on following page).

Design Parameter

**BACKYARD COTTAGES SHOULD BE DESIGNED TO BE AFFORDABLE (\$150/sf or LESS) + INCOME GENERATING FOR LEWISVILLE HOMEOWNERS.**

### R-7.5 Property Cost + Area Breakdown



# R-7.5 ECONOMICS

AREA		CONSTRUCTION COSTS		FINANCING		INCOME**		TOTAL MONTHLY COSTS	
				Loan*	\$/Month	Rent/Month	Net Profit/Loss**		
Small	400sf	\$150/sf	\$60,000	\$105,660	\$587	\$900	+	\$313	
		\$250/sf	\$100,000	\$163,620	\$909	\$900	+	\$9	
	500sf	\$150/sf	\$75,000	\$127,440	\$708	\$1,000	+	\$292	
		\$250/sf	\$125,000	\$199,800	\$1,110	\$1,000	-	\$110	
	600sf	\$150/sf	\$90,000	\$149,220	\$829	\$1,200	+	\$371	
		\$250/sf	\$150,000	\$236,160	\$1,312	\$1,200	-	\$112	
	700sf	\$150/sf	\$105,000	\$170,820	\$929	\$1,300	+	\$371	
		\$250/sf	\$175,000	\$272,340	\$1,513	\$1,300	-	\$213	
Large	800sf	\$150/sf	\$120,000	\$192,600	\$1,070	\$1,400	+	\$330	
		\$250/sf	\$200,000	\$308,520	\$1,714	\$1,400	-	\$314	

\* Loan assumes a 15-year fixed loan, 10% down, 6.5% interest, \$1,000 annual property tax, \$250 annual property insurance;

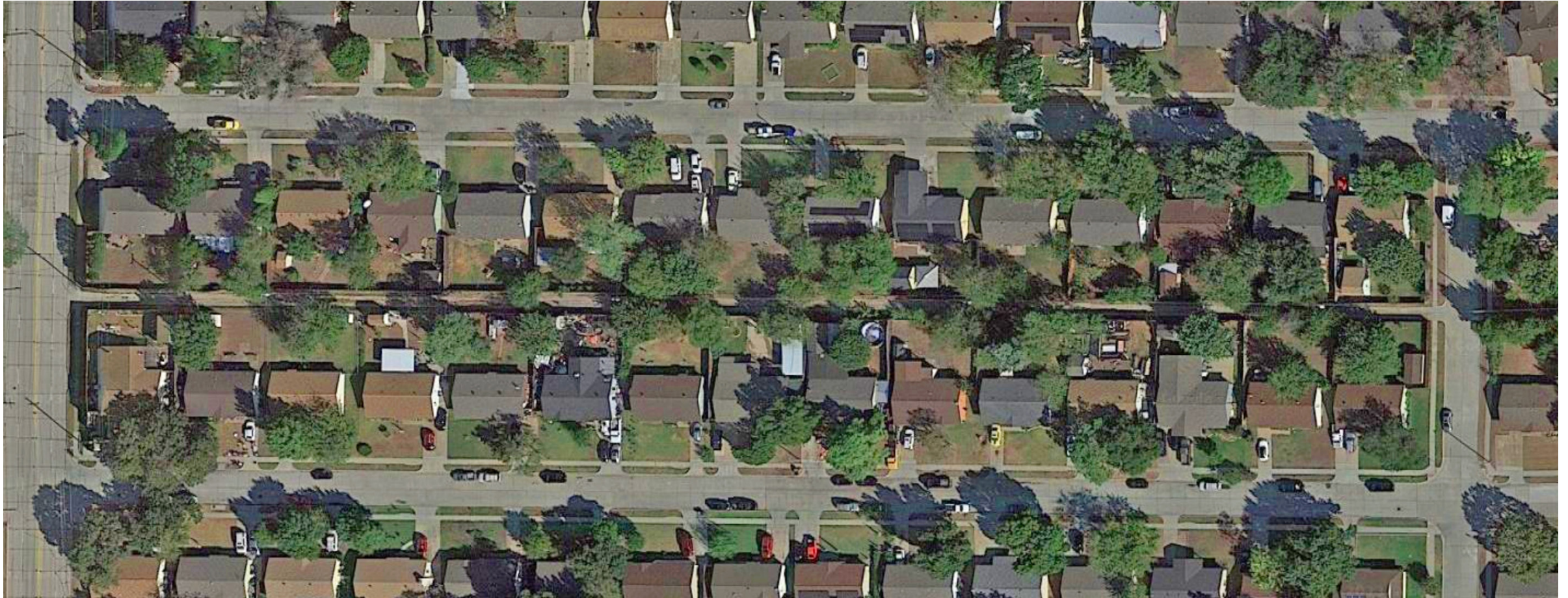
\*\* Rental income is estimated based on comparable properties on Zillow

\*\*\* Costs do not include tenant insurance, or other associated expenses

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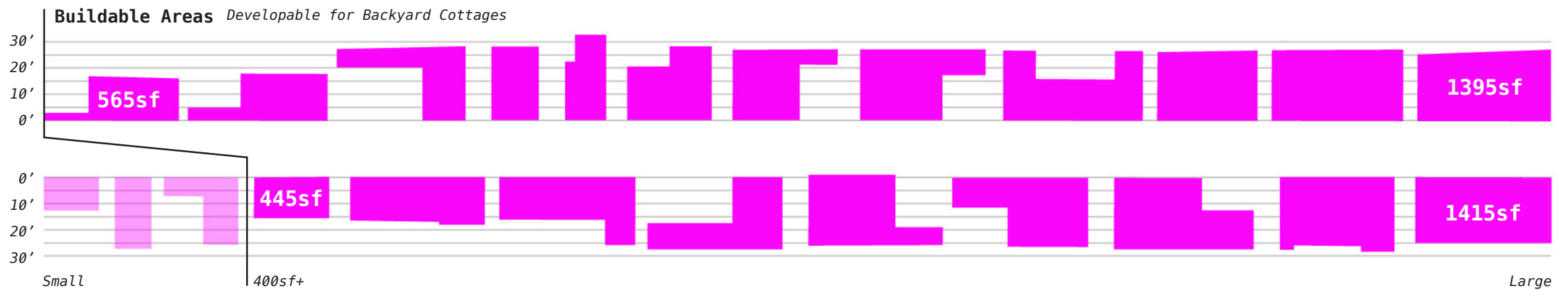
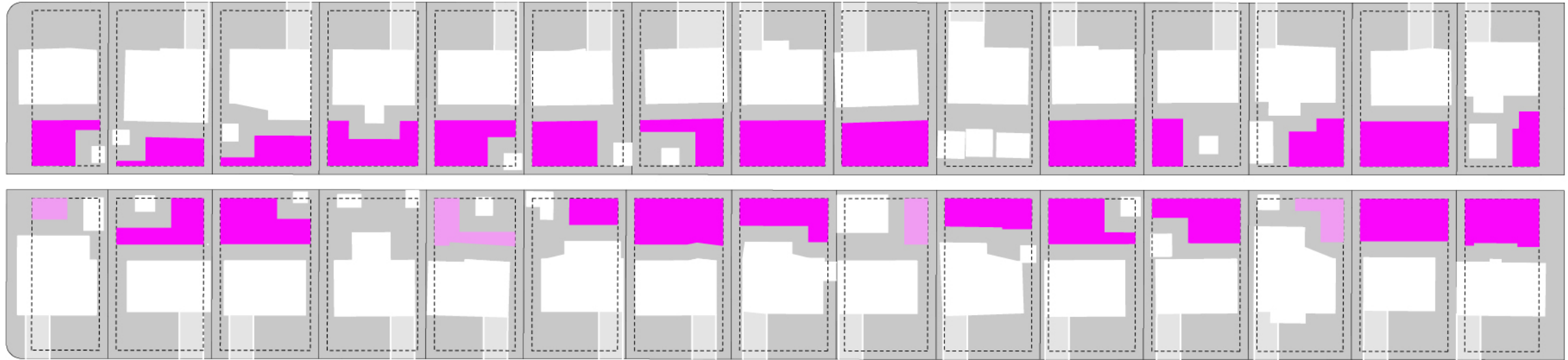
# NEIGHBORHOOD TYPE #1



Age	1960s–1970s
Lot size	6,500sf wide lots
Lot access	Mixture of alley + non-alley access blocks Driveways + garages are typically accessed from the street Alleyways are generally underutilized Garage conversions to inhabitable space are common

# NEIGHBORHOOD TYPE #1

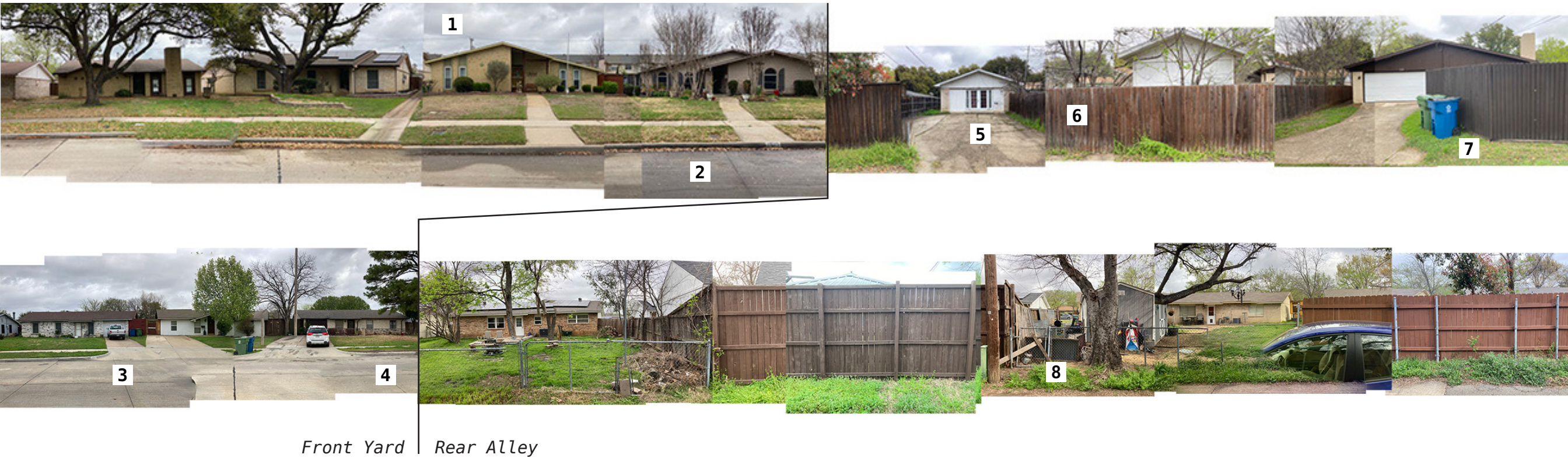
Type #1 has ample buildable lots due to street accessed drives  
 ("buildable" = minimum 10' in one dimension + 400sf)





# NEIGHBORHOOD TYPE #1

## Typical Elevations



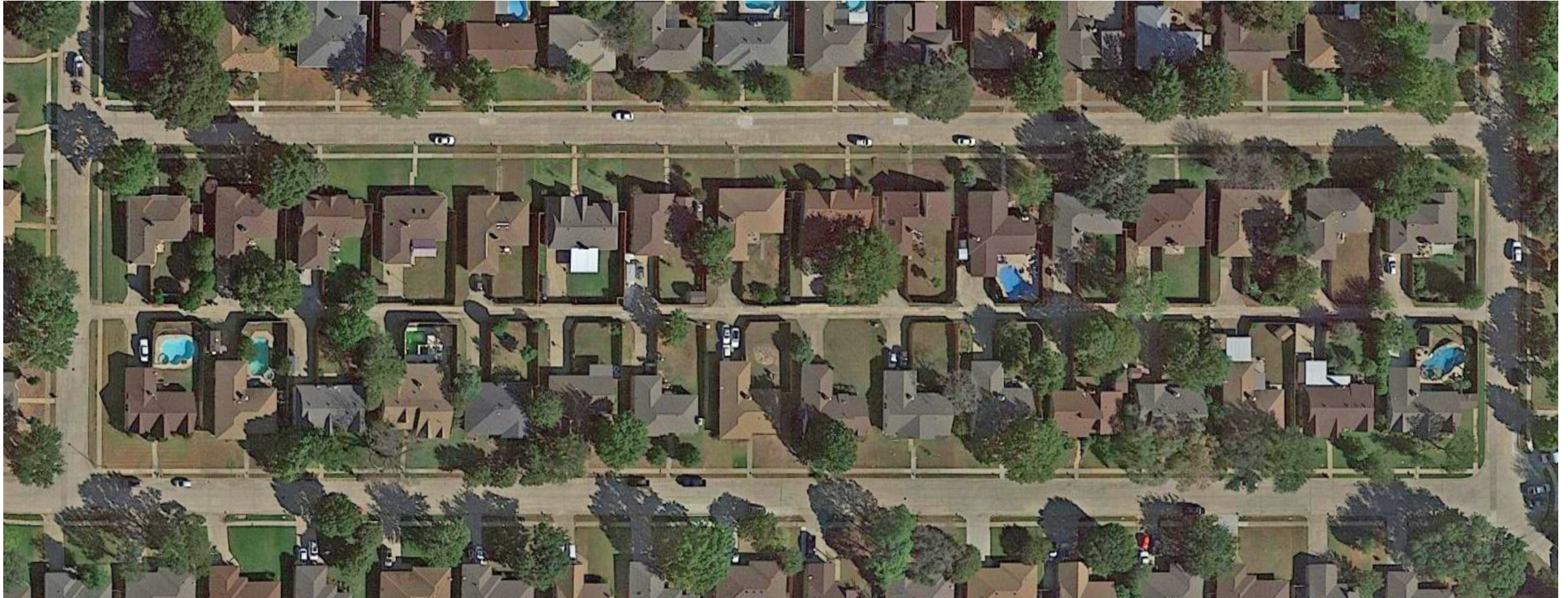
### Front Yard

- 1 One-story brick homes
- 2 Large front yards
- 3 Mixture of alley + street accessed driveways
- 4 Lots with street accessed driveways + rear alleyways

### Rear Alley

- 5 Existing residential garage conversions
- 6 Mixture of tall wood + short chain link fences
- 7 Driveways used for trash / recycling services
- 8 Some lots do not access parking off rear alleyways

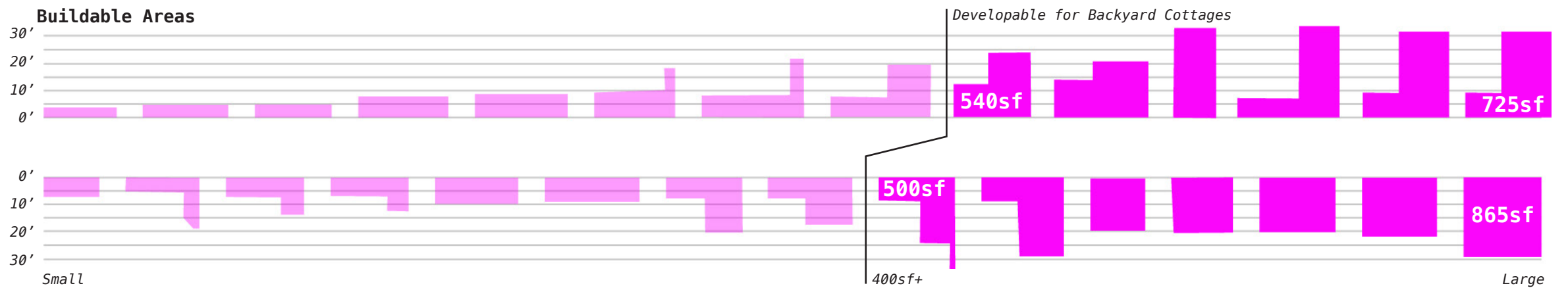
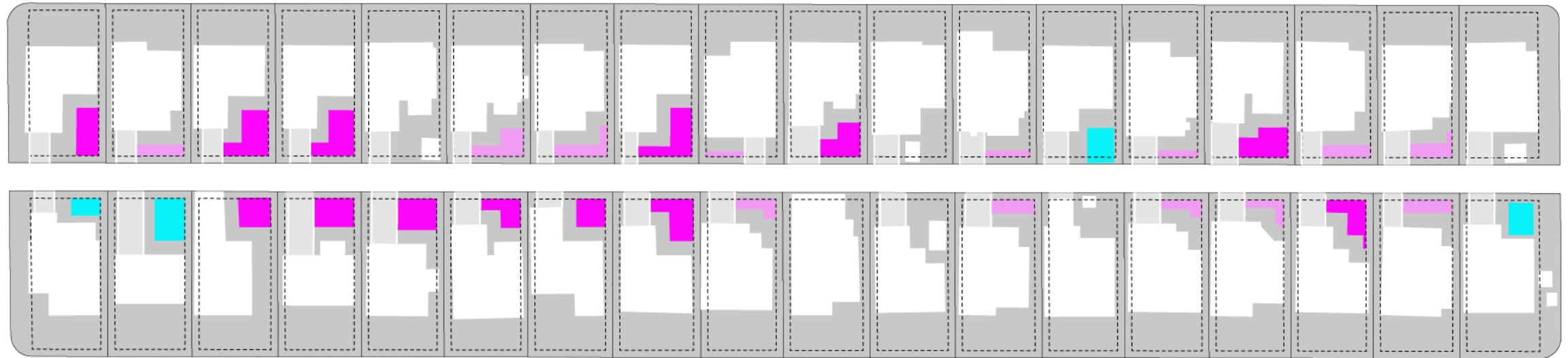
## NEIGHBORHOOD TYPE #2



Age	1980s
Lot size	7,000sf long lots
Lot access	Majority alley access blocks Driveways + garages accessed off alley Fully fenced backyards + homes with connected garages Scattered topography and elevation changes between front + rear yards

# NEIGHBORHOOD TYPE #2

Type #2 has limited buildable lots  
 ("buildable" = minimum 10' in one dimension + 400sf)



# NEIGHBORHOOD TYPE #2

## Typical Elevations



Front Yard | Rear Alley

### Front Yard

- 1 Mixture of one + two-story brick homes
- 2 Homes tend to be built out to property setbacks
- 3 Generous front yards + scattered trees
- 4 Site topographic elevation changes front-rear

### Rear Alley

- 5 Connected garage access off alleyways
- 6 Tall wood fences are typical around back yards
- 7 Driveways used for trash / recycling services
- 8 Most all properties access parking off rear alleyways

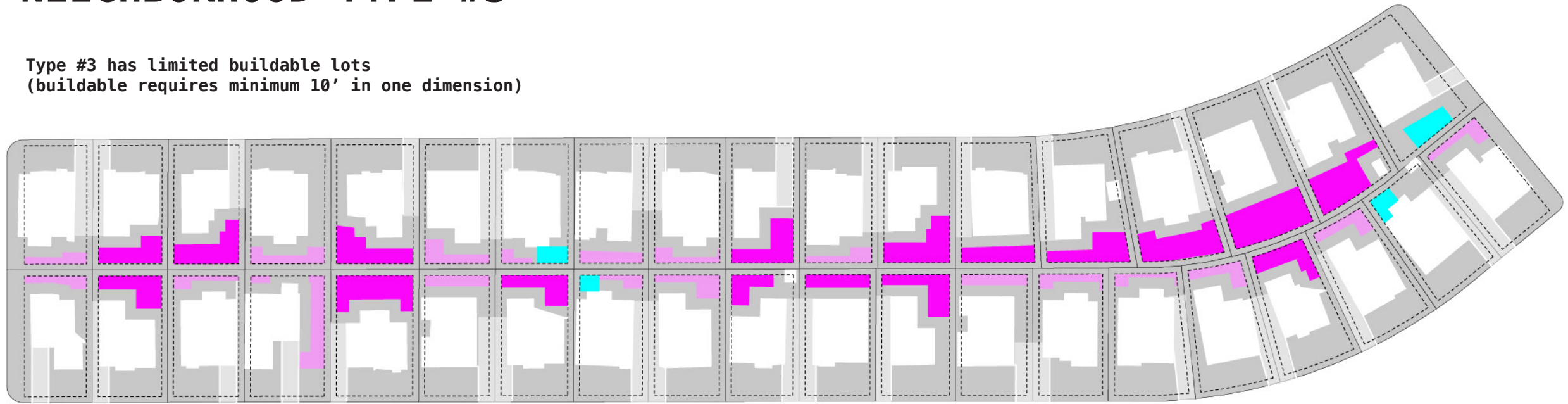
## NEIGHBORHOOD TYPE #3



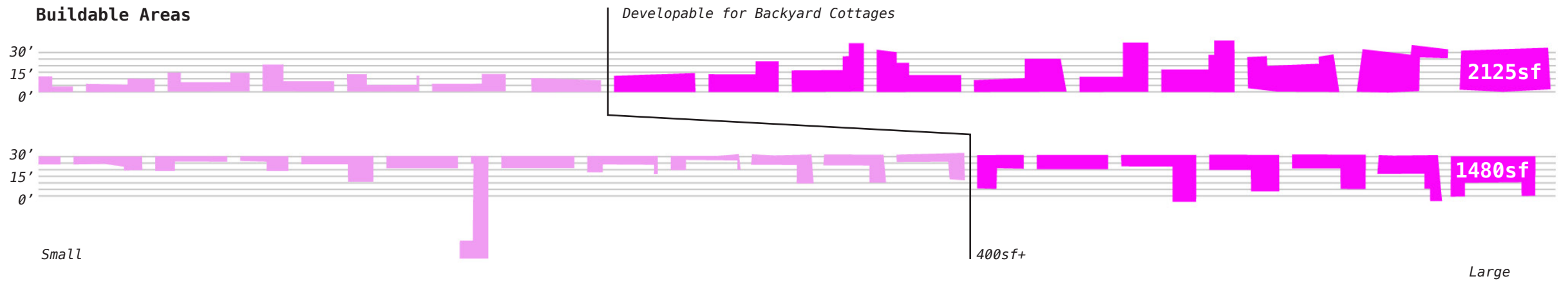
Age	1990s–2000s
Lot size	7,000 lots with shallow backyards
Lot access	Mixture of alley + non-alley blocks
	Lots tend to be built out to property setbacks
	Fully + partially fenced backyards + homes with connected garages

# NEIGHBORHOOD TYPE #3

Type #3 has limited buildable lots  
(buildable requires minimum 10' in one dimension)



## Buildable Areas



# NEIGHBORHOOD TYPE #3

## Typical Elevations



Front Yard | Rear Alley

### Front Yard

- 1 Mixture of one + two-story brick homes
- 2 Mixture of alley and street access for driveways
- 3 Front driveways tend to park 2 or 3 cars side-to-side
- 4 Side + rear yards tend to be fenced in

### Rear Alley

- 5 Mixture of alley and street access for driveways
- 6 Mixture of connected + separated garages + carports
- 7 Tall wood fences are typical around back yards
- 8 Driveways used for trash / recycling services

# DESIGN PARAMETERS

## BACKYARD COTTAGES SHOULD...

### 1. BE DESIGNED TO FIT ON R-7.5 LOTS

The majority of Lewisville lots are approximately 7,500sft or 50-65' x 115-150' in dimension. Typical lots include either a detached or attached garage with a driveway accessed off the street or alleyway ranging between 12' and 24' in width.

### 2. BE DESIGNED TO ACCOMMODATE MOST LOTS' BUILDABLE FOOTPRINT

When excluding lot area required for site setbacks, driveways, and existing built structures, most Lewisville lots that have enough remaining square footage to accommodate a min 400sf backyard cottage with a buildable area ranging between 12-16' x 26-34' unit. Buildable areas are typically orientated either parallel or perpendicular to the rear lot line.

### 3. ACCOMMODATE ONE PARKING SPACE IN CLOSE PROXIMITY TO THE COTTAGE.

Each backyard cottage must be accompanied by 1 dedicated parking space. The parking space may be located within an existing drive (for double or triple-loaded driveways that have additional parking capacity) or can be located on a new off-street driveway that accommodates a single vehicle.

### 4. BE AFFORDABLE (\$150/sf or LESS) + INCOME GENERATING FOR LEWISVILLE HOMEOWNERS

Lewisville backyard cottages are anticipated to be used as additional space for intergenerational families or as secondary rental income for homeowners. Cottages costs should be accessible to most residents at \$150/sf when considering backyard cottage finance options and fair market rent valuations.

### 5. RESPECT RESIDENTIAL ADJACENCIES + DESIRE FOR PRIVACY

Backyard cottage design including site access, entryways, windows, and exterior living space should be thoughtfully considered to adapt to a range of primary homeowner preferences including privacy, shared spaces, safety, and security.

### 6. CONSIDER A RANGE OF USER NEEDS

Homeowners build backyard cottages for a variety of users including caregivers, singles, couples, pets, live/workers, and those aging in place. Designs should be flexible to accommodate a range of resident physical, social, and emotional needs over the lifespan of the unit.

### 7. BE CONTEXTUAL TO EXISTING HOMES + NEIGHBORHOODS

In addition to Lewisville zoning requirements and the design parameters listed above, backyard cottages should be designed with a sensitivity to place including scale, form, and materiality.



# CITY RECOMMENDATIONS

In many cities backyard cottages have proven to be an effective strategy to help increase housing choice including the number, type, and price point of residential units offered. Given Louisville's relatively small buildable footprint, low homeowner rates, and area median income, there are several recommendations that Lewisville may consider implementing to further encourage backyard cottages.

## RECOMMENDATIONS INCLUDE:

### A. ALLOW BACKYARD COTTAGES TO BE GARAGE CONVERSIONS AND/OR ATTACHED UNITS BY RIGHT

Many neighborhoods already contain residential unit garage conversions. Adapting garage spaces and/or building connected backyard cottages opens up additional buildable lot area for secondary units, helps moderate construction costs, and minimizes contextual changes at either the front or rear street frontages.

### B. REDUCE MINIMUM GARDEN COTTAGE SQUARE FOOTAGES

Decreasing minimum garden cottages square footages to 200sf – 300sf expands the possibility for additional property owners to build accessory units while maintaining enough interior space for residential functions (small kitchen, sleeping, bath area).

### C. REDUCE OR ELIMINATE REQUIRED REAR YARD SETBACKS ALONG ALLEYWAYS FOR GARDEN COTTAGES

Eliminating rear yard setbacks for garden cottages opens up additional buildable lot area for secondary units while maintaining adequate separation between units across the alleyway to address code.

### D. ELIMINATE OFF-STREET PARKING REQUIREMENTS IN TRANSIT CONNECTED AREAS

Eliminating required off street parking opens up additional options for backyard cottage placement, size, dimensions, and site designs.

### E. ALLOW FOR OFF-STREET PARALLEL PARKING IN ALLEYWAYS FOR GARDEN COTTAGES

Substituting the required front pull-in off street parking space with a parallel parking option opens up additional options for backyard cottage placement, size, dimensions, and site designs.

### F. PERMIT LONG-TERM GARDEN COTTAGE RENTALS ON PROPERTIES THAT ARE NOT OWNER OCCUPIED.

Permitting two long-term rental units on a single-family lot (one for the primary structure and one for the backyard cottage unit) allows for greater flexibility in housing development options.

### G. WAIVE PERMITTING FEES AND EXPEDITE PERMIT APPLICATIONS FOR GARDEN COTTAGES.

Creating a more efficient design and construction process that minimizes homeowner resources will decrease barriers to entry for building backyard cottages.

# TERMINOLOGY

**Accessory dwelling unit** shall mean a detached, self-contained housing unit that is secondary to the main residence and is subordinate in area, extent, or purpose to the principal building or principal use served. An accessory building with shower/bath or kitchen facilities is considered an accessory dwelling unit and shall adhere to the regulations of this chapter.

**Block** shall mean a tract of land bounded by streets, or by a combination of streets and public parks, cemeteries, railroad rights-of-way, highways, streams or corporate boundary lines. There may be more than one numbered block as shown on a plat falling within a single block as herein defined.

**Building lot** shall mean a single tract of land located within a single block which, (at time of filing for a building permit) is designed by its owner or developer as a tract to be used, developed or built upon as a unit, under single ownership or control. It shall front upon a street or approved place. Therefore, a "building lot" may not coincide with a lot of record. A "building lot" may be subsequently subdivided into two or more "building lots", and a number of "building lots" may be cumulated into one "building lot", subject to the provisions of this chapter and the city's general development ordinance.

**Dwelling, single-family** shall mean a building containing only one dwelling unit and/or occupied by only one family.

**Garage, private** shall mean an accessory building designed or used for the storage of motor vehicles owned and used by the occupants of the building to which it is accessory.

**Lot area** shall mean the area of a horizontal plane intercepted by the vertical projections of the front, side, and rear lot lines of a building lot.

**Lot Line** shall mean a boundary of a building lot.

**Parking space** shall mean a surface area, enclosed or unenclosed sufficient in size to store one automobile together with a surfaced driveway connecting the parking space with the street or alley and permitting ingress or egress of any automobile.

**Yard** shall mean an open space on the same building lot with a building, unoccupied and unobstructed by any portion of a structure from the ground upward, except as otherwise provided. In measuring a yard for the purpose of determining the width of a side yard, the depth of a rear yard, and the depth of a front yard, the minimum horizontal distance between the building site and the lot line shall be used. A "yard" extends along a lot line and at right angles to such lot line to a depth or width specified in the yard regulations of the zoning district in which such building is located.