

VANCOUVER BUBBLE

A collaboration with the Vancouver Design Nerds and HCMA Architecture + Design | Fall 2017
Jesi Carson, MDES 2018 | GSMD 600 Grad Design Studio | Emily Carr University of Art + Design

Vancouver Bubble

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Promotional Image for the Vancouver Bubble Design Jam | Produced by the Vancouver Design Nerds (2017)

1.0 Proposal

When Eesmyal Santos, VDN's Executive Director, circulated the VIVA Vancouver Refresh call for urban activation proposals to our steering committee, I immediately thought of the Seattle Design Nerds inflatable projects and thought it would be a great opportunity for us to try our hand at one. In other words, I was stoked on the idea, and took on the role of point person for the application process. I hosted a nerd meeting in my home, where about five nerds came together for a mini jam or brainstorming session to think about how we could pitch the inflatable idea to VIVA Vancouver.

The following is an excerpt from the project proposal submitted by the Vancouver Design Nerds (VDN) to the City of Vancouver's VIVA Vancouver Refresh call for proposals in May, 2017.

VIVA Refresh Proposal

The Vancouver Bubble is an immersive inflatable structure designed to be eye-catching and socially engaging. With a footprint of approximately 1,000 square feet, our intervention will accommodate numerous people within it and without it, with programming both inside and outside. There will be interactive audiovisuals, with projections on various surfaces of the structure.

We are partnering with TILT Curiosity Labs via HCMA Architecture + Design, who will support us in design and engagement expertise, and will be offering their time at a deep non-profit discount. Production will occur at MakerLabs, who are offering space and equipment in-kind. Our sister organization, the Seattle Design Nerds, are experts in designing and building inflatable structures for urban interventions, and so they are providing our team with technical support and supplemental materials. Should our proposal be selected, we are

automatically invited to bring the Vancouver Bubble to the Seattle Design Festival Block Party (link.designinpublic.org/BlockPartyCFP) in September, which would give the project international exposure with over 10,000 visitors. Members of Provibers (<http://provibers.com/>), experts in engagement, will participate during the activations.

The design process to develop the structure and engagement will follow proven design-thinking methodologies actively employed by both VDN and TILT/HCMA. Smaller scaled-down prototypes will be created at MakerLabs to test various design options in order to ensure a successful installation.

The structure will likely be made from heavy duty 6mm poly using extra wide Gorilla Shipping Tape and/or heat seams as connecting materials. Sandbags or water-filled bags will be used to secure the structure to the ground. The structure will likely be inflated using 24" high velocity fans. Access to grid-power or a generator will be required for the fans and A/V. The entire intervention will be designed to pack down into a small volume within 1-2 hours that could be moved by a single vehicle. Setup time is anticipated to be 2-3 hours. Members of both VDN and TILT/HCMA will be present during the activations to support the programming.

Our budget is \$3,000 for design, materials and manufacturing, \$1,500 for programming, and \$500 contingency, for a total of \$5,000. This includes significant in-kind discounts in labour and materials, which we anticipate will total at least \$5,000. Therefore, while we are only seeking a grant of \$5,000, the total project cost is likely closer to \$10,000.

2.0 Approval

VDN was awarded one of the \$5000 grants to activate three underused sites in the City of Vancouver during (we thought) the summer of 2017. But by the time VIVA Vancouver organized the kickoff, summer took over and people were away, including myself.

Meanwhile, I had been reading about relational art, social sculpture, situations, happenings, fluxus and other expressions of participatory art since the 1960's. I began to see the connection between my thesis research and the potential of the Vancouver Bubble installation - the creation of citizen space, inviting participation, building connections, facilitating conversations all fit into a new definition of what art could be. In addition, the process of the nerds to design the installation could itself be a participatory art form. It was while reading about Joseph Beuys *Bureau of Direct Democracy* at Documenta 5 in 1972 that the light bulb flashed - the Vancouver Bubble could be my final experiment, documented again in 360 film, but this time from an insider's perspective - my own.

With this newfound perspective, I was determined to refresh the Refresh, and pushed for next steps from VIVA Vancouver. By about mid July, the nerds were ready to regroup. We found that design drawings were needed to gain approval from the City of Vancouver's engineers before we could receive any budget for design and production. We also had to agree on a list of possible sites approved by the CoV.

The sites became both a constraint and an opportunity for design. Considering strategies of institutional critique, I was encouraged by my supervisor to look back ParaSITE, as well as a project by Christof Buchel, who recreated a refugee camp in an art gallery in Buchel.

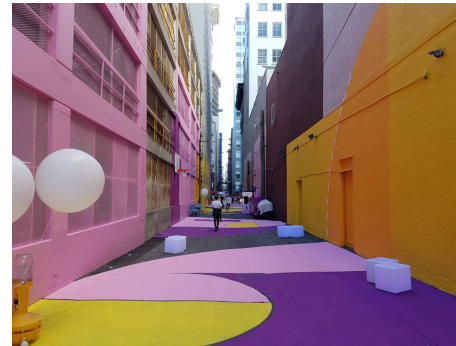
Possible Sites:



Vancouver Art Gallery Plaza



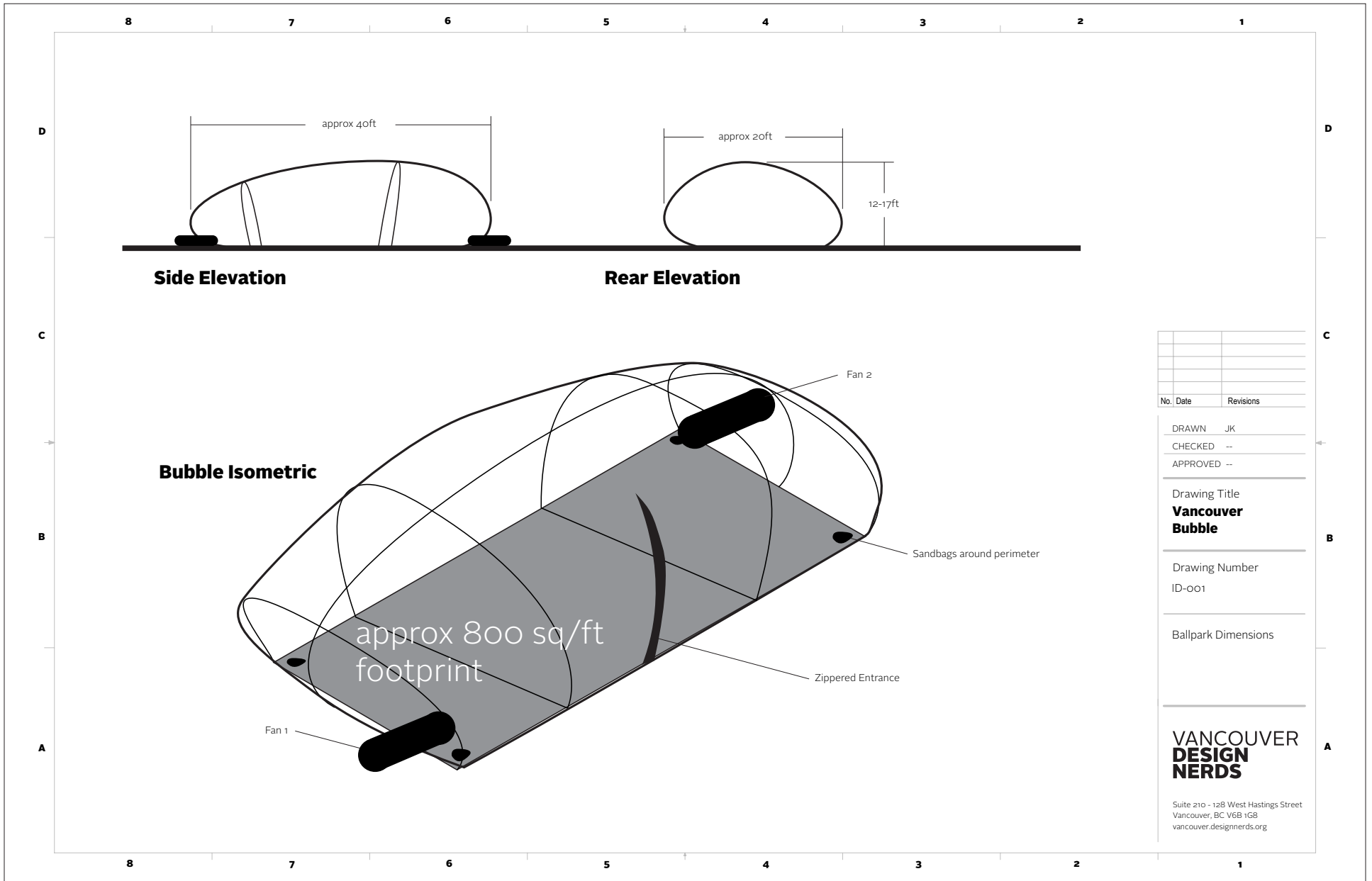
Spyglass Place



Alley Oop



Bill Curtis Square



No.	Date	Revisions

DRAWN JK
 CHECKED --
 APPROVED --

Drawing Title
Vancouver Bubble

Drawing Number
 ID-001

Ballpark Dimensions

VANCOUVER DESIGN NERDS

Suite 210 - 128 West Hastings Street
 Vancouver, BC V6B 1G8
 vancouver.designnerds.org

Plan submitted to City of Vancouver engineers for budget approval | Drawing by the Vancouver Design Nerds (2017)

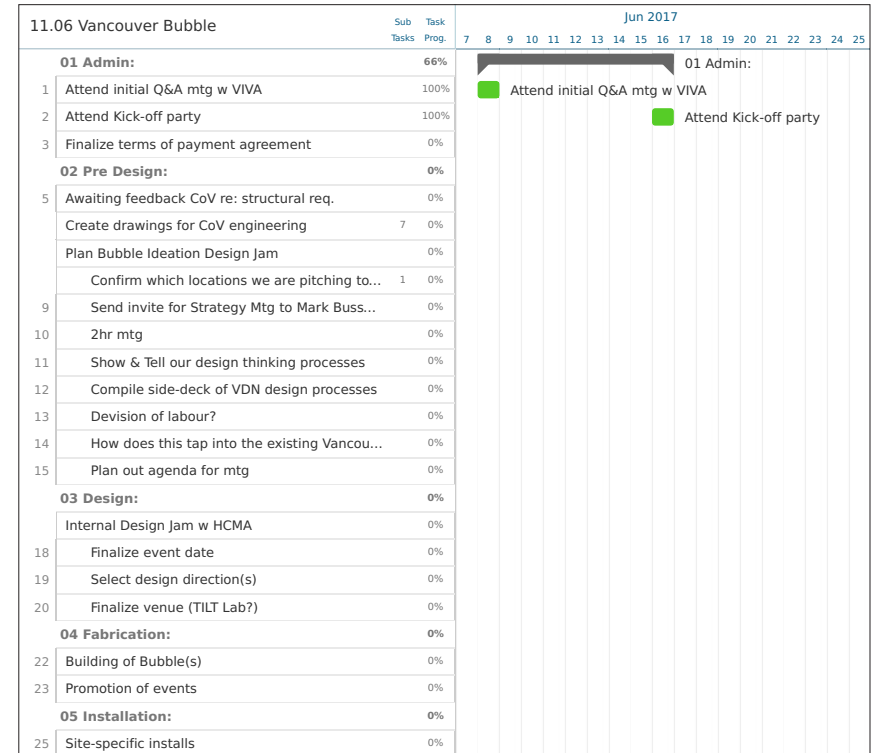
3.0 Planning

After gaining approval of our drawings and possible sites from the CoV, the VDN Steering Committee met and created a strategy for engaging our collaborators. Mark Busse of HCMA Architecture + Design, expressed interest in involving his colleagues as part of their TILT Curiosity Lab, and we thought it would be a great opportunity for our two collectives to learn from each other's participatory design processes.

We put together a timeline, including an initial kickoff meeting to discuss our ideas with Mark, followed by (we proposed) a design jam between our two internal teams to design the bubble in a collaborative way that employed elements of both our design strategies. We then hoped to be able to promote and produce our bubble and activate three sites before the end of 2017. Of course, as is the nature of participatory projects, things don't always go quite according to plan.

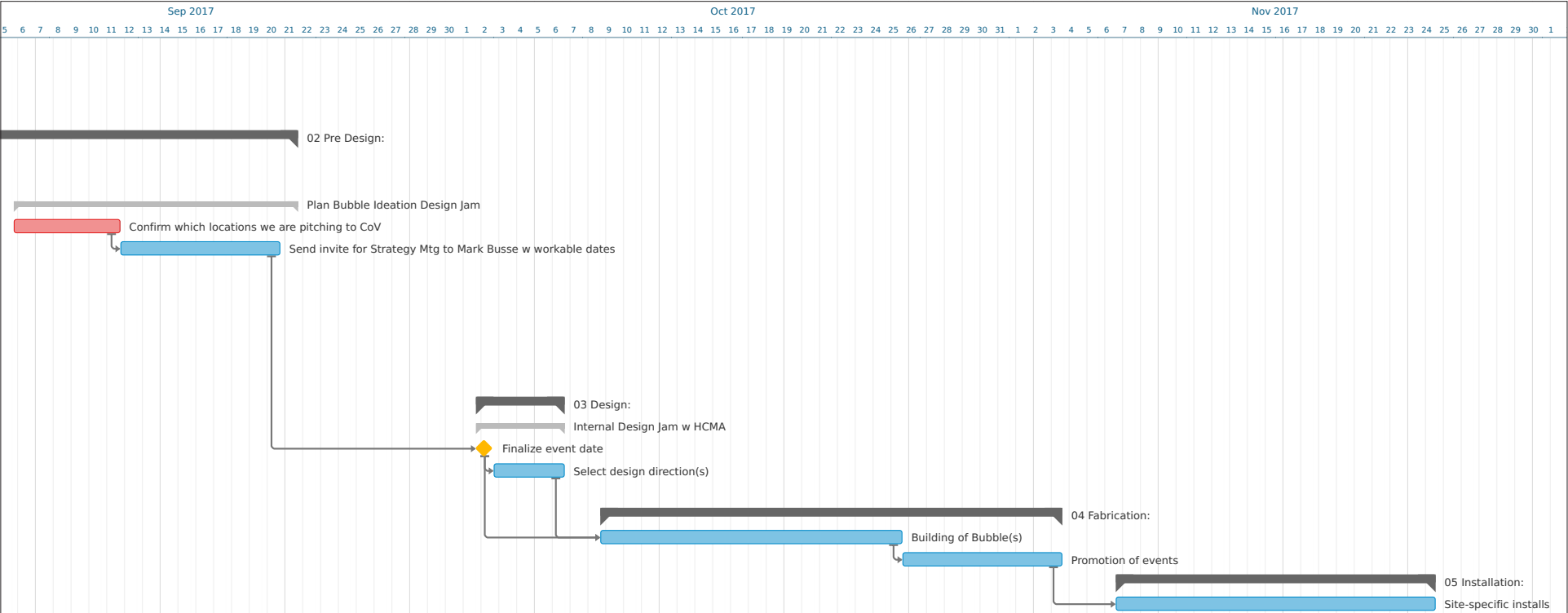
Our meeting with Mark was very productive, and we were also introduced to his colleague Steve DiPasquale. Mark and Steve were both keen on the idea of a jam to design the bubble, but rather than just our teams, Mark insisted that we open up the jam to the public. I was initially skeptical, thinking that productivity could be lessened and the timeline pushed, but convinced on the principle of participation. I realized that the jam itself was part of the conversation that we were having about the bubble and it's inherently political nature. The people who would engage in the jam could provide valuable insight into how and why the bubble could be more or less effective, the space it could occupy and the form it could potentially take.

Jam planning took on a greater complexity, being for a public audience and a group of 50-60 rather than just 10 participants. Luckily, the existing VDN process and assets made this pretty smooth.



Timeline of Vancouver Bubble | Gantt Chart by the Vancouver Design Nerds (2017)

3.0 Planning



4.0 Design Jam

The public design jam was held at the office of HCMA Architecture + Design. Mark, Steve and other members of the TILT Curiosity Lab team generously provided prototyping supplies, space, snacks and drinks for the event. Jared and I took point on leading the jam, including prepping the slideshow and remaining materials needed to create physical models of bubble ideas with the group.

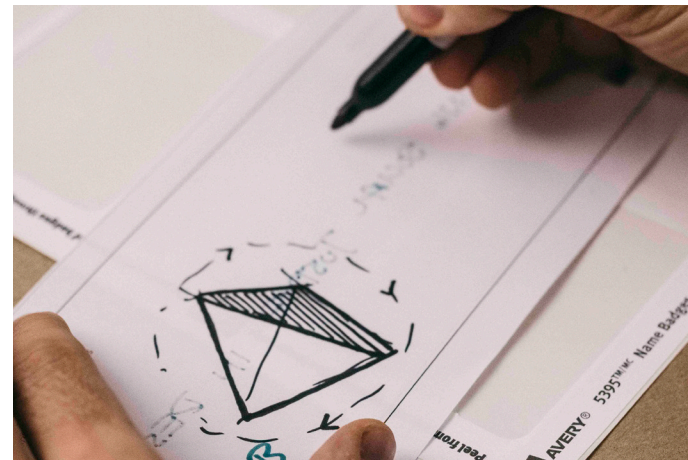
We constrained the work to two possible sites, Spyglass and Alley Oop, in the interest of gaining more concepts for less places. In particular, another VIVA Refresh project called *Enigmatic Colouration*, lead by Ben Cooper, was set to take place at Spyglass on November 24th and 25th, and we were given the unique opportunity to collaborate with him at the jam. Alley Oop was designed by HCMA Architecture + Design, and Steve was able to give good context for that site.

I brought my research about the “Right to the City” as the jumping off point for the jam, showing examples of the ParaSITE project, Beuys and others as precedent for creating citizen spaces and taking over institutional sites.

The goals of the jam were to have each group of about five participants work together to design both programming and form for one of the sites. Each phase of the jam (discover, define, develop, deliver) was geared towards meeting these goals.

Discover

Participants were given custom designed worksheets, and asked to interview each other, identifying a “cause” that they care about. Then they were to switch sheets to sketch three shapes that represent another teammates cause. The intention of this exercise was to warm up and get people thinking about connecting physical form to a theoretical concept or idea.



VDN “Discover” worksheets | Photos by Theunis Snyman (2017)

4.0 Design Jam

Define

During this phase, groups had to pick the site they were going to design for, as well as come up with some quick ideas for programming that could be developed further. Insight from the discovery phase in some cases influenced the programming ideas. For example, the team I was working with chose to focus on one of the causes that had been brought up - food security - and design some programming around that theme.

Develop

This was the longest phase of the jam process, and participants were offered a range of prototyping materials to work with. On each table, groups were given markers, paper, scissors, plastic sheeting and tape, with another table of extras like scrap foam core, tin foil, blow dryers and bike pumps available to finish off prototypes as needed. The combination of sketched out ideas and hands on making was a great success, and all groups managed to generate prototypes to communicate their site-specific programming ideas.

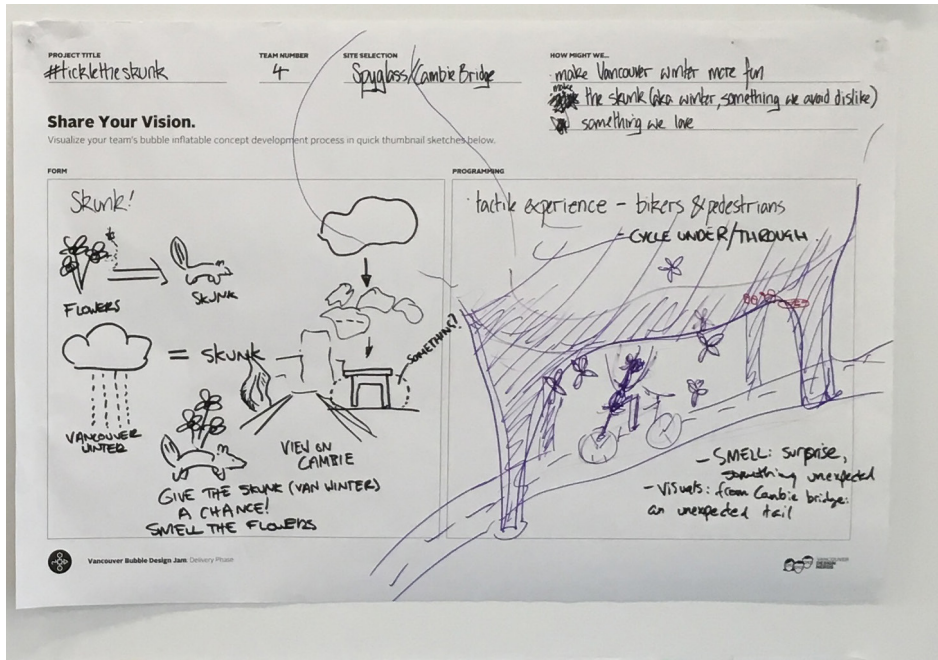
Deliver

Nearing the end of the jam, we handed out custom, large scale (architectural drawing sized) worksheets with specific quadrants. We asked for a project title, site selection, "how might we?", programming and form to be added to the poster, accompanied by each group's inflated small scale bubble prototype. Providing the large custom poster templates was a first for VDN, and I think greatly successful. It gave each group a template to communicate their ideas, along with a standardized system for us to document and understand each proposal for reference later in the design process. The physical models also became a key part of the delivery, with each group successfully inflating at least one model. It was incredible to see so much produced in three hours!



"Grow Opp" and "Tour Detour" posters and inflated models | Photos by Theunis Snyman (2017)

5.0 Design Jam Results



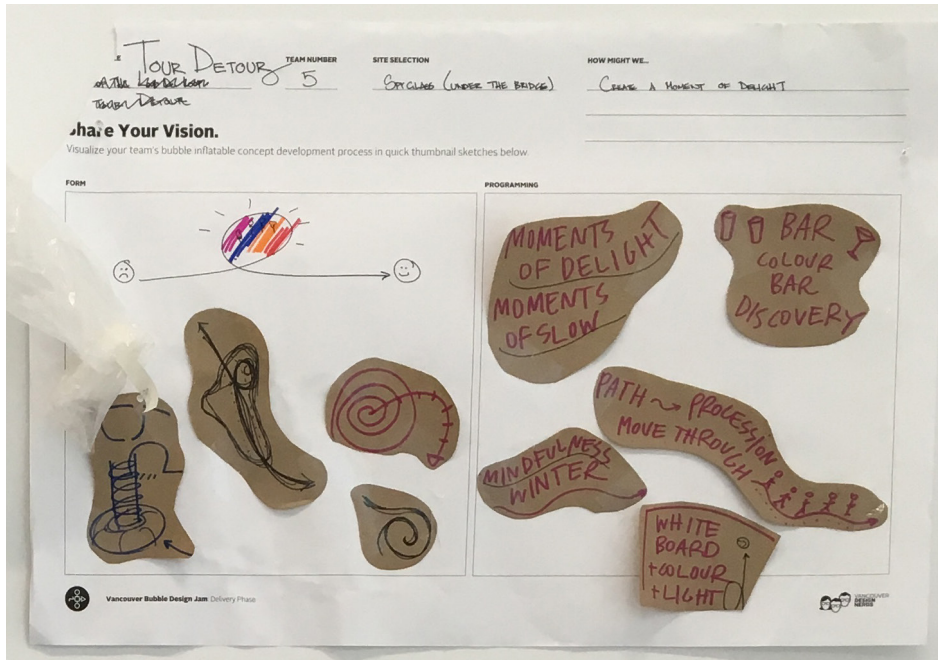
"#TickleTheSkunk" poster and inflated model | Photos by Theunis Snyman (2017)

#TickleTheSkunk

This pitch elevates the inflatable to a super large scale, spanning the width and overtaking the height of the Cambie Street Bridge. The head and tail of the skunk, which would be illuminated at night, attract potential visitors from the bridge level. On the ground level, the belly of the skunk would hover just above the cycle and walking paths, within reach of visitors below to reach up and #TickleTheSkunk as they pass through. Adding another sensory experience, the skunk would emit a floral scent.

During the reflection portion of the jam, where participants could share feedback about the experience, a member of the skunk team emphasized that they went with a whimsical and fun project because they needed a break from the heavy politics of social change. The skunk lightly offers social connection, conversation and in general all the aims of a typical VDN urban intervention, without being didactic or prescriptive about it. Simply put, #TickleTheSkunk makes winter more fun!

5.0 Design Jam Results



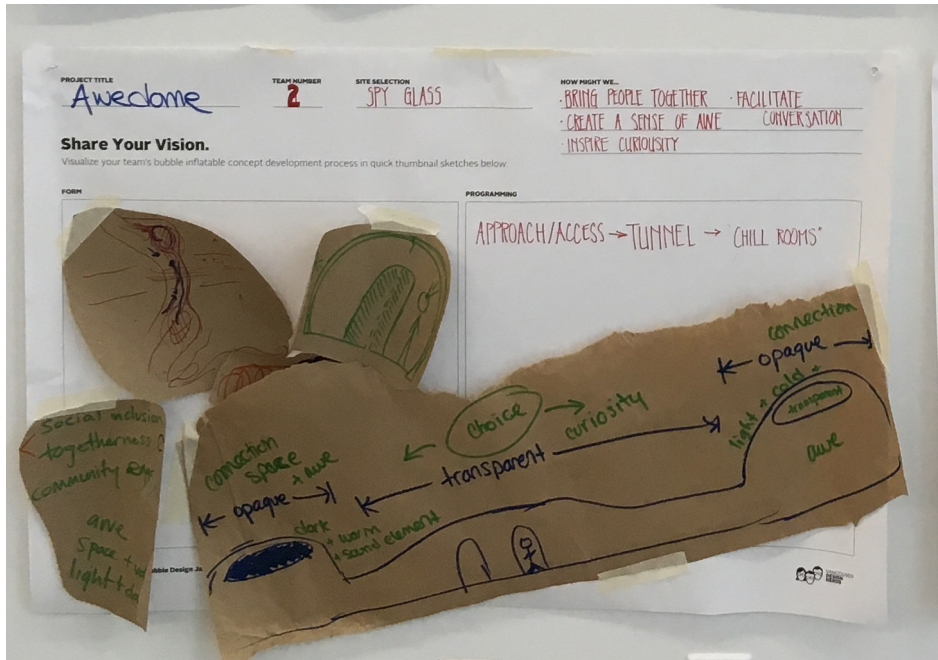
"Tour Detour" poster and inflated model | Photos by Theunis Snyman (2017)

Tour Detour

Making use of existing structures in the urban realm, the Tour Detour inflatable wraps around a pillar below the Cambie Street Bridge. Visitors can enter on one side, circle around, mix, mingle, have a cocktail perhaps, and exit the other side. By creating a pathway, visitors who are on the move might decide to stop for a moment and move through the installation on their way.

Tour Detour aims to create moments of delight, of slowness and of mindfulness during the winter months.

5.0 Design Jam Results



"Awedome" poster and inflated model | Photos by Theunis Snyman (2017)

Awedome

Also located under the south side of the Cambie Street Bridge, Awedome is designed to bring people together and inspire a sense of awe and curiosity. A tunnel shape spans the bridge with one dome on either side. The entrance is in the center of the tunnel, offering visitors two choices and inspiring a sense of curiosity. The first dome is brightly lit and chilly, with a clear window to see the stars. The second dome is much darker and warmer offering a different experience.

5.0 Design Jam Results



Dream House

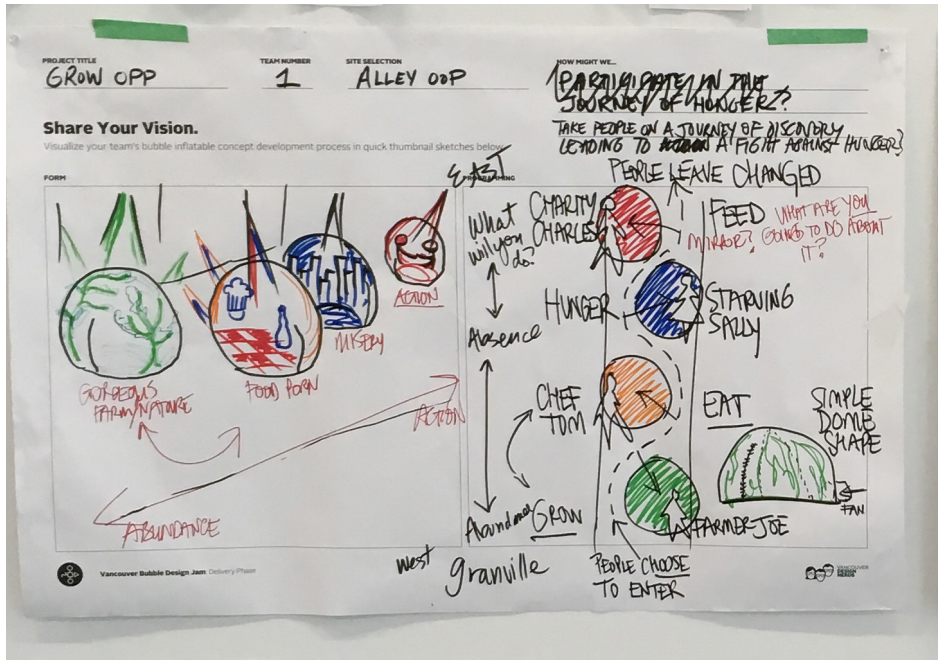
On the more serious end of the political commentary spectrum, the Alley Oop site was selected for the Dream House pitch. Perhaps because of the site's proximity to the Downtown East Side, or because of the height surrounding the potential form, this project draws attention to the housing crisis in Vancouver. Using the height of the buildings on either side of the laneway, the house shaped profile of the inflatable would press up against each side, creating a pressure fit that visitors could pass below. There was discussion of a condominium floor plan being projected below as well.



"Dream House" poster and inflated model | Photos by Theunis Snyman (2017)

This project is about the "Vancouver Dream" of home ownership that is out of reach for the majority of residents here. The house being elevated above the walkway speaks to this metaphor.

5.0 Design Jam Results



"Grow Opp" poster and inflated model | Photos by Theunis Snyman (2017)

Grow Opp

Food security was the jumping off point for this pitch. Grow Opp creates "opportunities for growth" by offering a series of inflatable structures, each with a unique message related to this theme. Also located in Alley Oop, Grow Opp, like Dream House, offers a more didactic political commentary on the state of our city.

Using projection mapping, each dome becomes an environment. Beginning at one end of the laneway, visitors enter the first dome, which represents the most wealthy and abundant food security situation, interacting with a gourmet

chef, perhaps sampling treats. Then, they encounter the farm, where an urban farmer would speak to the food production process. But then visitors would move on to the hunger dome, where the true experience of poverty would be represented, perhaps through storytelling from some of Vancouver's most marginalized folks. The final dome would offer an opportunity for visitors to make a difference, perhaps volunteering or making a donation. Somehow, visitors will leave this experience changed.

6.0 Post-Jam Design Process

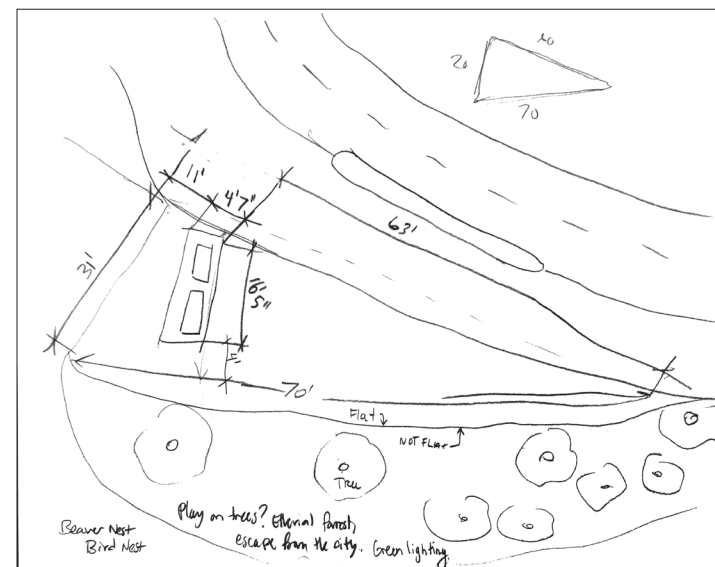
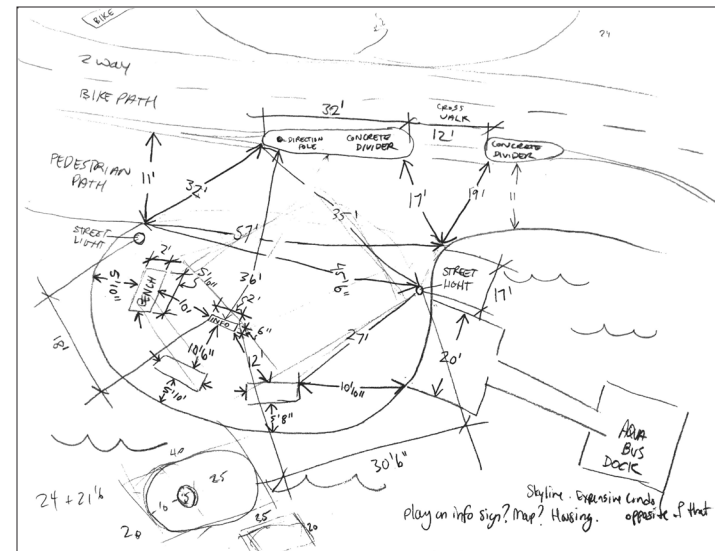
The trick to participatory design projects is that participants come and go through various phases, but they still need to be included in communications and sometimes in decisions to push the project forward.

Following the jam, it was critical from my perspective to not let things “fall off the map.” I sent out a VDN newsletter in the week following the jam, including thank yous and a link to a Flickr album with jam photos. I also pushed for a follow up meeting with my fellow organizers that week. Unfortunately, the HCMA folks couldn’t attend, but about five of the nerds were there and we had some great discussion and sketching over beers about how to follow up from the jam findings.

Two clear themes had emerged from the jam, interestingly divided by site. All three groups who had chosen the Cambie Street Bridge site had decided to focus on creating a whimsical, fun installation to inspire awe, wonder, curiosity and joyful interactions among participants. Meanwhile, the two groups who chose Alley Oop as a site for the inflatable installation had opted for much more serious, political themes (housing and food security).

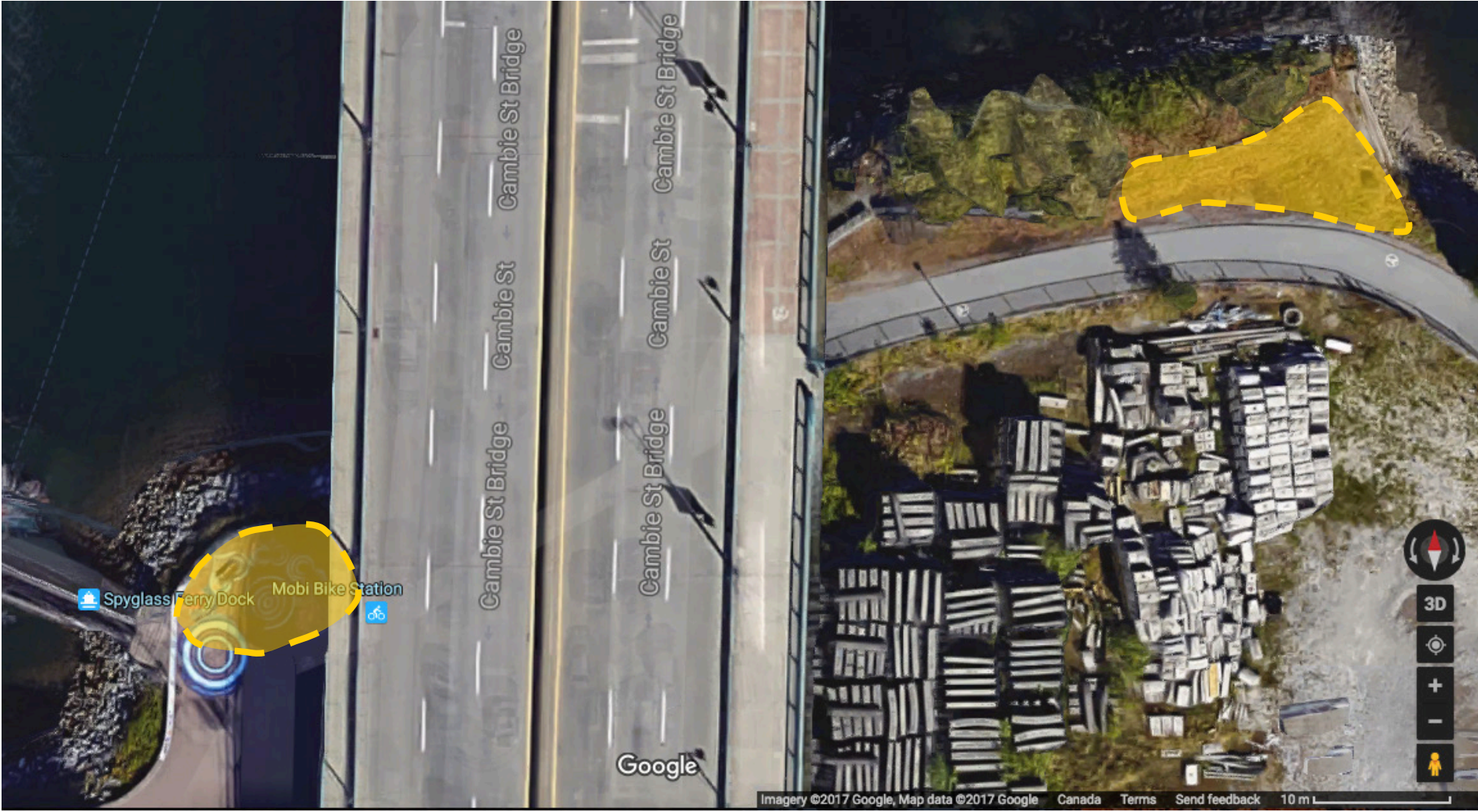
Given the opportunity to tag team the Cambie site with Ben Cooper’s Enigmatic Colouration project on November 24th/25th, I proposed that we aim to create a “prototype” bubble installation. While still refined and professional, this installation could be more of a test, not only of our bubble construction skills, but also of what kinds of interactions might occur inside a bubble intervention in urban public space. If we focus on the Cambie project themes from the jam - having fun outdoors in the winter months, inspiring awe and curiosity - will visitors become active participants within the bubble? Will they remain outside and look at it as more of a spectacle? Will they talk to each other? What sort of conversations will take place?

Most of the nerds and the HCMA team are generally too busy to take on any active prototyping, so myself and the newest nerd volunteer, Natalie Tillen, volunteered to take point. We did a site visit to Spyglass Place on October 29th to take measurements and did some brainstorming together. During our first prototyping session on October 31st, we came up with three potential forms, which I then summarized and presented for feedback via the #Vancouver_Bubble channel on the VIVA Refresh Slack team.



Measurements of possible sites at Spyglass Place | Top: West Side of Bridge, Bottom: East Side of Bridge | Sketches by Jesi Carson (2017)

6.0 Post-Jam Design Process



Aerial view of possible sites at Spyglass Place
| Google Maps (2017)

6.0 Post-Jam Design Process

A - Dount Form

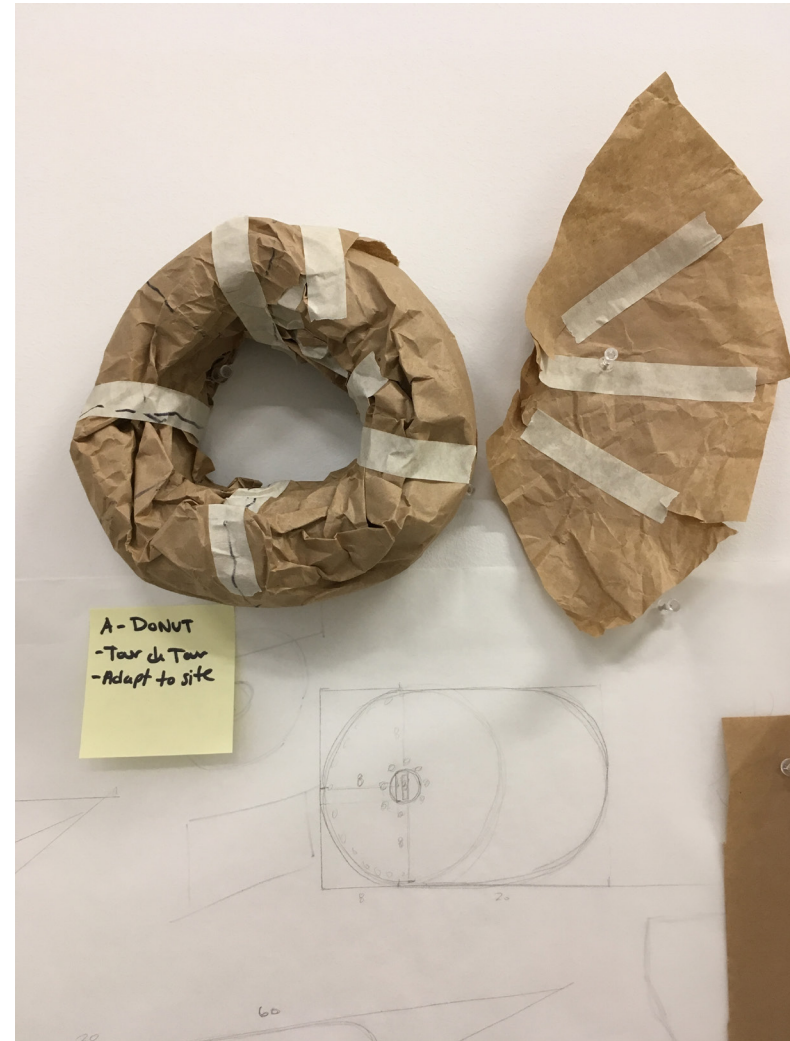
The Donut shape not only draws on the form of the Tour Detour pitch, but also responds to the Cambie site. On the west side of the bridge, closest to CityStudio, there is a circular area where a bubble could potentially be installed, but right in the middle of it there's a sign post. The donut wraps the sign. However, Slack feedback from Trevor Dykstra of the Seattle Design Nerds on this concept was that this shape is difficult to pattern and if the hole needs to be a specific size, that's even trickier. SDN has produced a donut in the past, so he spoke from experience.

B - Long Triangle Form

The site on the east side of the bridge is triangular, which is where this form comes from. Additionally, Natalie and I discovered during our site visit that a row of trees creates a mini forrest behind the gravel pad that could potentially become the site of the installation. With the help of Ben's lighting magic, we thought we could create a magical forrest cave, an escape from the city within the city, that could glow in front of the urban skyline. Trevor said that this shape would be the easiest to make, and would suit a "floorless" bubble weighted only around the edges with sandbags (which ours needs to be to met CoV engineering safety standards).

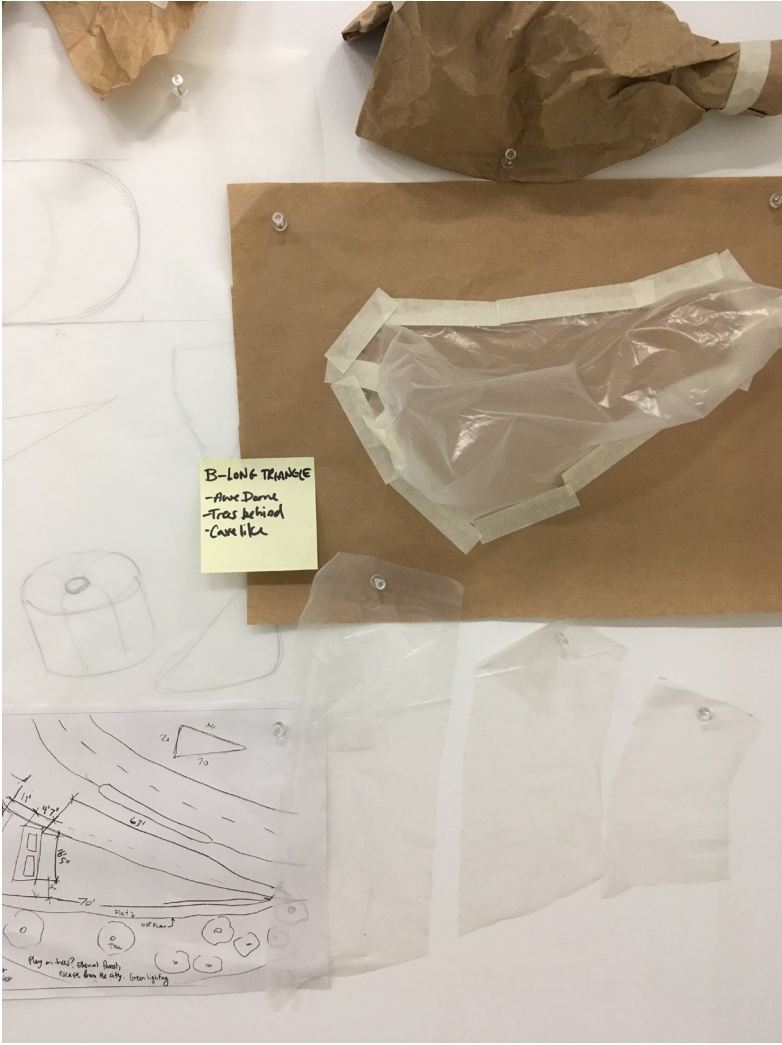
C - Tower Form

Based on our conversation with the other nerds at the follow up meeting, a tower shape that draws on the ideas of the Dream House pitch could be a direction we take. The height could have impact, given the limited footprint available at the Cambie site, and it could also become part of the skyline. Trevor also commented on this idea, saying that it would be really cool, but we'd have to make sure we have the right fans in place, as there would be more static pressure required to keep the lift of a taller structure. More weight might also be required at the base. Wind could become an issue as well.



A - Donut Form Prototype 1 (2017)

6.0 Post-Jam Design Process



B - Long Triangle Form Prototype 1 (2017)



C - Tower Form Prototype 1 (2017)

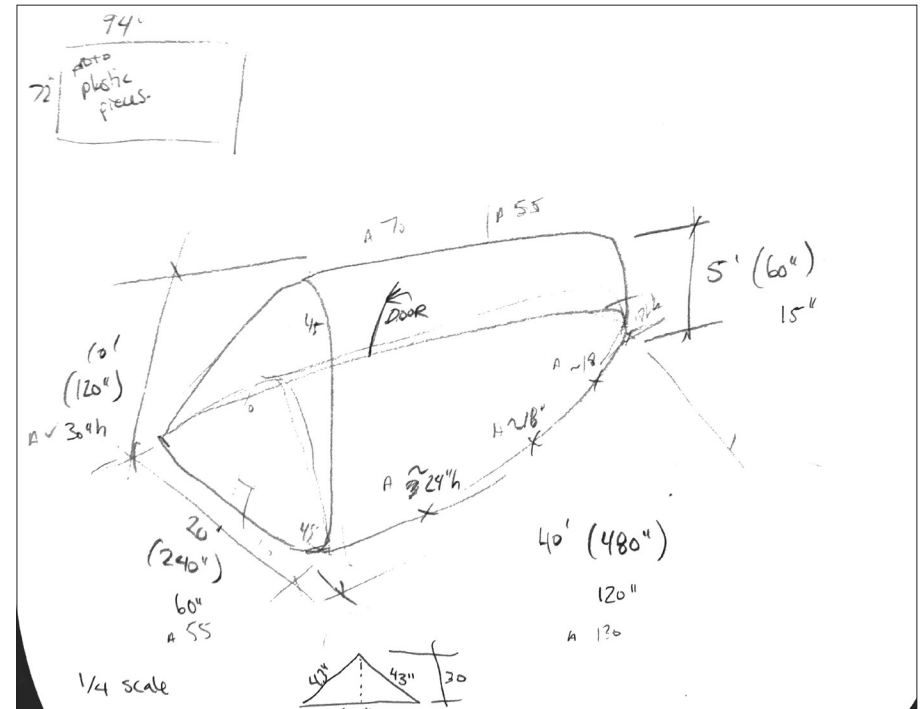
6.0 Post-Jam Design Process

Our next prototyping session was the following week, on November 5th. Based on the feedback from our first prototypes and going on the assumption that we'd install on November 24th with Ben's Enigmatic Colouration lighting installation, we opted for the low hanging fruit - Option C, the Long Triangle form. Simple to pattern, we mocked up a 1/4 of full scale model, using a small floor fan, heavy duty clear plastic drop cloths and packing tape.

We filmed the process, and discussed the form while taking turns laying down inside it. I posted the photo below on the Slack channel for feedback.



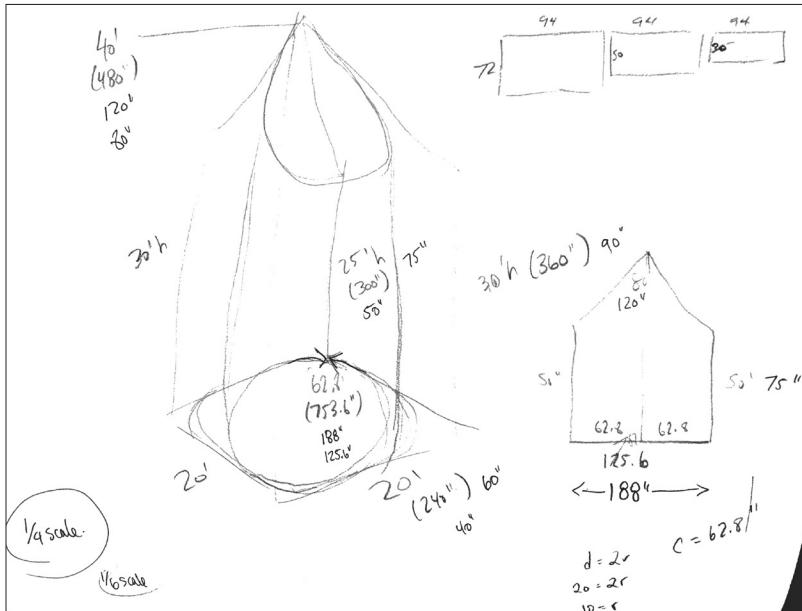
B - Long Triangle Form Prototype 2 | 1/4 Scale (2017)



B - Long Triangle Form Sketch with Dimensions by Jesi Carson (2017)

6.0 Post-Jam Design Process

Feedback was limited, other than a hope from a few members to also see a mockup of the tower form. We had discussed the tower in more detail during our last meeting, as a more direct commentary on the Vancouver housing crisis, and the connection to the "Dream House" concept that was created during the jam. Ideas about using flagging tape and helium balloons to create floating wireframes of towers were also brought up, and the possibility of a multi-inflatable / wireframe tower installation at the Alley Oop site was entertained. The images below show the tower mockup in process, with adjustments to the pattern being made on the fly (note this is 1/6 of full scale).



C - Tower Form Sketch with Dimensions by Jesi Carson (2017)



C - Tower Form Prototype 2 | 1/6 Scale (2017)

6.0 Post-Jam Design Process

Due to a double booking and mix up about sites, the November 24th installation was no longer an option, so I left the following message on our slack channel:

“Hola @channel I have an announcement: I was just informed that CityStudio students have big plans for the spyglass site on the 24th, so we won’t be able to install the bubble that night with @benzcooper’s project. However Adrian Sinclair (@vanmurals) suggested we tag team our viva projects (they have a mobile freestyle rap group) and do an activation on another weekend this winter. Hopefully Ben can still let us borrow lights, but if not we can find another solution for that. So (sort of) back to the drawing board, but I don’t think this is a huge deal really. I’m now thinking Alley Oop sometime in December for a bubble extravaganza? This also gives us time to regroup - @markbusse @ Steve DiPasquale @eesmyal @jaredkorb do you guys have any availability in the next couple of weeks to reconnect? Thanks!”

The VDN steering committee regrouped on November 14th, and the following day myself, Jared and Natalie met at HCMA’s office with Steve and Brett. To discuss next steps.

Ideas we brought to the table at the HCMA meeting:

- Collaboration with Vancouver Mural Festival - mobile freestyle group
- Alley Oop Dream House installation - tower forms
- Mobile “activation station” - a red wagon or bike trailer with the bubble, lights, generator and other activation tools for guerrilla popups
- Lumiere Festival popup test - capitalizing on existing crowds and lighting themed activation (Dec 2)
- Collaboration with Frida&Frank - ping pong inside the bubble

The popup activation model using bike trailers is gaining traction in Vancouver, with VIVA Vancouver awarding one of the refresh grants to the VMF rap bike and the City of Vancouver basically giving Frida&Frank free reign over an entire section of the Adanac bike route for the summer this year to do their popup ping pong events. Much of the work of the Vancouver Design Nerds centers around bringing people together to overcome the “no fun city” reputation while creating opportunities for meaningful connections between citizens; The mobile activation station, or nerd mobile, has a lot of potential for an ongoing and continually evolving project for the nerds to take on.

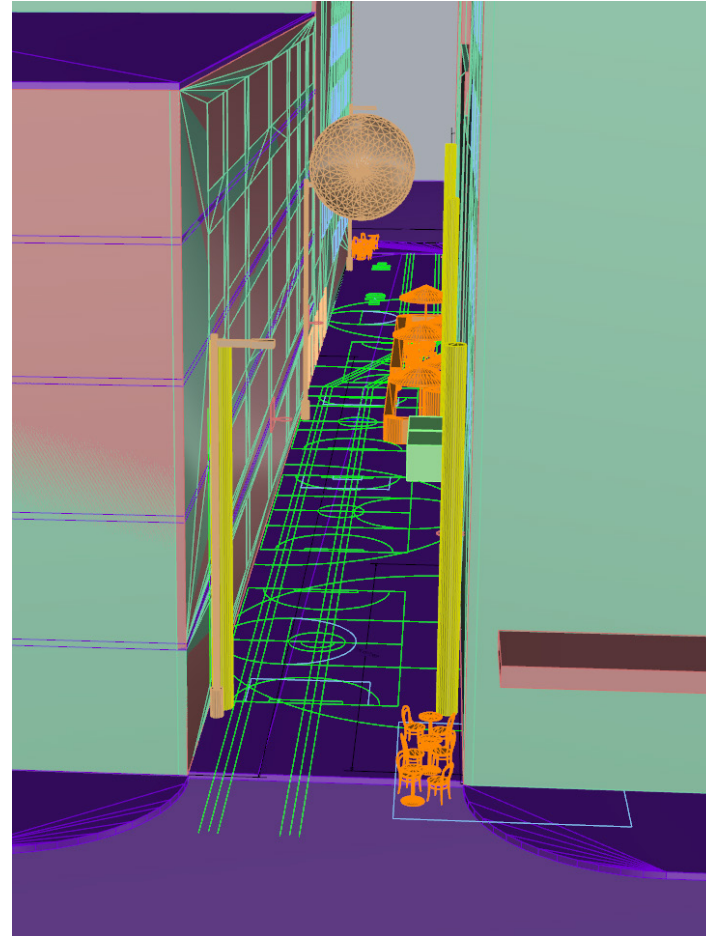


Ping Pong Popup at Vernon and Adanac, showing bike trailers to transport ping pong tables, and VMF mobile rap bike at the event | Photo via Frida&Frank (2017)

6.0 Post-Jam Design Process

The idea that got the most traction with the HCMA folks was the idea of ping pong inside the bubble. We discussed the housing metaphor, this time in the sense of the basement or rec room of a Vancouver special house, which used to represent the “affordable” option for the middle class here and is now no longer within reach. So instead of a tower, this concept creates an abstracted dreamscape of a rec room, focusing on the inviting aspects of ping pong and creation of social space for community to congregate. Alley Oop was revisited as a potential site for this type of event, and dates in January and February are being considered for a larger scale social event.

Funny enough, we’re back now to the donut form, but the donut hole in our latest design idea serves the purpose of a rain down spout as well as potential vertical structural support for a much larger bubble. I must admit I am a bit hesitant to aim for such a large scale installation, but the team proposed that we build a portion of the new jellybean shape and popup guerrilla style in a park or somewhere outdoors before the holidays to test the downspout idea. Brett from HCMA is working on a Revit model of the new shape, to aid in the development of the more complex pattern.



*Alley Oop digital
3D model by HCMA
(2017)*

VanBubble Nov 15 @ HCMA

□ video footage for Jared (From Jake?)

□ Ben-mobile puzzle?

- Collab w/ Van Mural test (freestyle rap mobile)
- Mobile Popup / Red Wagon / Bike trailer
- Alley Pop "Dream House" installation (multiple towers ± focal pt.)
- Lumiere Festival popup / test (Dec 2) Guedes style

* What do we want to know / prompt / test → waterproofness

- Frida & Frank | ping pong / dance site.

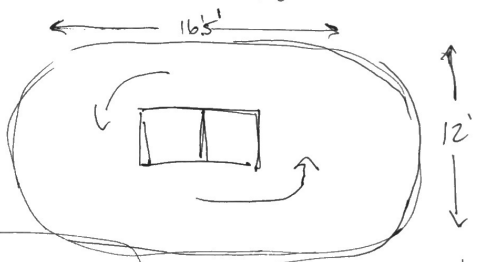
Dream House
Graw ops

Tow Detail
Skunk.
Ave Dame.

bring indoors
outdoors

- living room
- basement

"people library"
- check out a person.

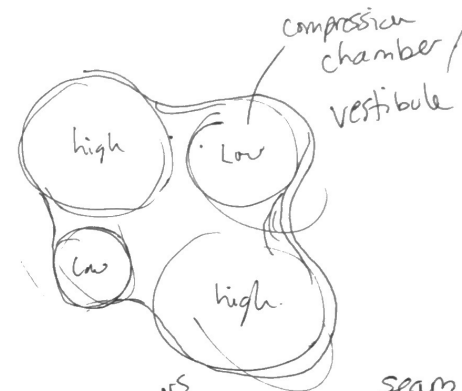
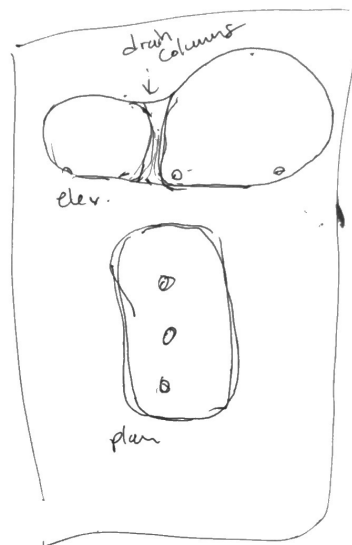
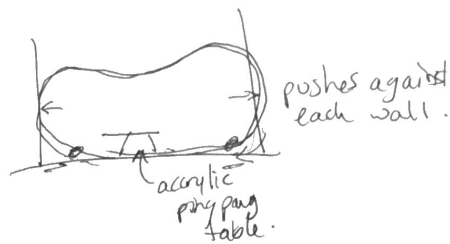


Bear bag
chairs

- made of crumpled up poly?
Rearest "moving" aesthetic

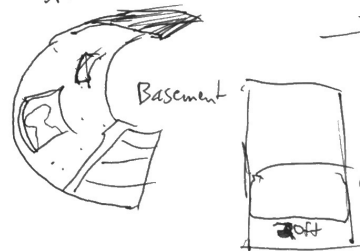
18' ↓
Alley pop
east end is more flat
Basement

□ Steve + Brent ~~and~~
going to get us
model drawings



seam.

Dream - abstraction



November 15 meeting with VDN & HCMA, drawings illustrating rec room with ping pong concept and down spout idea | sketches by Jesi Carson (2017)