KEVIN DOLPHIN

e: kevin.t.dolphin@gmail.com
w: kevindolphin.com
l: ca.linkedin.com/in/dolphink

STUDENT RESIDENCE

My final year project in technical college was to design a student residence for 200 students in a team with two other students. Instead of using a large single “block” method, we chose a townhouse style unit of eight occupants per building. The twenty-four units were strategically placed to create an easily navigable layout, with two interior courtyards allowing for casual gatherings and social events. The “village” would be located directly in front of the existing residence, with a large pedestrian bridge connecting the two sites and a new proposed green space linking the residences and the college.

As a team we had a great interest in West Coast style architecture, both in exterior aesthetic style and modernness of the interior. Precedent was drawn from small mountain towns such as Canmore, Banff, Jasper, as well as the natural environment that surrounds those areas.

Central to our design was sustainable construction. We took inspiration from three recognized responsible construction methods: LEED (Efficient Design), Net-Zero (Energy Balance), and Passivhaus (Efficient Construction). A two-phase system was implemented using active techniques to harvest resources and passive techniques to maximize these resources. Super insulated 14” thick wall systems with thermal bridge reduction were used to retain heat; air management systems involving heat recycling and airtight construction were used to control air movement; and the use of thermally efficient products in the form of triple glazed windows to ensure heat losses are kept to a minimum.

collaboration with Connor Clark + Richard Pozeg
faculty tutor: Peter Marzynski

2012

precedent images

unit floorplans, sketchup

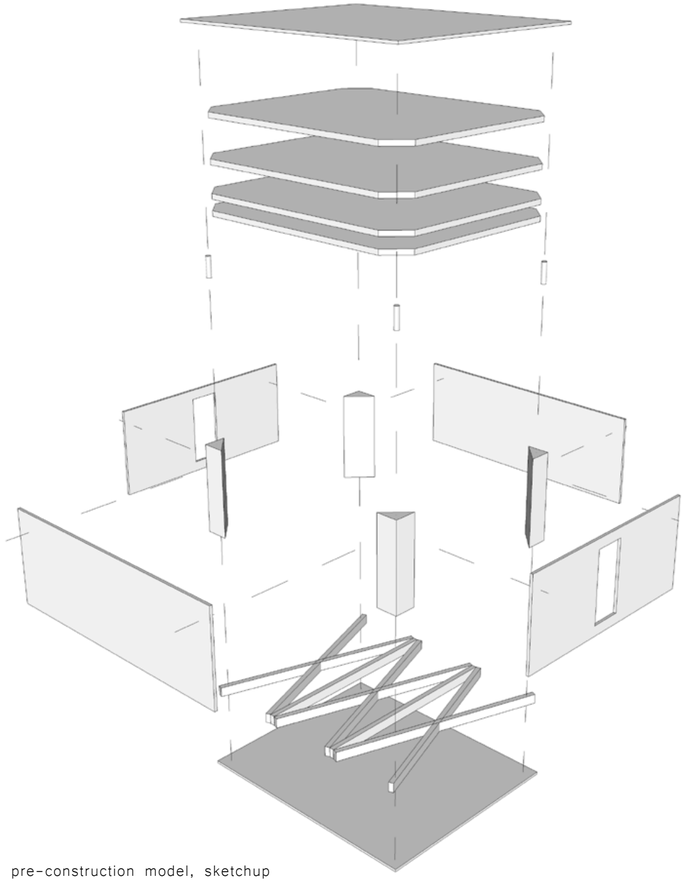
BEDS PORTFOLIO CRATE

I have always enjoyed building things with my hands. When the time came to assemble my BEDs entrance portfolio I thought it was a perfect opportunity to experiment with a container for my work.

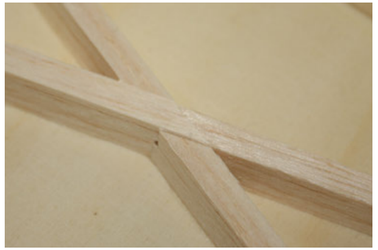
I had been drawn to the small boxes mandarin oranges are shipped in, as they are both sturdy and have an attractive elegance of economy to them.

The crate portfolio was constructed from thin plywood and used minimal glue, instead relying on tight friction fits. A lid with my personal logo was attached and secured using four pegs with a string wound around each. Portfolio pages are accessed by lifting them up and out using the finger holes on either side of the crate.

2015



pre-construction model, sketchup



NOCTURNE: ART AT NIGHT

Nocturne is an annual city-wide night festival held each Autumn in Halifax, Nova Scotia. A particular theme is chosen by the event's curators, with the theme of 2015 being "Found and Lost and Found". There is wide spread participation around the city and for one night in October many venues open their doors for a free night of art and entertainment.

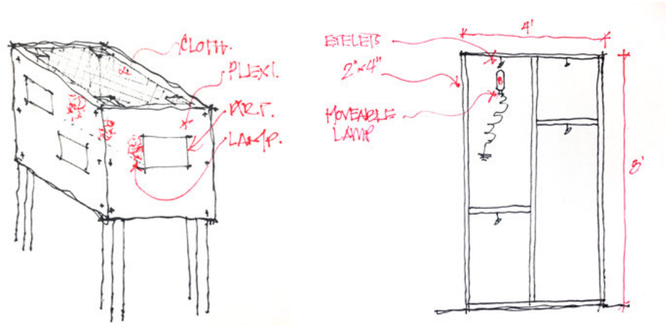
Dalhousie's Architectural Student Association put together a small team to participate in last year's event. Our installation was based around the idea of recording memories from the night in a visible and additive way. Rolls of trace paper were fixed to large back-lit acrylic sheets that the event attendees drew, wrote, and recorded their ideas on. As the night went on we added subsequent layers of trace to the wall so that the ideas of the previous artists would not only be remembered but also built onto.

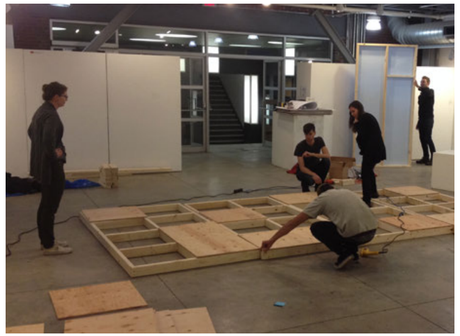
By the end of the night we had several hundred meters of trace paper that were completely full of sketches and doodles and ideas - a tangible record of the night's events.

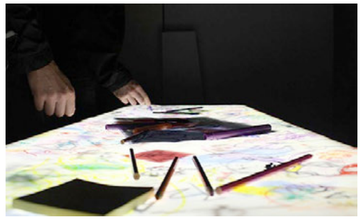
collaboration with DASA members

NOCTURNE
ART AT NIGHT

2015





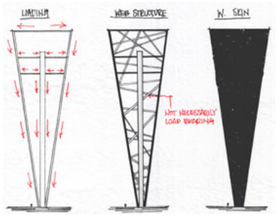


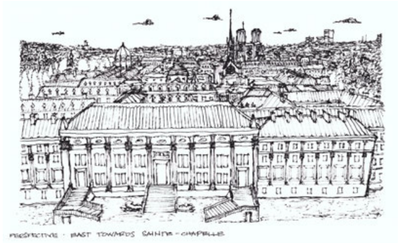
PARIS SPIRES

The site for my first undergraduate project was on the Île de la Cité, an island in the center of Paris, France. The intent of the project was to create a memory of the Paris terror attacks of November 2015. The eastern tower has an observation deck that offers a commanding view of city of Paris in all directions. The western tower is unoccupied and stands as a memorial to those affected by the attacks. The two are attached with cables between them, a permanent link between people.

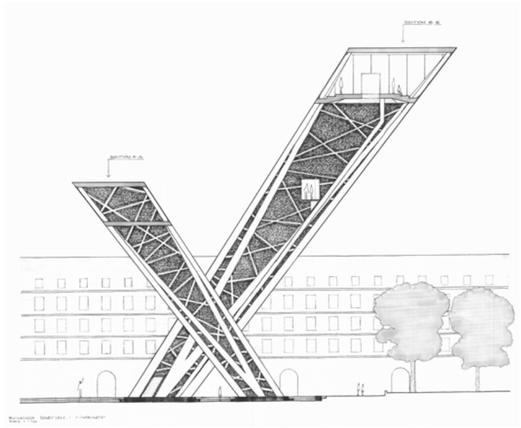
The towers are built using a skeleton of steel supporting the main bulk of the weight. The thinner secondary web structure supports a black Kevlar skin that conceals the interior of the tower.

faculty tutor: Alec Brown

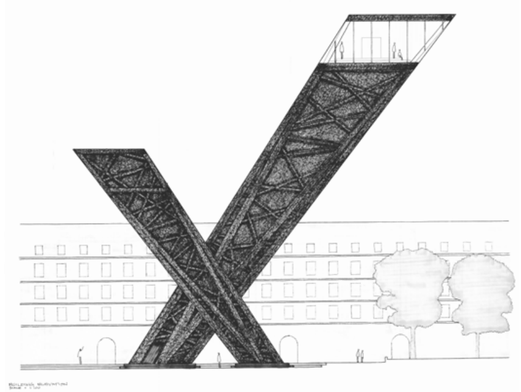




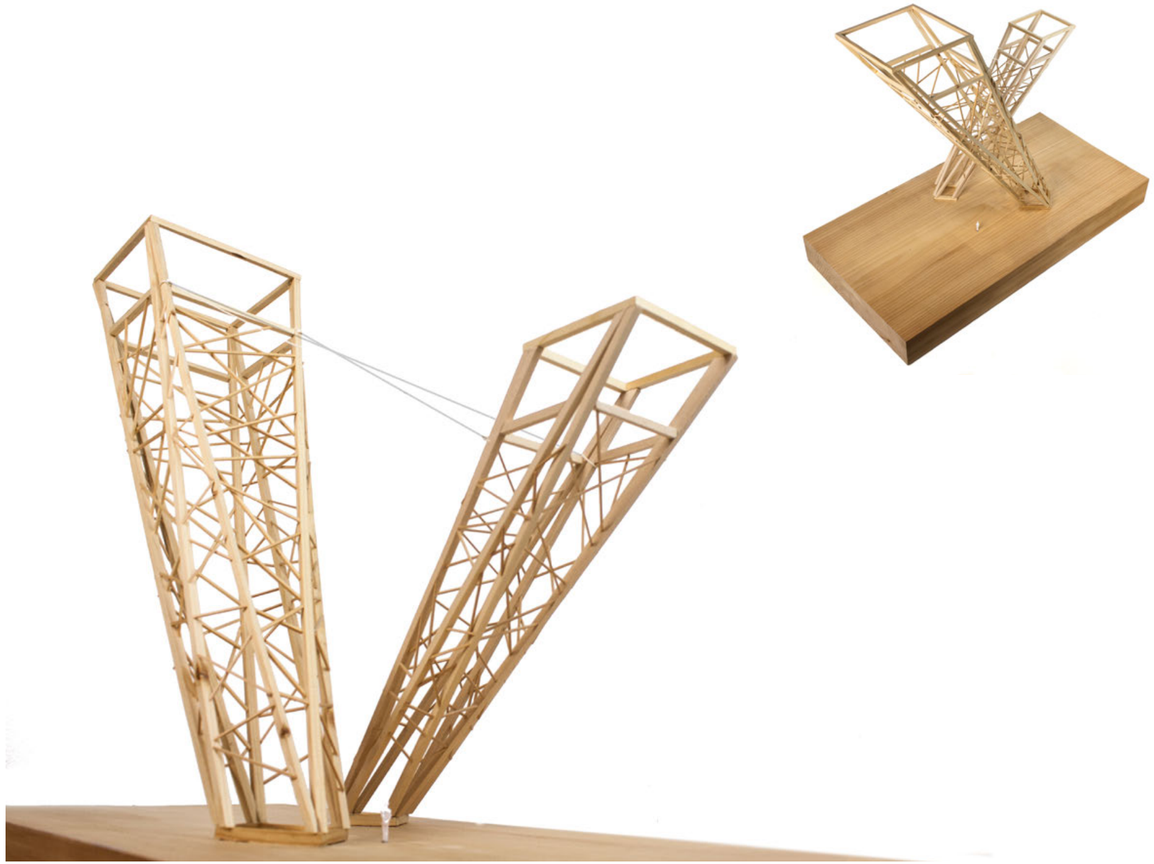
2015



section



elevation



WINTERSET ART COMPETITION

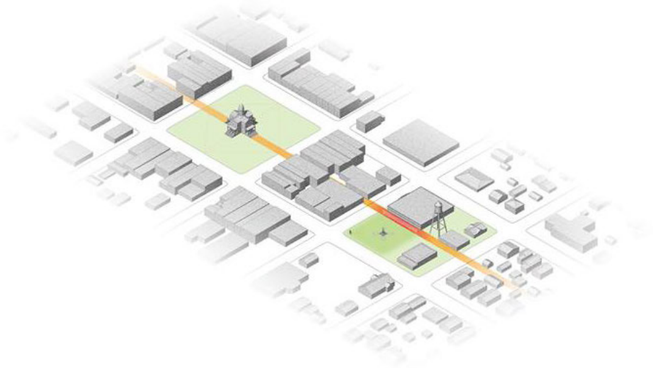
This project was a competition between several universities to design an art installation for a library in Winterset, Iowa – Dalhousie being the only entry from outside of the United States. This student based team was led by Dalhousie faculty Roger Mullin and Eric Stotts. Students applied and a group of eleven were selected to help bring the project to life. The short time frame – two weeks – meant our team was collaborating every other day to generate and refine ideas.

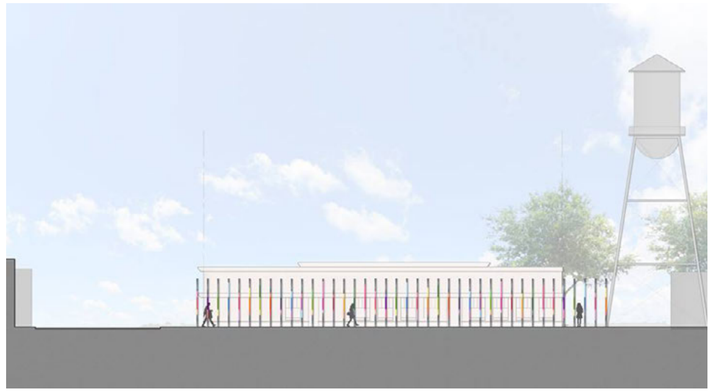
The proposed installation is a series of coloured poles that run alongside the existing library, creating a colourful open space for multiple programmatic uses. The proposed site of construction shares a strong axis with that of the historic courthouse, with the poles helping to frame the viewers perspective. The poles also serve to strengthen the civic "face" of the library, forming a new backdrop, or arcade, that runs along the length of the park.

Although we were not selected as initial winners, the jury noted their interest in our entry and sought additional funding to see it built. A variation of this project is now on exhibit at a gallery in Des Moines, Iowa.

collaboration with Dalhousie students + faculty

2016





MoMANS Museum of Modern Art Nova Scotia

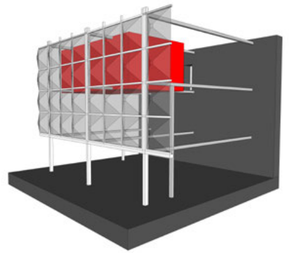
The site for this third semester project was located near the waterfront in downtown Halifax, with an assigned program of a museum of modern art. The thesis for this project was to create a museum that is flexible and dynamic in the way it displays art and sculpture. More traditional static spaces were discarded and replaced with elevators used as gallery spaces. The elevators are modular in design, allowing museum staff to curate the volume of the space for the size of the piece they intend to put on display. By changing the height and size of volumes the staff would be able to create a unique experience for each exhibition.

Influenced by Halifax's proud history as a port city, the main structural bay is constructed as and functions very similar to a dockside crane gantry. The galleries are suspended from a tall exposed structural skeleton and are accessed by a metal gangplank extending from a circulation and service wall.

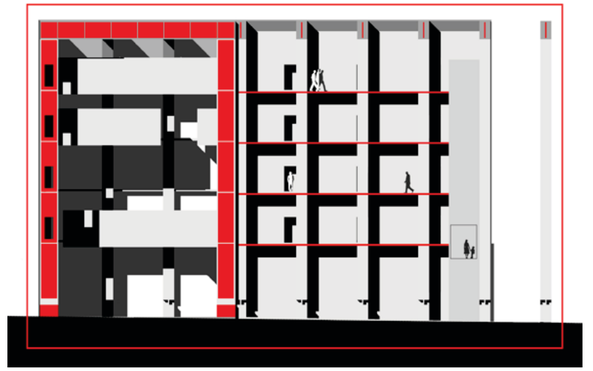
faculty tutor: Rayleen Hill

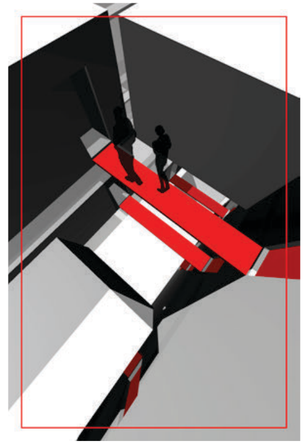
2016

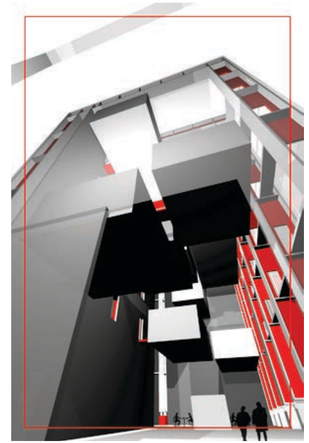
structural study model



facade study model

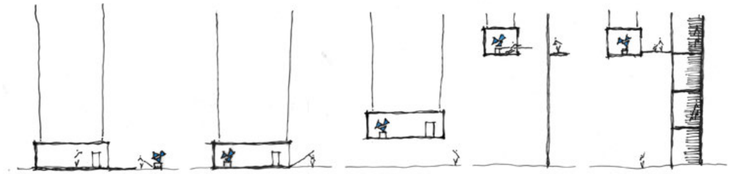






renderings, rhinoceros

MoMANS Museum of Modern Art Nova Scotia



assembly + installation guide

2016

plaxo showing floating volumes

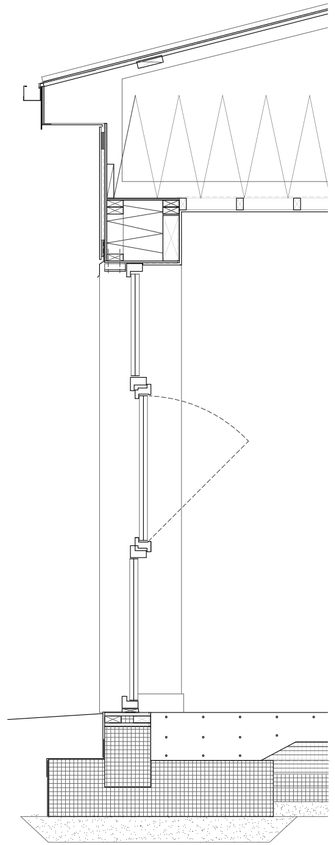
LANDFORM DESIGN + BUILD

Landform is a small design build firm located in the Okanagan Valley in the interior of British Columbia that I had the opportunity to spend my first work term with. The firm focuses on local projects offering architectural design as well as construction administration and management through the in house design-build team. Being a small team I was thoroughly involved in a number of projects in various stages of design and construction.

One project that I am especially proud of my involvement with is a daycare for Okanagan College. The client team was looking for a high level of energy performance (PassivHaus) and was very involved in the design process, which kept the office on it's toes. With occupancy being planned less than a year from contract awarding our team worked very hard to make the project come together. Although I left before the building was handed over, I had the pleasure of working on it during my work term and seeing the completed project on a recent visit to Penticton.

Because of the required climatic performance the section developed into quite a unique drawing with a concrete floor being poured over a very thick layer of rigid insulation. The building had a number of passive strategies like thick insulating floors, phase change wall coatings, and an earth tube system.

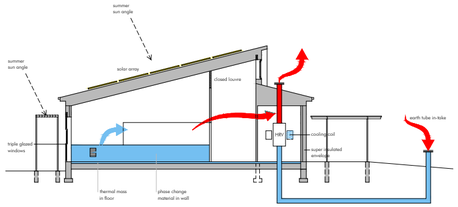
2016



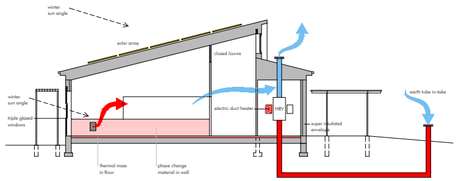
wall section with operable glazing

digital model

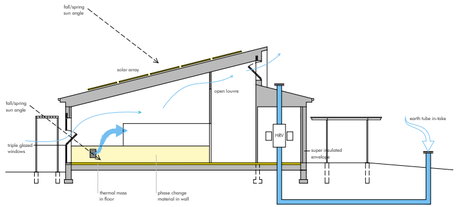
as-built



cooling mode



heating mode

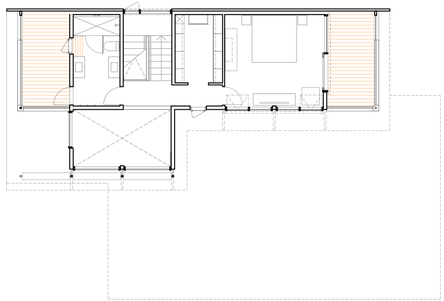


natural mode

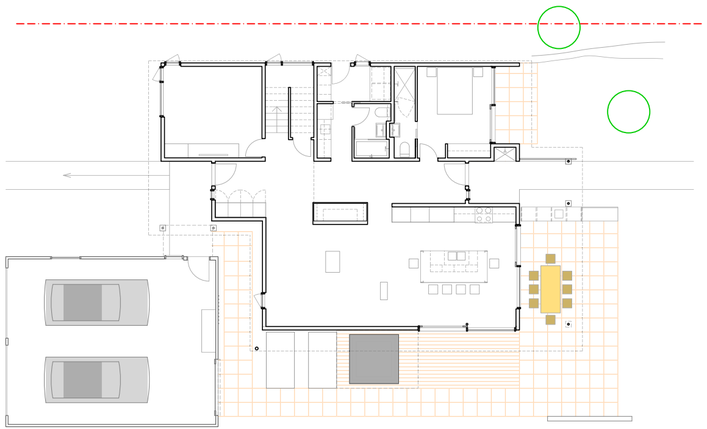
LANDFORM DESIGN + BUILD

A second project I spent time on was a single family design build project on the shores of Skaha Lake in the Okanagan. The clients wanted plenty of space to entertain with views towards the lake, and beach access as they were avid kite-surfers.

The project had just broken ground while I was at Landform and over the course of my term there I worked on updating the construction drawing set and digital model as per the clients request. On a recent trip to Penticton I managed to visit the completed project - very rewarding to see it all come together.



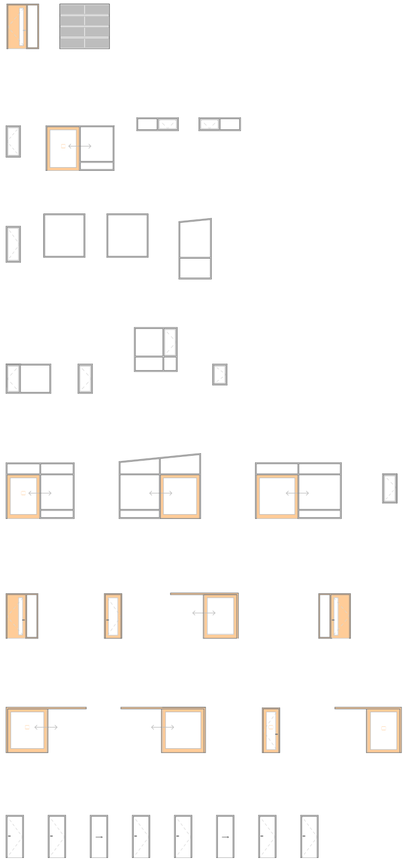
second floor



first floor

digital model

as-built



door + window schedule

2016

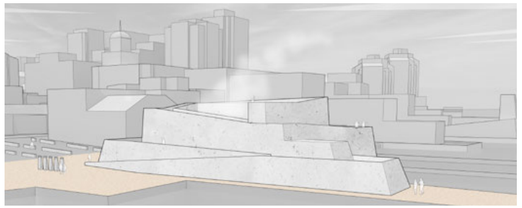
WATERFRONT BATH HOUSE

My final undergraduate project was a proposal for a bath house on the Halifax waterfront. Bath houses are a popular pastime in countries around the world but they do not have the same traction in North America. I believe that by connecting the public and the users public bathing could have a smoother introduction here.

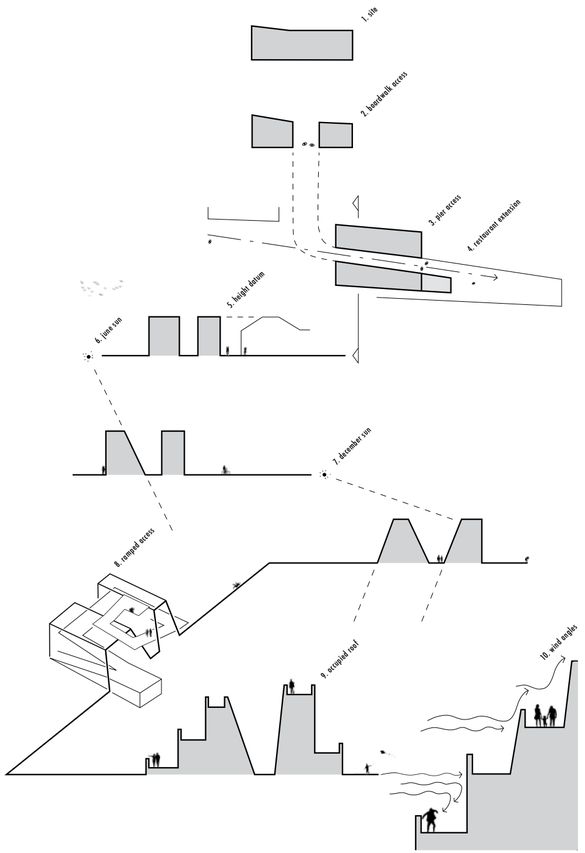
The proposal engages the public and private through circulation, massing, and views both inward and outward. The goal was to selectively connect those inside and those outside visually and audibly to introduce Halifax to the idea of public bathing. Glazing allows views in and out, with balconies open to the boardwalk creating a point of contact. The interior program is introverted and focuses in to a central public atrium that sits between the north and south sections of the building. The exterior tiered public pedestrian ramp acts as an look out point and a different way to experience the Halifax boardwalk with views of the new pier, courtyard, the Narrows and the ocean.

During the course of the semester I worked towards creating a large perspective section as the centre piece of my final pin-up. At 72" wide, the drawing helped convey a sense of scale, detailing, inhabitation, internal layout, and external relationships all at once.

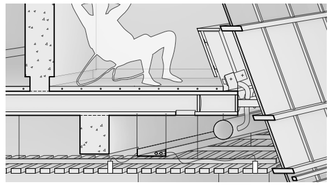
faculty tutor: Talbot Sweetapple

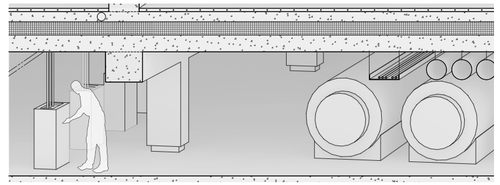


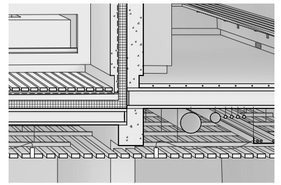
2017

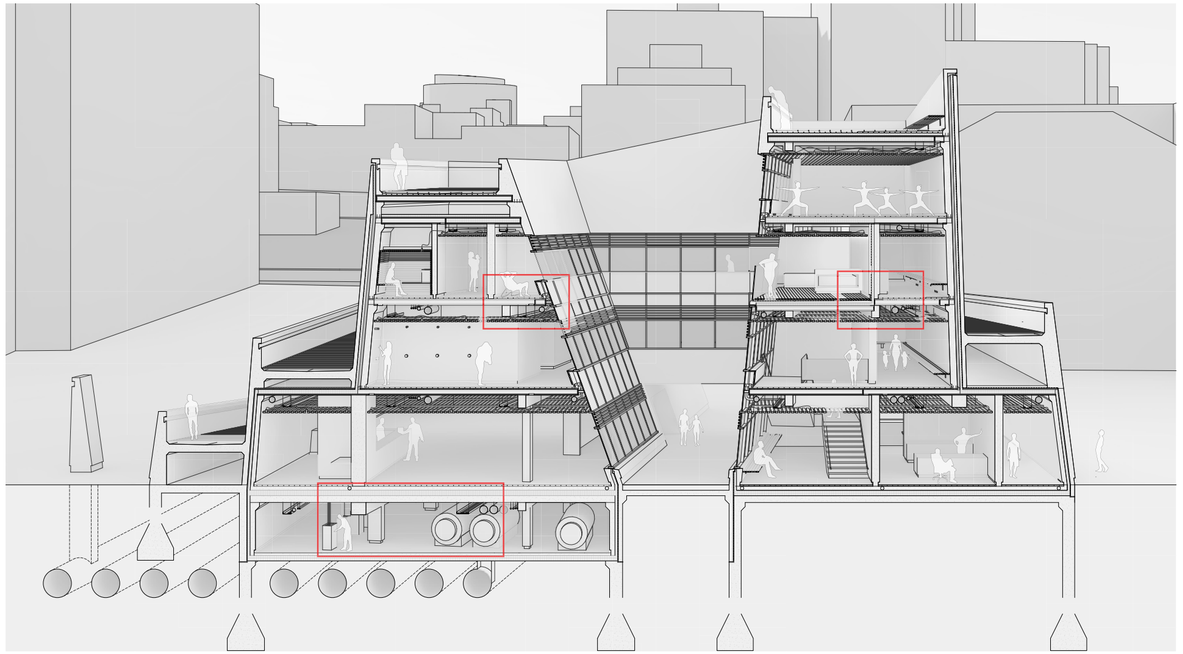


form generation









ICELAND INHABITATION

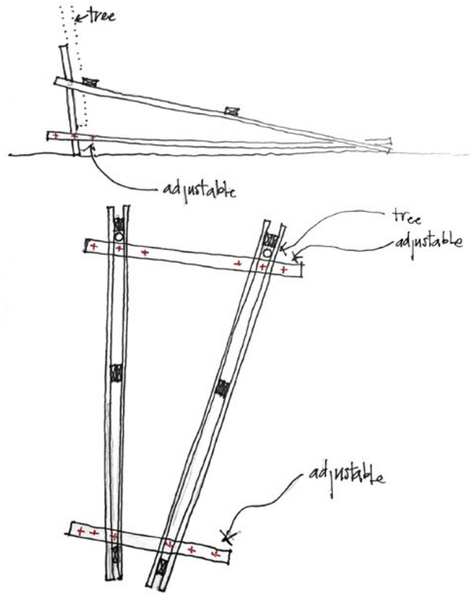
During the first term of my Masters I was fortunate enough to travel to Iceland with a studio group lead by Dalhousie faculty Roger Mullin. The focus of the project began with an awareness of the heavy deforestation Iceland has gone through. The population historically used wood for boats, fuel, and home building to such an excess that few stands of trees remain on the island. Natural disasters also had an effect - one of the largest forests on Iceland was destroyed by a volcanic eruption. The agricultural community is aware of the fantastic benefits of trees as windbreaks and soil stabilizers and there is interest in reforesting through a project called Hekluskógar.

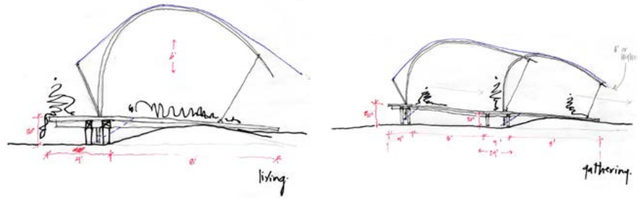
The thesis of the project revolved around an idea of a hub from where volunteers from Hekluskógar could hold workshops and distribute native northern birch tree seedlings and saplings from. The buildings themselves would be experiments of wood construction, with the structural forces inherent in the trees producing arcs that generated the form of the buildings. My partner and I designed and built a jig that would be capable of bending green trees and, with a connection through a local farm, managed to secure and harvest a dozen trees to experiment with.

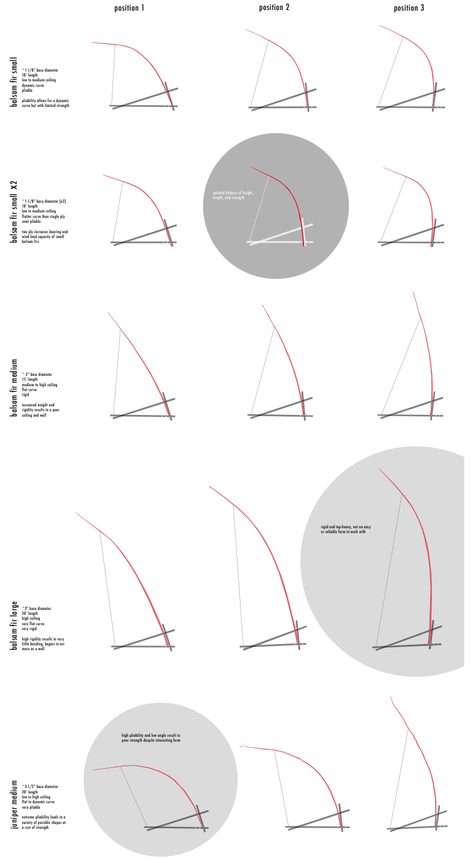
Over the course of a day we de-barked and tested different configurations, documenting along the way. Our findings were displayed in a end of term exhibition.

collaboration with Connor Clark
faculty tutor: Roger Mullin

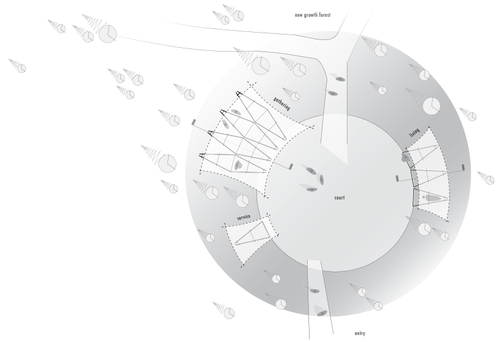
2017



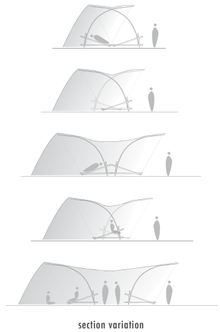




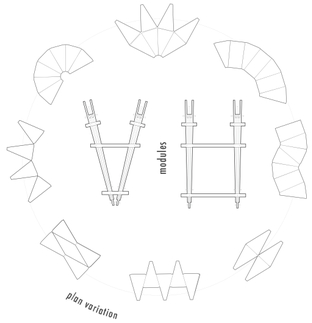
form generations



site strategy



section variation



configurations

2017

form generation

end of term exhibition

FREELAB: BOATSHED I

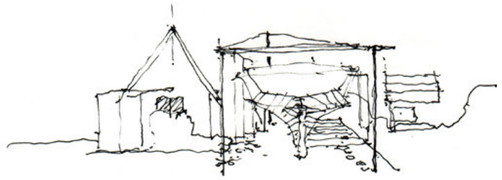
For two weeks each summer students from Dalhousie's Architecture program work on a full-scale project with a vertically integrated team consisting of faculty and students. These projects occur world wide and differ through their scale and objectives.

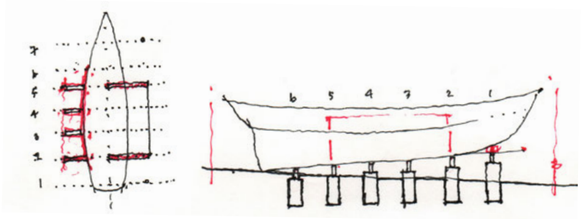
In 2016 my FreeLab was spent on the north shore of Nova Scotia in River John. For two weeks our team (lead by Dalhousie faculty Roger Mullin) designed and began building a shelter to cover a hand built forty foot vessel that had been shored up not more than 150 feet from the ocean. Following the enclosure the boat hull would be cut into and occupied with a bunk and several small pieces of built-in furniture. A set of sketches and a scaled model of the vessel and structure were developed in tandem with the project to aid the build team.

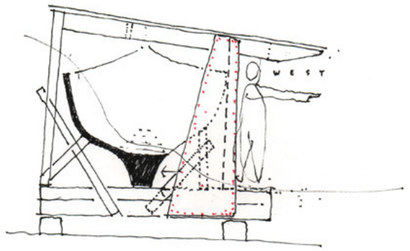
The project ended up becoming quite complicated and was a near constant barrage of hard physical labour however our team was more than happy to tackle ten hour days with enthusiasm. The culmination of two weeks work saw the boat's antiquated shoring removed and replaced with new concrete piles and two ply 8"x8" beams, quite a feat considering the boat weighed in excess of 8,000 lbs and we operated with nearly zero mechanical assistance. Although we never got to cutting into the hull a super structure was erected to prepare for the FreeLab that occurred in the summer of 2017 which aimed complete the project.

collaboration with Dalhousie students + faculty

2016







on-site sketches

FREELAB: BOATSHED II

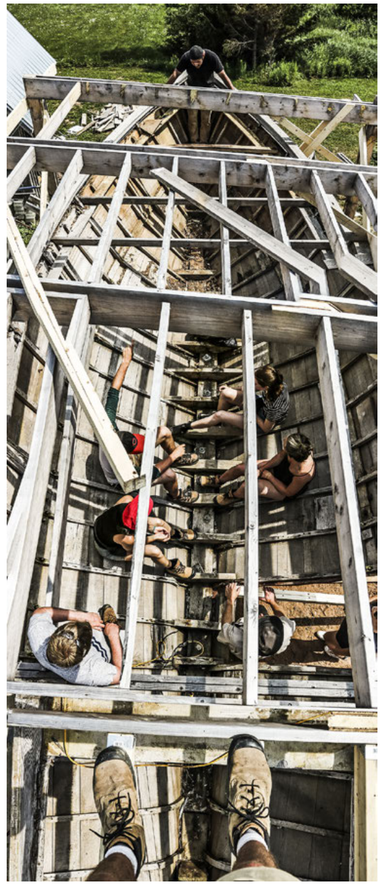
In the summer of 2017 I was fortunate enough to return to River John to continue working on the BoatShed project. We were again lead by Dalhousie faculty Roger Mullin and brought along a few familiar faces from the previous year. The team enthusiastically tackled the project from the point we left it the previous summer.

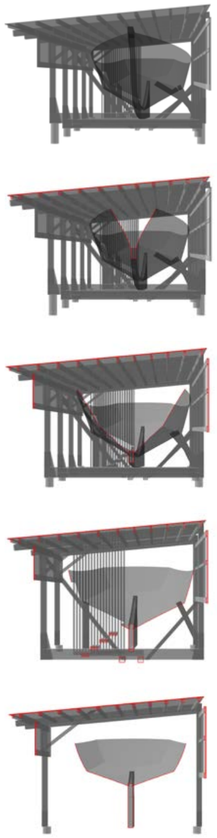
From the previously built super structure we were able to raise primary roof rafters and experiment with different ways to complete the roof and wall cladding. There was frequent consultation between our group and a healthy amount of prototyping. The scale model that was begun in 2016 was brought along and actively updated to reflect the current condition of the build, allowing the group to quickly discuss strategies at a smaller scale. A Rhino model was also constructed as a digital aid to the project.

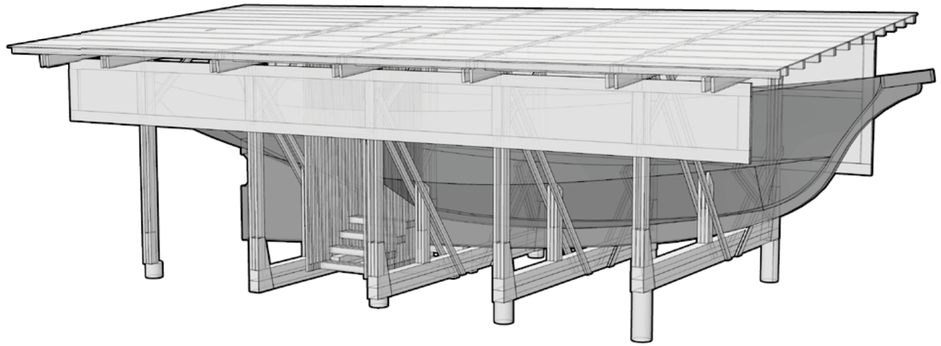
With a bit of luck we were able to cut into the hull and experience the interior / exterior connection for the first time. The cladding was kept simple, a layer of T+G decking installed diagonally to assist the structure in shear. An Alvar Aalto inspired entrance staircase was built to connect the keel walkway to the ground outside. The interior was mocked up in a simple fashion, allowing the boat's owner to experiment with his own interpretation of how the final product might look.

collaboration with Dalhousie students + faculty

2017







2017

digital studies, Rhino

KEVIN DOLPHIN

e: kevin.t.dolphin@gmail.com
w: kevindolphin.com
l: ca.linkedin.com/in/dolphink