



# E Ho‘i Kākou i Kauhale



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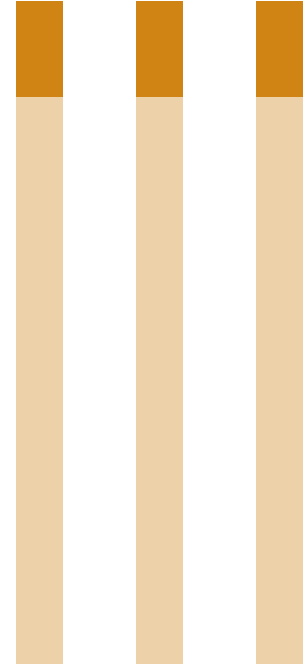
University of Hawai'i at Mānoa™

# Team Members



## Mark Krzyzanowski

Mark is a 2nd Year PhD student in the Department of Urban and Regional Planning at the University of Hawai'i at Mānoa (anticipated graduation 2026). His research focuses on Urban Informality and the nexus between supply side housing affordability and advancements in design approaches that promote vernacular architectural techniques.



## Kammie Tavares

Kammie Tavares is a Kanaka 'Ōiwi PhD student in the Department of Urban Regional and Planning at the University of Hawai'i at Mānoa and a graduate research assistant in the Institute for Sustainability and Resilience. Her research interests are in coastal management and climate adaptation. Kammie's anticipated graduation date is Spring 2026.



# Site Analysis



Photos of hale from the Hawai'i State Archives. Reference PP-32-1-029 (left) and PP-32-4-022 (right), both undated.

This design proposal aims to demonstrate how dwelling design can be enriched by reviving Kanaka 'Ōiwi (Native Hawaiian) design wisdoms and cultural practices on the island of Kaua'i, a part of the ancestral 'āina (that which feeds) to Kanaka 'Ōiwi. We are grateful for the generations of Kanaka 'Ōiwi whose knowledge systems have sustainably shaped Hawai'i and allow us to enjoy these gifts today. Like other Indigenous Peoples, Kanaka 'Ōiwi have dealt with negative impacts of colonization, including the suppression of Kanaka 'Ōiwi design in the built environment. As a team, comprised of a kanaka and an island transplant, we hope to support the work of others, such as modern kumu kuhikuhi pu'uone (teacher of master builders and architects) Francis Sinenci, who aims to portray and celebrate Kanaka 'Ōiwi identity through design and structural logics as a step towards restoring cultural sovereignty. We acknowledge that we are not experts in Kanaka 'Ōiwi art or design, but we found it important to suggest such an approach because of the community benefits that it offers. We want to appreciate and respect these design approaches that at one point were the standard but are now barely visible in the built landscape of the islands.

Kanaka 'Ōiwi approaches to planning include being sustainable, community-oriented, and resilient, which are the main influences in our design. This proposal was created to fit the Front Lot, which is located on the eastern shore of Kaua'i in the moku of Puna and somewhere within the Wailua, Oloheua and Waipouli ahupua'a. This area is near the Wailua River with Wailua Bay just down the road. With easy access to several water bodies, residents likely often recreate (e.g. swim and paddle canoe) or gather resources (e.g. fish). Being near the river and its accompanying streams also suggest this area is near a flood hazard, which we consider in our design. These are the notable features of the Front Lot community that we will expand upon more in our ARU proposal.

# Proposal Description

Our design is modeled after the kauhale design of traditional Hawaiian homes. A kauhale is a compound of structures that make up the holistic living space for the family unit. “E ho‘i kākou”, is a call for us to return. Hence, our project title, “E Ho‘i Kākou i Kauhale” does not just simply mean, “Let’s Go Home”, but it is a proposal to turn toward ‘ike kupuna (ancestral knowledge) and reincorporate ‘Ōiwi design in our living space. We use each part of this phrase to describe our proposal, which includes three structures: Hale Noa (Main house), Hale Papa‘a (Storehouse), and Hale Ka‘a (Vehicle house).

**Ho‘i:** *vi. To leave, go or come back; to cause to come back. (Pukui-Elbert)*

Our proposal is a call to action for designers to consider utilizing Indigenous knowledge and design in community structures as a way to restore cultural sovereignty. Perpetuating colonial designs such as plantation structures in Hawai‘i may further harm Indigenous communities and also misses the opportunity to incorporate generational knowledge of sustainable ways of living. The inspiration we drew upon from Kanaka ‘Ōiwi knowledge is the use of A-frame structures, careful consideration of the local environment, and being community-oriented (to be discussed in the following sections).

Each of our structures incorporate an A-frame design. The A-frame provides for greater rigidity and stability. The angled rafters and beams work together to distribute the load evenly throughout the structure, making it less likely to collapse under pressure. This design not only looks like traditional hale for its shape but also because of its gray color, which mimics the dried thatching that was made of natural materials like pili grass and loulou fronds. Substitution of natural materials with a metal roofing product allows for a more resilient, fire resistant protective shell. Metal also saves on the need to paint the exterior as it can be the finished product.

Our design also took careful consideration of the surrounding environment in order to be safe from hazards, stay cool, and offer self-sustainability. The main potential hazard in this area is flooding that may be exacerbated by the nearby streams and rivers. Our design addresses this by implementing a “post and pier” foundation system on the Hale Noa that is elevated a minimum of 2 ft above grade. This adds an element of resilience as the structure can be raised to accommodate climate change and the possible shifting of the flood zone boundary. The elevated structure design can also be applied to other parcels where the only buildable area may be within a flood hazard area. To address a warming environment, the structures are kept cool by being positioned in a direction that allows cross ventilation by capturing windflow. The Hale Noa is kept cooler by being placed just north of an existing mango tree, which can provide shade during parts of the day. All hale are built with metal materials because they are not only fire resistant but also have the ability to catch water if the resident desires. The major roof systems are also facing south to capture solar energy for the house to generate its own electricity.

**Kākou:** *pronoun, We (inclusive, three or more).* (Pukui-Elbert)

Our proposal is designed in a way that can be accessible to everyone and built in consideration of the local culture of gathering at peoples home to share food and enjoy each other's company. Hale Noa is easily accessible with the option of adding a wheelchair ramp at the front door as well as the main features of the house (bedroom, bathroom, living room and kitchen) all being located on a single floor. There is a loft that may not be accessible to some; however, this could be utilized as a storage space, or an extra sleeping space for those who can access the area. We designed this space in a way that is welcoming to guests, which could support residents who may need assistance.

**Kauhale:** *loc.n., Group of houses comprising a Hawaiian home, formerly consisting of men's eating house, women's eating house, sleeping house, cook-house, canoe house, etc.* (Pukui-Elbert)

As mentioned above, there are three hale. While they have historically had specific functions, our intention is for every hale to be multi-purpose. We hope that our design can be enjoyed as flexible gathering places that can meet the range of needs community members may have. Hale Noa has a kitchen both indoors and outdoors since guests in Hawai'i often gather outside. The Hale Ka'a may be used to shelter vehicles, but it could also be used as a place for people to gather. Since there is a kitchen outside of the Hale Noa, this can make moving food between each hale much easier and allow for food preppers to still be in the company of guests. Residents could also use the upper part of the Hale Ka'a to store more items (e.g. a wa'a (canoe), which is also the inspiration for this hale) or can be retrofitted to prepare food like drying fish. For the Hale Papa'a, we imagine it could be used to store outdoor equipment such as garden tools or recreational items. Having space to store these outdoor items is important since these communities likely spend much time outdoors.

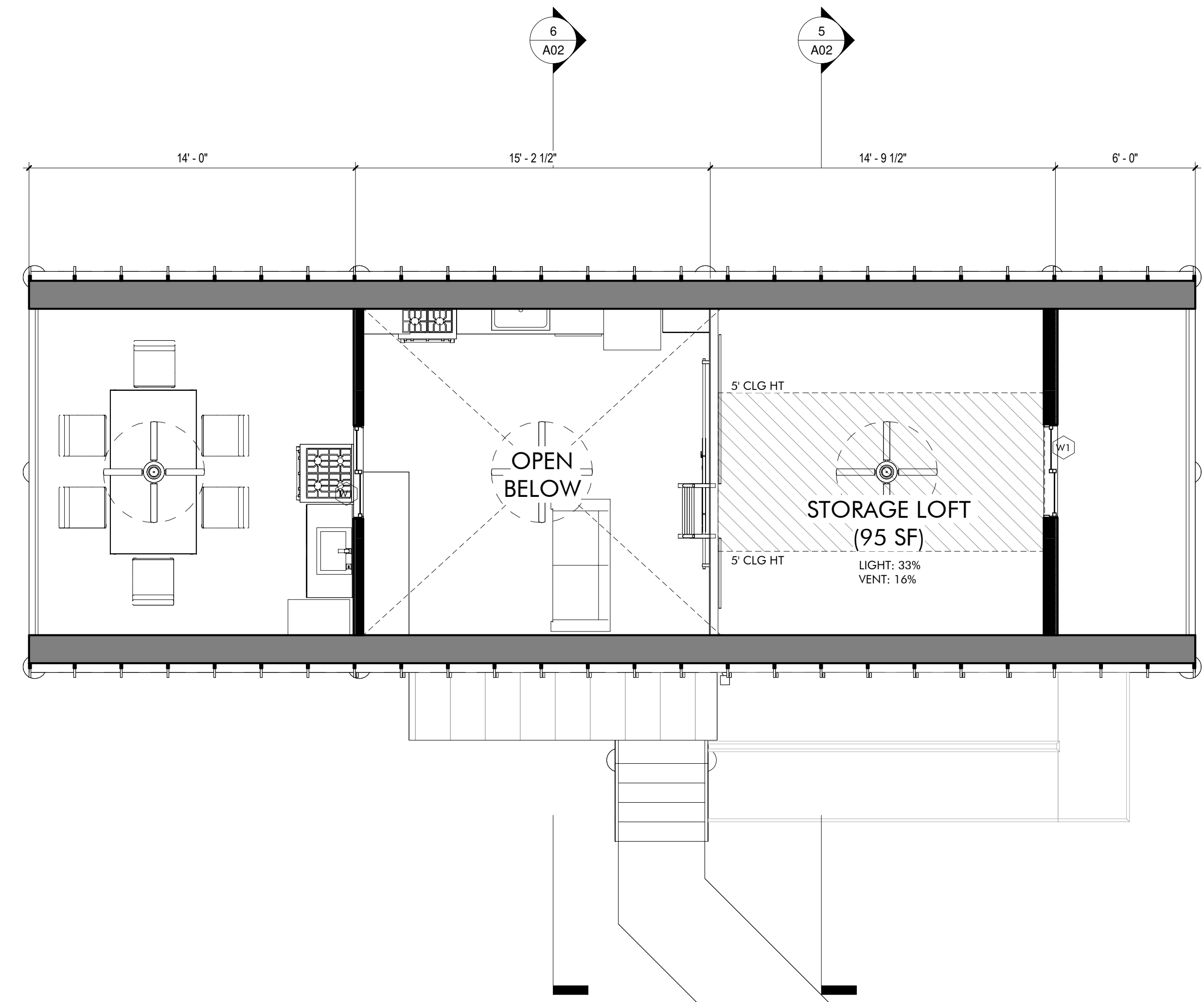
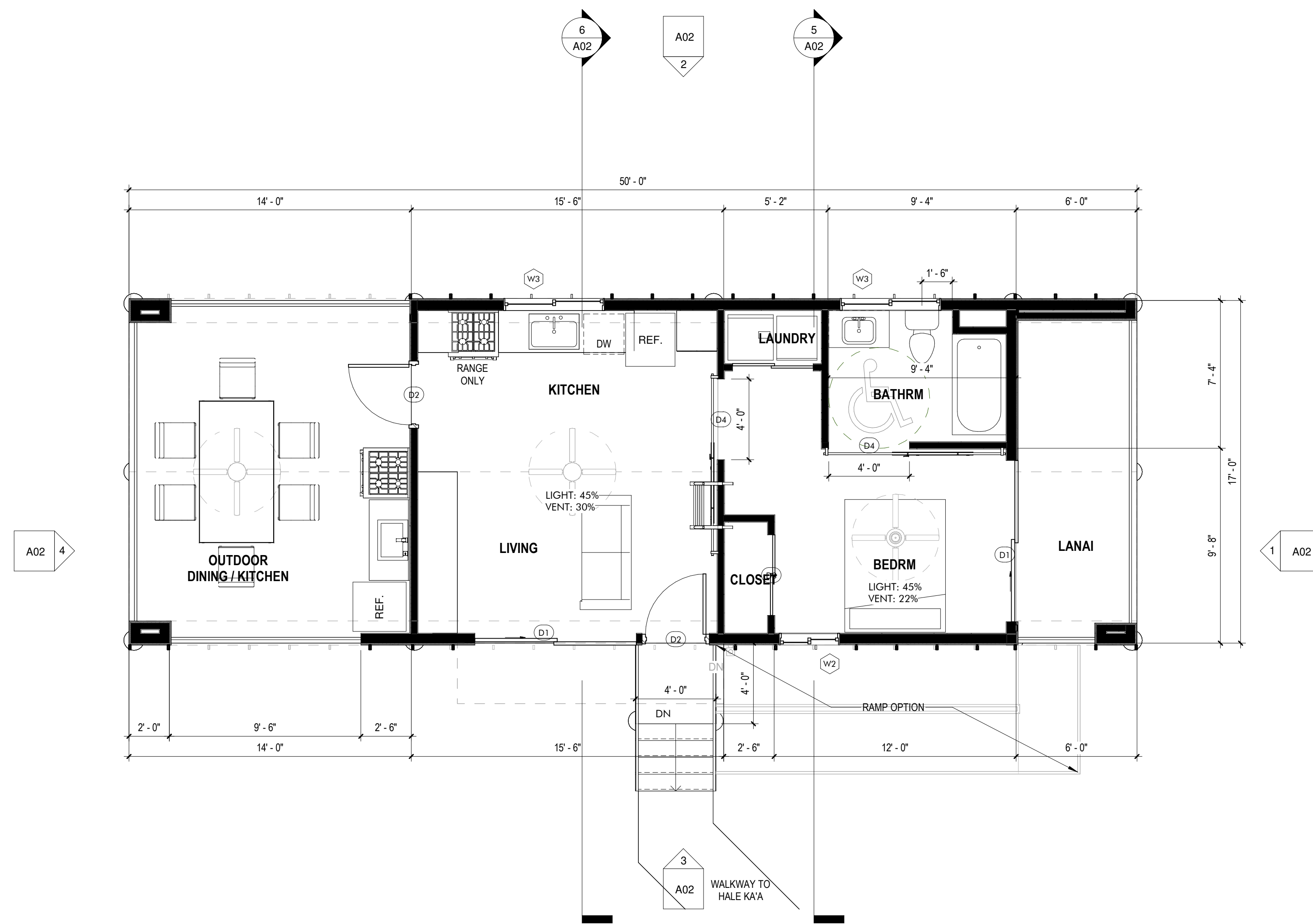
Overall, we hope to uplift the Kanka 'Ōiwi community by continuing community efforts to design urban spaces in which Kanaka 'Ōiwi might better see a reflection of themselves. Our design approach is to immerse the design into the community and the environment to support a more sustainable and resilient future.

*E ho'i kākou i kauhale.*

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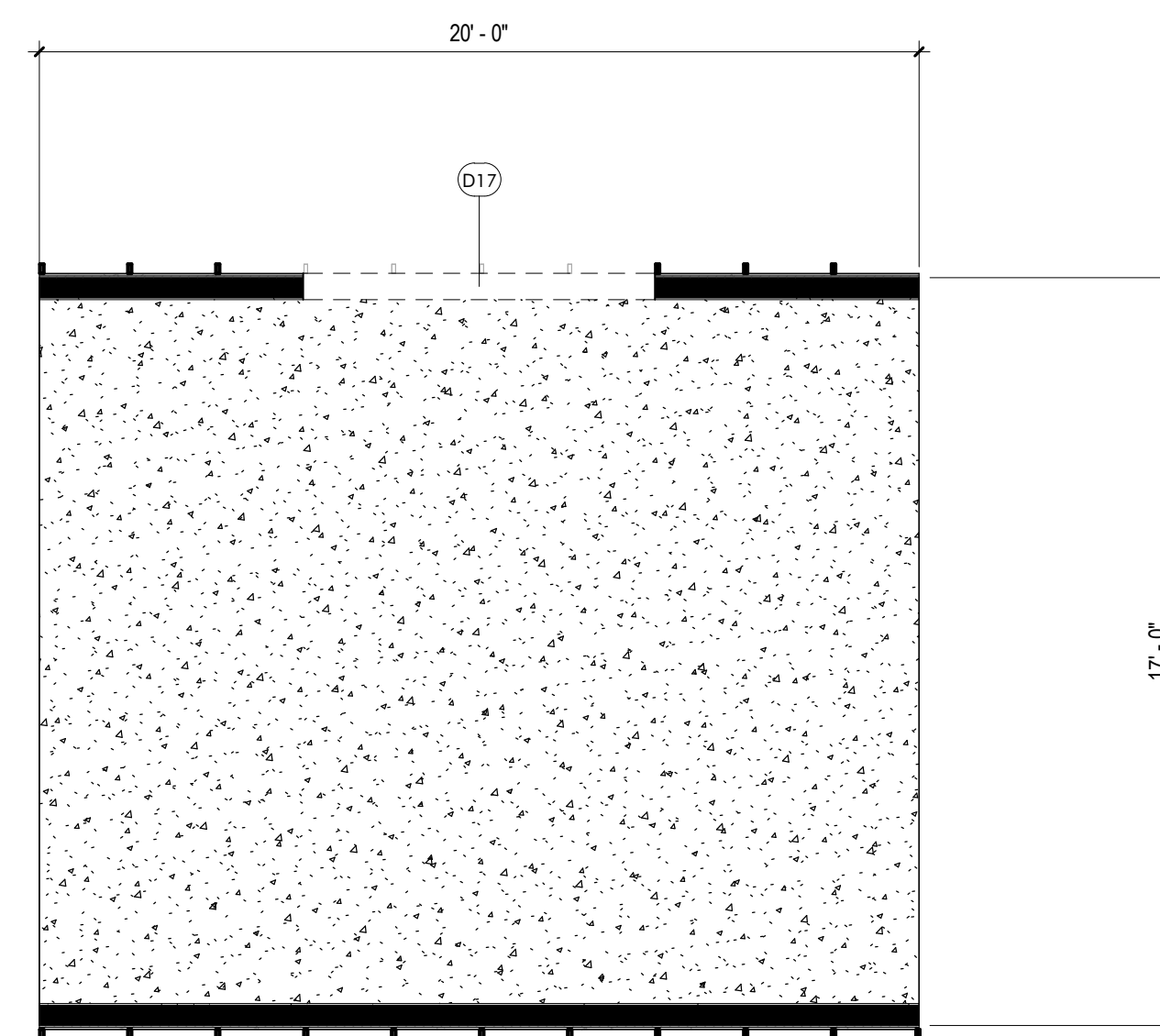
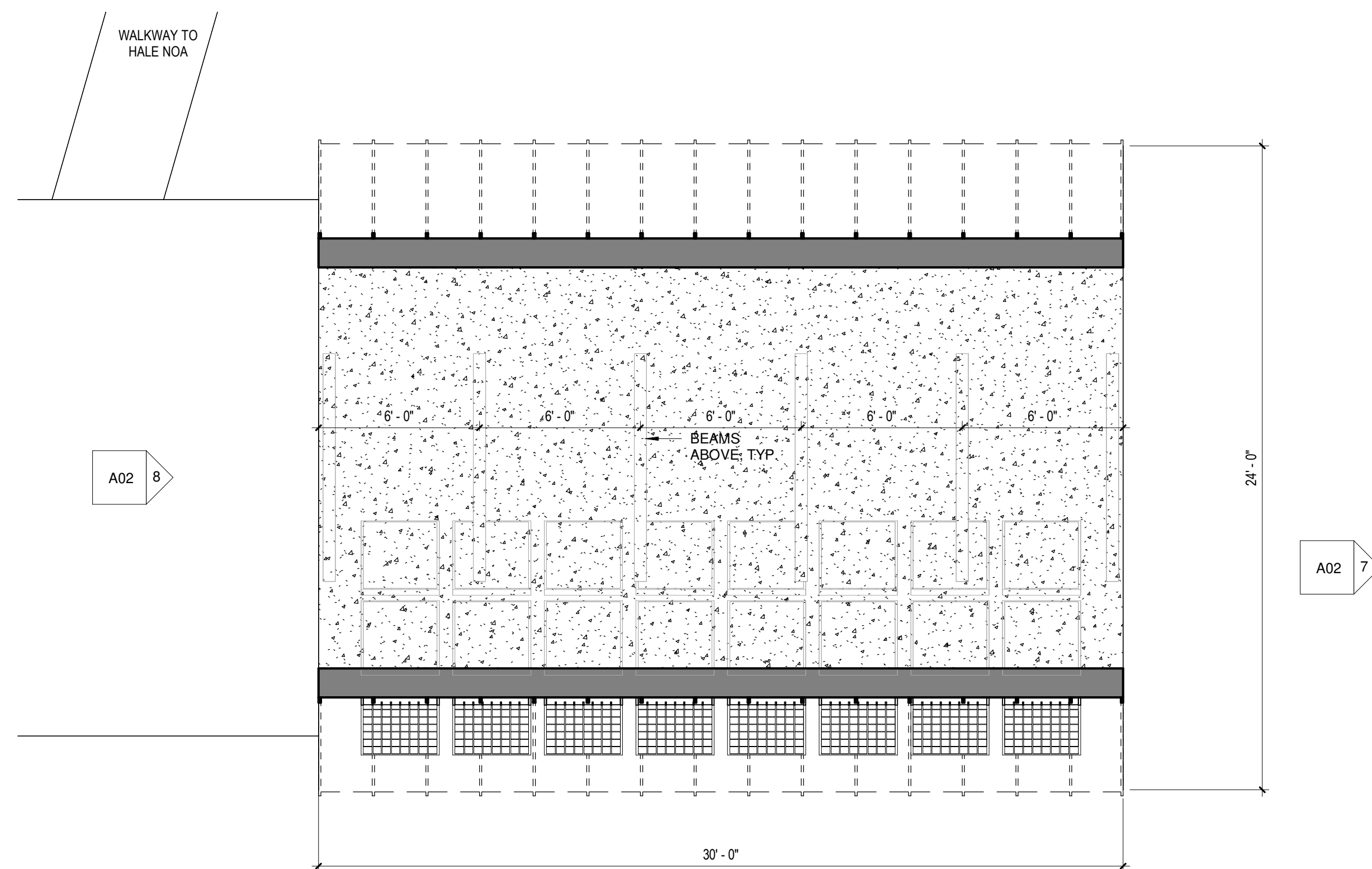
#### References:

Elbert, S. H., & Pukui, M. K. (1986). Hawaiian dictionary : Hawaiian-English, English-Hawaiian / Mary Kawena Pukui, Samuel H. Elbert (Rev. and enl. ed). University of Hawaii Press.



1 HALE NOA - GROUND FLOOR PLAN  
A01 1/4" = 1'-0"

2 HALE NOA - LOFT LEVEL  
A01 1/4" = 1'-0"



5 HALE KA'A - GROUND FLOOR PLAN  
A01 1/4" = 1'-0"

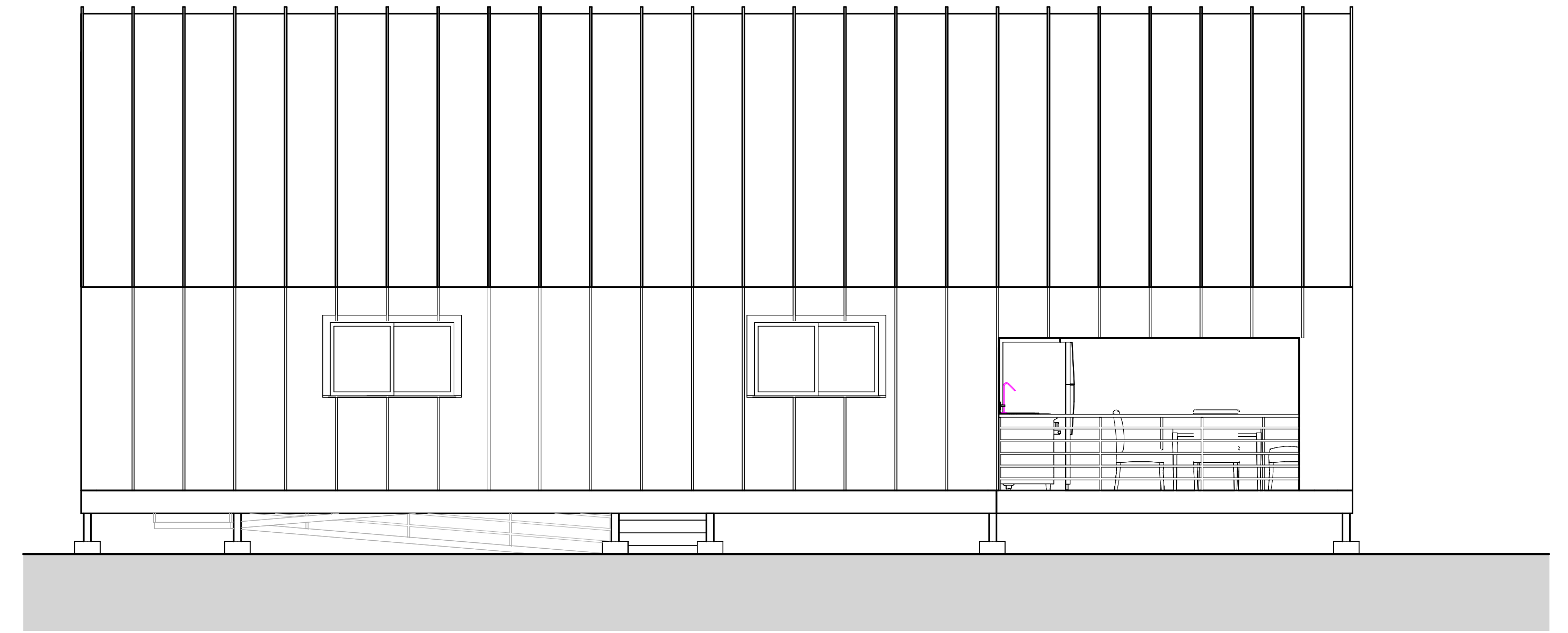
6 HALE PAPA'A - GROUND FLOOR PLAN  
A01 1/4" = 1'-0"

DOOR SCHEDULE						
DOOR #	TYPE	QTY.	UNIT DIMENSIONS		FUNCTION	REMARKS
			WIDTH	HEIGHT		
D1	Door-Double-Sliding	2	8'-0"	6'-8"	Exterior	
D2	Swing Door	2	3'-0"	6'-8"	Interior	
D3	Bi-Pass Slider Solid Core	2	4'-0"	6'-8"	Interior	
D4	Single-Barn Solid Core	2	4'-0"	6'-8"	Interior	
D17	Door-Opening	1	0'-0"	0'-0"	Interior	
Grand total: 9						

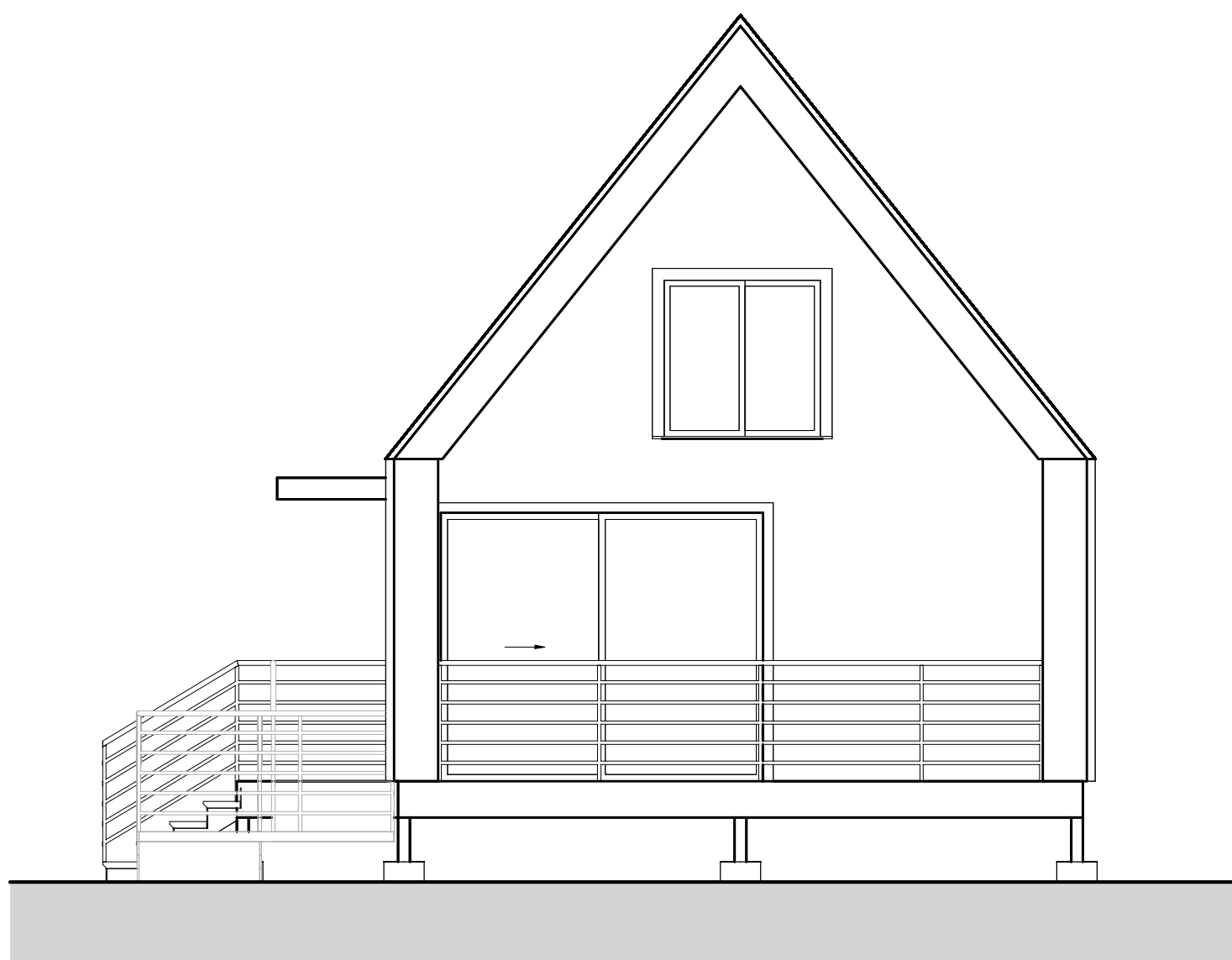
WINDOW SCHEDULE							
WINDOW NO.	TYPE	QTY.	UNIT DIMENSIONS		SILL HEIGHT	SHGC	REMARKS
			WIDTH	HEIGHT			
W1	SLIDING	2	4'-0"	4'-0"	11'-0"		
W2	SLIDING	1	3'-0"	4'-0"	2'-8"		
W3	SLIDING	2	5'-0"	3'-0"	3'-8"		
Grand total: 5							



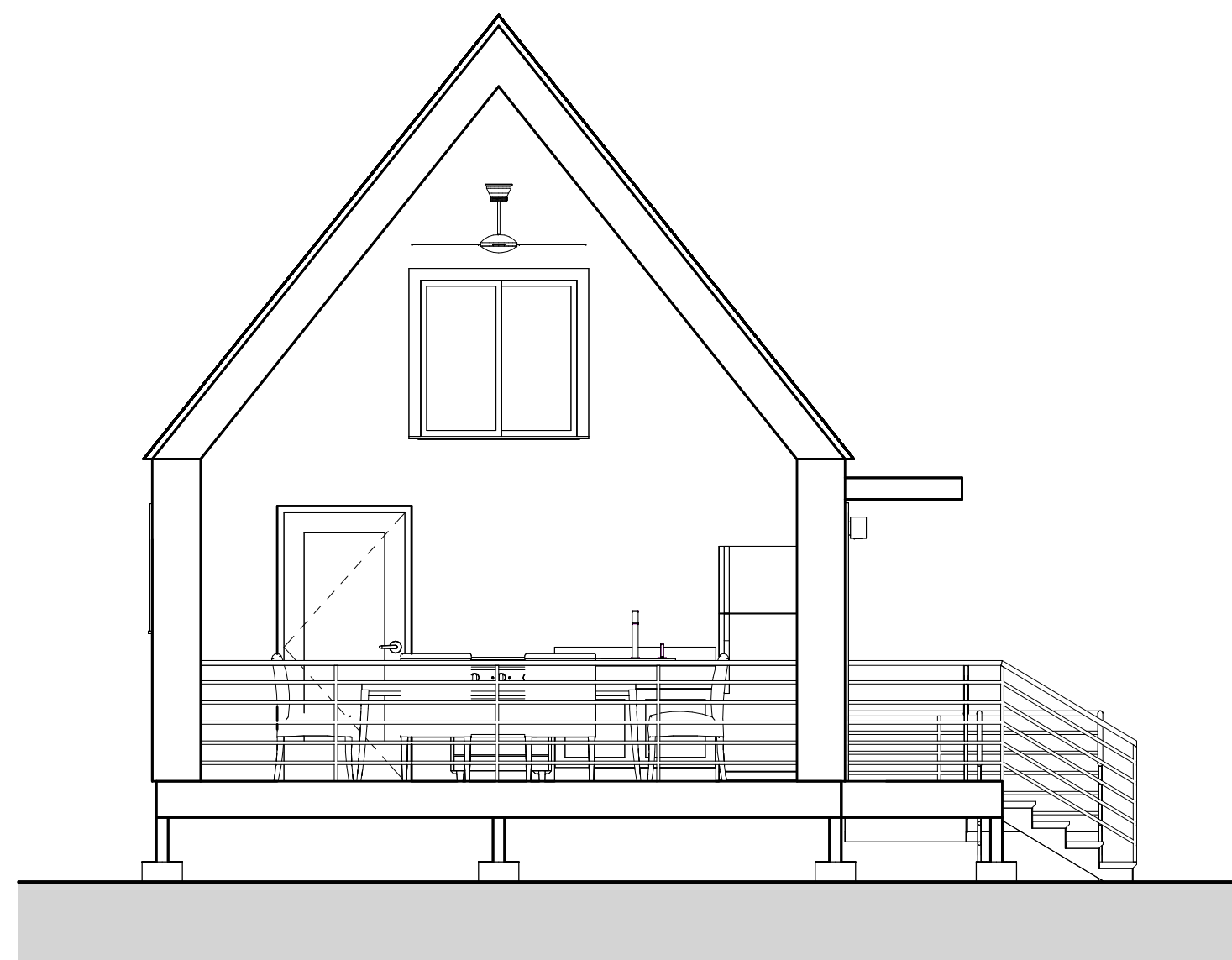
3 HALE NOA RIGHT-SIDE ELEVATION  
A02 1/4" = 1'-0"



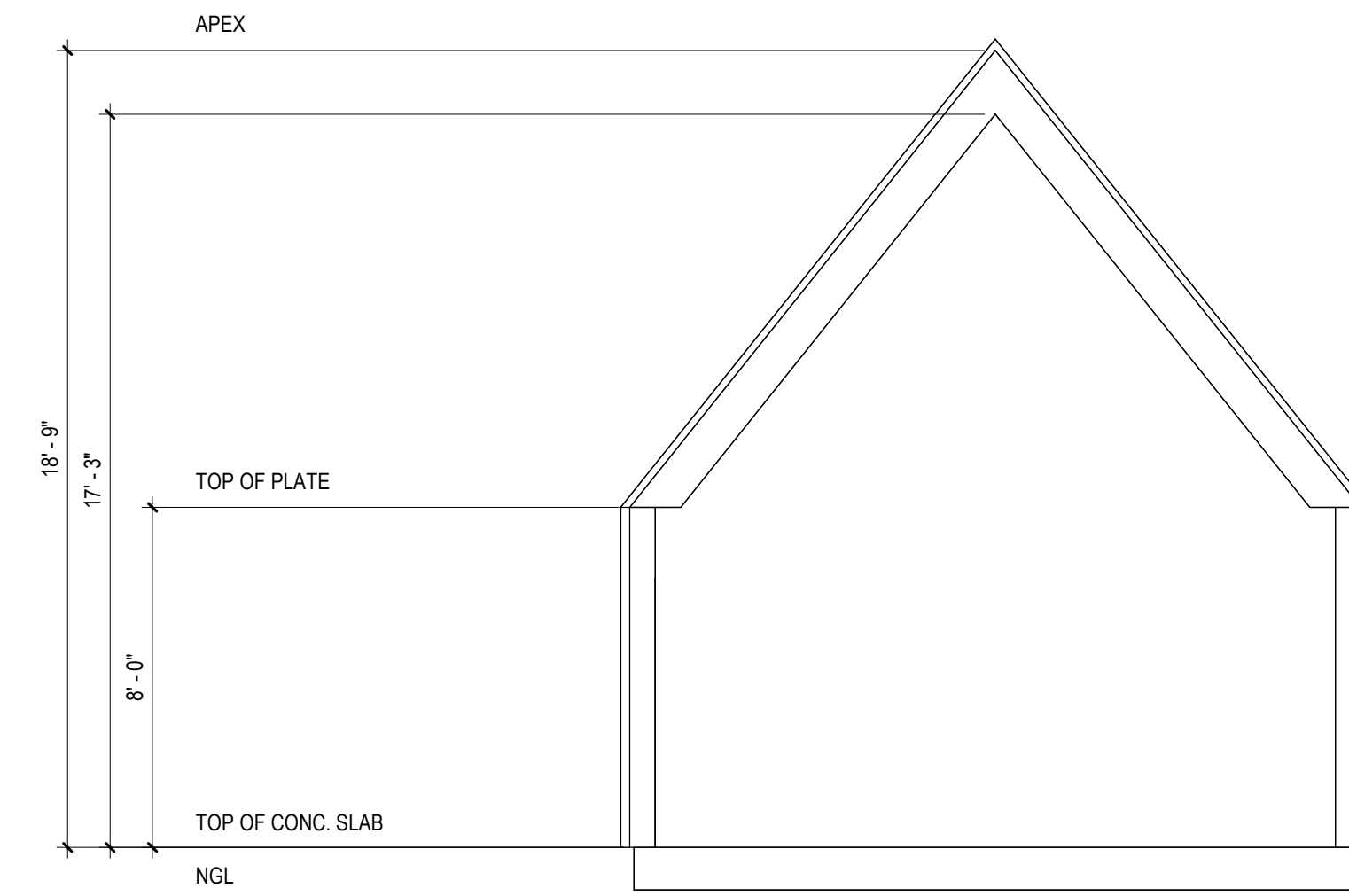
2 HALE NOA LEFT-SIDE ELEVATION  
A02 1/4" = 1'-0"



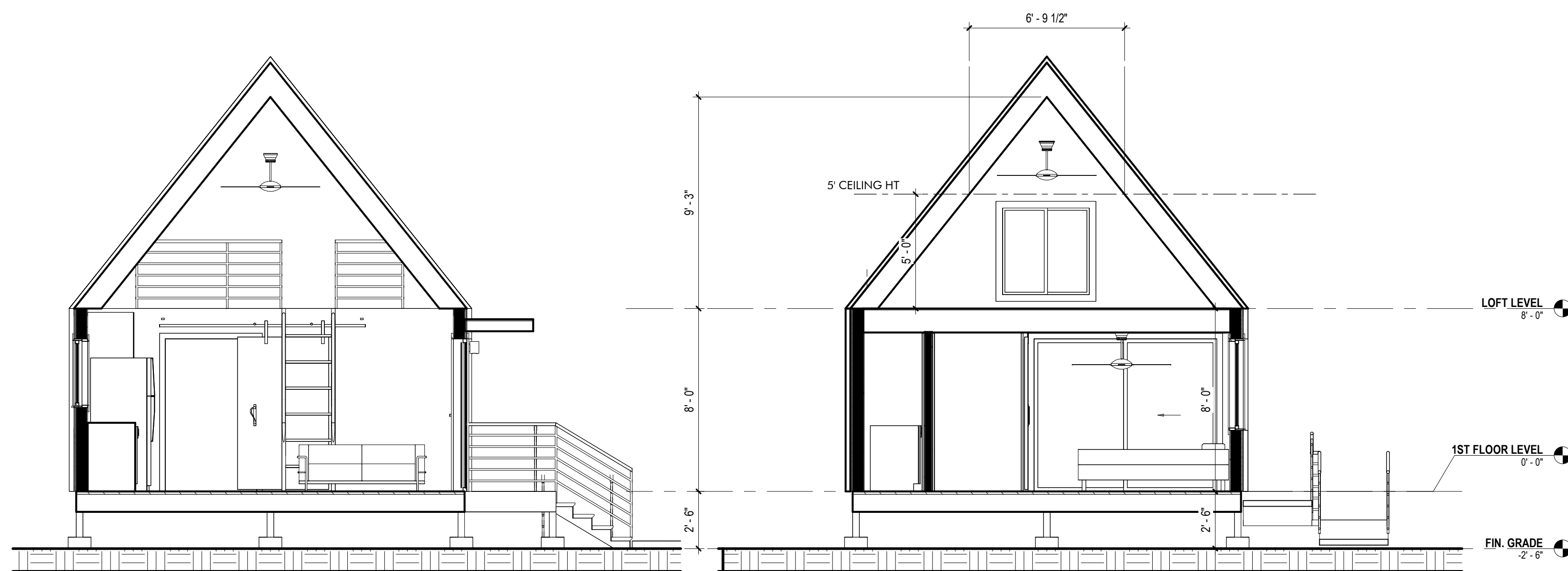
1 HALE NOA REAR ELEVATION  
A02 1/4" = 1'-0"



4 HALE NOA FRONT ELEVATION  
A02 1/4" = 1'-0"

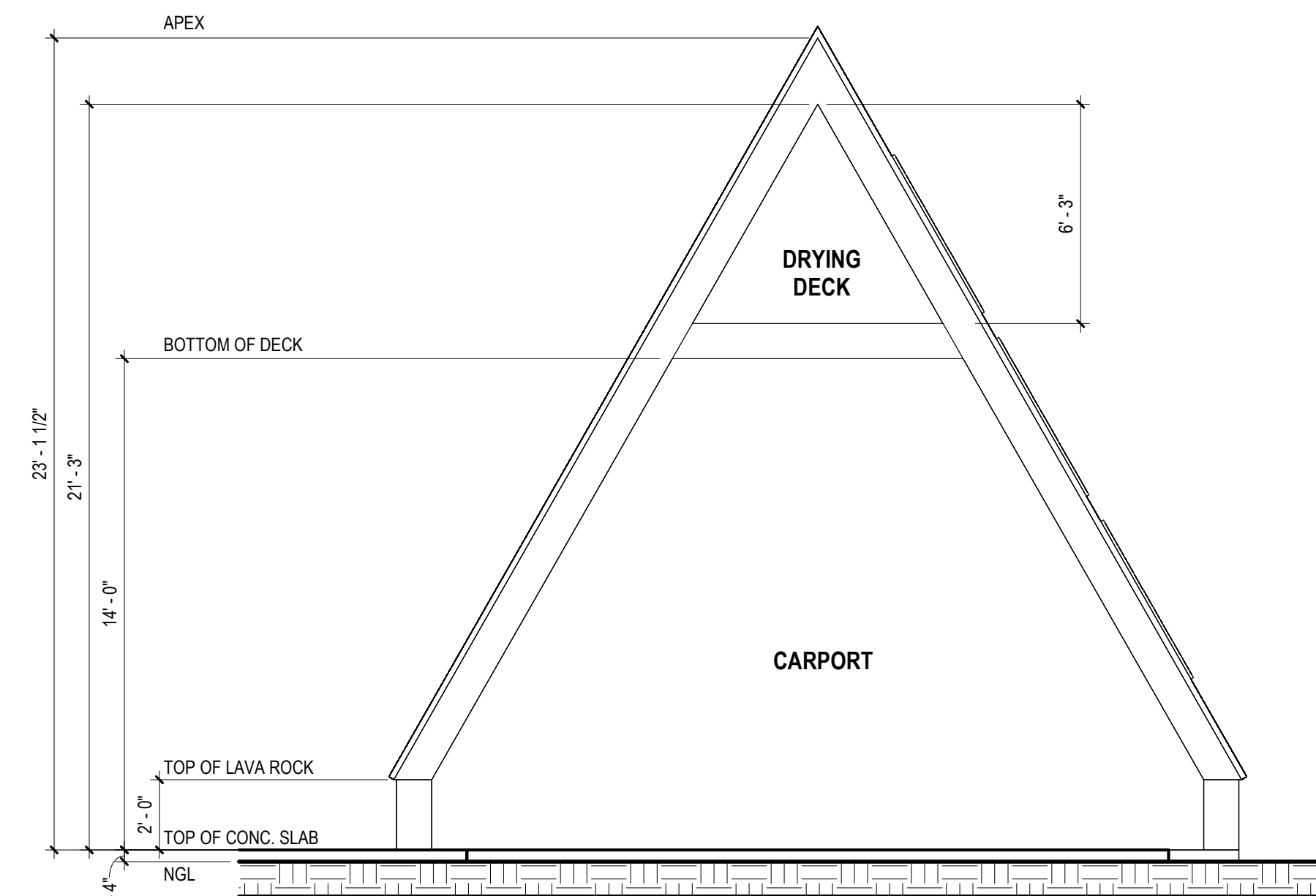


7 HALE PAPA'A FRONT ELEVATION  
A02 1/4" = 1'-0"



6 HALE NOA SECTION @ LIVING  
A02 1/4" = 1'-0"

5 HALE NOA SECTION @ BEDROOM / LOFT  
A02 1/4" = 1'-0"



8 HALE KA'A - FRONT ELEVATION  
A02 1/4" = 1'-0"



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PROJECT TITLE:

A-FRAME DESIGN

SHEET TITLE:

EXTERIOR ELEVATIONS

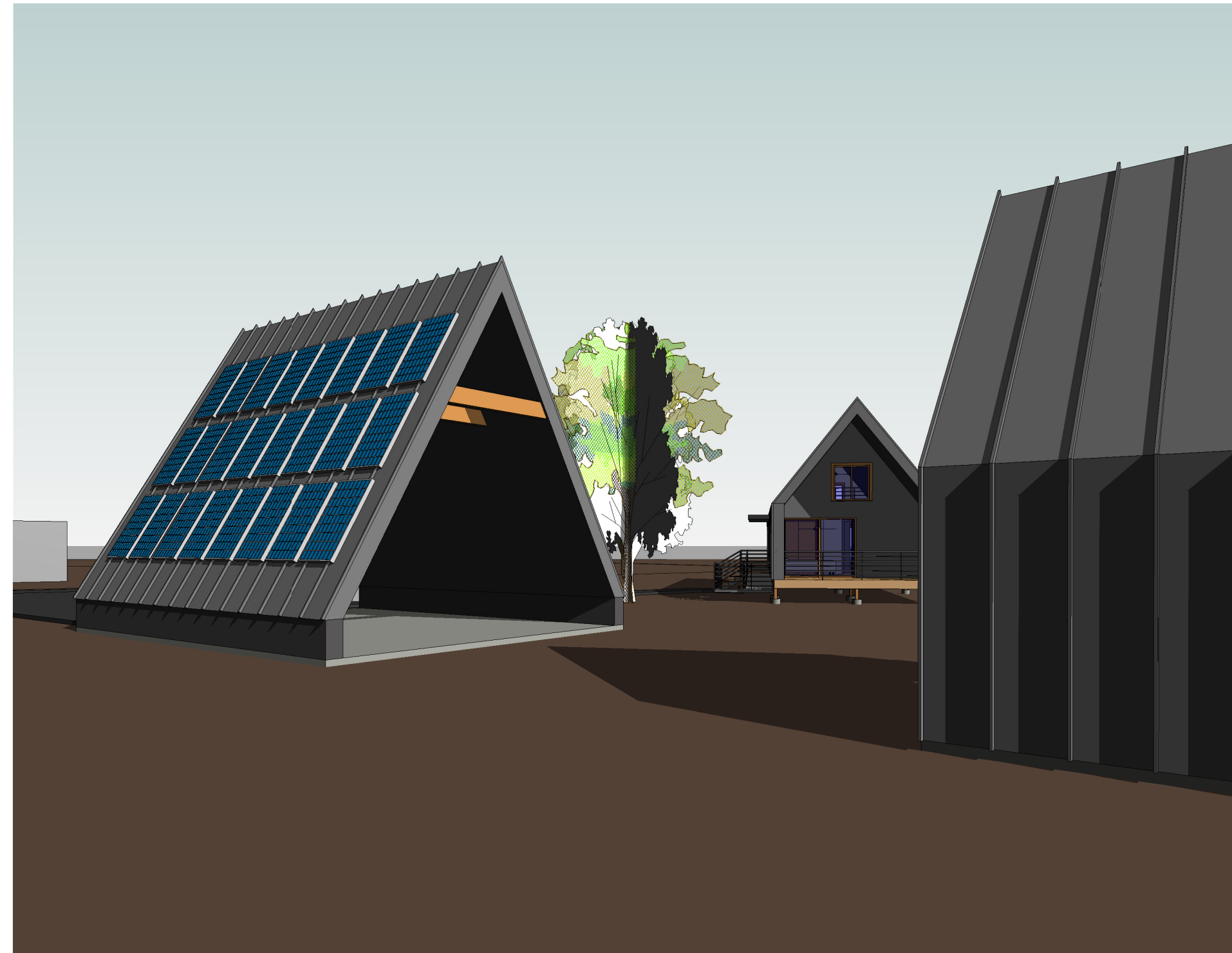
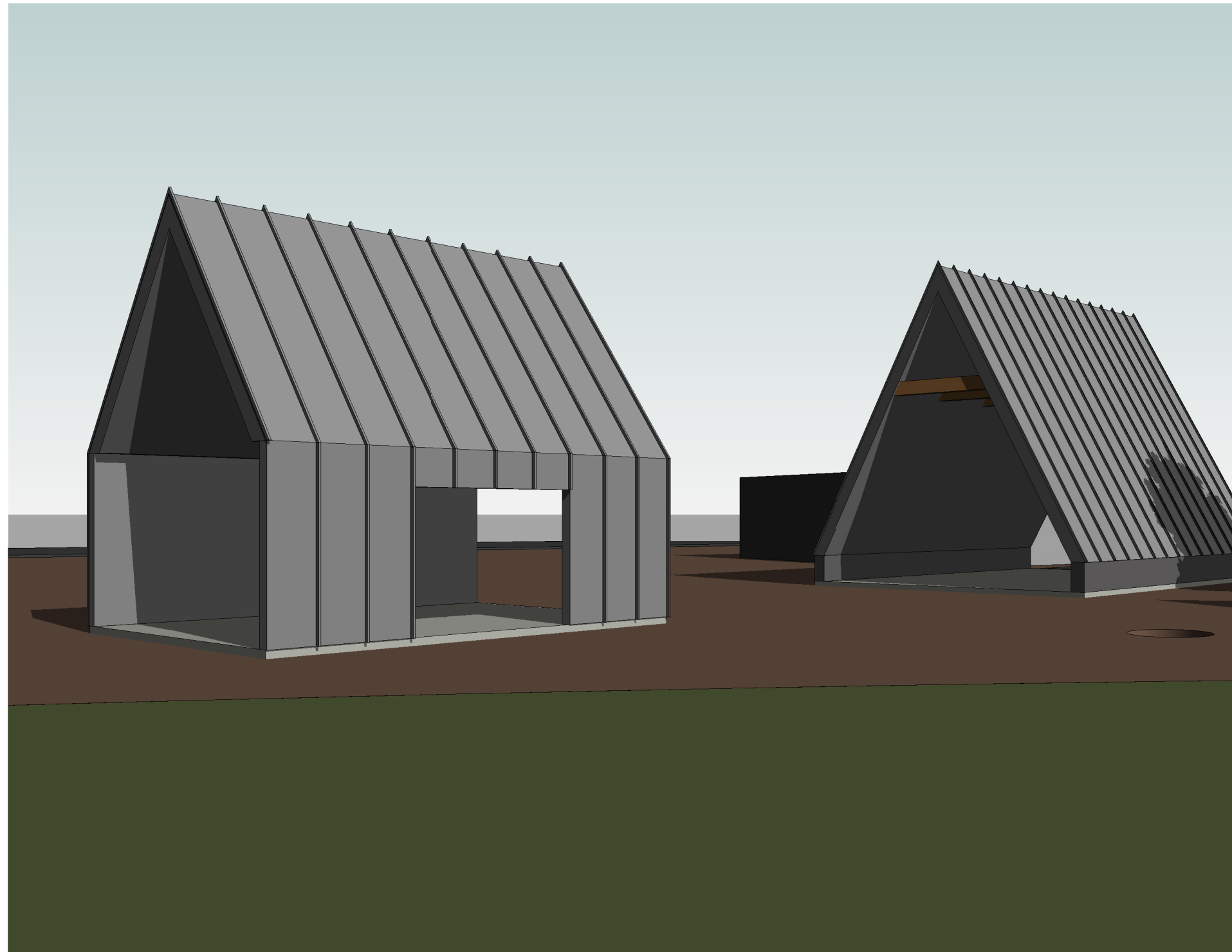
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A02



ALTERNATIVE OPTION



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PROJECT TITLE:

A-FRAME DESIGN

SHEET TITLE:

3D VIEWS

SCALE:

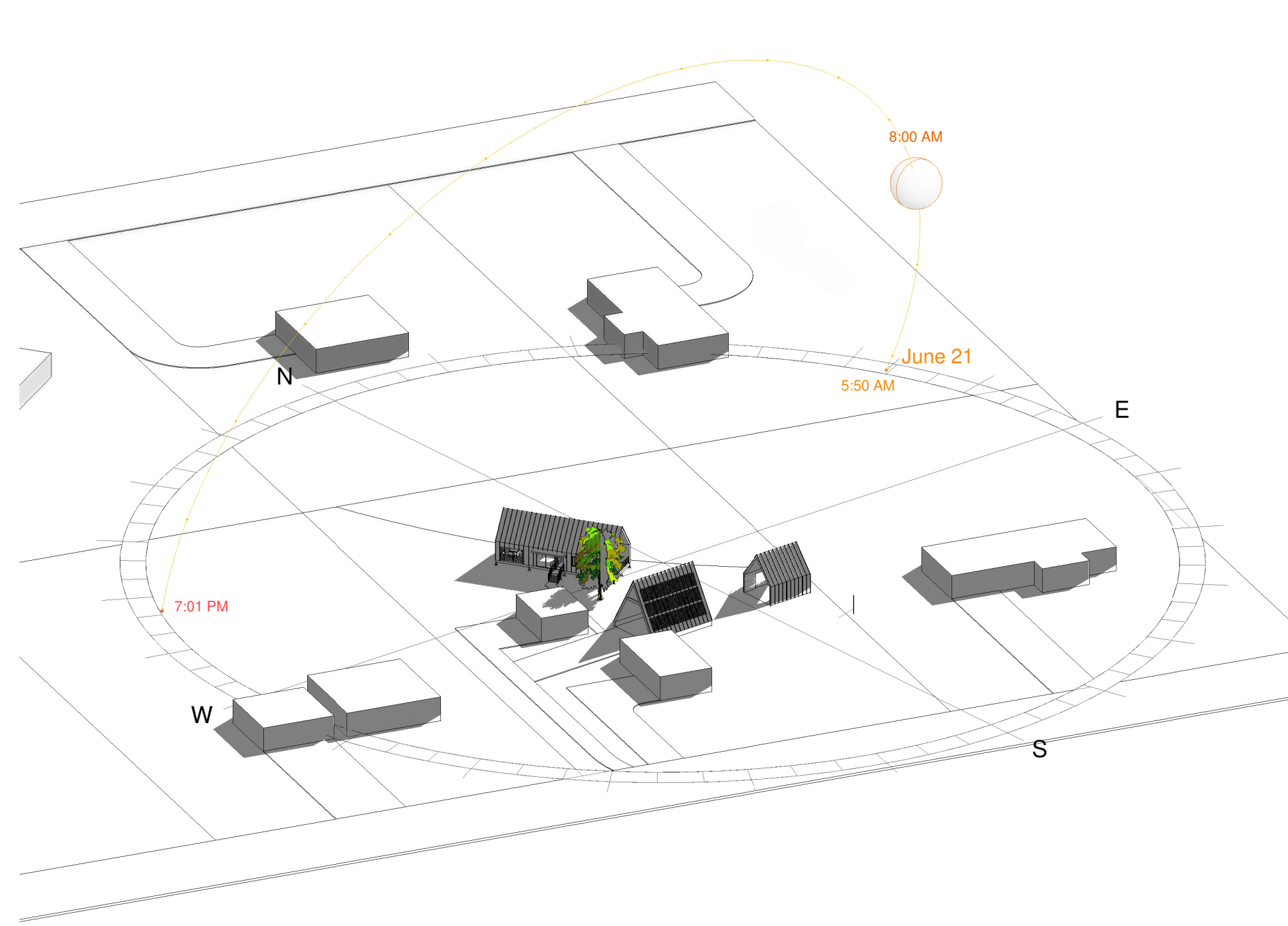
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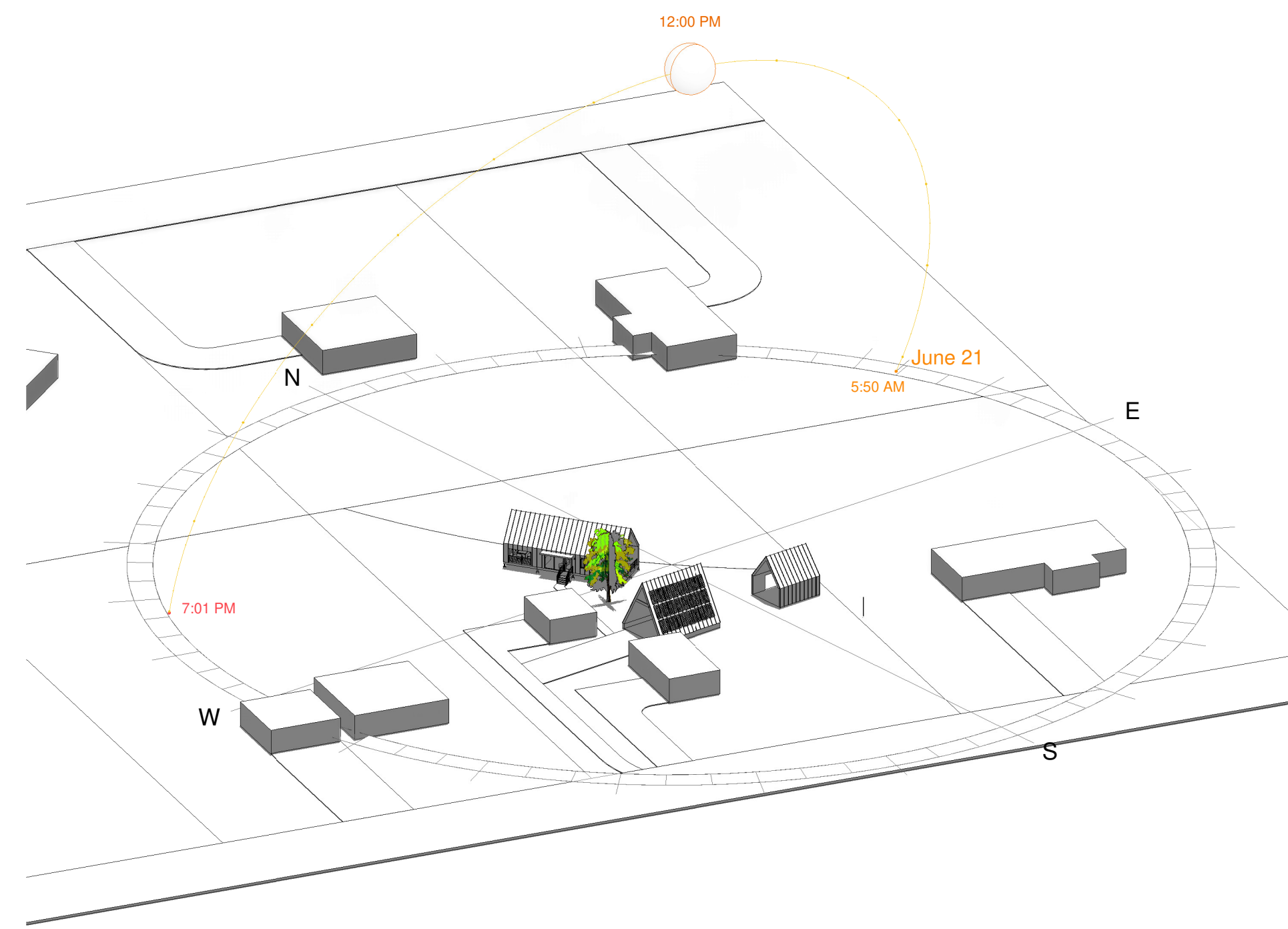
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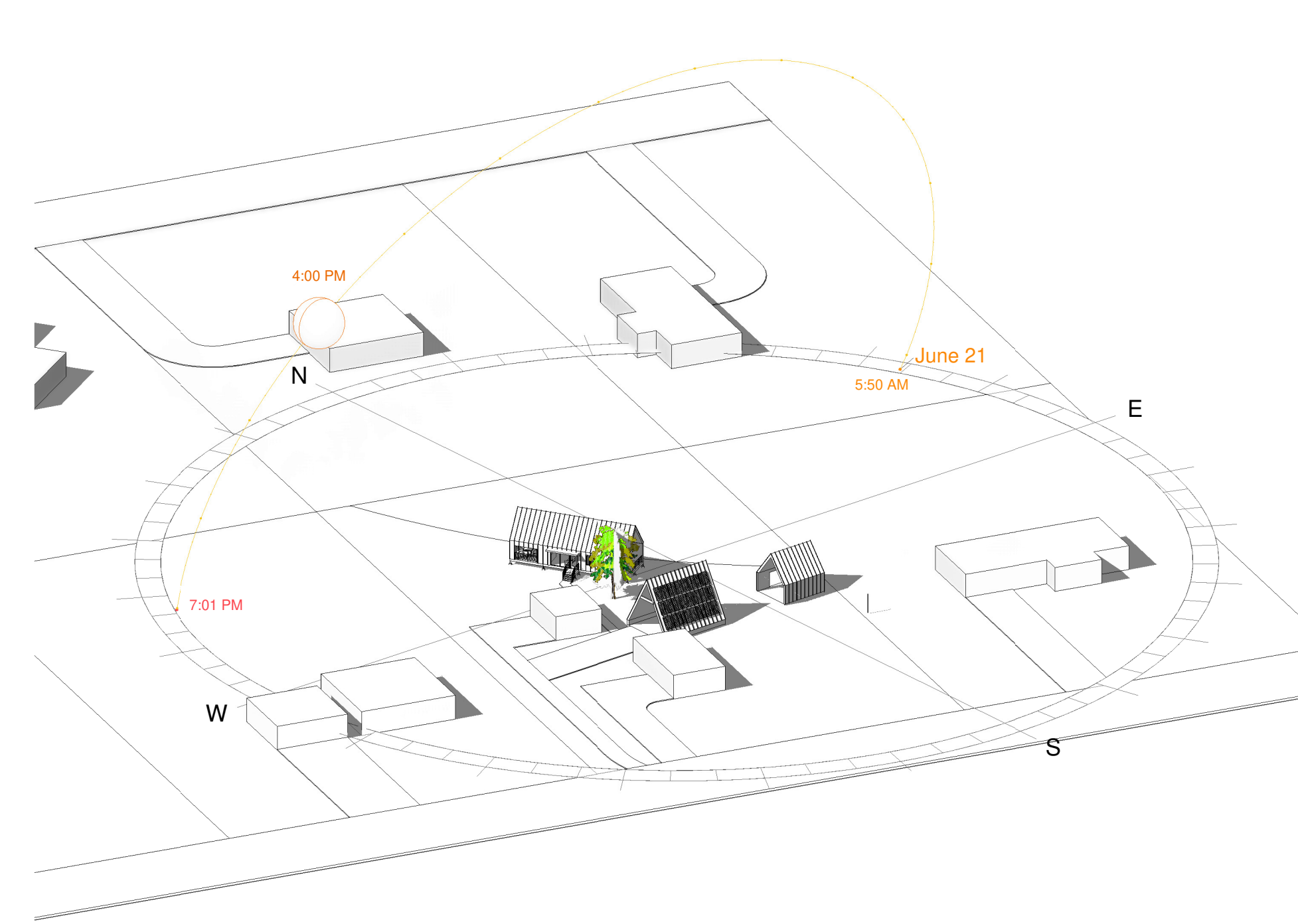




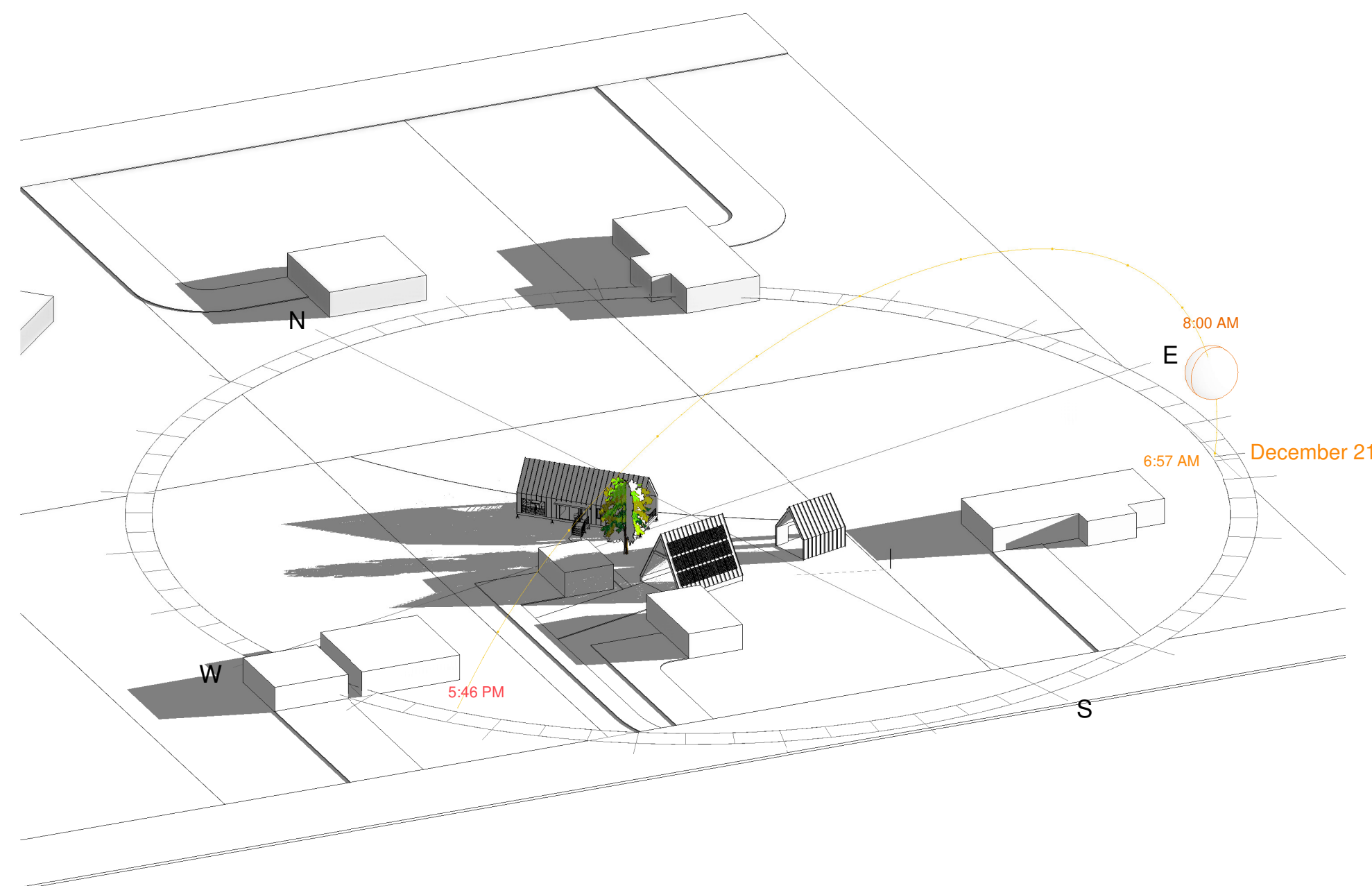
1 JUNE 21 (8AM)  
A04



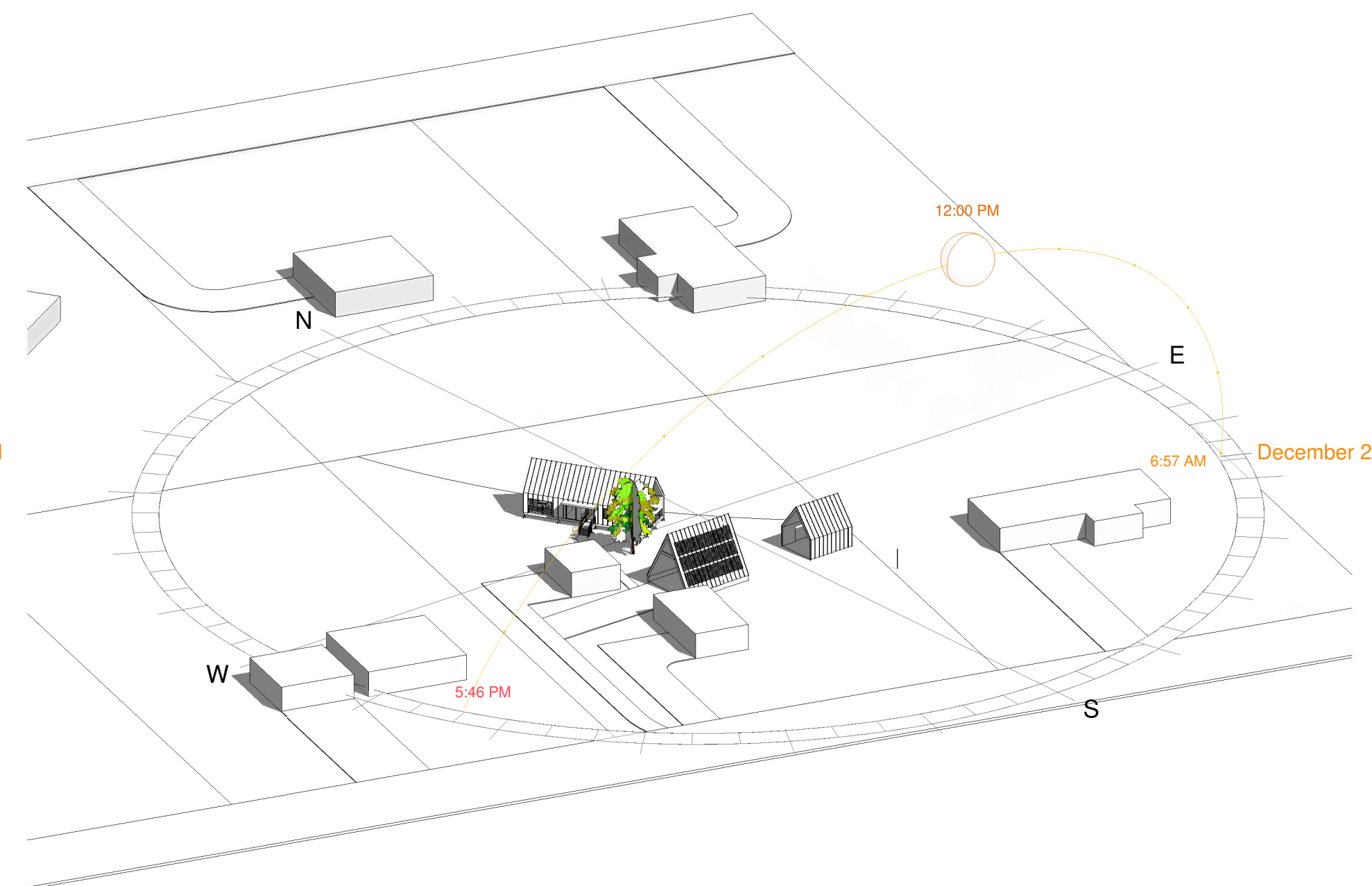
2 JUNE 21 (12PM)  
A04



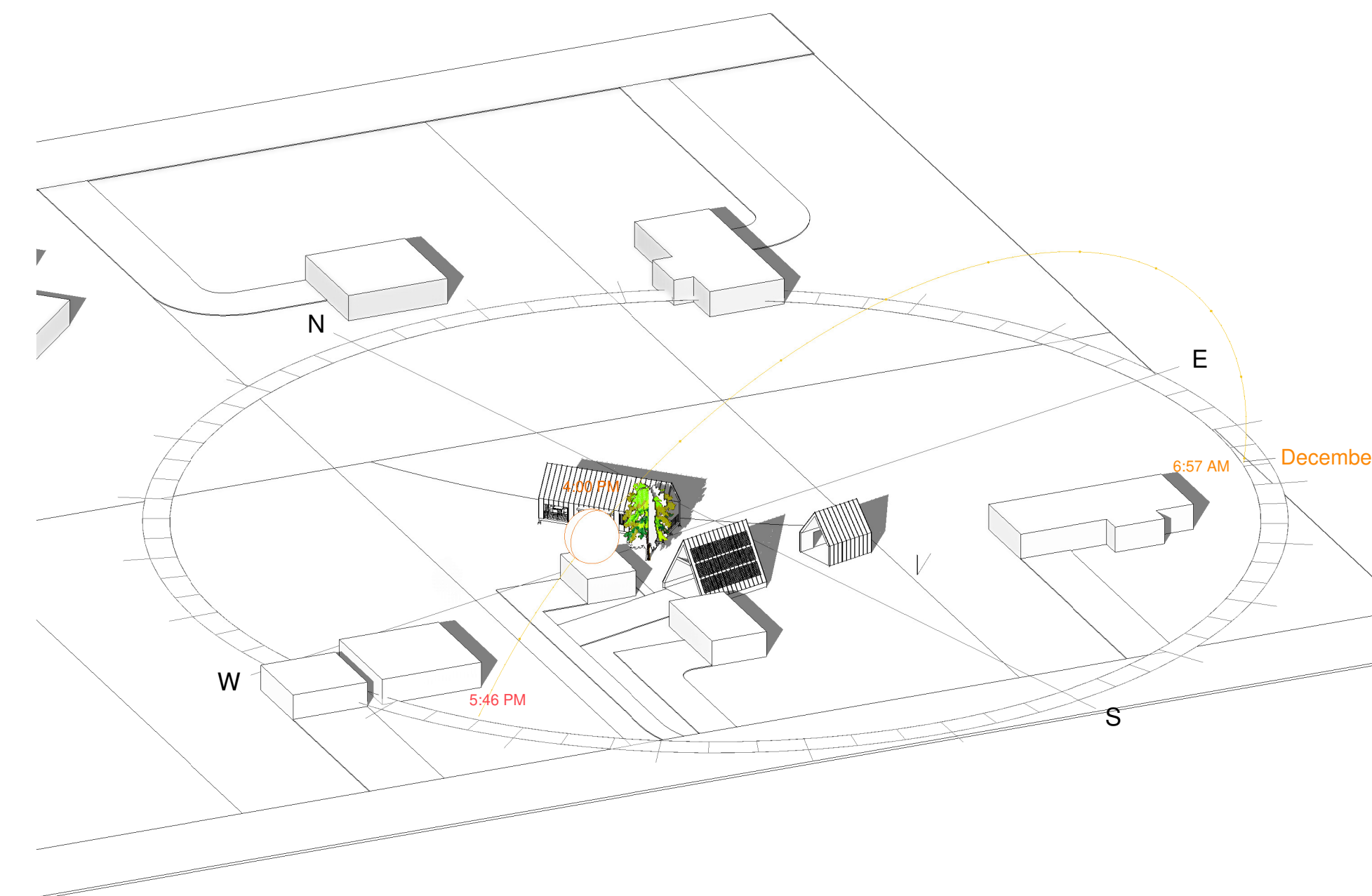
3 JUNE 21 (4PM)  
A04



4 DECEMBER 21 (8AM)  
A04



5 DECEMBER 21 (12PM)  
A04



6 DECEMBER 21 (4PM)  
A04



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PROJECT TITLE:

A-FRAME DESIGN

SHEET TITLE:

SOLAR STUDY

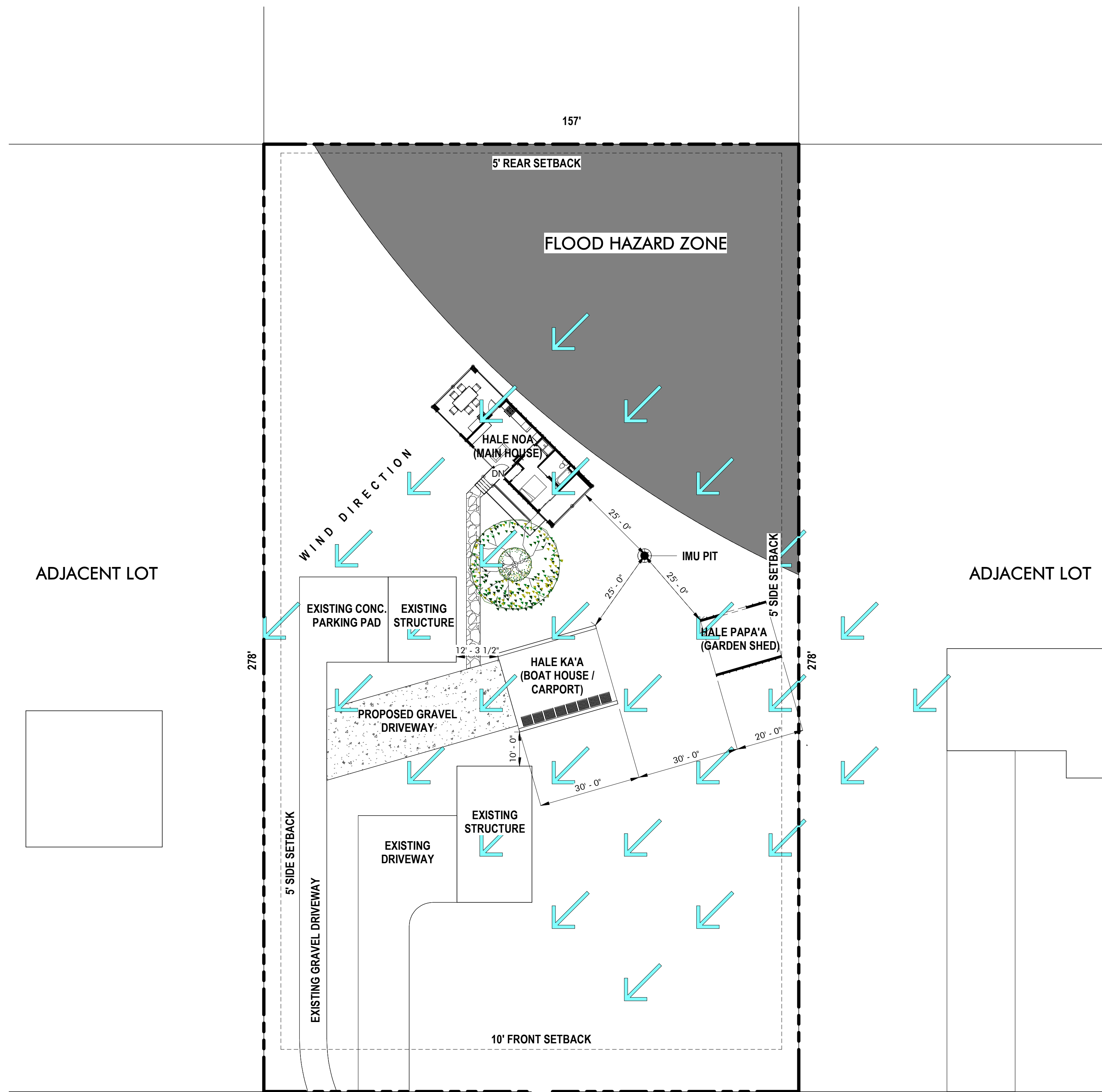
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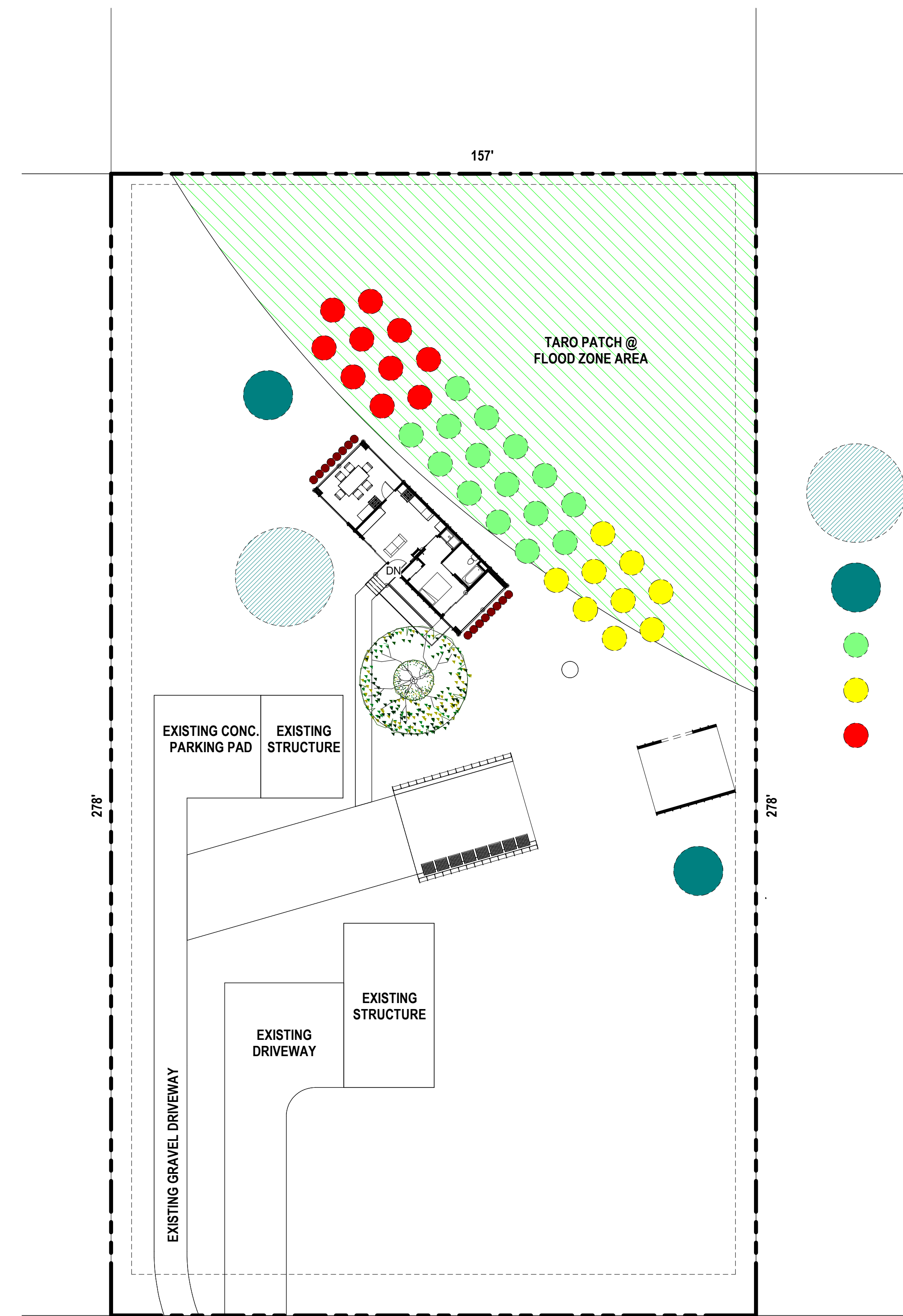


ADJACENT LOT

ADJACENT LOT

P U B L I C R O A D

1 SITE PLAN  
A05 1" = 20'-0"



- PROPOSED CROPS LEGEND:
- MILO (PORTIA TREE)
  - ULU TREES
  - NIU (COCONUT TREE)
  - MA'I'A (BANANA TREE)
  - OHIA 'AI (MOUNTAIN APPLE)
  - KI (TI)

P U B L I C R O A D

2 LANDSCAPING PLAN  
A05 1" = 20'-0"

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PROJECT TITLE:  
A-FRAME DESIGN

SHEET TITLE:  
PREVAILING WIND DIRECTION

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DRAWING NO.:

A05