

We acknowledge the City of Tucson's forward-thinking initiative in removing restrictions around permitting guesthouses in residential zones and align our mission by facilitating a fast track to bring Accessory Dwelling Units (ADU's) to life.

We present a diverse collection of three model units; each thoughtfully designed with variations in size and materials, tailored to meet the distinct housing needs and varied property requirements of our City's residents.

**LUMEN:**

\*Note: The Lumen model unit is available as a studio, one-bedroom, or two-bedroom unit  
2018 International Residential Code  
City of Tucson ADU Zoning Code Amendment

Area Summary:

Studio Unit: 605 SF  
One-Bedroom: 825 SF  
Two-Bedroom: 1,000 SF

Amenities:

Full Kitchen: sink, refrigerator, dish washer, oven  
Stackable Laundry  
Tank style or Tankless instant hot water heater  
All-Electric Design Load = 100amps, Solar Ready  
Graywater infrastructure included  
Cool Roof Coating specified  
Roll-in shower, 36" interior doors, meets Tucson Inclusive Home Design Guidelines



**MICRO 144:**

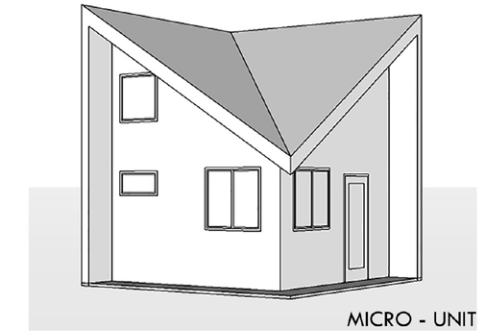
\*Note: 144 is the clear interior area of the building, 12'x12'  
Appendix Q: Tiny Houses from the 2018 International Residential Code  
City of Tucson ADU Zoning Code Amendment

Area Summary:

Ground Floor Area: 176 SF  
Loft Area: 130 SF  
Total Livable: 306 SF

Amenities:

Full Kitchen: sink, refrigerator, dish washer, oven  
Stackable Laundry  
Tankless instant hot water heater  
All-Electric Design Load = 100amps, Solar Ready  
Graywater infrastructure included  
Cool Roof Coating specified



**ROOST:**

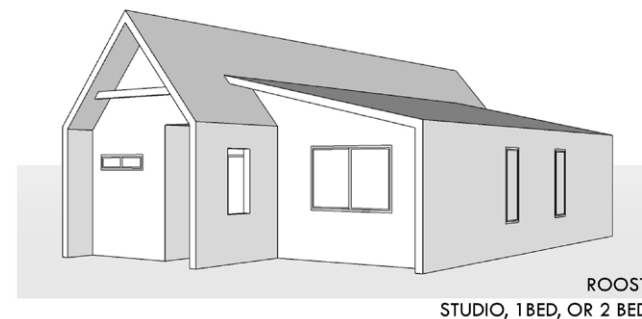
\*Note: The Roost model unit is available as a studio, one-bedroom, or two-bedroom unit  
2018 International Residential Code  
City of Tucson ADU Zoning Code Amendment

Area Summary:

Studio Unit: 436 SF  
One-Bedroom: 623 SF  
Two-Bedroom: 768 SF

Amenities:

Full Kitchen: sink, refrigerator, dish washer, oven  
Stackable Laundry  
Tank style or Tankless instant hot water heater  
All-Electric Design Load = 100amps, Solar Ready  
Graywater infrastructure included  
Cool Roof Coating specified  
Roll-in shower, 36" interior doors, meets Tucson Inclusive Home Design Guidelines



\*Note: All designs are already permitted as model plans in the City of Tucson and in Pima County.  
All information presented within this application is in reference to the permitted construction documents.



# Casita Model Plan Competition

## DESIGN GUIDELINES

### ACCESSIBILITY AND UNIVERSAL DESIGN

All model plans conform to PCDS Accessible Routes and all provisions of the Inclusive Home Design Ordinance (IHDO). The **ROOST** and LUMEN models fully comply with all IHDO provisions, feature wide entry and interior doors, strategically located fixtures, roll-in showers, low threshold entry doors, and thoughtfully planned spaces throughout. The MICRO 144 offers accessibility on the ground floor but due to the loft, it cannot be considered fully accessible.

### INNOVATIVE CONSTRUCTION / DESIGN

Our buildings offer customizable finish options, including cabinets, interior paints, and floor or wall textures. This flexibility extends to exterior wall materials, such as stucco, metal, or cement fiberboard, as well as roof options like metal or shingles. This feature facilitates construction in varied contextual styles and historic areas.

Our permitted drawings follow standard wood frame construction (2x6 walls, 2x12 roof joists) with concrete slab-on-grade foundations. The buildings are all carefully designed to industry standard material modules to limit waste during construction. All openings are designed to fit standard windows and doors, with many specified at 6'-0" wide for easy customization or downsizing.

Additionally, our designs allow for the use of alternative building materials with City approval. We are currently overseeing the construction of two buildings using SIPS panels, and we offer engineered shop drawings for the LUMEN and the MICRO 144 to homeowners interested in this option.

We partner with local businesses to streamline the construction process. A lumber supply, appliance company, and cabinet manufacturer all offer complete material packages including pricing and quantities specific to our designs. We're collaborating with a production home builder and several small-scale contractors for future projects and we are aligning ourselves to a future of off-site construction manufacturing for turn-key ADU units.

### AESTHETIC AND CONTEXTUAL INTEGRATION

We offer solutions for residential lots of all sizes. A range of square footages and floor plan options accommodate various lot sizes, configurations, and functional needs. Flexible detailing lets homeowners select exterior finishes to match surrounding context, including historic areas. Design adjustments include doors/window swaps, resizing or re-positioning openings, and rotating or mirroring plans in response to specific site conditions.

The LUMEN features a boxy design with a hip roof that yields wall heights that meets 6'-0" setback requirements while still providing ample lighting and high ceilings. The **ROOST** is a long and narrow structure, ideal for areas with limited space in one direction. It boasts open vaulted ceilings for a spacious feel. The MICRO 144 is a compact, efficient Tiny House on a permanent foundation with a sleeping loft, suitable for any lot size or property configuration.

### SUSTAINABILITY, ENERGY, AND WATER EFFICIENT

All buildings meet IRC energy standards for insulation R-values and door/window U-values and use cool-roof coatings. Each set of construction documents includes a cover page with General Design Guidelines, outlining best practices in High-Performance site planning and design, providing information about energy consumption, shading and solar access, integrating native vegetation, water conservation, and graywater infrastructure. All homes are all-electric and solar ready, require 100amps of power, and include graywater infrastructure, mechanical systems to be selected in the field - high efficiency mini splits are recommended.

## CASITA CATEGORIES

### UNIVERSAL DESIGN / ACCESSIBLE CASITAS

**ROOST**  
LUMEN

### LOW-COST / INNOVATIVE CASITAS

**ROOST**  
LUMEN  
MICRO 144

### FAMILY-FRIENDLY CASITAS

**ROOST 2-BEDROOM**  
LUMEN 2-BEDROOM

### GREEN OR NET ZERO CASITAS

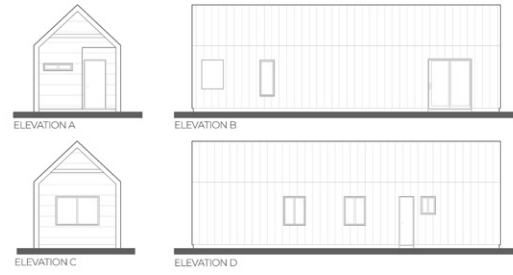
**ROOST**  
LUMEN  
MICRO 144

**MODEL / UNIT OVERVIEW**

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**ROOST STUDIO**  
436 SQUARE FEET

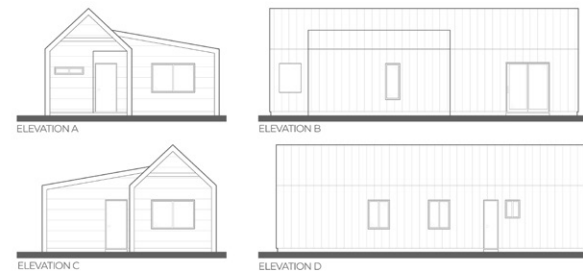
- 1 COVERED PORCH
- 2 ENTRY
- 3 BATHROOM
- 4 KITCHEN
- 5 BEDROOM



© 2023

**ROOST ONE-BEDROOM**  
623 SQUARE FEET

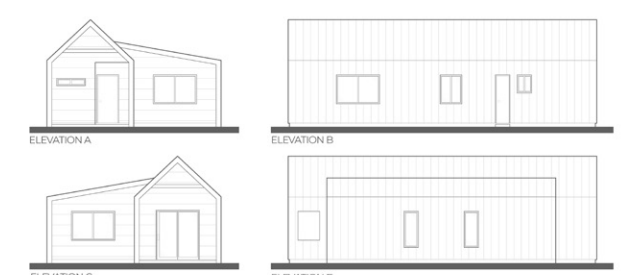
- 1 COVERED PORCH
- 2 ENTRY
- 3 BATHROOM
- 4 KITCHEN
- 5 LIVING ROOM
- 6 BEDROOM

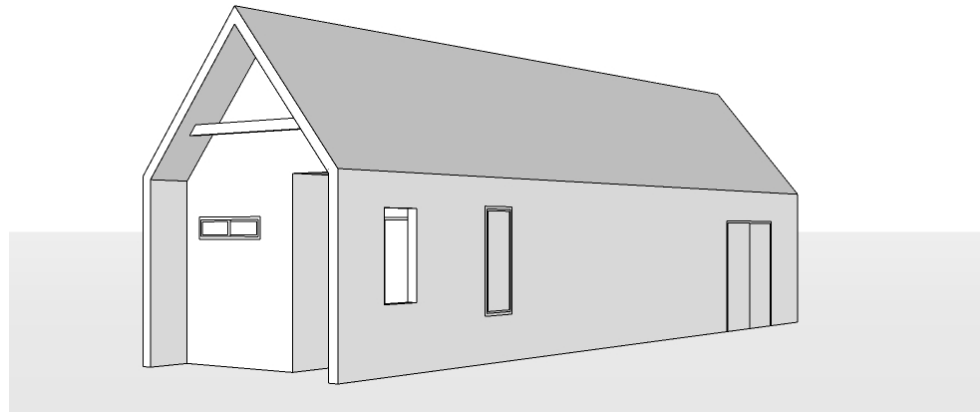


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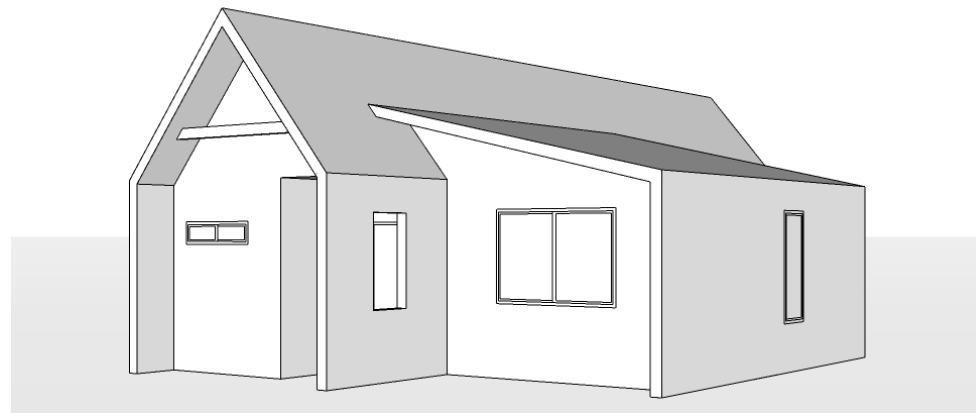
**ROOST TWO-BEDROOM**  
768 SQUARE FEET

- 1 COVERED PORCH
- 2 ENTRY
- 3 BATHROOM
- 4 KITCHEN
- 5 LIVING ROOM
- 6 BEDROOM 1
- 7 BEDROOM 2

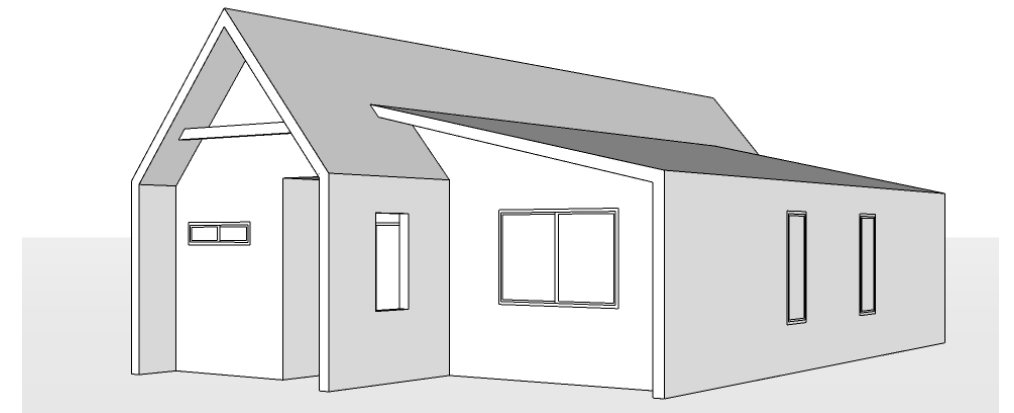




STUDIO: 436



1-BEDROOM: 623 SF



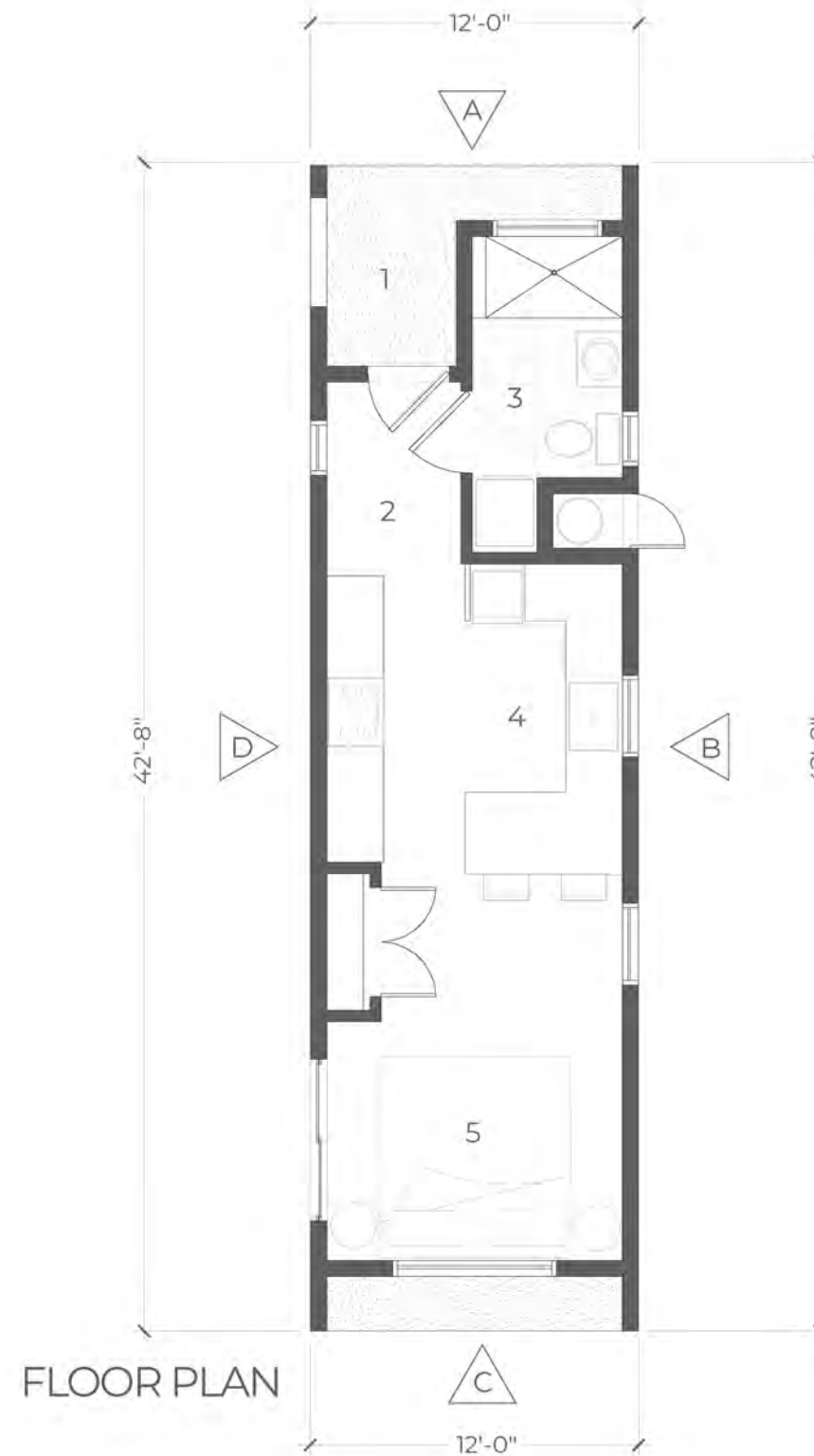
2-BEDROOM: 768 SF



# ROOST STUDIO

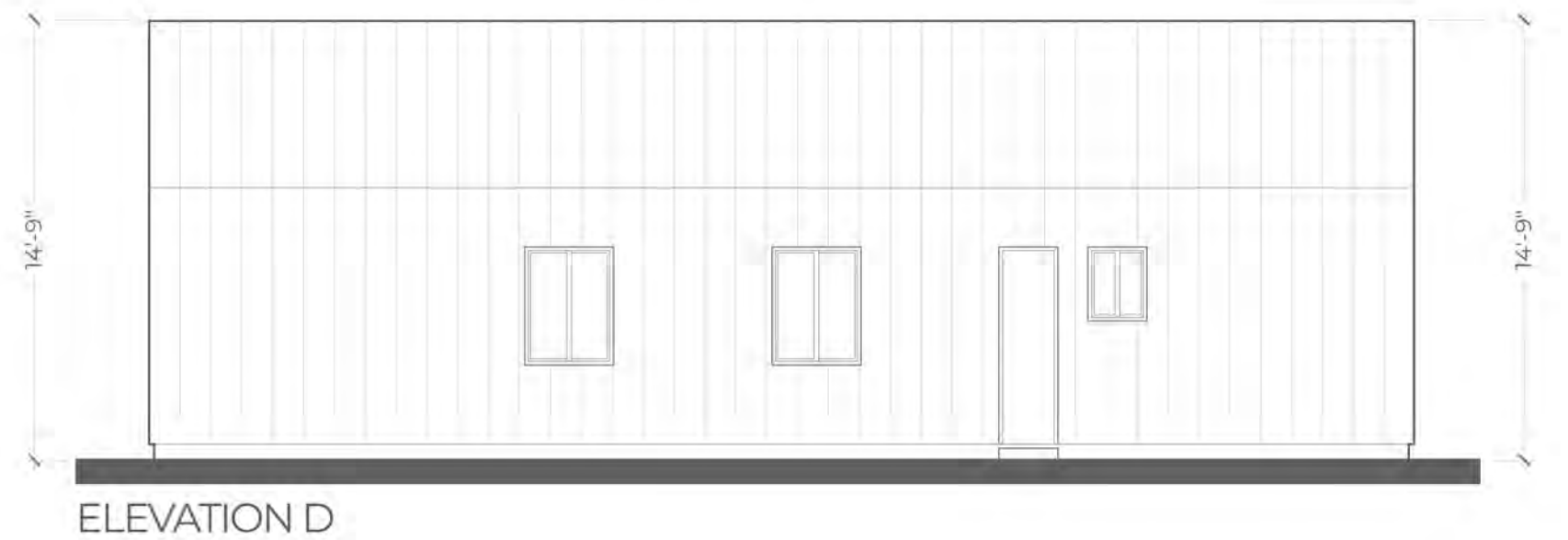
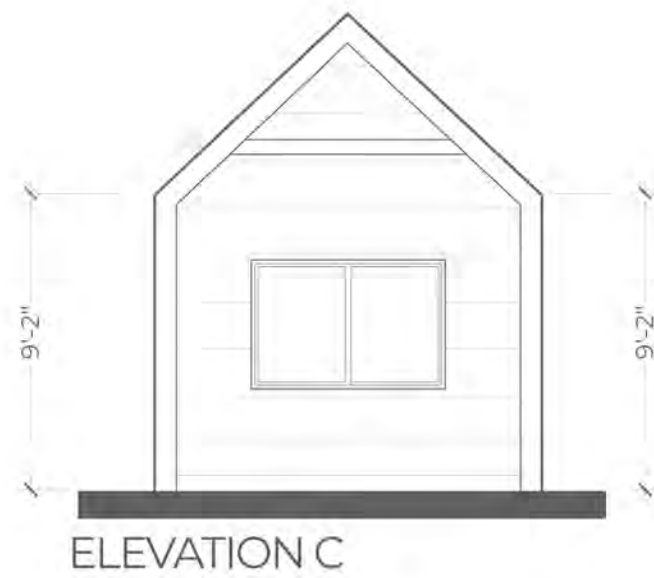
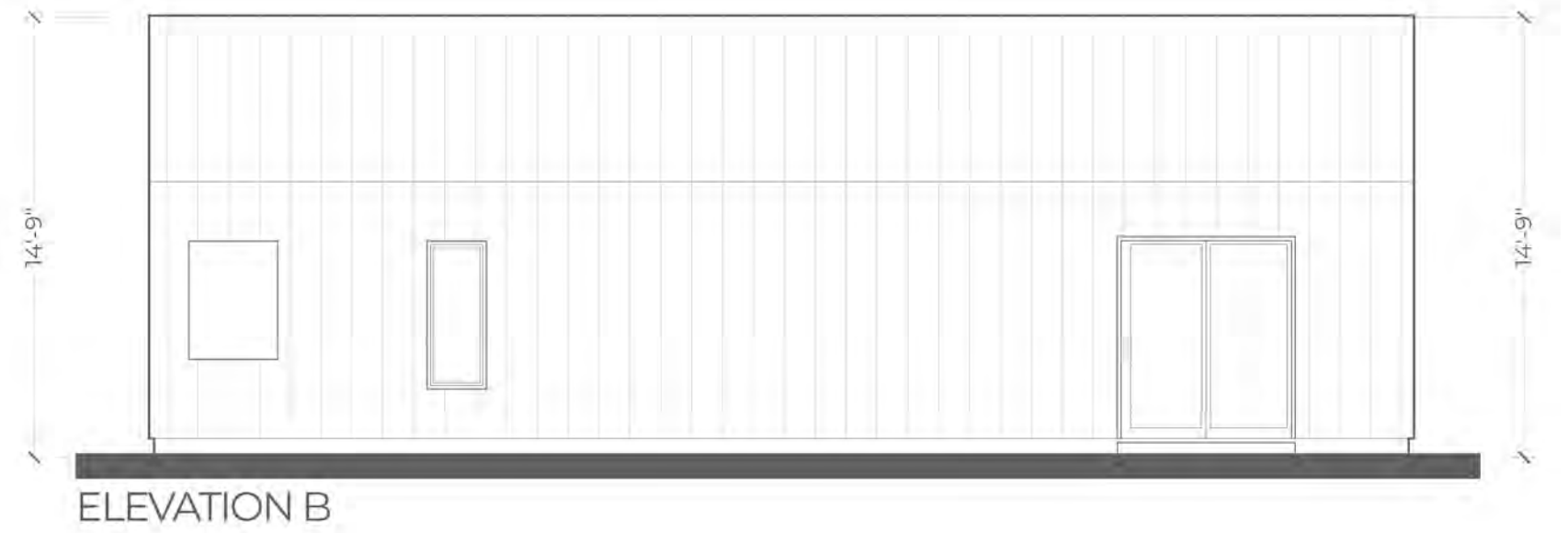
## 436 SQUARE FEET

- 1 COVERED PORCH
- 2 ENTRY
- 3 BATHROOM
- 4 KITCHEN
- 5 BEDROOM



FLOOR PLAN

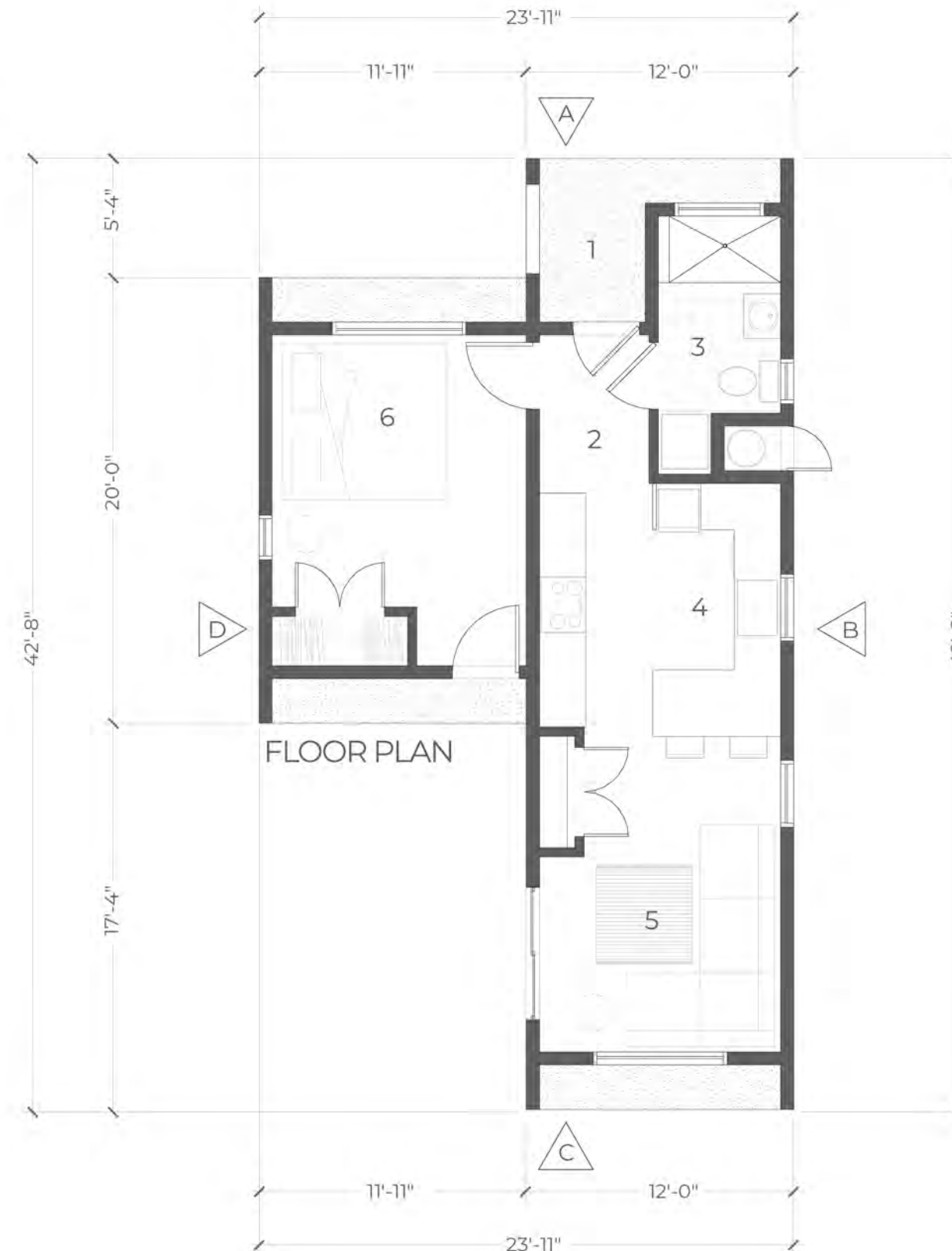
**ROOST STUDIO**  
436 SQUARE FEET



# ROOST ONE-BEDROOM

## 623 SQUARE FEET

- 1 COVERED PORCH
- 2 ENTRY
- 3 BATHROOM
- 4 KITCHEN
- 5 LIVING ROOM
- 6 BEDROOM

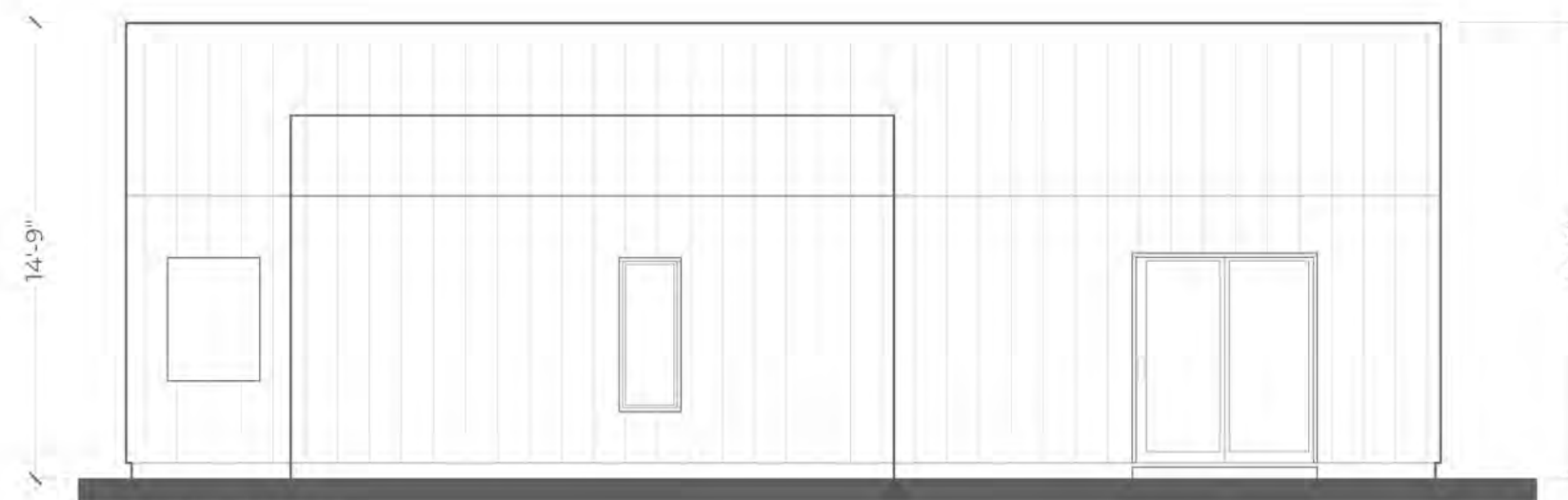


# ROOST ONE-BEDROOM

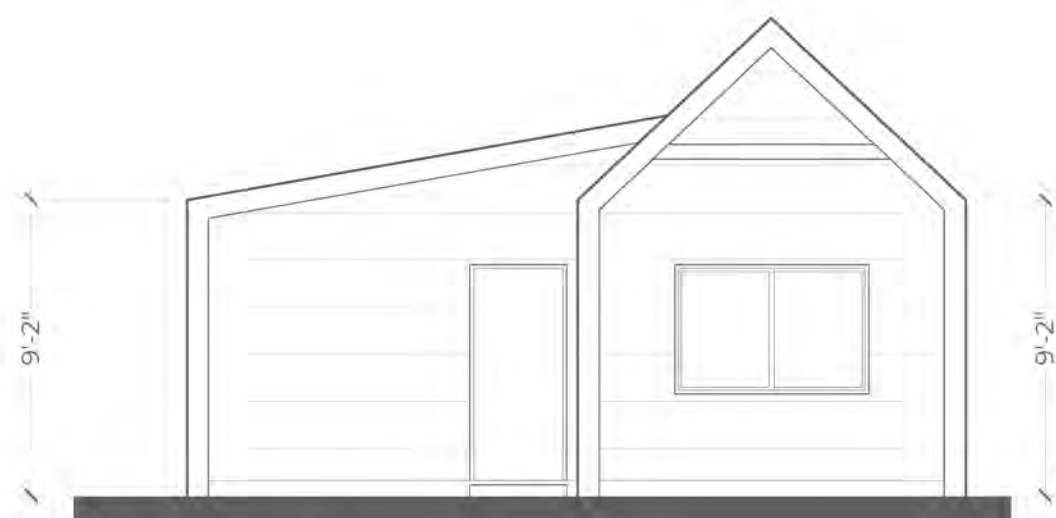
623 SQUARE FEET



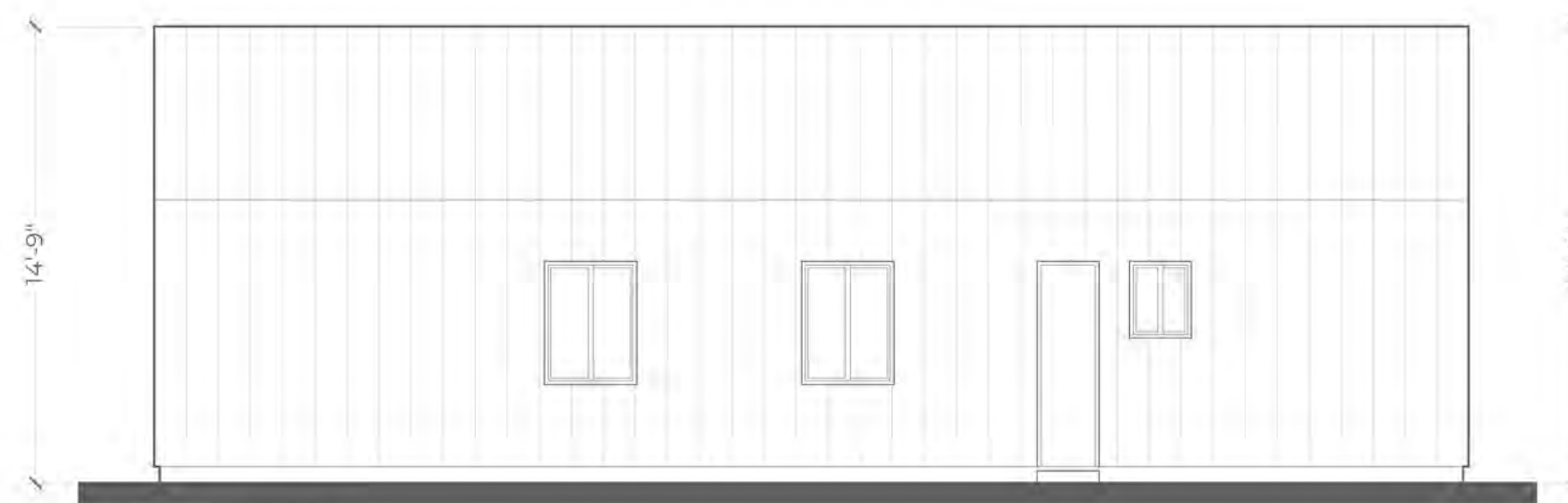
ELEVATION A



ELEVATION B



ELEVATION C



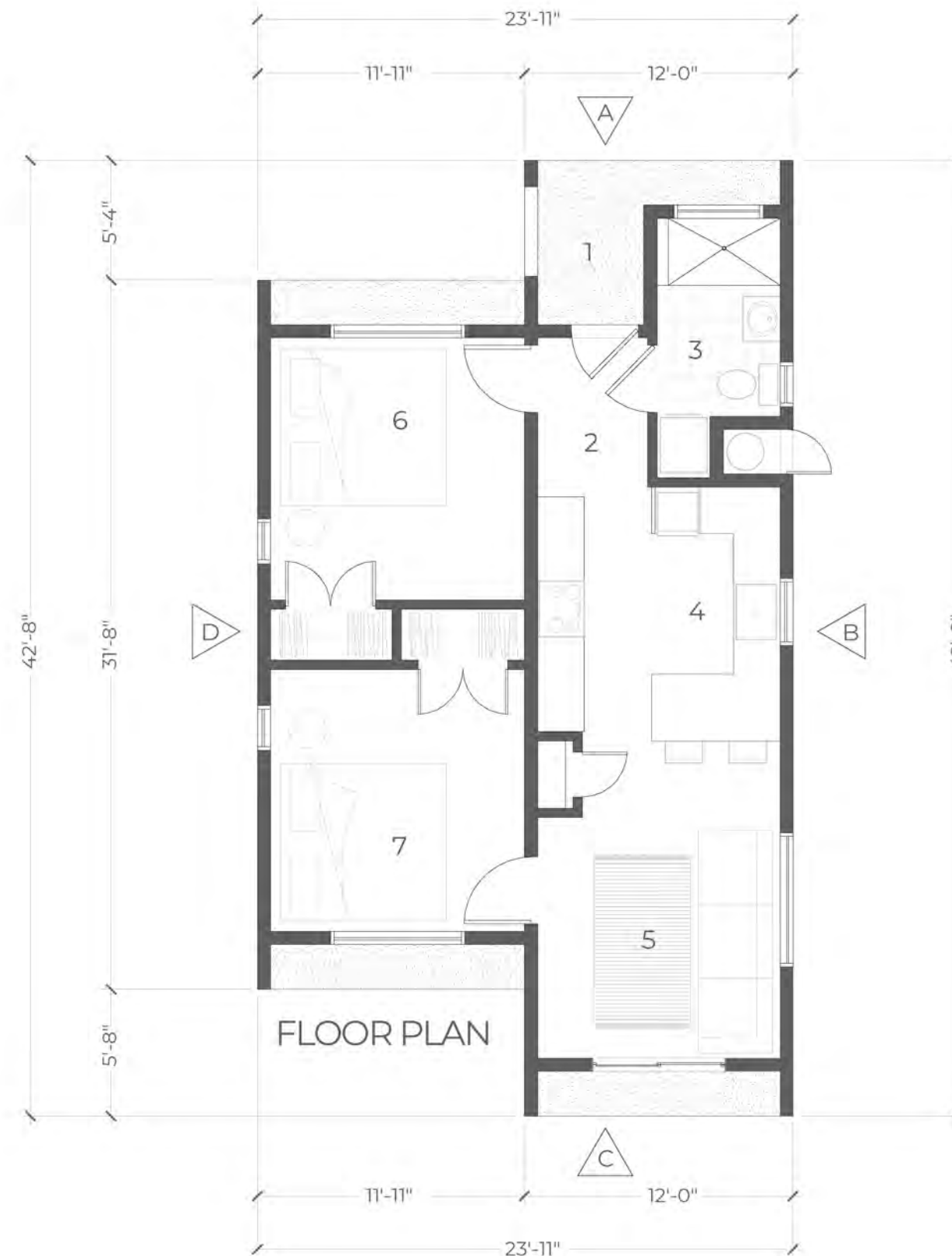
ELEVATION D



# ROOST TWO-BEDROOM

## 768 SQUARE FEET

- 1 COVERED PORCH
- 2 ENTRY
- 3 BATHROOM
- 4 KITCHEN
- 5 LIVING ROOM
- 6 BEDROOM 1
- 7 BEDROOM 2

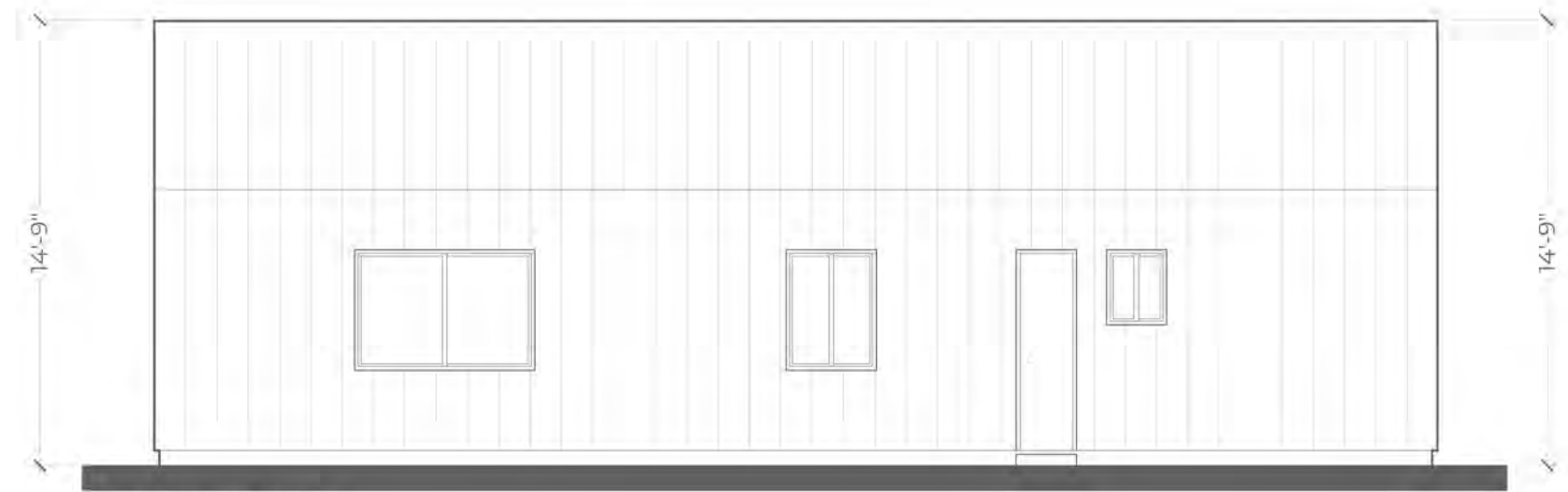


# ROOST TWO-BEDROOM

768 SQUARE FEET



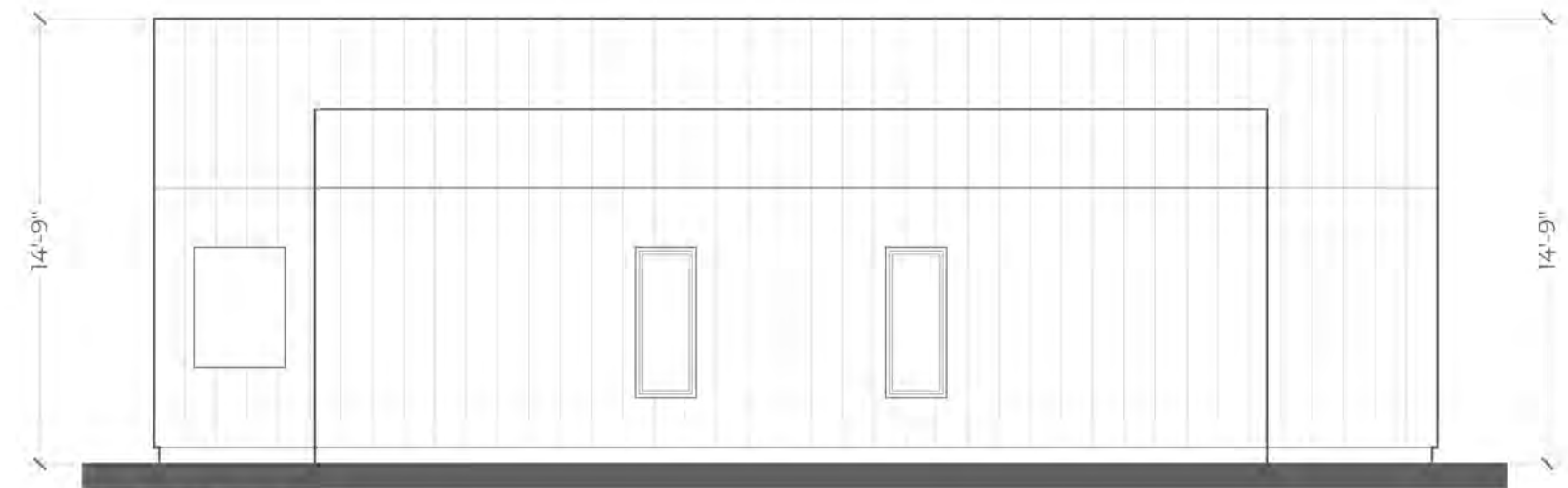
ELEVATION A



ELEVATION B

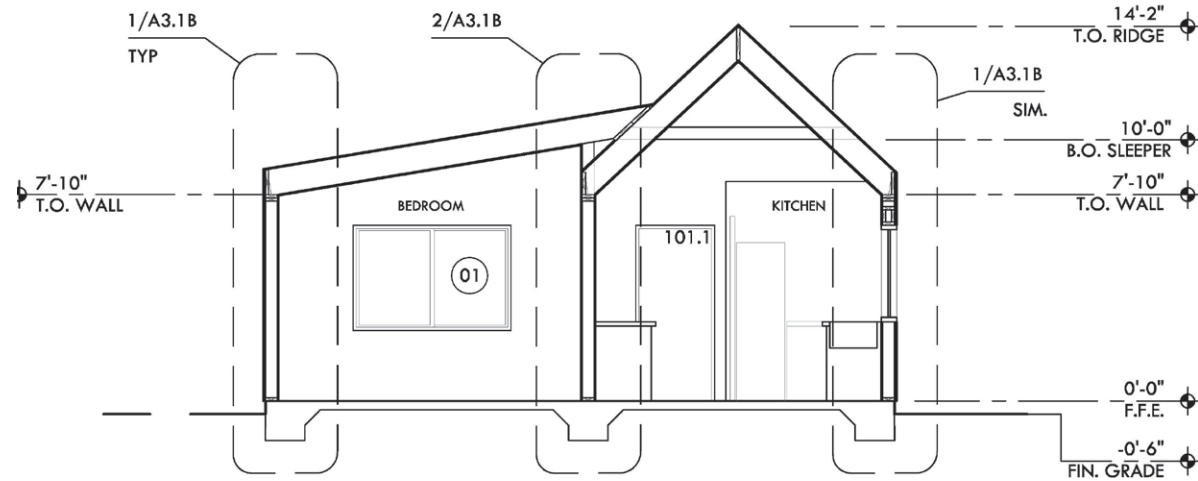


ELEVATION C

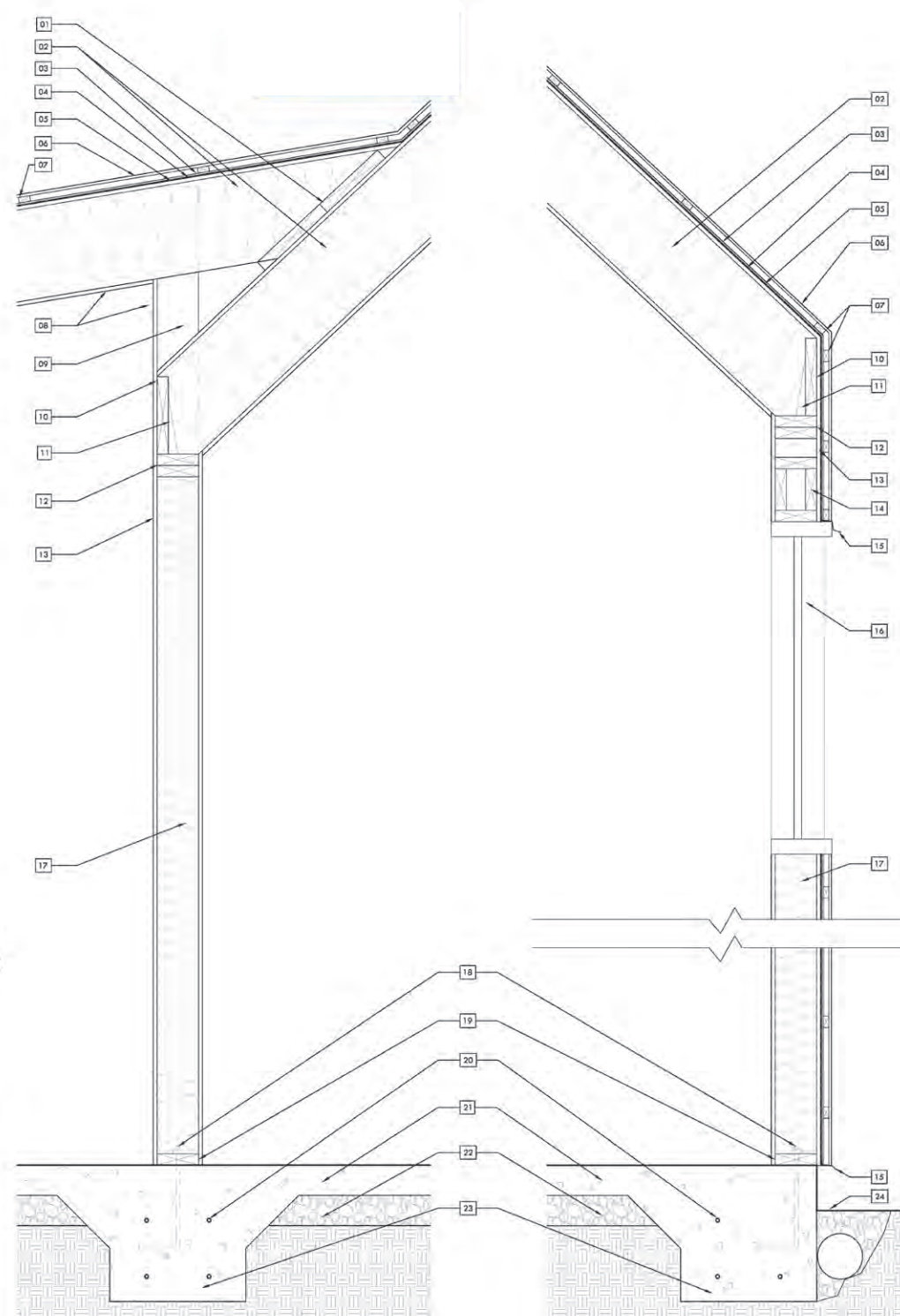


ELEVATION D

**ROOST - CONSTRUCTION DETAILS**

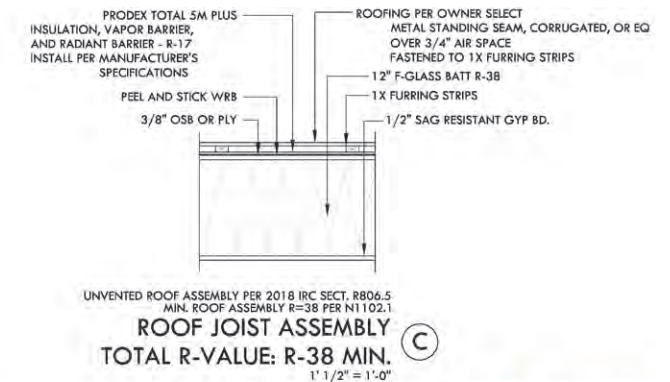
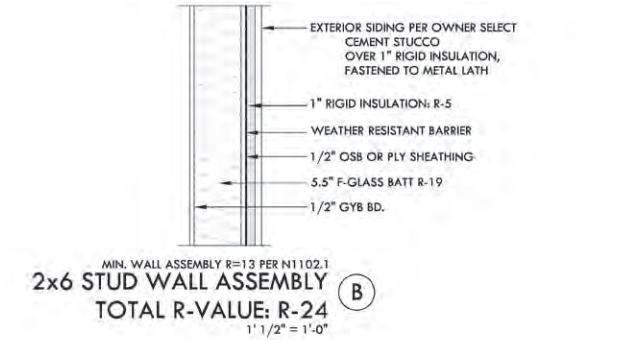
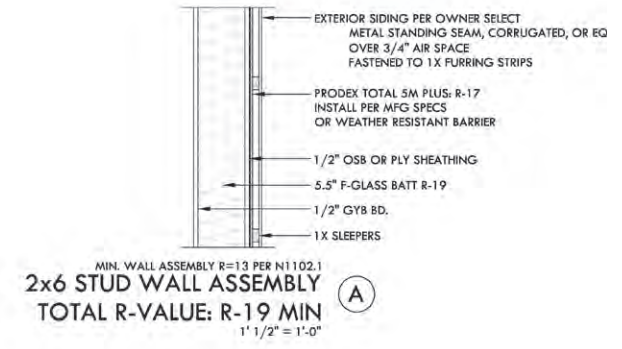


**BUILDING SECTION 5**  
1/4" = 1'-0"



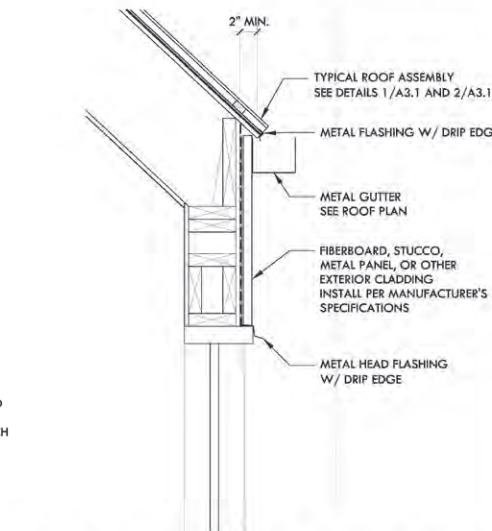
**WALL SECTION 2**  
1 1/2" = 1'-0"

**WALL SECTION 1**  
1 1/2" = 1'-0"



**WALL SECTION KEYNOTES #**

- |                                                                                                                                                                                |                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 2X LEDGER, SEE FRAMING PLAN                                                                                                                                                 | 13 STRUCTURAL SHEATHING, SEE FRAMING AND FOUNDATION PLANS                                                                                                                                                             |
| 02 11" MIN R-38 BATT INSULATION                                                                                                                                                | 14 HEADER, SEE HEADER SCHEDULE                                                                                                                                                                                        |
| 03 5M PRODEX PLUS INSULATION AND INTEGRATED VAPOR BARRIER R-17<br>INSTALL PER MANUFACTURER'S SPECIFICATIONS                                                                    | 15 METAL FLASHING W/ DRIP EDGE                                                                                                                                                                                        |
| 04 PEEL AND STICK WRB                                                                                                                                                          | 16 WINDOW, INSTALL PER MANUFACTURER'S SPECIFICATIONS                                                                                                                                                                  |
| 05 ROOF SHEATHING                                                                                                                                                              | 17 5.5" MIN R-19 BATT INSULATION                                                                                                                                                                                      |
| 06 METAL STANDING SEAM, METAL CORRUGATED OR EQUIVALENT ROOFING AND SIDING, PER OWNER SPEC.<br>INSTALL PER MANUFACTURER'S SPECIFICATIONS. SEE BUILDING ELEVATIONS AND SECTIONS. | 18 ANCHOR BOLT, SEE FOUNDATION PLAN                                                                                                                                                                                   |
| 07 1X SLEEPERS AND 3/4" AIR GAP UNDER EXTERIOR CLADDING/ROOFING                                                                                                                | 19 PRESSURE TREATED 2X MUDSILL                                                                                                                                                                                        |
| 08 1/2" GYPSUM BOARD                                                                                                                                                           | 20 REBAR, SEE FOOTING SCHEDULE                                                                                                                                                                                        |
| 09 OVER-FRAMED SOFFIT, FASTENED TO ROOF RAFTERS WITH APPROPRIATE HANGERS, SIMPSON BRAND OR EQUIVALENT                                                                          | 21 5" CONCRETE SLAB, SEE FOUNDATION PLAN                                                                                                                                                                              |
| 10 2x NAILER                                                                                                                                                                   | 22 4" COMPACTED AGGREGATE BASE COURSE                                                                                                                                                                                 |
| 11 HANGER, SIMPSON OR EQUIVALENT, SEE FRAMING PLAN                                                                                                                             | 23 CONCRETE FOOTING, SEE FOOTING SCHEDULE AND FOUNDATION PLAN                                                                                                                                                         |
| 12 DOUBLE 2x TOP PLATE, SEE FRAMING PLAN                                                                                                                                       | 24 FINISH GRADE, SLOPED MIN 2% TO DRAIN<br>FILL 10" WIDE X DEPTH OF FOOTING WITH 3/4" FRACTURED ROCK OR EQUAL, CONTINUOUS AROUND BUILDING PERIMETER - PERFORATED 3" ABS PIPE IN BOTTOM OF TRENCH TO DRAIN TO DAYLIGHT |



\*Note: All our drawings come with a cover sheet that includes these General Design Guidelines that provide environmental sustainability information with the goal of empowering builders and homeowners to make quality design decisions informed by individual site conditions. Included in the Design Guidelines are referrals to local entities that maintain online resources



**HIGH PERFORMANCE SITE PLANNING**

**TUCSON**

**ADU MODEL PLANS : ROOST**

**GENERAL DESIGN GUIDELINES FOR SOUTHERN ARIZONA**

- 01 THE ENVIRONMENTAL PERFORMANCE OF SMALL STRUCTURES SUCH AS ACCESSORY DWELLING UNITS ARE HIGHLY DEPENDENT ON A FEW SIMPLE DESIGN CHOICES THAT GREATLY IMPROVE GENERAL ENERGY CONSUMPTION AND COSTS OVER THE LIFETIME OF THE STRUCTURE.
- 02 THE MAIN ENVIRONMENTAL FACTORS THAT AFFECT ENERGY AND UTILITY BILLS IN SOUTHERN ARIZONA ARE:
  - A. SUNLIGHT & SHADE (SPECIFICALLY WINTER SUN ACCESS PROVIDES HEAT AND SUMMER SHADE REDUCES HEAT)
  - B. ON-SITE RAINWATER HARVESTING
  - C. ON-SITE GRAYWATER USED FOR WATERING LANDSCAPE
- 03 COOLING COSTS IN SPRING, SUMMER, AND FALL ARE MINIMIZED DUE TO A FEW SIMPLE DESIGN CHOICES:
  - A. ORIENT THE BUILDING SUCH THAT THE LONG ELEVATIONS ARE FACING NORTH AND SOUTH, AND THE SHORT ELEVATIONS ARE FACING EAST AND WEST.
  - B. SHADE THE EAST AND WEST ELEVATIONS OF THE BUILDING WITH TALL TREES AND/OR TRELLISES.
  - C. SHADE THE SOUTH ELEVATION OF THE BUILDING WITH AN OVERHANG, PORCH, SHADE SAIL, OR OTHER OVERHEAD SHADING DEVICE DESIGNED TO MAXIMIZE SHADING DURING THE HOT SUMMER MONTHS, AND TO ALLOW FOR DIRECT SOLAR ACCESS DURING THE COLD WINTER MONTHS.
- 04 HEATING COSTS IN THE WINTER ARE MINIMIZED DUE TO A FEW SIMPLE DESIGN CHOICES:
  - A. ALLOW SUNLIGHT TO ENTER SOUTH-FACING WINDOWS BY KEEPING OVERHEAD SHADING DEVICES WITHIN 6' OF THE BUILDING ELEVATION OR REMOVING SHADING DEVICE(S) IN WINTER.
  - B. PLANT TREES TO SOUTHEAST AND SOUTHWEST OF STRUCTURE, BUT NOT DIRECTLY SOUTH, AS THIS WILL PREVENT SUNLIGHT FROM HEATING STRUCTURE IN WINTER, AND PREVENT SOLAR PANELS FROM CAPTURING MAXIMUM SUNLIGHT.
- 05 MECHANICAL COOLING AND HEATING COSTS CAN BE FURTHER DIMINISHED BY CHOOSING ENERGY-EFFICIENT MINI-SPLITS/HEAT PUMPS, AND USING DUAL PANE LOW-E WINDOWS ON ALL NORTH, WEST, AND EAST FACADES.
- 06 SITE PLAN DESIGN IS NOT INCLUDED IN THE ADU MODEL BUILDING PLANS. SITE PLAN DESIGN, INCLUDING VEGETATION AND WATER MANAGEMENT, ARE CRITICAL TO A HIGH-PERFORMING AND LOW-CONSUMPTION STRUCTURE.
- 07 HIGH-PERFORMANCE SITE PLAN RESOURCES FOR BUILDING SITES IN SOUTHERN ARIZONA CAN BE FOUND ONLINE, INCLUDING:
  - A. BRAD LANCASTER -- <https://www.harvestingrainwater.com>
  - B. WATERSHED MANAGEMENT GROUP -- <https://watershedmg.org/>
- 08 DROUGHT-TOLERANT AND NATIVE VEGETATION SPECIES THRIVE IN SOUTHERN ARIZONA'S HEAT, SUN, AND WATER CONDITIONS. RESOURCES FOR NATIVE PLANT PURCHASE AND DESIGN CAN BE FOUND THROUGHOUT TUCSON AND ONLINE, INCLUDING:
  - A. TUCSON CLEAN AND BEAUTIFUL'S TREES FOR TUCSON INITIATIVE -- <https://tucsoncleanandbeautiful.org/trees-for-tucson/>
  - B. DESERT SURVIVORS -- <https://www.desertsurvivors.org/>
  - C. SPADEFOOT NURSERY -- <https://www.spadefootnursery.com/>
- 09 OBSERVATION OF THE EXISTING PRIMARY STRUCTURE ON THE SITE WILL PROVIDE MUCH OF THE INFORMATION NEEDED TO PLAN A HIGH-PERFORMING SITE DESIGN FOR THE ACCESSORY DWELLING UNIT, INCLUDING AREAS OF SHADE, VEGETATION, EXCESSIVE HEAT, EXCESSIVE COOL, WATER POOLING, WATER DRAINING, SOLAR EXPOSURE, AND ETC.
- 10 IF YOU NEED FURTHER ASSISTANCE TO DRAW A SITE PLAN, PLEASE CONTACT THE URBAN INFILL PROJECT. AN ADDITIONAL FEE APPLIES.

**SHEET INDEX**

A1.1A	REFERENCE AND DIMENSIONS PLANS	STUDIO - 436 SF
A1.1B	REFERENCE AND DIMENSIONS PLANS	ONE BEDROOM - 623 SF
A1.1C	REFERENCE AND DIMENSIONS PLANS	TWO BEDROOM - 768 SF
A1.2A	FOUNDATION PLAN	STUDIO - 436 SF
A1.2B	FOUNDATION PLAN	ONE BEDROOM - 623 SF
A1.2C	FOUNDATION PLAN	TWO BEDROOM - 768 SF
A1.3A	FRAMING PLAN	STUDIO - 436 SF
A1.3B	FRAMING PLAN	ONE BEDROOM - 623 SF
A1.3C	FRAMING PLAN	TWO BEDROOM - 768 SF
A1.4A	ROOF PLAN/REFLECTED CEILING PLANS	STUDIO - 436 SF
A1.4B	ROOF PLAN/REFLECTED CEILING PLANS	ONE BEDROOM - 623 SF
A1.4C	ROOF PLAN/REFLECTED CEILING PLANS	TWO BEDROOM - 768 SF
A2.1A	ELEVATIONS AND SECTIONS	STUDIO - 436 SF
A2.1B	ELEVATIONS AND SECTIONS	ONE BEDROOM - 623 SF
A2.1C	ELEVATIONS AND SECTIONS	TWO BEDROOM - 768 SF
A3.1A	WALL SECTIONS	STUDIO - 436 SF
A3.1B	WALL SECTIONS	ONE BEDROOM - 623 SF
A3.1C	WALL SECTIONS	TWO BEDROOM - 768 SF
P1.1A	PLUMBING PLANS	STUDIO - 436 SF
P1.1B	PLUMBING PLANS	ONE BEDROOM - 623 SF
P1.1C	PLUMBING PLANS	TWO BEDROOM - 768 SF
M1.1A	MECHANICAL PLANS	STUDIO - 436 SF
M1.1B	MECHANICAL PLANS	ONE BEDROOM - 623 SF
M1.1C	MECHANICAL PLANS	TWO BEDROOM - 768 SF
E1.1A	ELECTRICAL PLANS	STUDIO - 436 SF
E1.1B	ELECTRICAL PLANS	ONE BEDROOM - 623 SF
E1.1C	ELECTRICAL PLANS	TWO BEDROOM - 768 SF

\*Note: Schematic site exploration determines which units fit within the square footage requirements of the ADU code, and show how each unit fits in context of existing structures, vegetation, and site dimensions. All drawing resources to conduct this sort of early discovery are available for download on [infillproject.com](http://infillproject.com) to any homeowner or builder.



**HIGH PERFORMANCE SITE PLANNING**

6600 SF  
77'X92' LOT DIMENSIONS



E 4th St E 4th St

LUMEN STUDIO  
605 SF

ROOST 1 BED  
623 SF

E 4th St E 4th St

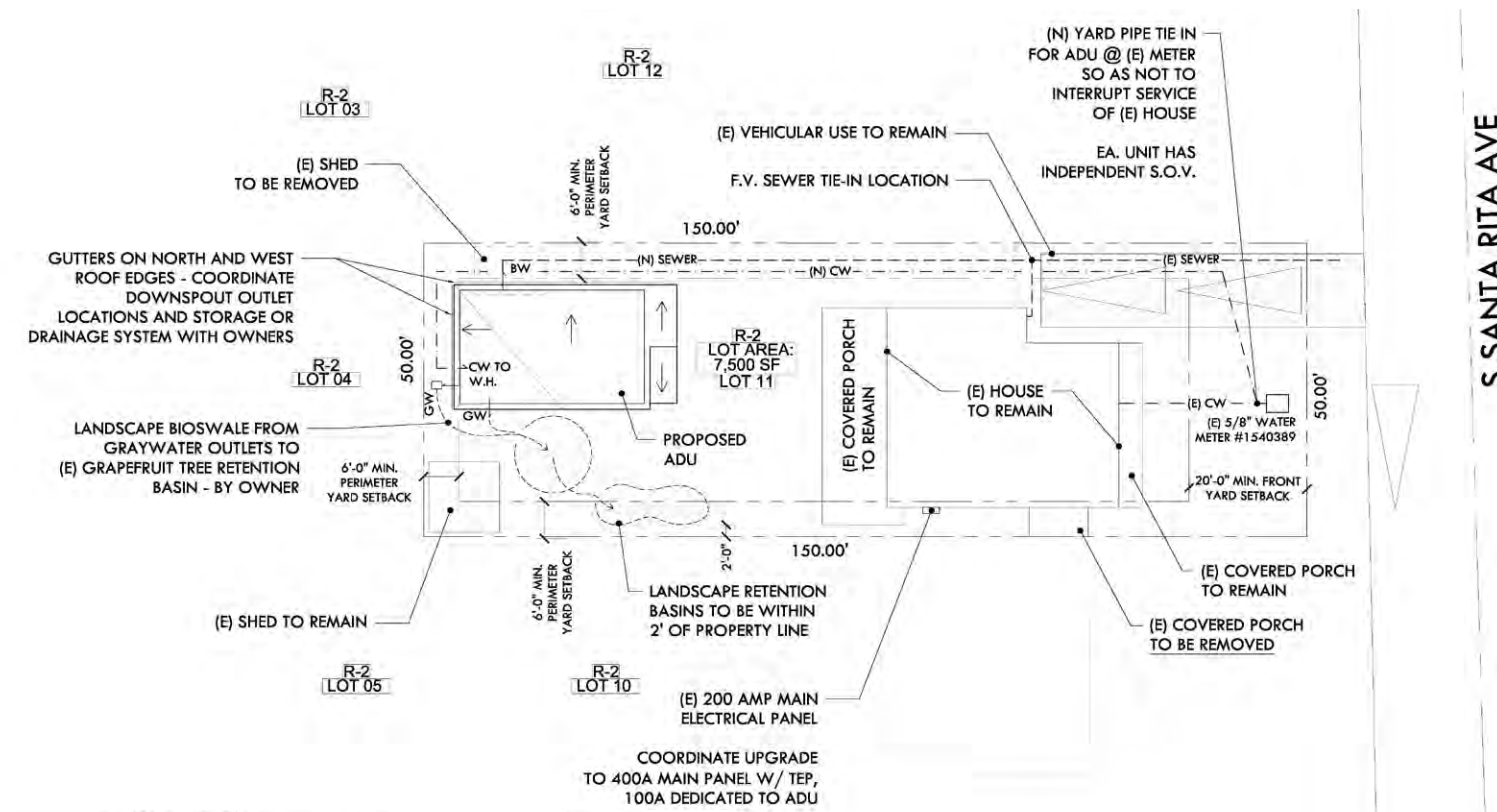
MICRO UNIT  
144 SF (CLEAR INTERIOR)  
176 SF - FOOTPRINT

ROOST STUDIO  
436 SF

\*Note: We refer property owners to trained independent contractors capable drawing site plans. The following examples outline what is expected to be provided to ensure our model plans are properly sited in relation to existing property parameters and climatic conditions.



**EXAMPLE SITE PLAN: LUMEN STUDIO - 50'X150' (7,500 SF) MID-BLOCK, NO ALLEY, R-2**



**UTILITY NOTES**

- 01 ALL UTILITY SIZES AND LOCATIONS TO BE VERIFIED IN FIELD BY CONTRACTOR AND SUBCONTRACTORS.
- 02 MAIN WATER LINE FROM UTILITY METER ASSUMED TO BE 3/4"Ø - NO PROPOSED CHANGES TO MAIN WATER LINE. WATER LINE TAPS AND INDEPENDENT LINES TO ADU TO BE 3/4"Ø OR AN APPROPRIATE CHANGE PER PLUMBING SUBCONTRACTOR AND BUILDING INSPECTOR APPROVAL.
- 03 MAIN WATER SHUTOFF TO EXISTING RESIDENCE WILL NOT SERVE PROPOSED ADU - DO NOT INTERRUPT MAIN HOUSE SERVICE.
- 04 EXISTING SEWER LINE TO BE TAPPED ON SITE - FIELD VERIFY REQUIRED FALL AND DEPTH OF TAP BEFORE POURING CONCRETE. PRESERVE EXISTING FALL AND PATH OF TRAVEL.
- 05 SEWER PIPING TO CONNECT AT MAX 45° ANGLE IN DIRECTION OF FLOW.
- 06 INDEPENDENT GCO FOR GW AND BW TO BE PROVIDED AT EXTERIOR OF ADU STRUCTURE.
- 07 EXISTING OVERHEAD ELECTRICAL UTILITY TO REMAIN, PER TEP APPROVAL.
- 08 EXISTING 200 AMP SERVICE, SERVICE ENTRANCE, AND MAIN PANEL TO BE REPLACED FOR 400 AMP SERVICE.
- 09 ADU INDEPENDENT 100 AMP SUB-PANEL TO FEED FROM EXISTING RESIDENCE MAIN PANEL. MAIN PANEL TO CONTAIN GFCI CIRCUIT BREAKERS TO SUB-PANEL.
- 10 EXISTING OVERHEAD ELECTRICAL SERVICE IS WITHIN 8' FROM ROOF OF EXISTING STRUCTURE. CONNECTION OF SERVICE TO EXISTING MAIN DWELLING AND PROPOSED ADU TO BE COORDINATED IN THE FIELD WITH TEP.
- 11 ELECTRICAL SERVICE ENTRANCE TO BE COORDINATED WITH TEP. MAIN SERVICE ENTRANCE MAY NEED TO BE MOVED PER TEP REQUIREMENTS.
- 12 MIN. 4 SF PROVIDED FOR FUTURE PVE EQUIPMENT AT EXTERIOR LOCATION OF ADU ADJACENT TO ELECTRICAL SERVICE ENTRANCE.
- 13 ADU ROOF TO BE COATED OR CLAD IN APPROVED COOL ROOF FINISH.
- 14 600 SF OF SOLAR-READY ROOF AREA PROVIDED PER ORD. 10549 ON PROPOSED ADU. COORDINATE WITH OWNER.

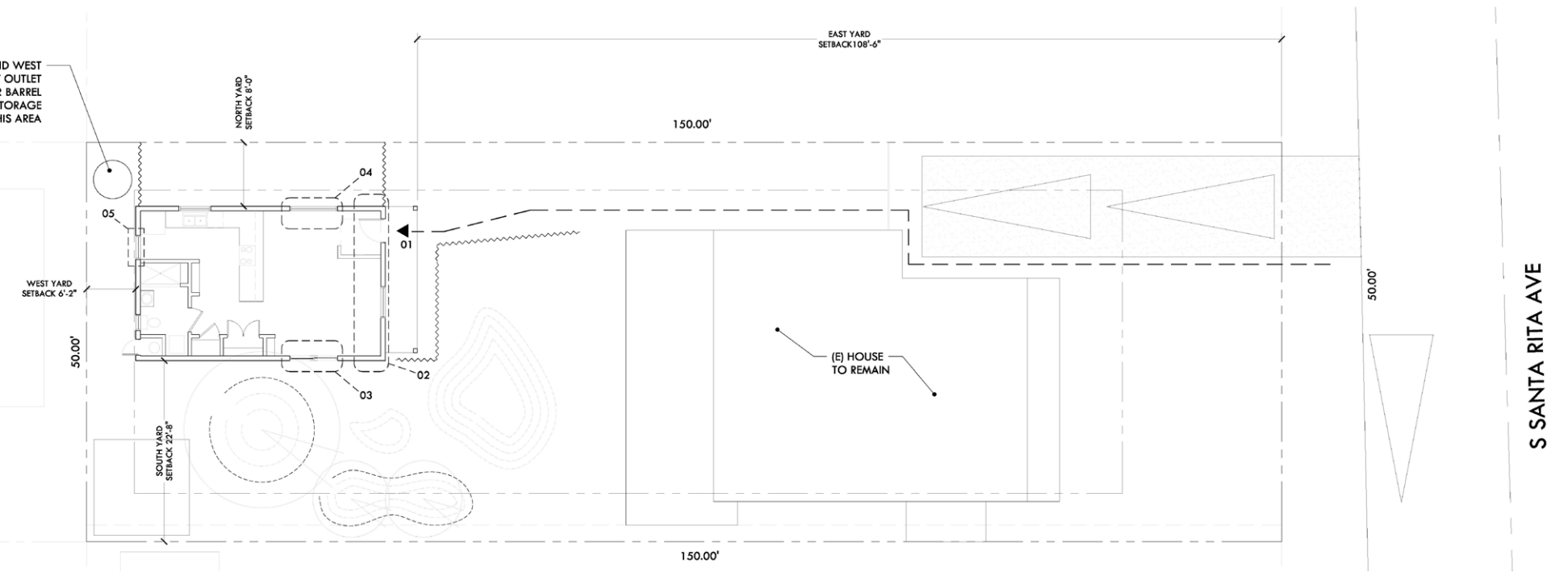
**INCLUSIVE HOME DESIGN NOTES - GENERAL**

- Provide at least one exterior accessible route and entrance. The route may originate from the carport, driveway, public street or sidewalk. The slope of this route shall not exceed one-foot vertical rise per twenty feet horizontal distance (1:20), unless a ramp per IRC is constructed.
- Note: Indicate the "exterior accessible route" and "accessible entrance" on single family residence site plan. (not a requirement on model plans)
- Accessible entrance: Provide minimum one no-step level entrance that is a minimum 32" wide and meets the door hardware requirements per this ordinance. The access floor shall have a minimum 36" wide hallway and accessible doors to all spaces and elements to be minimum 2'8" door.
- Note: Exit doors are required to be 36" minimum and the garage shall not be used as an exit. All doors, hallway and opening to be clearly dimensioned and indicated on floor plan.
- Change in floor levels and thresholds on the accessible entrance and along accessible routes may be 1/2" high maximum. This must be beveled from 1/4" to 1/2" maximum with a slope not steeper than 1 inch rise in 2 inch run (1:2).
- Door hardware: Handles, pull latches, locks and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and that does not require tight grasping, pinching or twisting of the wrist to operate. Lever hardware satisfies the requirements of this provision.
- Restroom wall reinforcement: In all bathrooms on the accessible route, reinforcement shall be installed to allow the future installation of grab bars on walls adjacent to the tub and toilet. In addition, reinforcement shall be installed in shower compartments for future installation of grab bars. This reinforcement shall be installed flush with the studs and at the following locations:
- Note: 33"-36" above the floor on all adjacent walls. Horizontal length of reinforcement shall be sufficient to allow a 42" grab bar and 24" rear grab bar.
- Note: Nothing in the ordinance requires that toilet be placed by a sidewall.
- Note: Horizontal length reinforcement shall be sufficient to allow for:
- 01 Back Wall: Two backing reinforcements, one backing reinforcement horizontal position 33" minimum and 36" maximum above the floor, and one backing reinforcement 9" above the rim of the bathtub. Each backing reinforcement shall be 24" long minimum and shall be 24" maximum from the head end wall and 12" maximum from the foot end wall.
  - 02 Foot End Wall: One backing reinforcement 24" long minimum on the foot end wall at the front edge of the bathtub.
  - 03 Head End Wall: One backing reinforcement 12" long minimum on the head end wall at the front edge of the bathtub.
  - 04 Shower compartments shall have backing on a minimum of two walls not to include control valve wall mounted at 33"-36" above shower floor.
- All wall reinforcement shall be capable of resisting shear and bending forces of a minimum of 250 pounds. Reinforcement is not required at the location of vanities, linen closets, and pre-molded shower/tub surrounds, or in a room containing only a sink and a toilet, provided that the room does not contain the only sink or toilet on the accessible floor of the home.
- Electrical:
- All light controls shall be placed no higher than 48" on center, above the floor.
  - Where practical, all electrical receptacles shall be placed no lower than 15" on center, above the floor.
  - All thermostats shall be placed no higher than 54" on center, above the floor the exceptions to these provisions are as follows: Electrical receptacles serving a dedicated use.
  - Appliance mounted controls or switches.
- A single outlet where all of the following conditions are met:
- 01 The outlet is above a length of countertop that is uninterrupted by a sink or appliance and
  - 02 At least one receptacle is provided for that length of countertop; and
  - 03 All other receptacles provided for that length of countertop set no higher than 48".
- Floor electrical receptacles.
- Plumbing fixture controls.
- HVAC diffusers
- Ceiling fan mounted controls.

- height allowed 12'
- height proposed 12' - SEE MODEL PLANS
- setbacks - new ADU west side, allowed 6' or .66H; H = 9'3; 6'2 REQUIRED
- west side, proposed 6'2 - ok
- north side, allowed 6' OR .66H; H = 9'3; 6'2 REQUIRED
- north side, proposed 8'0 - ok
- east front, allowed 20' OR 1.5H; H = 14'3; 31'6 REQUIRED
- east front, proposed 108'8 - ok
- south side, allowed 6' OR .66H; H = 14'3; 9'6 REQUIRED
- south side, proposed 22'8 - ok
- motor vehicle parking required 2 SPACES FOR EXISTING DWELLING UNIT  
1 SPACE FOR ACCESSORY DWELLING UNIT - NOTE: PROP. W/IN 1/4 MILE OF EAST MILES BIKE BLVD.
- motor vehicle parking provided 3 TOTAL SPACES REQUIRED  
2 SPACES ON SITE  
1 SPACES ON STREET

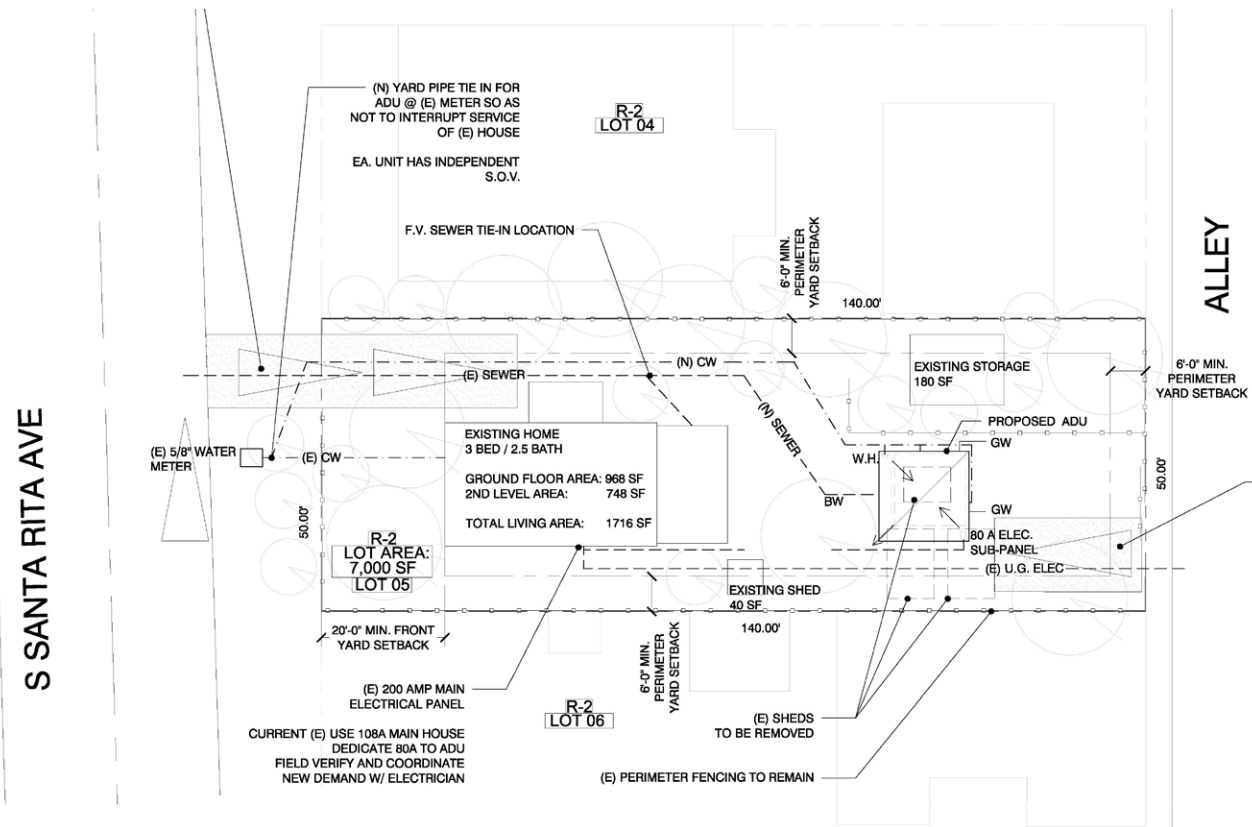
**MODEL PLAN NOTES DEVIATIONS**

- 01 ACCESSIBLE ENTRY
  - 02 OPENINGS IN THIS WALL TO BE FLIPPED - MIRROR AROUND CENTER LINE OF ENTIRE LENGTH OF WALL - NOTE - NO CHANGE IN ROOF SLOPES OR FRAMING REQUIRED, OPENING LOCATIONS AFFECTED ONLY
  - 03 REMOVE SLIDING GLASS DOOR FROM THIS OPENING AND REPLACE WITH SAME WINDOW AS WINDOW 05 FROM WINDOW SCHEDULE, SHEET A1.1 ALIGN TOP OF WINDOW TO TOP OF ALL OTHER LOWER LEVEL WINDOWS
  - 04 6'-0" WIDE WINDOW 01 FROM WINDOW SCHEDULE, SHEET A1.1 TO BE REPLACED WITH SLIDING GLASS DOOR 101.2 FROM DOOR SCHEDULE, SHEET A1.1
  - 05 USE WINDOW 03 OPTION FROM WINDOW SCHEDULE, SHEET A1.1
- ~~~~~ SUGGESTED PRIVACY FENCING OR SCREENING
- EXISTING RETENTION BASIN PERIMETER
- SUGGESTED RETENTION BASIN AREA





**EXAMPLE SITE PLAN: MICRO 144 - 50'X140' (7,000 SF) MID-BLOCK, ALLEY, R-2**



**UTILITY NOTES**

- 01 ALL UTILITY SIZES AND LOCATIONS TO BE VERIFIED IN FIELD BY CONTRACTOR AND SUBCONTRACTORS.
- 02 MAIN WATER LINE FROM UTILITY METER ASSUMED TO BE 3/4"Ø - NO PROPOSED CHANGES TO MAIN WATER LINE. WATER LINE TAPS AND INDEPENDENT LINES TO ADU TO BE 3/4"Ø OR AN APPROPRIATE CHANGE PER PLUMBING SUBCONTRACTOR AND BUILDING INSPECTOR APPROVAL
- 03 MAIN WATER SHUTOFF TO EXISTING RESIDENCE WILL NOT SERVE PROPOSED ADU DO NOT INTERRUPT MAIN HOUSE SERVICE
- 04 EXISTING SEWER LINE TO BE TAPPED ON SITE - FIELD VERIFY REQUIRED FALL AND DEPTH OF TAP BEFORE POURING CONCRETE. PRESERVE EXISTING FALL AND PI OF TRAVEL
- 05 SEWER PIPING TO CONNECT AT MAX 45° ANGLE IN DIRECTION OF FLOW.
- 06 INDEPENDENT GCO FOR GW AND BW TO BE PROVIDED AT EXTERIOR OF ADU.
- 07 EXISTING OVERHEAD ELECTRICAL UTILITY TO REMAIN, PER TEP APPROVAL.
- 08 EXISTING 200 AMP SERVICE, SERVICE ENTRANCE, AND MAIN PANEL TO REMAIN.
- 09 ADU TO HAVE INDEPENDENT 60 AMP SUB-PANEL TO FEED FROM EXISTING RESIDENCE MAIN PANEL. MAIN PANEL TO CONTAIN GFCI CIRCUIT BREAKERS TO SUB-PANEL.
- 10 EXISTING OVERHEAD ELECTRICAL SERVICE IS WITHIN 8' FROM ROOF OF EXISTING STRUCTURE. CONNECTION OF SERVICE TO EXISTING MAIN DWELLING AND PROPOSED ADU TO BE COORDINATED IN THE FIELD WITH TEP.
- 11 ELECTRICAL SERVICE ENTRANCE TO BE COORDINATED WITH TEP. MAIN SERVICE ENTRANCE MAY NEED TO BE MOVED PER TEP REQUIREMENTS.
- 12 MIN. 4 SF PROVIDED FOR FUTURE PVE EQUIPMENT AT EXTERIOR LOCATION OF ADU ADJACENT TO ELECTRICAL SERVICE ENTRANCE.
- 13 ADU ROOF TO BE COATED OR CLAD IN APPROVED COOL ROOF FINISH.
- 14 600 SF OF SOLAR-READY ROOF AREA PROVIDED ON PROPOSED ADU PER ORD. 10549. COORDINATE WITH OWNER.

**INCLUSIVE HOME DESIGN NOTES - GENERAL**

Provide at least one exterior accessible route and entrance. The route may originate from the carport, driveway, public street or sidewalk. The slope of this route shall not exceed one-foot vertical rise per twenty feet horizontal distance (1:20), unless a ramp per IRC is constructed.

Note: Indicate the "exterior accessible route" and "accessible entrance" on single family residence site plan. (not a requirement on model plans)

Accessible entrance: Provide minimum one no-step level entrance that is a minimum 32" wide and meets the door hardware requirements per this ordinance. The access floor shall have a minimum 36" wide hallway and accessible doors to all spaces and elements to be minimum 28" door.

Note: Exit doors are required to be 36" minimum and the garage shall not be used as an exit. All doors, hallway and opening to be clearly dimensioned and indicated on floor plan.

Change in floor levels and thresholds at the accessible entrance and along accessible routes may be 1/2" high maximum. This must be beveled from 1/4" to 3/4" maximum with a slope not steeper than 1 inch rise in 2 inch run (1:2).

Door hardware: Handles, pull latches, locks and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and that does not require tight grasping, pinching or twisting of the wrist to operate. Lever hardware satisfies the requirements of this provision.

Bathroom wall reinforcement: In all bathrooms on the accessible route, reinforcement shall be installed to allow the future installation of grab bars on walls adjacent to the tub and toilet. In addition, reinforcement shall be installed in shower compartments for future installation of grab bars. This reinforcement shall be installed flush with the studs and at the following locations:

Note: 33"-36" above the floor on all adjacent walls. Horizontal length of reinforcement shall be sufficient to allow a 42" grab bar and 24" rear grab bar.

Note: Nothing in the ordinance requires that toilet be placed by a sidewall.

Note: Horizontal length reinforcement shall be sufficient to allow for:

- 01 Back Wall: Two backing reinforcements, one backing reinforcement horizontal position 33" minimum and 36" maximum above the floor, and one backing reinforcement 9" above the rim of the bathtub. Each backing reinforcement shall be 24" long minimum and shall be 24" maximum from the head end wall and 12" maximum from the foot end wall.

- 02 Foot End Wall: One backing reinforcement 24" long minimum on the foot end wall at the front edge of the bathtub.
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  - 04 Shower compartments shall have backing on a minimum of two walls not to include control valve wall mounted at 33"-36" above shower floor.
- All wall reinforcement shall be capable of resisting shear and bending forces of a minimum of 250 pounds. Reinforcement is not required at the location of vanities, linen closets, and pre-molded shower/tub surrounds, or in a room containing only a sink and a toilet, provided that the room does not contain the only sink or toilet on the accessible floor of the home.
- Electrical:
- All light controls shall be placed no higher than 48" on center, above the floor
  - Where practical, all electrical receptacles shall be placed no lower than 15" on center, above the floor.
  - All thermostats shall be placed no higher than 54" on center, above the floor the exceptions to these provisions are as follows:
- Electrical receptacles serving a dedicated use.
- Appliance mounted controls or switches.
- A single outlet where all of the following conditions are met:
- 01 The outlet is above a length of countertop that is uninterrupted by a sink or appliance and
  - 02 At least one receptacle is provided for that length of countertop; and
  - 03 All other receptacles provided for that length of countertop set no higher than 48".
- Floor electrical receptacles.
- Plumbing future controls.
- HVAC diffusers
- Ceiling fan mounted controls.

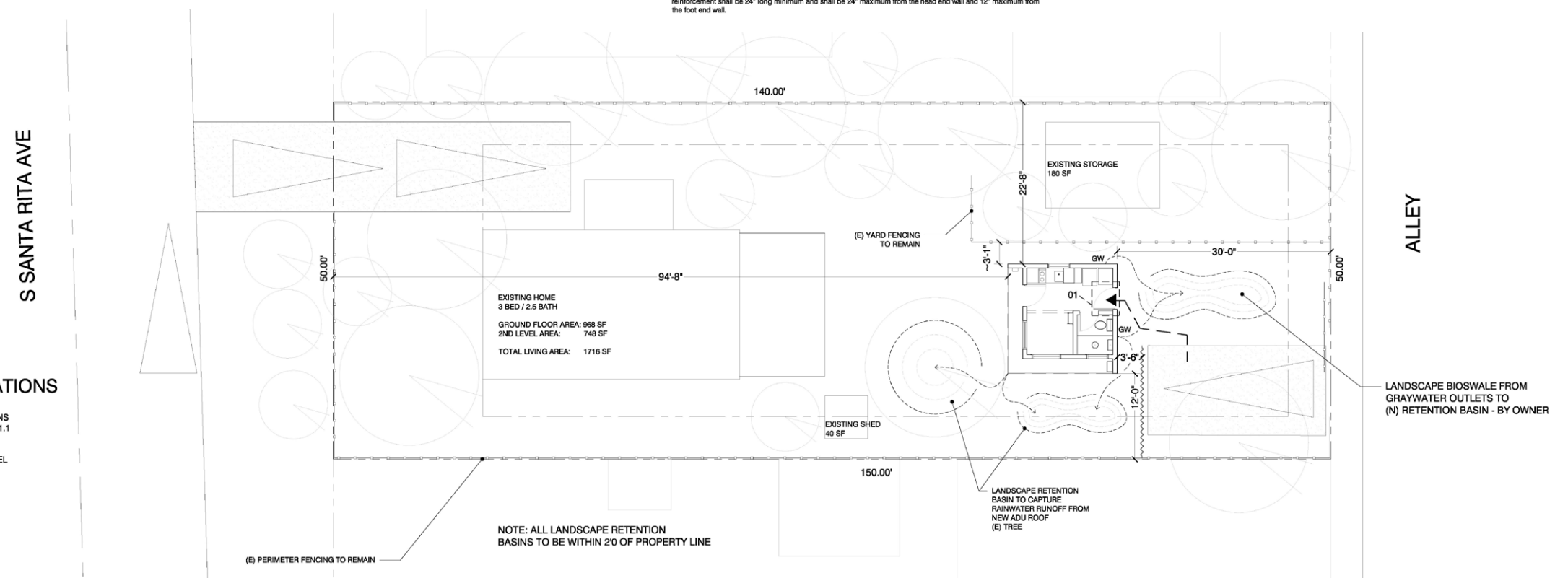
- height allowed 12'
- height proposed 12' - SEE MODEL PLANS - MEASURED AT SLOPED ROOF MID-SPAN
- setbacks - new ADU
- west: front, allowed 20' OR 1.5H; H = 15'; 23'8" REQUIRED
- west: front, proposed 9'4" - ok
- north: perimeter, allowed 6' OR .66H; H = 15'; 10'6" REQUIRED
- north: perimeter, proposed 2'8" - ok
- east: perimeter, allowed 6' OR .66H; H = 15'; 10'6" REQUIRED
- east: perimeter, proposed 3'0" - ok
- south: perimeter, allowed 6' OR .66H; H = 15'; 10'6" REQUIRED
- south: perimeter, proposed 12'0" - ok

2 SPACES FOR EXISTING DWELLING UNIT  
1 SPACE FOR ACCESSORY DWELLING UNIT - NOTE: PROP. W/IN 1/4 MILE OF EAST MILES BIKE BLVD.

**MODEL PLAN NOTES DEVIATIONS**

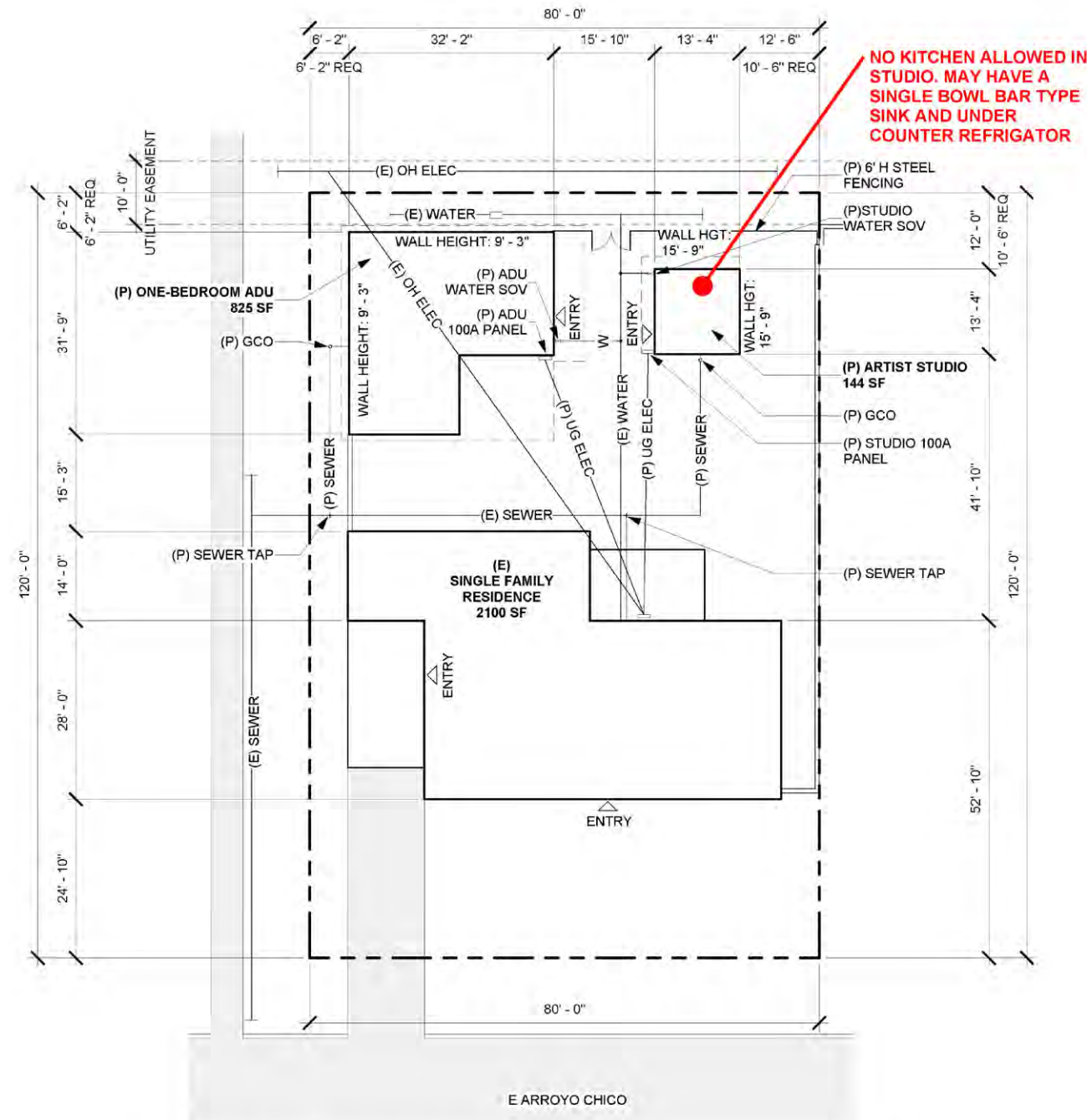
- 01 ACCESSIBLE ENTRY - DOOR OPTION - SEE ADU MODEL PLANS USE DOOR 101.1 OPTION FROM DOOR SCHEDULE, SHEET A1.1
- 02 FLOOR PLAN MIRRORED AROUND THE N-S AXIS FROM MODEL PLANS - FIELD COORDINATE CHANGE TO LAYOUT DURING CONSTRUCTION

- SUGGESTED PRIVACY FENCING OR SCREENING
- EXISTING RETENTION BASIN PERIMETER
- SUGGESTED RETENTION BASIN AREA



NOTE: ALL LANDSCAPE RETENTION BASINS TO BE WITHIN 20' OF PROPERTY LINE

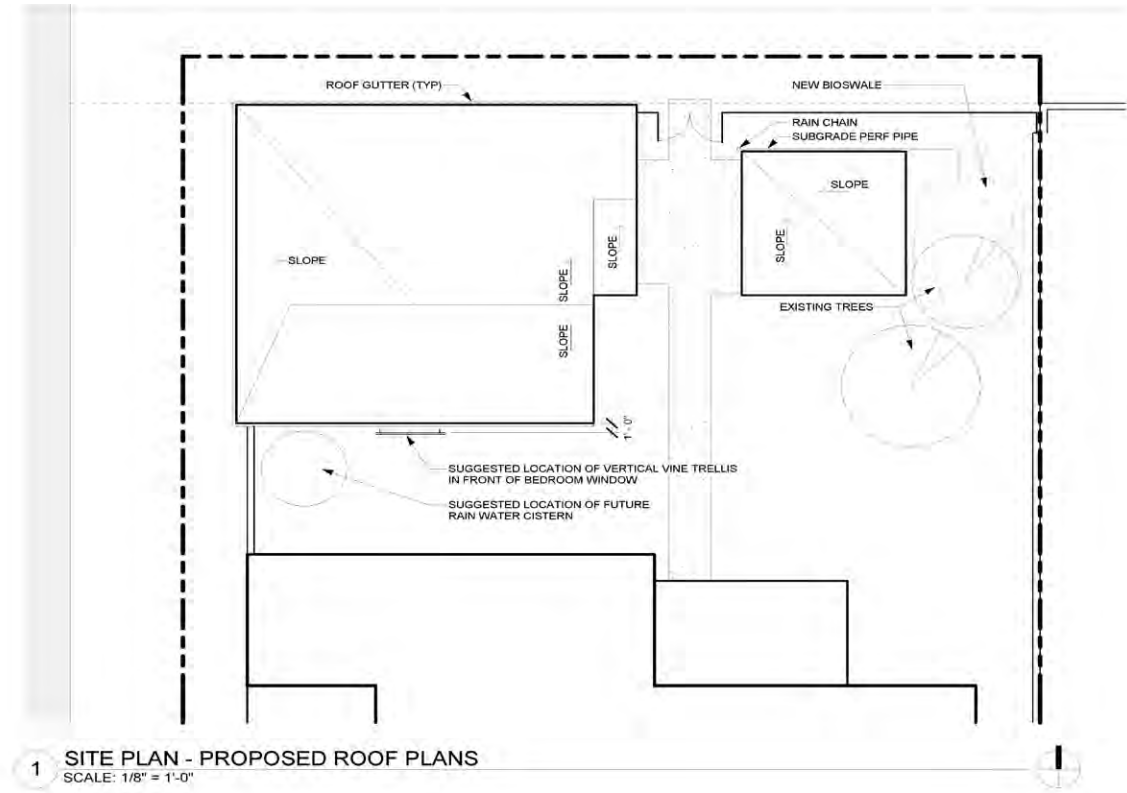
**EXAMPLE SITE PLAN: LUMEN 1-BED + MICRO 144 (NO KITCHEN) - 80'X120' (9,600 SF) CORNER LOT, R-1**



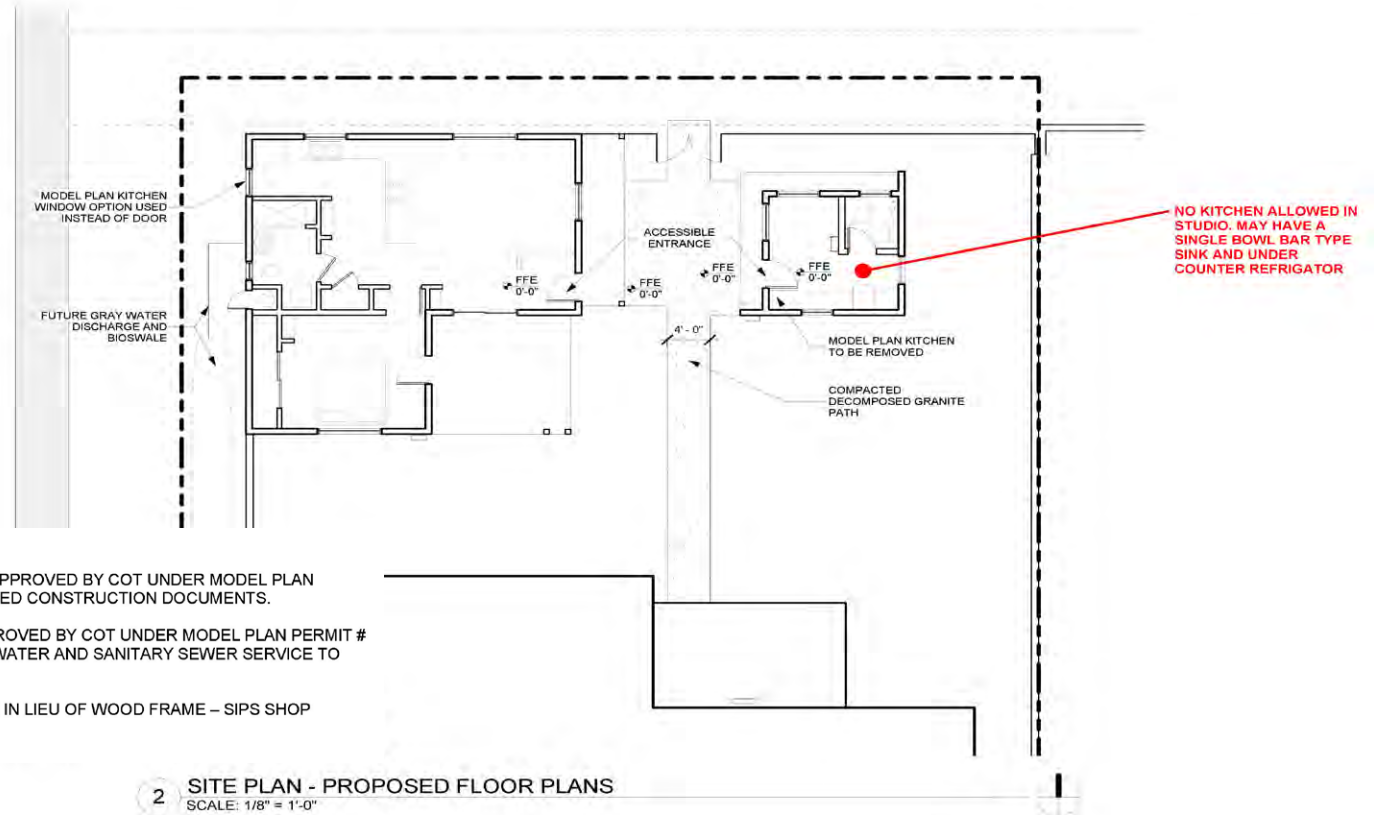
**2 SITE PLAN - PROPOSED**  
SCALE: 1/16" = 1'-0"

PROVIDED ADU SETBACKS: REAR: 9'-3" x 2/3 H = 6' REQUIRED | 6' PROVIDED  
SIDE: 9'-3" x 2/3 H = 6' REQUIRED | 6' PROVIDED

PROVIDED STUDIO SETBACKS: REAR: 15'-9" x 2/3 H = 10'-6" REQUIRED | 10'-6" PROVIDED  
SIDE: 15'-9" x 2/3 H = 10'-6" REQUIRED | 10'-6" PROVIDED



**1 SITE PLAN - PROPOSED ROOF PLANS**  
SCALE: 1/8" = 1'-0"



**2 SITE PLAN - PROPOSED FLOOR PLANS**  
SCALE: 1/8" = 1'-0"

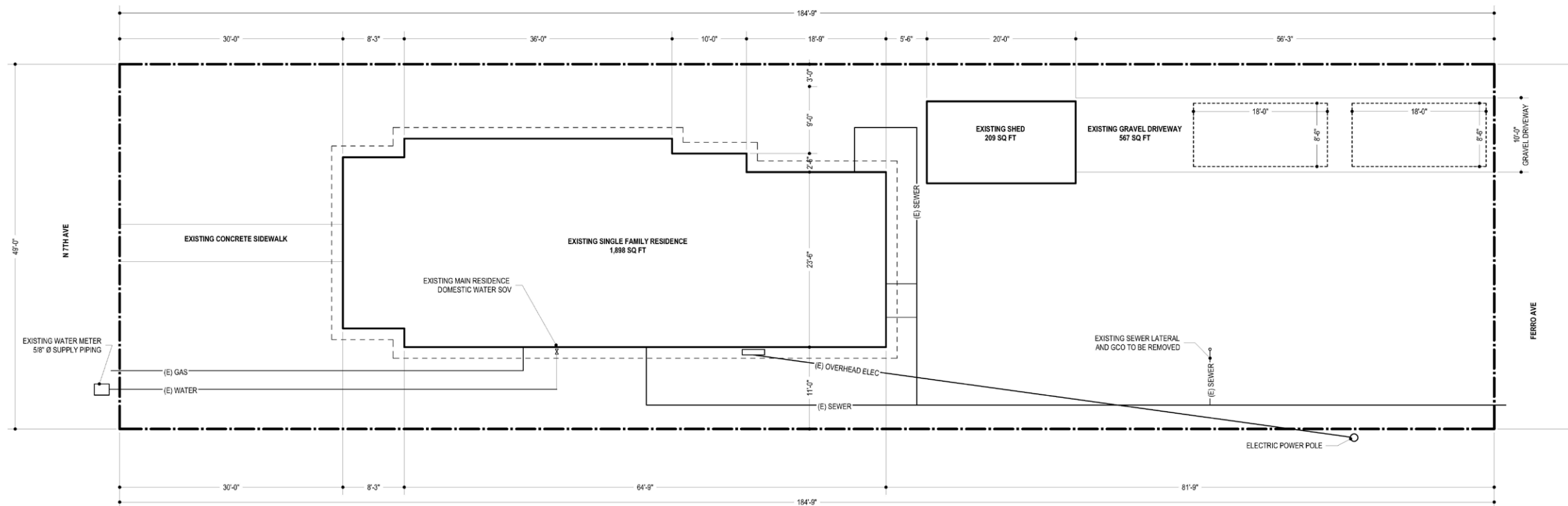
**MODEL PLAN NOTES**

- ONE-BEDROOM ADU TO BE CONSTRUCTED WITH DRAWINGS APPROVED BY COT UNDER MODEL PLAN PERMIT # MDP-0223-00619. NO PROPOSED CHANGES TO APPROVED CONSTRUCTION DOCUMENTS.
- ARTIST'S STUDIO TO BE CONSTRUCTED WITH DRAWINGS APPROVED BY COT UNDER MODEL PLAN PERMIT # MDP-0323-00825. STUDIO KITCHEN TO BE REMOVED; DOMESTIC WATER AND SANITARY SEWER SERVICE TO SERVE BATHROOM ONLY.
- EXTERIOR ENVELOPE TO BE BUILT USING SIPS PANEL SYSTEM IN LIEU OF WOOD FRAME - SIPS SHOP DRAWINGS TO BE DEFERRED SUBMITTAL TO COT.





**EXAMPLE SITE PLAN: ROOST 2-BED - 49'X185' (9,055 SF) MID-BLOCK, ALLEY, HR-3**



**A3 EXISTING SITE PLAN** SCALE: 1/8" = 1'-0" @ 24" x 36" 0 1 2 3 4 5

**PIMA COUNTY INCLUSIVE HOME DESIGN NOTES**

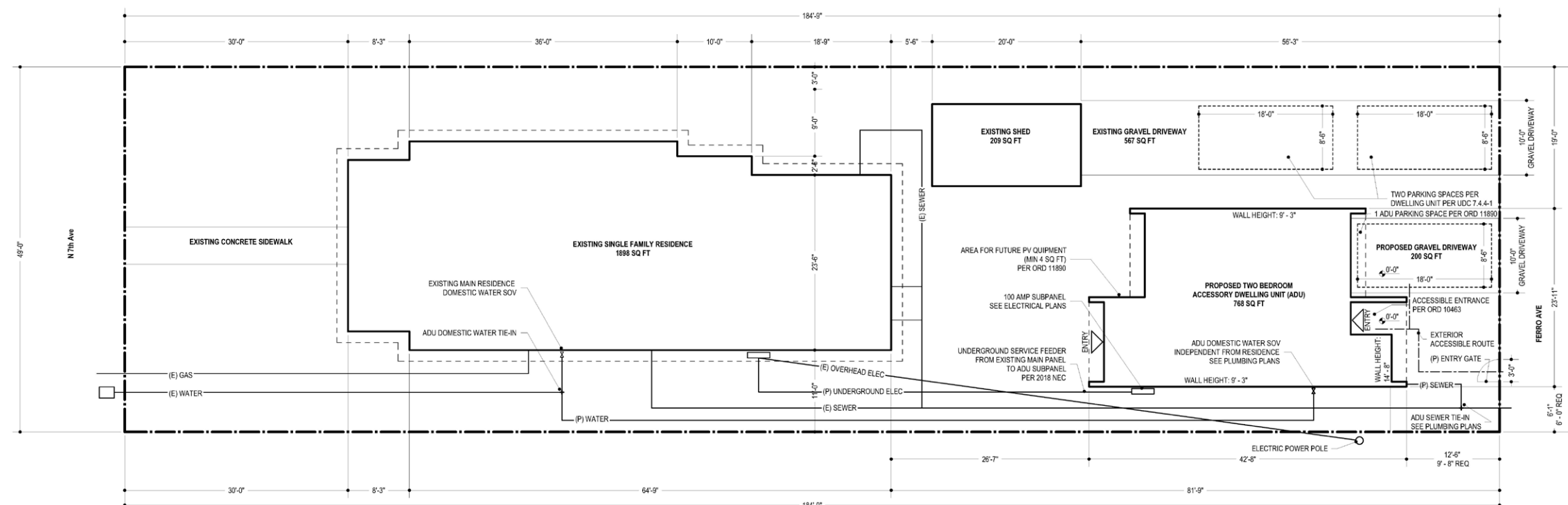
1. PROVIDE AT LEAST ONE EXTERIOR ACCESSIBLE ROUTE AND ENTRANCE. THE ROUTE MAY ORIGINATE FROM THE CARPORT, DRIVEWAY, PUBLIC STREET OR SIDEWALK. THE SLOPE OF THIS ROUTE SHALL NOT EXCEED ONE-FOOT VERTICAL RISE PER TWENTY FEET HORIZONTAL DISTANCE (1:20), UNLESS A RAMP PER IRC IS CONSTRUCTED. NOTE: INDICATE THE "EXTERIOR ACCESSIBLE ROUTE" AND "ACCESSIBLE ENTRANCE" ON SINGLE FAMILY RESIDENCE SITE PLAN.
2. ACCESSIBLE ENTRANCE: PROVIDE MINIMUM ONE NO-STEP LEVEL ENTRANCE THAT IS A MINIMUM 32 INCHES WIDE AND MEETS THE DOOR HARDWARE REQUIREMENTS PER THIS ORDINANCE. (NOTE: EXIT DOORS ARE REQUIRED TO BE 36 INCHES MINIMUM AND THE GARAGE SHALL NOT BE USED AS AN EXIT). THE ACCESS FLOOR SHALL HAVE A MINIMUM 36-INCH WIDE HALLWAY AND ACCESSIBLE DOORS TO ALL SPACES AND ELEMENTS TO BE MINIMUM 2 FOOT, 8-INCH DOOR.

**SERVICE NOTES**

1. TEP AND LICENSED ELECTRICIAN TO DETERMINE IF ELECTRICAL SERVICE UPGRADE AND MAIN PANEL UPGRADE ARE NEEDED. SEE ELECTRICAL PLANS IN ADU MODEL PLAN BUILDING PERMIT SET FOR ELECTRICAL SERVICE CALCS AND PANEL SCHEDULE.
2. TEP TO DETERMINE WHETHER OVERHEAD LINES ARE IN ACCEPTABLE PROXIMITY TO PROPOSED ADU ROOFLINE.
3. IF TEP DETERMINES THAT ROOFLINE OF ADU IS TOO CLOSE TO EXISTING OVERHEAD ELECTRICAL SERVICE LINES, ADU ELECTRICAL PANEL TO BE UPGRADED TO MAIN SERVICE ENTRANCE AND MAIN PANEL, AND EXISTING PANEL FOR SINGLE FAMILY RESIDENCE TO BE FED VIA UNDERGROUND SERVICE FEEDER.
4. ADU DOMESTIC WATER SERVICE TO SHARE EXISTING METER WITH EXISTING SINGLE FAMILY RESIDENCE. EXISTING SUPPLY LINE DIAMETER IS 5/8". LICENSED PLUMBER TO DETERMINE WHETHER SIZE UPGRADE IS NEEDED FOR NEW ADU DOMESTIC WATER SUPPLY. SEE MODEL PLUMBING PLANS IN ADU MODEL PLAN BUILDING PERMIT SET FOR FU AND DFU CALCULATIONS.
5. ADU WILL NOT USE EXISTING NATURAL GAS UTILITY SERVICE

**SOLAR NOTES PER ORD. 10549**

1. PROPOSED ADU ROOF SURFACE (894 SQ FT TOTAL) IN SOLAR-READY ZONE.
2. FUTURE PV EQUIPMENT TO BE LOCATED IN EXTERIOR LOCATION NOTED ON PLANS (MIN 4 SQ FT) FOR FUTURE SOLAR POWER AND WATER HEATING OPTION.



**EXISTING LOT COVERAGE**

LOT SQUARE FOOTAGE	9,055 SQ FT
EXISTING HOUSE AND PORCH:	1,953 SQ FT
EXISTING SHED:	209 SQ FT
EXISTING DRIVEWAY:	567 SQ FT
TOTAL LOT COVERAGE:	2,729 SQ FT
LOT COVERAGE %: (2,729 / 9,055)	30%

**PROPOSED LOT COVERAGE**

LOT SQUARE FOOTAGE	9,055 SQ FT
EXISTING LOT COVERAGE:	2,729 SQ FT
PROPOSED ADU:	788 SQ FT
PROPOSED ADU DRIVEWAY:	200 SQ FT
PROPOSED LOT COVERAGE:	3,697 SQ FT
LOT COVERAGE %: (3,697 / 9,055)	40%
HR-3 ZONE ALLOWED LOT COVERAGE:	70%

**ALLOWABLE ADU AREA PER ORD 11890**

LOT AREA:	9,055 SQ FT
MAX ALLOWED ADU AREA:	905 SQ FT
PROPOSED ADU AREA:	788 SQ FT

**PARKING REQUIREMENTS**

REQUIRED FOR DWELLING UNIT:	2 SPACES
PROVIDED FOR DWELLING UNIT:	2 SPACES
REQUIRED FOR ADU:	0 SPACES: TRANSIT <1/4 MILE
PROVIDED FOR ADU:	1 SPACE

**A5 PROPOSED SITE PLAN** SCALE: 1/8" = 1'-0" @ 24" x 36" 0 1 2 3 4 5