



ARETE

STRUCTURAL ENGINEERING &
DEVELOPMENT CONSULTING

AARP MULTI GENERATIONAL HOUSING DESIGN

Site Selection

Neighborhood Compatibility:

- Area with many established 2-story houses
- Area with established tall trees
- Site with > 65-ft street frontage

Mobility:

- Access to trails and recreation
- Proximity to elementary school (easy walking for kids + playground if limited yard space)
- Proximity to jobs
- Proximity to healthcare
- Proximity to adult recreation (gym, club, etc)

Assumptions:

- Flat site
- Follow predominant cardinal street orientation of neighborhood
- no easements, stream, lakes, etc.
- adjacent to residential uses
- local street classification

Chose infill/mid block lot because it will be the most common lot available and more challenging to work site access for pedestrians and vehicles.



Program

Design a property that accommodates a wide range of living arrangements.

Design that can be scaled by adding additional living spaces to a base program

Base Project:

- **Primary House** for family with 2-3 children
- **Mother-in-Law House** for aging parents/grandparents (could also be for disabled sibling/relative, rented for income, etc.)

Optional Add-ons:

- Add caretaker unit to mother-in-law house
- Add accessory dwelling unit over detached garage

Primary House

Family with 2-3 kids living at home

- 2-stories, +/-2,500 sf
- ground floor / kitchen / living accessible
- 3/4 bedrooms
- ground level office / guest suite
- generous mudroom near primary entry
- living room sharable with mother-in-law
- securable from mother-in-law (if not occupied by family)
- shared and private outdoor space
- movie / media space

Mother-in-Law

Aging Parents / grandparents (sibling / relative / other)

- fully accessible single level living
- +/- 1,500 square feet
- not so compact to limit hobbies and have to reduce personal items
- fully independent of primary house
- indoor access to primary house via semi-shared space
- private outdoor space
- option for attached, fully independent care-takers unit (or young adult/grandchild)

MIL caretaker unit

For live in caretaker, guest suite, young adult family member starting life, or rental/income unit

- fully functional independent living (bed, bath, kitchen)
- studio or one bedroom
- option for private or shared entry

Garage ADU

Optional accessory dwelling unit above the detached garage for income/rental or available to young adult family / friend.

- fully functional independent living
- +studio or one bedroom
- private entrance
- private outdoor space / deck

Multi - Generational Highlights

- Fully accessible site and mother-in-law house
- Mother-in-law and primary house are connected and accessible via indoor transition / shared space.
- Various generations co-located to help and share property and life responsibilities.
- Mother-in-law house is not so compact that aging parents don't have to give up a lot of personal items and have space to have hobbies and stay active.
- Indoor and outdoor space for private and shared activities.
- Options to add units for caretakers, additional family situations, or income.

Construction Methods

- Conventional wood frame construction
- At grade ground floor (slab on grade or recessed wood framing)
- Architectural style compatible with neighborhood
- Energy efficiency - continuous insulation or thermally broken wood framing
- Attention to sound detailing between spaces
 - Detached garage and garage ADU to limit noise from garage use and between family and ADU
 - Primary house and MIL separated by transition space
 - High STC rated floor/ceiling between MIL and Caretaker Suite
- Slip resistant outdoor walking surfaces
- Well lit outdoor access paths
- Well thought out lighting at accessible/aging in place unit
- Wide entrance and entry halls

Questions / Issues / Complexities

- Cars.....
- Length of driveways and amount of snow removal
- Cost of Basement living space
- Cost of roof top decks for private outdoor spaces
- not all entrances front street
- solar expose to each living space
- no alley! -> a lot of function is pushed to the front of the house
- Lot coverage and limited outdoor yard space
- Style and Massing that is compatible with existing neighborhood.
- How to classify an attached "communicating" mother-in-law house and "communicating" caretaker suite.



Title 21 and Code

For this specific site and proposed uses, we did not encounter zoning / code / site development standards that were challenging to design to.

This site has adequate street frontage to accommodate driveways, pedestrian access points, and some on street parking.

The lot is large enough for a lot of uses / structures with residual space for creative outdoor areas

Biggest Challenge - Lot Coverage

including a large garage, a primary house with all necessary functions on the ground level and a fully ADA accessible mother-in-law house on the ground floor pushes this site right up to the 40% lot coverage limit.

This does seem reasonable for a primarily single family neighborhood and trying to fit in with the existing environment.

Phase I to Phase II revisions

Focus on the site plan with mother-in-law house that is attached to the primary house as opposed to site plan with fully detached MIL.

Simplify parking arrangement and access to parking spaces (thinking about teenagers and older individuals maneuvering into tight spaces).

Use enclosed garage as opposed to open carports.

Direct and covered route between garage and living spaces.

Change caretaker unit and ADU to second level spaces instead of basement because of cost associated with basements on tight sites and less desirable living space.

Market Feasibility

This use is very specific to a family that wants or needs to live together. If multi-generational living works for you it is likely to reduce the cost of housing and ongoing cost of daily life.

Co-habiting and sharing property responsibility and expenses will likely reduce living costs per family

Maximizing the utilization of a single property (multiple independent living spaces) likely reduces the initial cost of housing by sharing site development costs with more than one family.

Being able to age in place is likely less expensive than senior living and assisted living homes.

Older generations living with/near younger generations can benefit from home, yard, and snow maintenance that is easier for younger generations to physically do.

Younger generations living with/near older generations can benefit with child care and day to day chores that older generations may have more time to complete and participate in.

Having flexible space that can be rented as income can help offset the cost of housing.

** In Anchorage, the current cost of construction and base cost of land/improving land is high. This product is likely not a speculative home product or an option for low to middle income families.

** This product could benefit older families in situations where younger generations are earning more money and have better access to money and financing

** This product could benefit younger families in situations when older generations have been financially successful and have the means to help younger generations with their housing.