

CASE STUDY



**The LINK
Zero Threshold
Design Competition**

Cleveland, Ohio

Site: 0.3 acre

Density: 27 du/ac

Number of Units: 9

*2019 Zero Threshold Design
Competition Honorable Mention*

*2019 McGregor Homes'
People's Choice Award*

Removing barriers and embracing access by linking individuals physically, socially, economically, and multi-generationally.

EXECUTIVE SUMMARY

Our current housing inventory is an echo—it's an artifact of a different time in our history. Responding to a call for ideas, DAHIN entered The LINK in the international architectural Zero Threshold Design Competition, a challenge to designers to celebrate the aesthetics of accessibility in housing.

Receiving an Honorable Mention and McGregor Homes' People's Choice Award, jurors of the competition recognized The LINK as an excellent planning project supported by very well-researched design, noting particularly, the idea of creating a multigenerational community that challenges some of the current thoughts on how we live in neighborhoods today. Design solutions looked at four key objectives: Transferability, Accessibility, Housing Affordability and Flexibility, and Respecting the Neighborhood.

CHALLENGES

Zero Threshold Design Competition challenged designers to celebrate the aesthetics of accessibility, applied specifically to the design of accessible housing. The competition sought urban design strategies and solutions aimed at eliminating physical, social and economic barriers in traditional urban neighborhoods across the United States, using the Old Brooklyn neighborhood of Cleveland, Ohio, as a stand-in.

As Cleveland's largest neighborhood, Old Brooklyn represents an affordable, family-friendly middle neighborhood on the edge between growth and decline.

Long-term residents are aging in place, and the neighborhood experienced modest levels of mortgage foreclosures and housing abandonment during the banking crisis of 2008, compared to other Cleveland neighborhoods.

The traditional neighborhood homes in Old Brooklyn have vacant, street-facing front porches that create a sense of isolation and absence. There is no community park or gathering space nearby. Creating a new model for regenerating urban neighborhoods by diversifying the housing stock is key to the City's long-term growth, health and prosperity.

"Young adults can't find homes that fit their means or lifestyle. Families need space to grow often including an aging parent. Seniors on fixed incomes have few choices. People want to live where they want and how they want, but lack the housing that makes it possible. The real adventure, the joy ride, is actually delivering value for people of more modest means."

Dr. Bill Thomas @ BUILD Conference

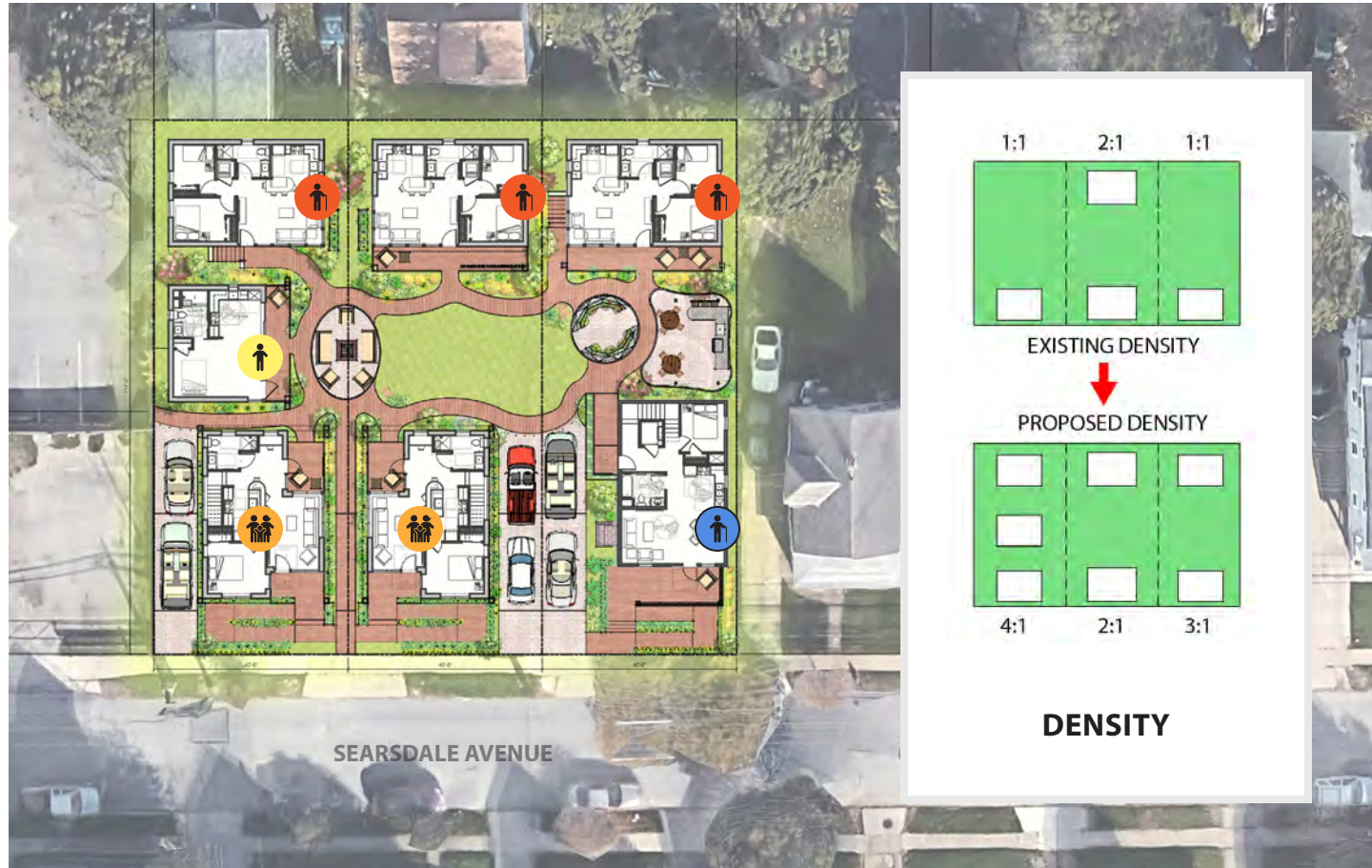


Site Context Legend

- Transit / Bike-Friendly
- Pharmacy / Medical Center
- Churches
- School / Library
- Grocery
- Restaurants



THE LINK



HOW DAHLIN HELPED

The LINK is a cluster of modular homes that address accessibility on a variety of fronts. It proposes efficient and affordable housing alternatives that champion diversity and inclusiveness in a shared communal environment.

Transferability

Designed on 40- by 120-foot lots within Cleveland's Old Brooklyn neighborhood, the design concept is transferable to other locations throughout the city. The configuration combines two vacant lots with one existing home built around a shared community garden core.

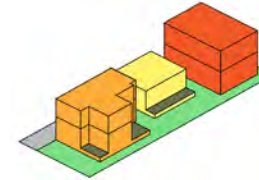
To address housing demand and stimulate growth and reinvestment back into the neighborhood, the solution proposes to house three families per lot (and up to four), achieving a density of 27 dwelling units per acre.

Accessibility

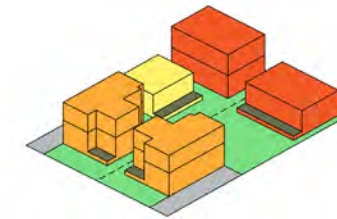
Discouraging 'otherness', The LINK responds to people with varying degrees of physical ability in a variety of innovative ways. Carefully crafted plans feature interior as well as full-site accessibility, by creating a raised, continuous, accessible circulation path from the street curb to the rear of the lot. Thoughtfully designed ramps bridge and achieve a connected path to the small individual porches of street-facing homes and the patios of homes surrounding the internal garden core.

Diversifying the Housing Stock of Middle Neighborhoods

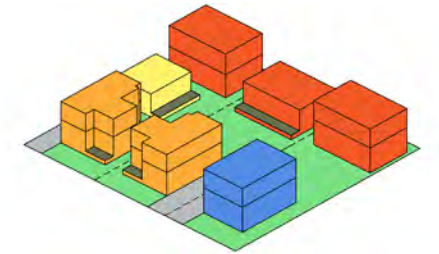
TRANSFERABILITY / LOT CONFIGURATION



SINGLE LOT - 4 UNITS
Designed to house four families on a 40x120 lot.

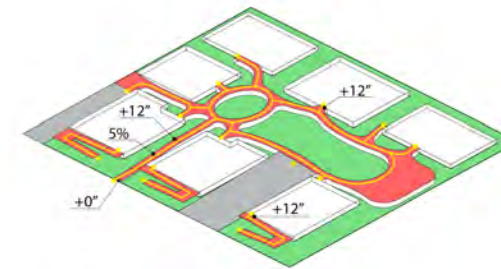


DOUBLE LOT - 6 UNITS
On two adjacent 40x120 lots, it can house up to six families.



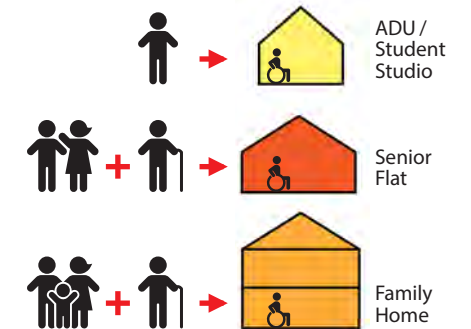
PROPOSED TRIPLE LOT - 9 UNITS
The density on three lots can be reduced by eliminating the two-story duplex or the accessory dwelling unit.

CIRCULATION



SITE ACCESSIBILITY

Accessibility to the courtyard from each home is provided with a raised circulation path to create a level platform upon approach to the central garden from the street. The circulation path has a porous edge to buffer between the path and the homes for snow accumulation.



Continuous site accessibility is accomplished by providing a raised circulation path that connects from the street to an internal community space. This core space will socially engage neighbors and provide a shared courtyard for gathering, outdoor dining, kid's play, and community gardening.

Housing Affordability and Flexibility

The LINK addresses the missing middle with an economically accessible model. Ownership of different units can be decoupled to allow access for multiple owners and provide a variety of affordable housing choices.

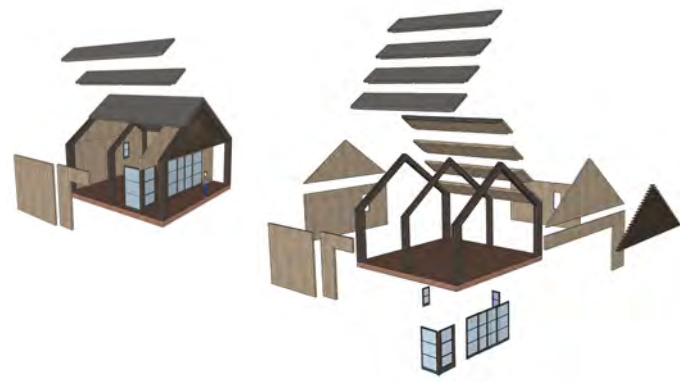
Middle-income families needing space to grow have both the alternative of a stacked flat or two-story home with ground floor accessibility and basement. The studio/accessory dwelling unit can serve young professionals, students or caregivers. It targets workforce housing for the neighboring hospital and community college, and offers rental property to supplement the owner's income. The flexibility of the lot configurations and units themselves allow for removal of the middle unit to create a larger community garden core.

All homes provide seniors and people with disabilities, the opportunity to live independently within their means, in smart homes equipped with technology, within a safe community.

MODULAR TINY HOMES

Accessory Dwelling Units are designed based on a modular tiny home model. This elegant simple design is based on a post and beam system that offers infinite configurations of pre-fabricated walls, roof panels and girders. Parts can be cut with CNC machines and shipped on-site and assembled in a very short period of time. The walls and panels are insulated and weather-tight. The cost of these homes is less than \$150 per square foot (approximately \$75,000 per home).





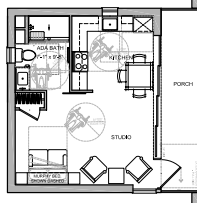
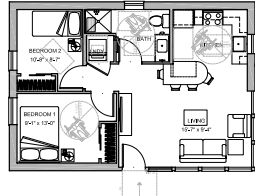
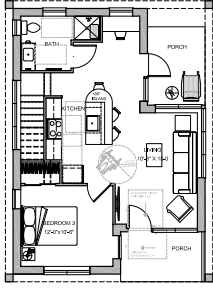
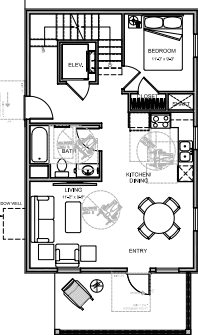
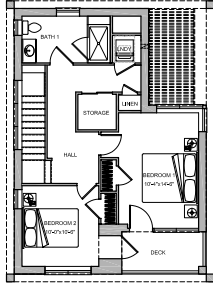
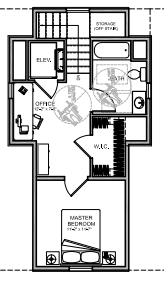
ACCESSORY DWELLING UNIT



SITE SECTION

Envisioning and Building a Barrier-free Future



 ADU / Student Studio 1 bed / 1 bath 480 sf	 Senior Flat 2 bed / 1 bath 704 sf	 Family Home 3 bed / 2 bath 1,148 sf	 Retrofit Existing Bungalow 3 bed / 3 bath
		 First Floor	 First Floor
		 Second Floor	 Second Floor



SEARSDALE AVENUE ELEVATION



Respecting the Neighborhood

The proposed multigenerational community respects the current neighborhood fabric responding with solutions that are appropriate in scale, density and articulation. New homes facing the street take design cues from Old Brooklyn while maintaining the historical cadence.

Adjoined by a common garden core, efficient footprints of these new smaller homes wrap the sides and rear of the project site. Two parking spaces per lot (or three 'smart' cars) with optional accessible parking and van pick-up convenience, continue the rhythm of the neighborhood's streetscape. The site's proximity to bus stops and bike lanes along State Road, promote a more walkable community foreshadowing the evolving shared economy.

By making connections in a neighborhood of possibilities: new residential construction, accessory dwelling units, housing retrofit, and community gathering, The LINK is a holistic approach to the challenge of accessible, barrier-free living.

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