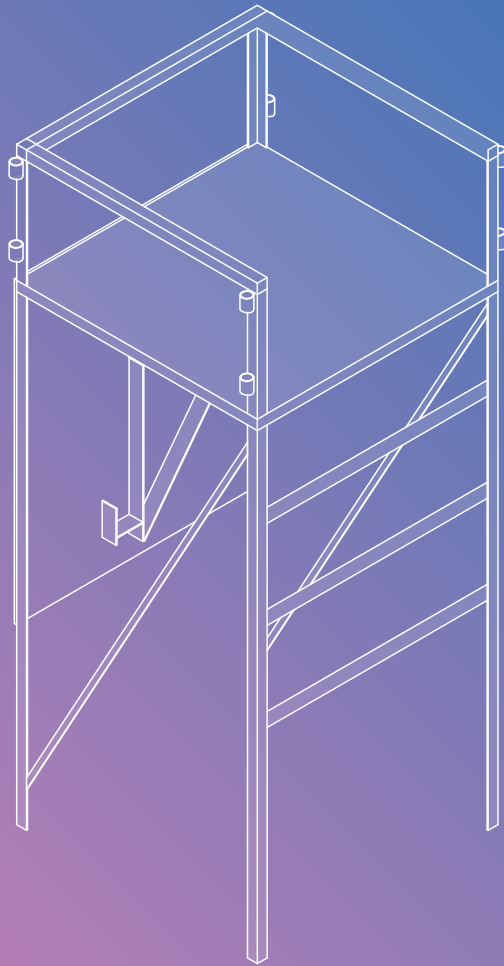


ARCH 686 REPORT



COMPETITION WINTER STATIONS 2016
THEME FREEZE/THAW
COURSE ARCH 686 COMPETITION ELECTIVE
PROFESSOR TERRI MEYER BOAKE

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COMPETITION BRIEF¹

As we learned this past year, during the winter of 2015, even record-cold temperatures cannot turn back Torontonians from the Beach. For 2016 we return with an expanded second annual Winter Stations exhibition to celebrate Toronto's winter waterfront landscape.

This year we are expecting to include up to thirteen lifeguard stands across Balmy, Kew and Ashbridges Bay beaches located in the heart of the Beach community, south of Queen Street East, between Woodbine and Victoria Park Avenues. These utilitarian structures are to be used as the armature for temporary installations which will need to be able to withstand the rigours of Toronto winter weather. The exhibition is to run February 13, 2016 until March 20, 2016.

This is a single-stage open international competition, welcoming artists, designers, architects, landscape architects and all those that defy labels to submit proposals for Winter Stations' temporary artwork installations.

Freeze - Thaw. Toronto winters are long and unpredictable. They consist of varying temperatures, amounts of precipitation, wind, in short: dispositions. There are days the snow falls heavy. Other days are deceptively bright and sunny, but with bristling winds and plummeting cold. The snow accumulates, along with the ice, and sometimes it is blown away, dispersed in drifts. But at some point during the long winter months we wait for the temperatures to rise and the sun to melt it all away. Whether it will do so for good is always an unknown.

The theme asks designers and artists to respond to the changing climactic conditions and transitions of the Toronto winter. Designs may anticipate the coming spring or refuse to yield, reminding us December is only a few months behind and will return again. They may highlight a static moment or phase in our winter.

Perhaps, most significantly, designs have the opportunity to observe, reflect or contrast the immediate waterfront landscape with its banks of snow and frozen ice. To this end, they should expect to be playful and provocative, creatively utilizing materials and site to inform concepts that echo the freeze / thaw narrative and will engage the public.

There is no limit to the size of the installation, but please note that included in the jurors instructions will be durability and constructability.

Winning teams will be provided with an allowance for travel and accommodation to spend time in Toronto during the installation and the activities surrounding the opening, February 11 - 15, 2016. Last year, this included an opening party at the Balmy Beach Club and a speaking engagement at Toronto's Design Exchange. These events provide opportunities for citizens of Toronto to engage directly with the designers. Members of the design team should expect to meet with media to discuss their designs and ideas. Winterstations Inc., the not for profit organization under which this competition runs, reserves the right to use all entries and the identity of all teams for media purposes, for all social media interventions and for any other appropriate use to publicize this event.

Ryerson University's Faculty of Engineering and Architectural Sciences, University of Toronto's John H. Daniels Faculty of Architecture, Landscape and Design, OCAD University's School of Environmental Design, and Laurentian University's Faculty of Science, Engineering and Architecture will head up teams of students to create installations for four stands. Up to ten proposals from this Call will be selected to design installations for the remaining lifeguard stands.

Lifeguard Stands. The lifeguard stands (Fig 1) are essentially identical. They are sturdy steel pipe structures to which the installation is to be fastened. The method of fastening is up to each competitor, however it may not result in any damage to the structure. As this is the off-season for use, there are few restrictions on covering the stations; the three exceptions are: the shepherd's hook, the lifesaving ring and any emergency signage.

Please assume minimal security during the event and the possibility of vandalism or simply wear and tear from the curious. There will be no power or utilities available. Proposals should indicate how materials may be disposed of or recycled at the end of the display period. Please designate on your entry if your design is specific to one particular station.

Honoraria and Budget. \$3,500.00 CAD for the designers honorarium. Up to \$10,000.00 CAD including taxes for the purchase of all materials, hiring of any engineers or other

¹ Winter Stations Inc. Competition brief, <<http://winterstations.com/competition.php>>



Figure 1 Kew Beach Lifeguard Stand

consultants deemed necessary, and labour for the installation and removal of the installation. This budget will be jointly managed by the designer, the Winter Stations management team and the constructor. A separate budget of up to \$1,500.00 CAD for travel and accommodation is available for designers outside of the greater Toronto area.

Jury. Jane Hutton - Landscape Architect / Assistant Professor, Harvard University GSD; Alex Josephson - Architect / Co-founder, Partisans Architecture; Lecturer, U of T Daniels FALD; Lily Jeon - Winner, Winter Stations 2015; Diana Koncan - Winner, Winter Stations 2015; Catherine Osborne - Editor-in-chief, Azure Magazine; Lisa Rochon - Jury Chair, M.A. Urban Design Studies; Senior Fellow, Global Cities Institute U of T; Founder, Friends of the Beach Parks

PREFACE

This report investigates precedents researched and initiatives undertaken in response to the Winter Stations 2015 call for submissions. The discussion is guided by the following excerpt from volume 5 of *The Harvard Architectural Review*, where John Hancock, in establishing a theory of precedent, states that,

“The works of the past always influence us, whether or not we care to admit it, or to structure an understanding of how that influence occurs. The past is not just that which we know, it is that which we use, in a variety of ways, in the making of new work.... The typology argument today asserts that despite the diversity of our culture there are still roots of this kind which allow us to speak of the idea of a library, a museum, a city hall or a house. The continuity of these ideas of type, such as they are, and the esteemed examples which have established their identity and assured their continued cultural resonance, constitute an established line of inquiry in which new work may be effectively grounded.”²

Carrying forward these thoughts, it is the continuity of type allows us to observe and pull from a historical lineage of ideas. Through continuous exposure to work and lengthy training, the architectural designer operates with specific nuance in relation to type. Just as one adjusts their gait, in relation to terrain, architects adjust their design hand in relation to program and type. We are trained to do so, and as John Hancock points out, the works of the past are inherently influential, whether we know it or not.

In the initial stages of developing a proposal for this competition I struggled to advance design iterations based on the relevant pool of concepts I had established (Fig 2). A starting point like this came about in anticipation of a response for this report. However, it was not until I visited the site that I was able to develop an understanding of the qualities I wished to bring forward in the design of the project. After arriving at a concept on site, and returning to my desk the next day, I immediately questioned the trajectory of my design concept - even an epiphany is rooted in past work.

Through the sections of this report I will outline how the works of the past have found their way into my proposal. What is of most importance is that I structure an understanding of how this influence occurred. This is an investigation into my own subconscious methods, but also a hope to reveal my best practices going forward.



Figure 2 First set of precedent images

RESPONDING TO THE BRIEF

The Winter Stations Competition call provides a straightforward deliverable - a temporary work utilizing the lifeguard stands which is able to withstand the rigors of winter.

² Hancock, John E., “Between History and Tradition: Notes Toward a Theory of Precedent,” *The Harvard Architectural Review*. Volume 5. Precedent and Invention. <<http://www.tboake.com/684-comp-outline.html>>

However, in doing so the installation is also tasked with a less straightforward symbolic task, the celebration of the winter waterfront landscape in the Beaches neighbourhood.

The celebration is driven by the polarities of freeze and thaw, to be considered in tandem as the competitions design theme. The brief goes into detail describing the dispositions of Toronto winters. In doing so it suggests a desire for the winning design to not only refuse to yield, but have the capacity to respond to the changing climactic conditions and the transitions of winter. As a provocation, freeze-thaw is just as unyielding as the season it represents. However, I had anticipated that the call for playfulness in the design brief will forgive entrants who do not conceptually retain the freeze-thaw narrative.

It is my belief that the organizing committee sought to provoke a more varied group of design submissions than that which was developed from last years general theme of *warmth*. Last years design prompt was similar to the Warming Huts competition, and as a result the work produced was in the same spirit as what we see annually along the Winnipeg River. Similarity is not a issue, however, as a new not-for-profit organization I'm sure that Winter Stations Inc. is looking to make their mark bringing innovative and unique design to Toronto's waterfront public space.

My immediate responses to the brief were both fixated with the dispositions in the freeze-thaw narrative. The first was to explore and leverage the freeze-thaw properties of specific materials; frost shattering came to mind (Fig 3). My second response was to acknowledge two states, frozen and thawed, and have designed components act as a conceptual and physical hinge between the two states (Fig 4). In addition to allowing a state change to be rendered visible, the freeze and thaw would also be highlighted individually. Movement was central to this concept, and the first schematics took the form of kinetic sculptures (Fig 5).

My initial responses all took the theme very seriously, however I had overlooked the importance of the life guard stand as an existing component. Reflecting on my response, and looking back at the brief, the committee did not bring specific attention to the emblematic quality of the lifeguard stands or the specificity of the Beaches neighbourhood. The lifeguard stands were simply dimensioned and itemized as something that proposals must fasten to at at least one point. In this regard,



Figure 3 Frost shattering in a rock formation

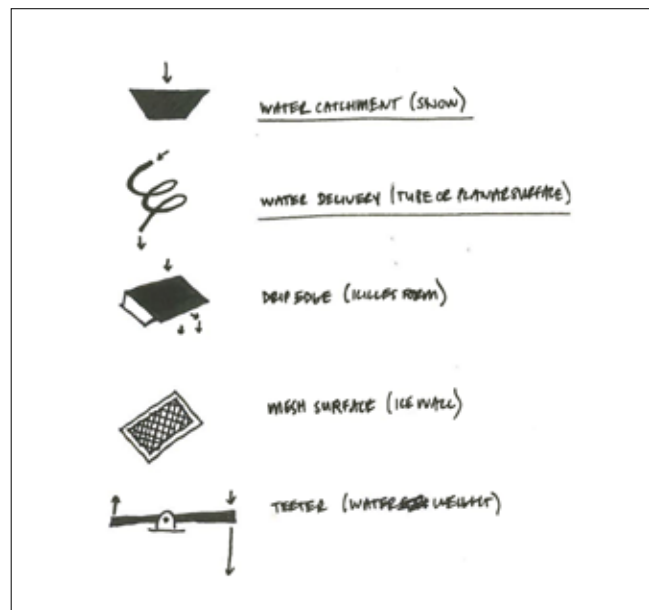


Figure 4 Components supporting the freeze-thaw narrative

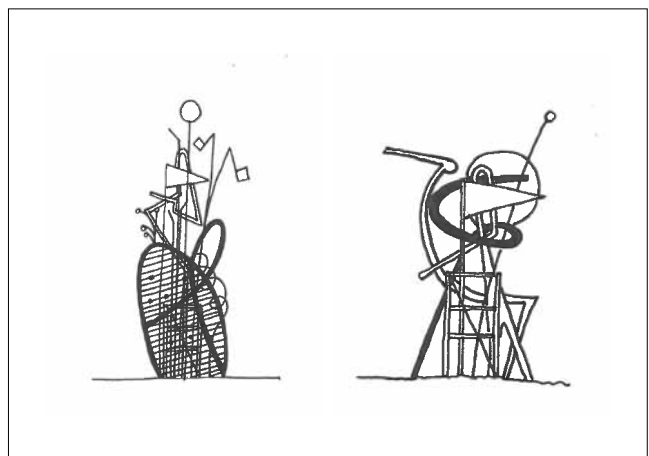


Figure 5 Schematic designs for kinetic sculptures, 2 of 10



Figure 6 Porch Parade for Robson Redux



Figure 7 Woolhaus for The Forks Warming Huts



Figure 8 Impulse at Luminothérapie

plus the acceptance of international contestants, I thought it to be unlikely that there will be many submissions calling out the lifeguard stand or the beaches neighbourhood as central to the proposal. It was my intuition that the lifeguard stand was likely to exist as a hurdle in developing designs, rather than something that is the celebrated focus.

Additional considerations in the brief were the deliverable's and submission requirements. An anonymous open call with no entry fee has its merits, in contrast to discipline specific call with an entry fee. This set up is likely in place to not only draw a variety in design proposals, but as a public space competition should be, it is inclusive of individuals from any creative background.

Three documents were to be submitted, two 11x17 boards and one team information package. The importance of knowing the 11x17 dimensions was that it let me know there was a high probability the panels were going to be printed out for judging rather than digitally projected.

SIMILAR BRIEFS & COMPETITIONS

Taking a closer look at similar competitions and their respective briefs is one way of looking at work that has come before. This is not only to see which concepts were successful in capturing the intent of the brief, but also to understand the nature of the call and its response. For the Winter Stations competition I was able to find similar briefs and proposals in three current Canadian competitions, Viva Vancouver's Robson Redux (Fig 6), The Forks Warming Huts (Fig 7), and Quartier des Spectacles Partnership's Luminothérapie (Fig 8).

The Robson Redux call to action is to temporarily transform the iconic 800-block of Robson Street, in the heart of downtown Vancouver, into an inviting and enjoyable pedestrian plaza for the summer season.³ As this is a traffic blocked pedestrian thoroughfare on Vancouver's busiest street it is no surprise that all of the past winners are linear schemes. Additionally, due to its proximity to two major shopping streets and business towers, all winning designs provided provisions for seating. It is clear that there are well established generators for the formal concepts in this competition. There is a clear call and response.

In retrospect, it is the Warming Huts competition that holds the most similarities and lessons for the Winter Stations

3 Robson Redux 2015 Design Competition, <<http://www.vivadesigncomp.ca>>

competition. In addition to its hopes of a winter-time appropriation and invigoration of public space, it is also heavily tied to recreation activity. Whereas the Assiniboine River has its skating, the beach has its own recreational activities. However, beach activities are summer-driven with few of them translating to its dreary winter landscape. Although not mentioned in the Winter Station brief, I saw it as incredibly important for the any proposal to bring recreation to the winter beach landscape, just as winning proposals for the Warming Huts competition capitalize on its potential as a recreational setting. Recreation must be brought to the winter beach if there are hopes to create a successful, lively public space.

The scope of the Warming Hut proposals are also very similar to what was produced in the 2014 set of Winter Station designs. The most architectural of proposals consisted of an interior big enough for a group of four, defined by a conceptualized exterior. In addition to these traditional enclosures, the Warming Hut's brief allowed and prompted two other types of design responses which I considered important in developing my proposal. One, such as Patkaus Jellyfish warming huts (Fig 9), was the set of semi-enclosed forms. This response allowed for the individual semi-enclosure, but also a larger defined space established by the positioning of the components. The other response that has been common is what I will call the object-installation. Examples are the Raw Design Inc. Nuzzles (Fig 10), and Workshop Architecture's Red Blanket (Fig 11). The object-installation is successful for its unexpected relationship to context and tacit playfulness, whereas the set of semi enclosed forms is successful in its ability to create multiple occasions amongst a public group.

Luminothérapie's multidisciplinary competition represents a unique winter experience in the Quartier des Spectacles and to stimulate creativity in the design of works for public spaces. In addition to being site-specific, works are inspired by winter and focus on light and sound to give visitors a daytime and night-time experience.⁴ The focus on creating a unique experience has resulted in annual installations that are playful and interactive, encouraging people of all ages to participate. Provisions for night-time use is something that is not identified by any of the other competition organizers (including the Winter Stations competition). I considered this night-time use as something that could be brought forward in a proposal for any one of these competitions. In doing so, success could be found by simply through differentiation from typical submissions.



Figure 9 Jellyfish warming huts by Patkau Architects



Figure 10 Nuzzles by Raw Design Inc.



Figure 11 Red Blanket by Workshop Architecture

⁴ Luminothérapie, Call for proposal's <<http://www.quartierdesspectacles.com/en/media/luminotherapiecompetition>>

PROJECT GOALS IN THE GREATER CONTEXT

Along with the infamous Gardiner Expressway, the Toronto waterfront has been a common focal point in the city's urban design conversation. There is kilometers of loosely programmed waterfront sitting idle, waiting to be claimed by the public. In the winter months this idle space grows as the city's beaches are blanketed in snow and ice.

Jumping on board with the many waterfront improvement initiatives in the city, Winter Stations Inc. chose to differentiate their endeavours by focusing improvement on the challenging off-season. The utilitarian lifeguard stands are leveraged as a point of departure in a community improvement initiative for the Beaches neighbourhood. Ultimately, the goal is to bring people to the Beaches. One can hope and imagine that the public would be able to observe and celebrate Toronto design and construction through the widespread partnerships the competition has set up. Local universities, design offices, and construction companies will attempt to attract an international design audience made up of participants and visitors alike.

The competition has already been recognized for its high inspirational value with the potential for significant impact on Toronto's development. The design competition was recognized at the 2015 Toronto Urban Design Awards, receiving an Award of Excellence in the Visions and Master Plans category. In addition, the Snow Cone winning entry received an Award of Excellence in the Student Projects category. The jurists, Alex Bozickovic, architecture critic, *The Globe and Mail*; George Dark, partner, Urban Strategies; Stephen Teeple, founder and principal, Teeple Architects; and Sibylle von Knobloch, principal, NAK Design Group; noted that the project is,

“a model of community engagement that builds on good design. This competition and event helped activate Toronto's eastern beaches in mid-winter, a time when these places are largely abandoned. The competition solicited some excellent designs; and its larger victory was to create a sense of occasion and togetherness. The jury feels other events of this kind, particularly in winter, would be welcomed by Torontonians in other neighbourhoods.”⁵

Reflecting on the jurors' comments and city-wide acclaim, I had a few key words to rally around in developing my proposal. Engagement, occasion, and togetherness would prevail as I focused my effort in the context of Toronto's Development.

TRADITION OF COMPETITION

There is a second context for this submission, one that may be of little or no interest to the general public, but is a driving force for commendable development and temporary projects we see in urban centers today. Poor design quality has become the status quo in development-heavy city-centers across Canada. As a student of architecture I see the design competition is a pedagogical context in itself.

Looking at Toronto and Vancouver, for example, we can see that some of the most innovative architecture has recently come about through the long standing tradition of the architecture competition. Last year Waterfront Toronto unveiled the winning design for the new Jack Layton Ferry Terminal. The KPMB Architects, West 8 and Greenberg Consultants proposal was chosen from 33 submissions from architecture firms in 12 countries.⁶ Also in 2015, The Vancouver Art Gallery and the City of Vancouver unveiled the winning proposal from their closed competition for the new Vancouver Art Gallery. Herzog de Meuron proposed a controversial design unlike anything in the city. To a lesser extent, the same could be said for the Jack Layton Ferry Terminal. However, controversial is far better than the status quo. With it comes a level of engagement which is unprecedented for the majority of development. This is not a statement suggesting any press is good press, but rather, in the context of a public project, it can actually lead to some good. A project for the people, debated by the people, is far more likely to reach a stronger design resolution. The public architectural competition brings about a winning proposal, but also generates a conversation far before any tender documents have gone out.

The premise of a competition both holds and hides the ability to bring precedent to the forefront of innovative design discourse. We only hear about the winners of a competition, and occasionally some honourable mentions. In addition to the winning proposal, and the conversation, competitions hold within them, there are an incredible amount of quality design concepts we never hear about. It's noteworthy that the Winter Stations competition organizers published every submitted entry. Not only are they contributing to the context of Toronto's waterfront, but the pedagogical context that can be described as a low-risk high-stakes battleground. On this ground we see opposing ambitions and antagonistic solutions, giant architecture classrooms with invisible boundaries, and,

5 Mirabelli, Julian, "Winners Announced for the 2015 Toronto Urban Design Awards", <<http://urbantoronto.ca/news/2015/09/winners-announced-2015-toronto-urban-design-awards>>

6 CBC, "Waterfront Toronto unveils winning design for new Jack Layton Ferry Terminal", <<http://www.cbc.ca/news/canada/toronto/waterfront-toronto-unveils-winning-design-for-new-jack-layton-ferry-terminal-1.3029133>>

often, open enrollments. This pedagogical context provides the forum for struggles for one's personal best, team efforts rouged in camaraderie, occasional debilitating taxes on body and pocket, and, for the happy few, joyous public triumph. Competitions encourage those who only observe, including the public, to applaud or admonish architects as if designers were contending in a public tournament.⁷⁷ This tournament proliferates thinking in type. And just like any classroom, as we recognize a star pupil one day, we are looking over a handful of others that will find themselves under a future spotlight. When the Winter Station Competition organizers shared the 450 received designs, they not only proliferated this type of work, but acknowledged and valued the the spirit and accumulated knowledge of the competitions tradition.

WINTER STATIONS INAUGURAL SUBMISSIONS

Only in its second year, the Winter Stations Competition is in a fruitful position. It is likely that submitted designs genuinely find inspiration from their brief, rather than solely the pool of historical submissions. So, where, in this case, does precedent come into play? Even though it is a small pool, it is still important to look at the inaugural submissions in order to establish an idea of scale and intent that the organizing committee is looking for. Additionally, looking at and unpacking the design concepts of previous winners allows for the identification of what I have called the call and response.

There were five competition winners last year. Hot Box (Fig 12), Snow Cone (Fig 13), Sling Swing (Fig 14), The Wingback (Fig 15) and Driftwood Throne (Fig 16). All winners were chosen based on 200+ designs having responded to the theme of warmth. I looked at each design in order to understand the merits observed by the judges, as well, how they incorporated the 2014 theme of 'warmth'.

As a theme, warmth produced concepts similar to what you would see submitted in the Warming Huts competition. The reason being, besides the obvious similar themes, is that warmth produces a formal response symbolic of enclosure. Many concepts have physical associations. It's not synesthesia, but the simple notion that we can perceive shapes from concepts, in many cases simply because concepts are often descriptive in nature. Warm suggests a focus on enclosure, hearth suggests a focus on a central element, exposure suggests a surface. It is subjective, but the odds are the majority of designs will



Figure 12 Hot Box



Figure 13 Snow Cone



Figure 14 The Sling Swing



Figure 15 The Wingback

7 Tostrup, Elisabeth. *Architecture and Rhetoric : Text and Design in Architectrel Competitions, Oslo, 1939-97*, edited by Arkitekthøgskolen i Oslo. London: Andreas Papadakis Publisher, 1999. (49)



Figure 16 The Driftwood Throne

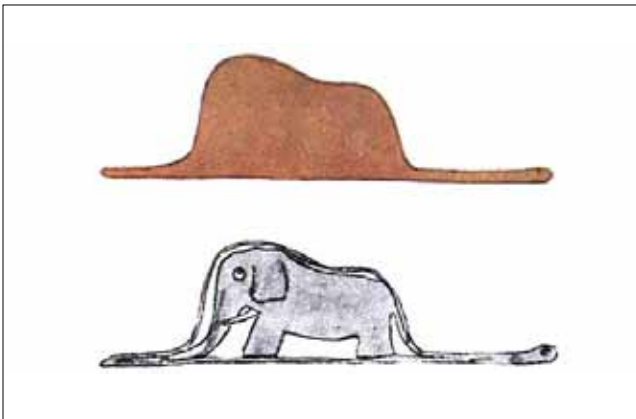


Figure 17 Hat or Elephant, The Little Prince



Figure 18 Tschumi Follies at La Villette

respond formally similar if a descriptive word like this is used.

Out of the 2015 Winter Station submissions, the Hot Box, Snow Cone, and Wingback achieved a warming enclosure through the use of sheltered walls forming a closed space. Warmth was also achieved by the Iron Thrones' enclosed seat and with the Sling Swing through the clever adaptation of a deck chair that transformed to become an enveloping fabric swing/scarf hybrid.

Freeze-thaw is far more difficult to project. A variety of responses is to be expected and will be likely seen in the winning designs. Freeze Thaw, in comparison to warmth, is a difficult theme for projecting the formal outcome.

TYPOLOGICAL ASSESSMENT

Specific precedents were considered in an attempt to bring some closure to the design concept. At the time of designing I was producing multiple final formal configurations. Precedent was considered in reigning back the eventual proposed form, as well as establishing a convincing display of assembly and structural intent.

Establishing a pool of precedents specific to my concept was difficult. Other than the section we all know from *The Little Prince* (Fig 17), I was hard pressed to find a similar in appearance proposal to investigate. Considering typology, more so than the formal aspects of my proposal, I saw my proposal as something between a pavilion and a folly. A strong public art aspect was considered as well. Now, rather than formally sifting through work, I was interested in the qualities of each typology. What is the function of a folly? What does a pavilion assert? What is the expectation of this kind of architecture?

As a design typology, I understand my proposal most as a folly. The folly as a typology has been celebrated as a public space typology by many architects. Most notably to me is Bernard Tschumi with several deployments in Park De La Villette (Fig 18). However, just as much as the typology is celebrated, it is also widely undervalued in its definition as whimsical or extravagant, built to serve as a conversation piece, lend interest to a view, or commemorate a person or event.⁸ Perhaps the follies lack of praise is due to its roots in 18th century pleasure gardens, where they were often deployed as ornaments, with the straightforward task of pulling ones gaze across the landscape. That's sufficient enough a role for me, however

8 Folly definition < <http://www.dictionary.com/browse/folly>>

Tschumi, and my guess would have it, the Winter Stations Design Committee, seeks more from the folly.

Tschumi describes the follies at Parc de La Villette as objects of permutation brought about from an analysis of the set of combinations that are possible among different categories (space, movement, event, technique, symbol, etc.), as opposed to the more traditional play between function or use and form or style.⁹ In this perspective, observing the typology of folly as precedent would suggest a proposal for the life guard stands that is founded in the climactic, participatory, and technological demands of the physical and cultural context of the beaches neighbourhood.

The pavilion is an more celebrated and understood public space typology. Often associated with festivals, the pavilion is always 'titled', in comparison to follies, which stand for themselves. The 'Water Pavilion', the 'Smallwood Homes Pavilion', and the 'Canadian Pavilion' are all examples of this titling that happens with Pavilions. In this regard, our proposals are not Pavilions. A pavilion is also typically associated with a clearly defined space, often enclosed and housing a specific activity. The activity could be observation of ones surroundings, but it could just as easily be housing artwork. I would say the competitions call is requesting folly, in Tschumi's definition, as opposed to a pavilion.

DESIGN CONCEPT

The proposed design for the competition, titled Beach Bump, is a playful undulated surface constructed from a fabricated lattice structure and a flexible plywood skin. The design's ambition accents existing winter snow and summer beach activities. Sledding, digging, climbing, snow angels, and footprints are re-imagined and brought to life by the a colourful surface beneath (Fig 19).

The mystery of this covered surface utilizes freeze and thaw to provide visitors with multiple experiences of discovery and play. The Beach Bump responds to the changing climactic conditions and the transitions of Toronto winter by creating an unexpected engagement with the ground. The coloured surface is either revealed or covered through use, temperature change, and prevailing winds (Fig 20). The installation offers a tracing of the activities of the day (Fig 21), only to be lost with the accumulation of tomorrow's snow and frost.



Figure 19 Snow angles revealing the surface beneath



Figure 20 The bump in the storm



Figure 21 Activity tracing

9 Tschumi, Bernard, *Architecture and disjunction*, Boston, Massachusetts Institute of Technology, 1994: (181).



Figure 22 Recreation on the bump



Figure 23 Buoy and rope



Figure 24 Thawed ground

INTENT

It was my goal to address all aspects of the brief, which included everything from the freeze-thaw narrative to provisions for disassembly. The competition winners are not required to be present during the fabrication and development of drawings for construction. Because of this, the competition boards were to contain enough information for the judges to envision how to carry the project forward in construction. Looking at the finished proposal, it conceptually includes typologies, projects, and competitions investigated, but also a clear rationale of constructability.

The object-in-the-landscape sense of discovery, as well as the Tschumi-decried combination of space, movement, and events are qualities that came forward in the development of the proposal. The undulated surface that grows out of the horizontal beach landscape is subtle in its transition, provoking inquisition on the part of the visitor. Where exactly does the object start? What is it, and how do we identify with it? These questions suggest a certain amount of investigative time to be spent with the proposal, in a tactile manner as well as visual.

The proposed form also sets up the provisions for the much needed recreational winter landscape at the beach (Fig 22). The subtle transition that results in the 'bump' allows for sledding, a classic winter time recreational activity. One would not typically see slope sledding at a waterfront setting. Slides are, however, often found around water in the summer. Further carrying the recreational image, a watercraft buoy is playfully fastened to a rope (Fig 23). Much like the pom-pom of a toque, but scaled up, the rope provides a climbing aid for those in need. This subtle provision for winter recreation is at the heart of this proposal.

The most challenging part of the brief, the freeze-thaw narrative, came about from an observation of last year's Winter Stations Submissions. In a search for the most telling photos of last year's submissions I came across many user photos which could be considered candid photos as opposed to professionally taken photos for magazines and publicity. The difference between the two was that the professional photos presented the pavilions as pristine within a blanket of snow, whereas the publicly sourced photos documented the actual use. In these photos that documented use I noticed that all the pavilions were surrounded by thawed ground, free of snow (Fig 24).

This is due to the crowds of people passing near and stopping at the pavilion. The result was a thaw and displacement of snow through activity. It is from this ground condition, in contrast to the snow around, that I developed my approach to the freeze-thaw narrative. Instead of revealing the uneven and 'dirty' sand below, activity and body heat would reveal an artificial surface. This aspect of the proposal is a central event I sought to create.

The proposed form was established before any materials research took place, and therefore became one of those after-the-fact design problems we often encounter as designers. How was I going to achieve this shape? How would it fasten together? Several projects were looked upon for structural precedent. I determined that the shape could be achieved in two different ways, a lattice shell that could be clad (Fig 25) or the stacking and sculpting of solids (Fig 26).

The stacking and sculpting method would be made up of supported components similar to that of the work from Partisans (Fig 27). Although beautiful, this construction strategy would be expensive and inefficient for the scope of this project. Additionally, it would ironically suffer from the very theme the competition was centered around. Frost heaving would likely target this method of construction, causing it to fail at some point during the winter.

The lattice structure (Fig 28) was determined to be the most efficient and structurally sound method for developing the desired profile for the proposed form. Not only are the lattice members straightforward to fabricate on the CNC milling machine, they are also frequently documented and carried out today in design proposals of this scale, making them at the same time an innovative approach and one that could be accepted by the jury. In order for this structure to support, rather than impede, the desired activity that is central to this proposal, it was necessary to consider a cladding that could provide a seamless cover suitable for sliding hands down and butt first. A cladding of slats (Fig 29) was therefore out of the question.

Building on the research undertaken by Patkau Architects for their Warming Hut's proposal, I decided a cladding of a CNC cut plywood shell would be most appropriate. Utilizing a flexible aircraft grade plywood, the cladding components could be dimensioned through digital modelling and flat-cut



Figure 25 Lattice shell structure

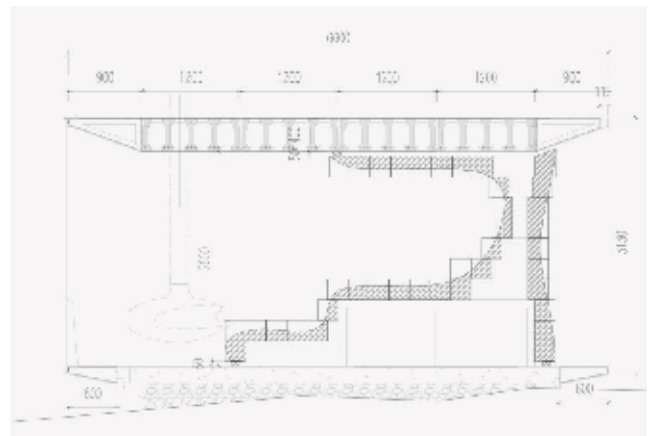


Figure 26 Stacked, sculpted interior cladding



Figure 27 interior cladding components

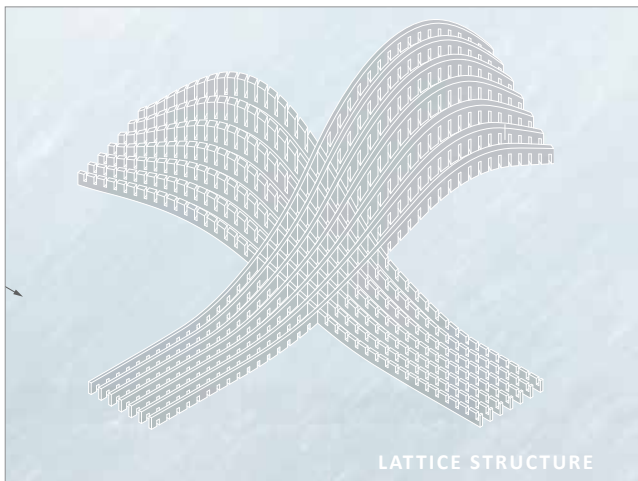


Figure 28 Portion of the Beach Bump lattice structure

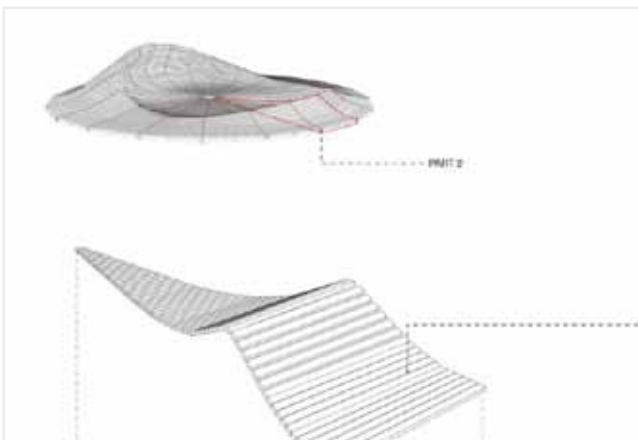


Figure 29 Precedent for slatted wood cladding

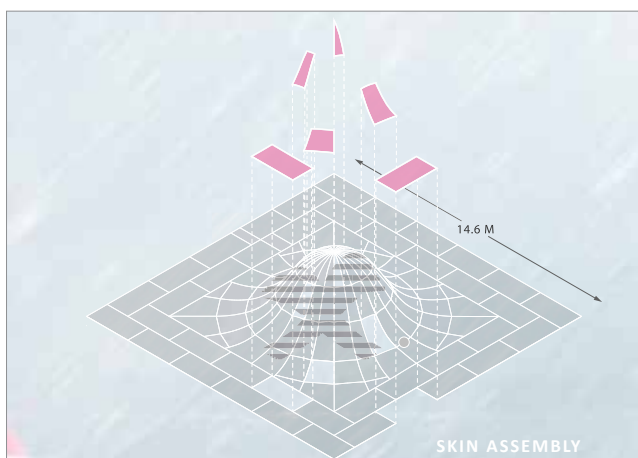


Figure 30 Proposed cladding

on the CNC. Afterwards, they would be placed like a puzzle and screwed on site (Fig 30).

A few assembly details were called out in anticipation of wear, and potentially damaging weather. The top of the bump, where the cladding components meet at their narrowest point, is considered vulnerable to damage, be it from use, weather, or the construction team attempting to nail it down. As a result, I proposed a small cap that would cover the ends, hold them down, and additionally provide an area where the the buoy could be attached by rope.

Another detail that was called out in the proposal was the drilling of holes on the horizontal cladding elements. Keeping away from the sledding surface, these holes would allow for the drainage of pooling water in cases of thawing snow and ice. These holes could be cut during the panel fabrication process, however since they are mainly on the rectilinear pieces, which could be manually cut, I considered these holes being introduced on site at the time of assembly. The ability to make these holes on site would allow for the assembly team to assess the assembled conditional as they related to the ground on site and drill holes where they see greater potential for pooling water.

Provisions for attaching the structure to the lifeguard stand, which was outlined in the competition brief, was accounted for by a custom notched saddle (Fig 31, Fig 32). This saddle sits on a plywood fastened to the lifeguard stand by sandwiching the top railing. The saddle takes on the language as the lattice, allowing for the underside of the members to notch securely to the stand. The self weight of the structure secures it in place with no need for additional fasteners.

CONCLUDING REMARKS

I wrote this report before, during and after submitting this competition. Although it made for a mess out of my tenses, it provided the opportunity for a valuable reflection that has offered up lessons in competition design work.

Through the sections of this report I outlined my use of precedent in the manner provided by John Hancock by his reference to precedent as “works of the past”. Looking at these works is not only limited to the investigation of the architectural type as drawn. Instead, it can be considered

a holistic investigation which includes any documents of relevance that can be regarded as a guide for the task at hand. Photography, written accounts, news stories, competition type, and design briefs all hold value in the conversation of precedent.

Reflecting on my design process, it is clear that my strategy was to work very close to the design brief. The brief is a work in itself and I sought to validate its call and provide a response that built upon the organizing committees vision. However, in a competition such as the Winter Stations, where the stakes are low, this strategy might not be the most fruitful. Many of the items outlined in the brief went undressed by the winning submissions, and so one can assume that the brief in this case was a jumping-off point rather than a set of rules.

Looking at past competition entries and briefs provided insight into what I have outlined as the call and response. The call and response traces back past design concepts to the brief, but also traces them forward to the evidence of the concept as built. Winning projects did what they said they would do. These projects were simple, leaving little to doubt in their response to the brief.

Considering my intent as a type, in this case the folly, provided me with language to describe my work, both in text and image. Responding to the freeze-thaw narrative, the task I sought out was to bring together a complexity of temporal space, defined by Tschumi's movement, events, and symbols, but package it all in a concept subtle enough to be digested by a jury panel and the public. The Beach Bump was proposed to be robust, curious, and light hearted. In its design and construction I viewed it as serious enough for design aficionados, but playful enough for all to enjoy.

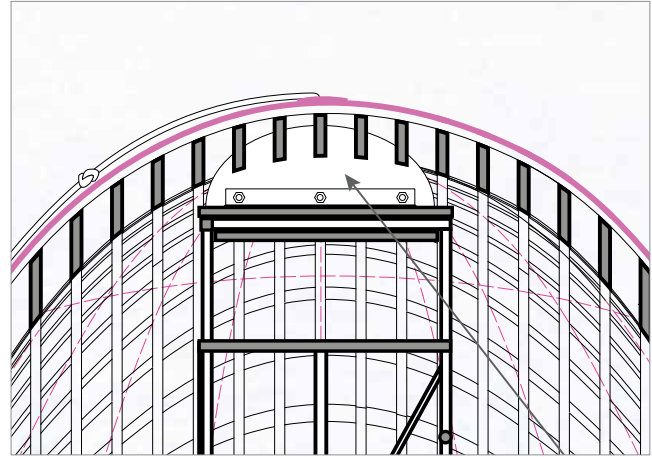


Figure 31 Proposed connection to lifeguard stand

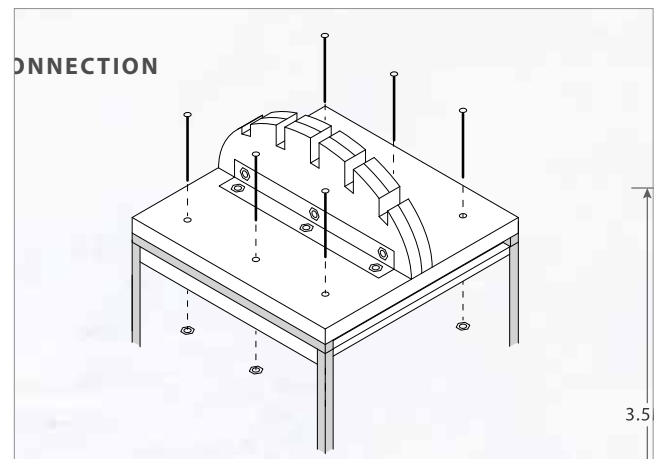


Figure 32 Proposed connection to lifeguard stand

BEACH BUMP



The Beach Bump is a playful undulated surface constructed from a fabricated lattice structure and a flexible plywood skin. Sledding, digging, climbing, snow angels, and footprints are brought to life by the surface beneath.

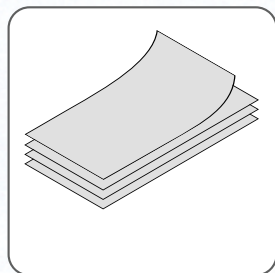
The mystery of this covered surface utilizes **freeze and thaw** to provide visitors with multiple experiences of discovery and play. The bump on the beach responds to the changing climactic conditions and the transitions of Toronto winter by creating an unexpected engagement with the ground. The coloured surface is revealed through use, temperature rise, and prevailing winds. The installation offers a tracing of the activities of the day, only to be lost with the accumulation of tomorrow's snow and frost.



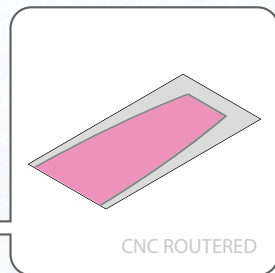
BEACH BUMP



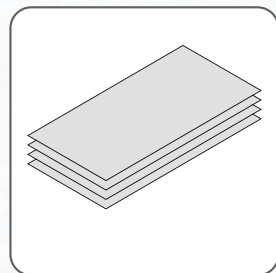
CONSTRUCTION MATERIALS



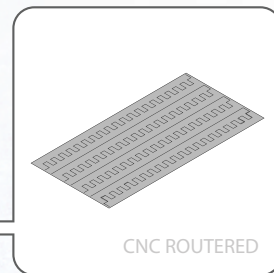
1220 x 2440 mm 3/16"
FLEXIBLE PLYWOOD



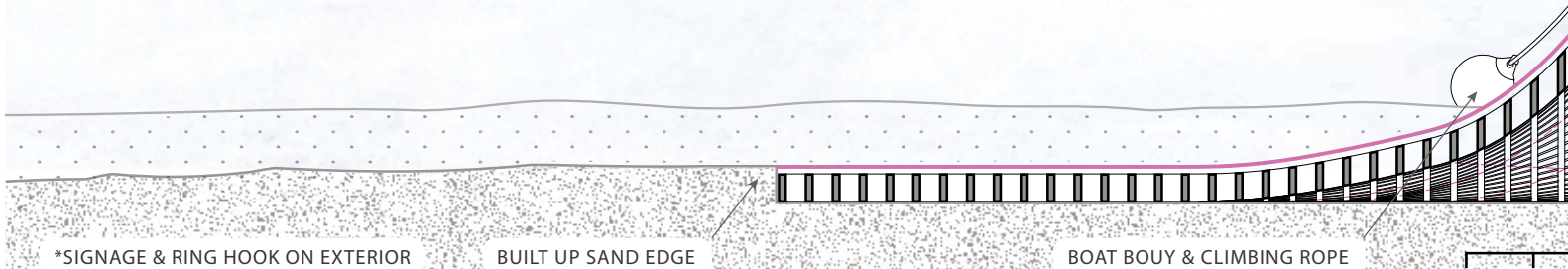
PLYWOOD SHELL
CNC ROUTED



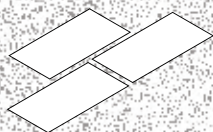
1220 x 2440 mm 1-1/4"
PLYWOOD



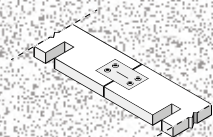
STRUCTURAL LATTICE
CNC ROUTED



SPECIFICATIONS

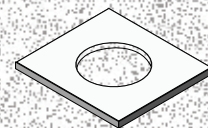


STAGGERED DECK



MENDING PLATE FOR LATTICE MEMBERS

lattice system is friction fit



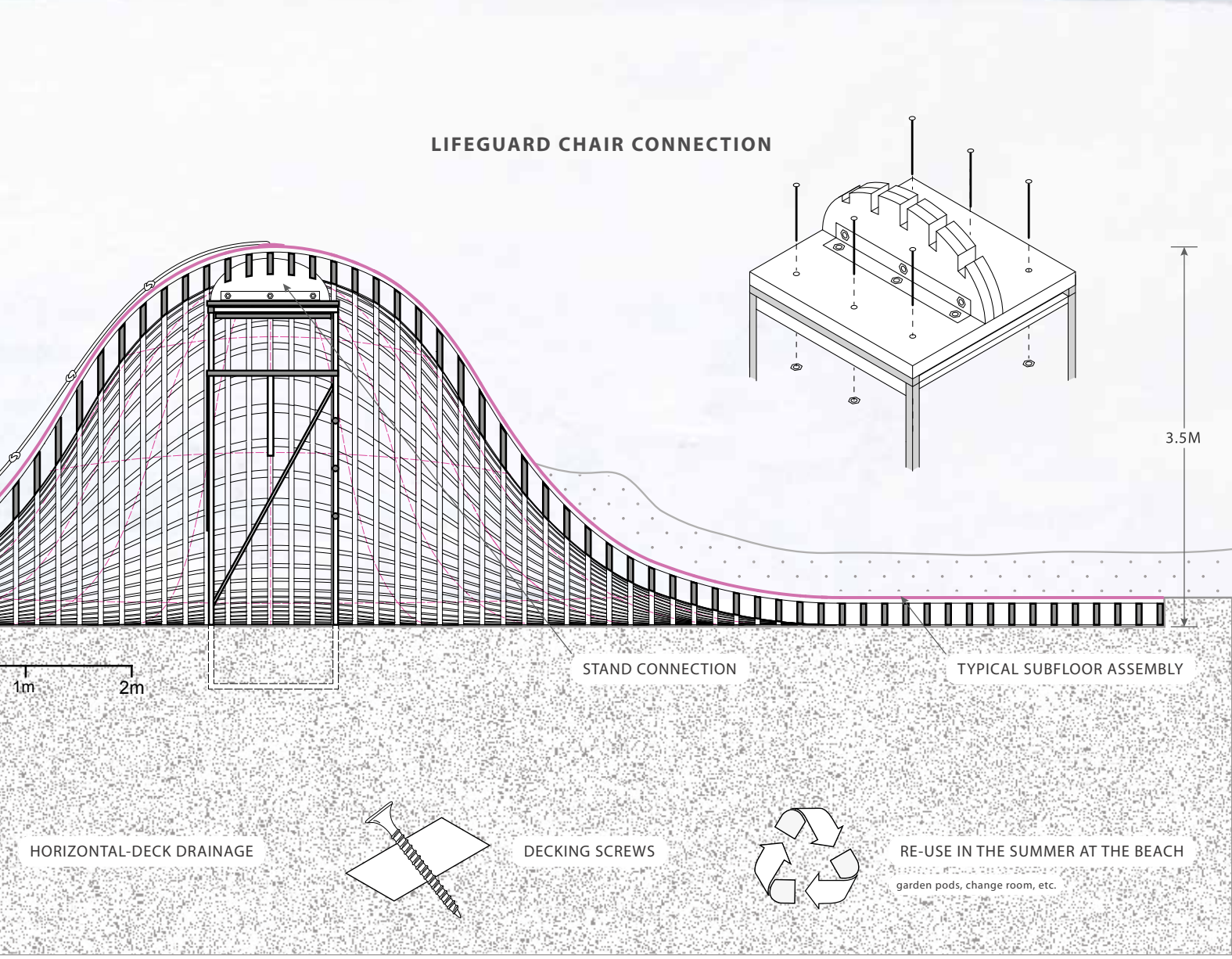
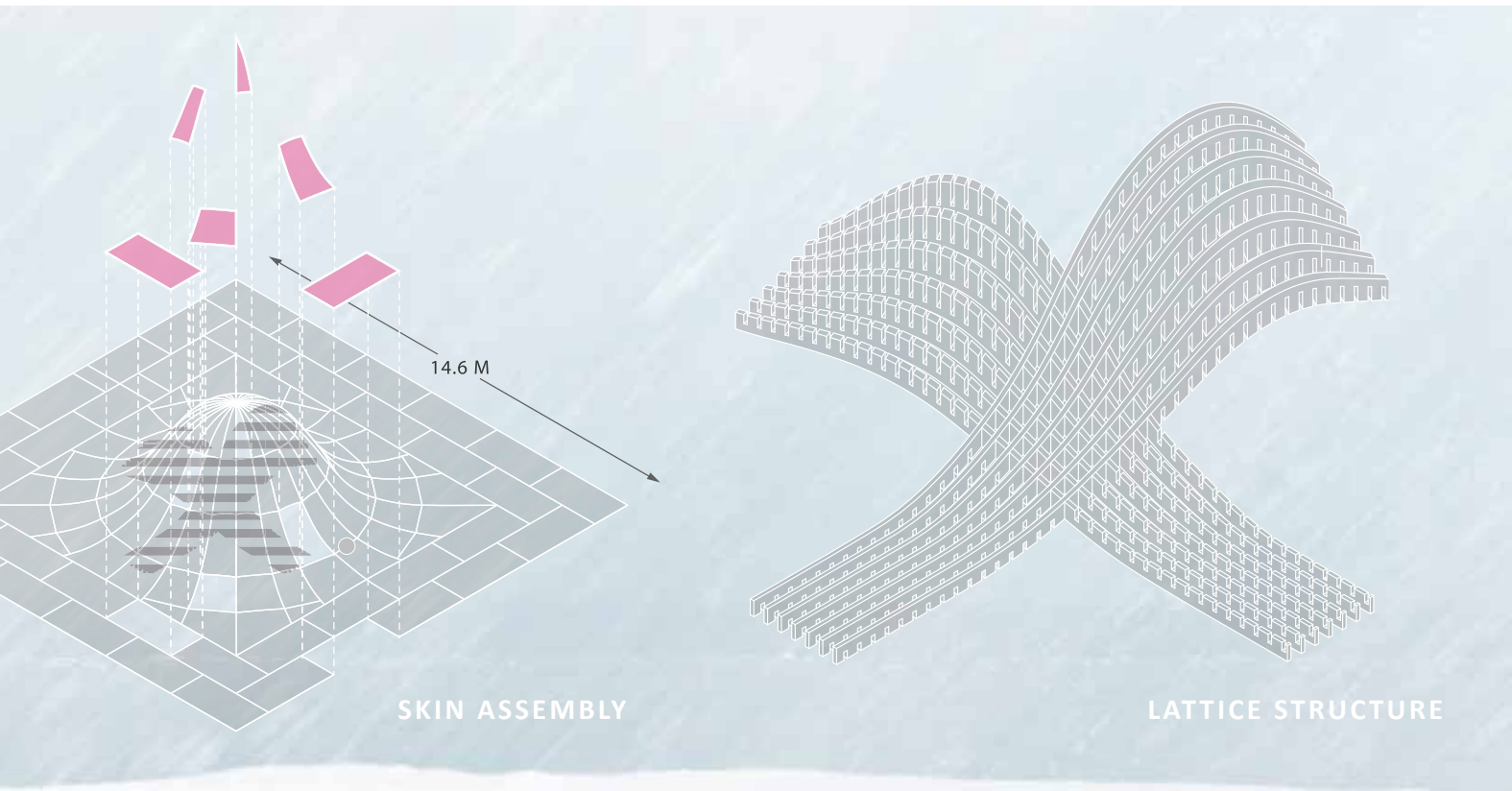


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Figure 3 Author unknown, <http://cicgeo20.weebly.com/uploads/2/3/6/3/23630132/external_forces_diagrams_illustrations_form_2-20.pdf>

Figure 4 Graphic by Peter Bohdal

Figure 5 Graphic by Peter Bohdal

Figure 6 The City of Vancouver, Porch Parade for Robson Redux, <<http://cdn.plataformaurbana.cl/wp-content/uploads/2015/08/porch-parade-viva-vancouver-por-city-of-vancouver-via-flickr-9.jpg>>

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Figure 12 Nicholas Croft, <http://static1.squarespace.com/static/51f57aaf4b0e0e87a7ea2ac/55182e1fe4b0d571edbde92a/55182e91e4b0d6bbb54f3a95/1435544373192/WS_02.png?format=1500w>

Figure 13 Ryerson Fabrication Zone, <<http://dfz.ryerson.ca/wp-content/uploads/2015/01/Snowcone-Remi-88.jpg>>

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Figure 15 Author unknown, <https://static.dezeen.com/uploads/2015/03/Toronto-Winter-Stations-2015_dezeen_468_8.jpg>

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Figure 18 Bernard Tschumi, <<https://s-media-cache-ak0.pinimg.com/736x/fc/04/72/fc0472360b2f15fb214af55babda059.jpg>>

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Figure 20 Graphic by Peter Bohdal

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Figure 23 Graphic by Peter Bohdal

Figure 24 Author unknown, <http://winterstations.com/images/inset/snowcone_01.jpg>

Figure 25 Dis Section, <<http://images.pausecafein.fr/images/cafein/2016/03/architecture-design-urbain/banc-part-terre-fleur.jpg>>

Figure 26 Snøhetta, <<https://s-media-cache-ak0.pinimg.com/736x/eb/2a/ba/eb2aba30514a592660ef5081a846f682.jpg>>

Figure 27 Partisans, <http://www.archello.com/sites/default/files/imagecache/header_detail_large/C05.jpg>

Figure 28 Graphic by Peter Bohdal

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Figure 31 Graphic by Peter Bohdal

Figure 32 Graphic by Peter Bohdal

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