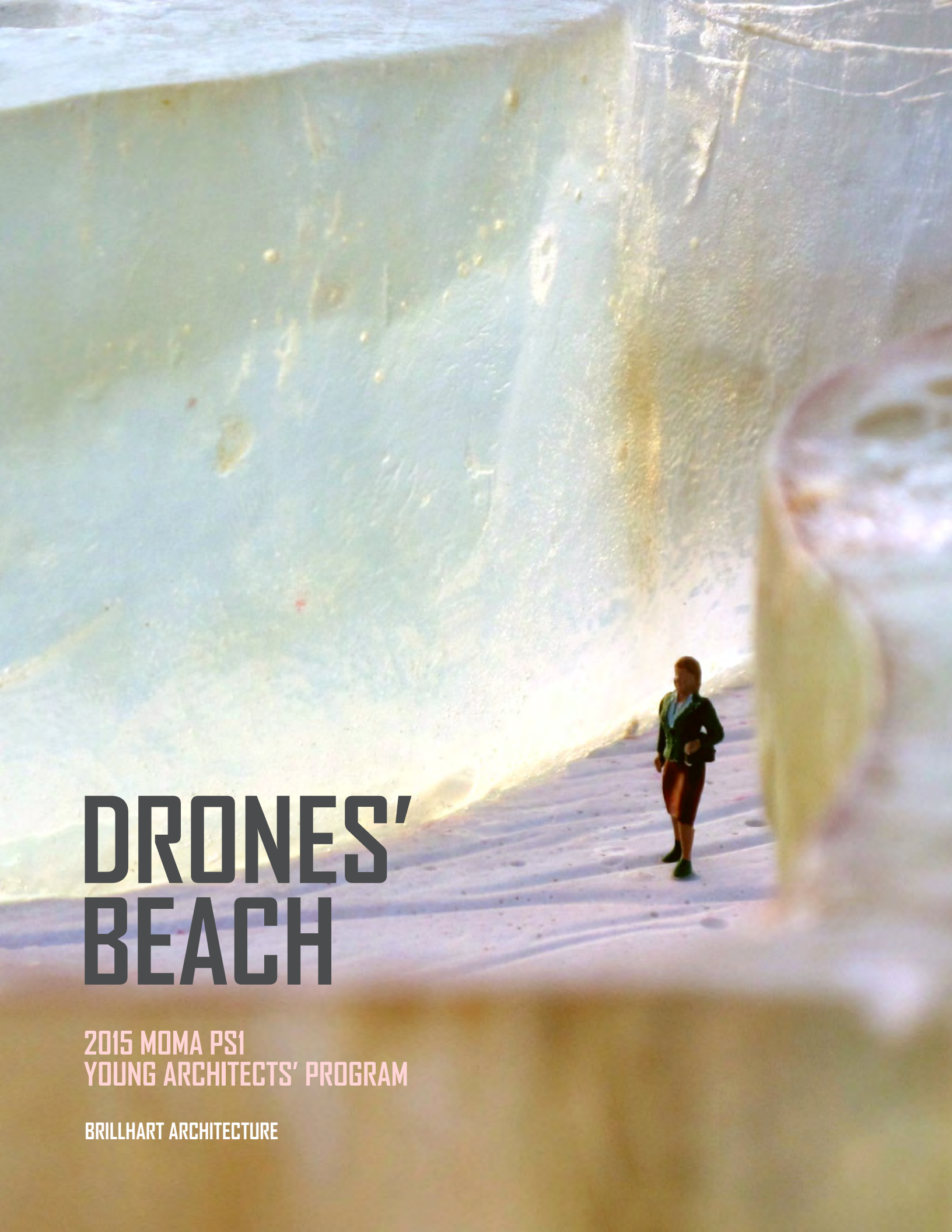


A surreal landscape featuring a massive, translucent, crystalline structure that dominates the scene. The structure has a rough, textured surface with various inclusions and a warm, golden-yellow glow emanating from its base. A person stands on the ground in the lower right, providing a sense of scale. The ground is a light, sandy color with some small, dark spots. The overall atmosphere is dreamlike and otherworldly.

DRONES' BEACH

2015 MOMA PS1
YOUNG ARCHITECTS' PROGRAM

BRILLHART ARCHITECTURE



I've got a secret



about a mythic beach



a multi-sensory experience



DRONES’ BEACH

Drones’ Beach is a phenomenological construction: a multi-sensory installation that explores the physical and ephemeral boundaries of space. As setting and atmosphere, the beach serves as a playground of limitless human experiences. The sensational perceptions are all completely unique, shaped by different cultural, situational and personal conditions, moods and memories.

The project engages the existing infrastructure as a canvas for design, beginning with reconstituting the concrete walls. Wooden ribs increase the height and formal nature of the space while manipulating the vertical planes. The newly articulated surface is lined with evocative imagery and misting devices that create a “waterwomb.” The ground-plane has been transformed to suggest pure pink sand, while four “nest-infested” palm trees tower above the space. Associative smells function as instruments for memory and navigation, while the music from the DJ amplifies the experience.

Lastly, the project juxtaposes the narrative of escapism and contemporary public space. Exploring the inter-subjectivity between viewers, Drones’ Beach speaks to the evolution of static urban environments into participatory and performative social spaces, while offering new vantage points and multiple dimensions of reality.

Collaborators include photographer Richard Misrach and Berlin-based smell researcher, Sissel Tolaas.



that changes Summer in the City



Collaborators



Richard Misrach - Photographer, Berkeley, CA

Richard Misrach is one of the most influential photographers of his generation. In the 1970s, he helped pioneer the renaissance of color photography and large-scale presentation that are in wide-spread practice today. Best known for his ongoing series, Desert Cantos, a multi-faceted approach to the study of place and man’s complex relationship to it, he has worked in the landscape for over 40 years. Other notable bodies of work include his documentation of the industrial corridor along the Mississippi River known as “Cancer Alley”, the study of weather, time, color and light in his serial photographs of the Golden Gate bridge, and *On The Beach*, an aerial perspective of human interaction and isolation.

Misrach has had one-person exhibitions at the National Gallery of Art, the Art Institute of Chicago, the Los Angeles County Museum of Art, and the Centre Pompidou, Paris, among others. His photographs are held in the collections of most major institutions, including The Museum of Modern Art, the Whitney Museum of American Art and the Metropolitan Museum of Art in New York, the National Gallery of Art in Washington, DC, and the San Francisco Museum of Modern Art.



Sissel Tolaas - Smell Researcher, Berlin

Sissel Tolaas was born in 1961 and grew up in both Iceland and Norway.

She originally studied mathematics, chemical science, linguistics and languages, and visual art at Oslo University; Warsaw University; Moscow University; St Petersburg University; Oxford University, Princeton University. She speaks and writes in nine languages and has received a variety of international scholarships, honours and prizes. Tolaas has concentrated her work on the topic of SMELL / SMELL & LANGUAGE - COMMUNICATON since 1990, within different sciences, fields of art and disciplines. Work has involved numerous companies and institutions i.e. Cartier; Louis Vuitton; E. Lauder ;BBC Imagineering, London; Sony Computer Science Lab; BMG SONY; Swissotel Worldwide; Mercedes Future Lab; Rockefeller Foundation; Liverpool University; Oslo University; Moscow University; Bangalore High tech Park; Oxford University; MIT Boston; Harvard University; The Boston Consulting Group; BayersSchering Inc.; San Francisco Neurosciences Institute, SF ; Humboldt University Berlin.

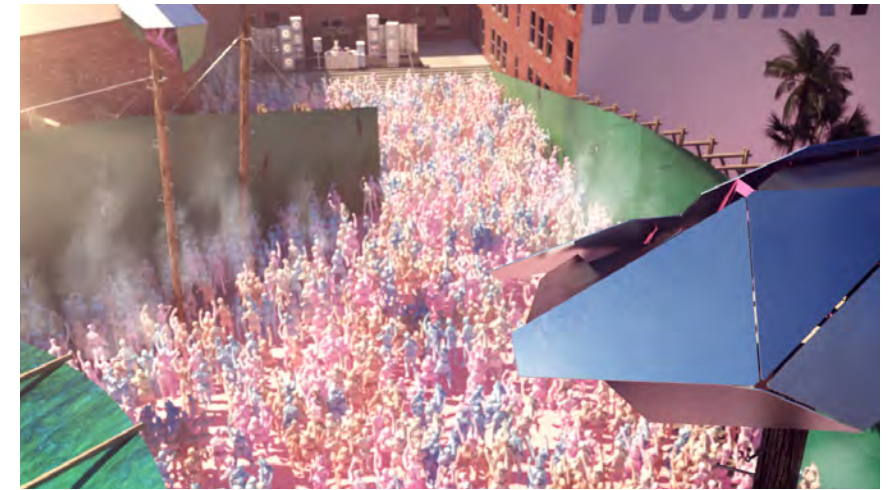
Sissel Tolaas has exhibited in major international contexts, such as Bien-nials, museums and other professional institutions. Active participation in international colloquiums, conferences and networks. Advisor/consultant to: BBC Imagineering, London; Sony Computer Science Lab, Paris; IFF Inc. New York; MARS, ZH Suisse; IntelligentFastFood Inc., Salzburg/Vienna; Statoil New Energy Program, Norway; Charité Humboldt Univer-sity Hospital, Berlin; Max Planck Institute, Berlin.

She established the research lab IFF re_searchLab Berlin for smell & communication in Berlin in January 2004, which is supported by IFF (International Flavors & Fragrances Inc., New York).

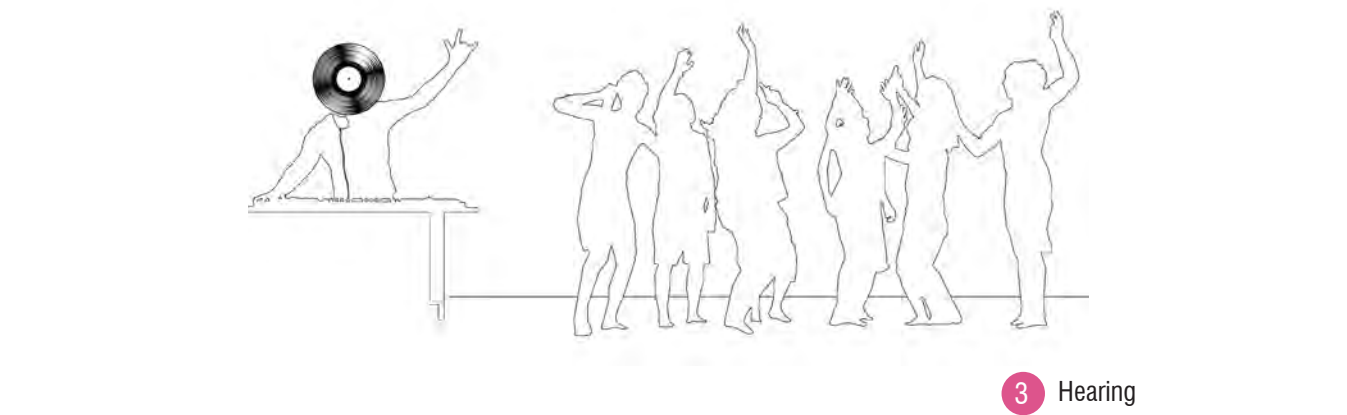
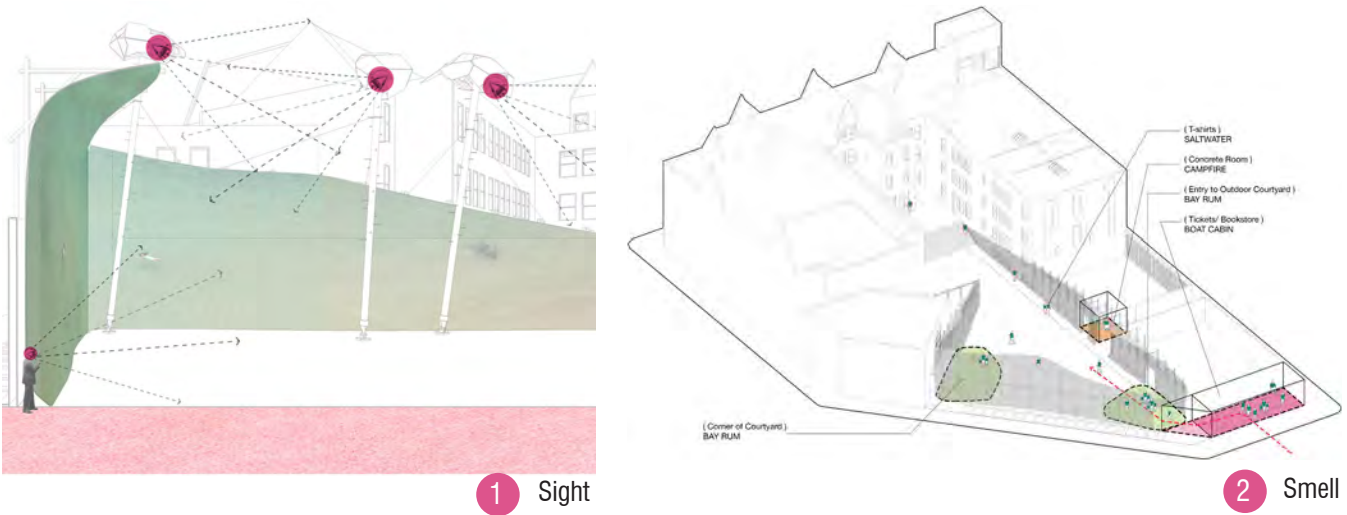
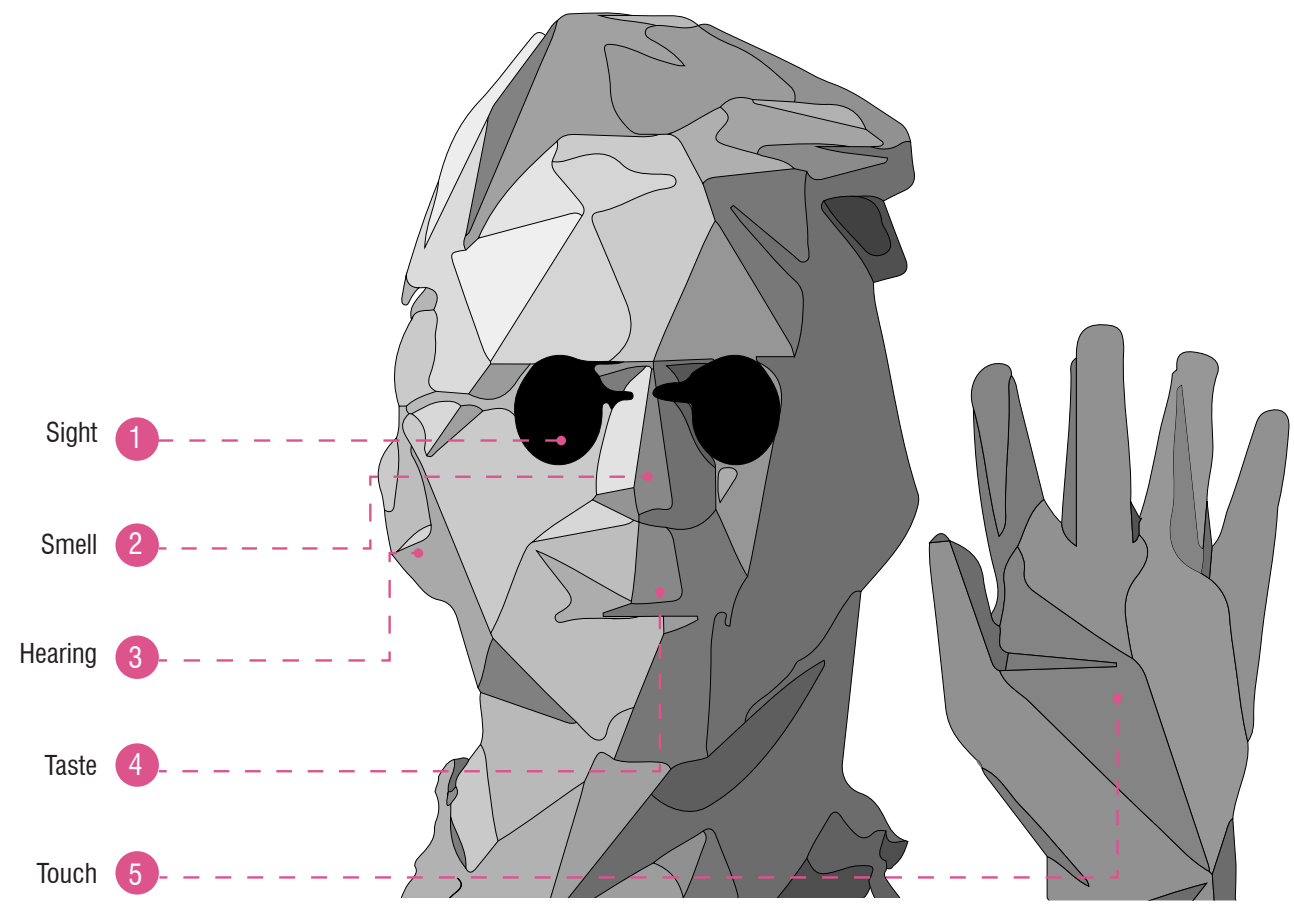




MoMA PS1

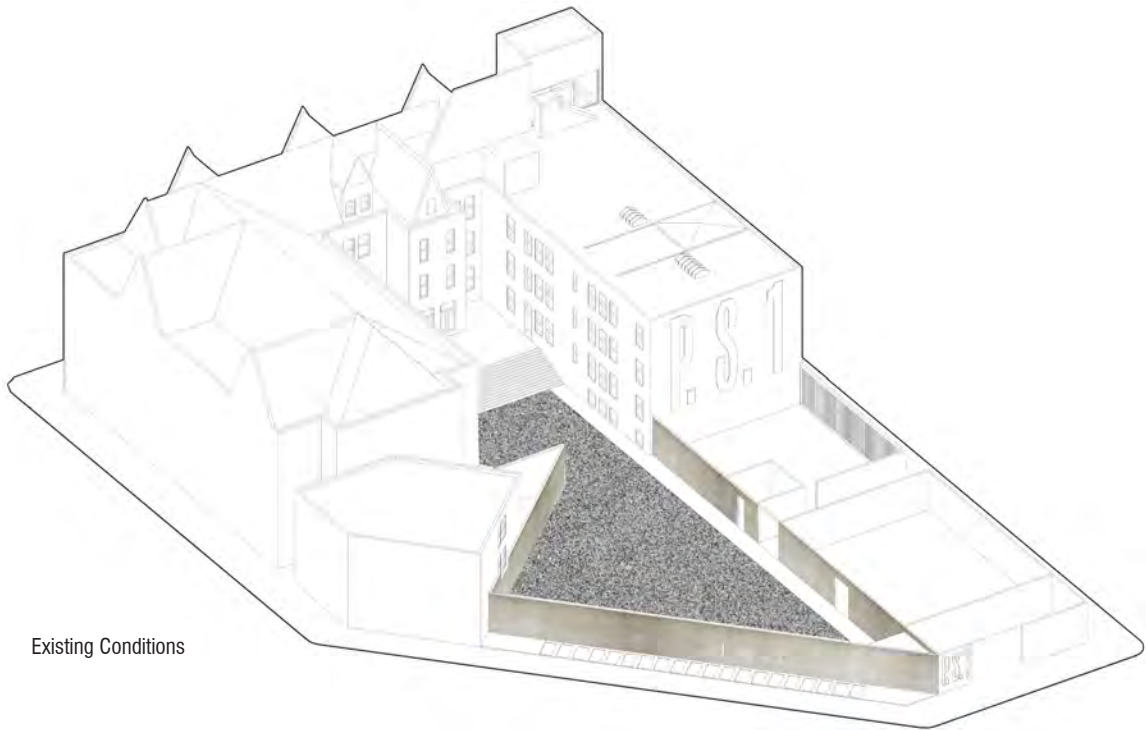


A MULTI-SENSORY EXPERIENCE

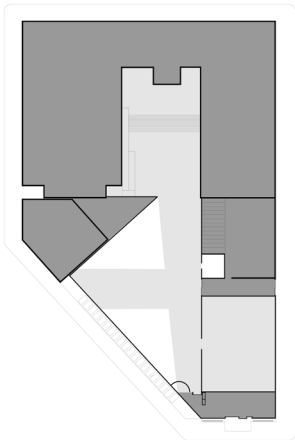


Best Use of Pre-Existing Space

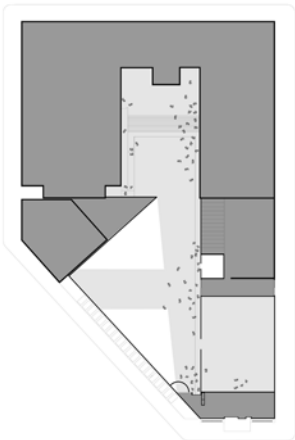
When evaluating the space needs and circulation patterns for the Warm Up Series, we felt that the existing infrastructure provided an excellent design opportunity. Not only did it provide a potential canvas but it also served as a structural framework for the project that would not interfere with the crowd.



Existing Conditions



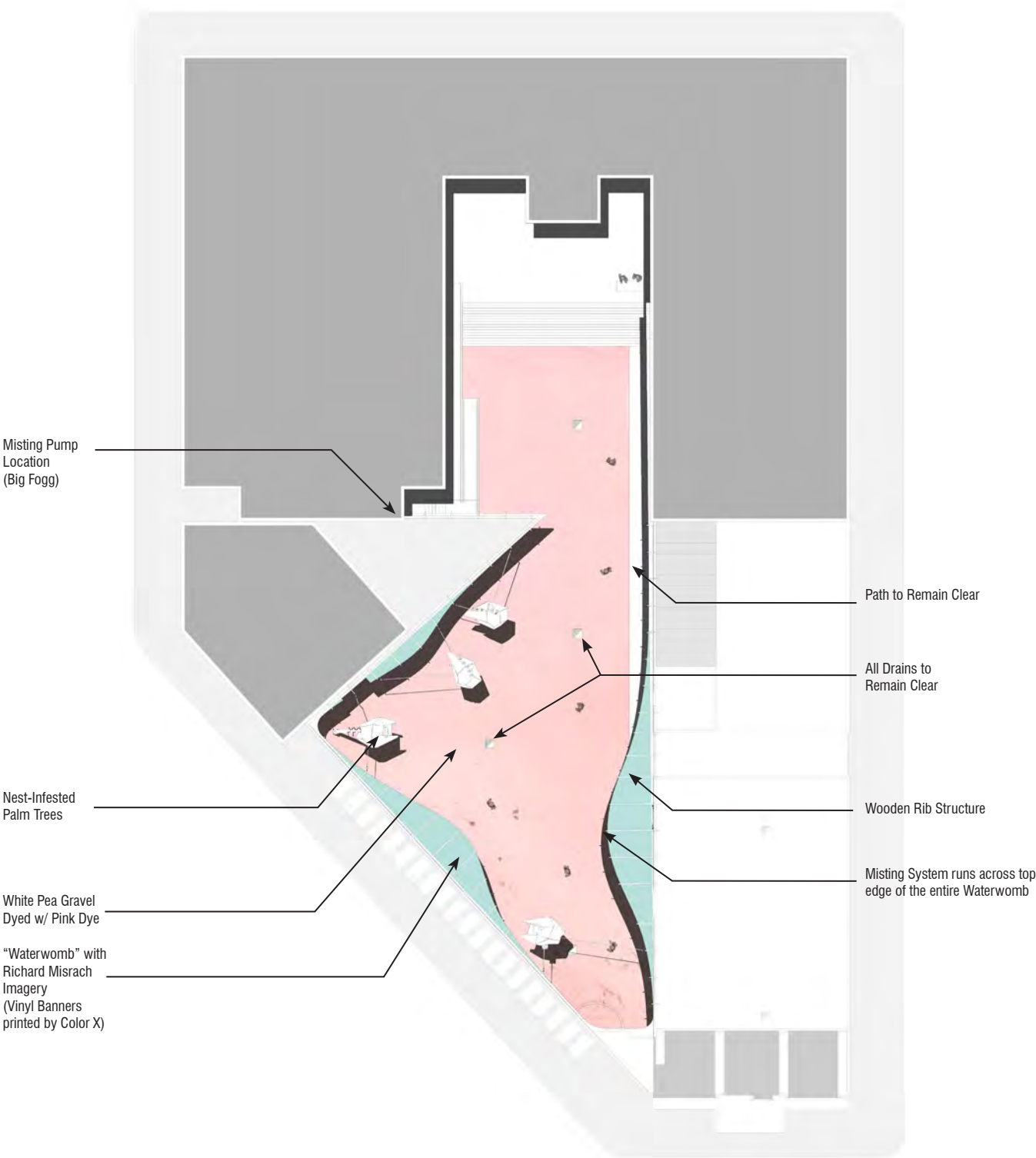
Areas To Be Left Free For Circulation (shown in grey)



Traffic Patterns During the Week



Traffic Patterns during WarmUp Series

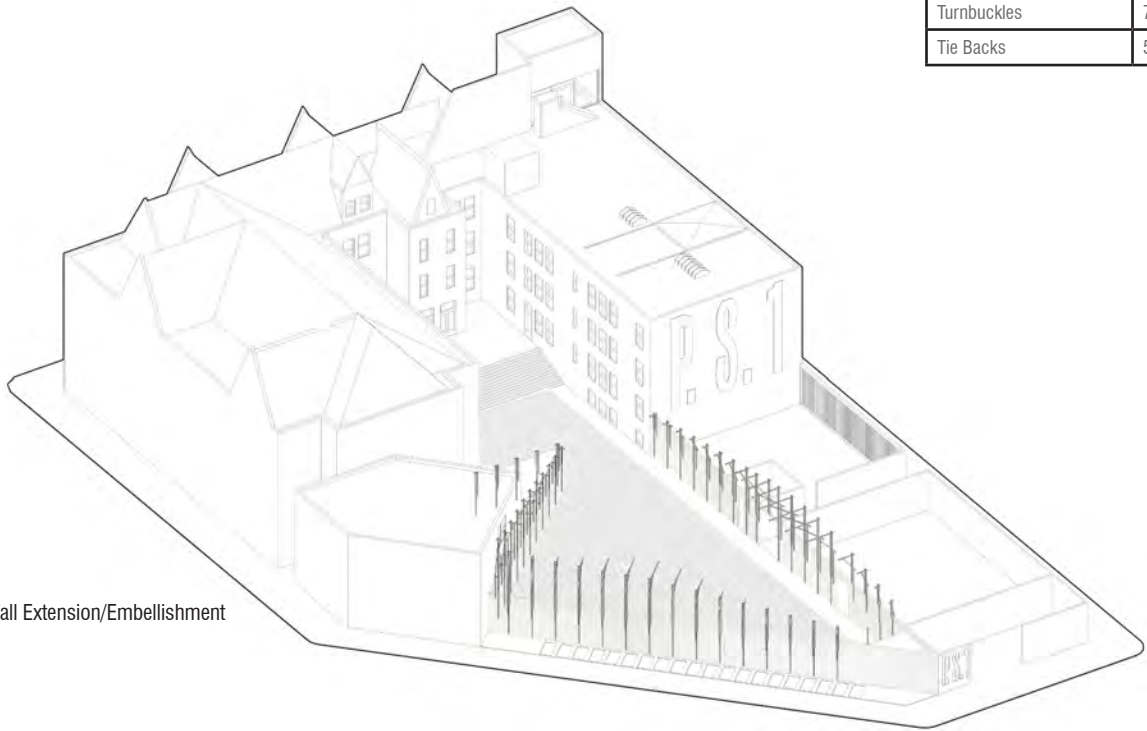


Proposed Plan

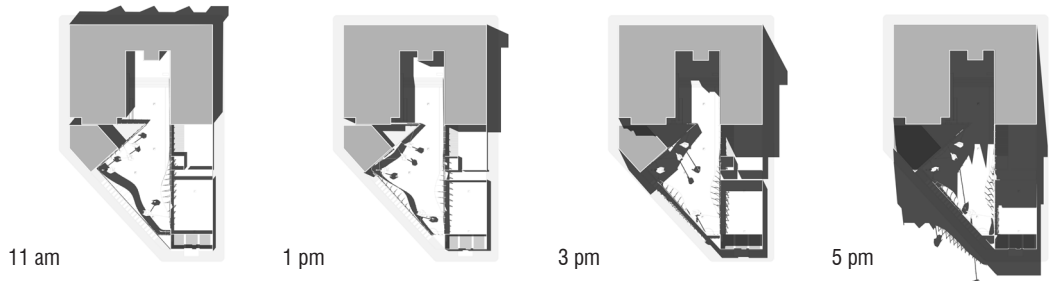
Alter the Spatial Dynamic

To transport viewers to another place, we first changed the physical nature of the rectilinear 16 foot tall concrete walls -- increasing the height to 30 feet in spots, and creating a curvilinear edge that projects 9 feet into the space to create moments of shade and shadow.

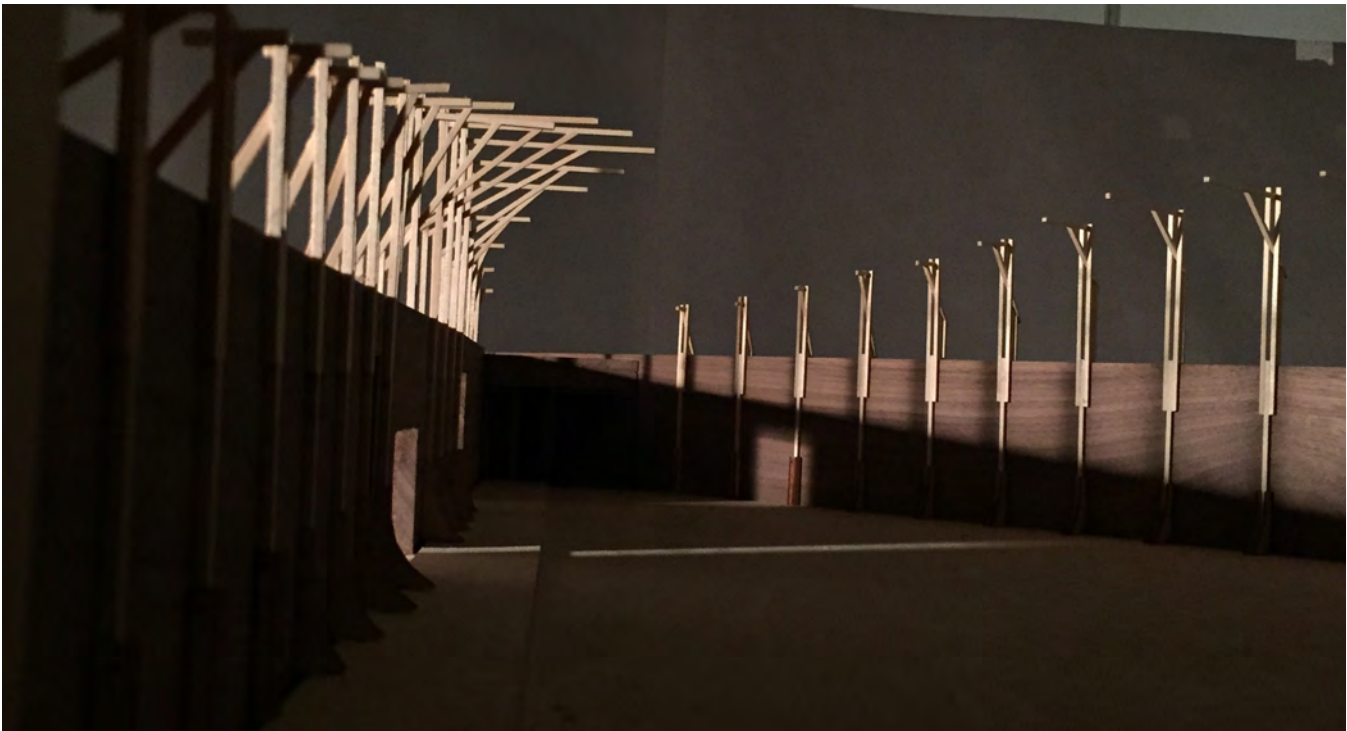
INFRASTRUCTURE / RIBS	QUANTITY
4x6 Posts	
10'	76
12'	16
14'	23
16'	60
18'	6
20'	11
Threaded Rods	300
Bolts / Nuts	500
Expansion Bolts	48
Plywood 4x8	10
Cable / Rope	1500 LF
Turnbuckles	75
Tie Backs	50



Wall Extension/Embellishment



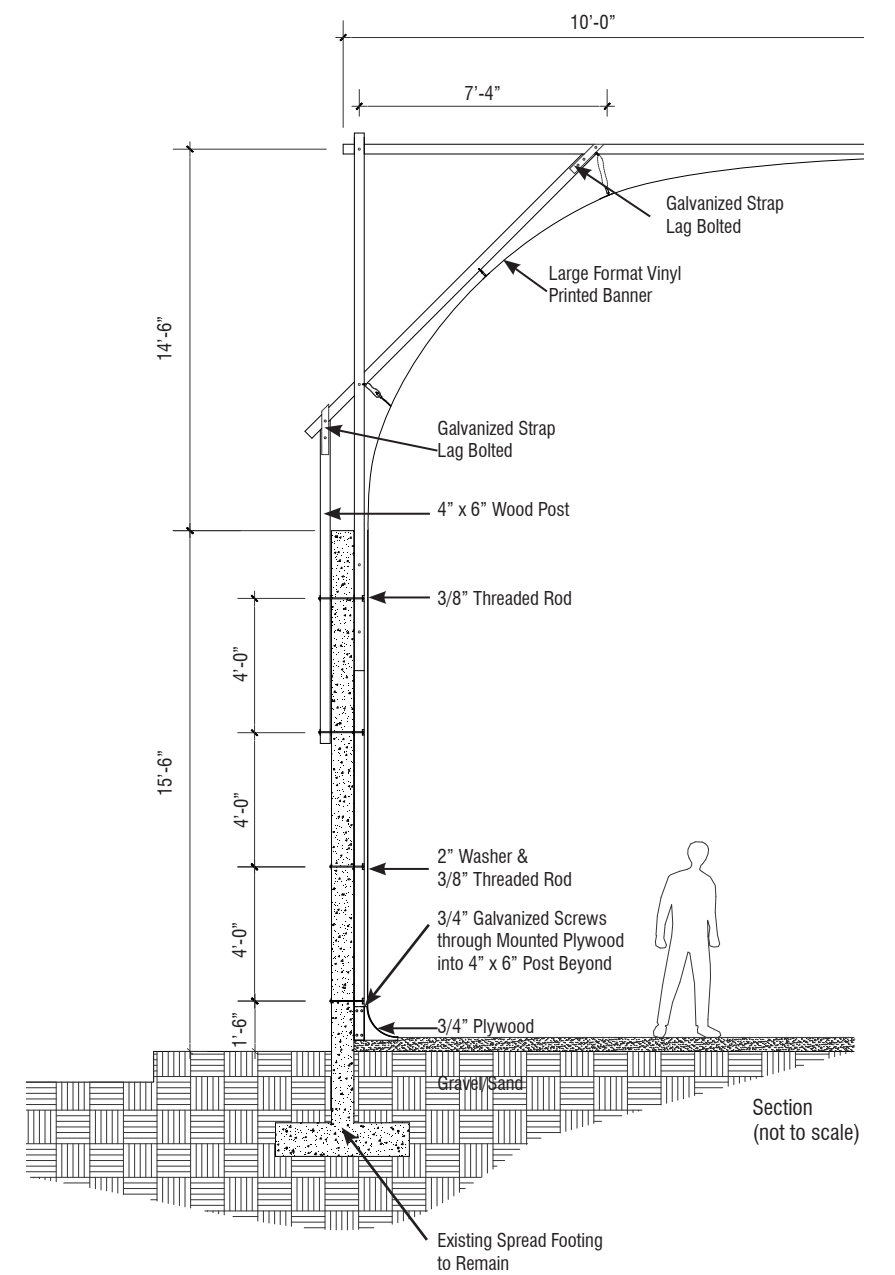
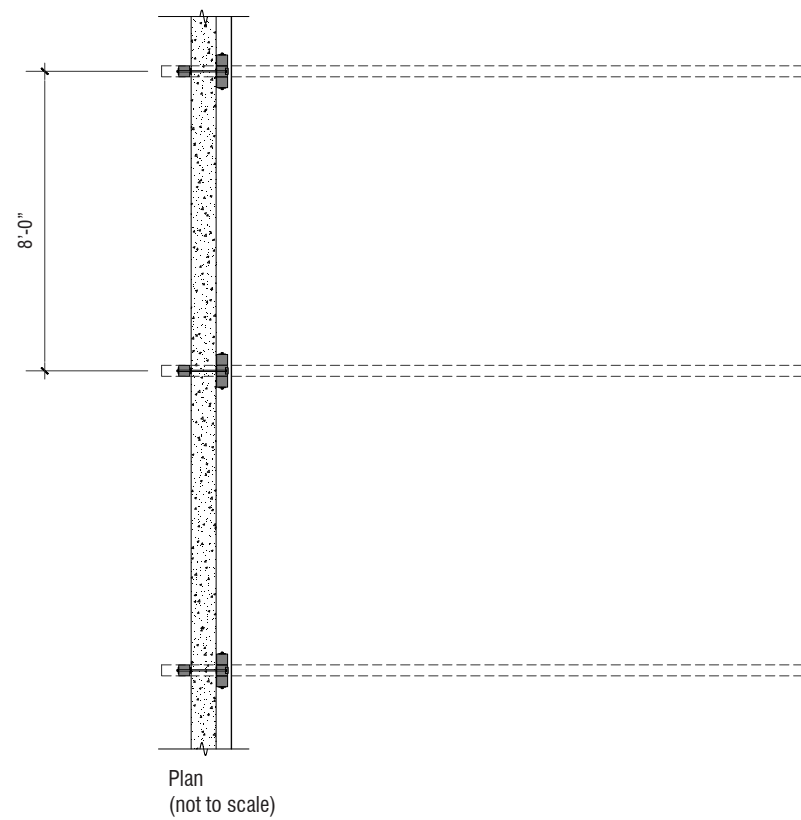
Shadow Studies



Model: Showing Rib Infrastructure



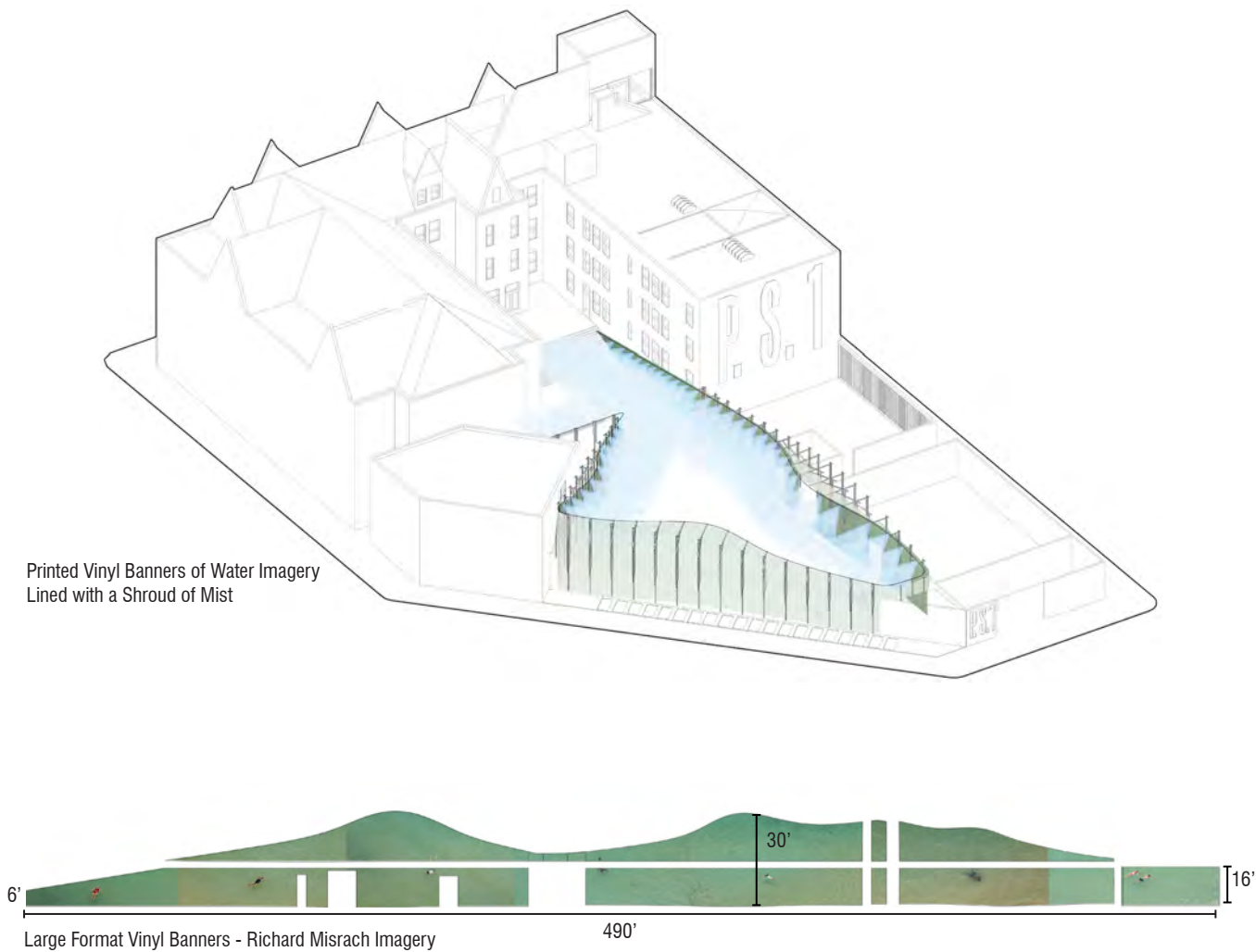
Model: Showing Rib Infrastructure



Create a Waterwomb

We wrapped the walls with vinyl banners, printed with Richard Misrach's imagery of people swimming in crystal clear Hawaiian waters. As the banners follow the curve of the new wall structure, it creates the sense of being enveloped in a waterwomb.

Using an evaporative cooling system, we devised a shroud of fog at the upper edge of the wall to 1) blur the hard line of where the banners meet the sky and to allow the edge to quietly disappear and 2) cool the overall space.



BIG FOGG MISTING SYSTEM	
Hose Bib	
High Pressure Hose	
Mojave Series High Pressure Pump	w/ Filtration
Stainless Steel Tube	3/8" O.D.
Koolfog KMN80 Misting Nozzle	8' OC

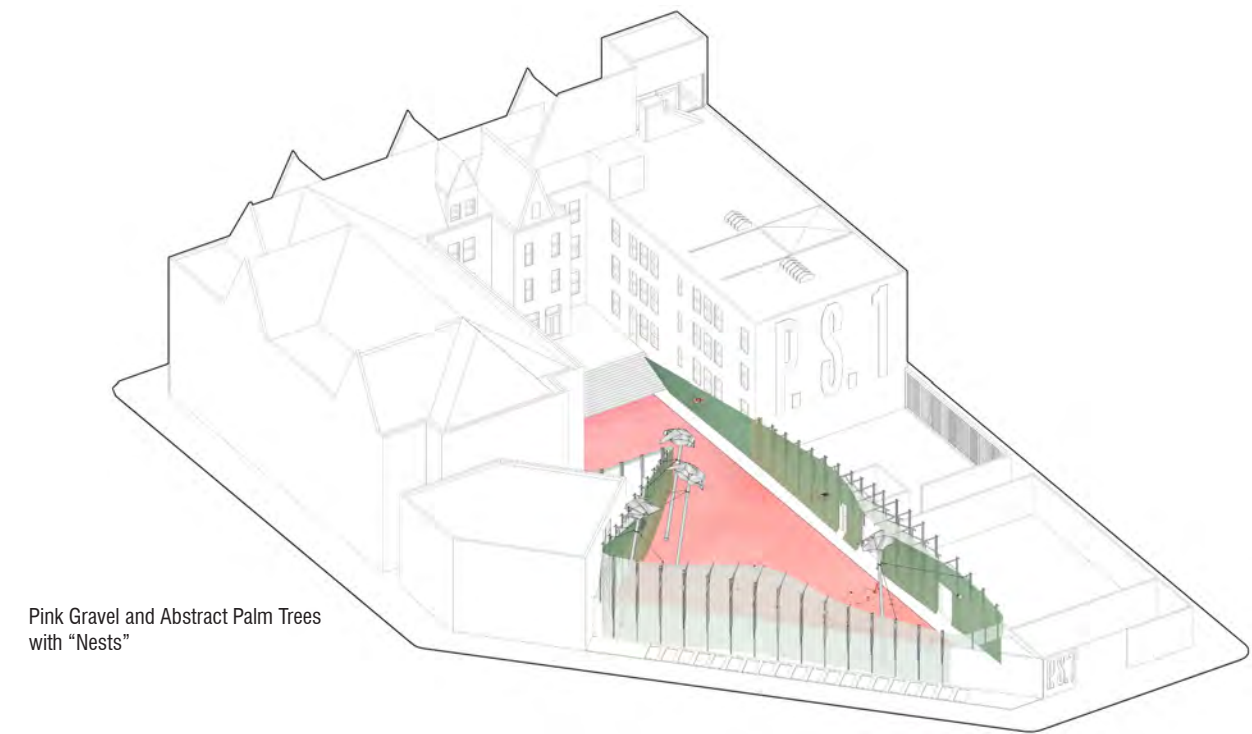


Photo Credit: Richard Misrach

Bring in the Beach

We are proposing to transform the ground-plane by replacing the existing grey gravel with white marble chips, dyed pink to look like pure pink sand. We also designed four, very tall “nest-infested” palm trees that echo the iconic palms seen in LA, Miami, and other tropical locales.

The trees tower 40 - 45 feet above the space and the nests span 10 feet long x 4 feet wide.



Pink Gravel and Abstract Palm Trees with “Nests”



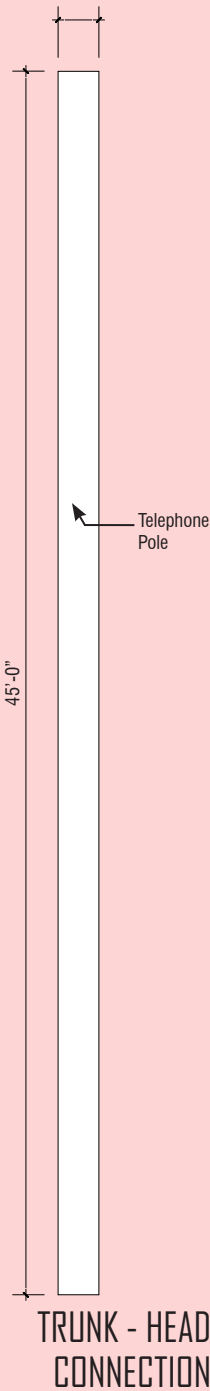
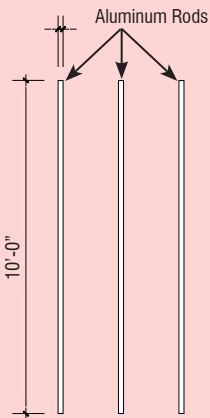
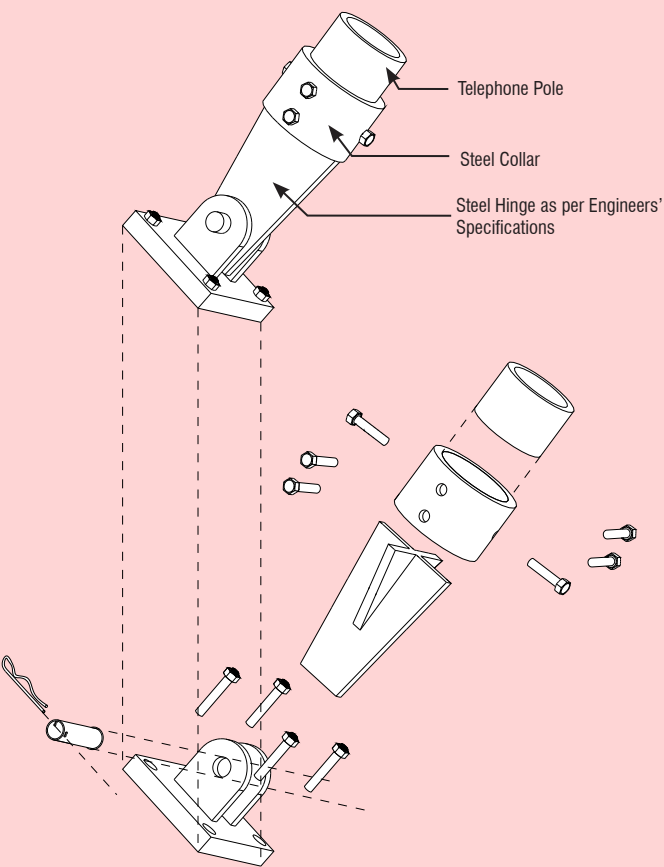
RECIPE FOR A PALM TREE

RECIPE

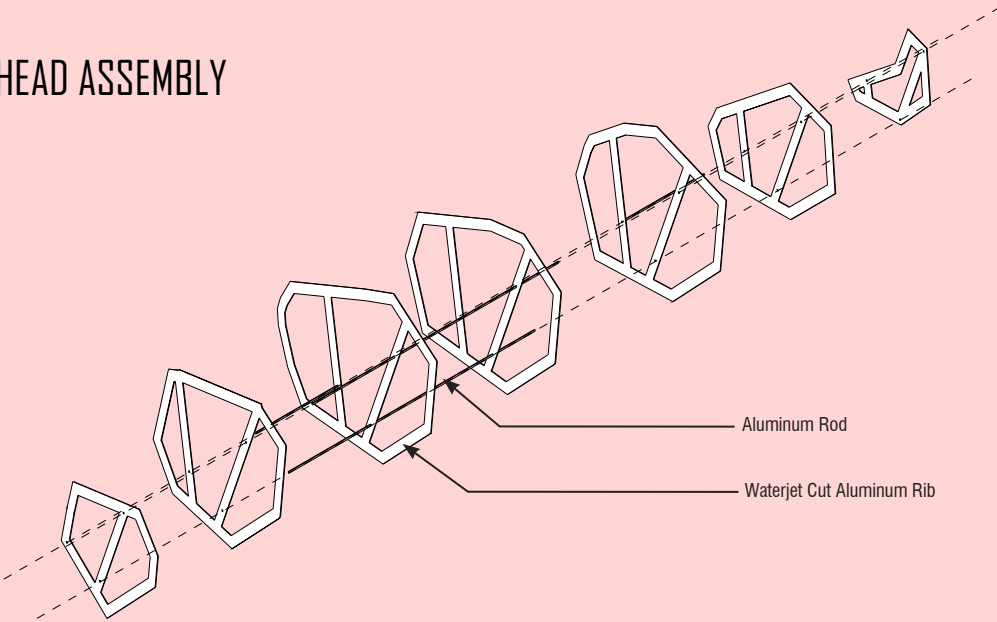
PER ONE PALM TREE

- | | | | |
|----|--|----|-------------|
| 12 | 5' X 10' ALUMINUM SHEETS | 1 | STEEL PLATE |
| 3 | 2.5" THICK ALUMINUM RODS, EACH AT 12' LONG | 1 | SCREW PILE |
| 1 | CEDAR TELEPHONE POLE | 10 | 3/4" BOLTS |
| 1 | STEEL PIN | 1 | R PIN |
| 1 | STEEL TUBE | | |

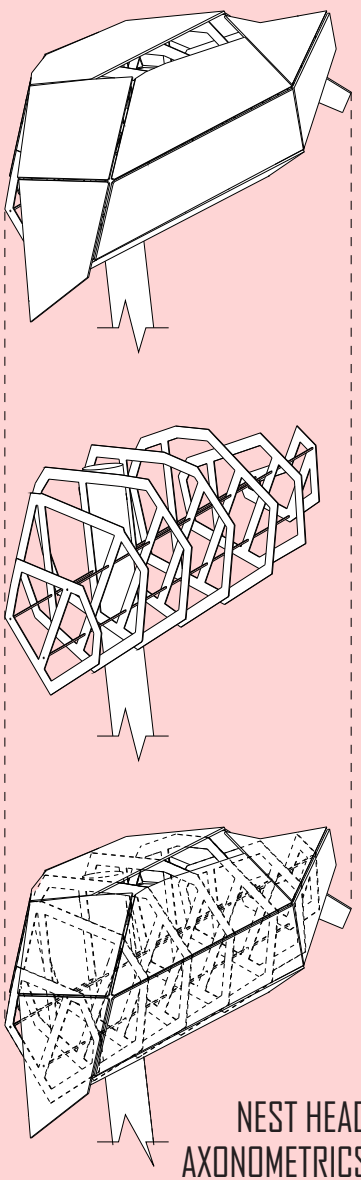
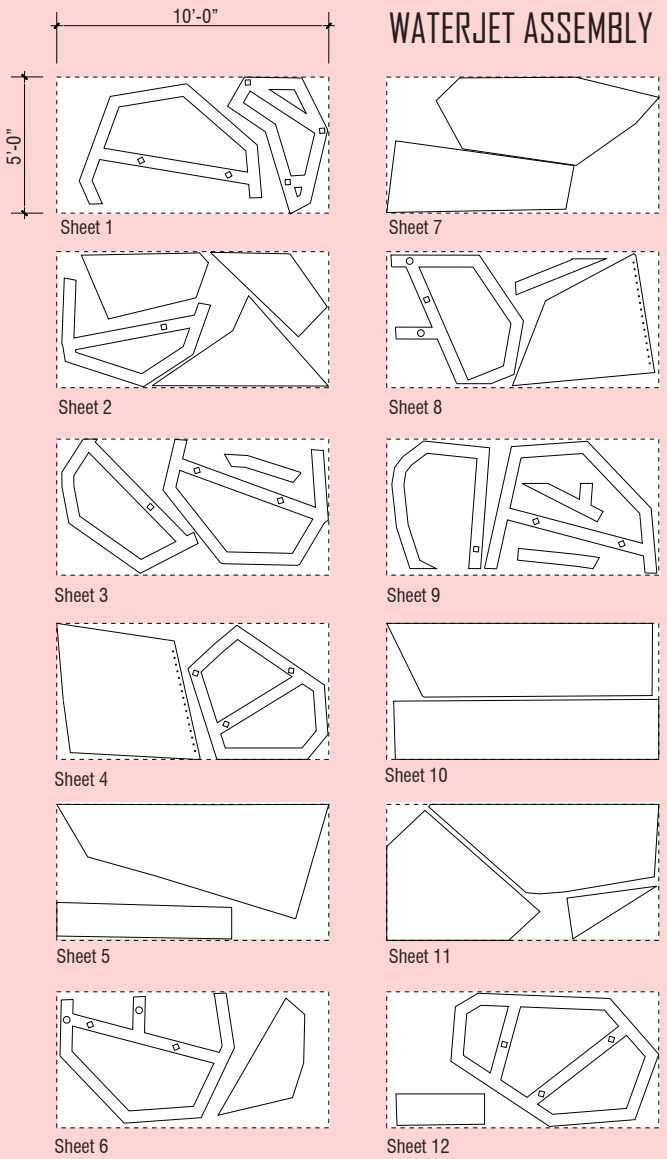
BASE ASSEMBLY

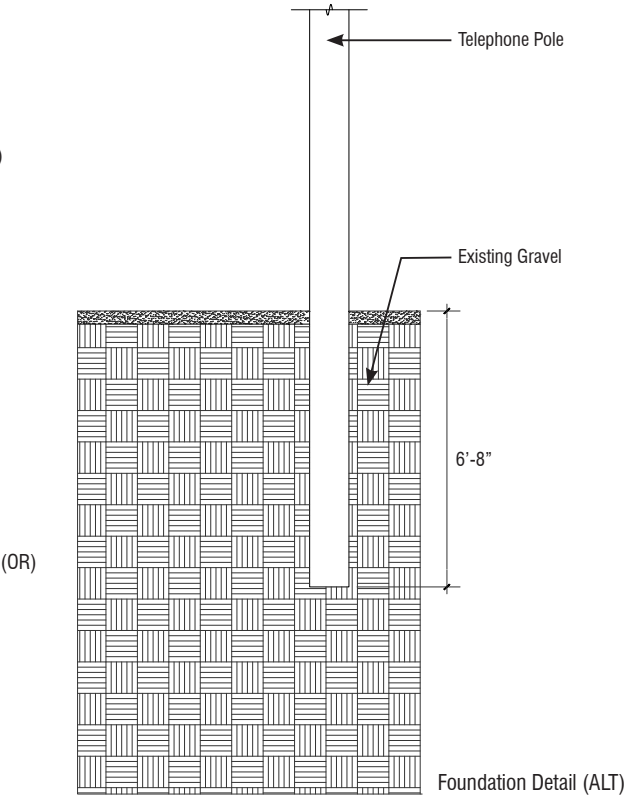
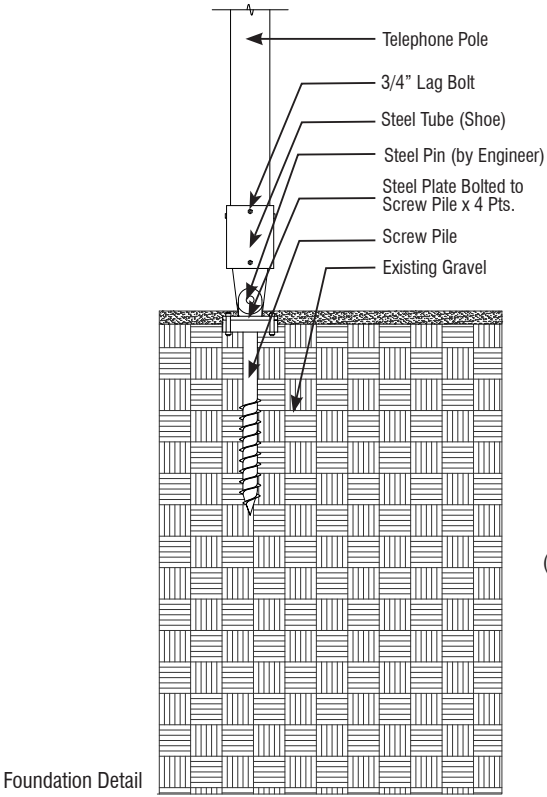
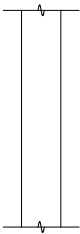
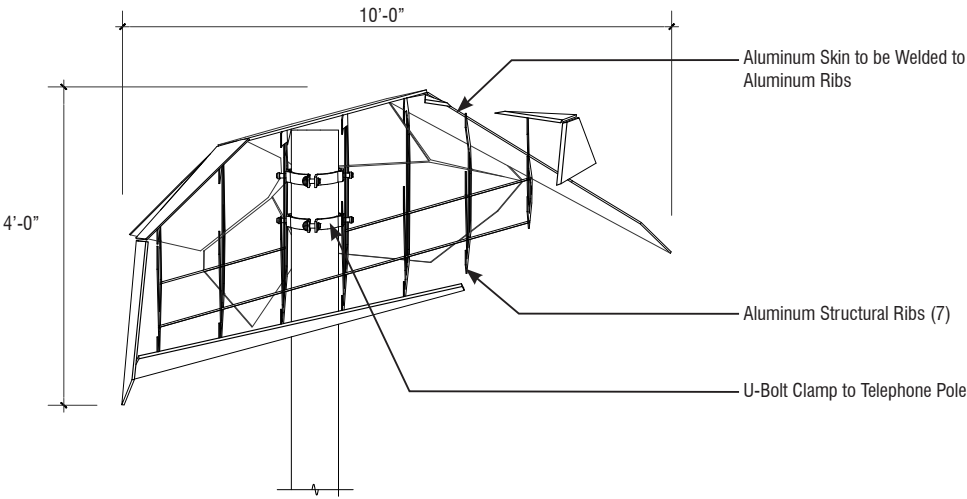


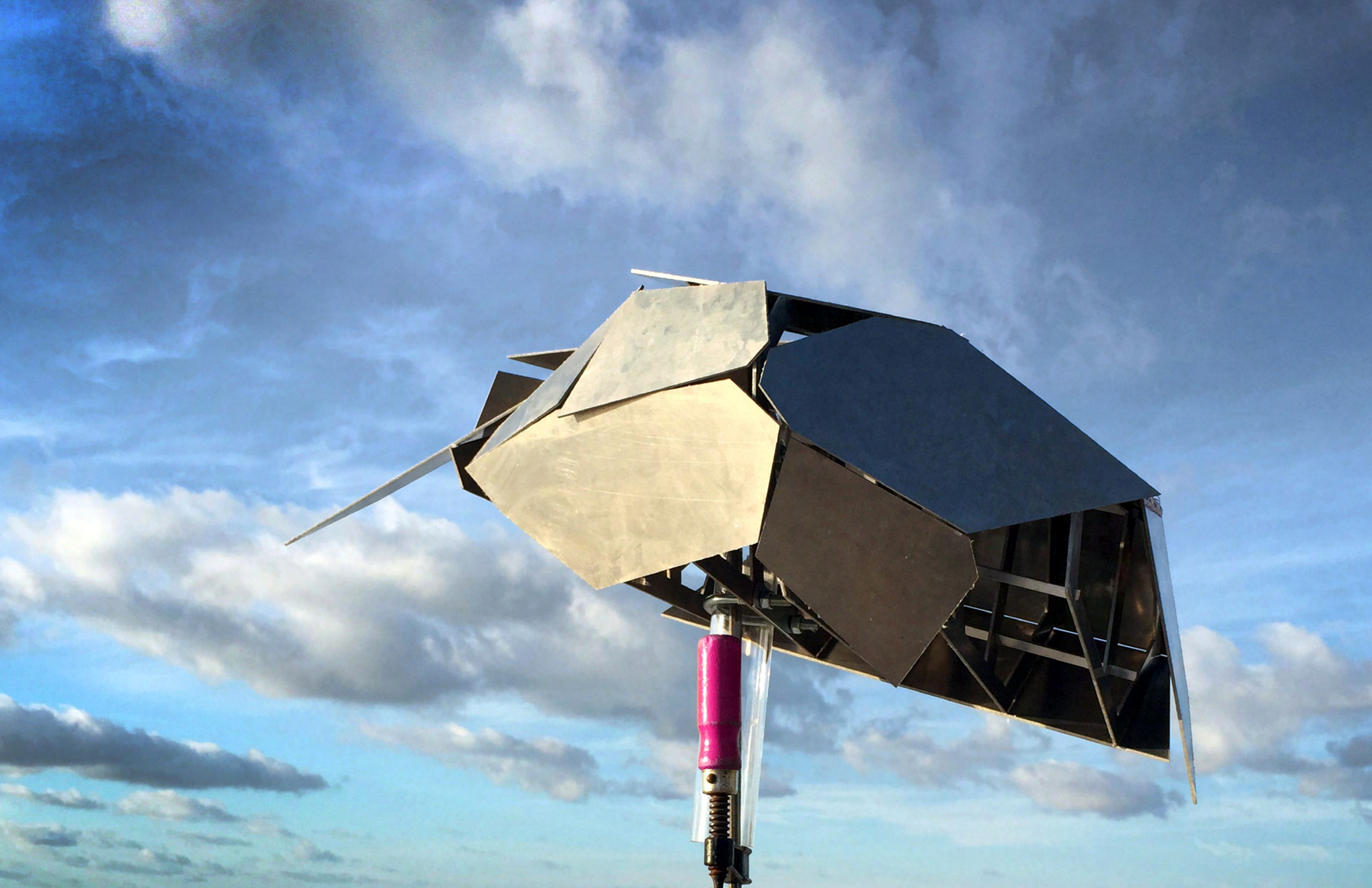
NEST HEAD ASSEMBLY



WATERJET ASSEMBLY

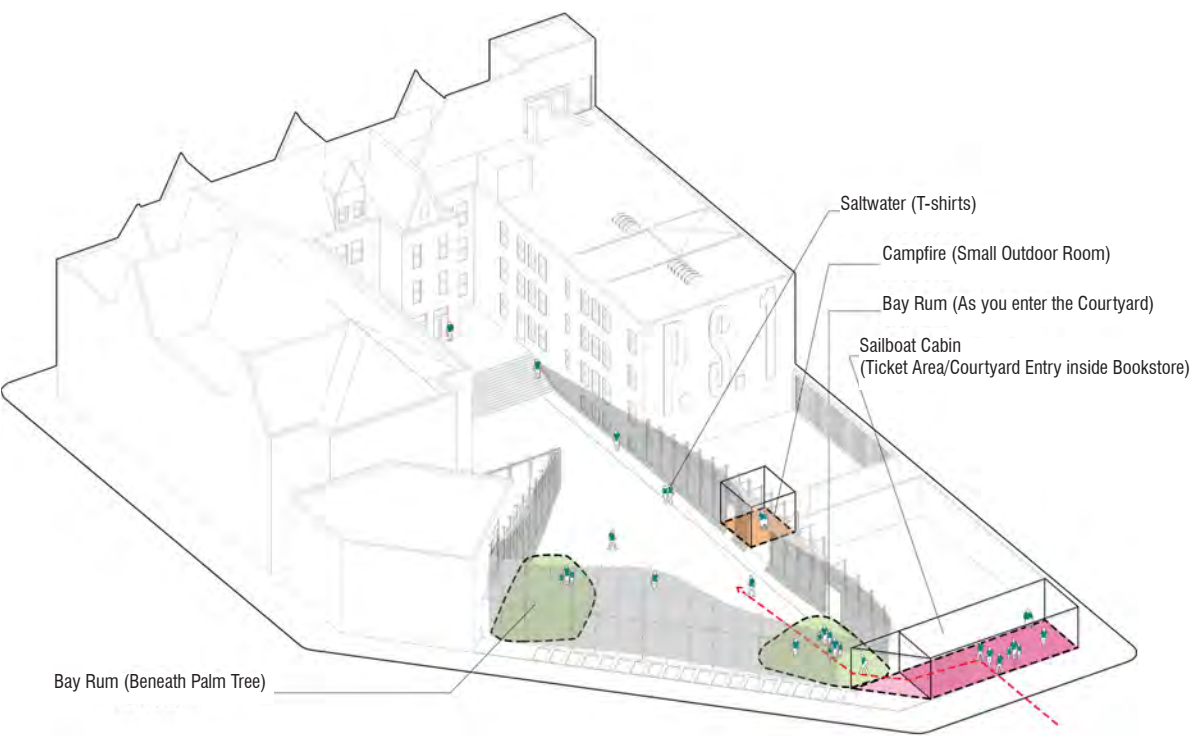






Incorporate Smells

We are collaborating with smell researcher Sissel Tolaas to develop four smells that conjure the beach and associated experiences. Smells include the inside of a sailboat, bayrum, campfire and salt water. These smells will be located in different areas of the space to help navigate you through the experience.

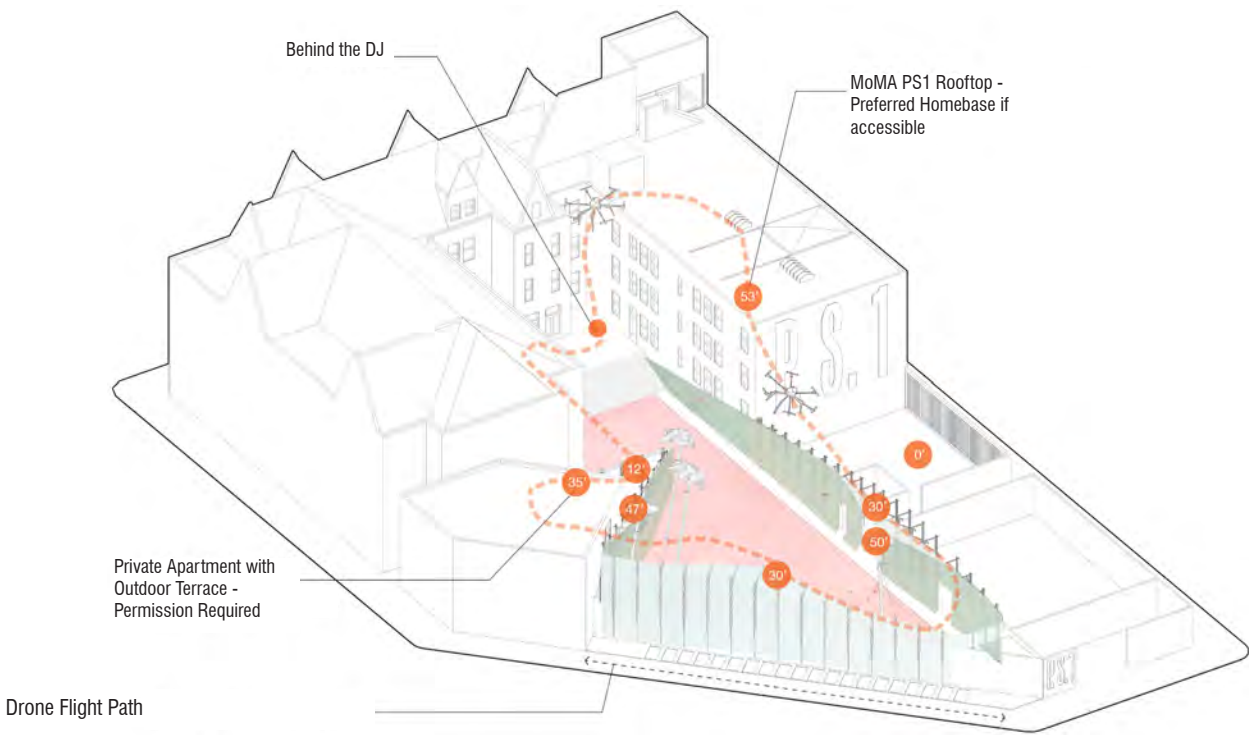


Smells and Locations



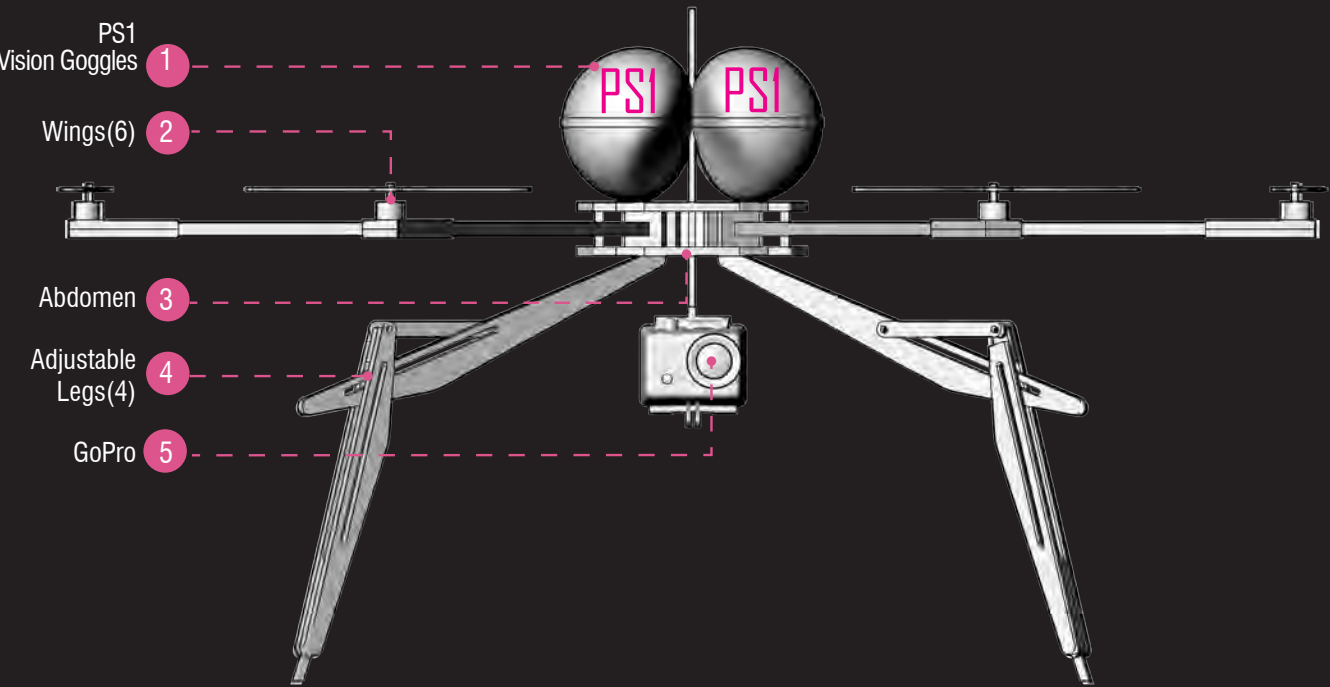
Transmit New Impressions

To thicken the experience, we introduced another level of perceptual phenomena using new media tools. The goal is to not only create a multi-sensory environment but also a multi-dimensional space which can be understood from new and once seemingly impossible vantage points, all the while allowing the party to go viral. Parker Gyokeres, owner of Propellerheads Aerial Photography, will assist us every Saturday. He and another drone pilot will fly two camera-equipped drones and post videos and still photos to Youtube, Instagram, Facebook, etc. Without ever flying directly over the crowd, he can safely get images from within the drone's nest, looking out from djs eyes, and high above the space, where you could never stand.



DRONE DETAILS / SPECS			
Drone 1:	650MM Quadcopter	Gro Pro Camera	15 Minute Flight Time
Drone 2:	Y6	NEX5 Camera	8 Minute Flight Time
Operators:	2 Drone Pilots	1 Runner / Volunteer	1 Camera Operator / Volunteer
Upload Times:	Video: 1 Hour	Stills: 20 Minutes	Live Streaming: Instant (Optional)
Safety Measures:	Autonomous Route using high resolution GPS Receivers	Will not Fly Over any Crowds	Will not fly above 55 feet +/- (in height)
Other Requirements:	Internet Access	UStream Account (optional if you want to Live Stream)	

PS1 PARTY DRONE



PARKER GYOKERES Drone Pilot, Photojournalist



Parker Gyokeres is a drone pilot, lead engineer and Owner of Propellerheads Aerial Photography. He is also an award-winning U.S. Air Force Photojournalist (retired).

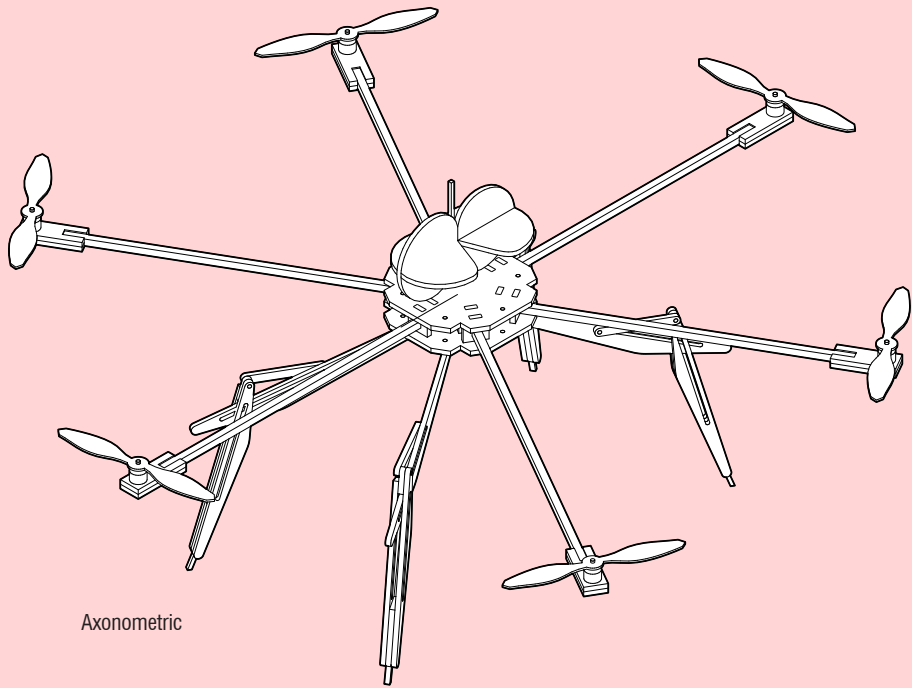
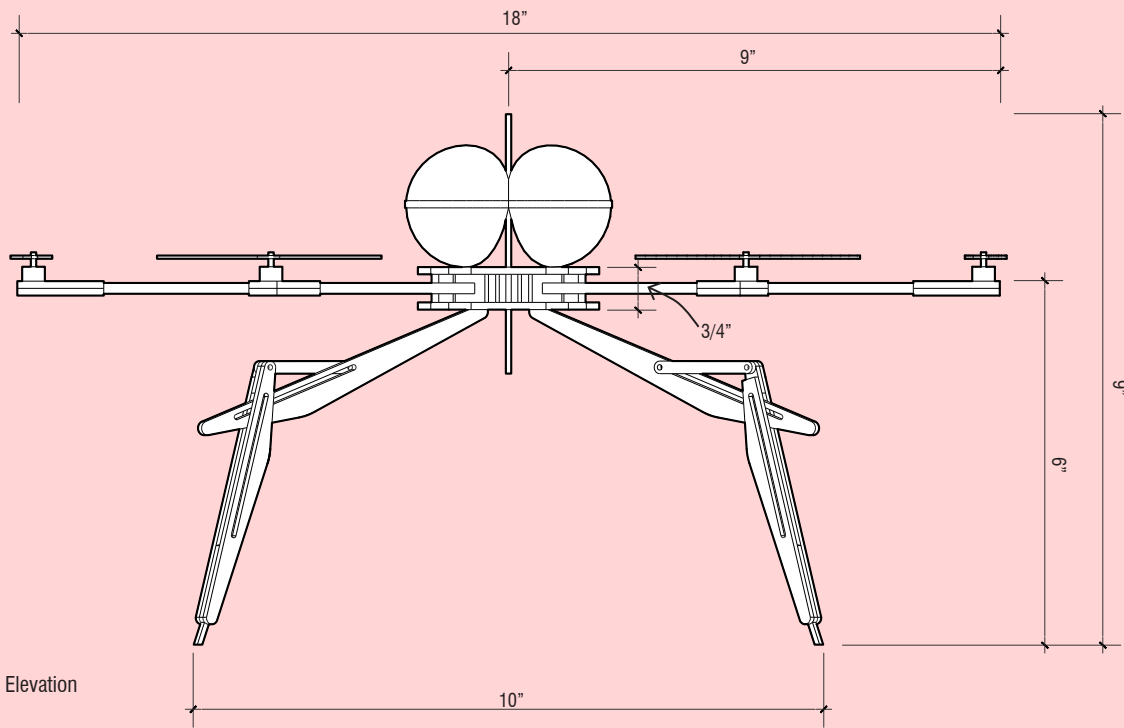
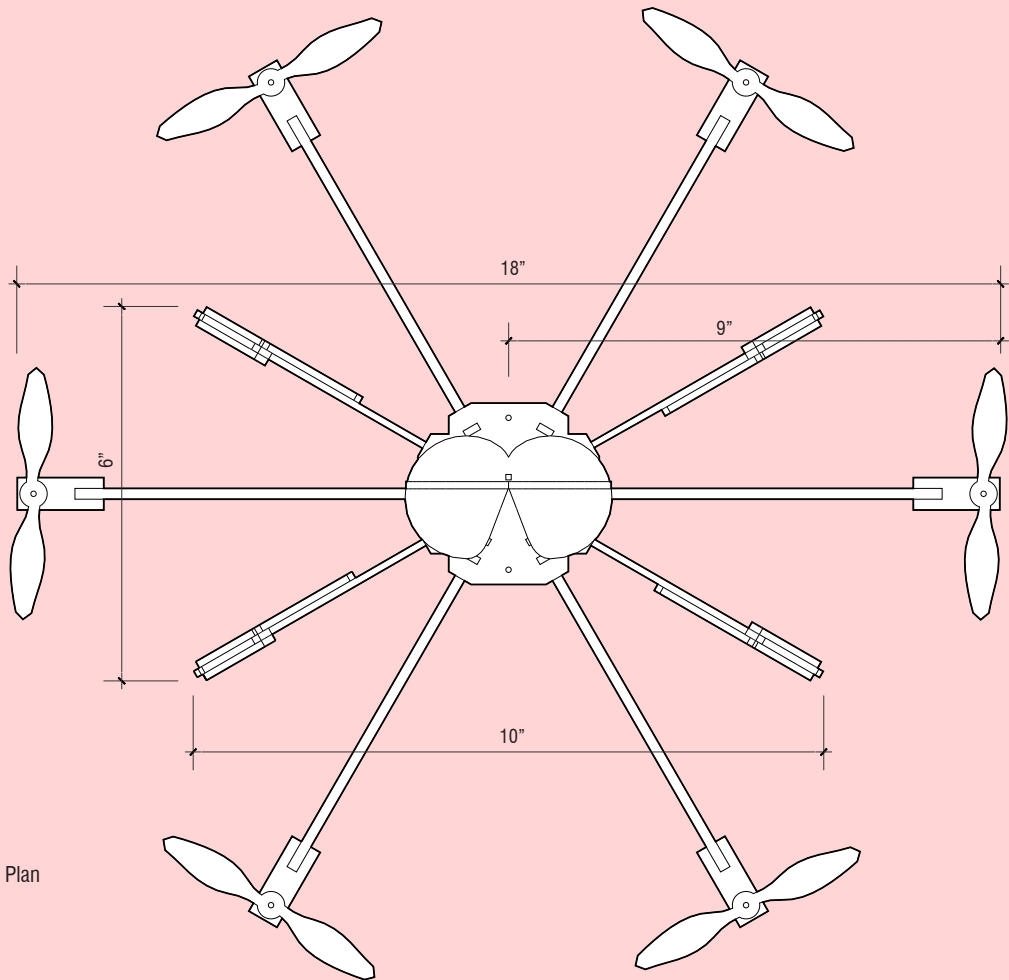
Gyokeres is represented by Legion Photo and serves as a member of the board of directors for the Professional Society of Drone Journalists. He has captured nearly a million images in the course of his career.

He has extensive experience with the design, construction and operation of multicopters and fixed-wing aircraft. Propellerheads maintains a perfect safety record.

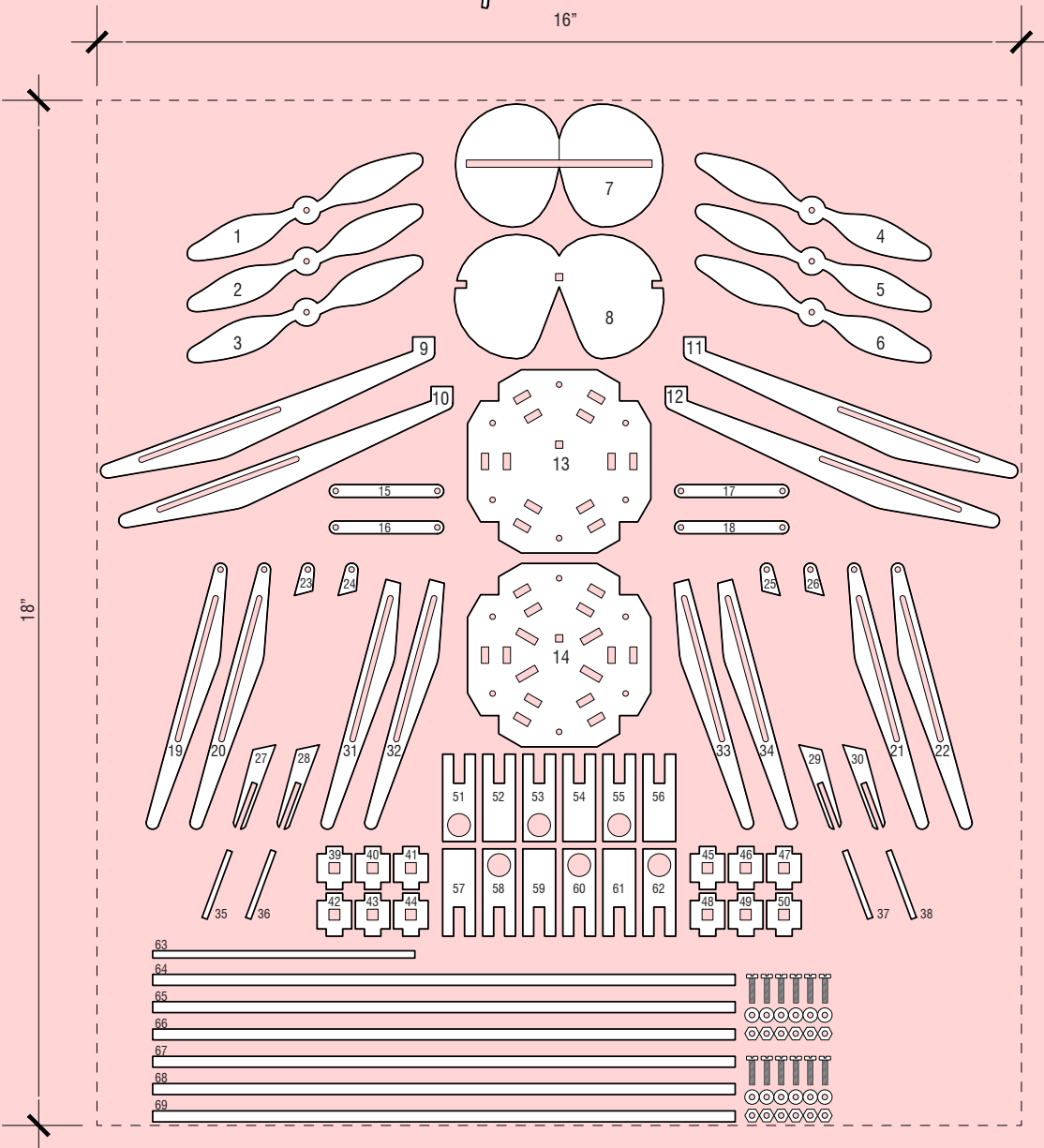
Recent clients include: Nike/Air Jordan, The WuTang Clan, Oheka Castle, The Battleship NJ foundation and the United Nations Human Rights Commission.

WRITTEN & PHOTOGRAPHIC WORKS FEATURED BY:
American Society of Media Photographers
Business Insider
CNN
Scripps News Service
Associated Press
Capture Magazine (Australia)
National Endowment for the Arts
60 Minutes (Australia)
Smithsonian Air & Space Magazine
Reuters
The Washington Post
Among Others...

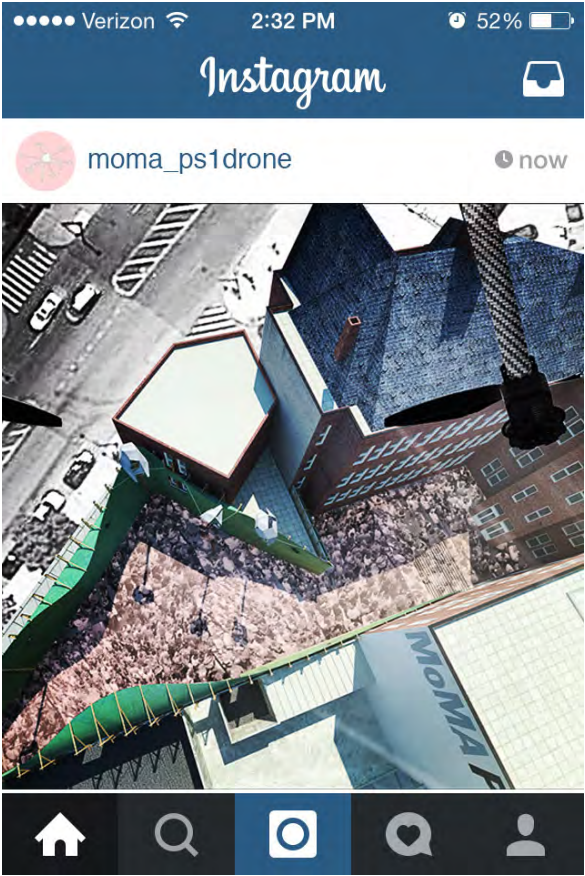
Architecture of the Drone

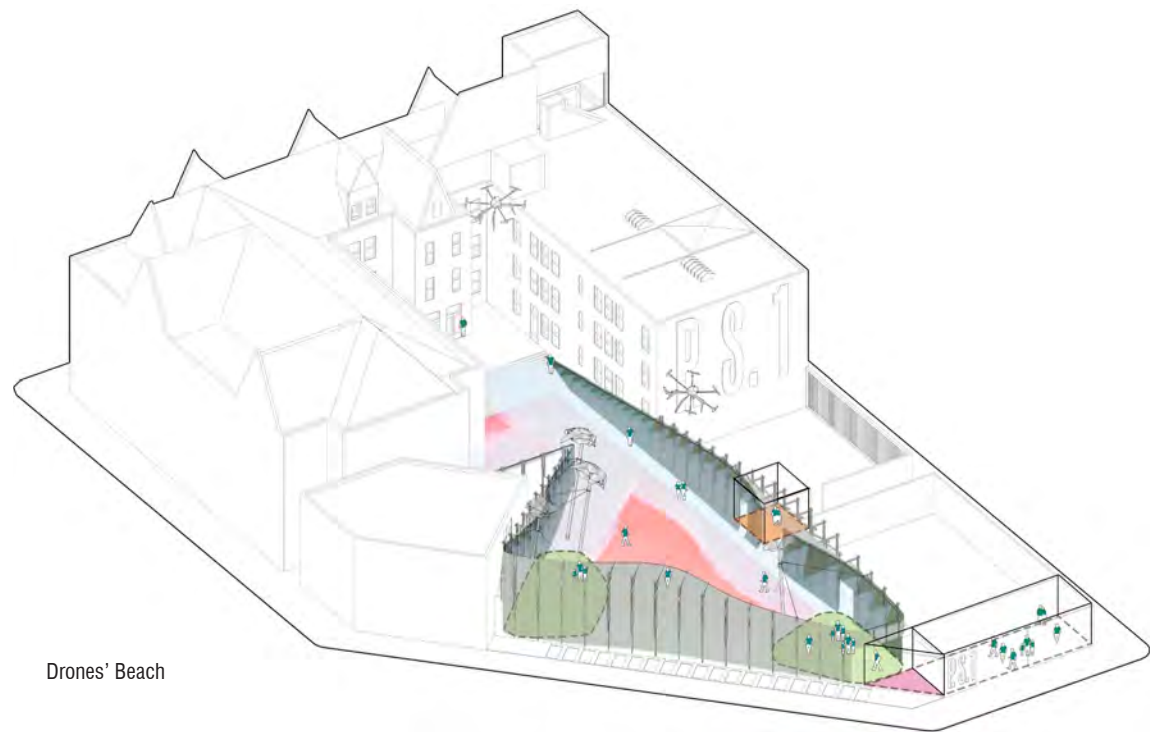


Axonometric









Drones' Beach

