

ACCESSIBLE FEATURES

- Zero ht. threshold at entry. Covered porch at entry with bench and 5’ turn radius
- Wide doorways (36”) and sliding doors with lever handles
- Modular furniture to allow for future flexibility
- European-style wet-room bath w/ wall-mounted fixtures, curbless shower, 5’ turn radius
- Bedroom door opens to the porch for safe emergency exit
- Kitchen and laundry area are approachable to wheelchairs. Buildout can include lower work hts and knee space.

PROJECT STATS

Land Use Type: DADU or SFR  
Building Type: SIP construction on foundation  
Details: One bedroom, one bath, loft  
Net Living Area: 534 sf  
                    Level 1: Net 480 sf inside exterior walls  
                    Loft Level Above 5’ ht: 54 sf  
Total Footprint: 635 sf  
                    Building Footprint: 521 sf  
                    Covered Porch Area: 114 sf

Duo POD  
dWELLing Collection

Universal Design & Flexibility for Aging in Place

Category

Accessible DADU  
Low-Cost ADU

Project Description

The Duo POD DADU is designed to Universal Design standards for comfortable barrier-free living. This accessible home, with an emphasis on flexibility, enables aging-in-place.

The Duo POD is ideal for couples and singles as well as for those mobility-challenged and elders. The name “Duo” reflects that the home can function as a one bedroom residence or both a studio home plus a separate office. Each has a separate entry door.

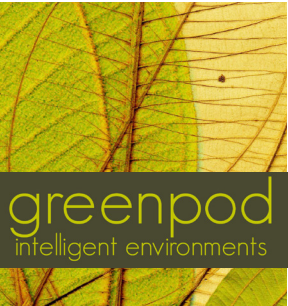
It is a small home that feels expansive at 480 net sf., laid out to offer a modern take on space planning. The Duo is an energy-efficient structure with a maintenance-free exterior, all materials chosen for a healthy environment and designed for LEED and Built-Green Certification.

The simple compact one story+ size fits a wide range of Seattle back yards and minimizes visual impact to neighbors. The gable style complements most Seattle neighborhoods.

The home can be sited to nest with the main house or face away for privacy. It may be located on 40’ and wider lots and is intended to reside on an alley or in a landlocked backyard.

TABLE OF CONTENTS

Cover and Project Information..... 1  
Project Narrative/ Floor Plan: L1 ...2  
Floor Plan: Loft Level.....3  
Elevations .....4  
Sections.....5  
Bldg Systems.....6  
Images.....7  
Options .....8



Greenpod Development LLC  
606 Roosevelt Street  
Port Townsend, Wa. 98368  
ann@greenpod.design  
360.301.9686  
merrill@greenpod.design  
425.280.3776

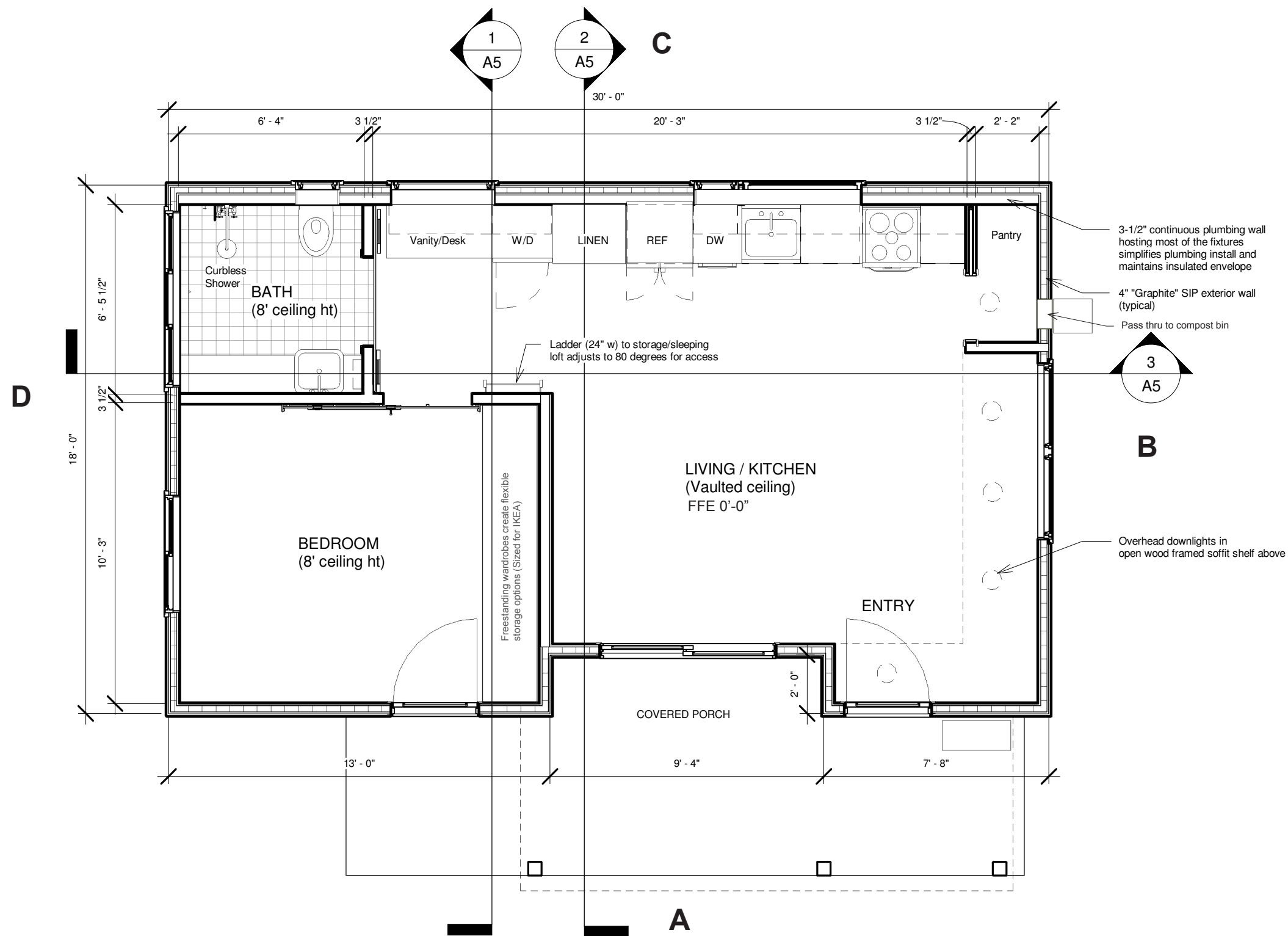
DUO POD DADU

SDCI Submission for Pre-Approved ADU Gallery February 17, 2020

SCALE:

Cover

General Project  
Information



1 FLOOR PLAN: LEVEL 1  
 Scale: 1/4" = 1'-0"  
 See P. 9 for furniture layout options

## Project Narrative

The Duo Pod is designed to be simple in layout and construction. The small 18'x 20' rectangular footprint with minimal interior walls is a less-expensive building profile. An owner can finish the shell in DIY fashion.

The home includes one bedroom, one bath, a loft for storage/mechanical/young guests, and a large living, dining, kitchen area with a vaulted ceiling. Secondary sleeping options include the window nook daybed and the loft. Accessibility is key - please see Accessibility Features on this page.

**(LOW COST)** The design has been reviewed for cost to build in Seattle. In 2019, that was estimated in the range of about \$300/sf not including land, permitting, utility fees and connections. That's about as low as you can go without being cheap in Seattle. See p.6 for strategies on reducing costs.

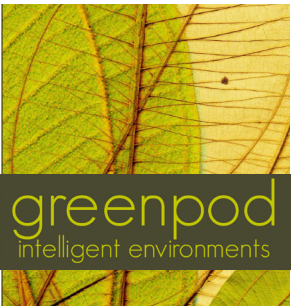
**(GREEN DESIGN)** This home is designed to meet the Seattle Green Building Standard as defined by the Director's Rule 20-2017. Smart planning on the front-end can leverage the existing site conditions to minimize disturbance, maximize recycling of waste materials, and sustain a healthy landscape and trees. See p.6 for an in-depth look at the major materials and building system.

**(PRIVACY)** The DADU design is applied to the site by rotating or mirroring the plan, ensuring easy access, sun tempering, and privacy. Carefully placed windows (counter, transom, clerestory and frosted) provide light and privacy throughout. Lower windows can be shaded. Layering of trees and plantings contribute to build privacy. The lower height of this home will allow the neighbors to maintain their own privacy and sunlight.

**(CONTEXT)** Roofline options (shed and straight gable) and material/trim choices can be made to complement the existing residence and surrounding neighborhood at large. While a gable works well in older communities, a shed roof option can be applied in more transitional communities.

**(CULTURAL RESPONSIVENESS)** Cultural needs vary and can be specific for each family and community. This DADU allows for intergenerational habitation on the same property, a common practice of many countries. The flexibility can provide space for sensitive traditions. (Ask me about the Chinese Taoist prayer service in a Lynnwood home!)

**(CONSTRUCTABILITY)** See Bldg. Systems p.6.



Greenpod Development LLC  
 606 Roosevelt Street  
 Port Townsend, Wa. 98368  
 ann@greenpod.design  
 360.301.9686  
 merrill@greenpod.design  
 425.280.3776

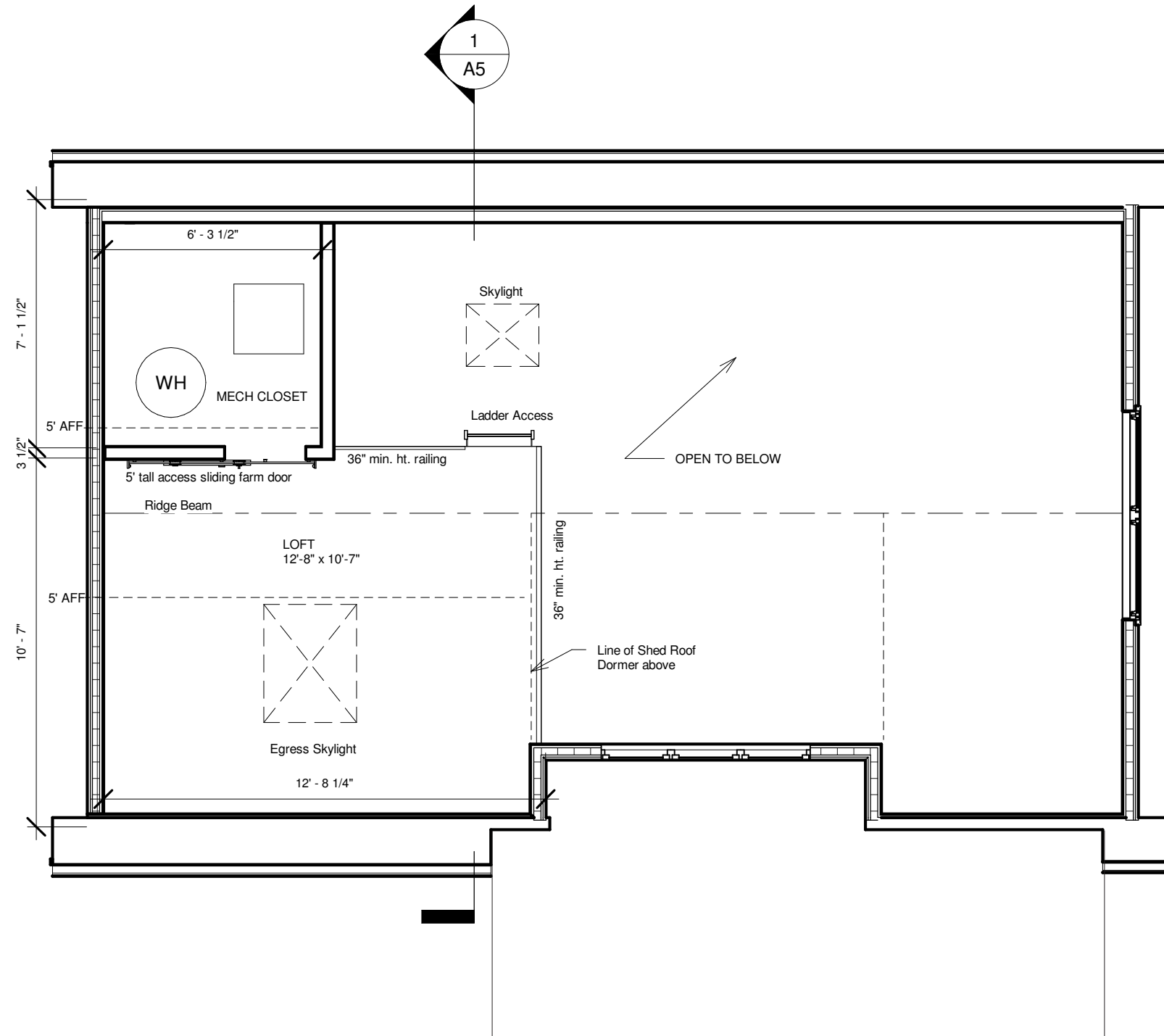
DUO POD DADU

SDCI Submission for Pre-Approved ADU Gallery February 17, 2020

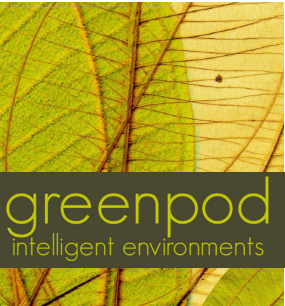
SCALE:

Floor Plan: Level 1  
 Project Narrative

2



1 FLOOR PLAN: LOFT LEVEL  
Scale: 1/4" = 1'-0"



Greenpod Development LLC  
606 Roosevelt Street  
Port Townsend, Wa. 98368  
ann@greenpod.design  
360.301.9686  
merrill@greenpod.design  
425.280.3776

DUO POD DADU

SDCI Submission for Pre-Approved ADU Gallery February 17, 2020

SCALE:

Floor Plan: Loft

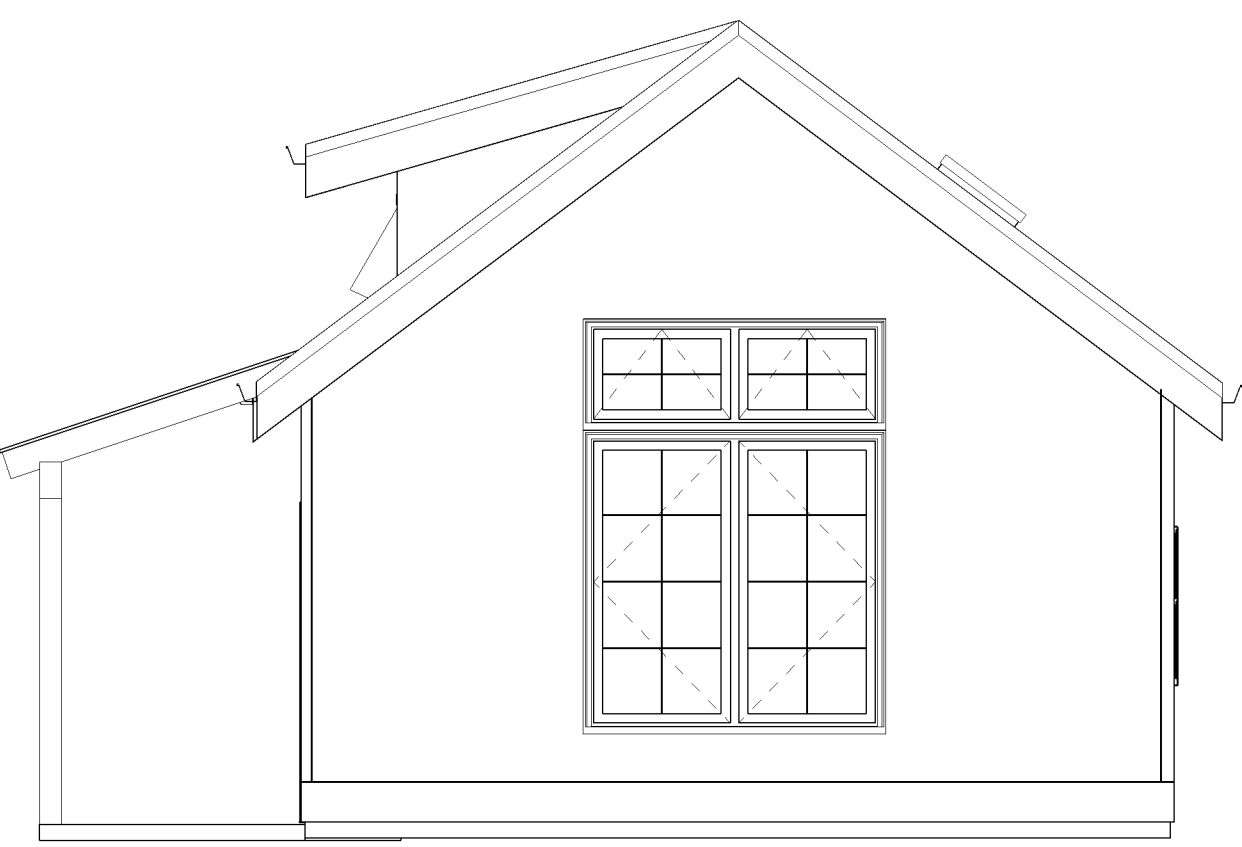




1

ELEVATION A

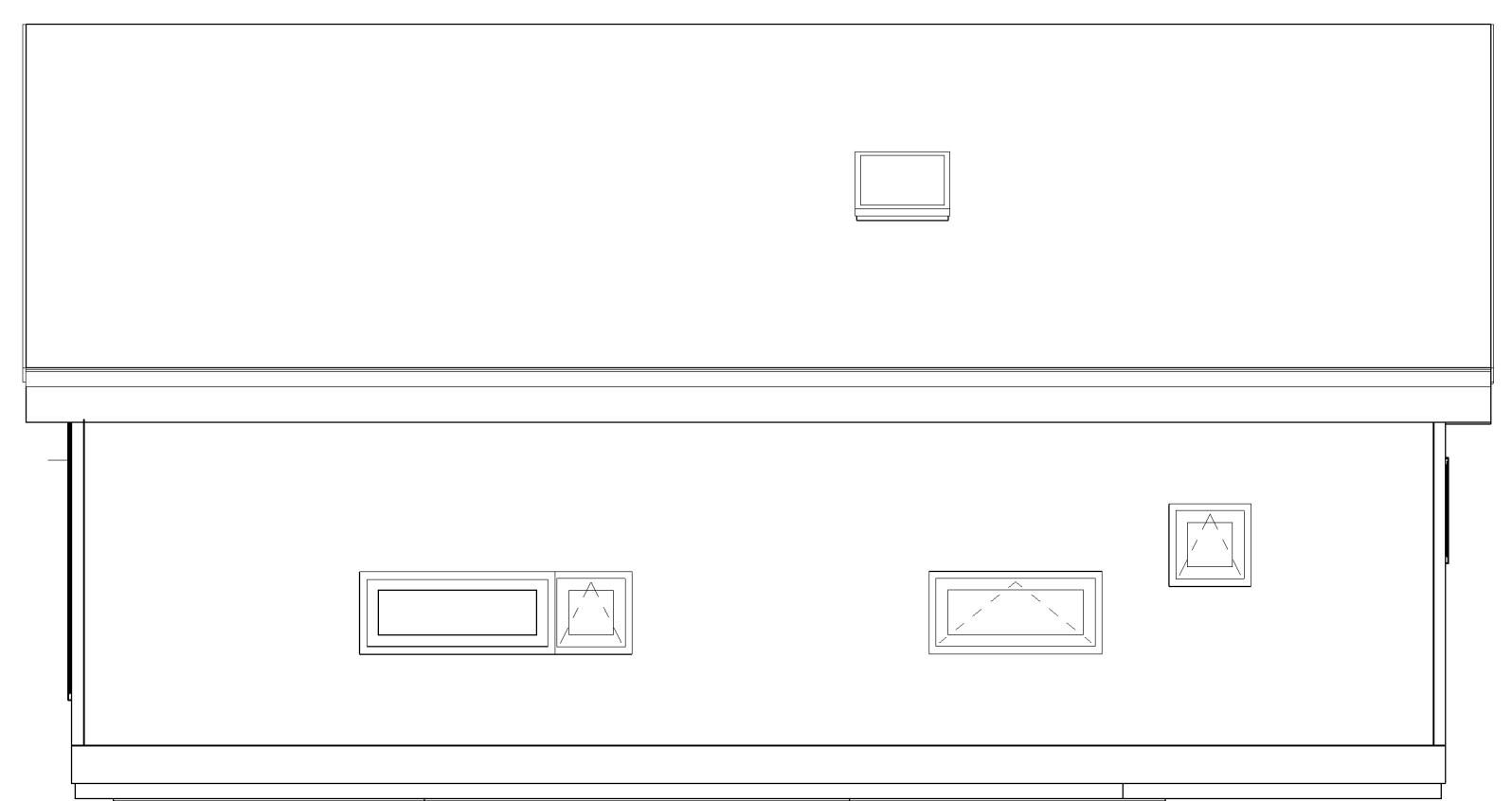
Scale: 1/4" = 1'-0"



2

ELEVATION B

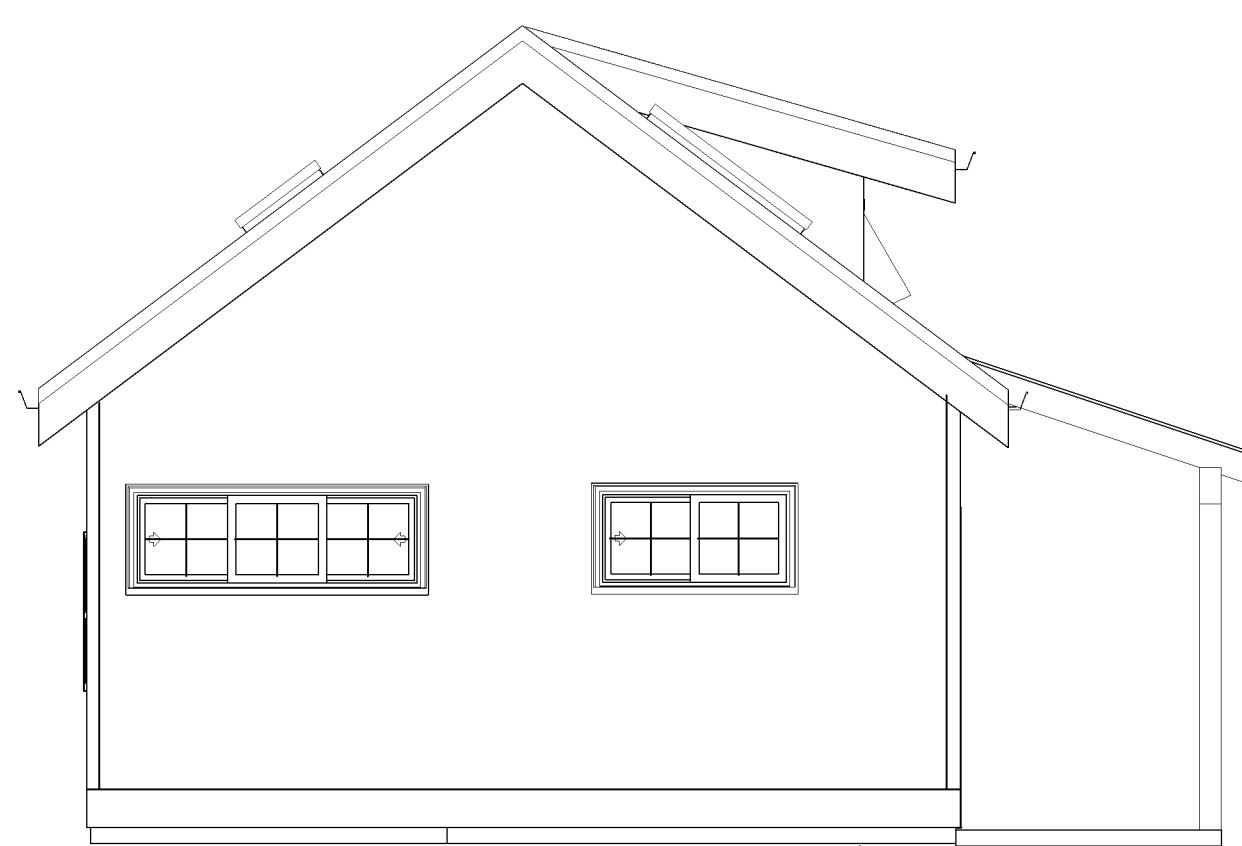
Scale: 1/4" = 1'-0"



3

ELEVATION C

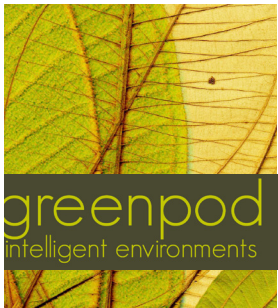
Scale: 1/4" = 1'-0"



4

ELEVATION D

Scale: 1/4" = 1'-0"

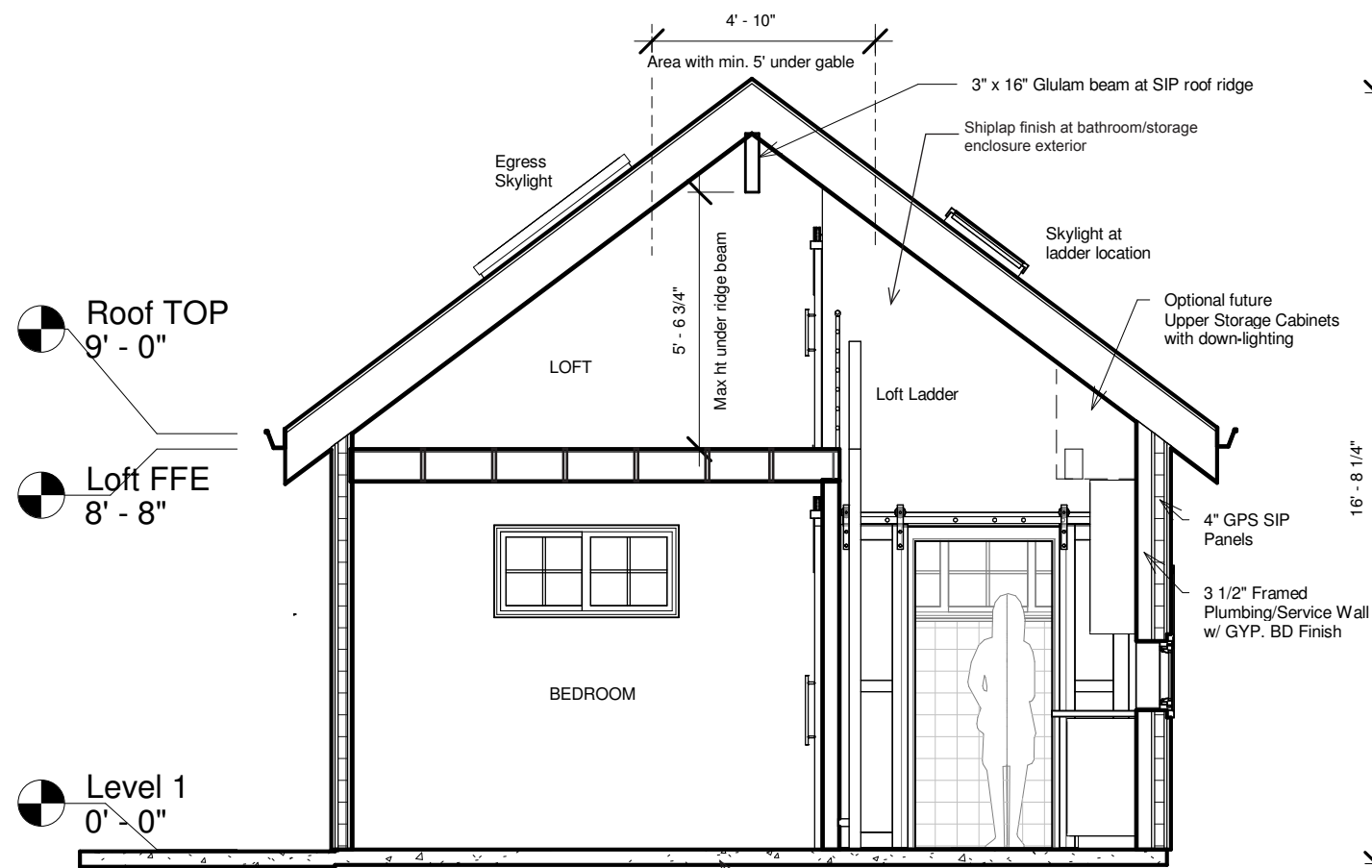


Greenpod Development LLC  
106 Roosevelt Street  
Port Townsend, Wa. 98368  
info@greenpod.design  
60.301.9686  
terrell@greenpod.design  
25.280.3776

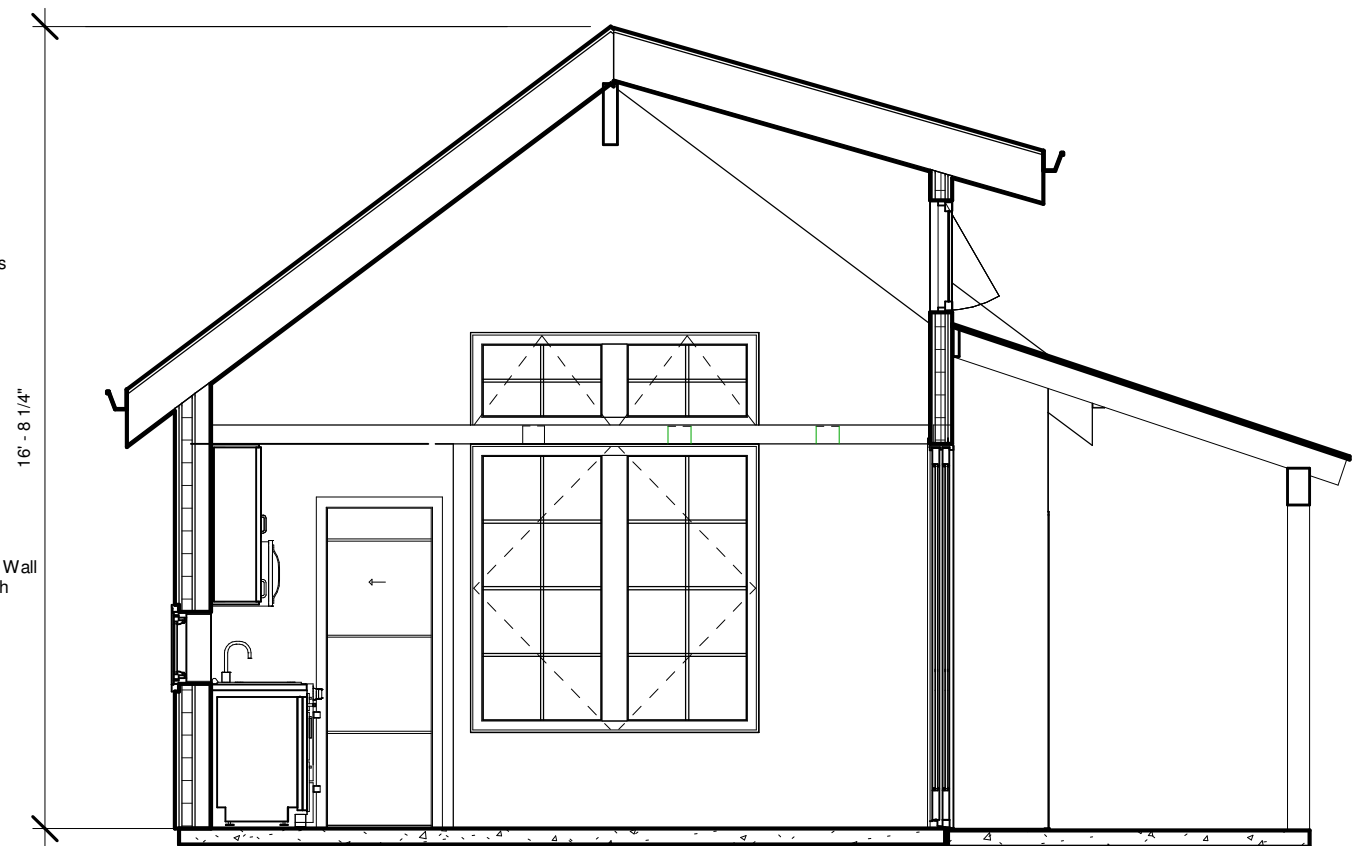
DUO POD DADU

SCALE:

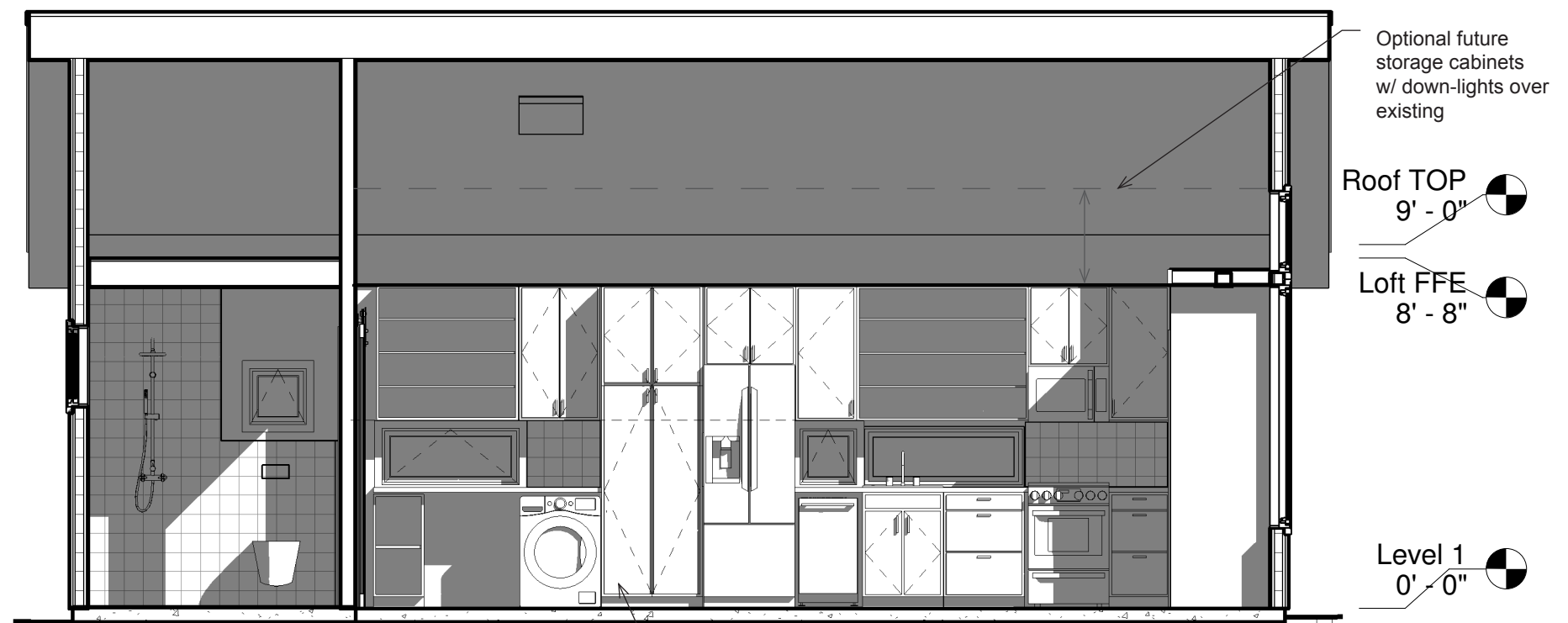
ELEVATIONS



1 SECTION A  
Scale: 1/4" = 1'-0"



2 SECTION B  
Scale: 1/4" = 1'-0"



3 SECTION C  
Scale: 1/4" = 1'-0"

A continuous separate service-wall full of cabinetry, fixtures and storage provides flexibility to design a custom kitchen/storage system that fits the owner needs.



Greenpod Development LLC  
606 Roosevelt Street  
Port Townsend, Wa. 98368  
ann@greenpod.design  
360.301.9686  
merrill@greenpod.design  
425.280.3776

DUO POD DADU

SCALE:

SECTIONS

5

© 2020 Merrill Leonard  
All Rights Reserved

SDCI Submission for Pre-Approved ADU Gallery February 17, 2020

CORE BUILDING SYSTEM

ENVELOPE

SIP Construction is the core building system we recommend. This includes Graphite Structural Insulated Panels for wall, roof, and possibly floor panels depending on the foundation and site conditions. We rely on the rolled-on emulsion Enviro-Dri as an effective WRB. Cementitious siding and trim (often Hardi Color Plus) round out the low maintenance materials. For the interior, we apply gyp board or wood panels. Our goal is to simplify the construction process using quality materials that meet and exceed Built Green standards.

SIP Panels

Structurally Insulated Panels (SIP) ensure a well-insulated and tight building envelope. The construction is stronger, and straighter with no off-gassing. The OSB sandwiched-filled cavities do not allow mold or rodents. The new GPS (graphite polystyrene) SIPs are made with BASFs Neopar which has earned the Greenguard gold certification and allows higher R-values. Panels built offsite and delivered just in time limit construction storage issues.

Enviro-Dri

This WRB system is effective and permanent, protecting the sheathing from moisture and air infiltration. It requires no fasteners. It is part of the triple seal around the windows.

Windows and Doors

Sierra Pacific Windows adhere to the environmental protection standards of the Sustainable Forestry Initiative® (SFI) and go beyond the forestry regulations in California and Washington - the highest standards in the world.

Andersen 100 Series budget-friendly windows and patio doors are available in rich colors and are made with our revolutionary Fibrex® composite material and can be painted.

Roofing

Taylor Metal roofing, unlike other roofing material, is 100% recyclable at the end of their long life. with a minimum of 25% content in them already. Metal roofs are excellent insulators saving energy up to 40% and weigh less. The longevity is 40-60 years with a 40year paint warranty. They have a class A fire rating. Solar panels are compatible.

Siding and Trim

HardiePlank® siding is made from natural and sustainable raw materials: cement, sand, wood fiber, and water. It has no asbestos, glass fibers, or formaldehyde, which makes it a safe building product as well. The materials are low in toxicity; therefore, it does not harm the environment.

INTERIORS

All interior finishes are chosen to promote indoor air quality, avoiding any products that might out-gas volatile organic compounds. The fabrics and dyes are made from organic natural plant fibers, naturally antimicrobial, that won't support the growth of mildew or mold. Our open plans utilize modular furnishing and sliding walls/doors, using local craftsmen wherever possible.

COST CONSIDERATIONS

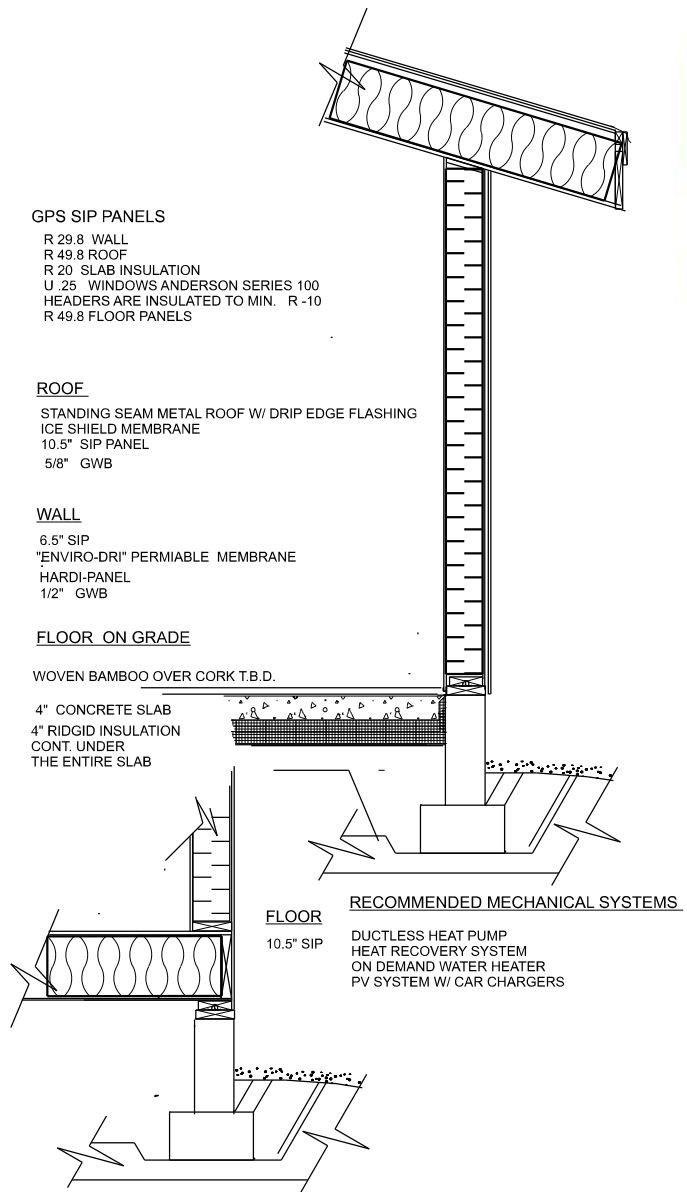
The SIP system is not the least expensive program in terms of building cost. We believe that as that system becomes ubiquitous in our area, the cost will come down and contractors will prefer their use. The preconfigured panels are up to 55% faster to install with no job waste. Traditional framing has 7 steps- SIP has 3. As time becomes more precious, these faster hybrid systems will become the standard, especially with the ever increasing demands of the Wa. State Energy Code.

Strategies to Reduce Cost to Build

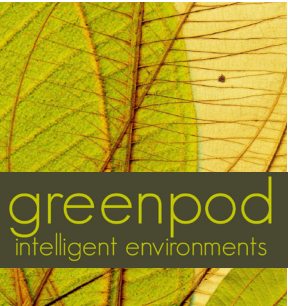
We design simple low maintenance, non-toxic and energy-efficient building shells and focus on the interior experience. A lot can be done inside with less expensive materials and creativity for less money. The owner attitude predicts the extent of a low cost solution.

Other strategies include:

- Simplified building shell design will help contractors reduce the fear factor percentage on the job.
- Hand the completed building shell over to the Owner to complete DIY.
- Design with recycled or reused doors, cabinets and plumbing
- Pier foundation or Pin foundation might be a more cost effective solution on some site than monopour slabs and stem walls.
- Gang service & plumbing infrastructure in one area or along one wall.
- Source less expensive materials. Consider painting or troweling a finish directly on the OSB interior shell rather than use gyp board.
- Build in locations that are easily accessed, flat site, utility connections via the existing residence - easier said than done.



1 TYPICAL WALL SECTION  
Scale: NTS



Greenpod Development LLC  
606 Roosevelt Street  
Port Townsend, Wa. 98368  
ann@greenpod.design  
360.301.9686  
merrill@greenpod.design  
425.280.3776

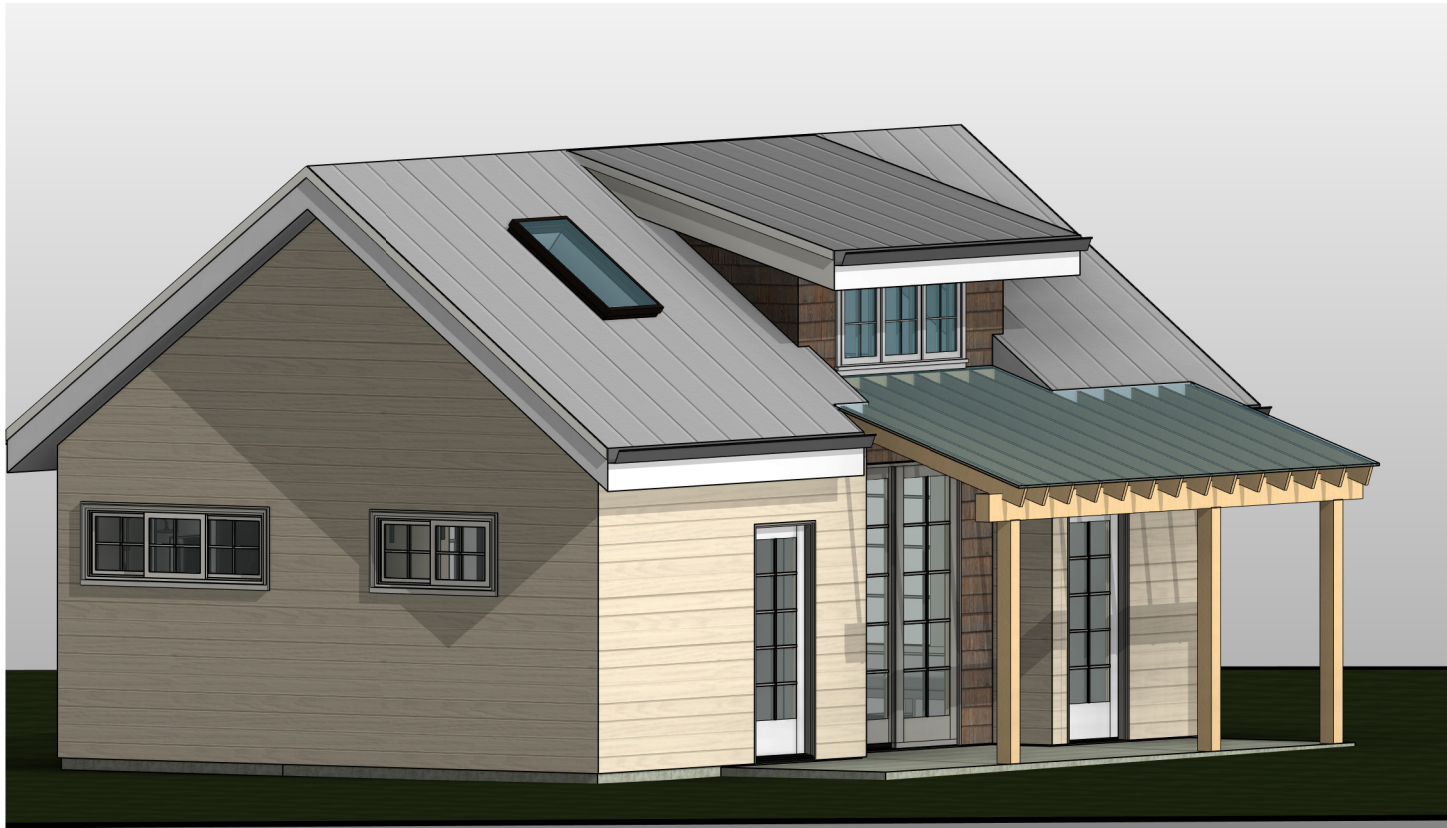
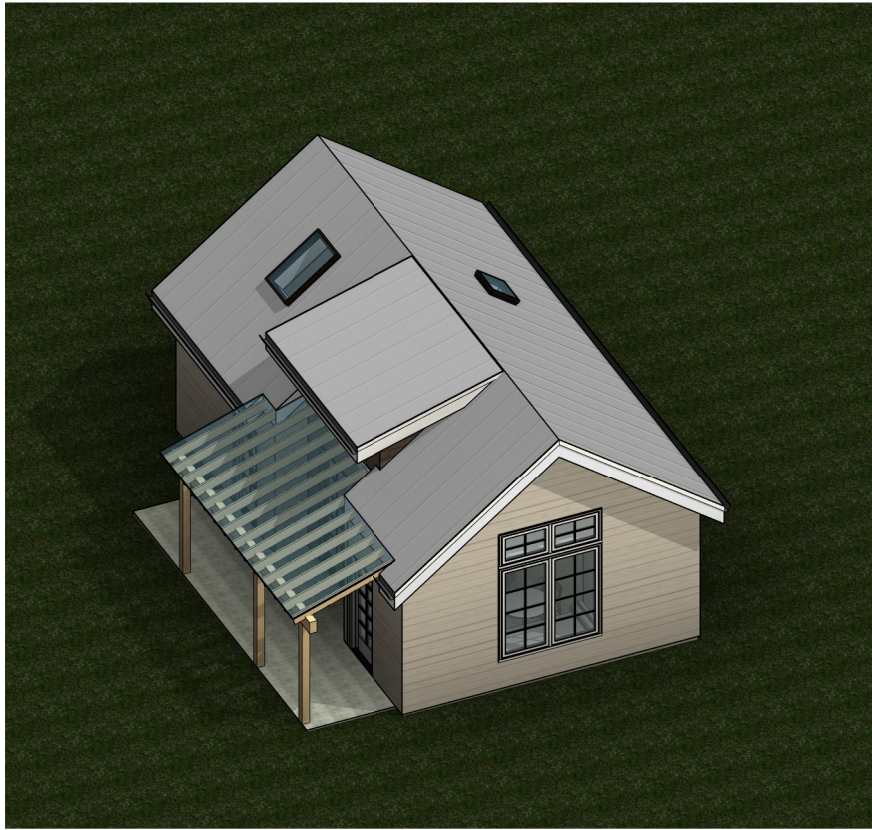
DUO POD DADU

SDCI Submission for Pre-Approved ADU Gallery February 17, 2020

SCALE:

SECTIONS  
BLDG SYSTEMS





Greenpod Development LLC  
606 Roosevelt Street  
Port Townsend, Wa. 98368  
ann@greenpod.design  
360.301.9686  
merrill@greenpod.design  
425.280.3776

## DUO POD DADU

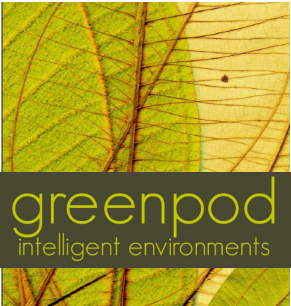
SCALE:

IMAGES

7

© 2020 Merrill Leonard  
All Rights Reserved



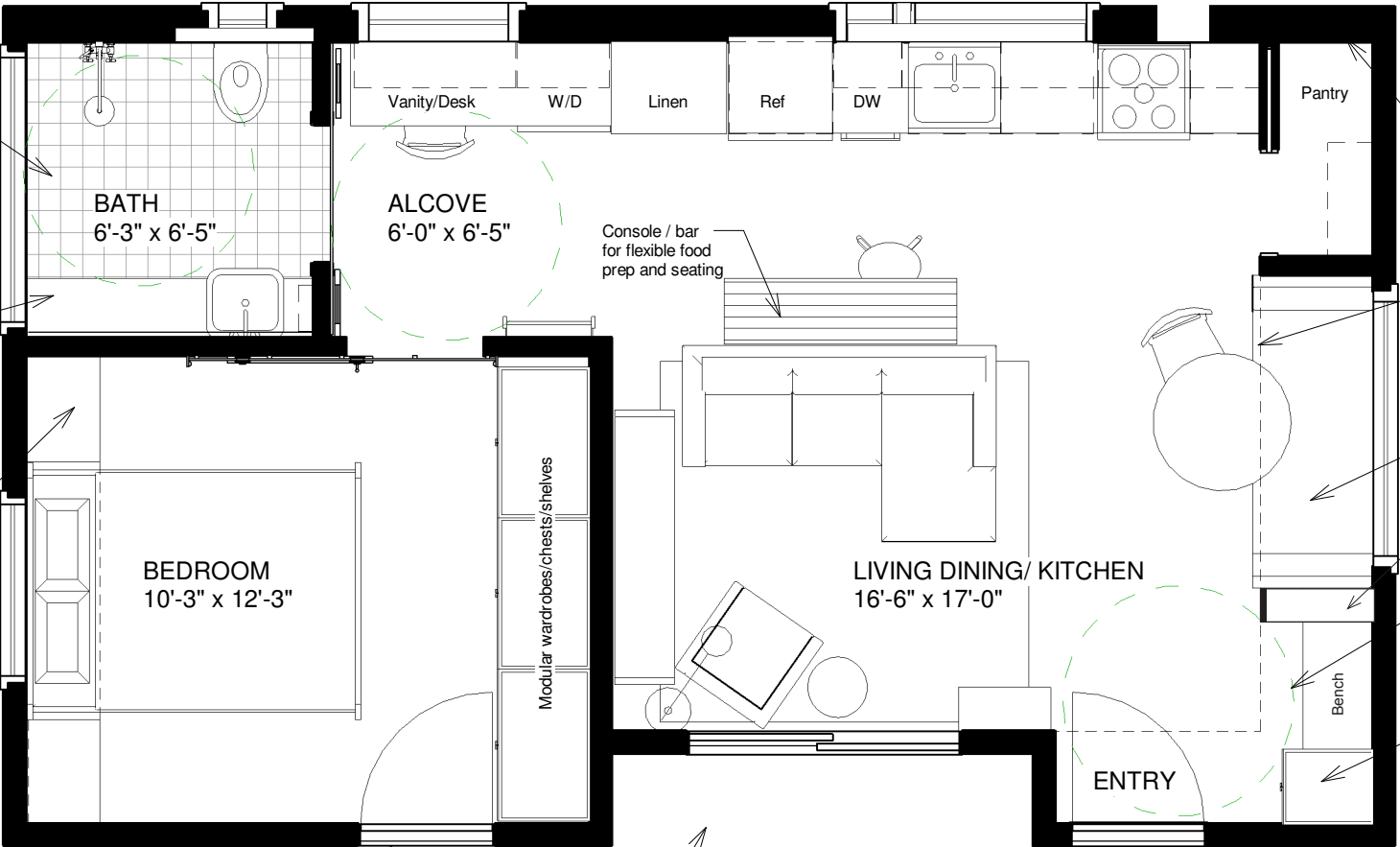


Greenpod Development LLC  
606 Roosevelt Street  
Port Townsend, Wa. 98368  
ann@greenpod.design  
360.301.9686  
merrill@greenpod.design  
425.280.3776

European style wet room drains to a full length linear drain. Curbless shower and wall-mounted toilet create an easily cleaned bath. Solid surface wall panels limit grout issues. High windows provide privacy.

Flexible Bath wall with area for sink, cabinets and shower bench. Entire wall is mirrored above vanity.

Bedroom can include multiple modular freestanding storage options. Tall cabinets with shelving and downlights at the head of the bed and a wall of wardrobes & chests opposite.



Plumbing wall hosts kitchen, laundry and desk area. All cabinetry (sized for IKEA units) are similar to maintain a simple clean integrated look with flexible storage options. Deep windows at counter height allow excellent natural light on counters yet provide privacy from neighbors or alley behind.

Light Soffit/Shelf above provides cozy nook below with down-lighting along wall and entry. Windows above shelf illuminate ceiling while window coverings at lower windows can provide privacy.

Daybed serves as reading nook, dining seating and extra sleeping space for guests

Open freestanding bookcase up to light shelf provides storage and for both nook and entry

Flexible room and furniture layout per Universal Design principles. Includes 5' turning radius at key locations.

Modular freestanding wardrobes provide flexible storage options and less expensive interior buildout. Sized for IKEA units.

Bedroom has separate outdoor entry for easy egress and for possible use as a standalone guest room or office

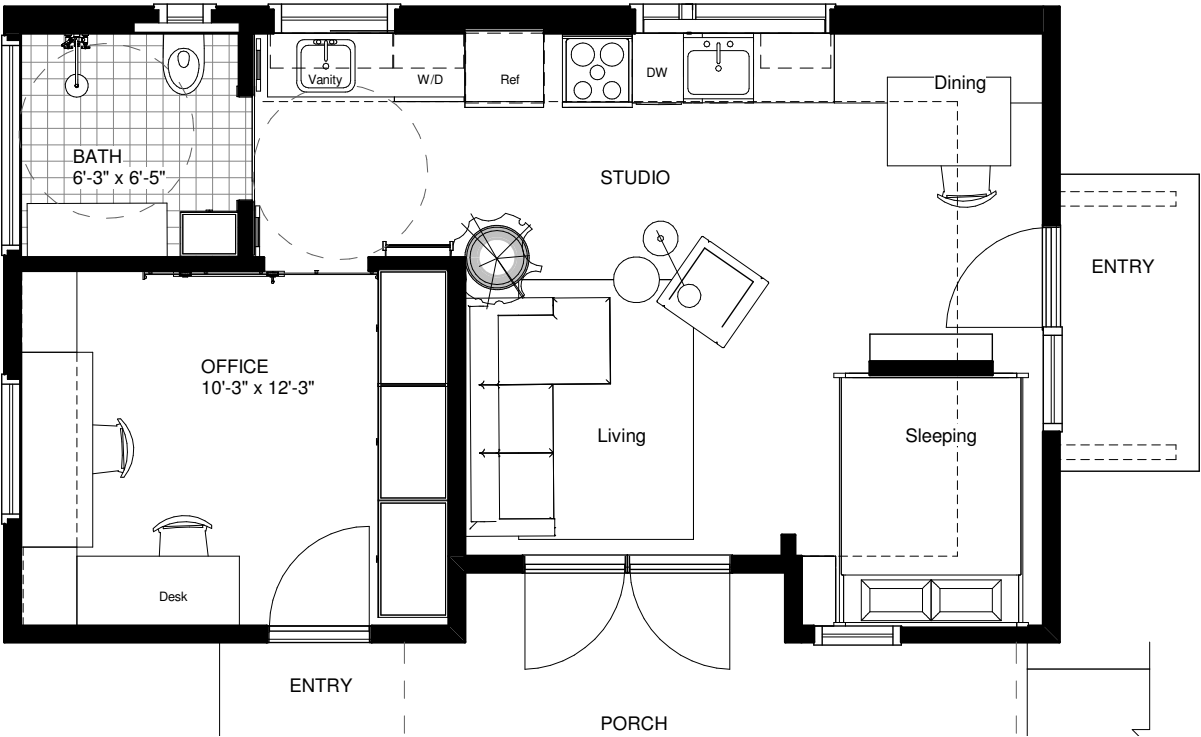
Living area opens to covered porch area for outdoor seating and dining

Min. ht. thresholds and 3' wide standard interior and exterior drs provide accessibility throughout

Path (or ramp) to main house or alley

FURNITURE LAYOUT EXAMPLE

Scale: 1/4" = 1'-0"



STUDIO HOME PLUS OFFICE LAYOUT

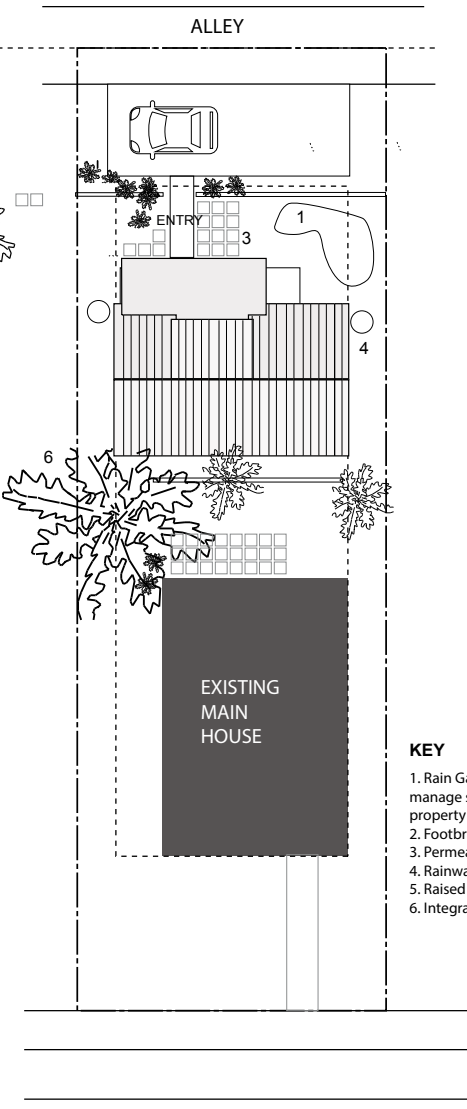
DUO POD DADU

SDCI Submission for Pre-Approved ADU Gallery February 17, 2020

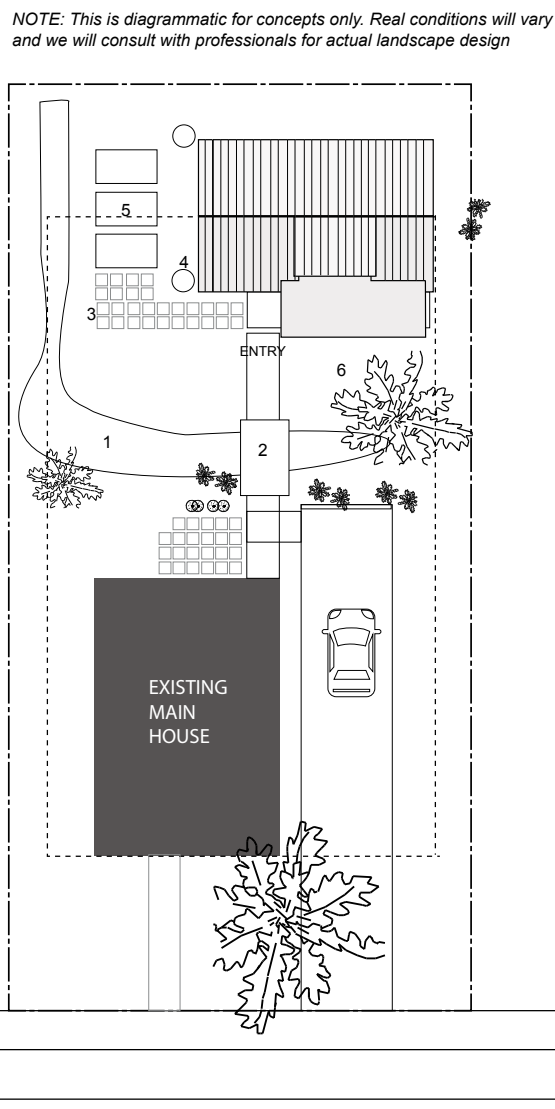
SCALE:

OPTIONS

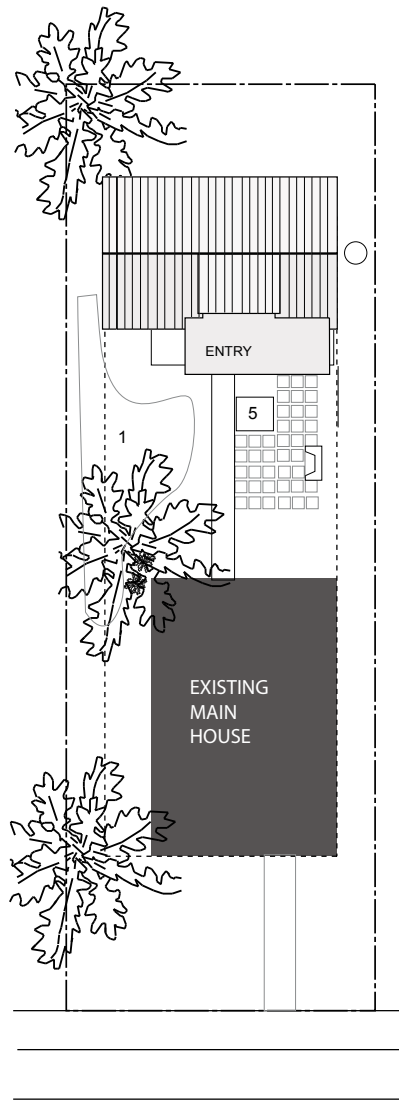




EXAMPLE LAYOUT OPTION 1  
40' x 100' deep lot with Alley access  
Privacy from Main House.



EXAMPLE LAYOUT OPTION 2  
60' x 100' deep lot - no Alley Access  
Could replace an existing garage. Resident  
engages with Main House



EXAMPLE LAYOUT OPTION 3  
40' x 100' deep lot. Resident engages  
with the Main House

## SITE LAYOUT CONCEPTS

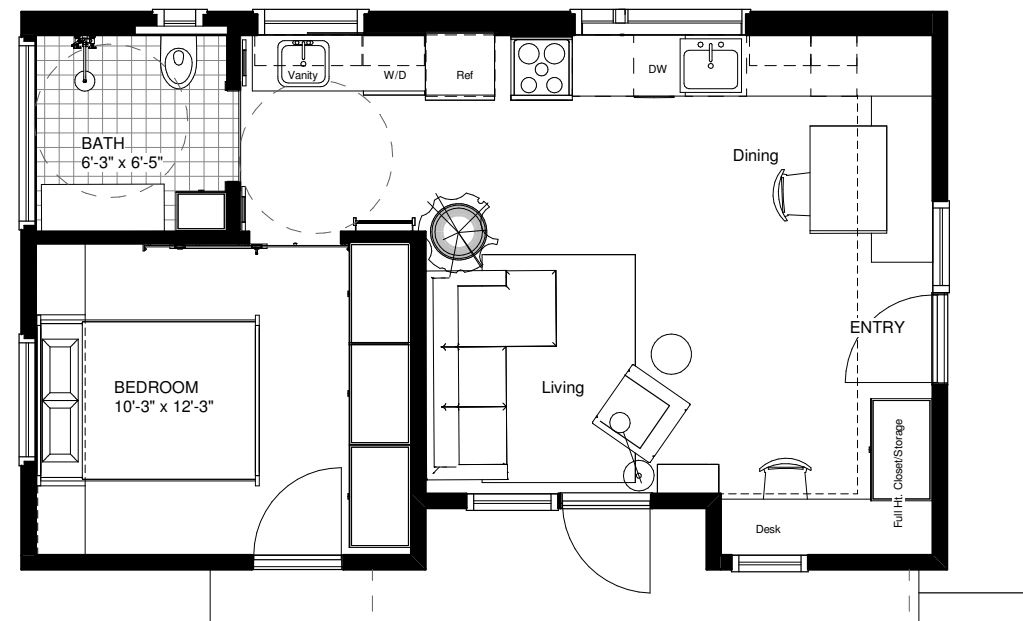
Scale: NTS

NOTE: This is diagrammatic for concepts only. Real conditions will vary  
and we will consult with professionals for actual landscape design

### KEY

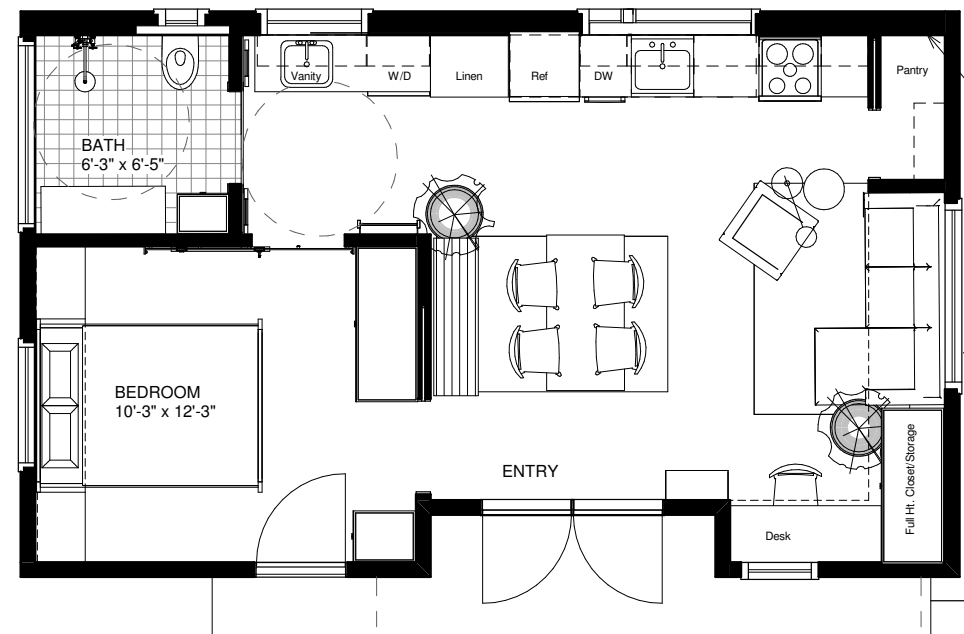
1. Rain Garden/Swale to help manage stormwater on property
2. Footbridge over Swale
3. Permeable Paving
4. Rainwater Catchment
5. Raised Bed Gardens
6. Integrate Existing Trees

## OTHER PLAN LAYOUT OPTIONS



## SIDE ENTRY LAYOUT

Scale: NTS



## PATIO ENTRY LAYOUT

Scale: NTS



Greenpod Development LLC  
606 Roosevelt Street  
Port Townsend, Wa. 98368  
ann@greenpod.design  
360.301.9686  
merrill@greenpod.design  
425.280.3776

## DUO POD DADU

SCALE:

OPTIONS

9

© 2020 Merrill Leonard  
All Rights Reserved