

forma studio

Hahamongna *A Sculpture for Glendale*

Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Index

3	Team
6	Project Narrative
8	Context
11	Sculpture Concepts
21	Renderings
41	Schedule + Budget + Maintenance

forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

Team

Team- Forma Studio

Karen Kitayama + Sixto Cordero

forma studio was founded in 2013 by MIT alumni, Karen Kitayama and Sixto Cordero. Together we share an interest and a passion for public art and collectively we have many years of experience in the field. Our practice is interested in a contextual approach to the spaces and objects we design and build. We strive to create elements that elicit an emotional response from the public and engage it on many levels.

As you can see from our work sample we have experience working in a variety of contexts and mediums. Collectively we have collaborated with non profits to design and built schools in Kenya, we have exhibited work at the Chicago Architecture Biennial, and we have worked on a significant number of large scale projects as project managers, designers, art consultants and fabricators. Recently we completed a Public Art project for the City of Santa Clarita and we are currently designing and managing various architecture projects.

We have been working and collaborating with many fields relevant to our public art practice and forma studio's work is enriched by the vast network of consultants and industry experts we collaborate with, which include manufacturers, engineers and other designers.

Karen Kitayama, received her Master of Architecture from the Massachusetts Institute of Technology. While at the School of Architecture and Planning, she focused on the design degree as well as a concentration in History, Theory and Criticism. She received her B.A. in Architectural Studies and Art History at UCLA. During her undergraduate studies, she participated in organizing the exhibition, "California Design, 1930-1965: Living in a Modern Way" at LACMA.

While at MIT, she participated as a researcher for OfficeUS, the US pavilion at the 14th International Architecture Exhibition in Venice. Previously, she has also worked at several international firms including Kengo Kuma in Tokyo. Her interests include architecture's relationship to cultural institutions and architectural drawings and representations as they pertain to history and their role in the profession's future.

Her thesis explored architectural drawings and representations and their relationship to the description of forms and spaces in zero and artificial gravity. Her research attempted to test different ways of representing perception and experience based on the parameters of the human body and its visualization of orientation and movement. Her theoretical perspective is of paramount importance to forma studio as it helps to conceptualize and contextualize the work within the fabric of history.

Sixto Cordero Maisonet is an artist, architect, designer and scholar. Born in Puerto Rico, he graduated from the Massachusetts Institute of Technology. He has worked for SelgasCano, Zaha Hadid Architects, Matter Design, CPArchitects, Cliff Garten Studio and ODB Engineering as well as serving as a consultant for the Norman Foster Foundation. His first architecture practice helloeverything (co-founded with two partners, Austin Smith and Julian Ocampo) exhibited work in the Louisiana Museum of Modern Art. Helloeverything and also produced large scale built work, including a prototype house which will be fabricated and sold by Revolution Pre-Crafted Properties.

Sixto's work both in architecture and design employs digital technologies and attempts to coalesce these with social, environmental and cultural parameters. His work explores methods of geometric discretization as well as critical approaches to the social function of art and architecture. He formed forma studio out of Los Angeles with Karen Kitayama to explore the potentials of public art as potential social points of convergence.

forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

Team- Metal Arts Foundry (Fabircator)

Kevin Maag, President

Kevin Maag began working for Wasatch Bronzeworks in 1977. He worked in all areas of the fine arts casting foundry until 1990 when he purchased the business and renamed it Metal Arts Foundry. Maag has over 42 years of metal working experience. He is passionate about finely crafted work and enjoys the challenge of difficult technical problems. A natural problem solver Kevin can build almost anything. Metal Arts Foundry has been as longtime collaborator of Cliff Garten Studio for the last 20 years, 1997-2020.

Metal Arts Foundry has completed hundreds of large-scale public arts projects across the United States and Canada and are a highly capable fabricator well versed in all kinds of metal fabrication from lost wax casting to steel and bronze fabrication. They often work with architects and artists from the conception of the artwork through final fabrication and installation. Their range of experience between hands on craft, digital engineering and CNC fabrication makes them capable of resolving complex fabrication and construction problems in any type of metal. Digital and hand fabrication go hand in hand toward the resolution of innovative fabrication solutions, in highly crafted solutions for artists and designers.

The foundry team consists of approximately 25 employees. This includes in-house artists who work in clay molding, casting and patination as well as team members that take care of everything from metal shaping, welding, shipping and installation in the field. Most of the current foundry team has been with the business for over 20 years with a few key artisans exceeding 30 years. The foundry facility is a 25,000 square foot facility with a complete range of molding, casting, forming, bending, welding, surfacing equipment to facilitate the fabrication of sculptures of any size. The foundry will often build and alter equipment to perform specialized forming processes for specific projects. Highly specialized equipment of scale is sourced through their long-term relationships with fabricators in the Salt Lake area and throughout the United States. Metal Arts Foundry considers itself a partner and collaborator to their clients and enjoys working with creative teams, of engineers, artists and architects, facing the unique challenges of each artwork.

forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

Project Narrative

Hahamongna

Project Narrative

Introduction

In 1884, residents of a valley in Southern California gathered to form a town and chose the name “Glendale.” This name is an anglicized version of the Gaelic “*Gleann Dail*,” which translates to “fertile valley.” The selection of this name is remarkable and presents an astonishing coincidence. The Tongva people, who had inhabited the area for centuries prior, referred to their home as “*Hahamongna*” which means “fruitful valley” in the Tongva language. This “coincidence” speaks to the character and identity of the city and how, even across centuries, it has always been associated with this idea of a fertile ground bound by the impressive backdrop of the Verdugo Mountains. While Glendale’s land use has drastically changed from its initial agrarian roots, it still remains a fertile valley, and one that now fosters innovation and cultural exchange.



Consequently, the character of Glendale is very much tied to the Verdugo Mountains and this geographic context makes it a special place apt for growth in the broader sense of the word. For this reason our artwork, Hahamongna, pays homage to the Verdugo Mountains and is inspired by their natural beauty to create a remarkable marker for the City of Glendale.



Inspiration

We often find inspiration in nature and extract geometry from natural imagery and its geographical representations. In the case of Hahamongna, the overall form of the artwork is derived from the elevation change across the longest traversing path through the Verdugo Mountains. This sine curve has been reinterpreted to create a beautiful geometry while remaining true to its origin.



Another element we have included in our design is the appropriation of one of the existing palm trees on the site. Making the tree a part of the art piece is once again a nod to the concept of the “fruitful valley” and a way of directly borrowing from the dynamic beauty of nature itself into our art.



Pattern and Lighting

The laser cut pattern that covers the piece is an abstraction of topographical lines extracted from the terrain of the Verdugo Mountains, projected onto the surface of the artwork.



The goal of this pattern is two-fold: during the day, it creates a texture that, when seen from below, allows rays of sunlight to shine through; at night, these openings create a dazzling display illuminated by LED lights.



Conclusion

Hahamongna is meant to create a sense of wonder and place and serve as a marker that informs the viewer they have arrived to the city of Glendale. The design of the piece has been carefully considered and its scale and orientation are meant to provide a remarkable experience for motorists and pedestrians alike. The artwork presents a dynamic form offering completely different geometries from each different vantage point.



forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

forma studio

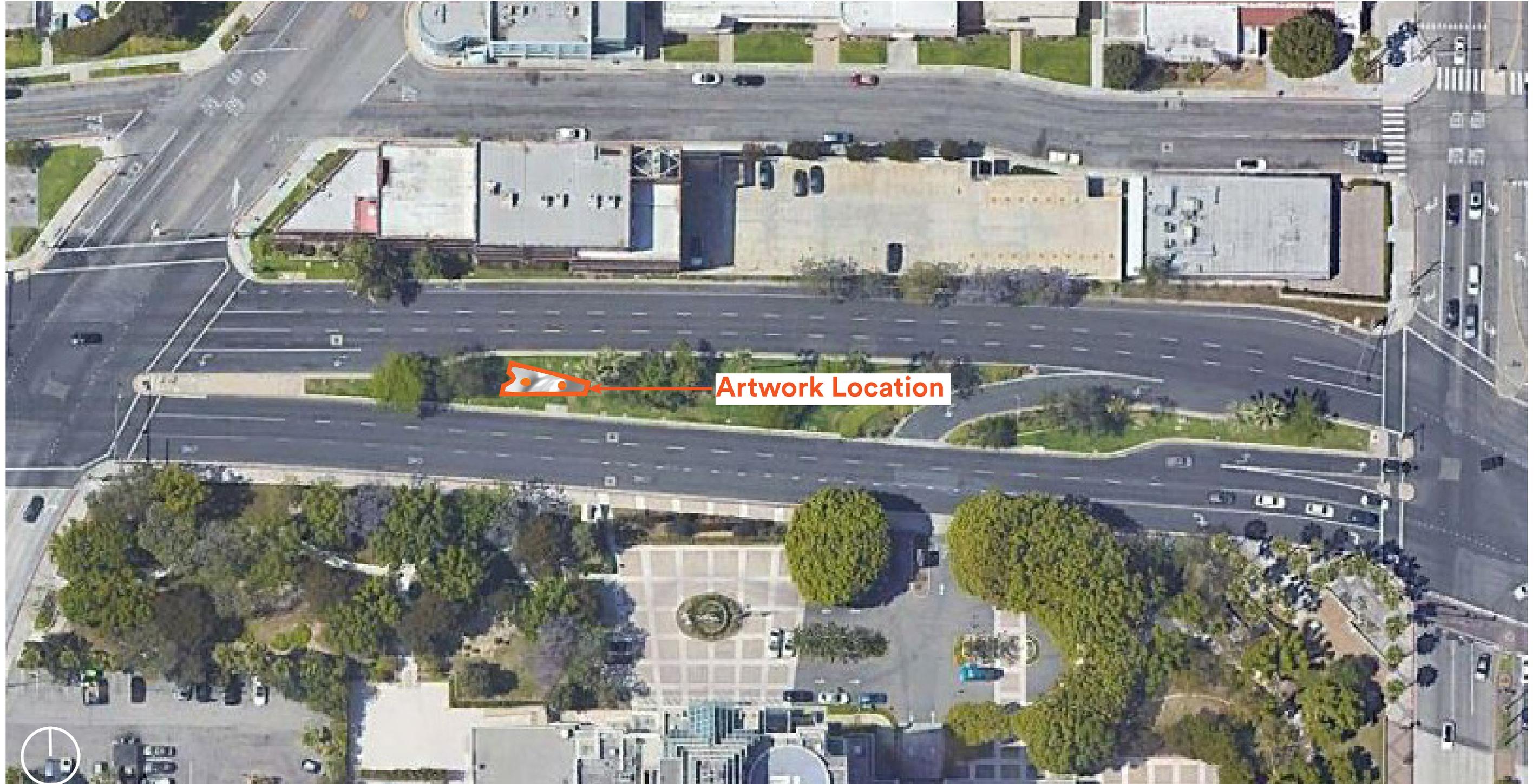
17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

Context





17273 Los Pintos Cir Fountain Valley CA, formastudio.net

forma studio

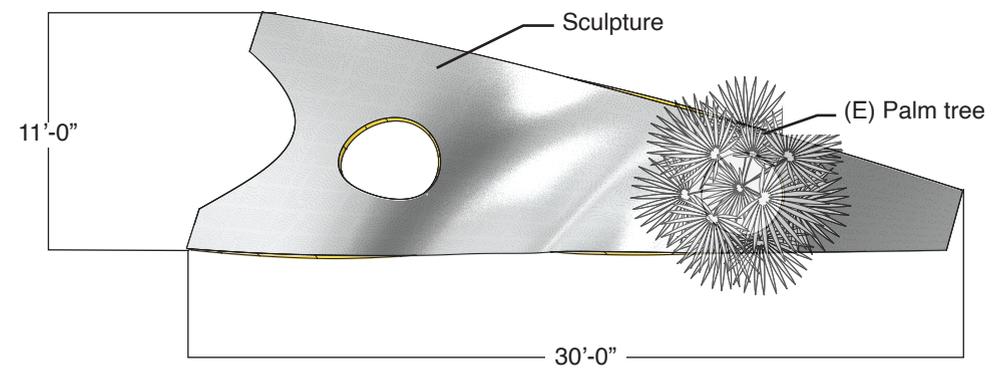
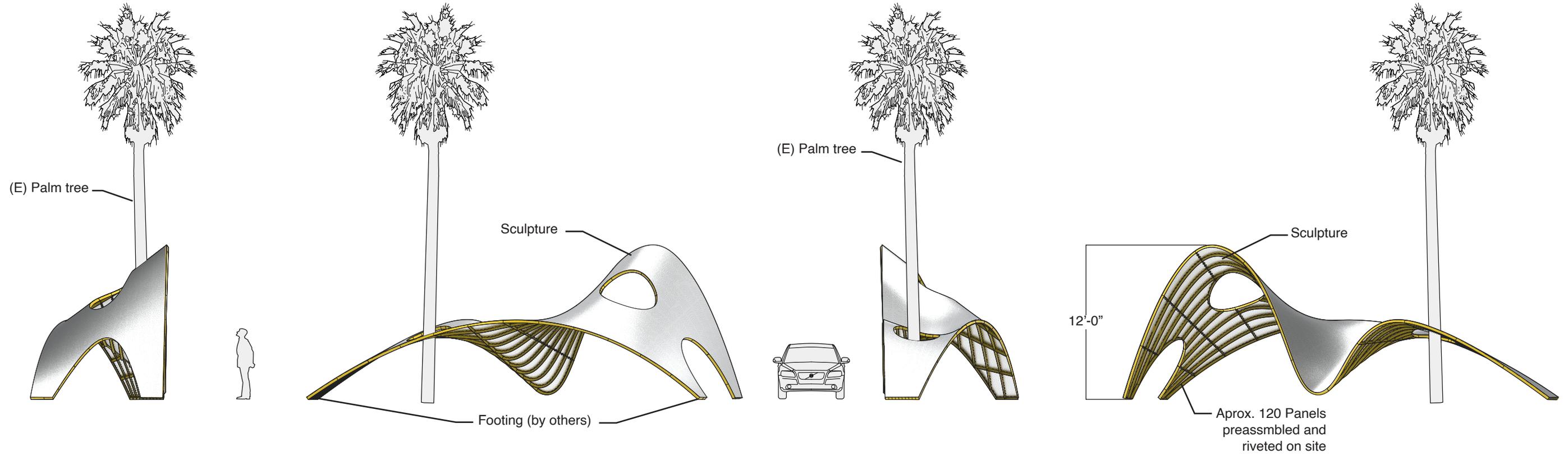
forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

Sculpture Concept





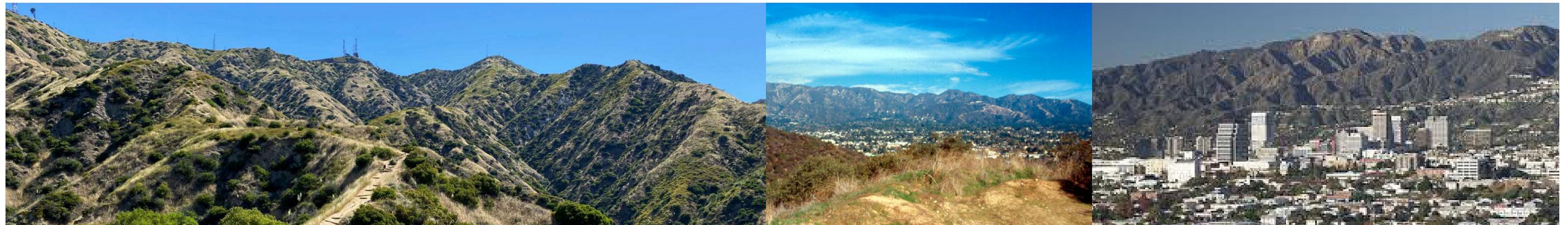
Glendale with the Verdugo Mountains in the background

Glendale [Gaelic] Gleann Dail- Fertile Valley

Hahamongna [Tongva]- Fruitful Valley



Verdugo Mountains

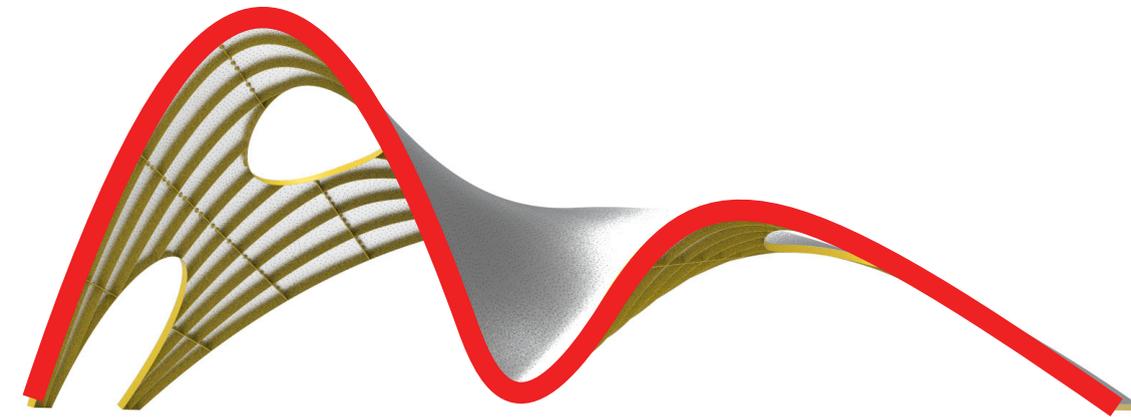


17273 Los Pintos Cir Fountain Valley CA, formastudio.net

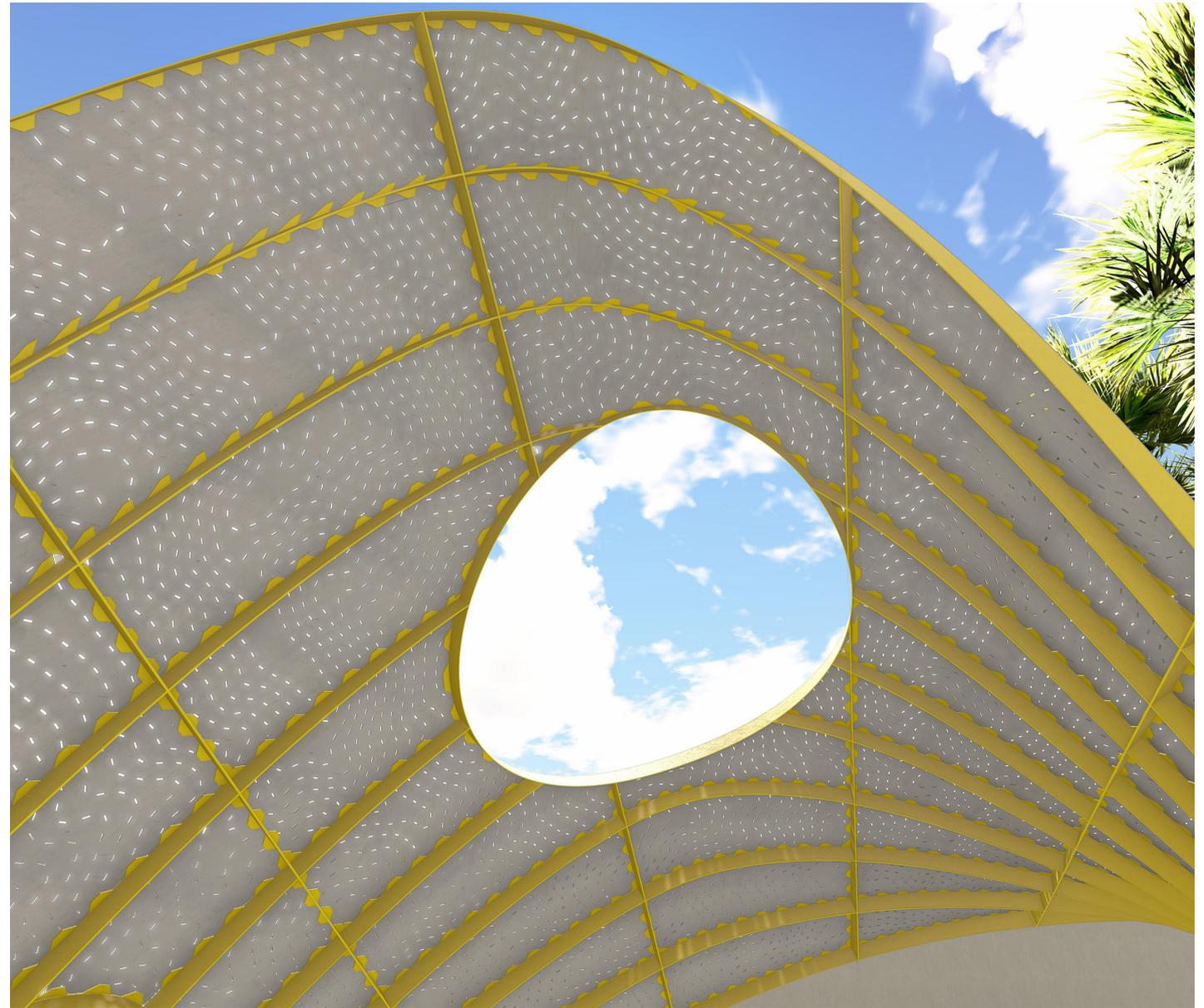
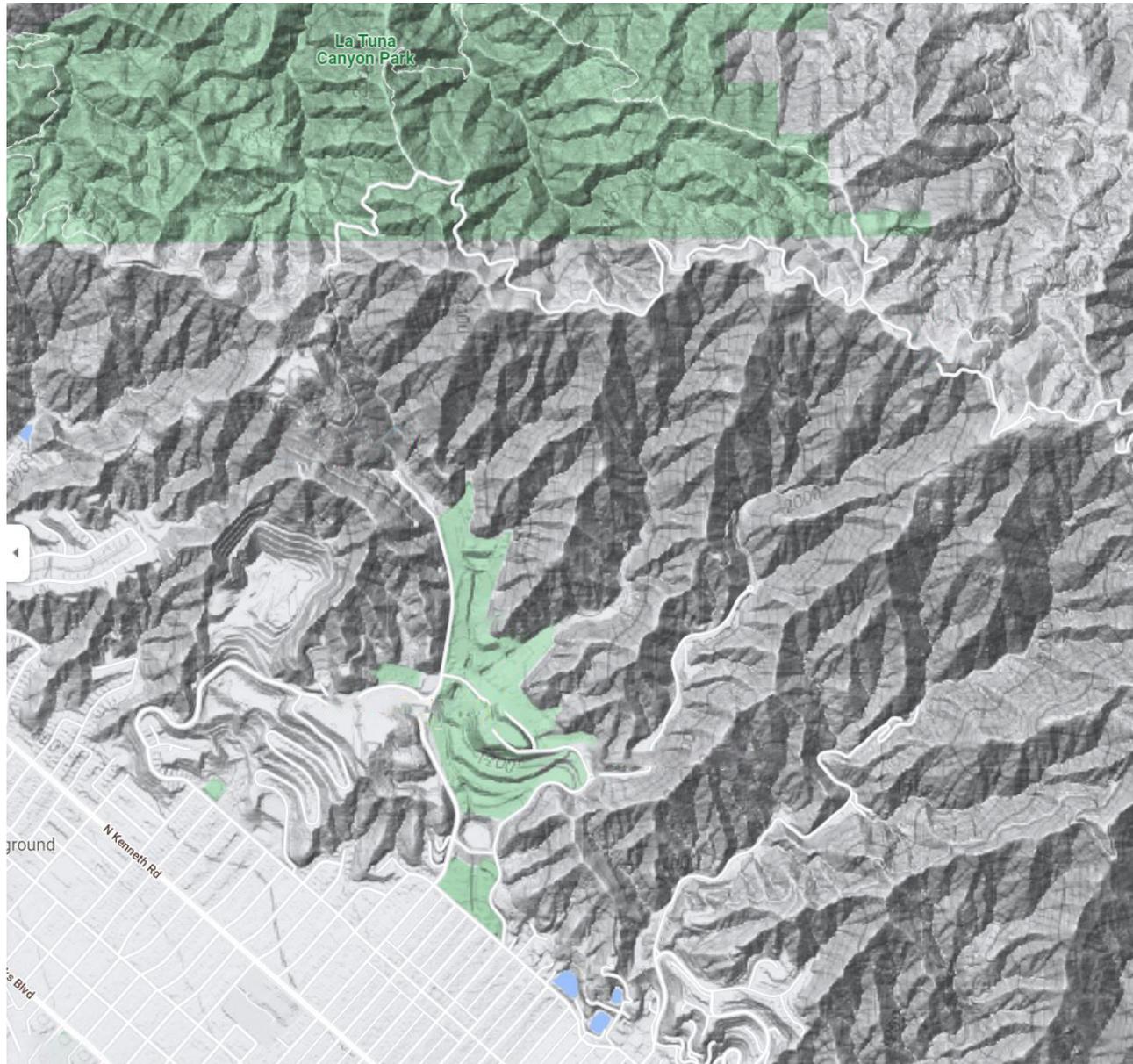
forma studio



Elevation change across the Verdugo Mountains Traverse Trail

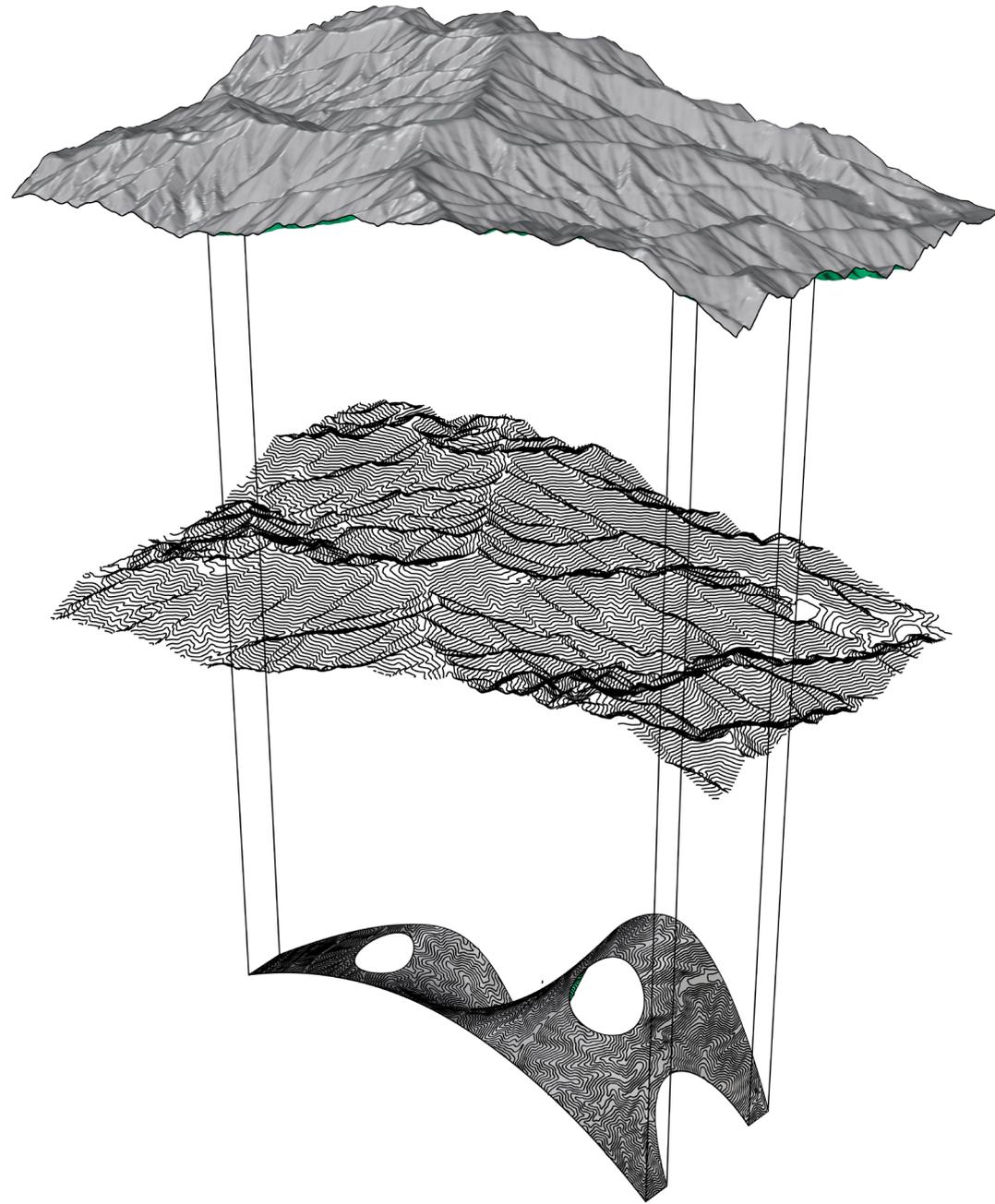


Hahamongna an iconic homage to the Verdugo Mountain and Glendale as a Fruitful Valley, its form is inspired by the elevation change across the verdugo Mountains

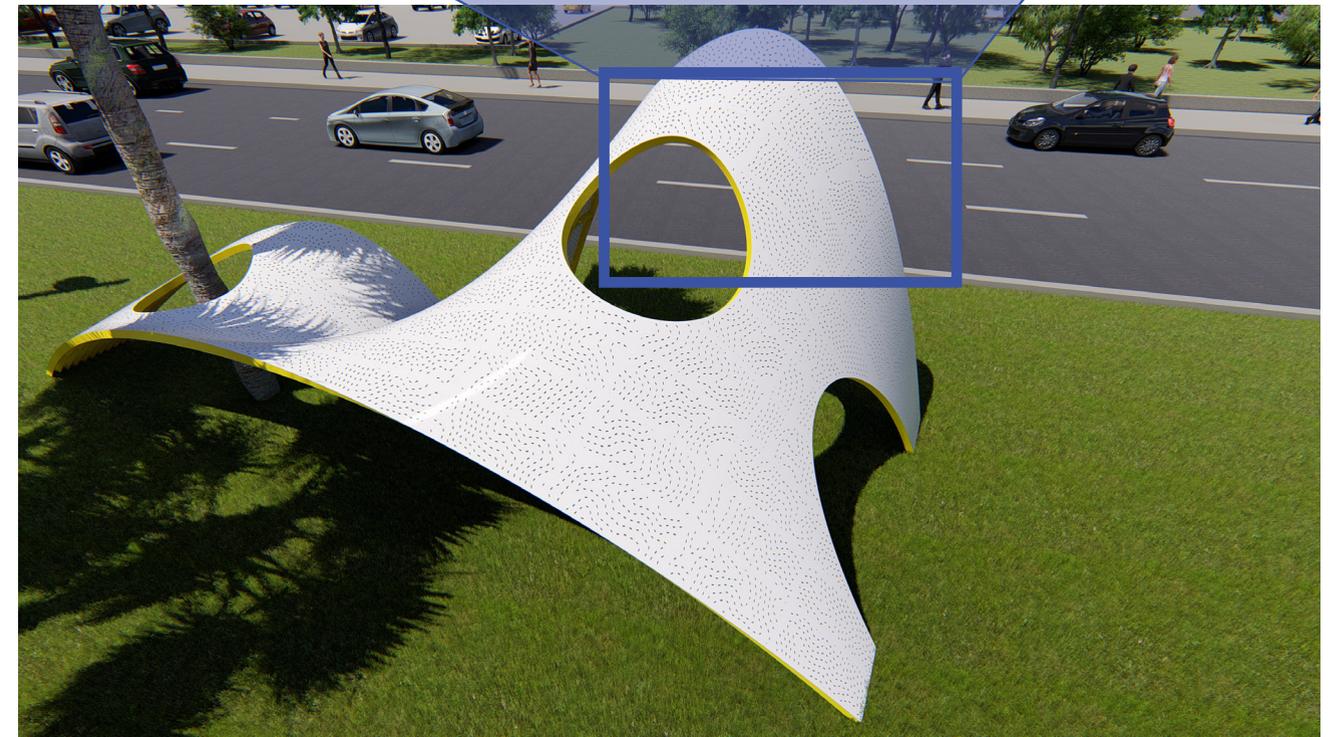
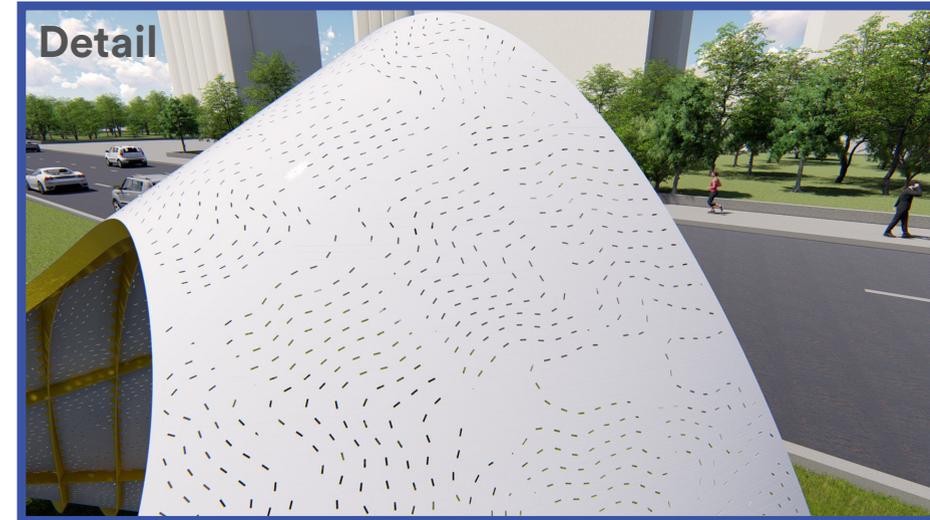


Verdugo Mountains Texture

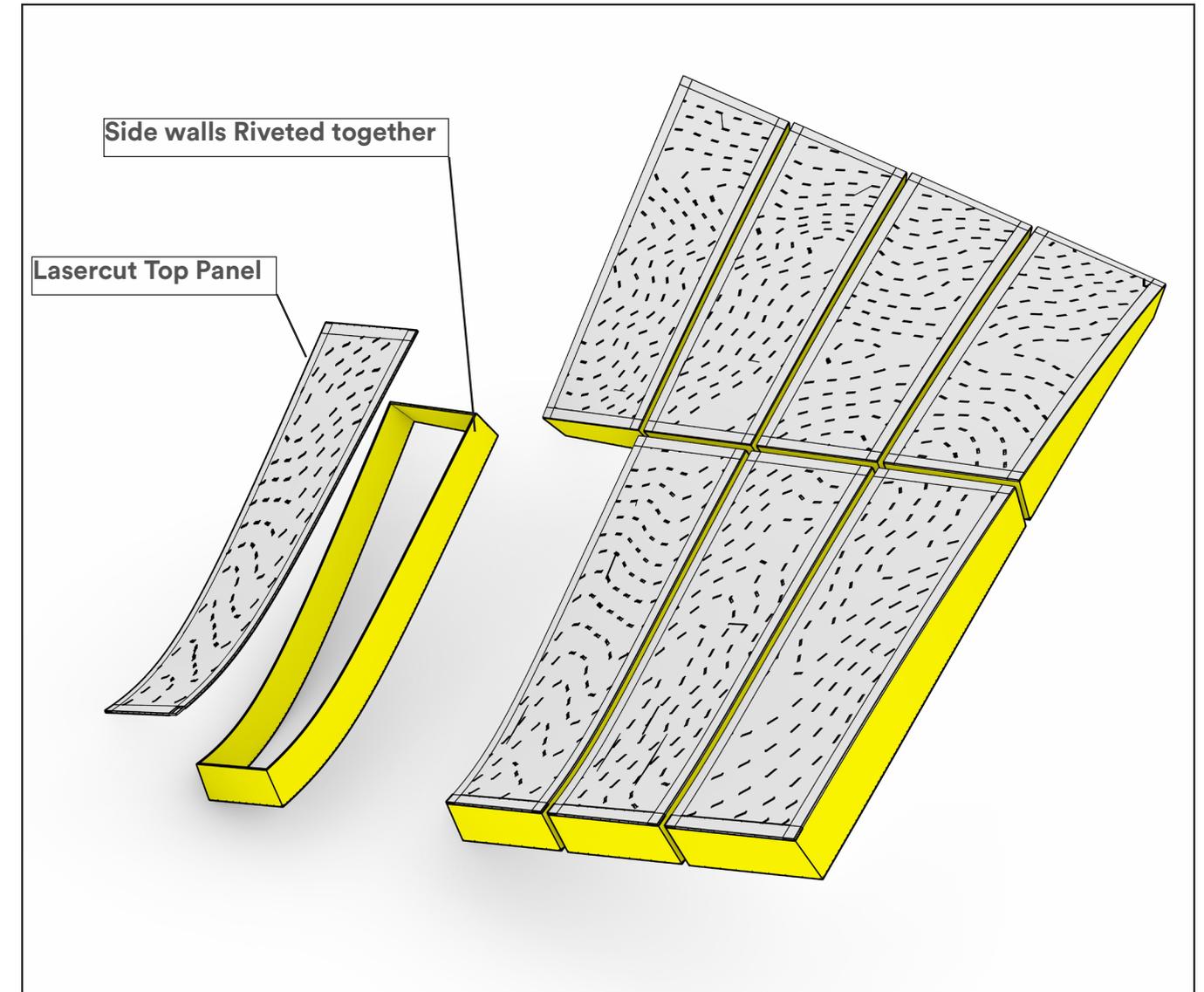
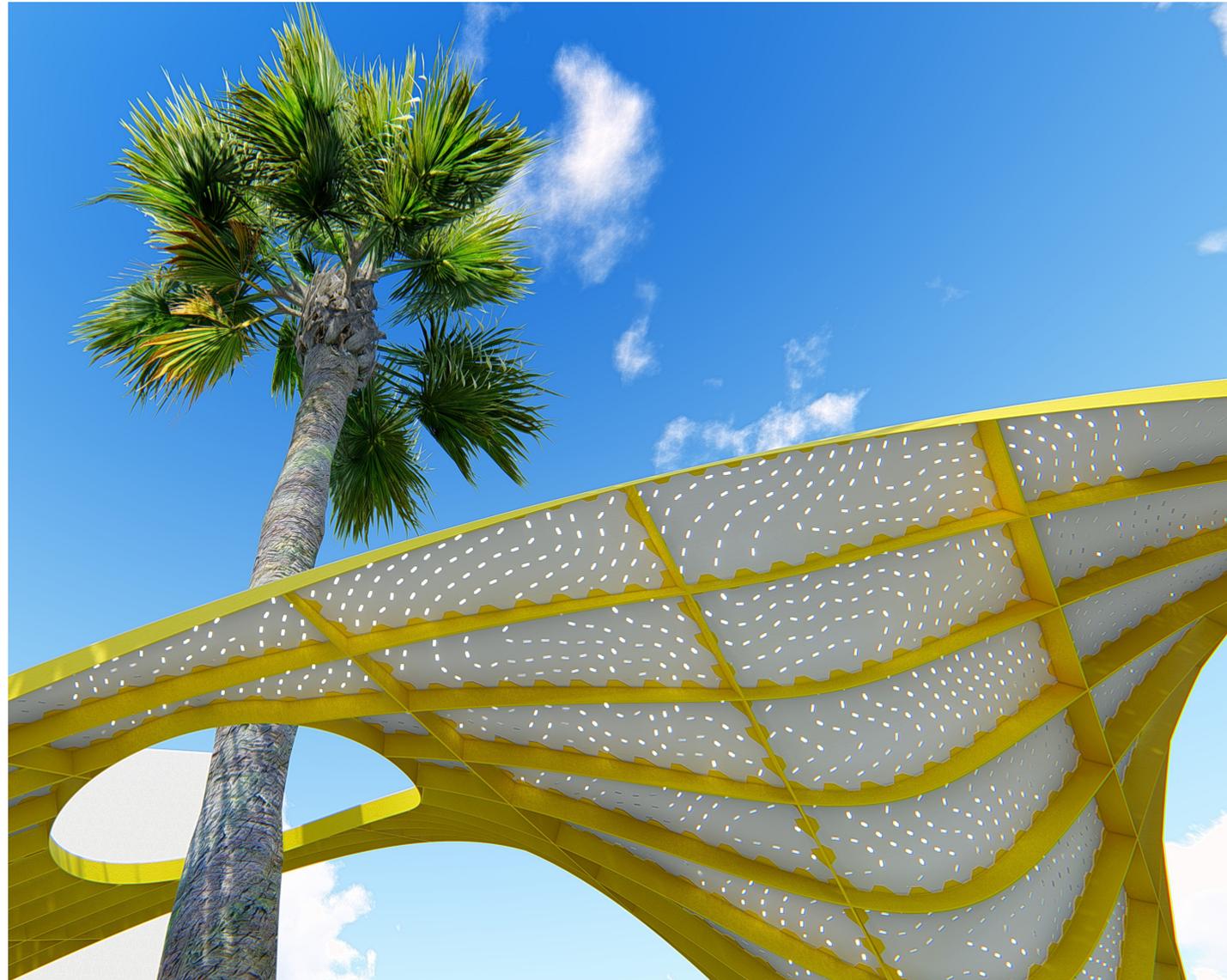
Hahamongna Pattern Texture



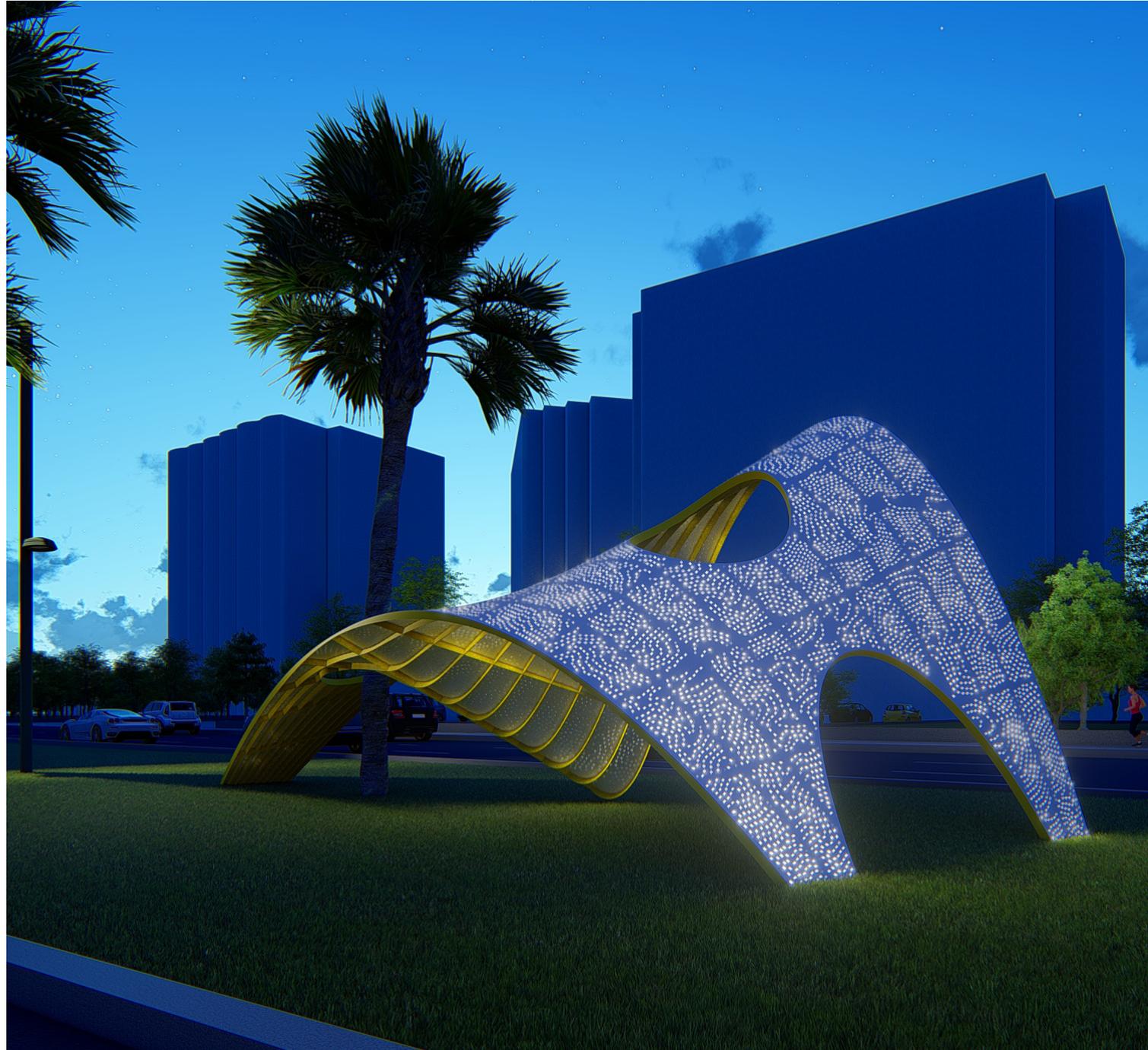
Terrain Lines of the Verdugo Mountains being projected onto the Artwork



Hahamongna Lasercut Hole Pattern



Panels are prefabricated and partially assembled at the foundry. Depending on further structural evaluation the panels would be made of stainless steel, powder coated aluminum or a combination of the two.

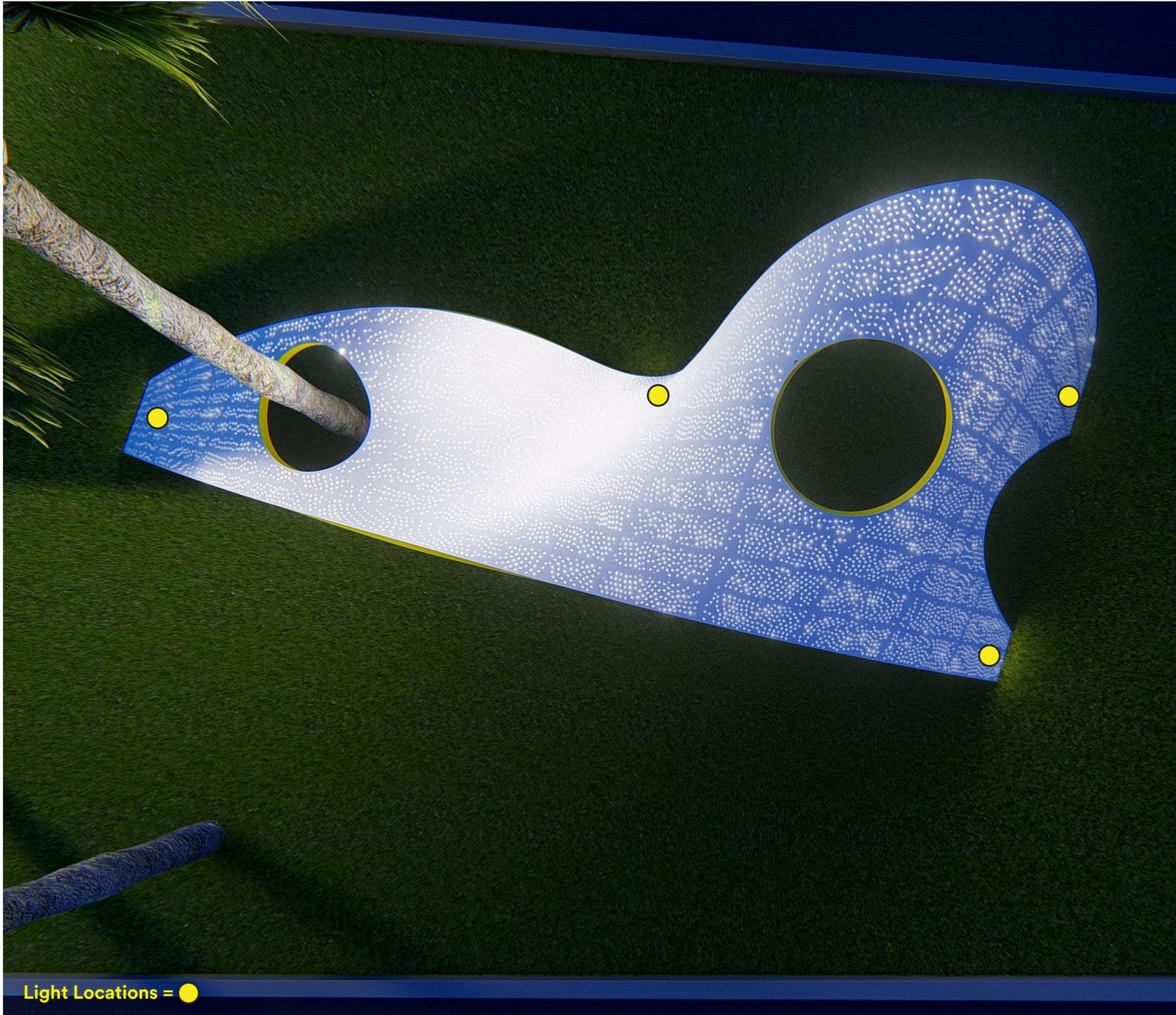


Hahamongna Sculpture

Integrated into the sculpture, the pattern cut through the metal will form a beautiful texture comprised of a surface derived from the landscape of the Verdugo Mountains that becomes illuminated at night. The quality of this light cannot be properly captured in a rendering, But the precedents shown give a broad idea of what this effect may look like

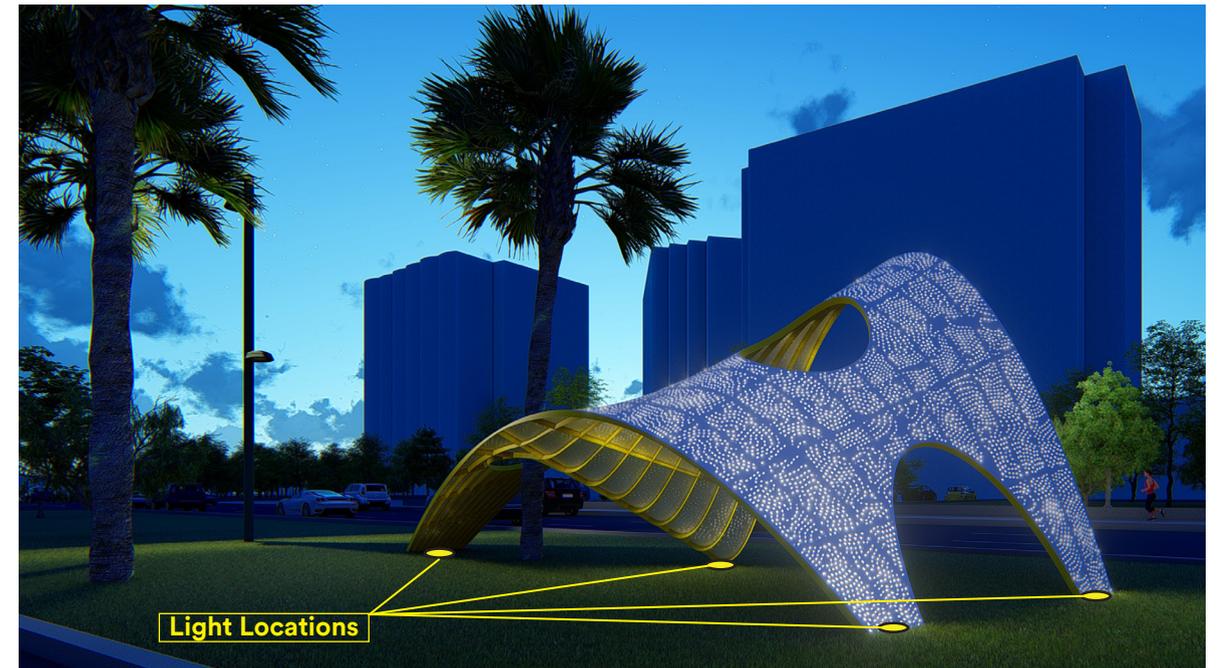


Precedent- I Am A Man Sculpture (Cliff Garten Studio)



Light Locations = ●

Sculpture Lighting Plan



Lighting Diagram

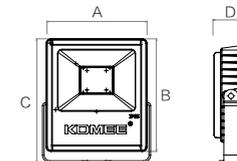


- Product Features**
- The K-Series Luminaire adapts simple design and outstanding performance
 - Excellent rigid structure made from die cast ADC12 aluminum for excellent thermal management and durability
 - Factory pre-treated and powder-coated to meet the most rugged industry standards
 - Available in Square reflector for maximum light distribution
 - Yoke Mount Bracket - lockable and adjustable for 220 degree overall
 - Built-in surge protection up to 4kV
 - IP65 Rated suitable for outdoor / wet application
 - UL / cUL Listed , DLC 4.2 Listed

Application
General Purpose Outdoor Lighting, Workshop Lighting, Warehouse Lighting

Specifications

Input Voltage	AC 110~277V
Frequency	50~60HZ
Color Temperature	5000K, 4000K, 3000K
Efficacy	95 lm/W
Color Rendering Index	80
Distribution	110° Square Reflector
IP Rating	IP65
Operating Temperature	-30°C~+55°C
Life Span	50,000 hrs



Dimensions

Power	A	B	C	D
30W	190mm (7.48")	197mm (7.76")	217mm (8.54")	58mm (2.32")
50W	218mm (8.58")	241mm (9.49")	273mm (10.75")	72mm (2.83")

Fixture Specs

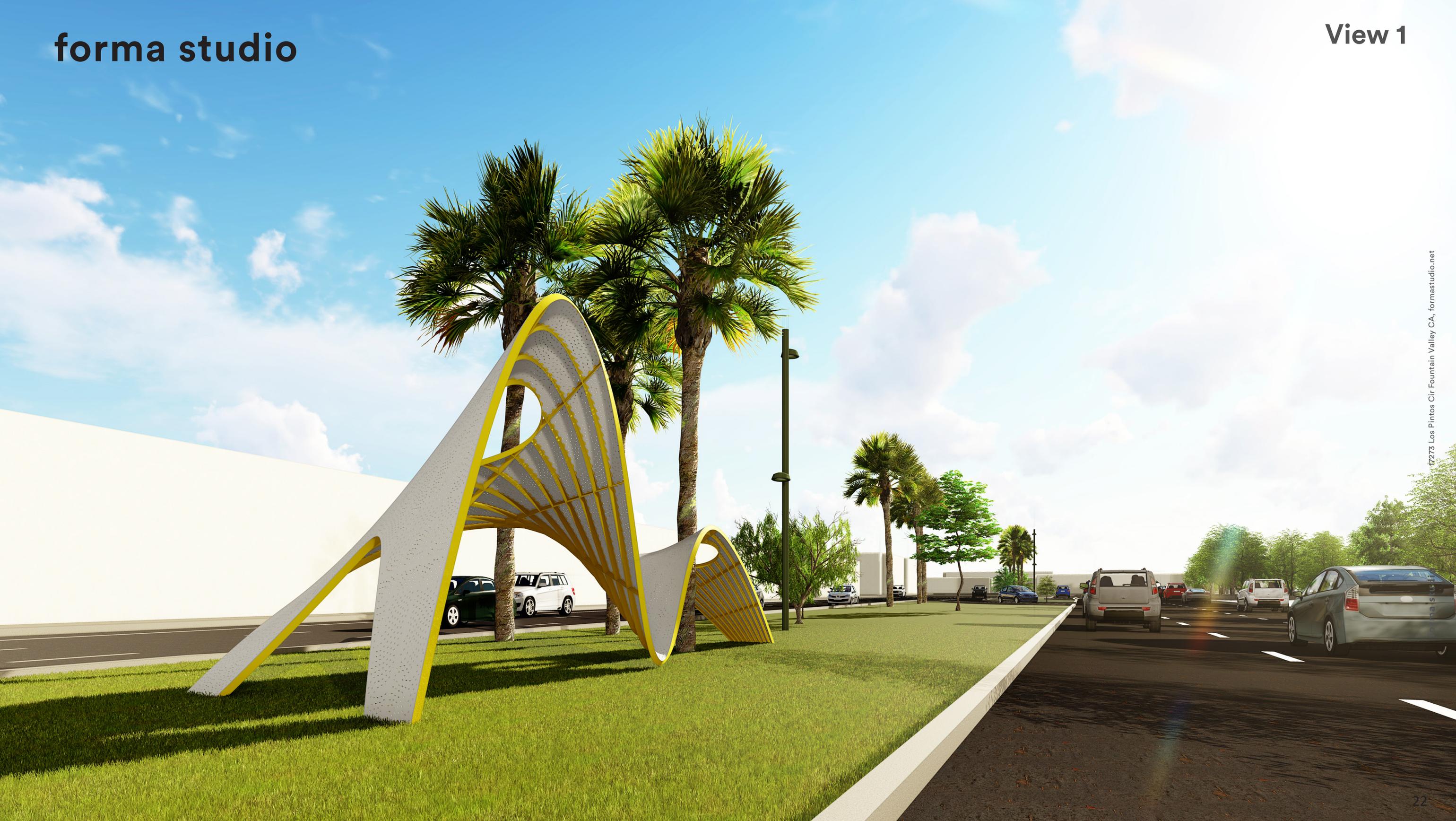
forma studio

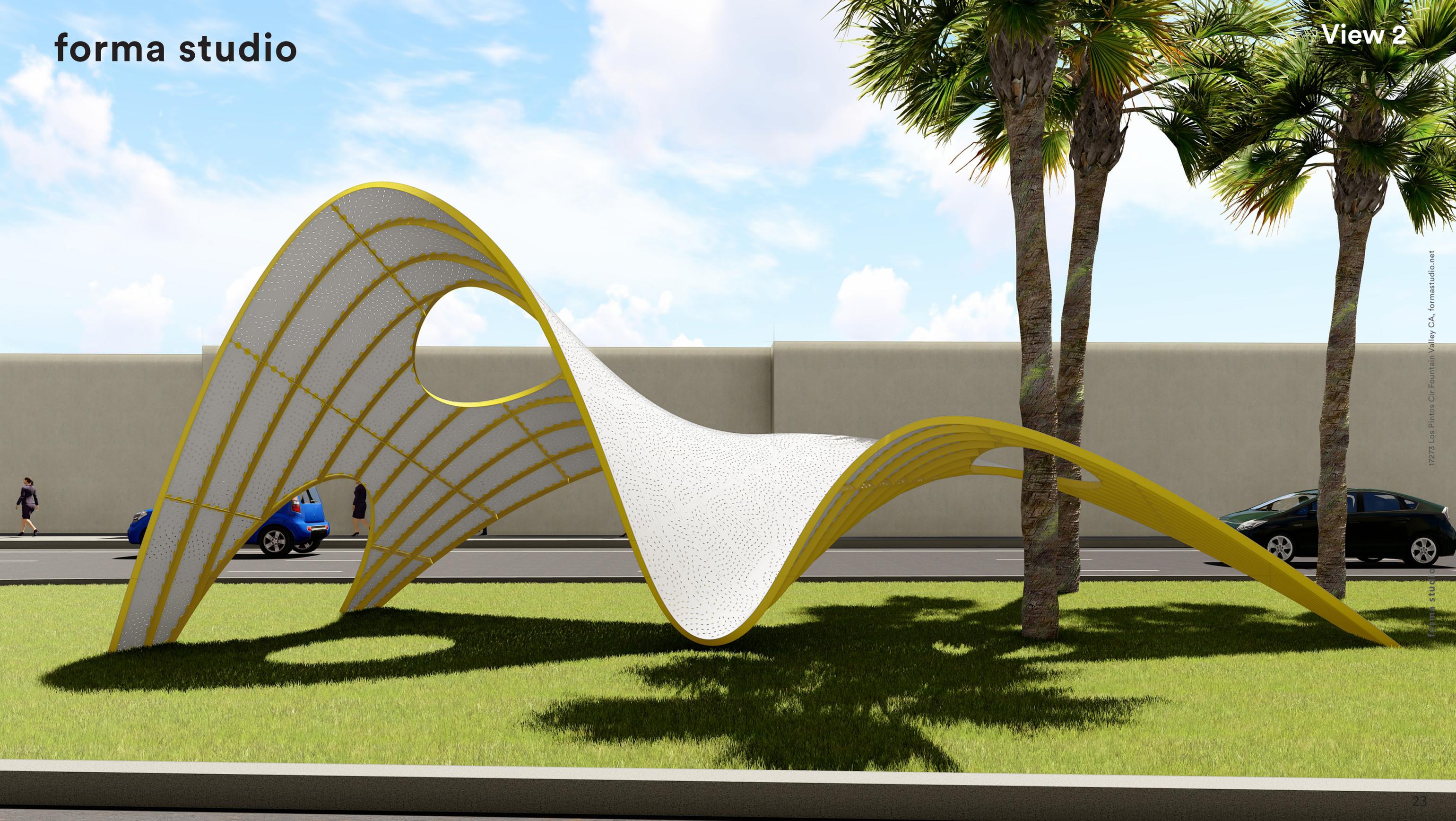
17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

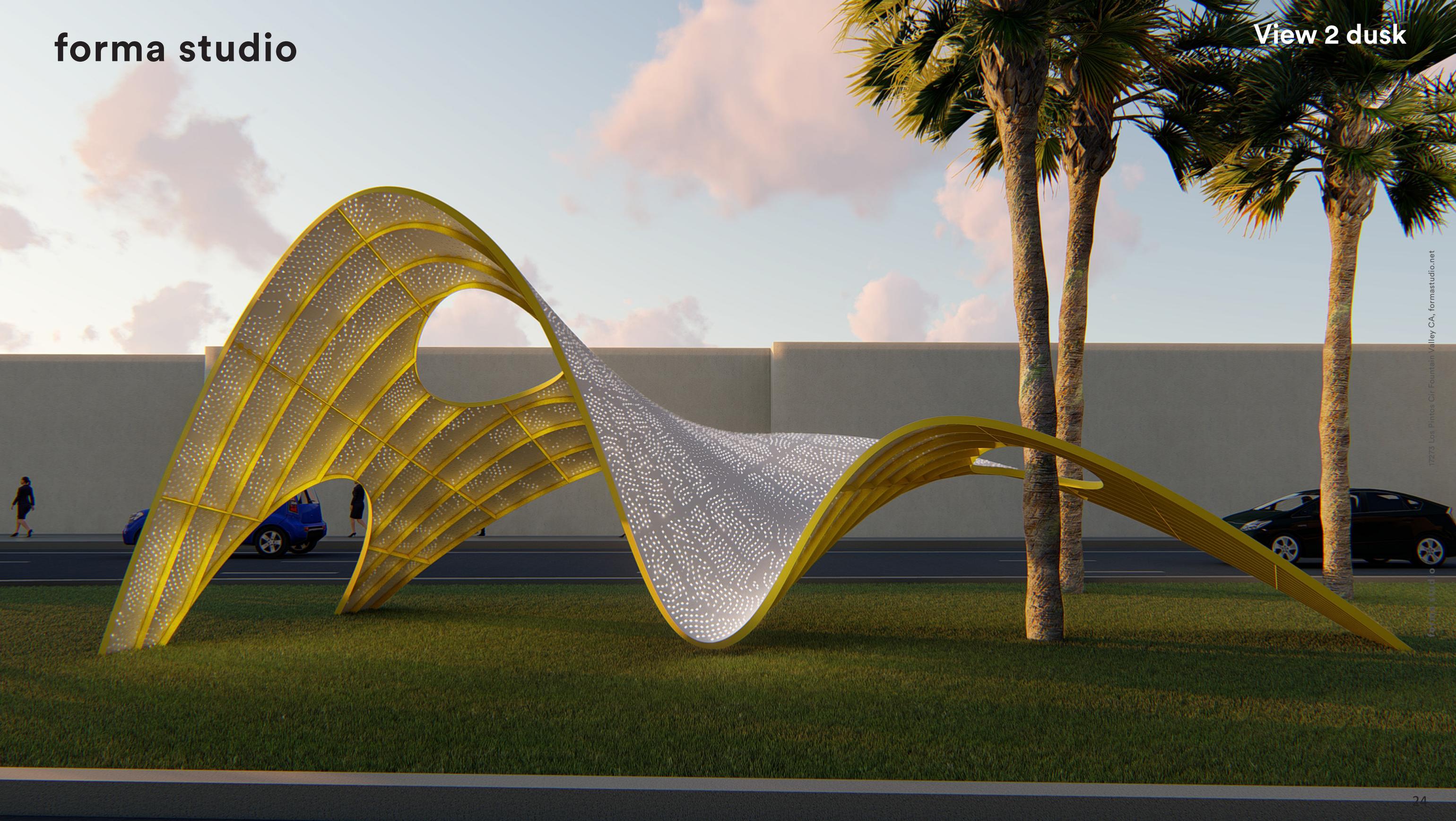
Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

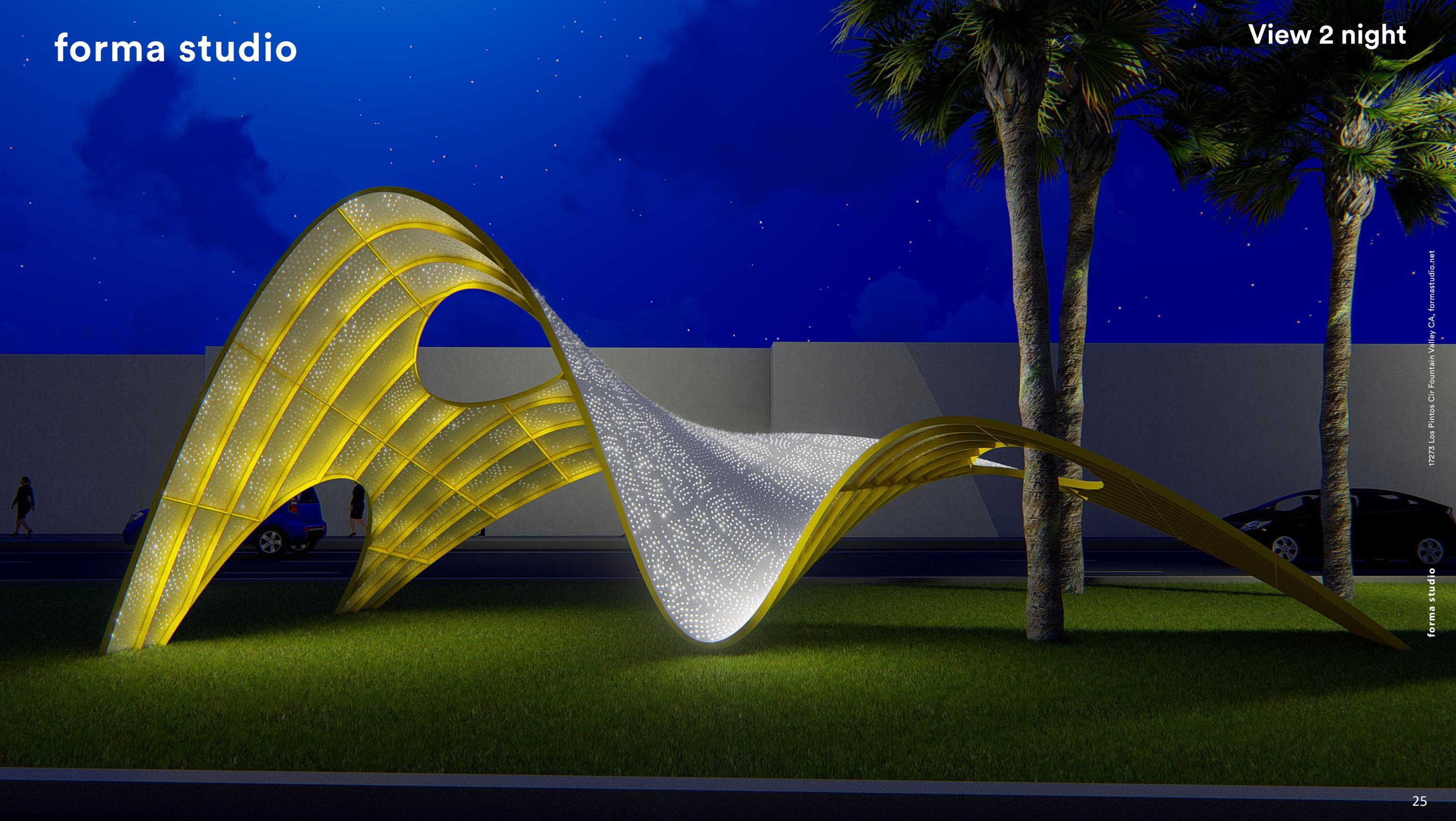
Renderings

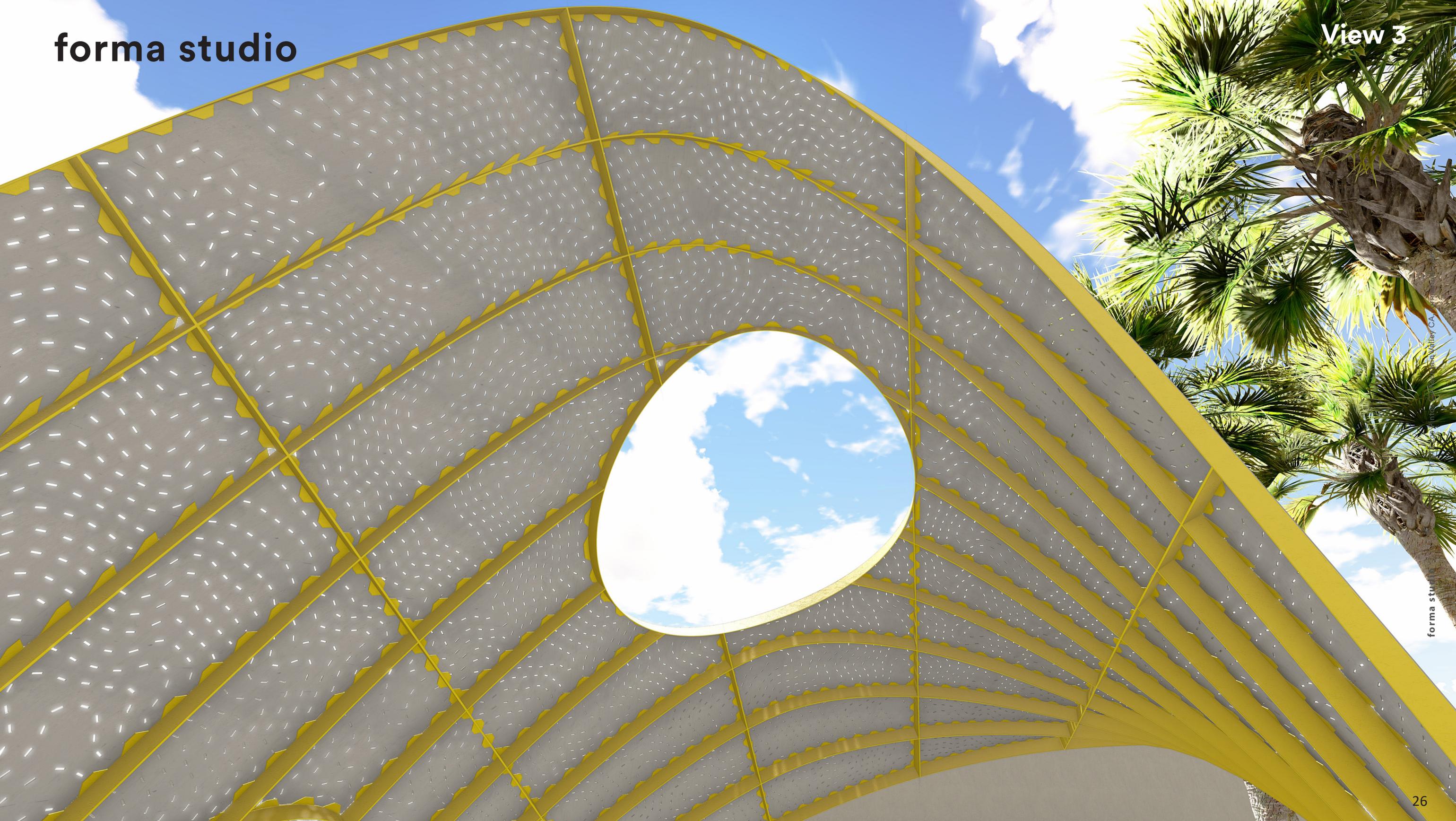






17273 Los Pintos Cir Fountain Valley CA, formastudio.net
forma studio

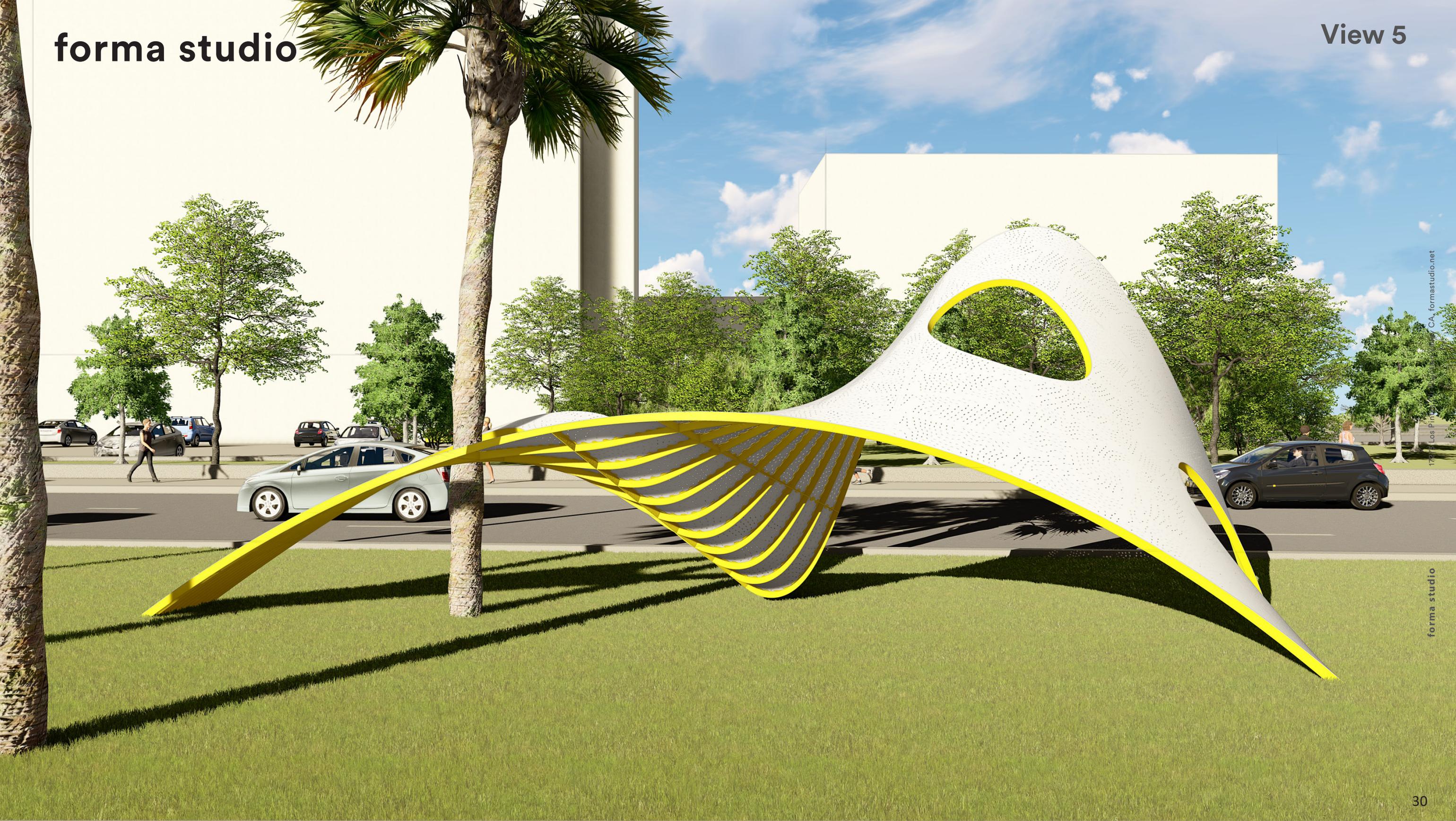












CA: formastudio.net

1723 Los Pir...

forma studio



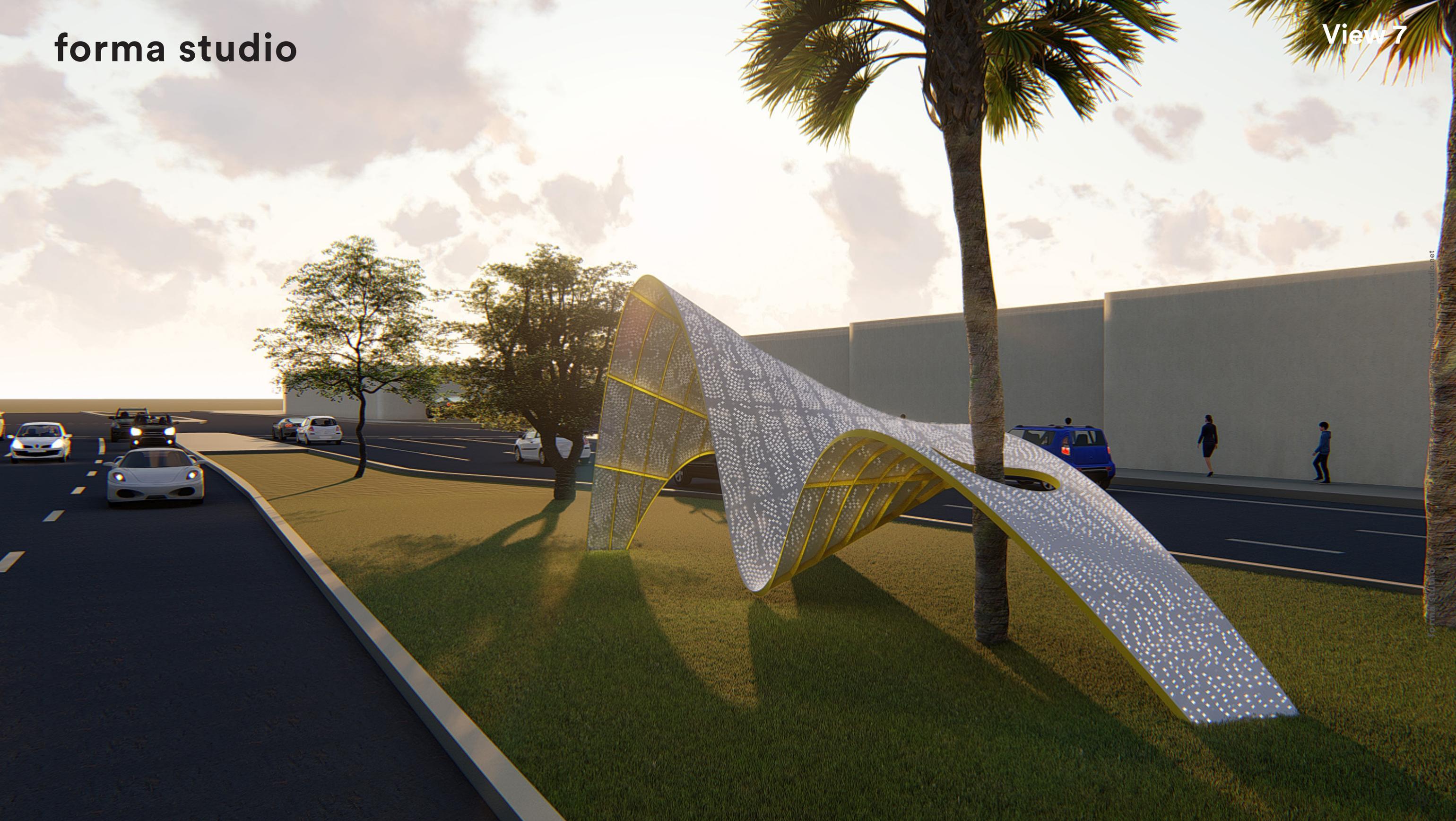


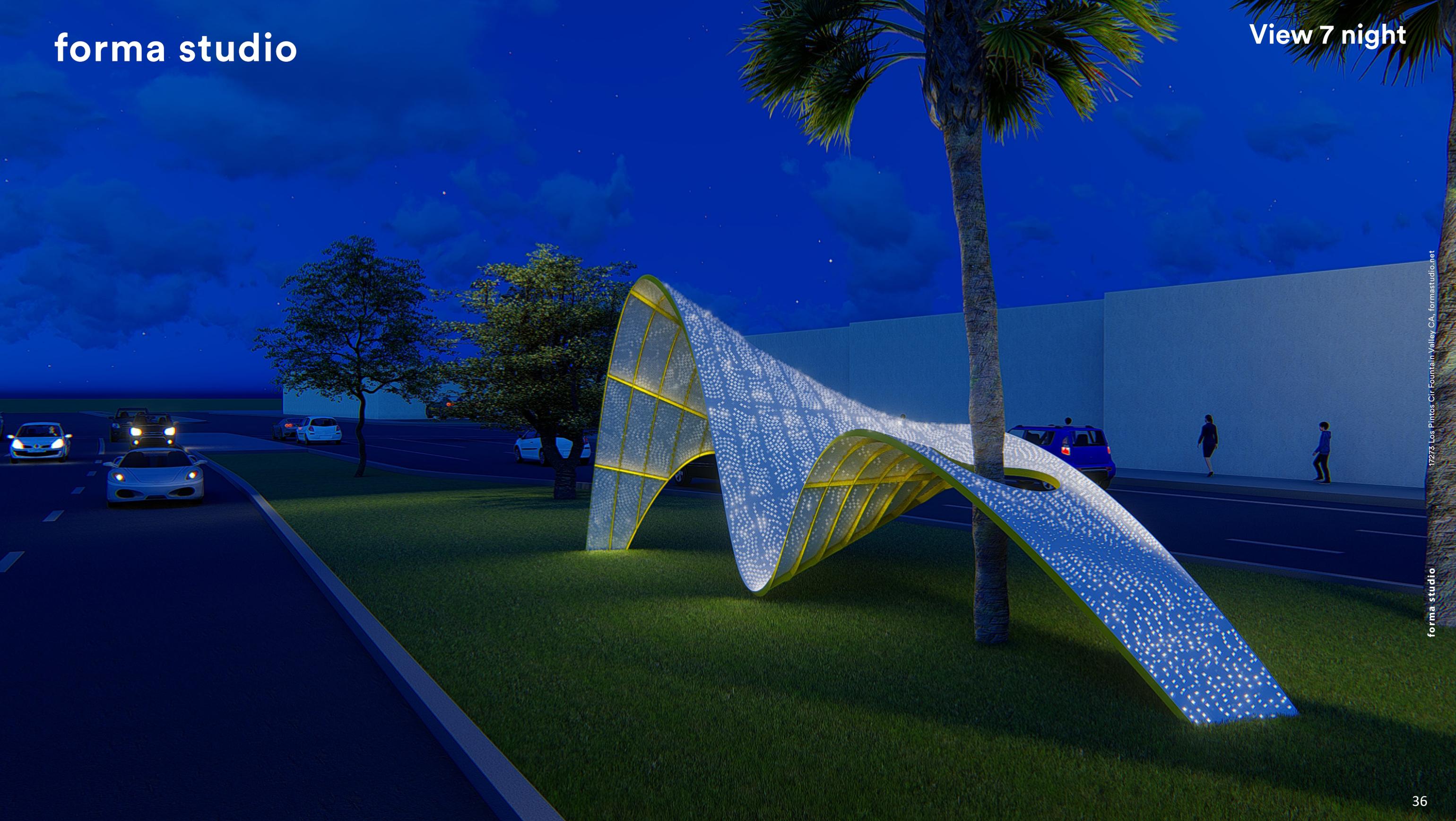
17273 Los Photos Cir Fountain Valley, CA forma studio.net

forma studio

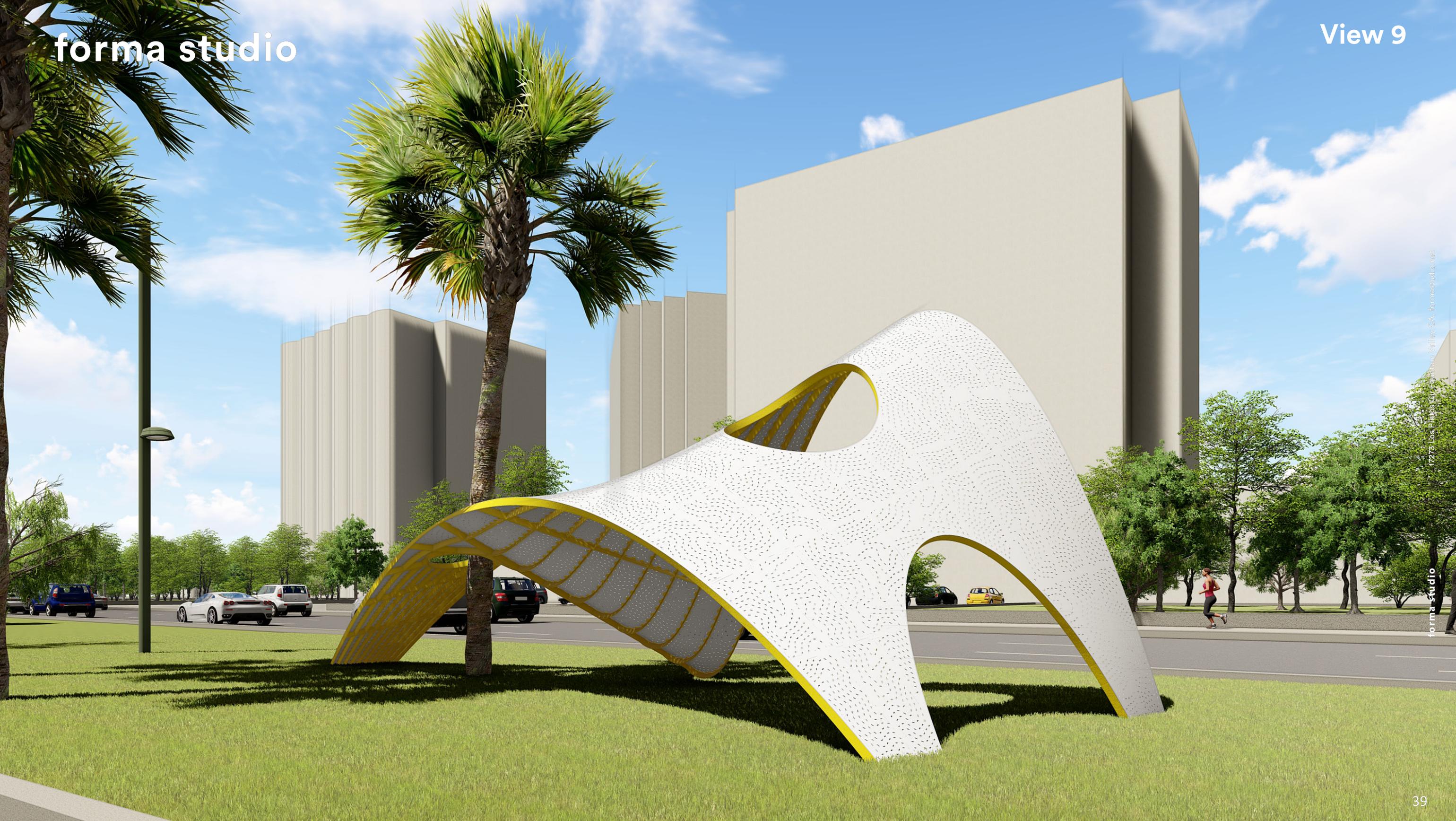


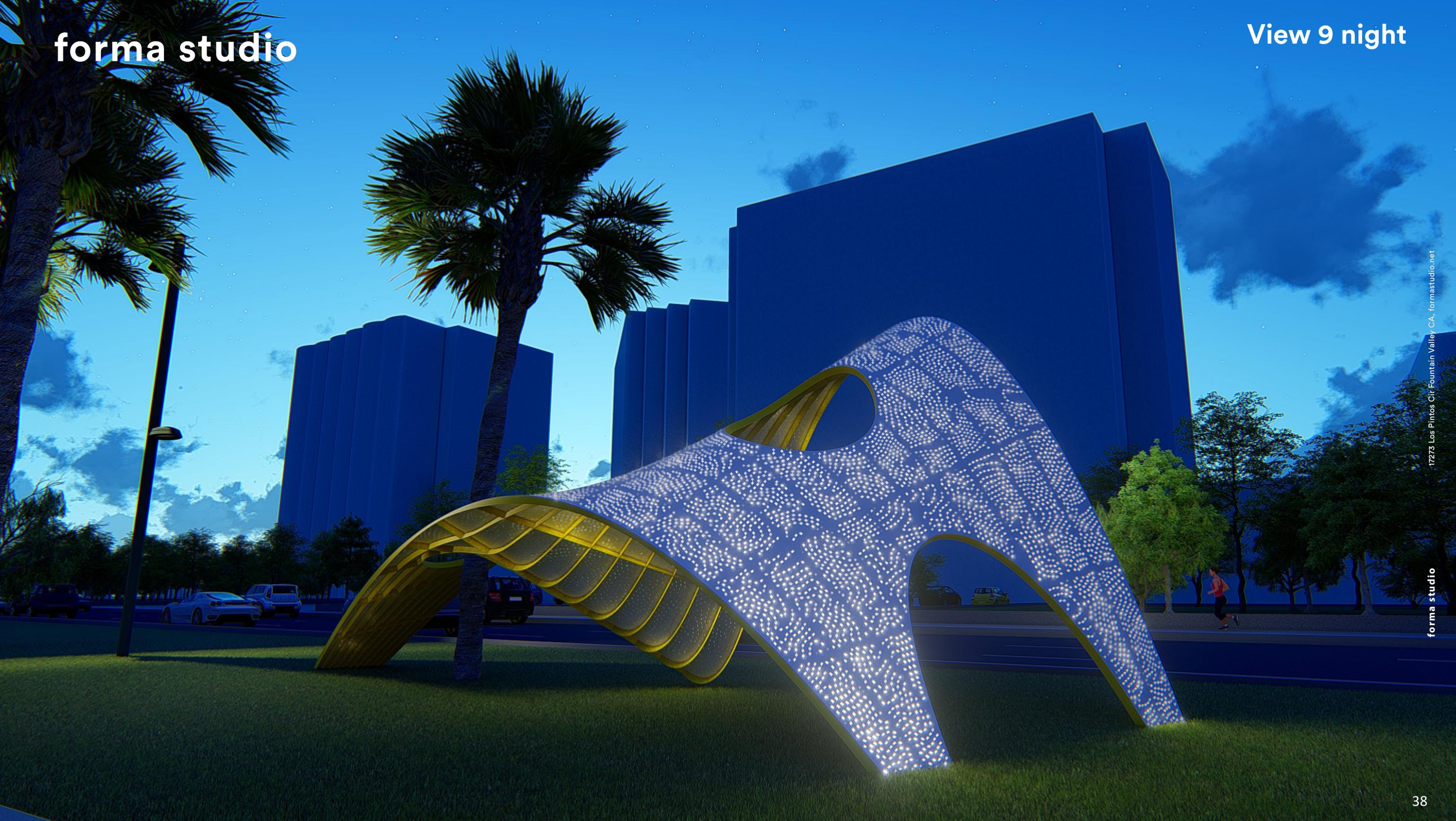


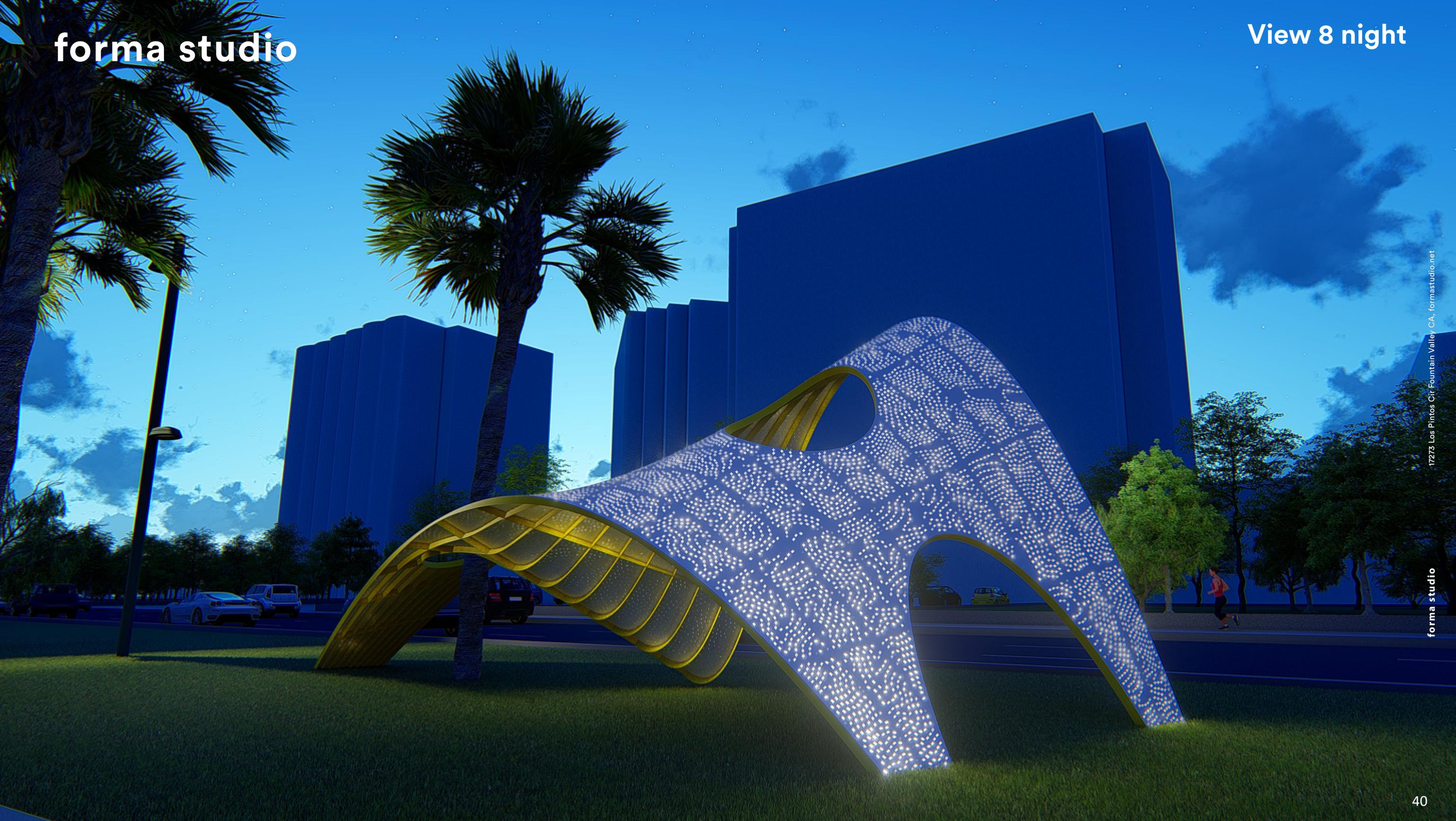












forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

Schedule + Budget + Maintenance

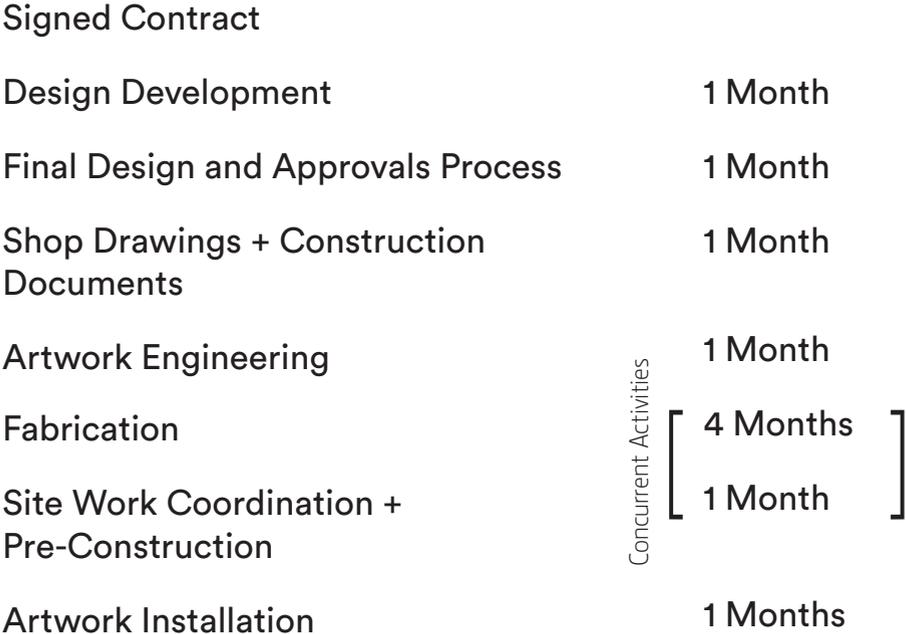
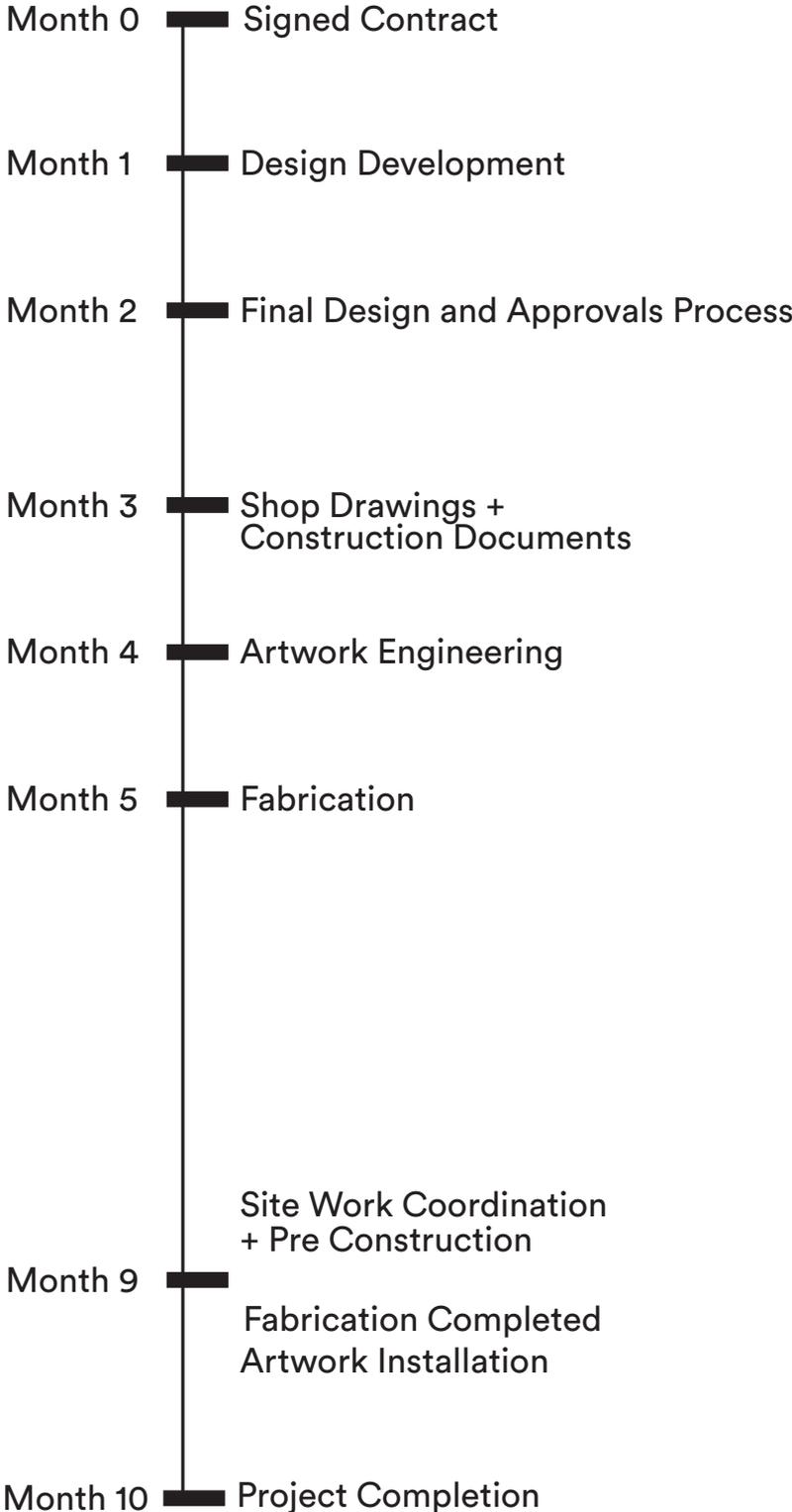
Schedule

forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna



*Time-line is dependent on construction schedule and approvals process.

Budget

Glenoaks Blvd Glendale - Public Art, Cost Estimate				
	No.	Unit Cost	Cost	
Sculptures				
Fabrications of sculptures	1			\$62,000.00
Installation	1			\$15,000.00
Sales Tax California	n/a			n/a
Total Sculpture Fabrication and Installation and Sales Tax				\$77,000.00
Sculpture Foundation and Pedestal				
Poured in place concrete footing and pedistal W/ conduit, wiring and data, Electrical and Drainage Install and electrical stubin to pedestal by Pubic Works	1			By Others
				\$0.00
LED Light Fixtures				
Lights Inside Sculpture (8 lights inside)	6	\$120.00		\$720.00
Astronomical Time Clock (Public works to tie in to Street Lighting)				By others
Cables between Fixtures		\$155.00		\$155.00
Leader Cable (120 volt)		\$170.00		\$170.00
Sub-Total Cost Electrical Fixtures and Equipment				\$1,045.00
Tax 9.5%				\$99.28
Shipping				\$176.05
Sub-Total Tax and Shipping				\$275.33
Total Light Fixtures and Electrical,Tax and Shipping				\$1,320.33
Engineering Fees				
Structural Engineering for Sculpture and Footing/Pedestal (does not include soils report or borings)	1	\$0.00		\$3,500.00
Total Engineering				\$3,500.00
Miscellaneous				
Travel				n/a
Total Miscellaneous				\$0.00

Artist Fee				
Artist Fee		15%		\$15,000.00
Sub-Total Project Costs				\$96,820.33
Contingency		3%		\$3,179.68
Total Project Costs plus Contingency				\$100,000.00
Total Project Budget \$100,000				\$100,000.00

forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna

Maintenance

We understand that maintenance is one of our client's primary concerns. Our goal is to establish a beautiful image that takes as little maintenance as possible. Sound maintenance procedures begin with good decisions on materials and structure. We exclusively work with materials that are low maintenance. Our fabricator, Metal Arts Foundry in Utah has fabricated Public art sculptures for over 20 years. We employ a high level of craft in fabrication of the sculptures and build things to last. The LED lighting we use is low voltage and low energy consumption. Once the installation is complete, a detailed maintenance manual will be provided.

Sculpture

Medium/Materials: The Sculpture will be made from laser cut sheet metal. After engineering has taken place the specific metal selection will take place. The laser cut sheets will be rolled and fabricated in sections to be shipped to the site. Each section will begin and end at a mounting post to facilitate the ease of installation while keeping each prefabricated assembly a closed and protected unit.

The sculptures will be finished with a maroon Scotch Brite pad number 7447. When stainless steel is cleaned with 77 Cleaner and Passivator Spray and washed (see maintenance below) the original finish will return. If the surface is damaged or scratched the scratches can be buffed out. We do not recommend a graffiti coating or clear lacquer for stainless steel as the Passivator Cleaner works better directly on the stainless steel itself. Touching the sculptures will not change the surface.

Maintenance

For routine maintenance the sculpture should be dusted annually, biannually or every five years, depending on the environment. This can be done using compressed air, or the sculptures can also be cleaned using long handled feather dusters, which is a more hypo-allergenic option. No refinishing is necessary for the sculptures and no additional cleaning or maintenance should be necessary. Should there be any issues with the sculpture contact Forma Studio or Metal Arts Foundry for maintenance questions.

Installation

Maintenance of your sculptures begins with sound and controlled fabrication methods. We consult with a metallurgist to ensure that our fabrication procedures for stainless steel and or aluminum are the highest standards for the industry. Before fabrication begins the shop areas where the material is stored or fabricated are cleaned so they are free of mild steel debris or iron bearing dust. Surface rusting of stainless can be caused by unclean shops and mild steel (chains, tools, etc.) contacting the surface of the stainless steel during fabrication. Surface spotting or rust on our sculptures is always the result of airborne chemicals or particulate that is inherent in site conditions and is not part of the controlled fabrication environment. If such conditions are present in the sculpture site, then regular cleaning will ensure that there is not a buildup of chemical air pollutants or airborne particulate.

Stainless steel sculptures can be cleaned using a common garden hose or pressure washer with Stellar Solutions Ready to Use 77+ Passivator Cleaner and Rust Remover citrus spray. This product will restore the stainless steel to a new luster. It is recommended to not exceed 1400 psi at no more than 4 CFM is using a power washer. Use a 40 degree fan tip and working distance of 12 inches or greater. For instructions on where to order and on using the Citrisurf 77, Stellar Solutions Plus, Passivating Solution consult Section 7. Pages 391 through 393, in product information.

Abrasive cleaners or pads other than Scotch Brite pad number 7447 should not be used on the stainless steel. If there is defacement with graffiti, it should be removed by sparingly applying paint thinner to the affected area and scrubbing with Scotch Brite 7447 and/or a soft cloth. Spray wash with citrus spray followed by water or just water following application of paint thinner.

The sculptures should be watched carefully to check for environmental build-up of dirt, dust, and/or staining from airborne particulate and/or chemicals. The frequency of cleaning and a cleaning schedule should be based upon these

environmental observations. It is best to watch the sculptures during the first 3 years and establish a cleaning regimen based on this observation. We recommend that the sculptures should be cleaned at least once every year. If maintenance is postponed cleaning may become more difficult. We need to emphasize that every site has inherent environmental conditions and that you must adapt your cleaning frequency to these conditions.

Warranty

The Sculptures will be warranted for material defects and workmanship for one year. The LED lights usually carry a five, year warranty with the manufacturer from the time of purchase. All lighting components are covered by the manufacturer's warranty and are not covered by the artist.

forma studio

17273 Los Pintos Cir
Fountain Valley CA, 92708
formastudio.net

Glendale Citywide Public Art Landmarks
Glendale Arts and Culture Commission
222 E. Harvard St.
Glendale, CA 91205

Hahamongna