

# EAST END TRAIL ACCESS

KITCHITWAA SHKWAANDEM TRAIL

NICOLE REGIER

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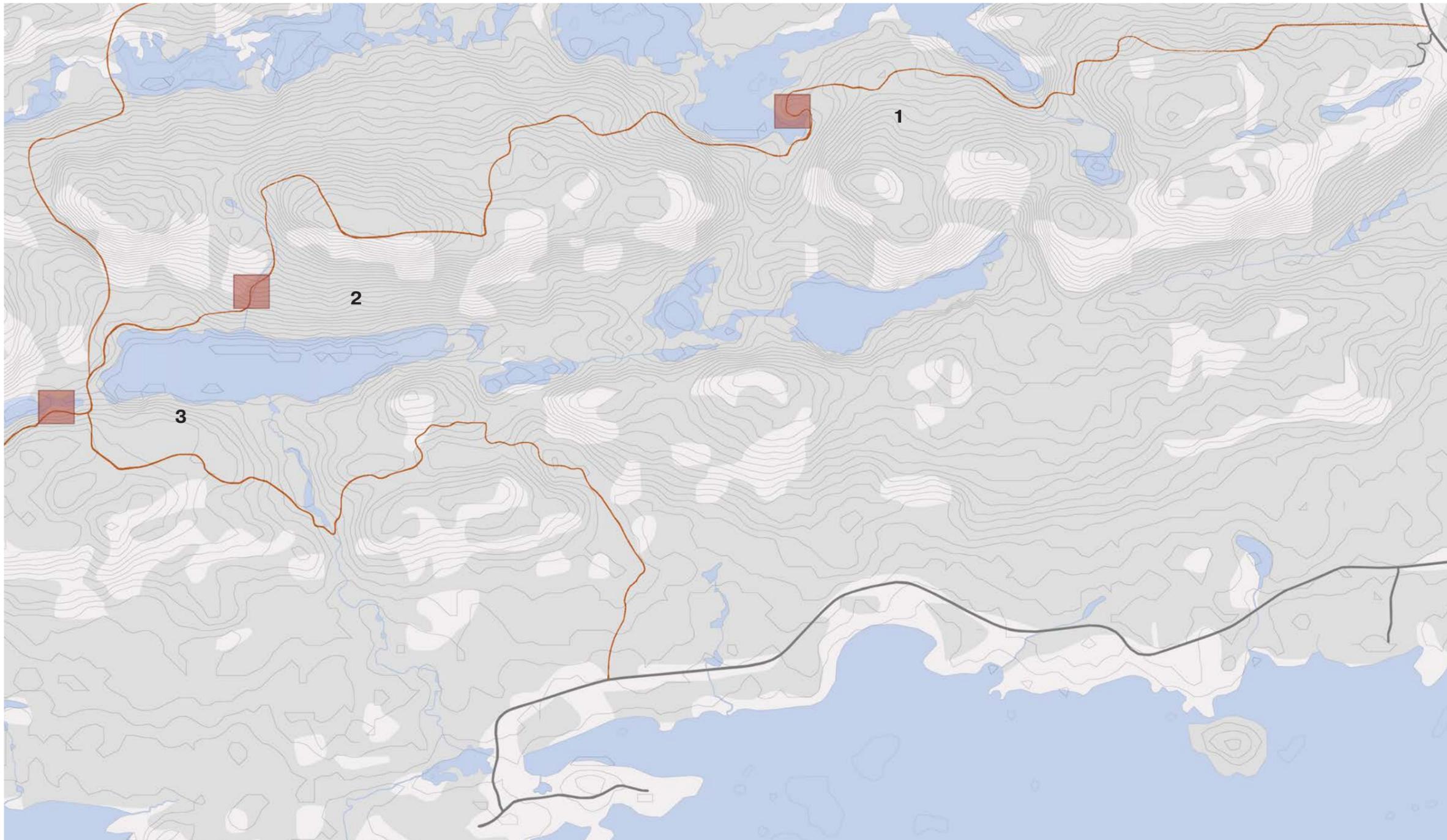




## PROJECT SUMMARY

In conversation with Sagamok First Nation, Whitefish River First Nation, and Parks Ontario this class will propose designs for structures along a 38 kilometers long hiking trail on the north shore of the North Channel of Lake Huron. Manitoulin Island lies across the channel to the south and Killarney Provincial Park lies adjacent to the east. The trail begins at Sagamok and ends at Whitefish River. LaCloche Provincial Park, a non-operating provincial park, and LaCloche Ridge Conservation Reserve lie between these two First Nations. It is an incredibly beautiful and wild place. Forests and quartzite ridges plunge into the water along three ancient shorelines.

Each student will propose a series of individually designed interventions along the trail at various scales from furniture to overnight accommodations. The overnight accommodations could also range in size from tent platform to cabin. At present there are three overnight campsites, one with a shed structure, five small stream crossings in need of bridges and many wetlands that could support boardwalks. The furniture, infrastructure, and building designs will rely on the ability to internalize the lessons provided by preindustrial timber building typologies to create contemporary, forward thinking responses to specific site's programmatic needs.



# HIKING THE HEAVEN'S GATE TRAIL

## - An Architectural Abstract

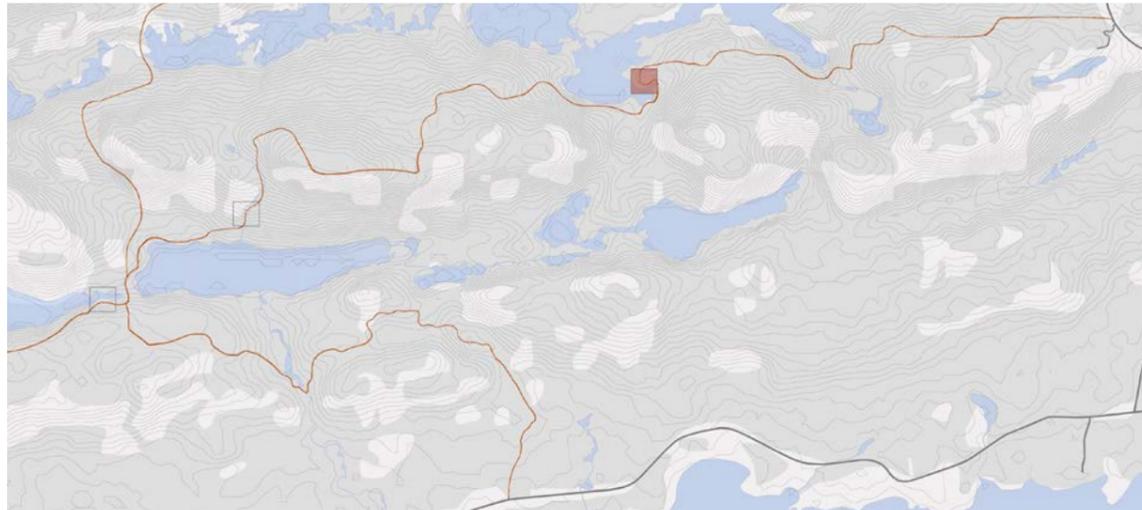
The two best ways to ensure that you have an enjoyable hiking and camping experience is to go fully prepared for anything and pray for good weather. Unfortunately, when planning this sort of trip it is impossible to control the one thing that could ruin your adventure on a trail such as the Heaven's Gate Trail, which is the weather conditions. Of course, the potential for poor weather does not stop you from going because of the many advantages that a trip like this has. The fantastic scenery that the Heaven's Gate Trail has to offer inspires all who visit to create a stronger connection with nature and can often make people have more respect for nature's beauty and everything it does for us. Not only do people build a better relationship with nature while camping and hiking but if the hike is completed with other people, it is common to build a stronger relationship with friends and family on the trip as well. On top of these benefits, studies show that there is also a great amount of stress reduction and of course, the amazing advantages of getting fresh air.

Because there are so many benefits to camping and hiking, the goal for this architectural intervention on the Heaven's Gate Trail is to make it easier and more enjoyable to hike and camp on Heaven's Gate. This trail is known to be extremely difficult due to the rocky terrain, portions of steep incline and the fact that the path is poorly marked. These aspects of the trail conditions make it difficult to hike and it becomes even more challenging in poor weather conditions. The rocky portions become very slick, the poorly maintained trail becomes muddy and this makes it even more difficult to enjoy the hike.

Three different architectural interventions will be created at three locations on the eastern portion of the trail where the hiking path is well marked. A piece of furniture will be added at the first location to create a resting spot because despite the awesome exercise, it can be quite taxing to hike the Heaven's Gate Trail and a place to sit down and take off your pack will be very beneficial. At the second location, a small bridge will be added to cross one of the larger streams to allow people to cross without the fear of getting their feet soaking wet and making for an uncomfortable hike for the remainder of the trip. Finally, at the third location a small cabin will be built for rest stops, camping and shelter from the elements.

These interventions will not have a dramatic impact on the site so that they do not take away from the natural beauty that people set out to experience. They will be small, simple timber structures using natural materials in order to blend in with their surroundings.

These architectural interventions will enhance the existing benefits that camping and hiking on the Heaven's Gate Trail has to offer. The interventions have the chance to minimize someone's poor experiences on the trail due to the difficult terrain and unfortunate weather conditions. This will give people more opportunity to take in all the sights, sounds and smells of the Heaven's Gate Trail and the ability to thoroughly enjoy all the experiences that nature has to offer.

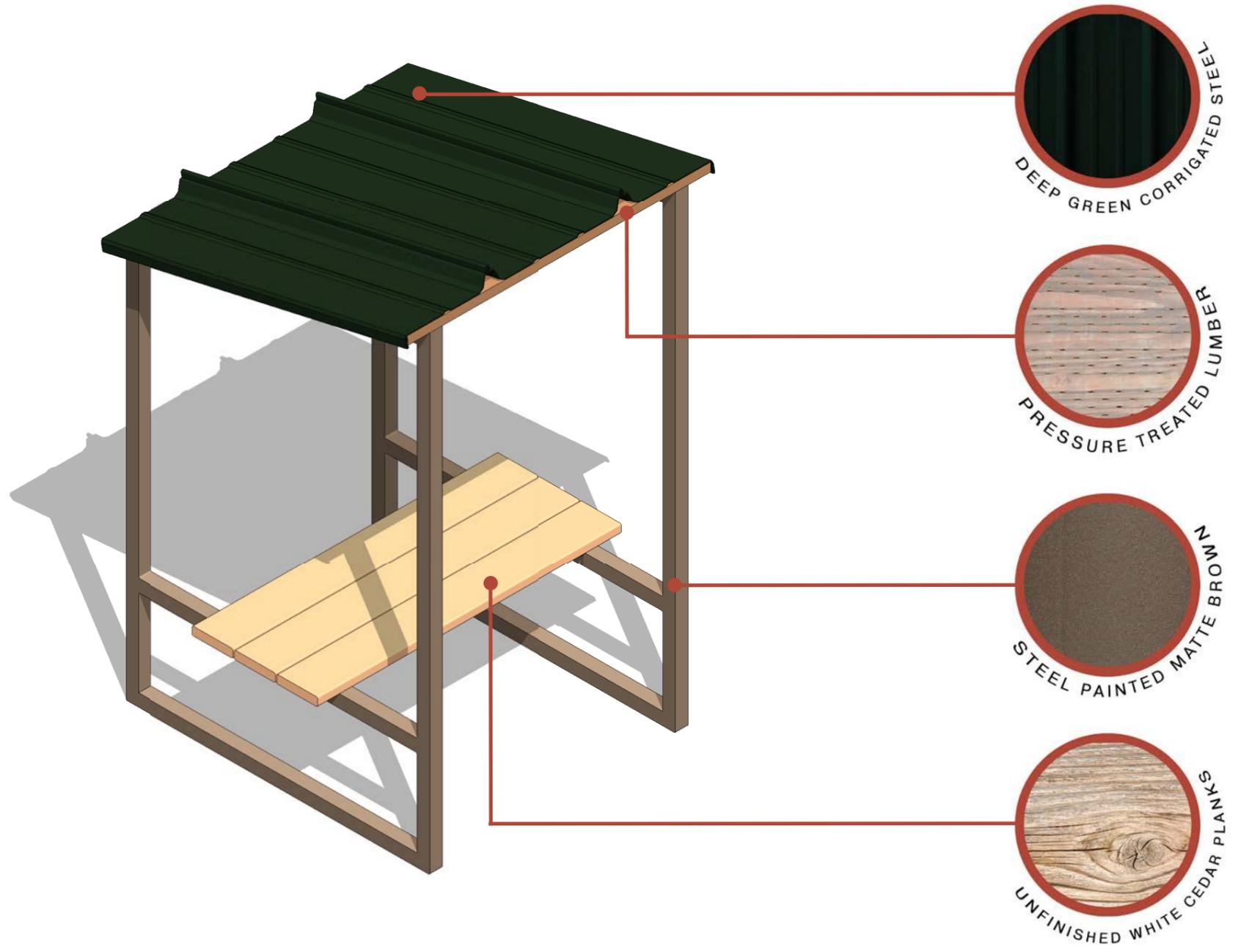
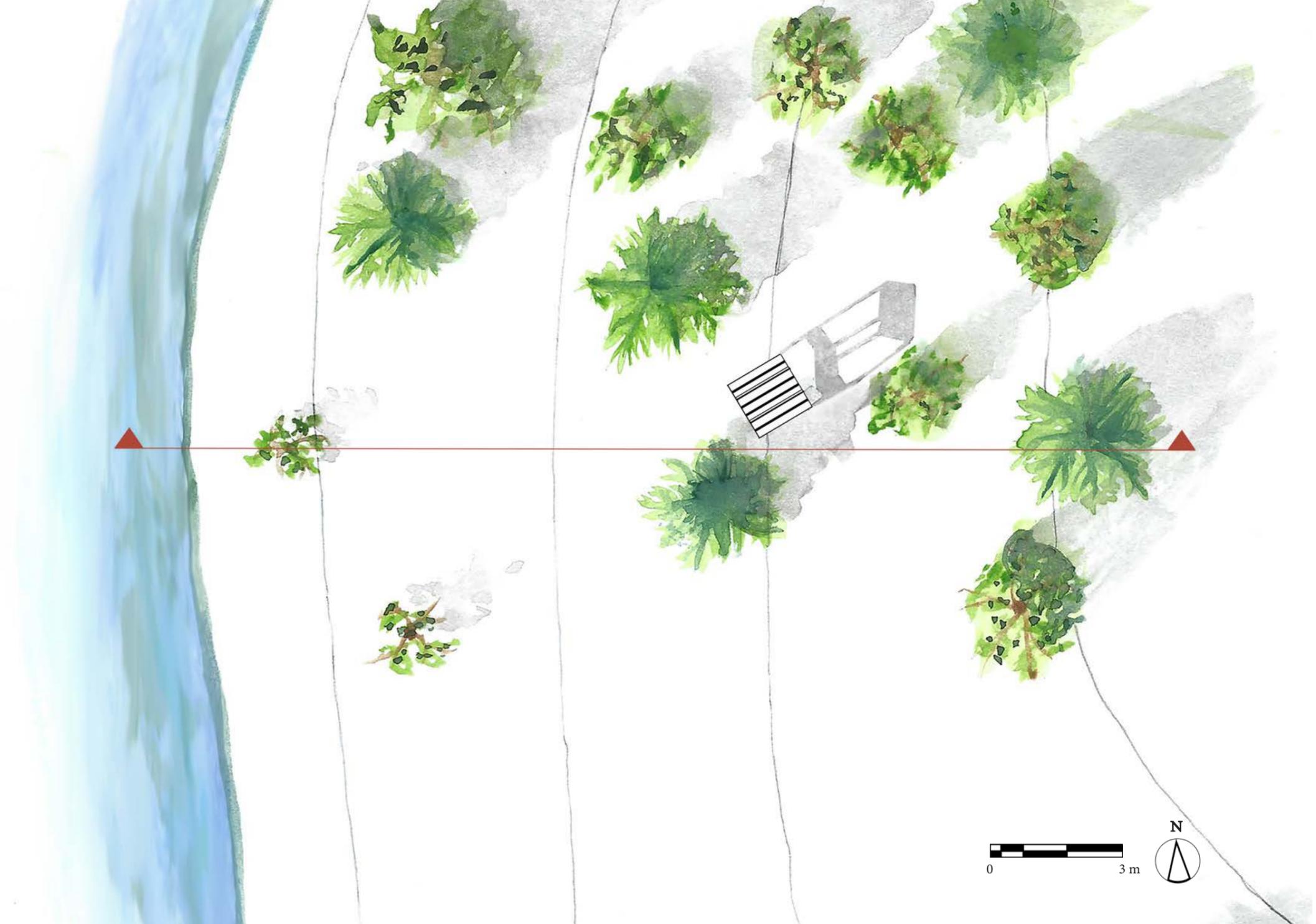


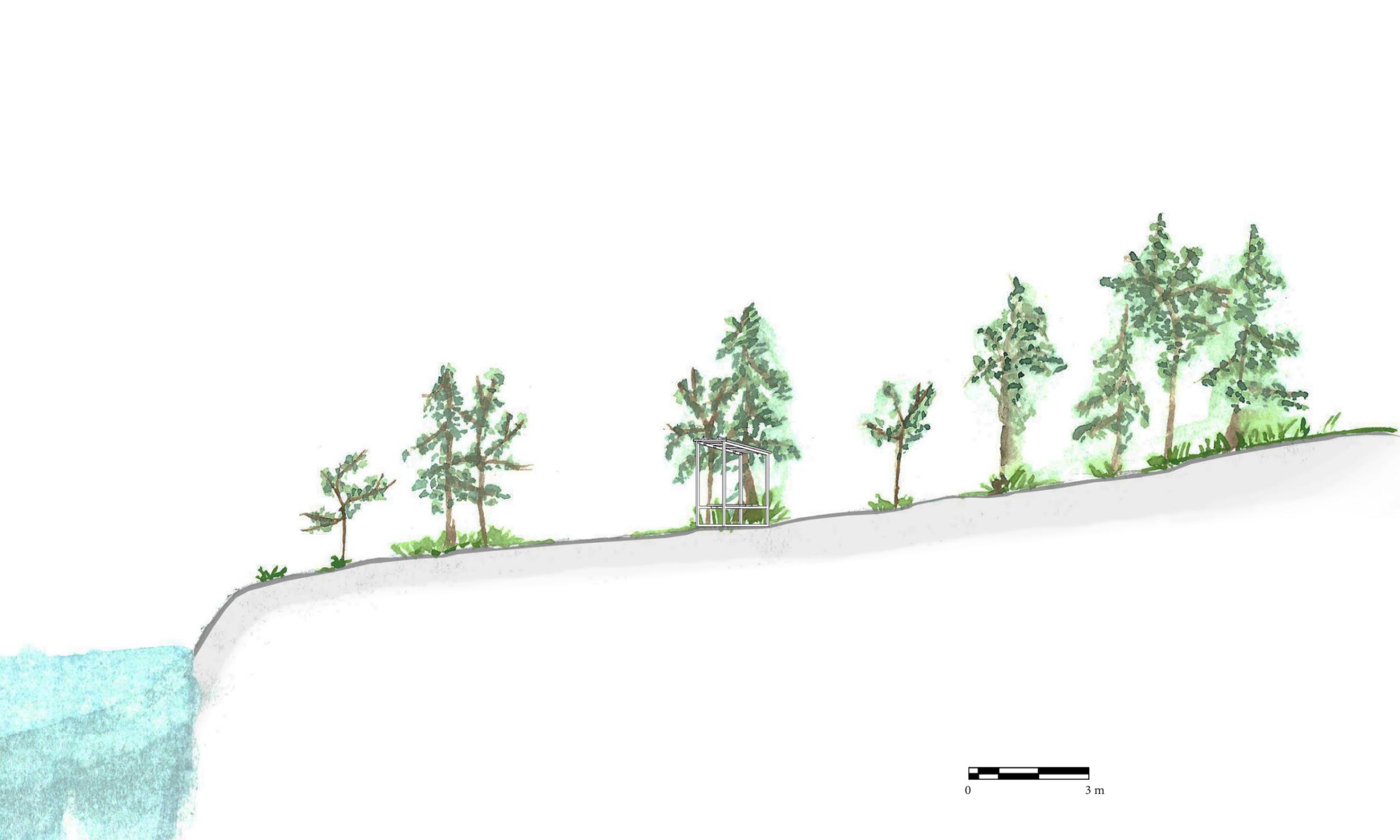
## WAYPOINT ONE

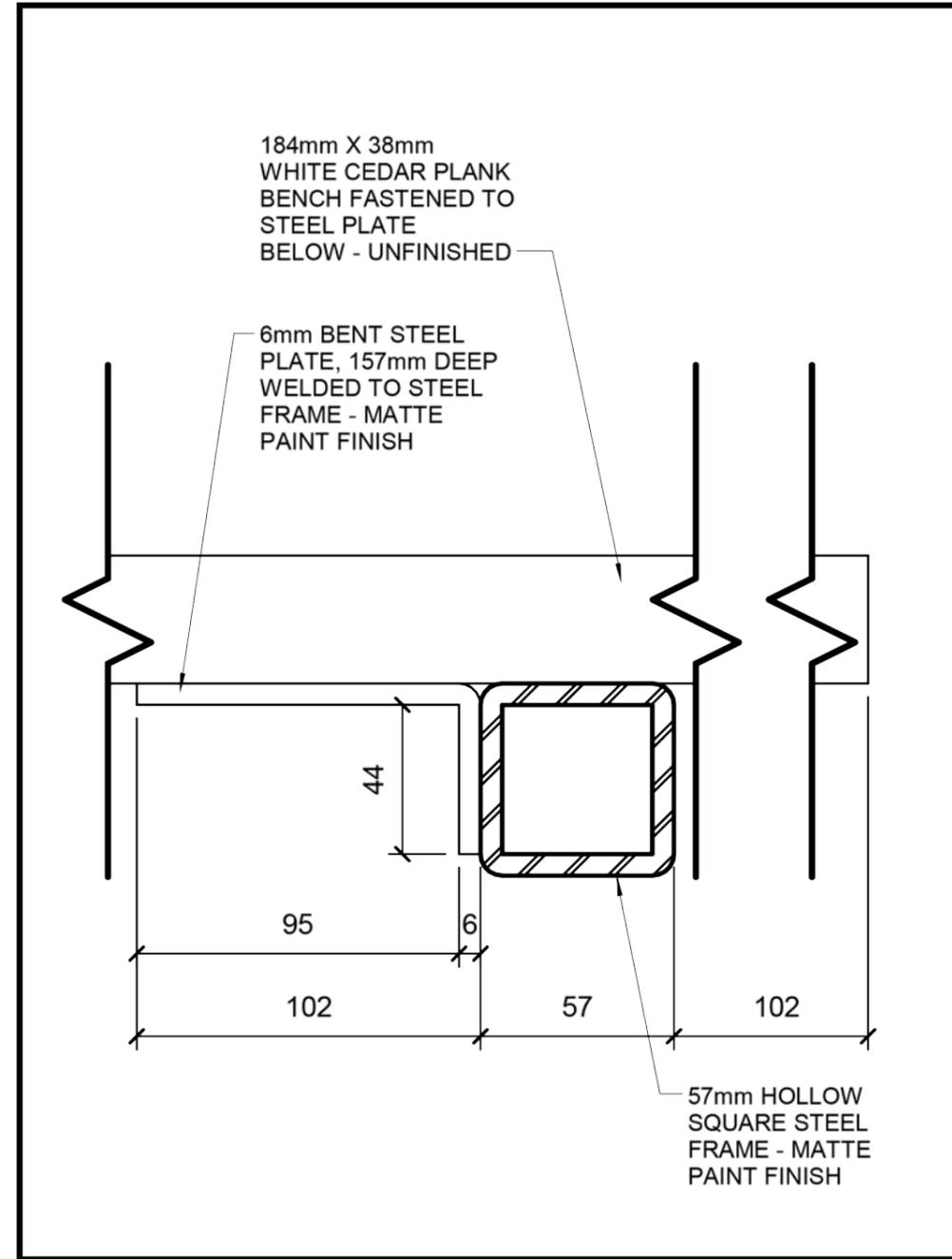
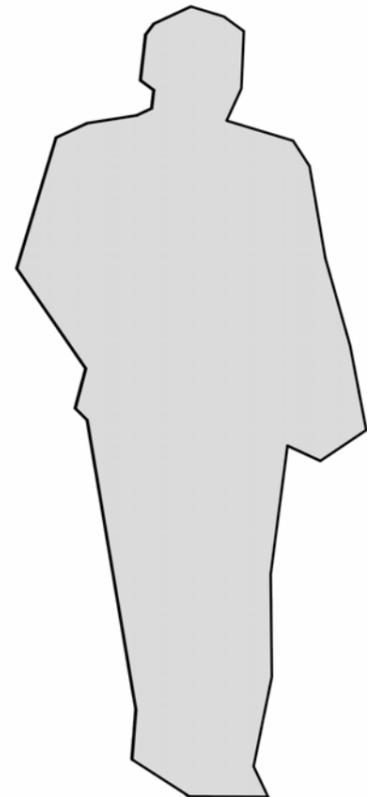
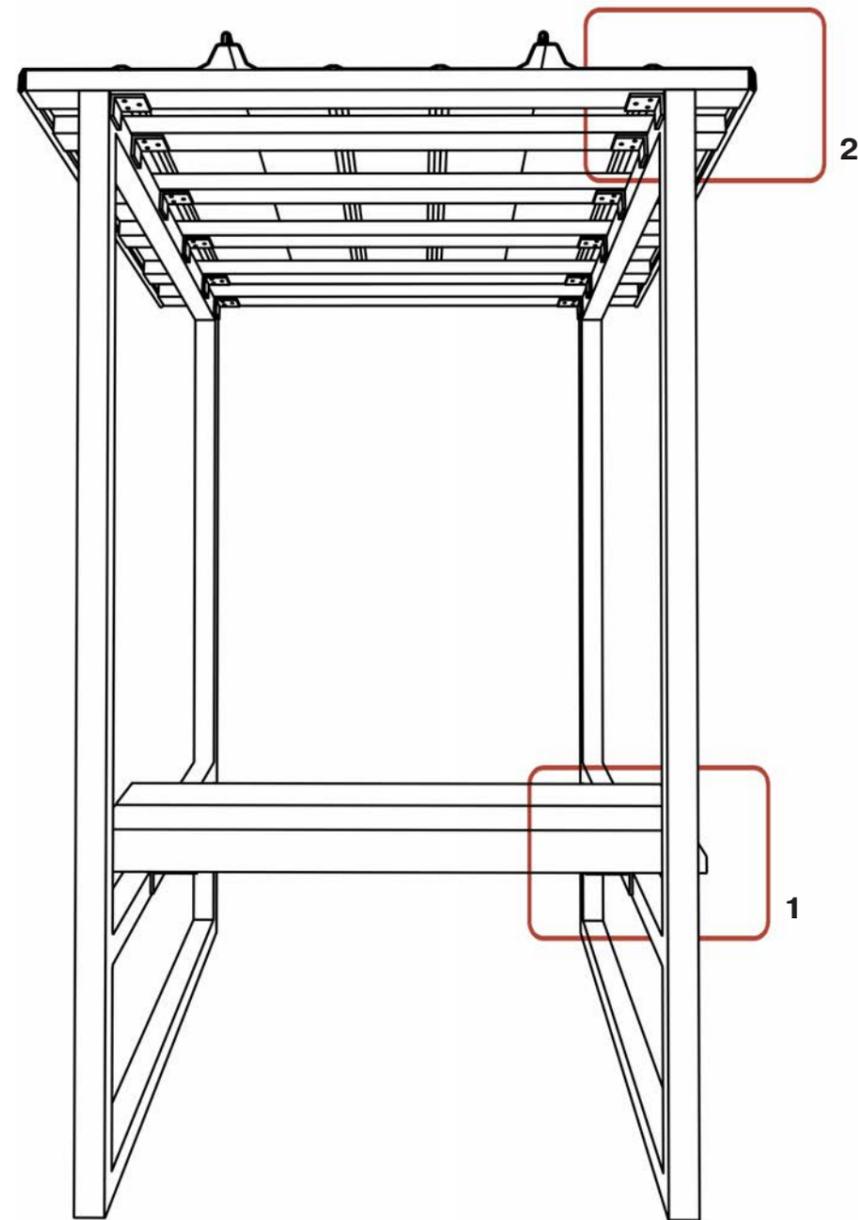
### FURNITURE

In this location, hikers on the Heavens Gate Trail will find a small bench over looking Horseshoe Lake to provide hikers a spot to sit down and take a break with a view. The bench is constructed of steel with a paint finish, pressure treated wood, unfinished cedar planks and standing-seam metal roofing. It is designed to be constructed on site with minimal assembly as the metal pieces will be prefabricated. It is large enough for two people to sit down with some space for pack items. The roof is also designed to overhang the bench to provide protection from the rain and other elements. The large overhang on either side of the bench will also keep the bench dry so that it will also be a dry space for hikers when they come across this piece of furniture. The bench is conveniently located halfway between Highway 6 and Mount Ararat so that even day hikers have a nice spot to rest on the way to the top.



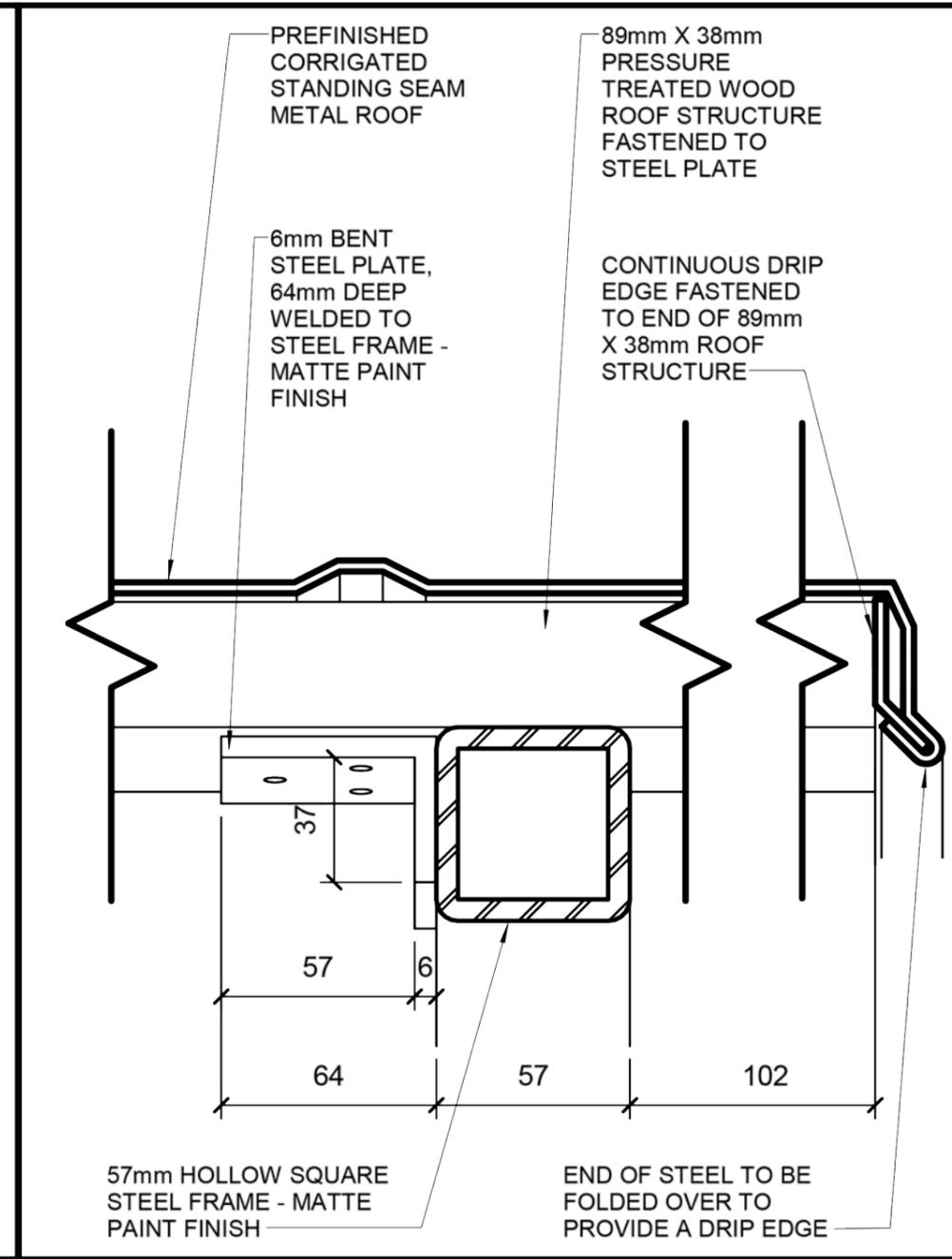






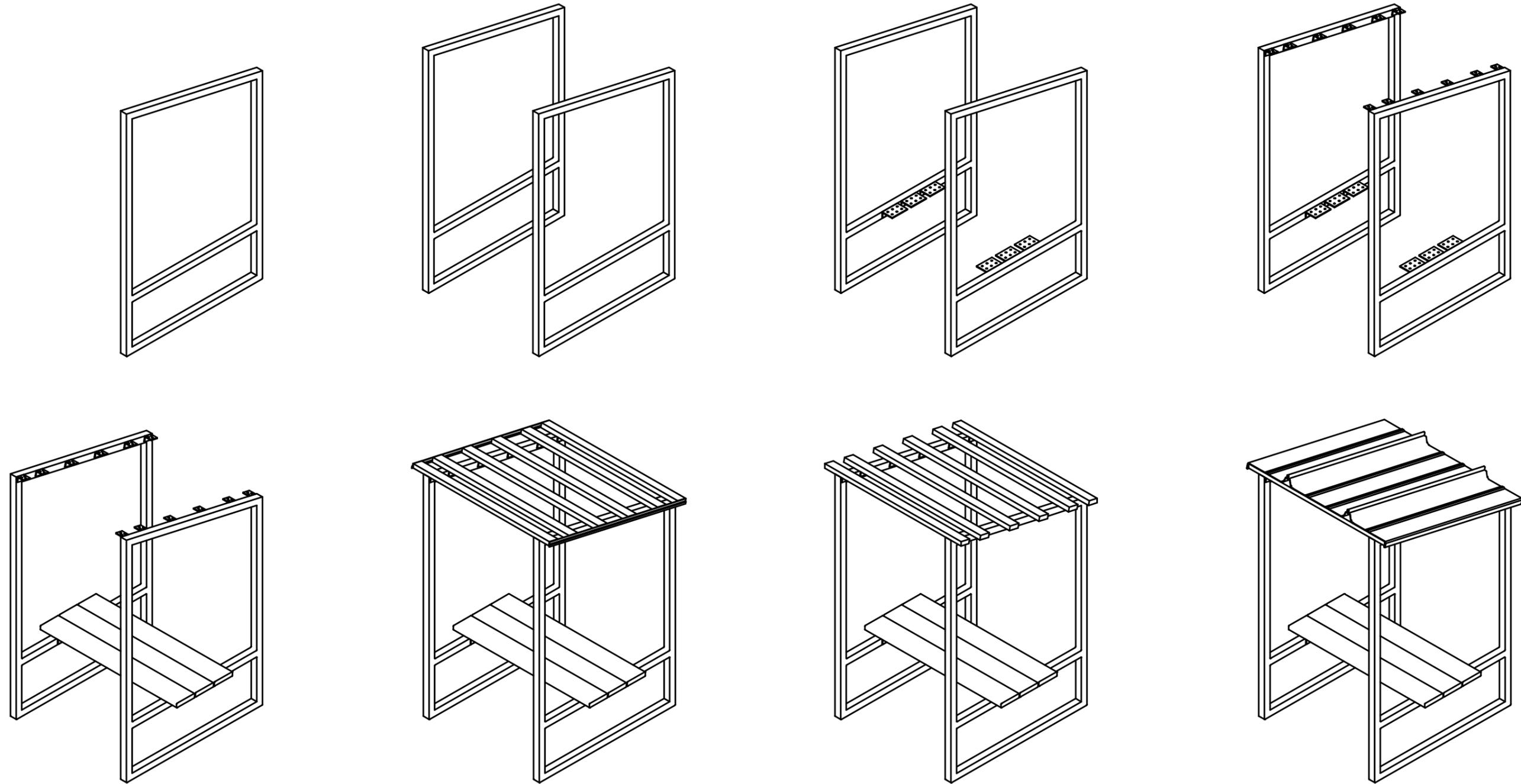
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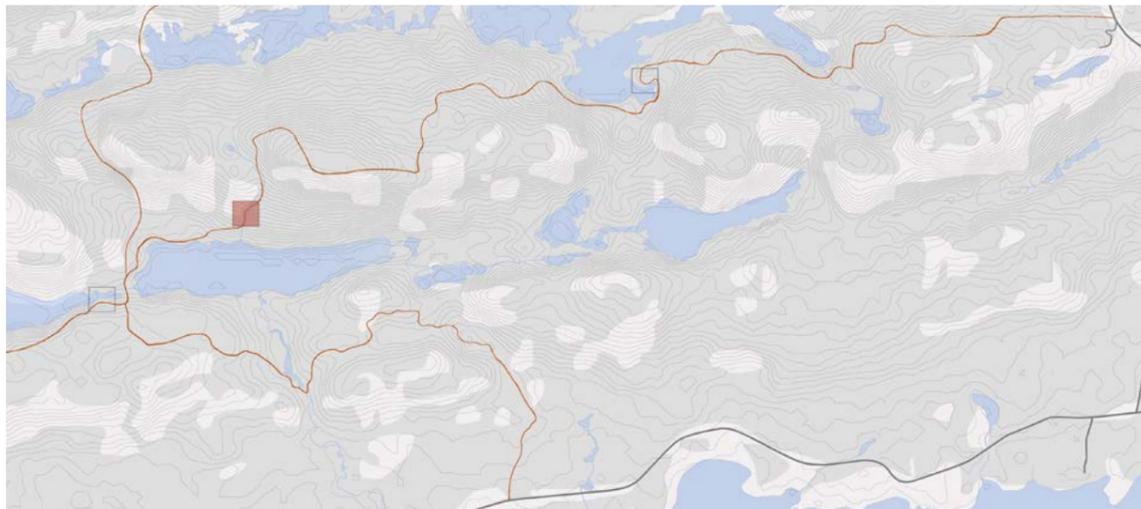
1:2



2. ROOF TO FRAME DETAIL

1:2



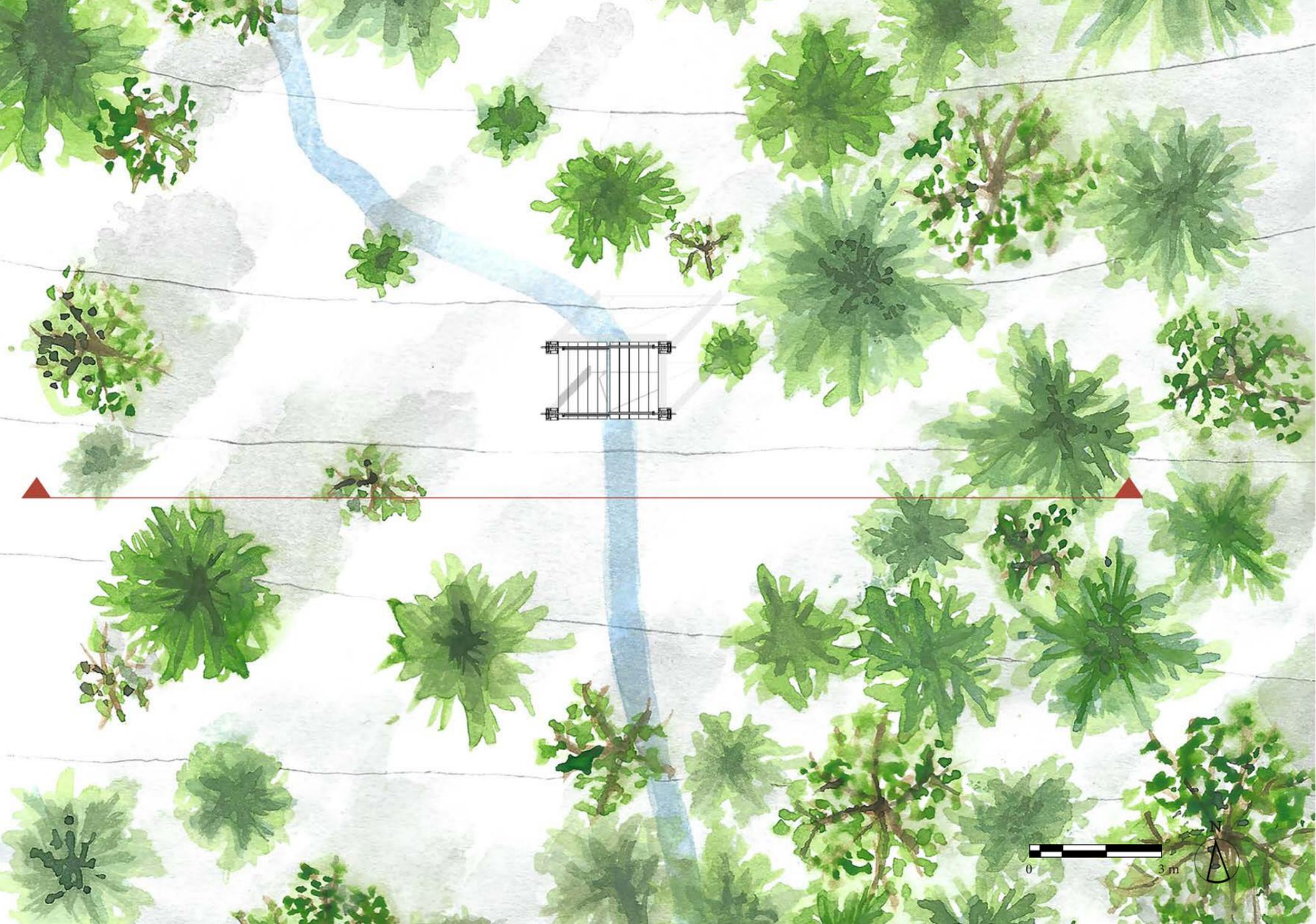


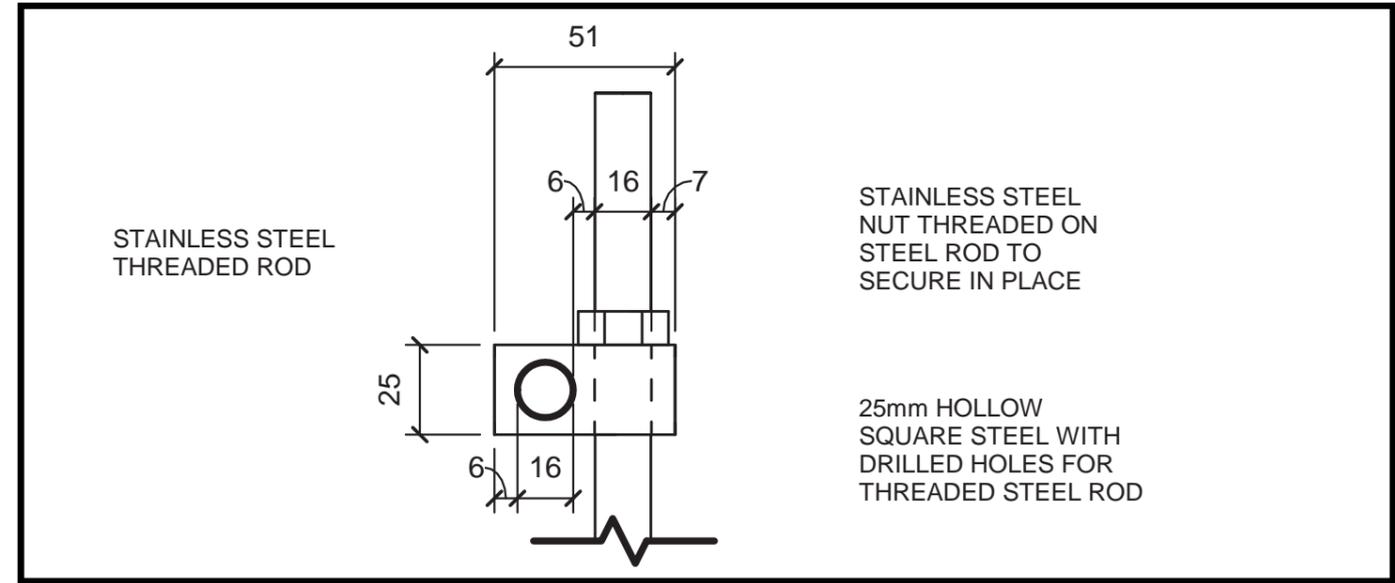
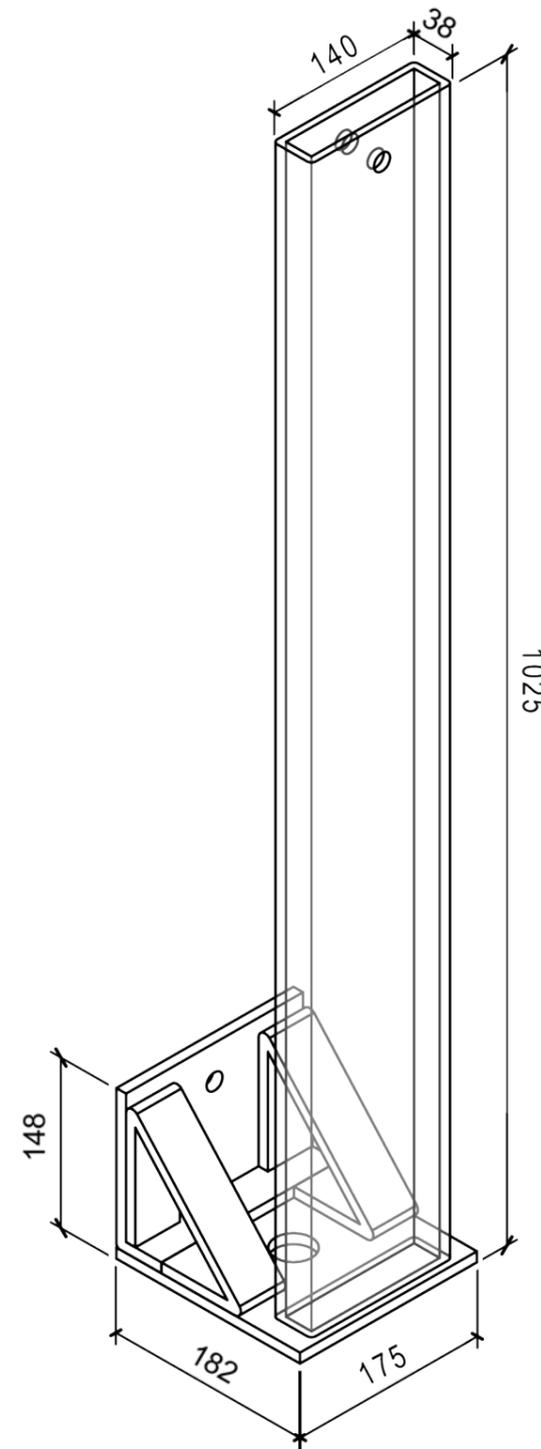
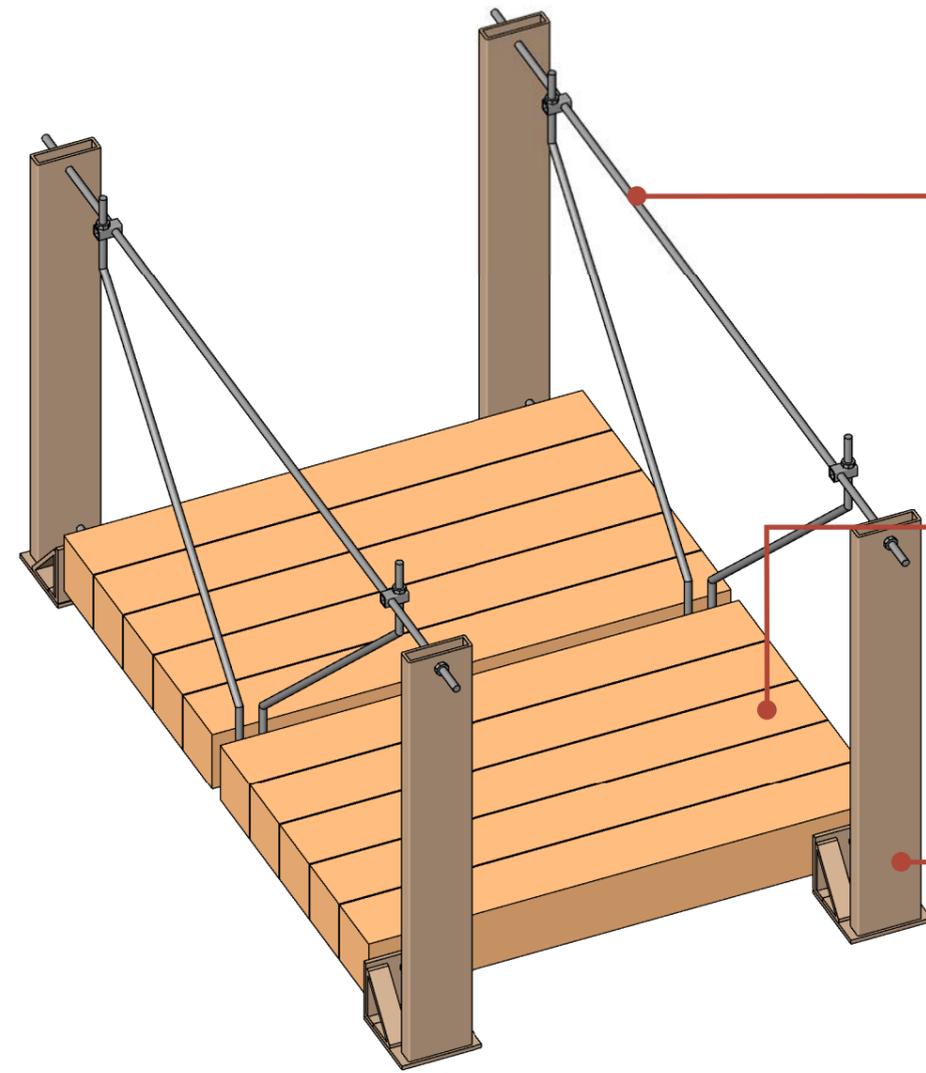
## WAYPOINT TWO

### BRIDGE

On the way to the first established campsite from the Eastern entrance of the Heaven's Gate Trail, hikers will be met with a small, sturdy bridge near Camp Florence. This bridge crosses a small stream that feeds into Florence Lake and floods often. The bridge will be constructed out of painted stainless steel, threaded rods, prefabricated metal foundations which the rods will be fastened to, and pressure treated lumber threaded onto the rods. The separation of the foundations allow for movement within the ground overtime and allows the bridge to be adjusted on site when it is installed. The threaded rods allow for the wood peices to be replaced overtime if neccessary and allows the bridge to also be adjusted overtime if necessary as well. The bridge could even be expanded if this small stream ever got bigger in the future.

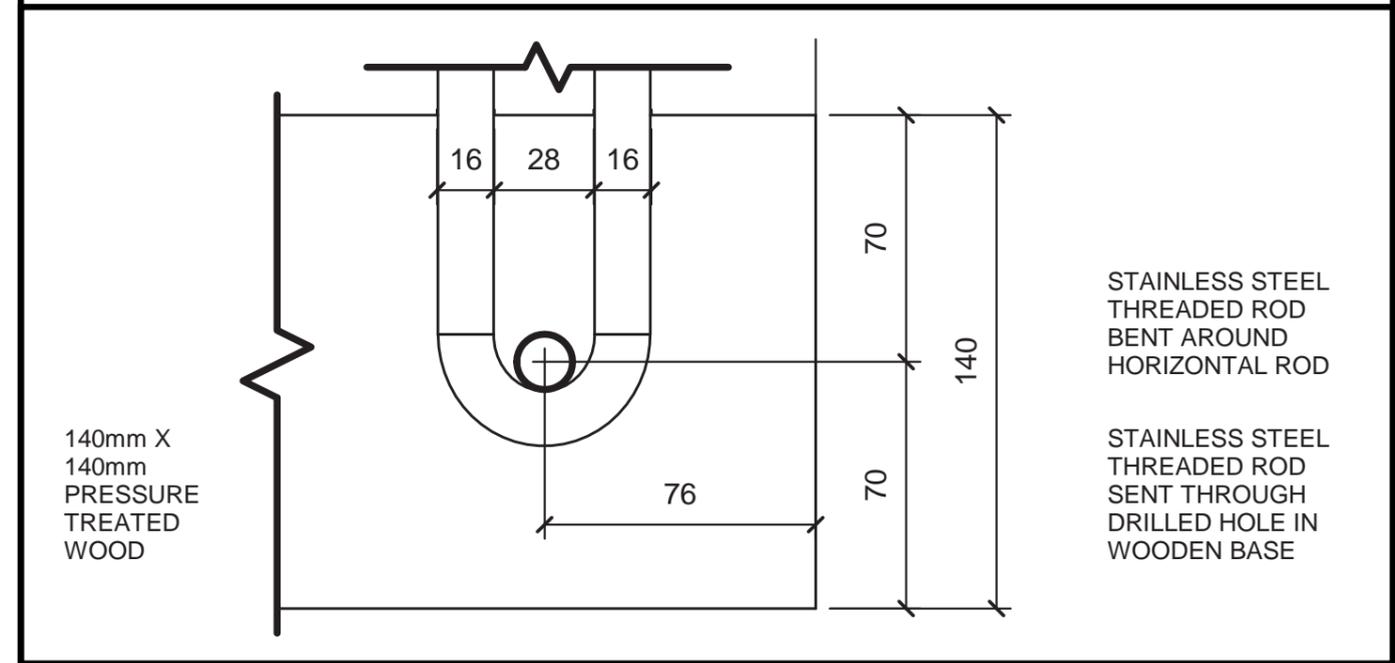






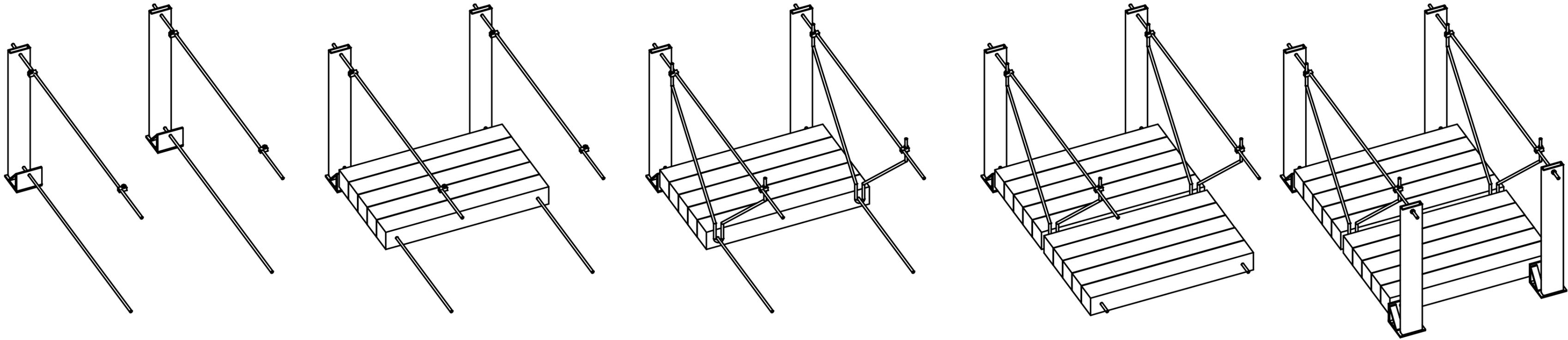
1. TOP OF LATERAL SUPPORT DETAIL

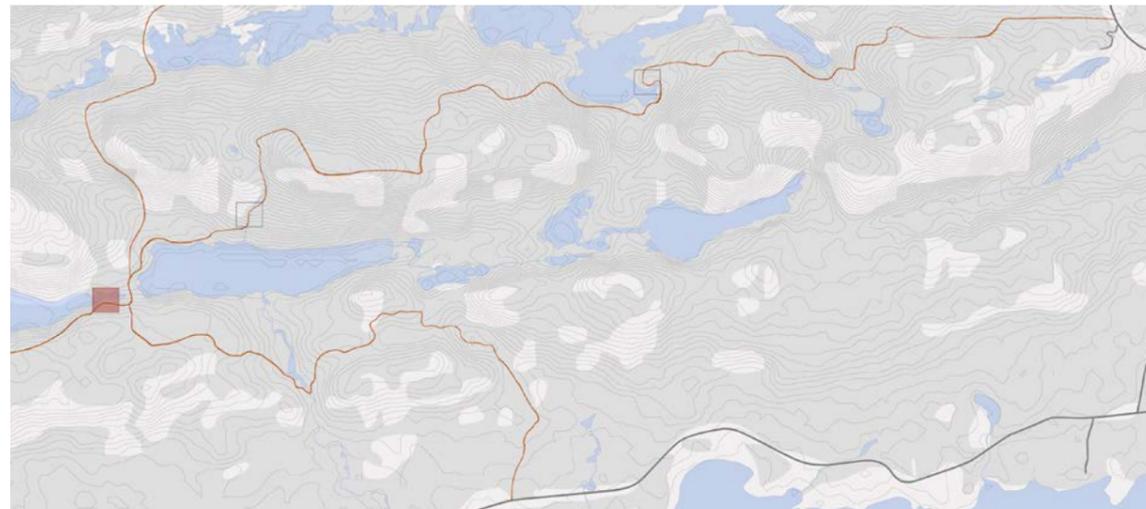
1:2



2. BOTTOM OF LATERAL SUPPORT DETAIL

1:2

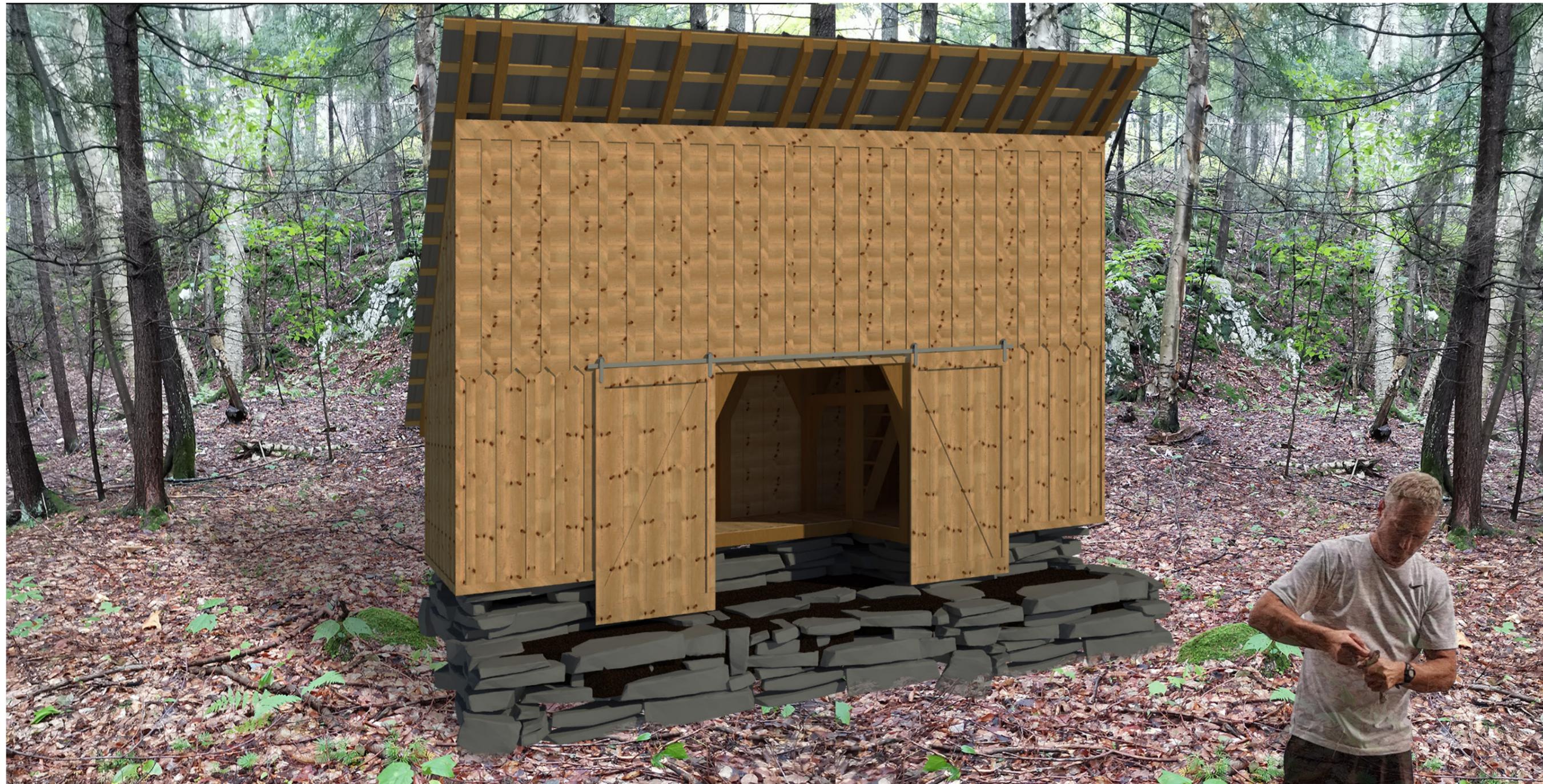


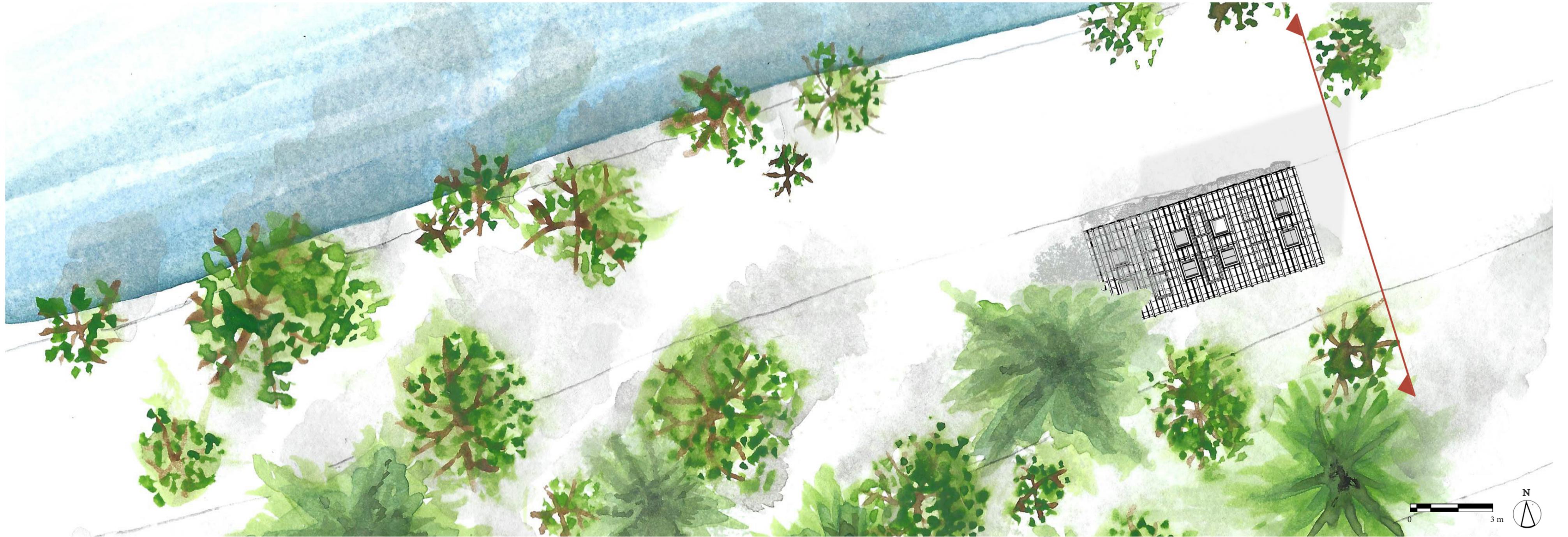


## WAYPOINT THREE

### CABIN

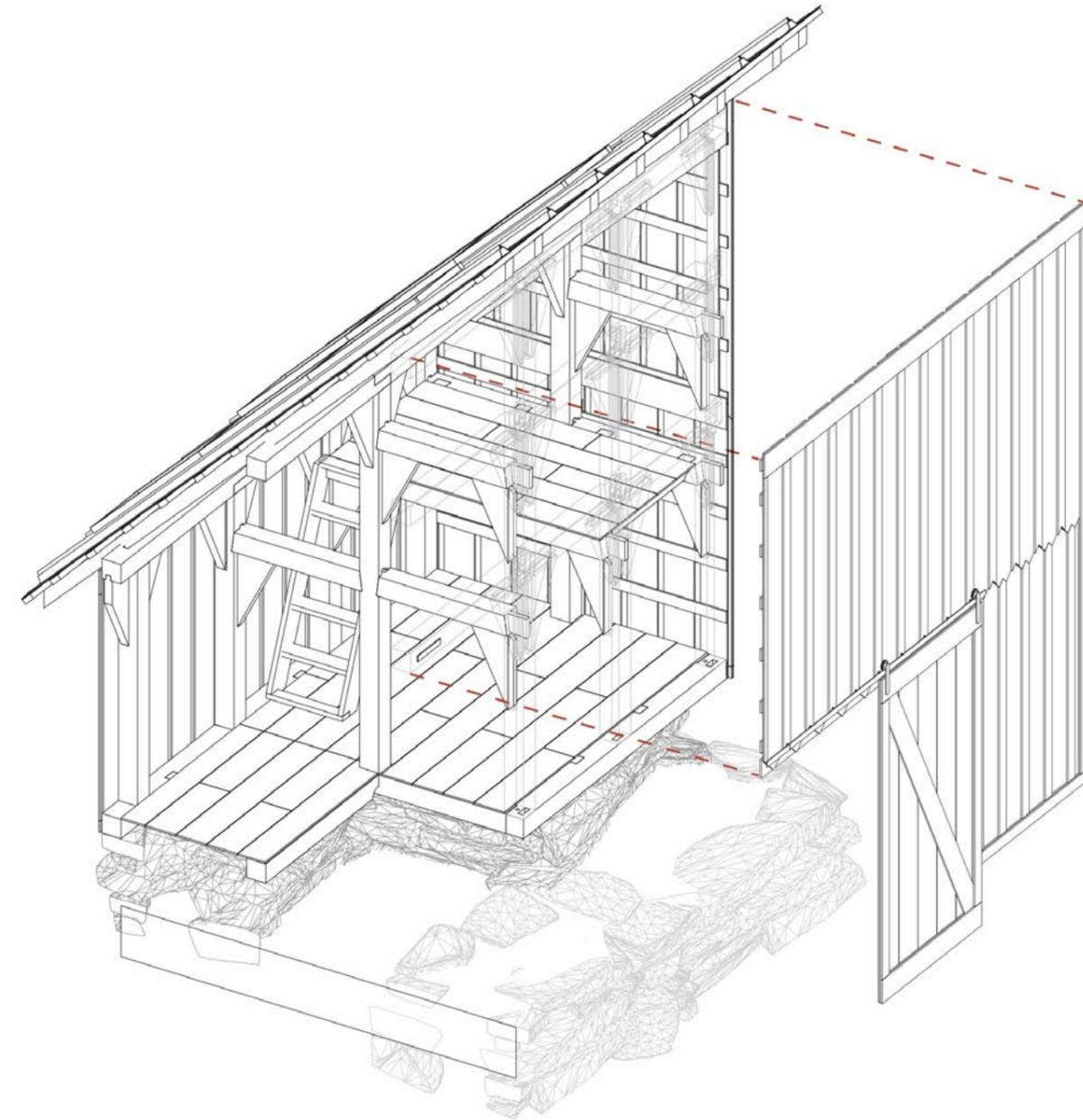
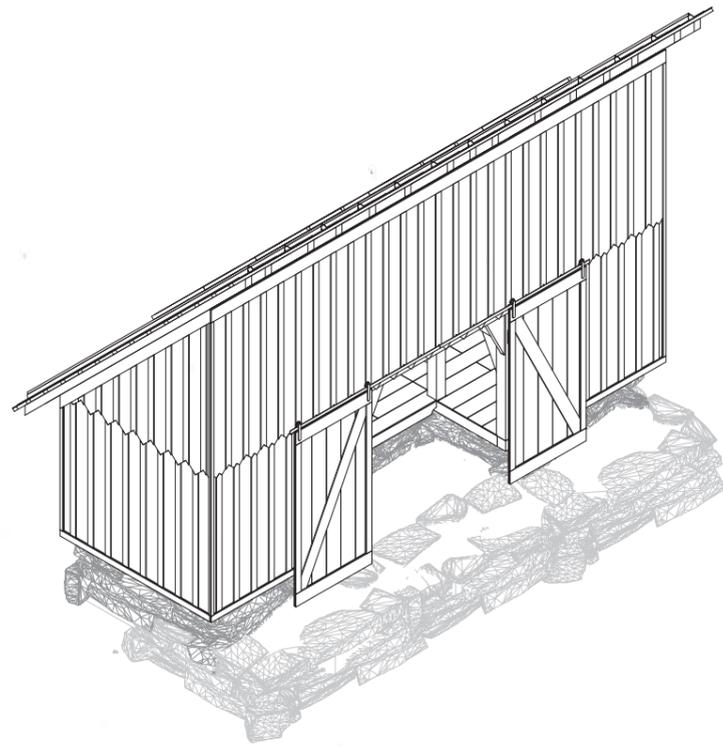
Where the Heaven's Gate Trail and the existing ATV trail meet, hikers will find an open air cabin with enough room for eight people to sleep. This readily accessible location has a beautiful view of Alexander Lake from the entrance. The center of the cabin provides bench-like seating under the protection of the standing seam metal roof, keeping hikers safe from the elements. There are also loft spaces in the cabin to provide more space for people to sleep and rest. The cabin is constructed of heavy timber on piled rock foundations that are secured with mortar. The cladding is durable, cedar board and batten siding left unfinished to naturally weather over time. The roof cladding is prefinished, standing seam metal roofing. On the roof are skylights facing the south. In the winter the sun can enter the cabin and warm the interior space for winter visitors. Also on the roof are a few solar panels that can be activated later on to provide electricity to the cabin. This cabin will provide visitors shelter and protection all year round.

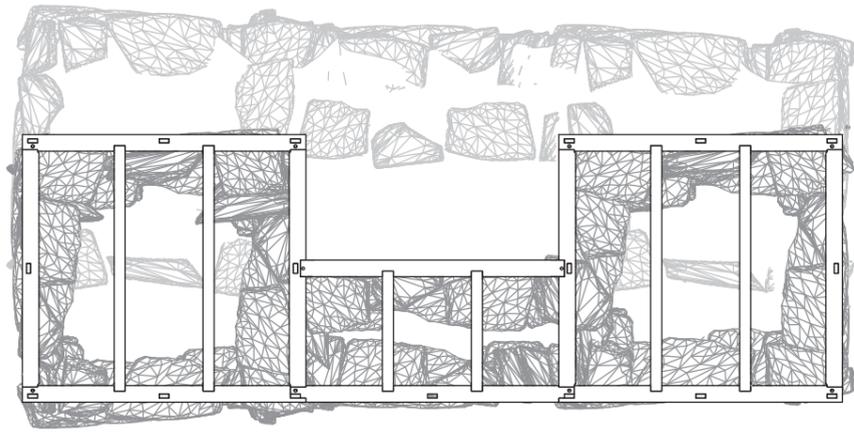




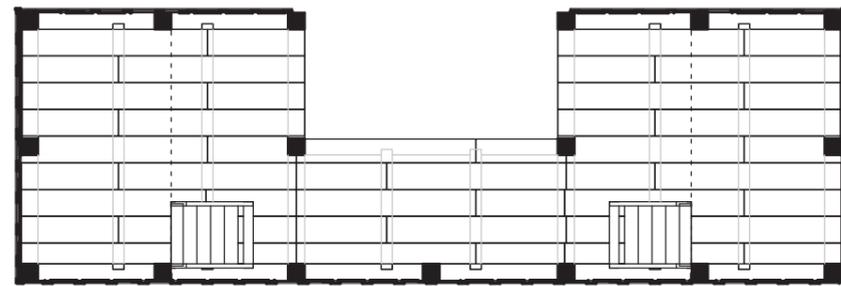


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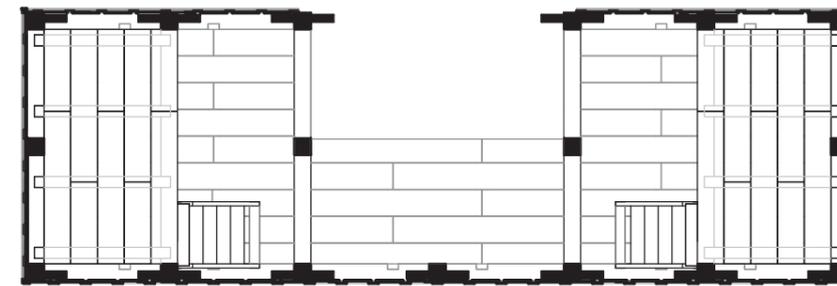




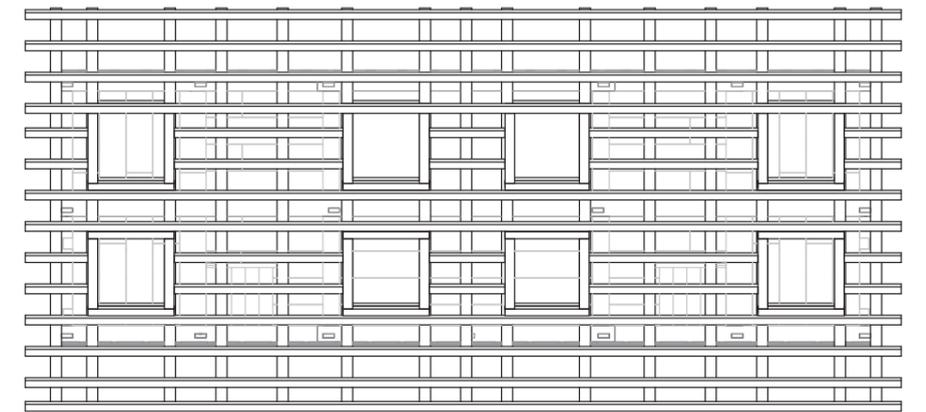
**FOUNDATION PLAN**



**FIRST FLOOR PLAN**

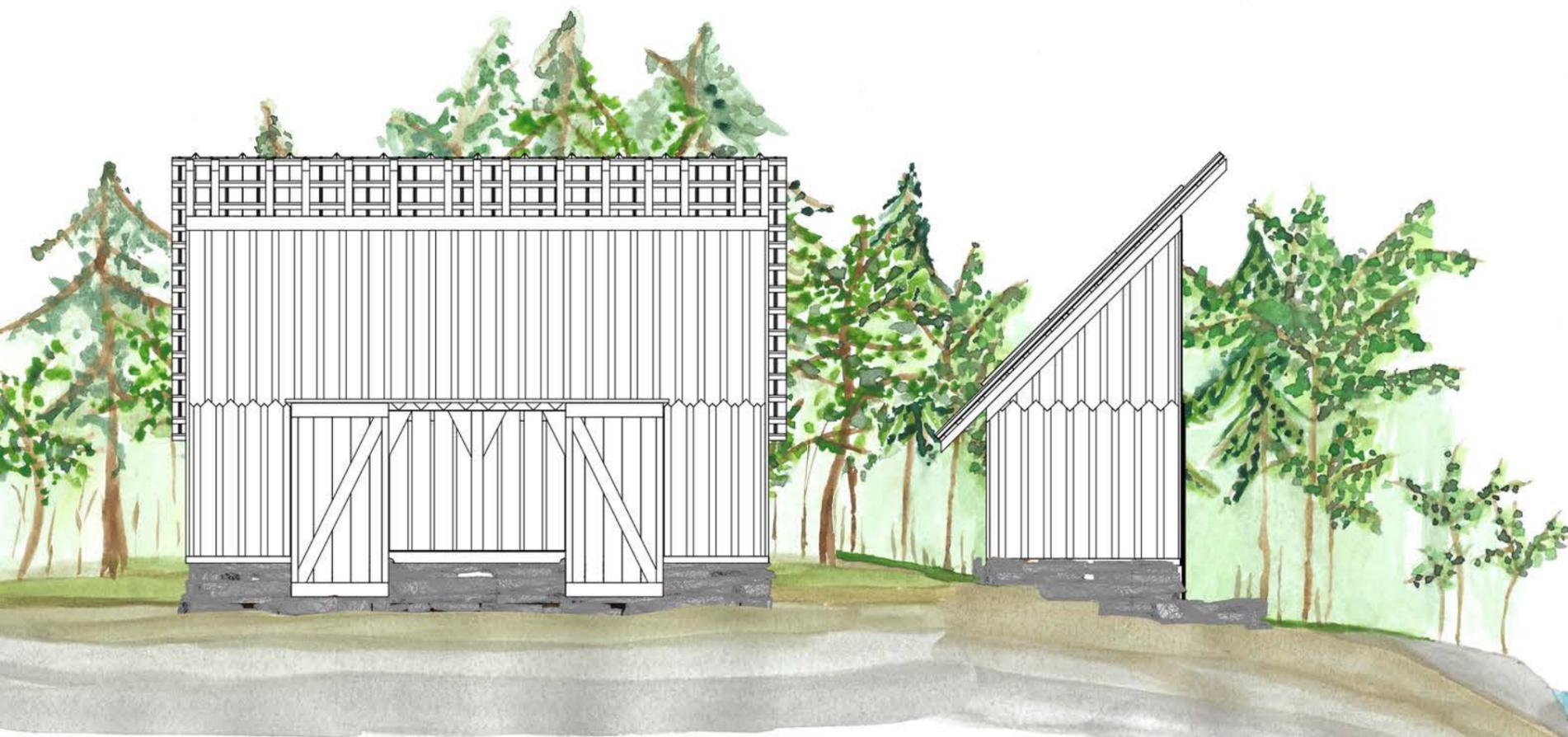


**LOFT FLOOR PLAN**



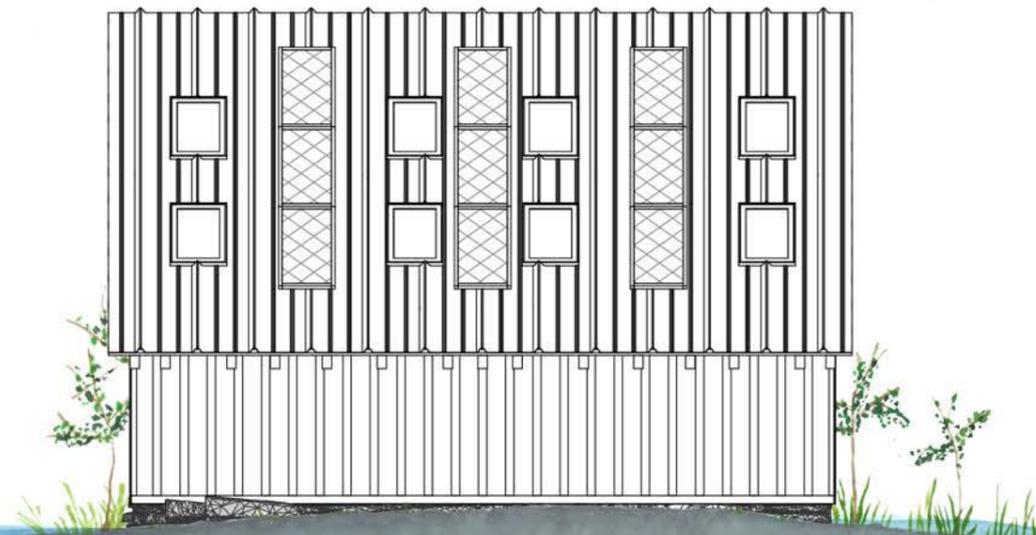
**ROOF FRAMING PLAN**





**NORTH ELEVATION**

**EAST ELEVATION**

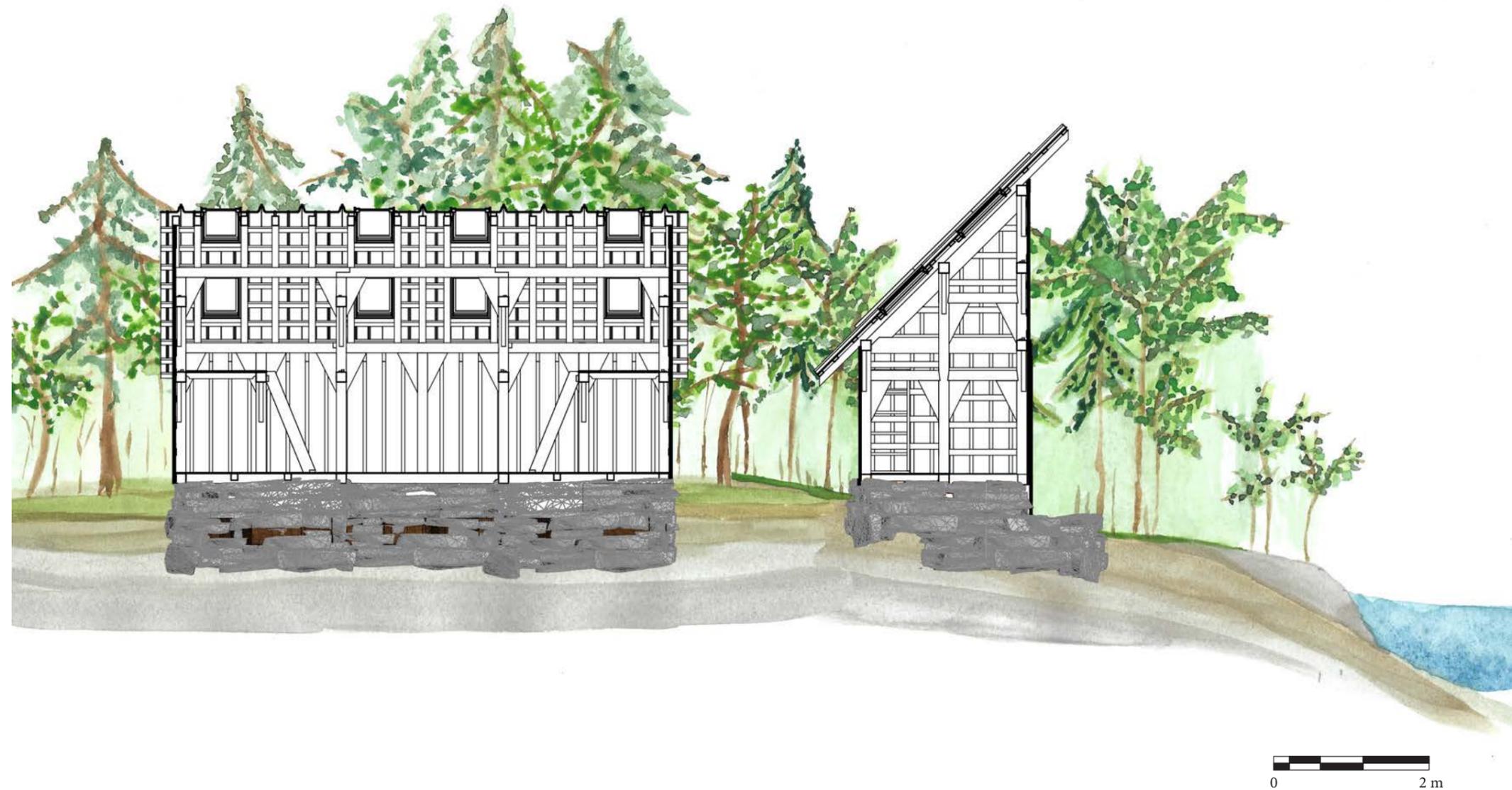


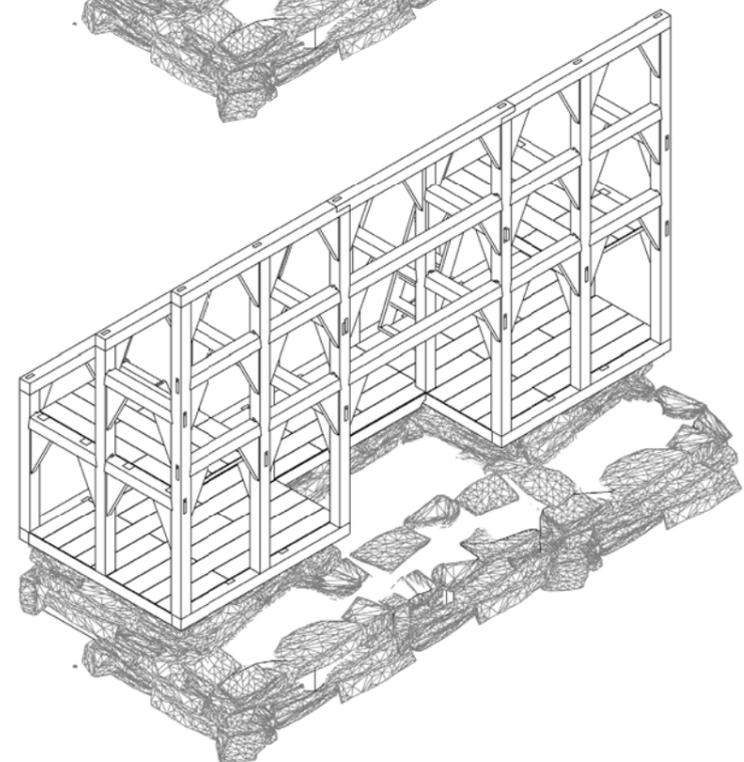
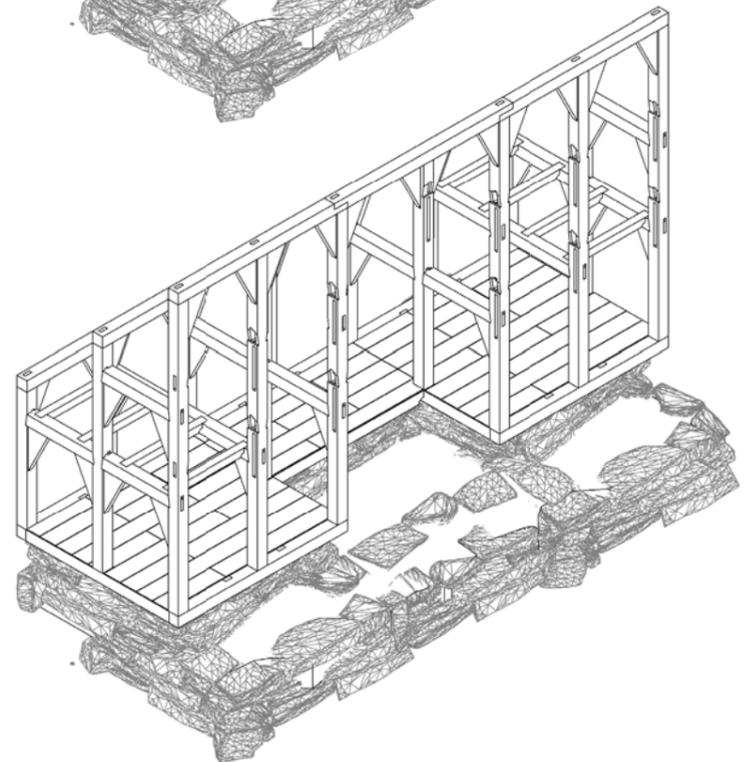
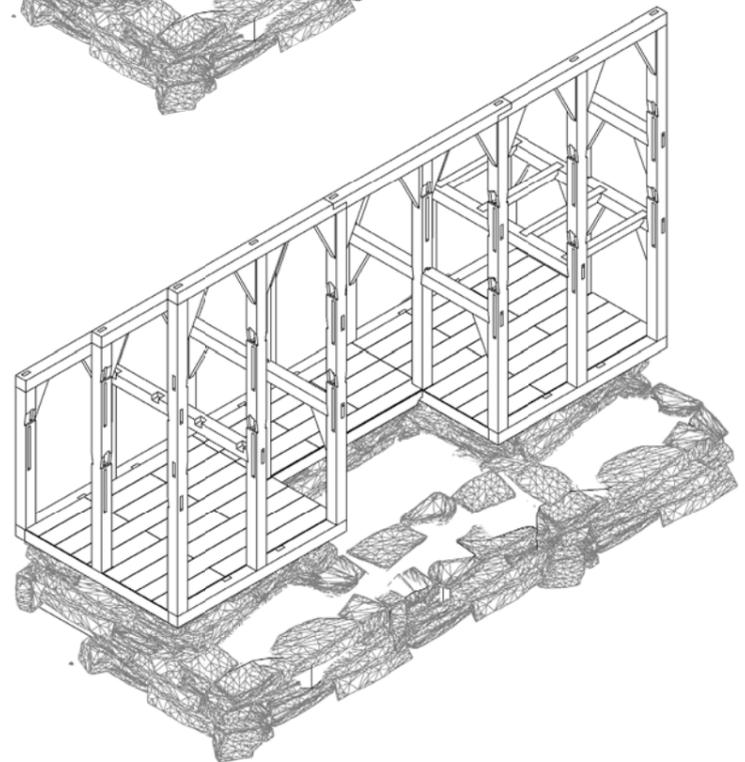
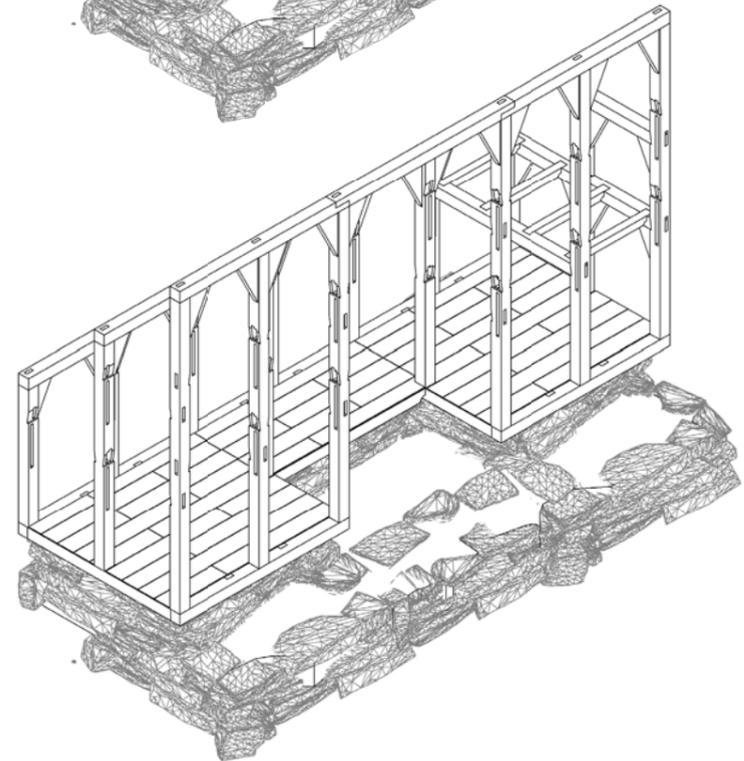
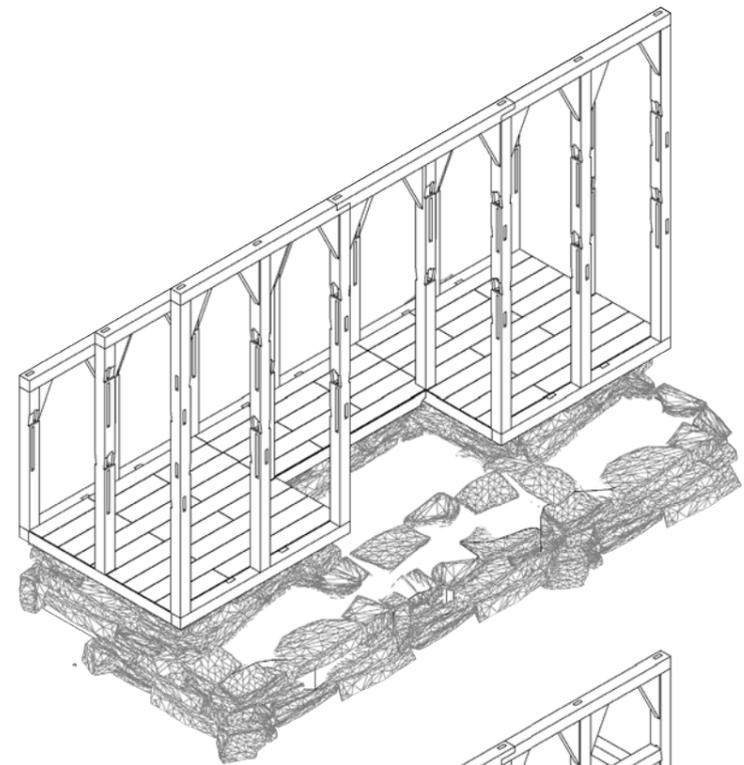
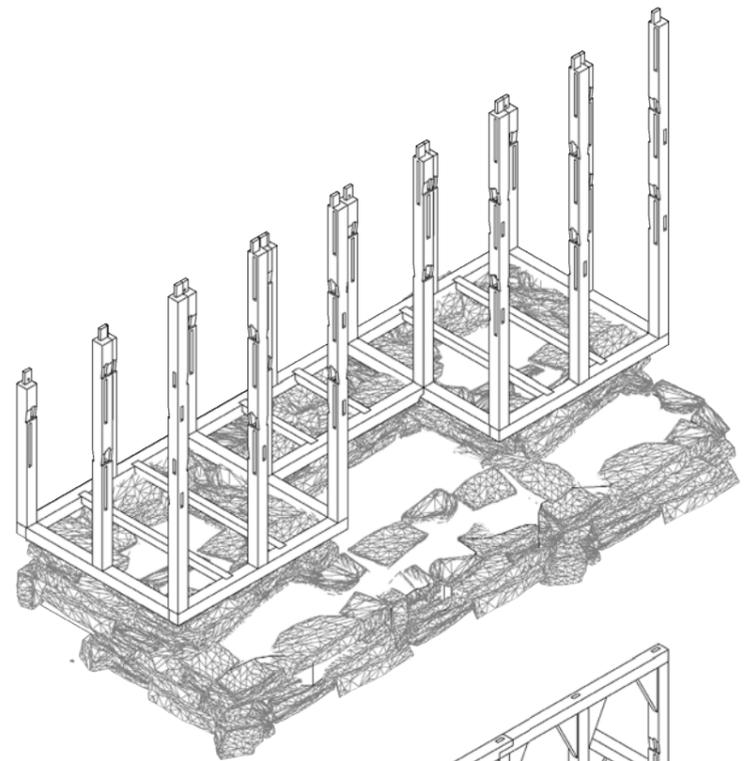
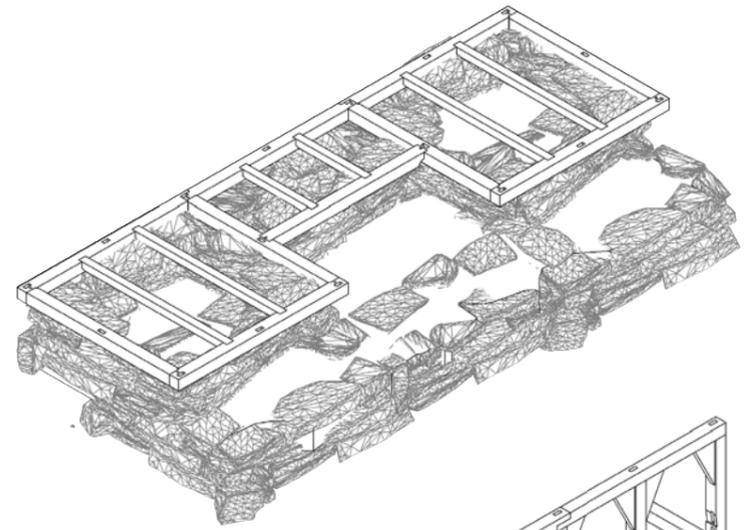
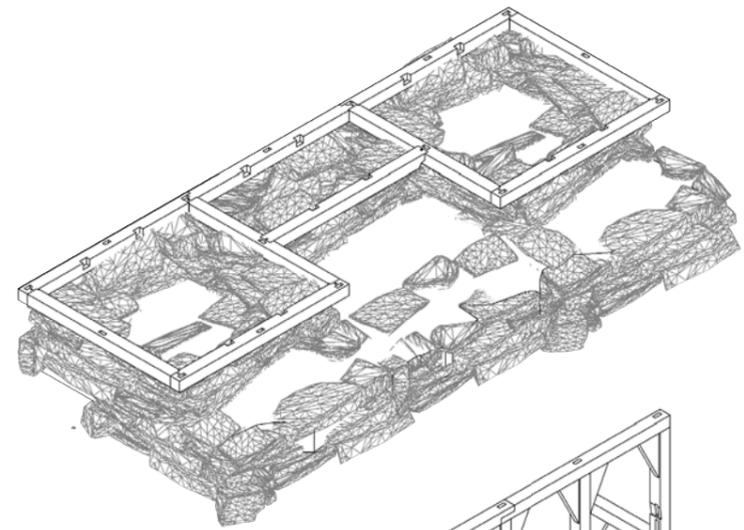
**SOUTH ELEVATION**

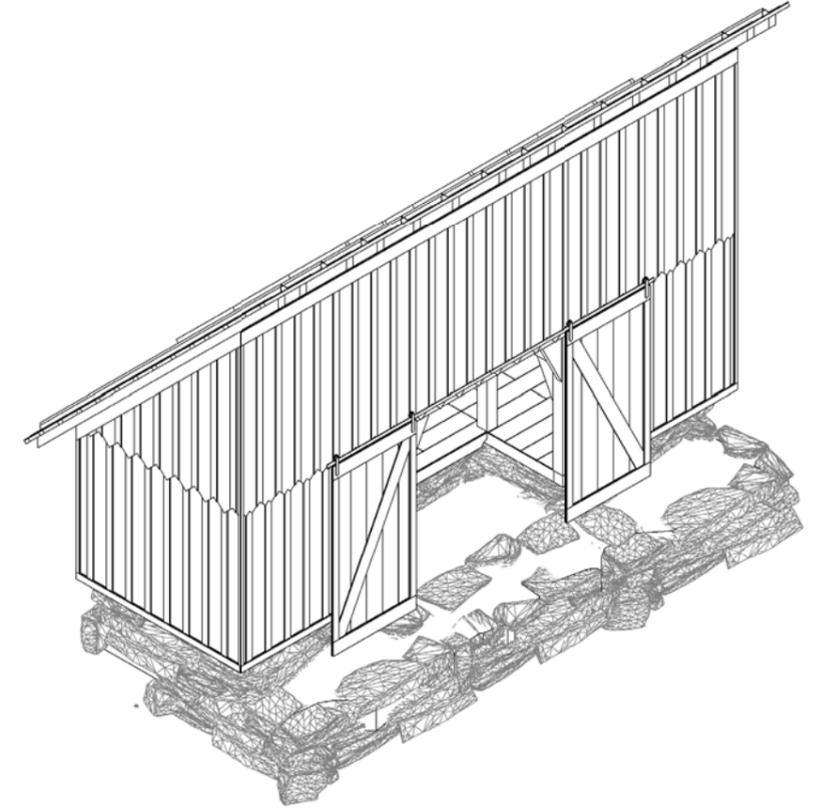
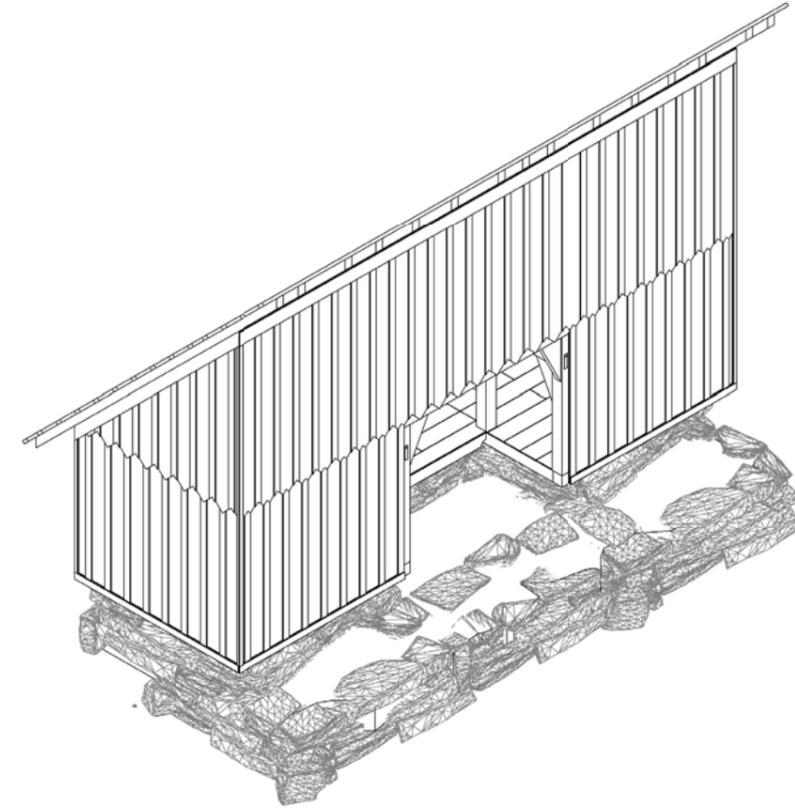
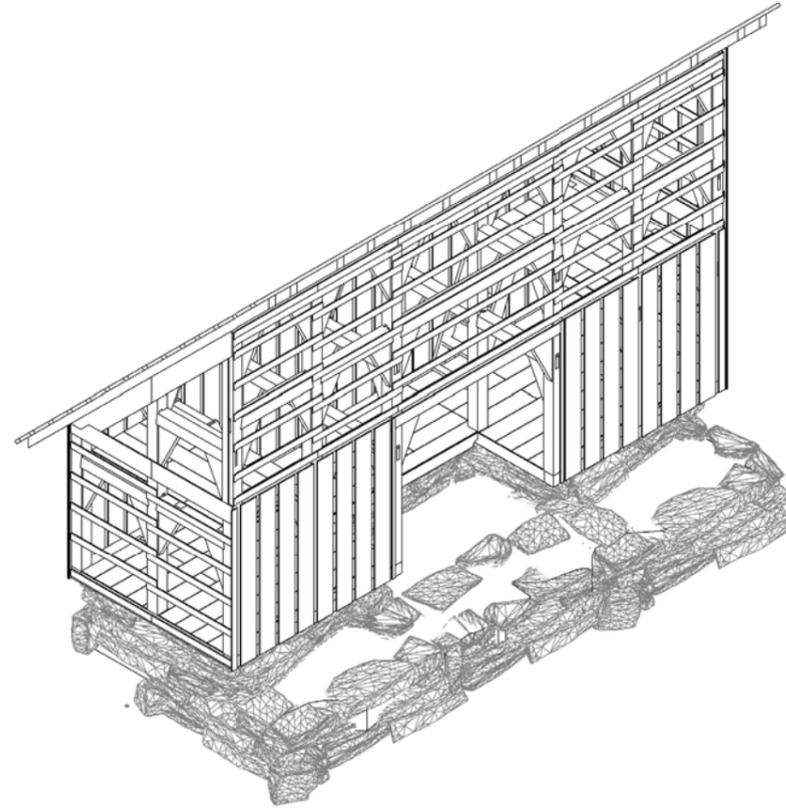
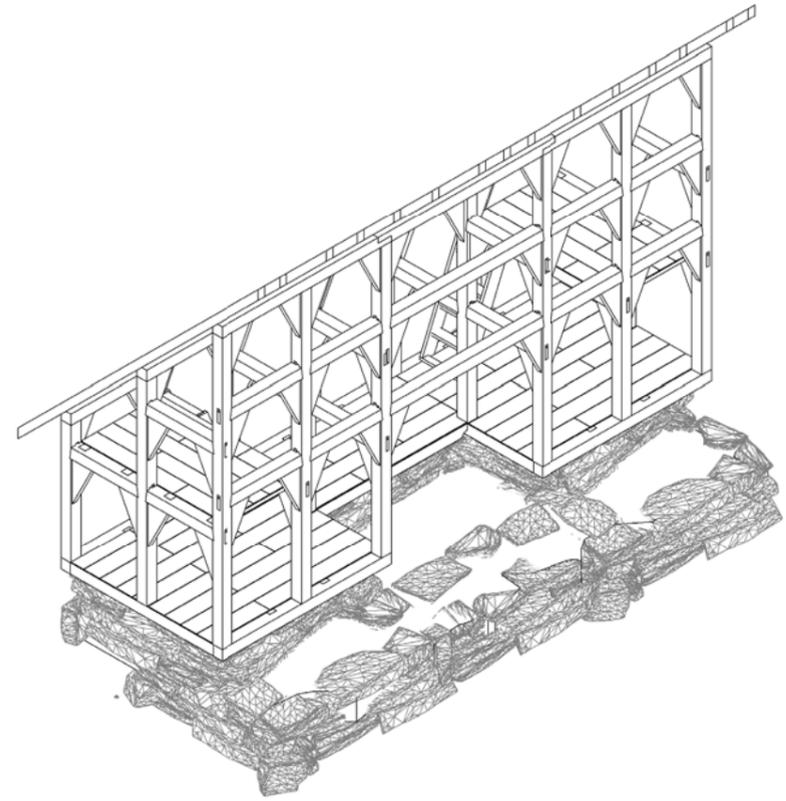


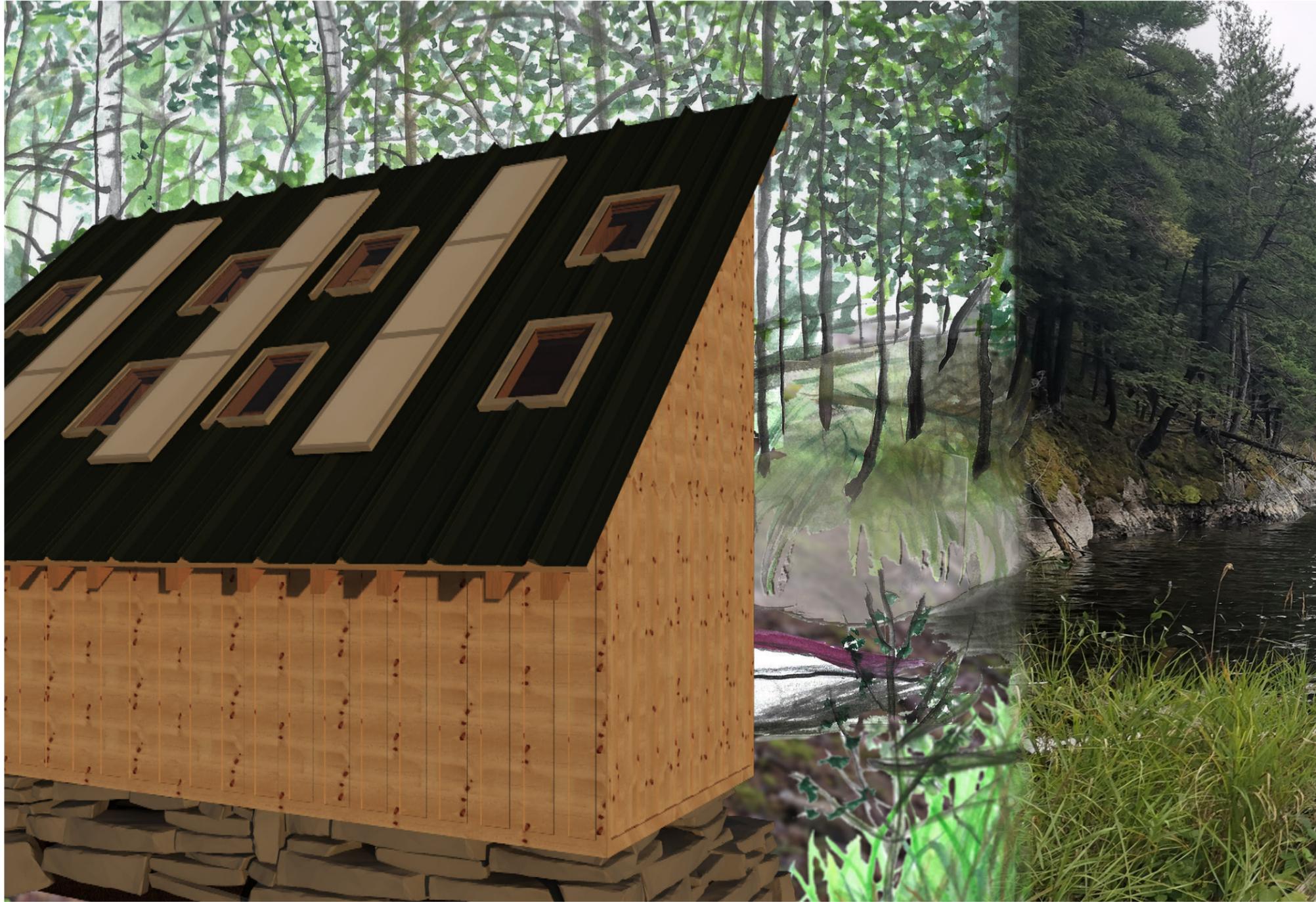
**WEST ELEVATION**











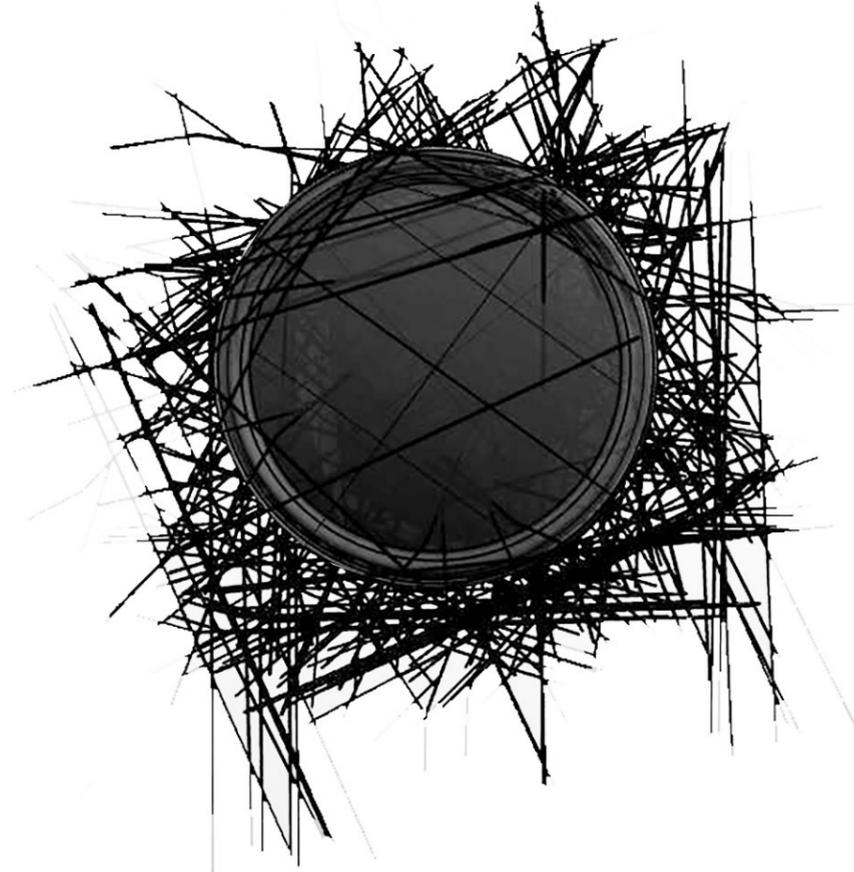
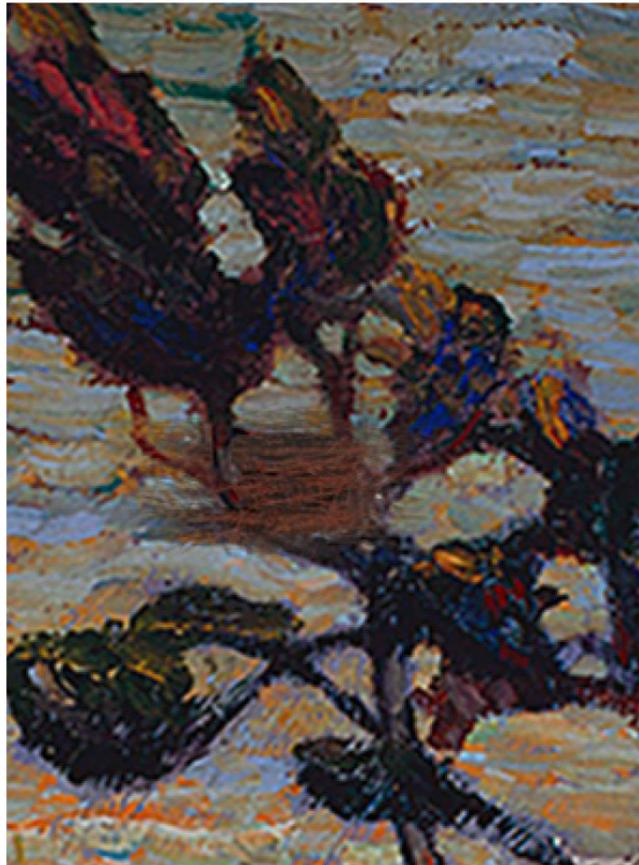
# APPENDIX

ARCH 5505 EL  
Design Studio: Architecture & Craft  
Fall 2020  
Professor: Randall Kober

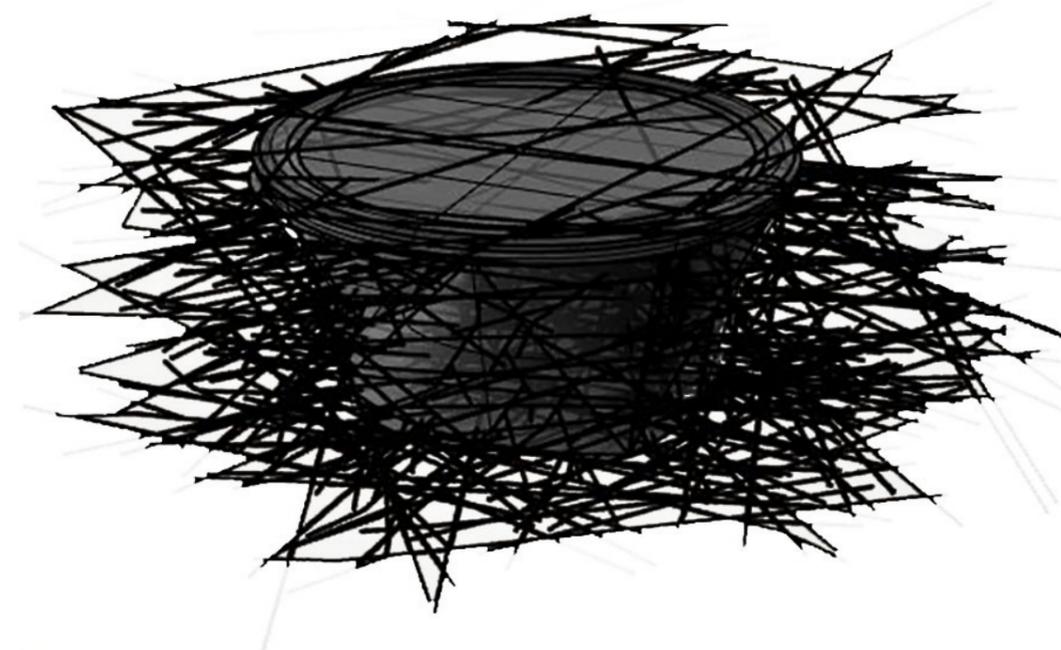


# FLORA FAUNA MODEL ASSIGNMENT PART 1

3D Digital Model of an Eagles Nest completed in Rhino 6. The nest was then rendered in a painting by a member of the Group of Seven. The painting is the Byng Inlet Georgian Bay by Tom Thomson.



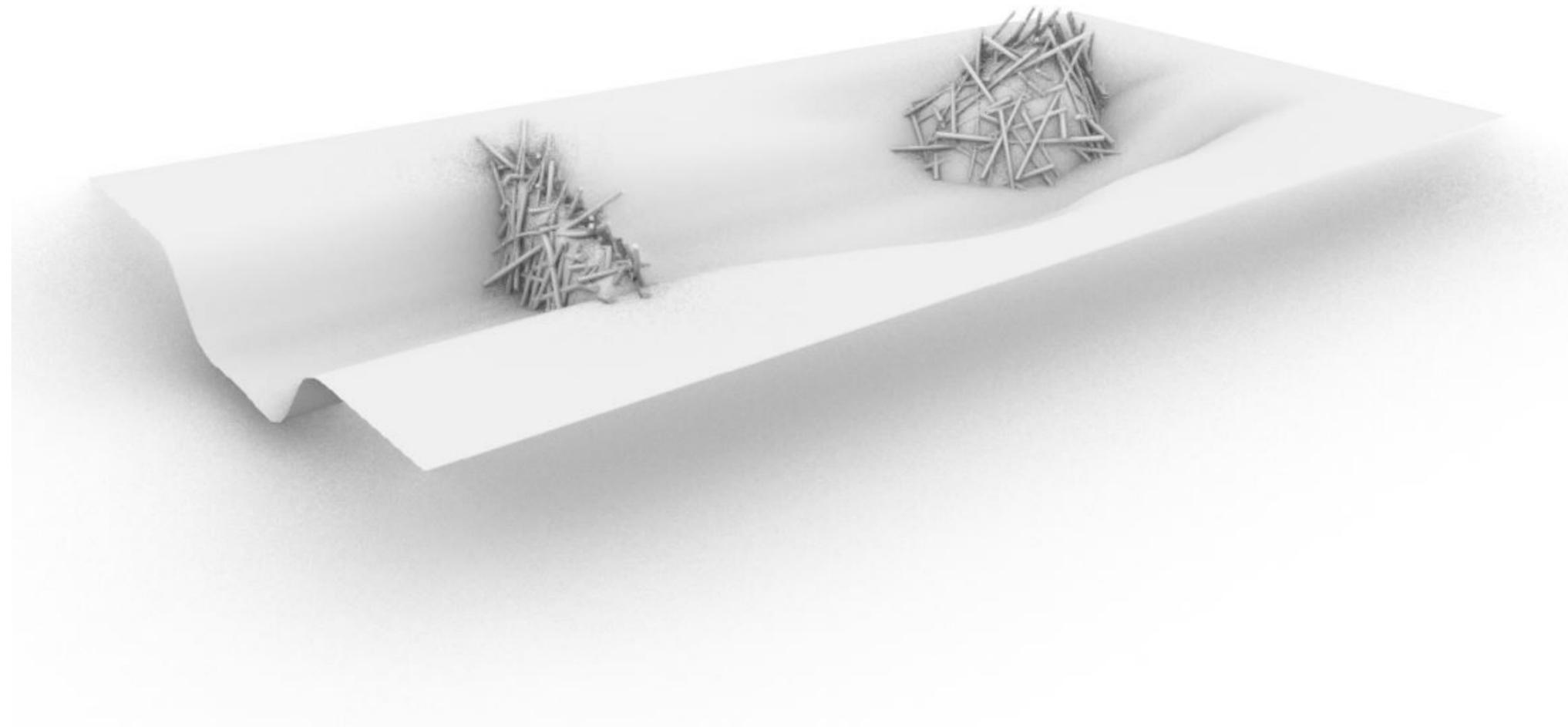
TOP VIEW



ISOMETRIC VIEW

## FLORA FAUNA MODEL ASSIGNMENT PART 2

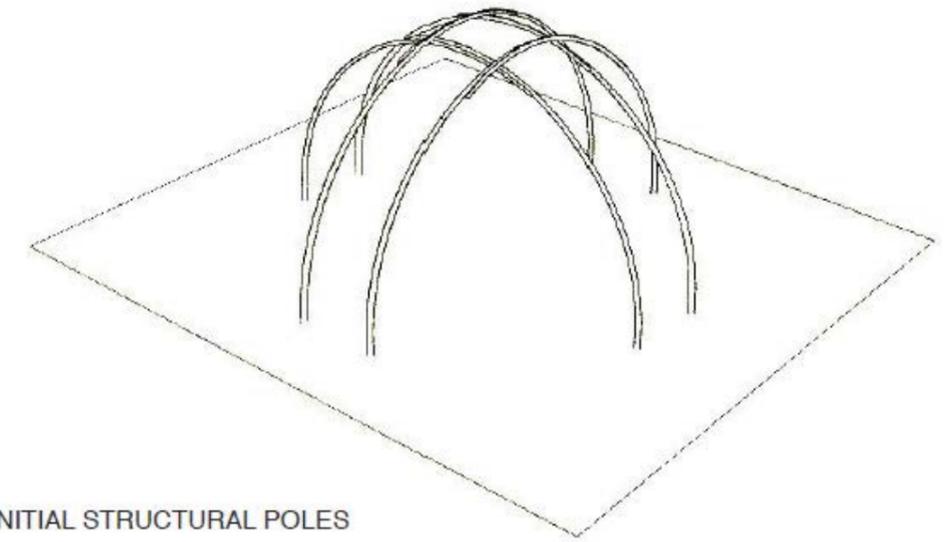
3D Digital Model of a beaver lodge, beaver dam, and pond in which the lodge and dam are located completed in Rhino 6. The beaver dam and beaver lodge were then rendered in a painting by a member of the Group of Seven. The painting is A Northern Lake by Tom Thomson.



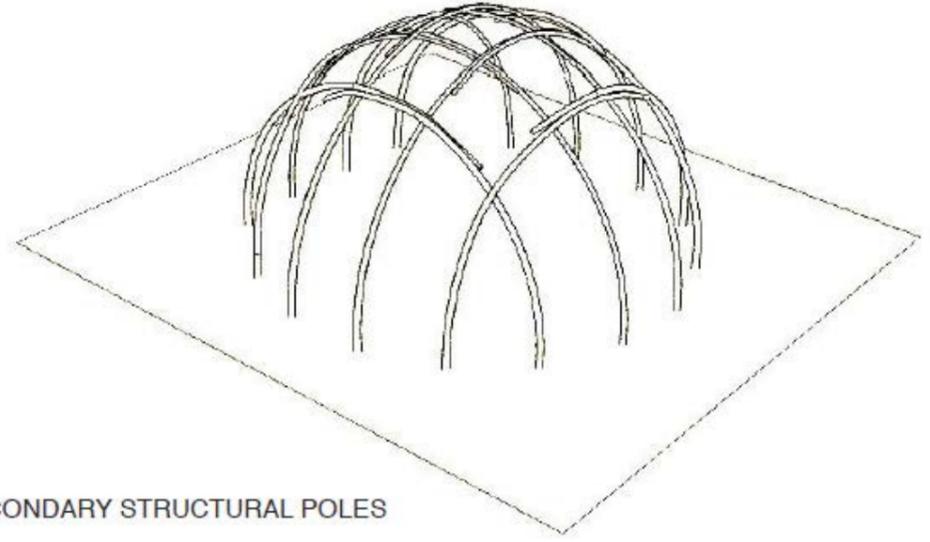
**INDIGENOUS  
MODEL  
ASSIGNMENT**



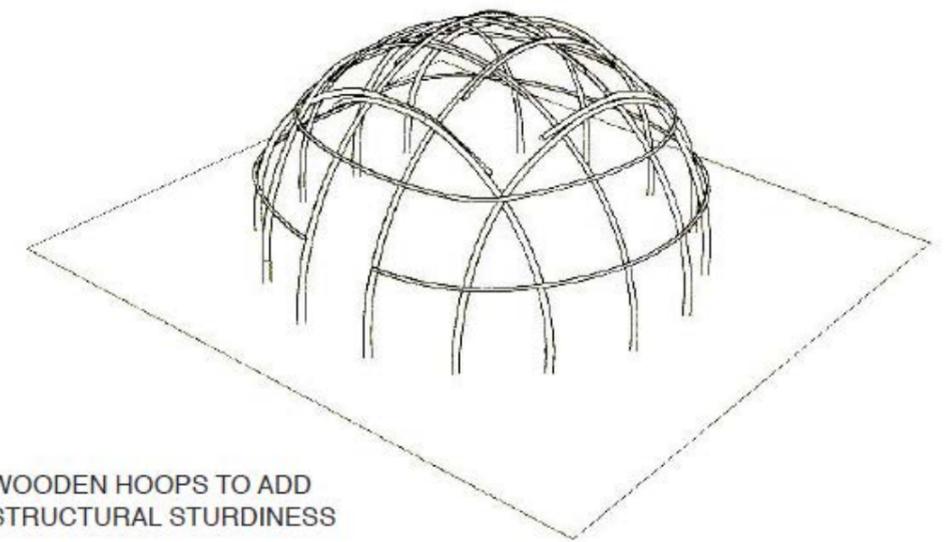
3D Digital Model of a bent wood structure that accommodates four sleeping adults. The wigwam that I created with Rhino 6 was then rendered in a contemporary Anishinaabek piece of artwork. The sketch used in my render was completed by Carl Ray.



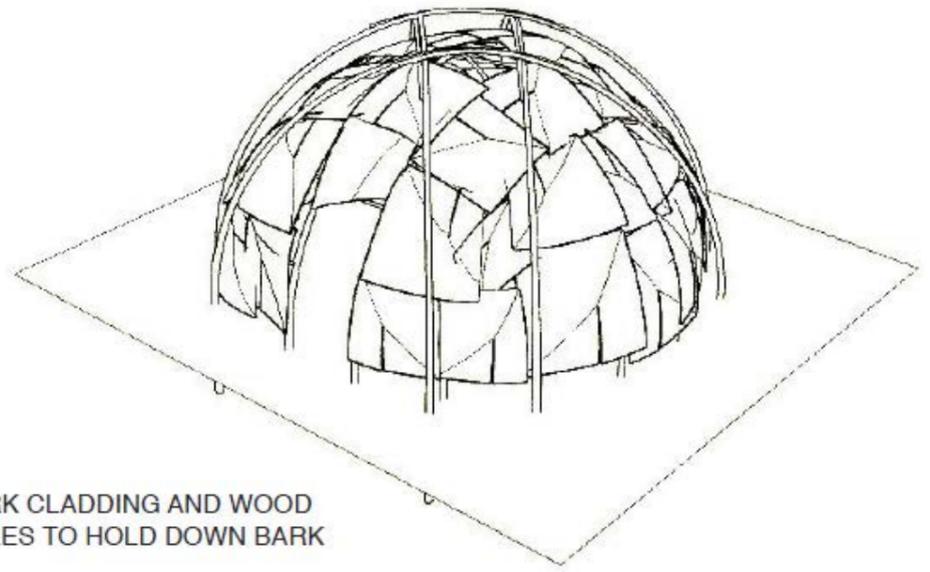
INITIAL STRUCTURAL POLES



SECONDARY STRUCTURAL POLES



WOODEN HOOPS TO ADD STRUCTURAL STURDINESS



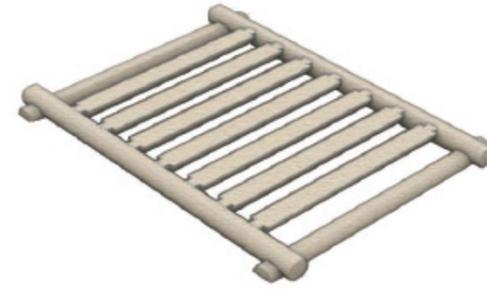
BARK CLADDING AND WOOD POLES TO HOLD DOWN BARK

# COLONIAL MODEL ASSIGNMENT

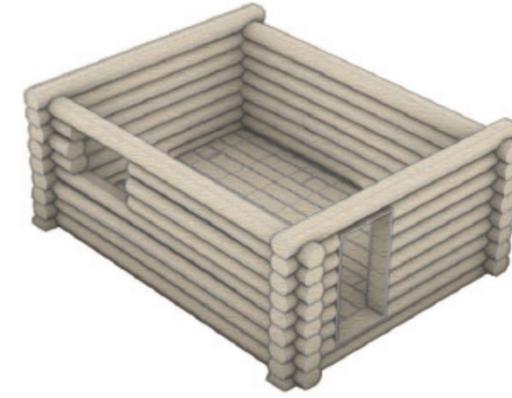
3D Digital model of a Colonial timber structure based on the instructions from the Introduction, Chapter 1, the introduction and Article 1 of Chapter 2 of Laugier's An Essay on Architecture.

The structure created in Rhino 6 was then rendered with Photoshop to look like a piece of artwork created by artist and poet William Blake. Included in the render are three passages from Laugier's An Essay on Architecture that inspired the design of the timber structure.

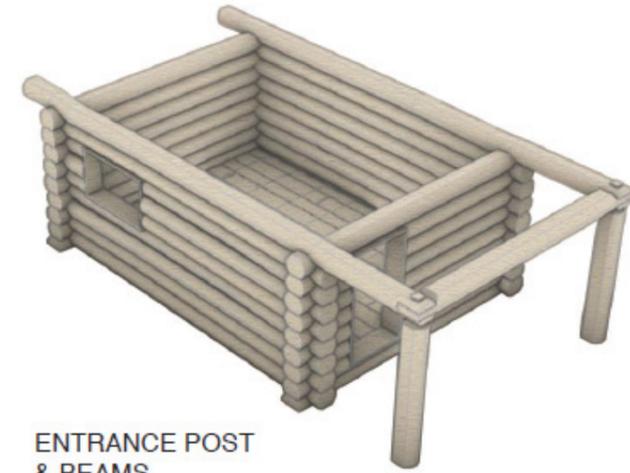
- 'it is with Architecture as with all other arts; its principles are founded upon simple nature...' pg.9
- 'the column should be round, as nature forms nothing square...' pg.15
- 'the roof always terminates in a point more or less sharp; the pediment which is the representation of it ought strictly to imitate this form. Then the arched pediments are against nature...' pg.38



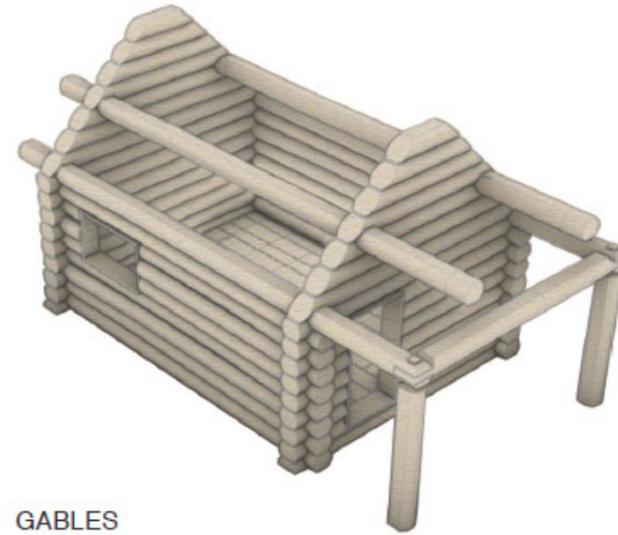
BASE



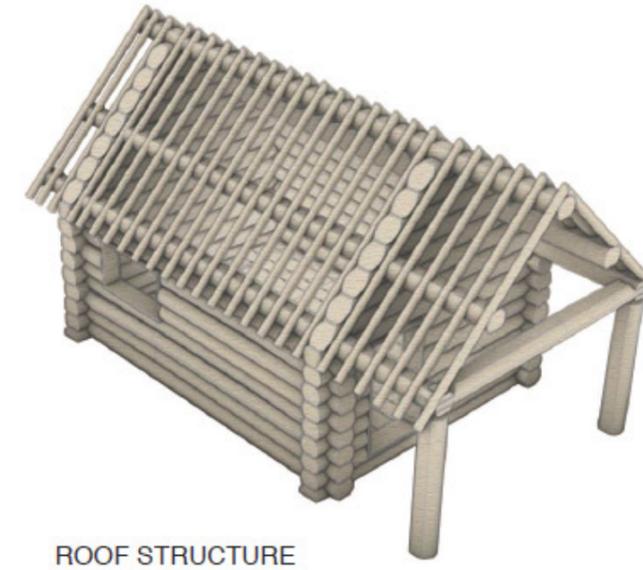
FLOOR, WALLS & OPENINGS



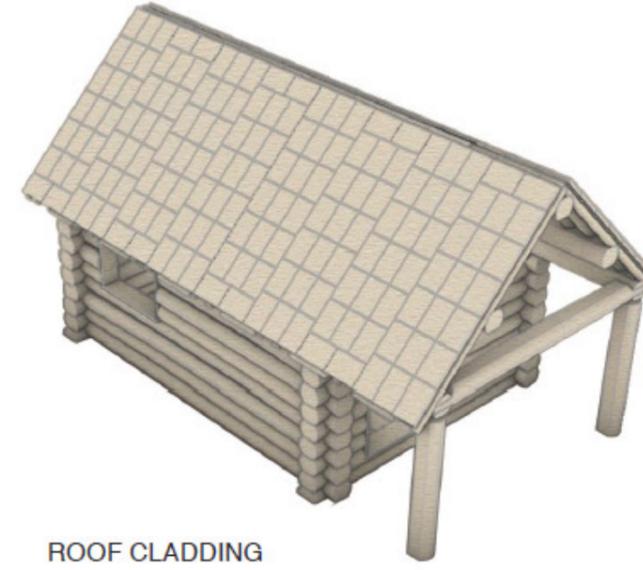
ENTRANCE POST & BEAMS



GABLES



ROOF STRUCTURE



ROOF CLADDING