

# Incorporate Universal Design Without Breaking the Bank:

## Affordable Universal Design

Housing Washington 2013

October 9, 2013



# Typical Homes



# Part Way

Multi-Family Housing

Fair Housing

State Building Code

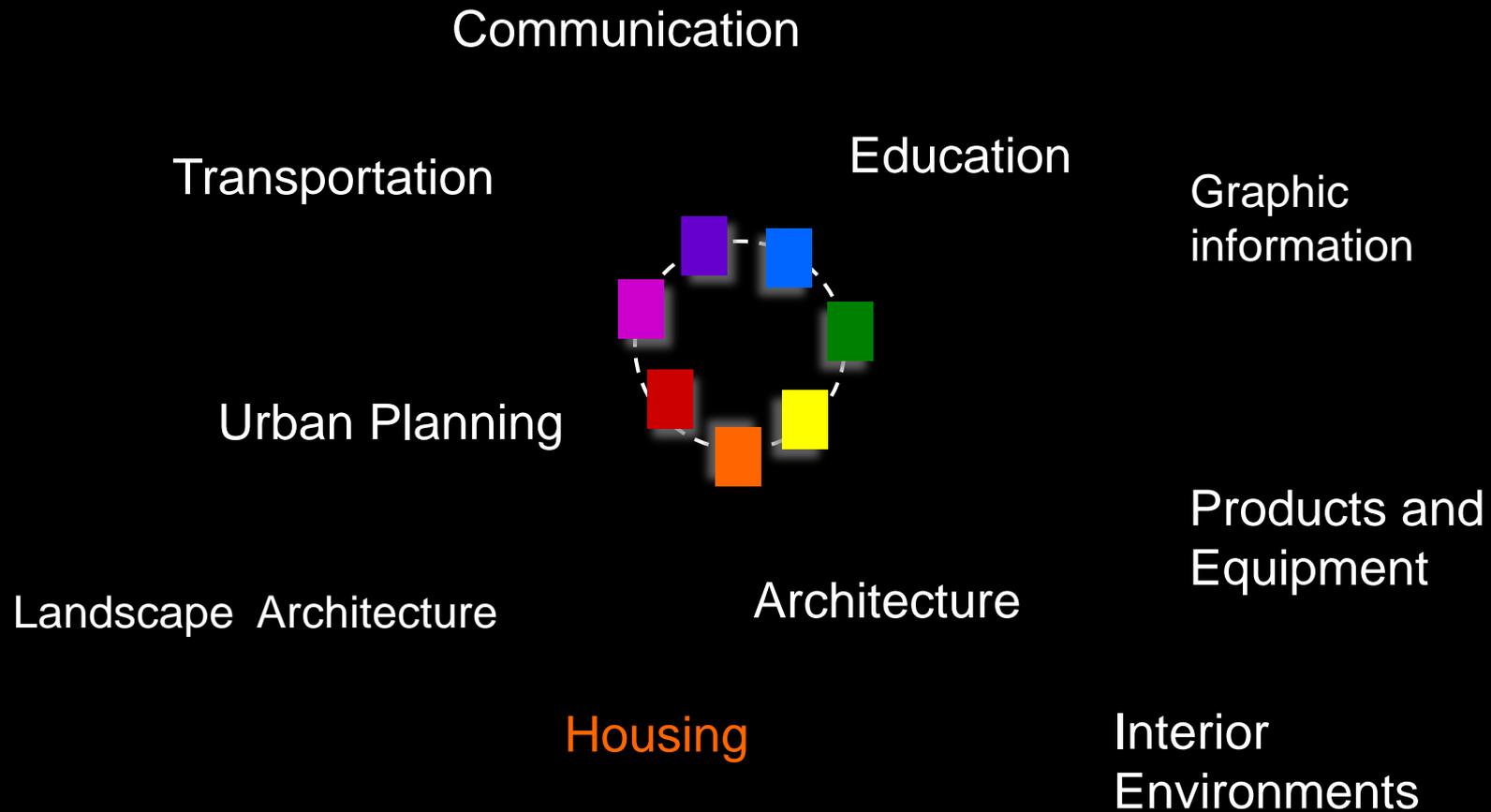
Federal or HFA funding

Local ordinances or incentives?

# Needed

1. Universal, affordable housing features for low-wealth households with and without current disabilities
2. More UD homes/units with UD
3. Communities that support our lives

# areas of UNIVERSAL DESIGN



# Is Universal Design the same as...

Accessible Design  
ADA Compliant Design  
Barrier Free Design

Specialized Design  
Assistive Technology  
“Handicapped” Design  
Visitable Design

A NEW AGE EUPHEMISM?



# Universal Entrances



Avoid



Better, but  
not UD



# Accessible



# Universal Entrance



# Universal Entrance

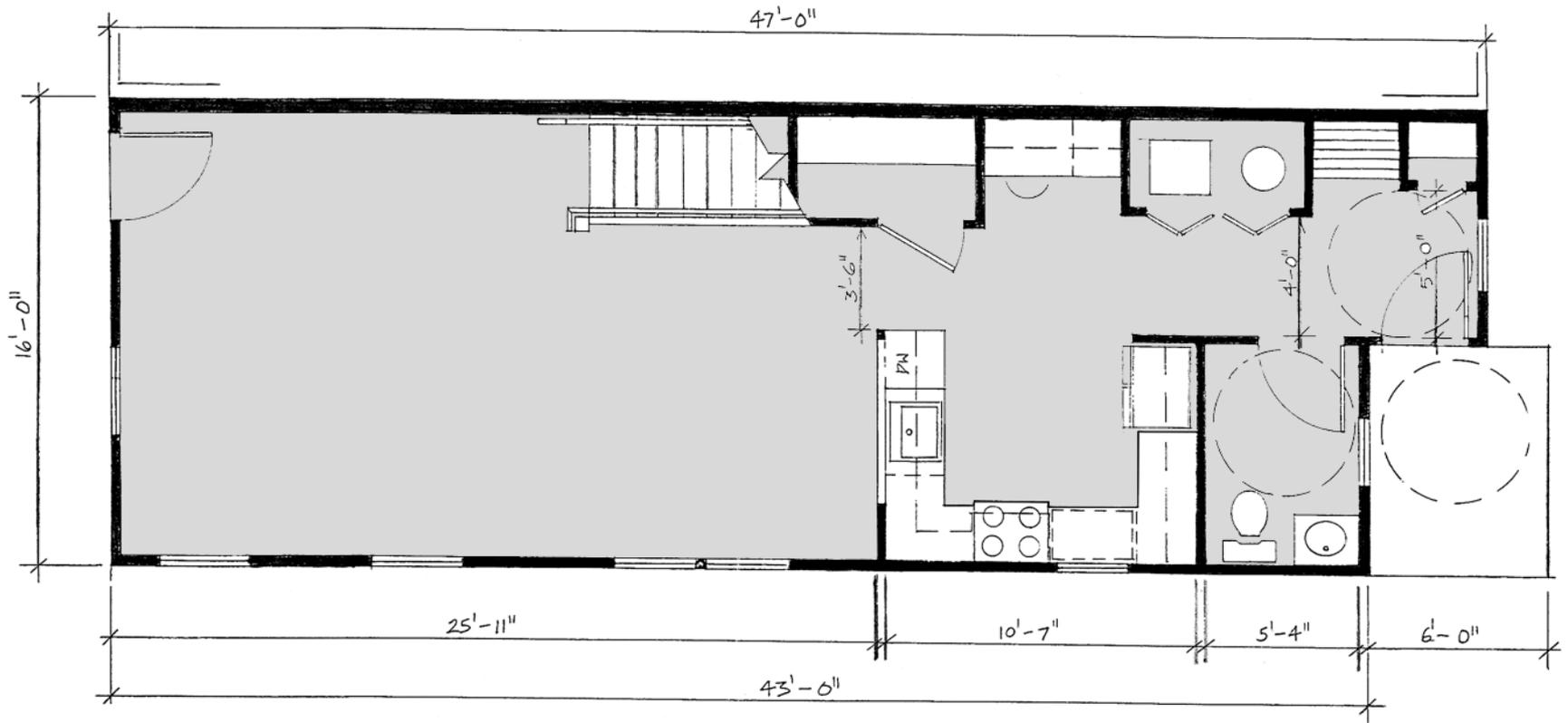


# Price Points



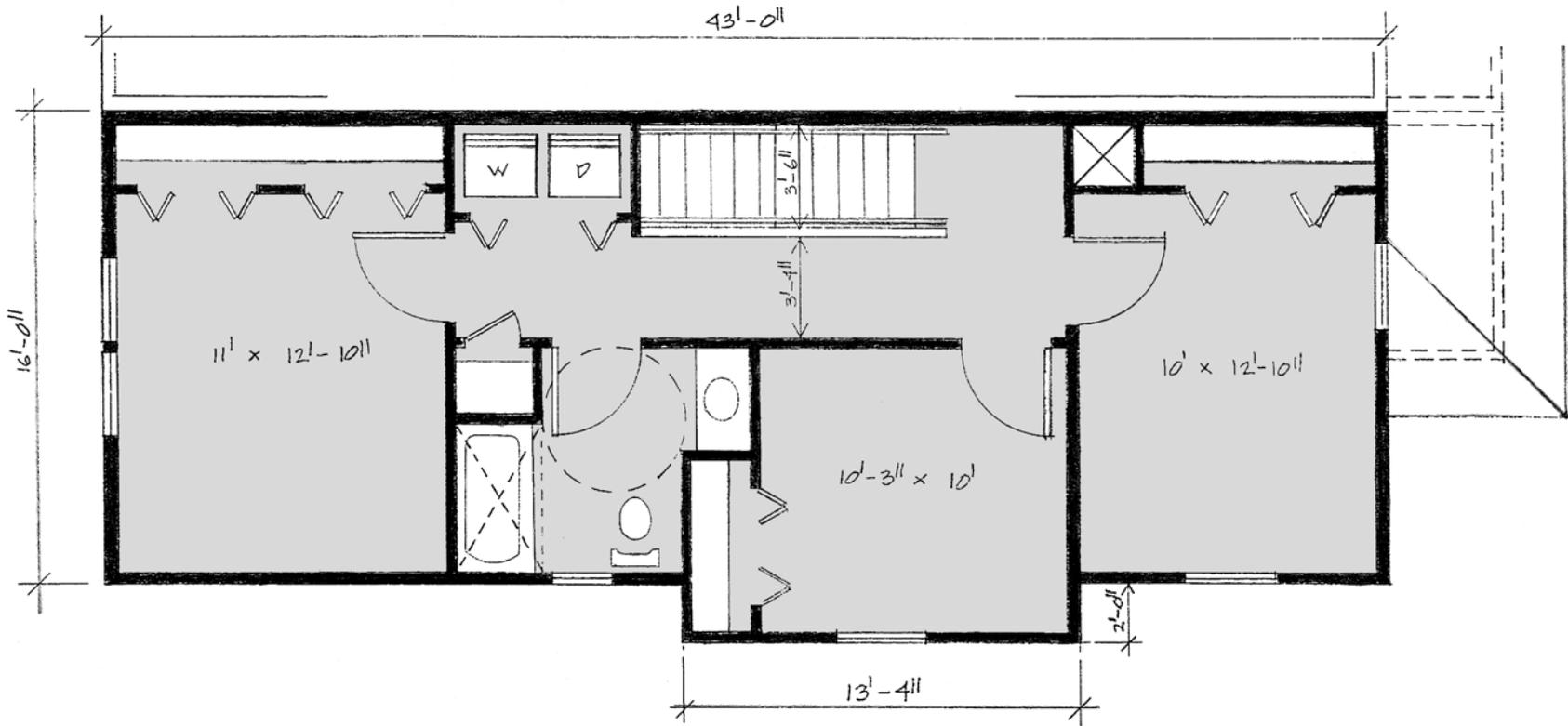
# Affordable Universal Design





MARYLAND HOMES  
 UNIVERSAL TWO-STORY UNIT 1ST FLOOR

11-12-00



MARYLAND HOMES  
 UNIVERSAL TWO-STORY UNIT 2ND FLOOR  
 11-06-00

# Easier Assistive Technology Add-ons

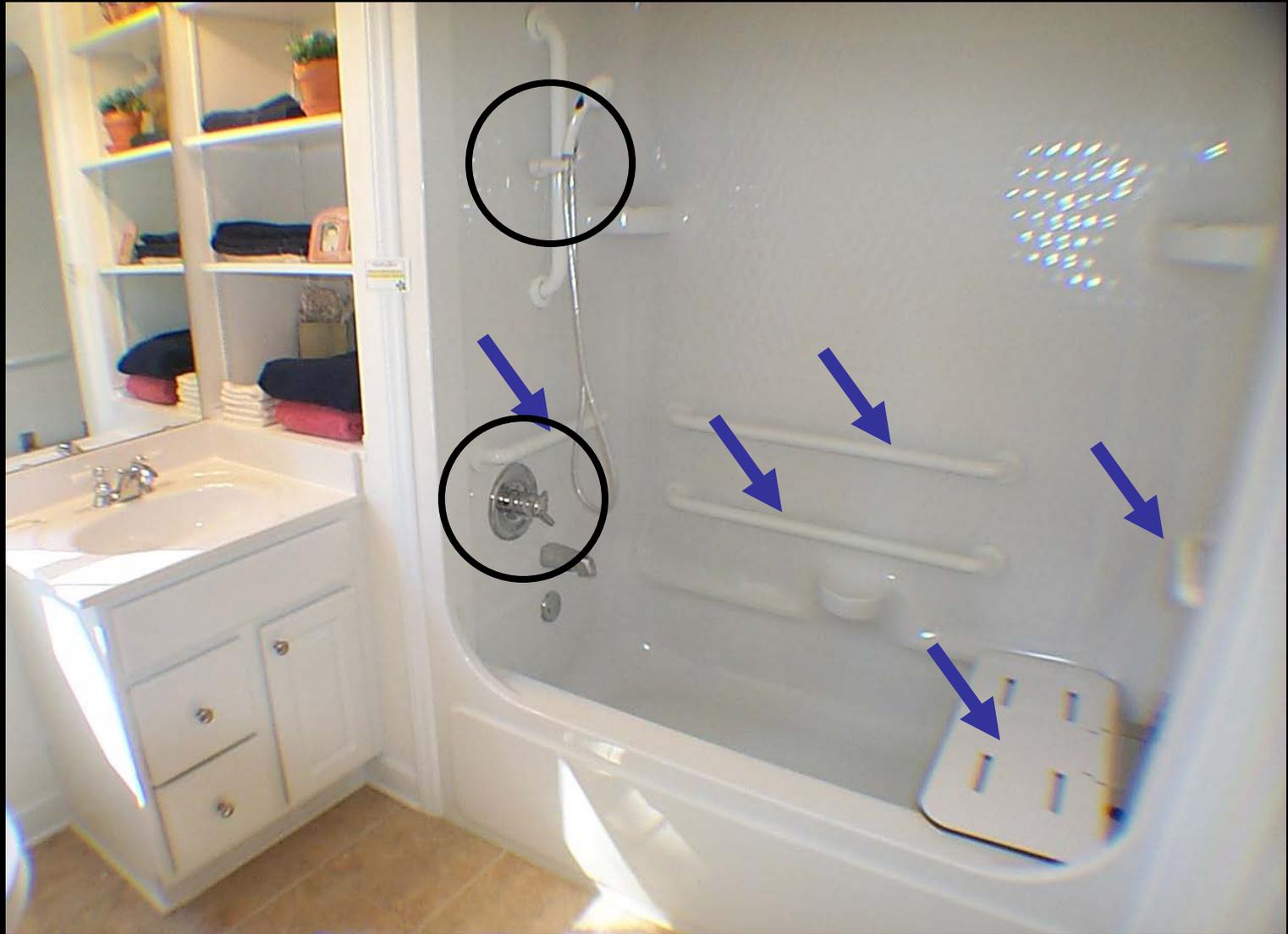


# NOT Universal



“Armrest” Grab Bars and  
Raised Seats

# Too Much







# Good Looking but still very custom



# Very Accessible - Not UD



# Pull-down Shelves



# Adjustable Height Wall Cabinets



# Mixed Bag

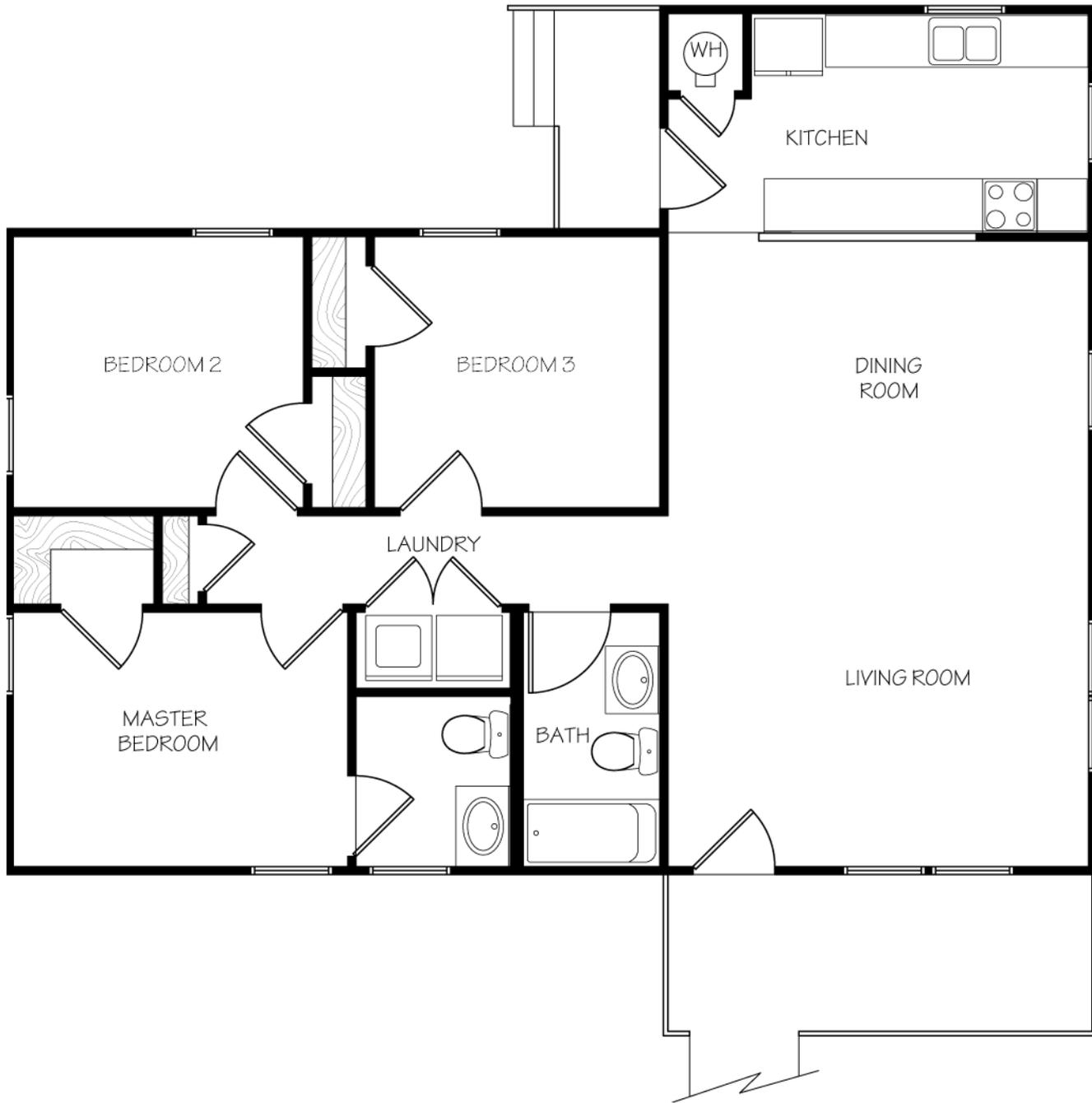


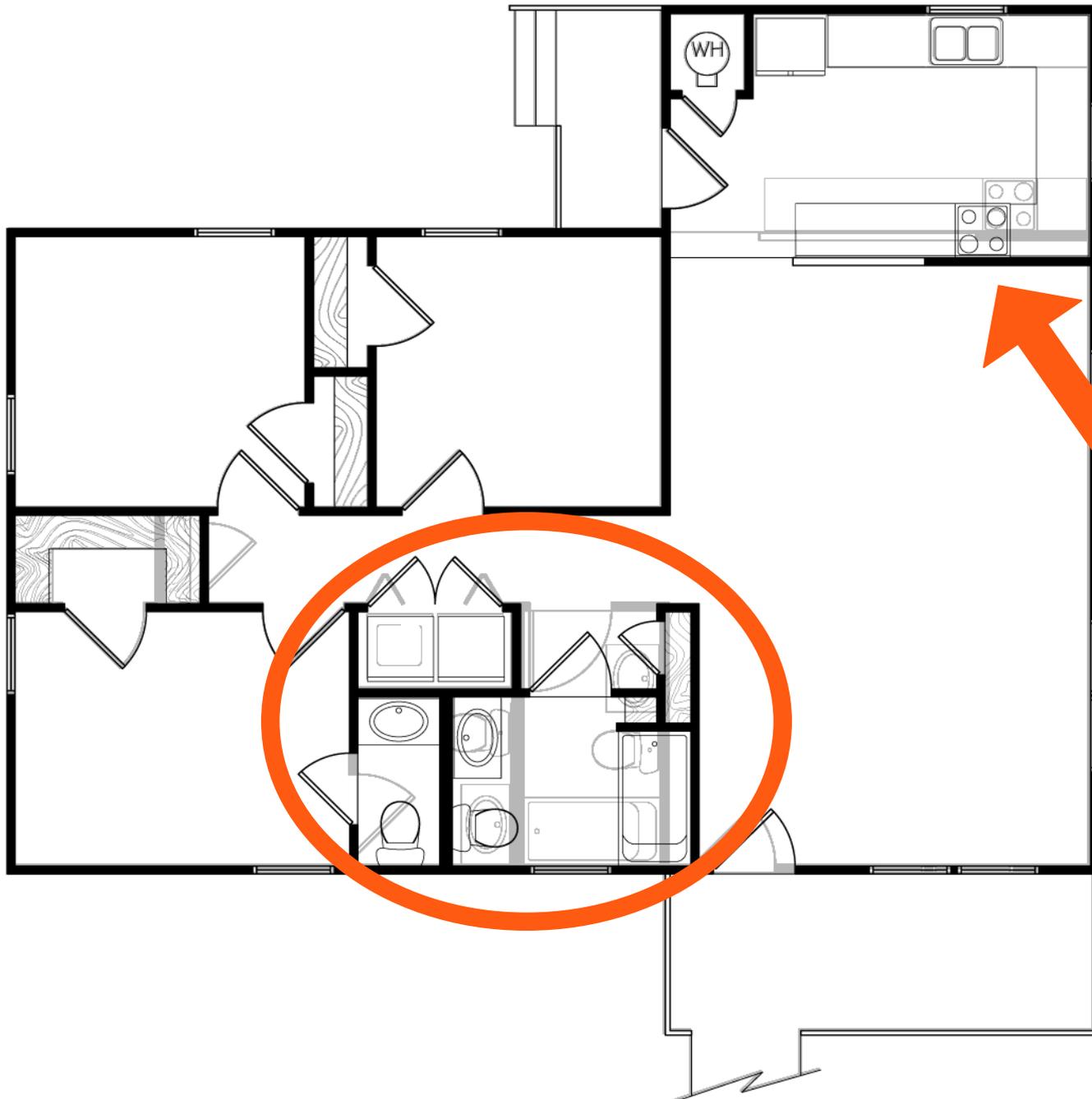




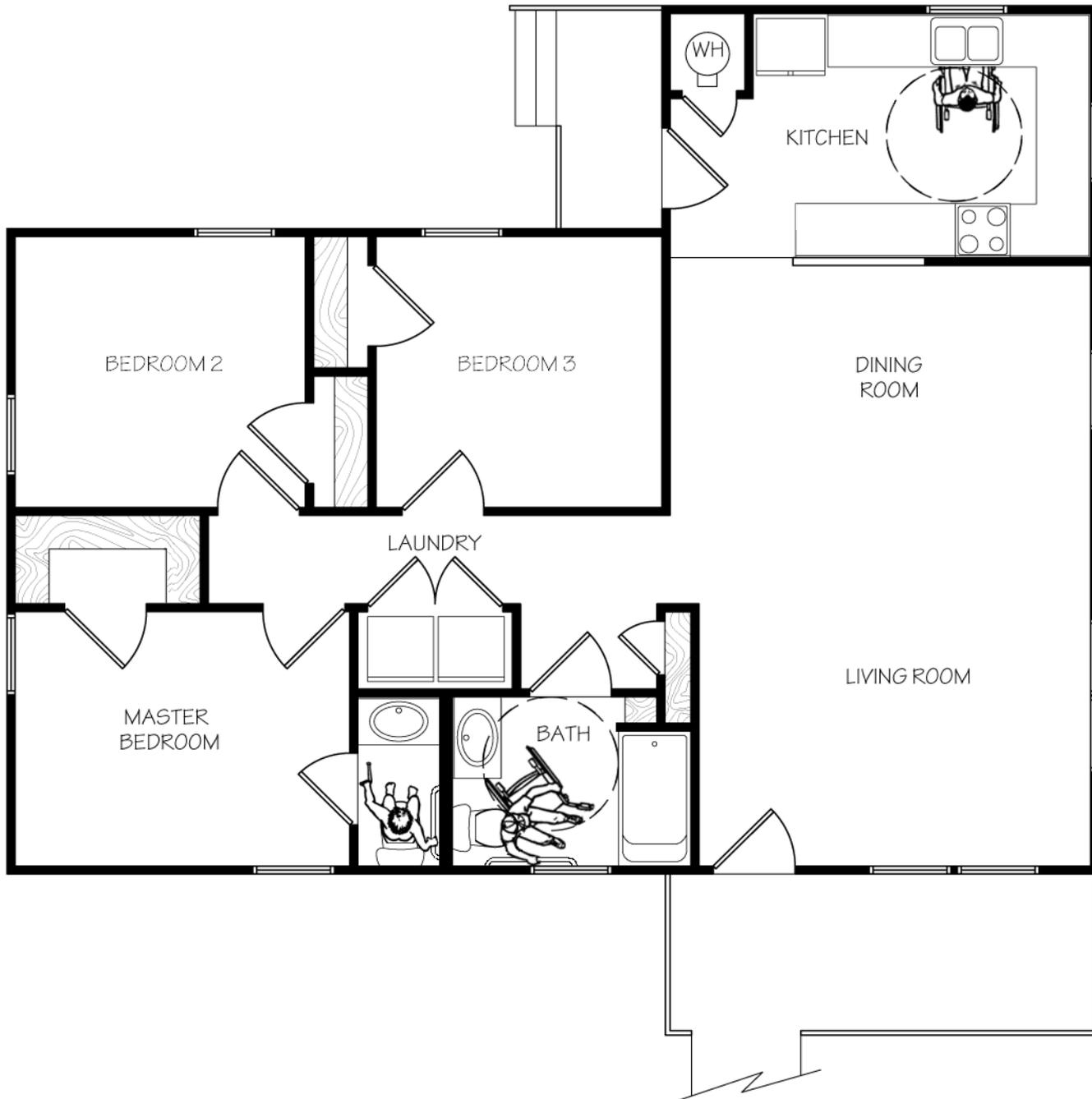


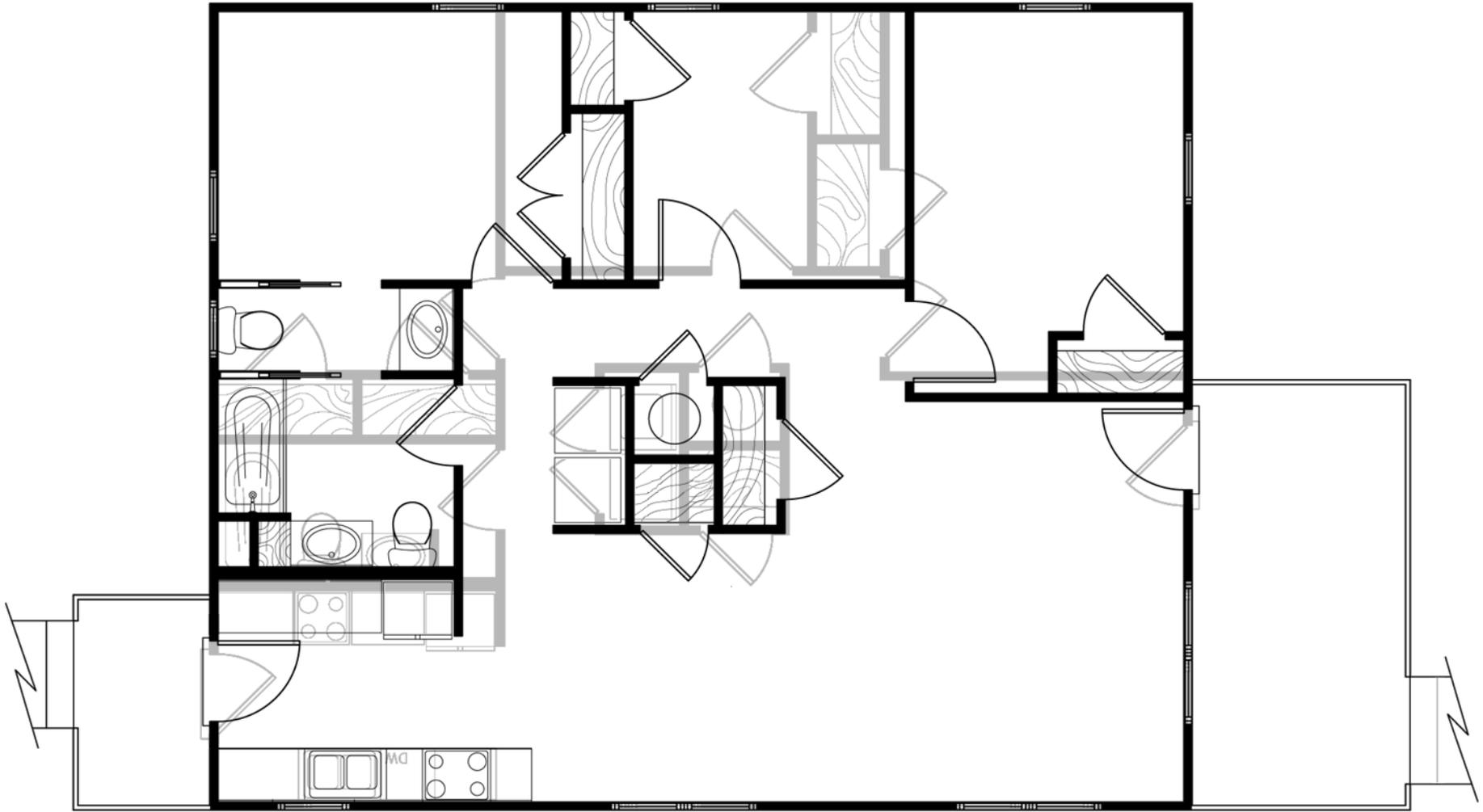


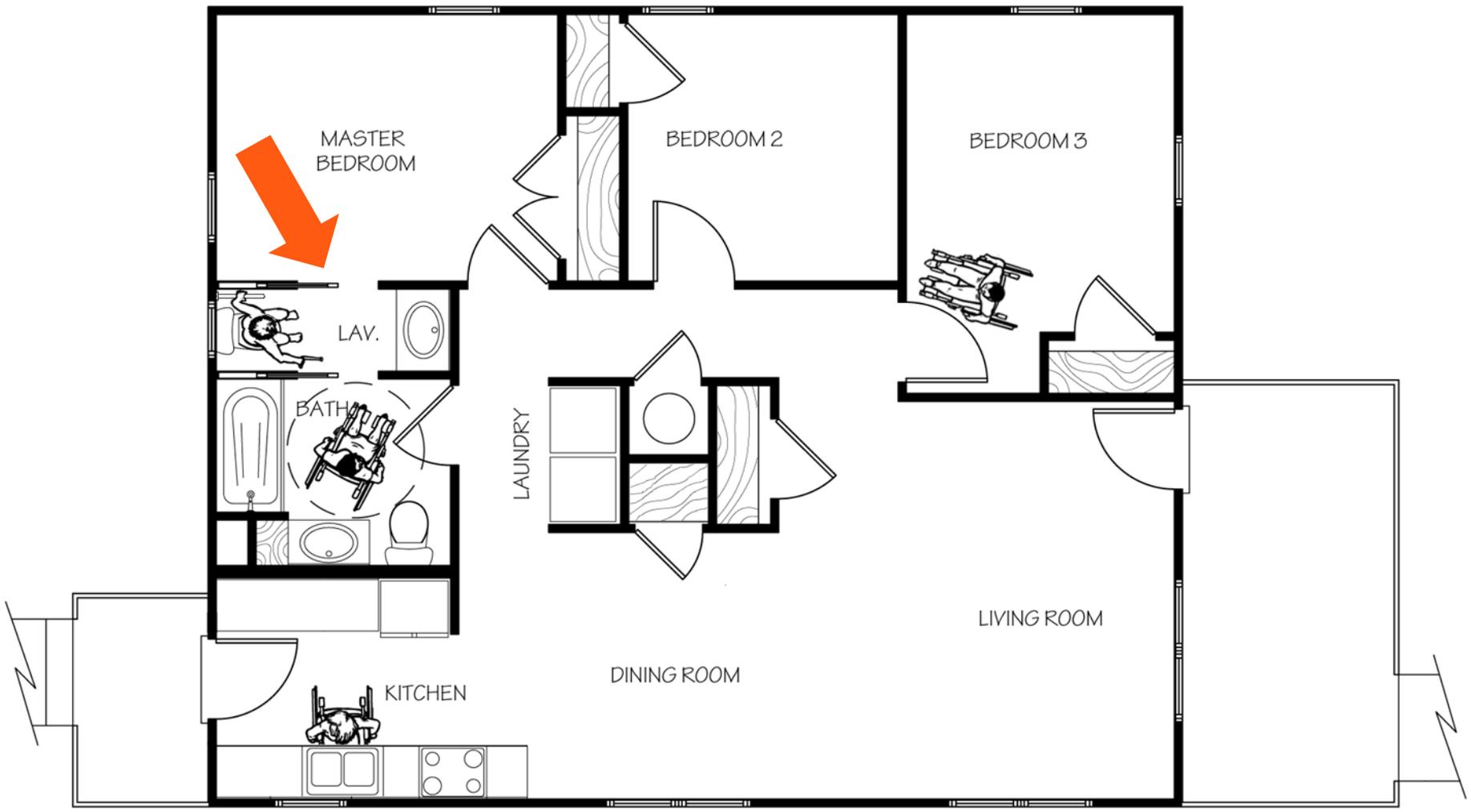












MASTER  
BEDROOM

BEDROOM 2

BEDROOM 3

LAV.

BATH

LAUNDRY

DINING ROOM

KITCHEN

LIVING ROOM

# Controls In Usable Locations



# UD “Short” List

- Route of Travel
  - Stepless entrance, with roof
  - 3'-0" (2'-10") door width
  - 3'-6" minimum hallway width
- Key function areas on accessible level
- Usable kitchen and bath configurations
  - Whole wall reinforcing for grab bars
- Easy-to-use controls and hardware in reachable locations
- Integrated, marketable design

# Costs

Basic features

Transition

Products



# Transition Costs

Design and planning

Education and training of...

Subcontractors

Builder

Design team

Drawing changes

Supply Chain

# UD Expenses

Careful siting on lots

Entrance - grading, foundation

Indoor air quality

Materials

Products



# Products

## Refrigerator

Side by side, Freezer on bottom

Drawer style

## Front control stoves

Drop in, Slide in

Stove tops



# Products

Front control clothes washer/dryer

Casement Windows

Pre-blocked tubs and showers

Curbless showers

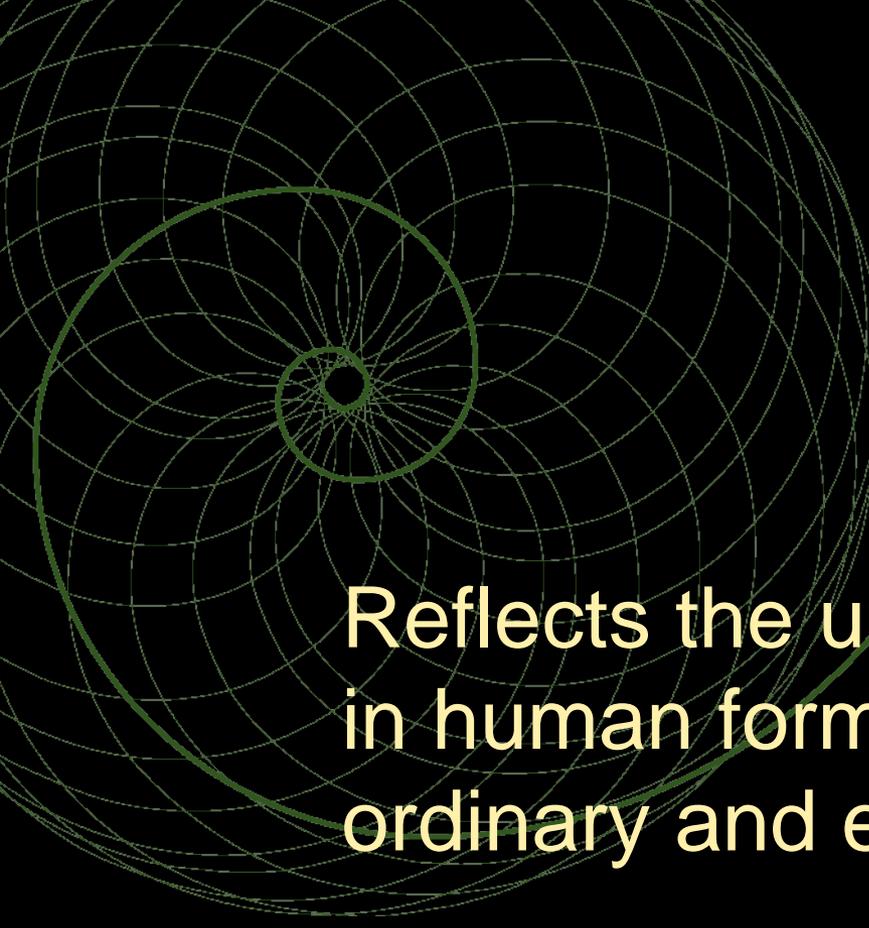
Home Automation



# Added Value

Additional fill - may not need to pay for removal

Added value as demographics progress



universal design

Reflects the understanding that variation in human form and performance is ordinary and expected.



BETTER LIVING DESIGN

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I N S T I T U T E

Better Living Design (BLD) is a sensible design approach to improve how homes are designed, built and remodeled in America.

The BLD team will rebrand universal design for homes and home products.

# THE TASKS



- ➔ Educate Designers, builders and remodelers
- ➔ Provide marketing materials and resources to help promote BLD projects
- ➔ Promote BLD to consumers
- ➔ Review and approve home designs and remodeling projects and issue the BLD “seal” to projects that meet the criteria

[betterlivingdesign.org](http://betterlivingdesign.org)



In the future **every home** will be designed, built and remodeled for **everyone at every age and ability.** That future starts here. Now.



# R.L. Mace Universal Design Institute

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Designing for Human Diversity



# R.L. Mace Universal Design Institute

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