

IRVINE, CA

CALIFORNIA MASONRY SUMMIT & EXPO

APRIL 30, 2026

Welcome!

www.CaliforniaMasonryCouncil.org





- ❖ Founded in 1946
- ❖ Largest CMU Producer in Southern California
- ❖ Many Iconic Southern California Structures made with Angelus Block CMU

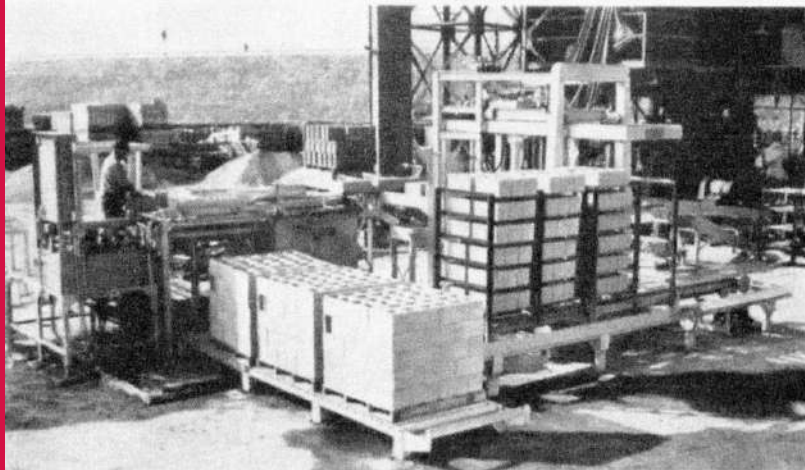




Automation in Manufacturing
Concrete Blocks...

ANGELUS BLOCK SCORES AT CHAVEZ RAVINE!

1/3 MILLION ANGELUS BLOCKS USED THROUGHOUT STADIUM



AUTOMATION AT ANGELUS

- AUTOMATICALLY INDEXES RACKS FOR UNLOADING
- AUTOMATICALLY UNLOADS THE PALLETS AND BLOCKS FROM RACKS
- AUTOMATICALLY PLACES BLOCKS AT PROPER HEIGHTS FOR CUBING
- AUTOMATICALLY DISCHARGES COMPLETED CUBE FOR PICKUP
- PROTECTS PRODUCT QUALITY WITH CUSHIONED HYDRAULIC CYLINDERS.



THE NEW DODGER STADIUM

Architect: Praeger, Kavanaugh & Waterbury
General Contractor: Vinnel Construction Co.
Masonry Contractor: West Coast Masonry

Architects...Engineers...Masons CHOOSE ANGELUS BLOCKS Leader in the Concrete Masonry Field

Newer methods of manufacturing and an enlarged production capacity (1 1/2 million units per month), coupled with a larger sales force and more delivery equipment, now enable us to service the entire Southern California area.

Many architects and engineers create their own original design units and have them custom-made to specification by Angelus. Our design department is ready to assist you with your block designs or lay-

out problems. Of course, the designs are always the exclusive property of the designer.

Each block design manufactured has undergone extensive product research. Angelus Block is constantly conducting research to help sustain the outstanding leadership in the concrete masonry field. Precision Angelus block, made from Rocklite Expanded Shale Aggregate are specified by architects and engineers and used by masonry contractors throughout Southern California.

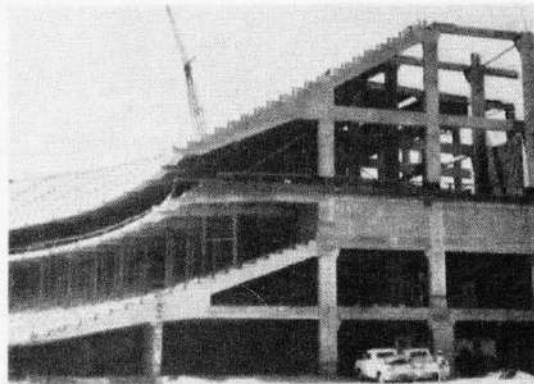
Angelus

BLOCK CO., INC. 11374 TUXFORD • CH 7-8576 • TR 7-5539

At the intersection of Golden State Freeway and San Fernando Road in San Valley, Calif.

ANGELUS produces a higher quality and more uniform concrete masonry unit.

ANGELUS guarantees this superiority in manufacture through improved production controls and greater plant efficiency.



ANGELUS concrete masonry blocks at the Dodger Stadium.

You saw it in CONCRETE MASONRY REVIEW

October, 1961

October, 1961

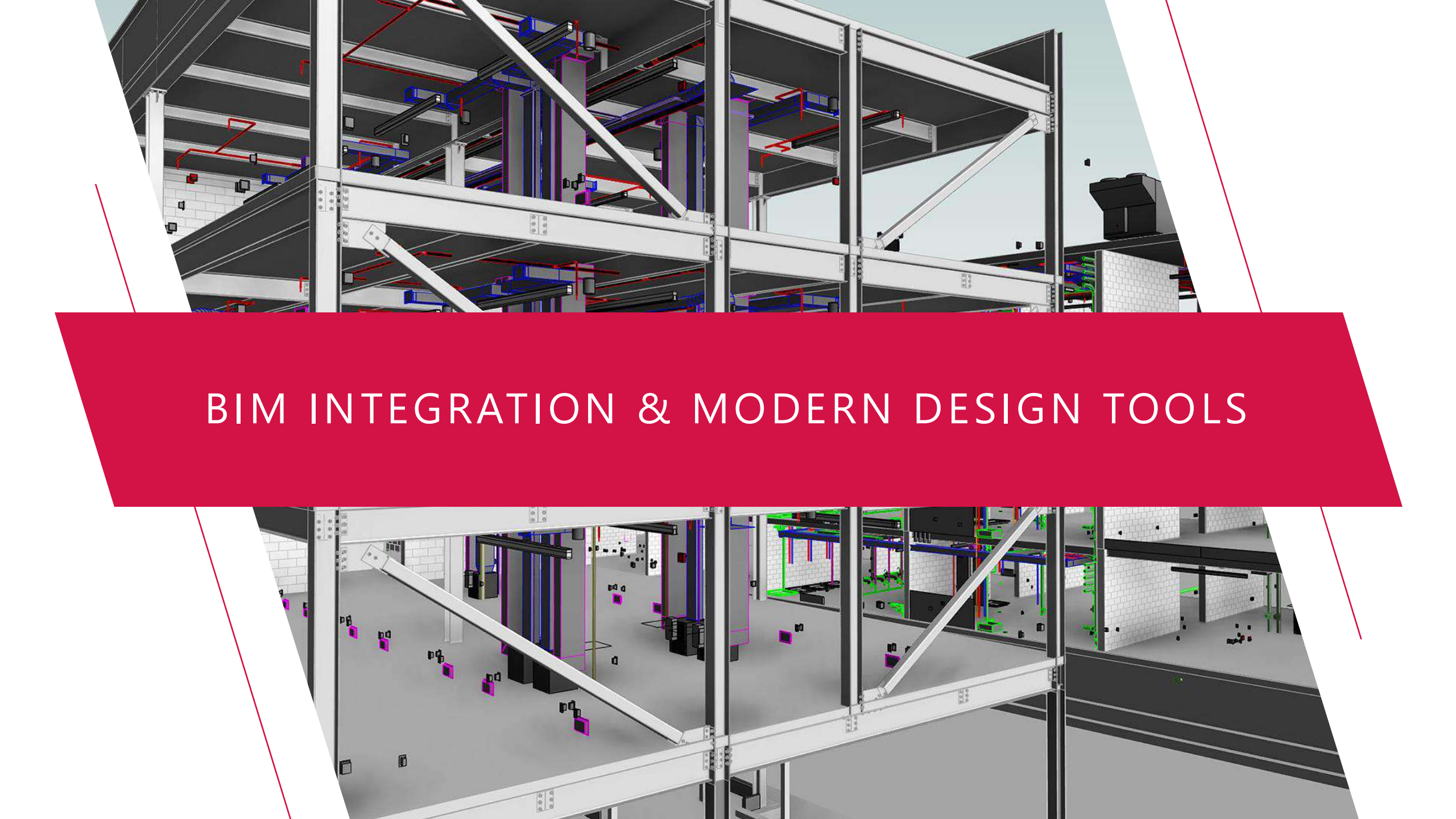
You saw it in CONCRETE MASONRY REVIEW

Angelus
BLOCK CO., INC.
Since 1946









BIM INTEGRATION & MODERN DESIGN TOOLS

HOW WE SUPPORT THE MODERN DESIGNER

www.AngelusBlock.com

3D Unit Library
& BIMsmith Marketplace

MasonryiQ

Support Team

Dozens of technical articles on all the topics discussed here today, masonry code references, LEED and other sustainability strategies and much more

1,000's of digital assets of our products in every size, color, texture, and configuration—100% free to everyone and can be exported to SketchUp

Incredible Revit plugin developed by Tom Cuneio—we sponsor licenses for architects to make designing with CMU easier and more efficient

Customer service is a huge priority for us—we have an incredible team of architectural reps, stop by our booth and say hello

3D Unit Generator



Search Standard & Decorative Units

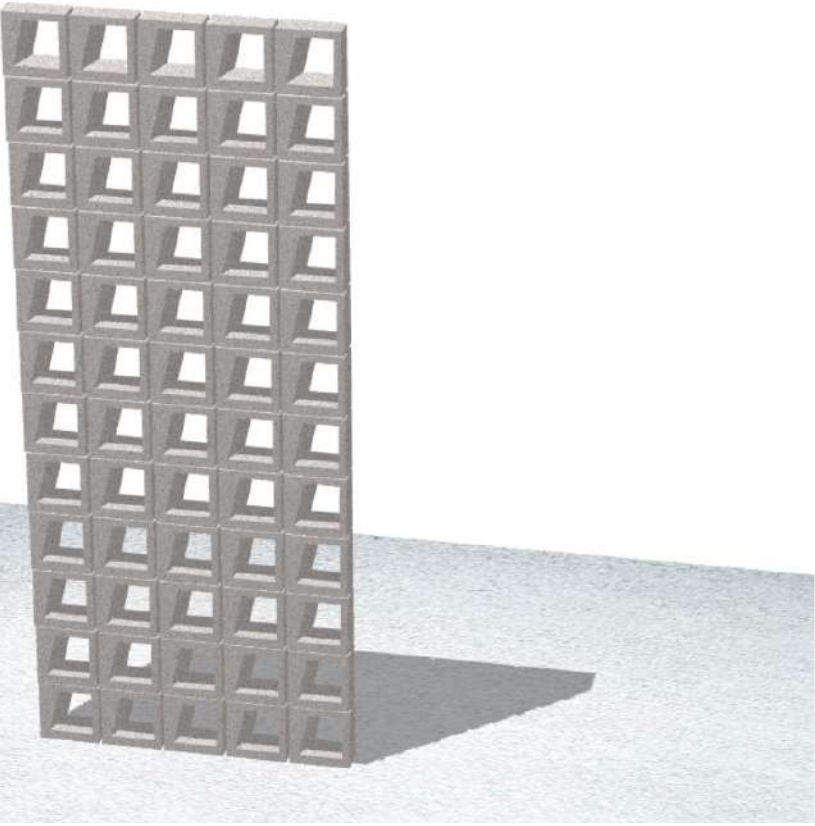
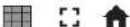


HOME STANDARD UNITS DECORATIVE UNITS MY CONTENT CONTACT

Homepage » Wall Assembly

Delete Selected (0) Download Selected (0)

IMAGE	PRODUCTS	ACTIONS
☐	 6x6x16 Regular MW Greysto...	  
☐	 4x12x12 View-Lite_IV Glac...	  
☐	 8x8x16 Regular MW Sage Bu...	  
☐	 6x6x16 Regular MW Canyonb...	  
☐	 4x8x8 Neptune Silver	  





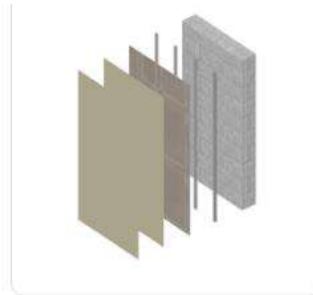
Anchored CMU Veneer

Walls



12-Inch Wide Load Bearing
Single-Wythe CMU

Walls



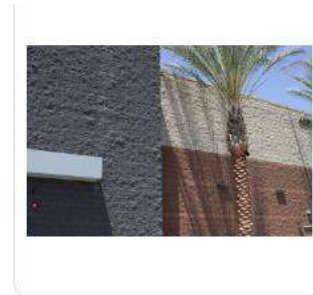
10-Inch Wide Load Bearing
Single-Wythe CMU

Walls



8-Inch Wide Load Bearing
Single-Wythe CMU

Walls



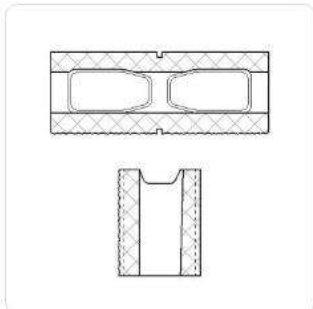
Split Face CMU

Concrete Masonry Unit (CMU)



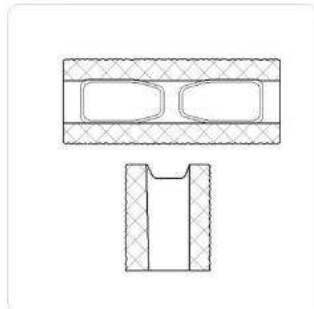
4-Score Split CMU - 2D

Concrete Masonry Unit (CMU)



Vertical Score CMU - 2D

Concrete Masonry Unit (CMU)



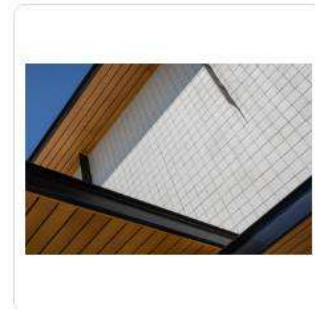
CMU - 2D

Concrete Masonry Unit (CMU)



4-Score Split CMU

Concrete Masonry Unit (CMU)



Vertical Score Precision CMU

Concrete Masonry Unit (CMU)



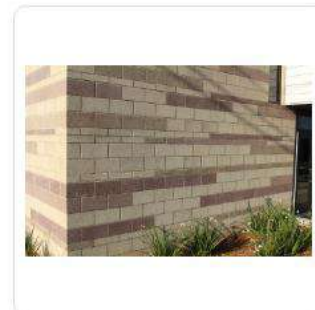
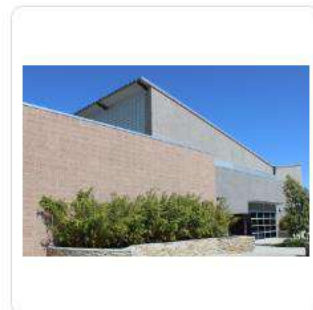
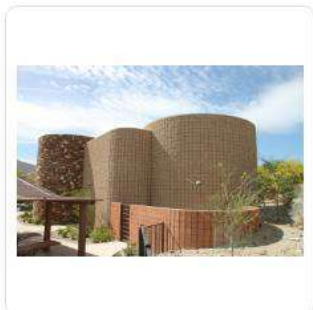
Vertical Score Burnished CMU

Concrete Masonry Unit (CMU)

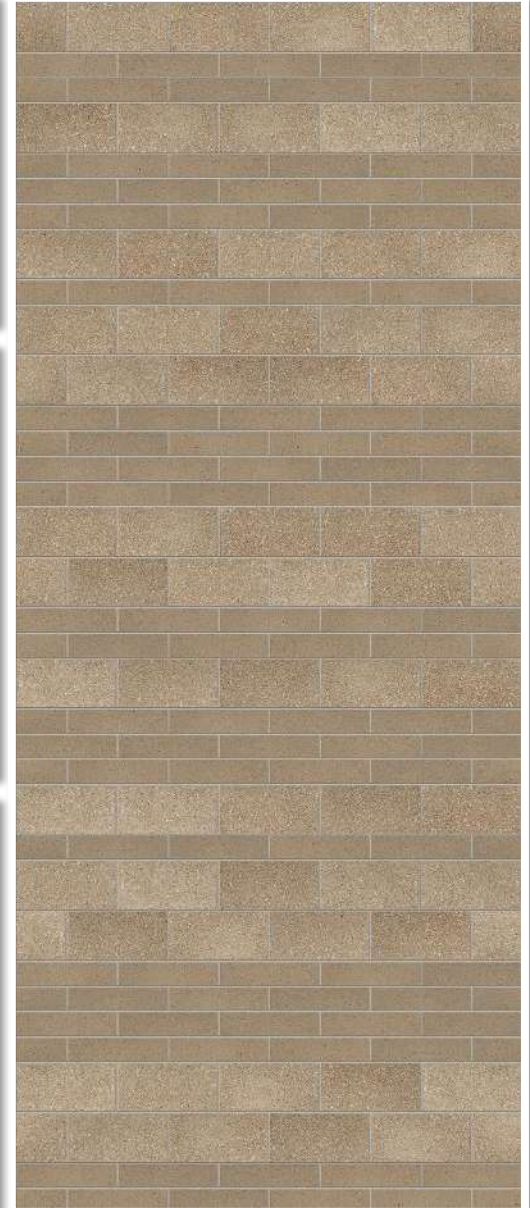


Vertical Score Shotblast CMU

Concrete Masonry Unit (CMU)



market.bimsmith.com/angelus



3D LIBRARY & MASONRY IQ



Free 3D Unit Library
Export to Sketchup Material File



Masonry iQ License
Angelus Sponsors Design Firms!

APRIL 30, 2026 @ IRVINE, CA

CONCRETE BLOCK ARCHITECTURE PANEL

Thank you to our Session Sponsor!

Angelus
BLOCK CO., INC.
Since 1946

www.CaliforniaMasonryCouncil.org



LANCE O'DONNELL
FAIA – Principal @ o2 Architecture –
Educator @ CalPoly Pomona



JANVI KANANI
AIA, LEED AP BD+C, DBIA – Principal @
Arcadis – Past President @ Assoc. for
Women in Architecture + Design



ROBERT M. SIMONS
AIA – Partner & President @
SVA Architects



DOMINIQUE HOURIET
President @ [oo-d-a] studio
Architect, Developer, and
General Contractor



MARK SWANSON
AIA, CSI, LEED AP BD+C – North
Central Regional Director @
International Masonry Institute (IMI)

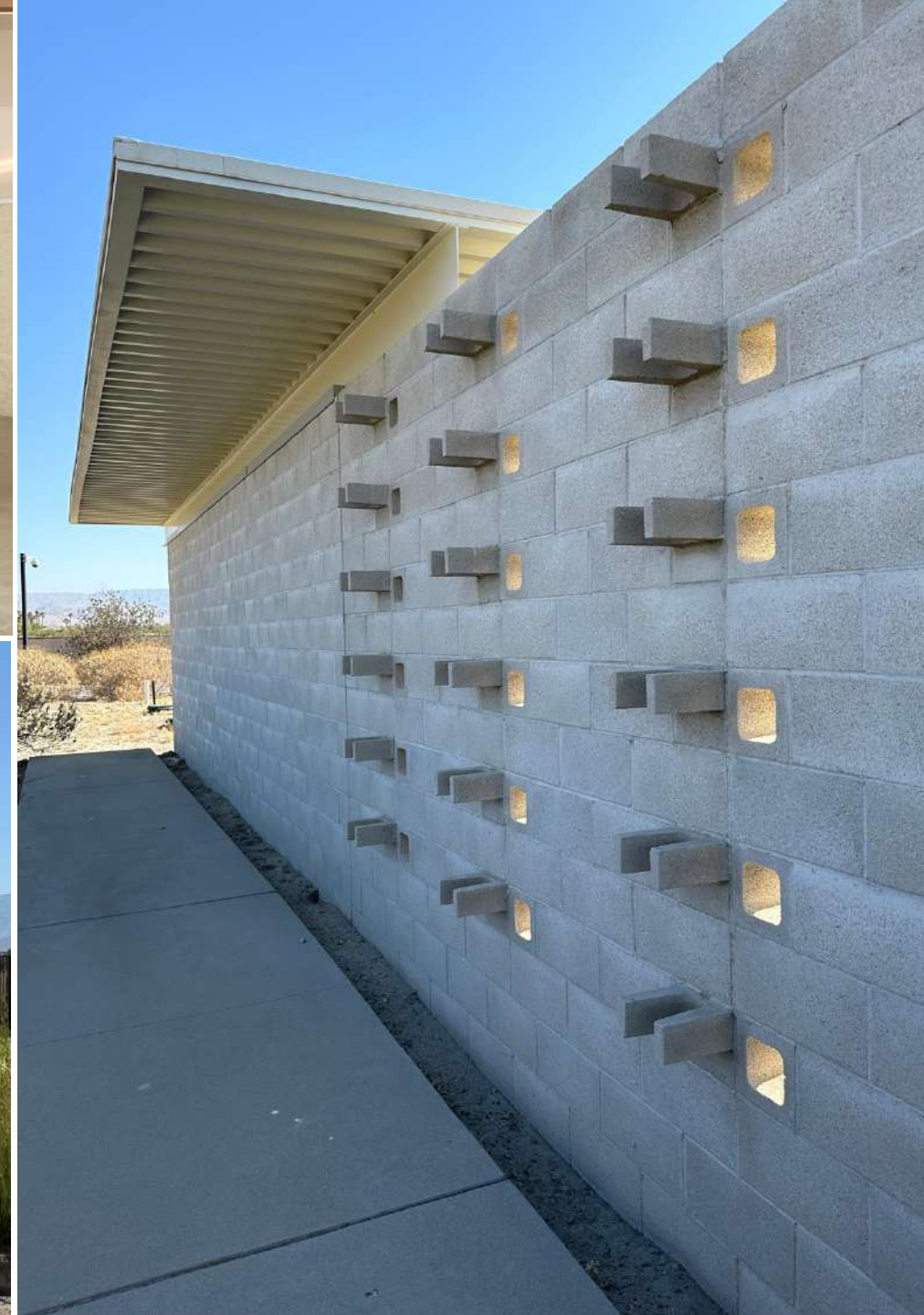


Award-winning Architecture

#masonry
matters

















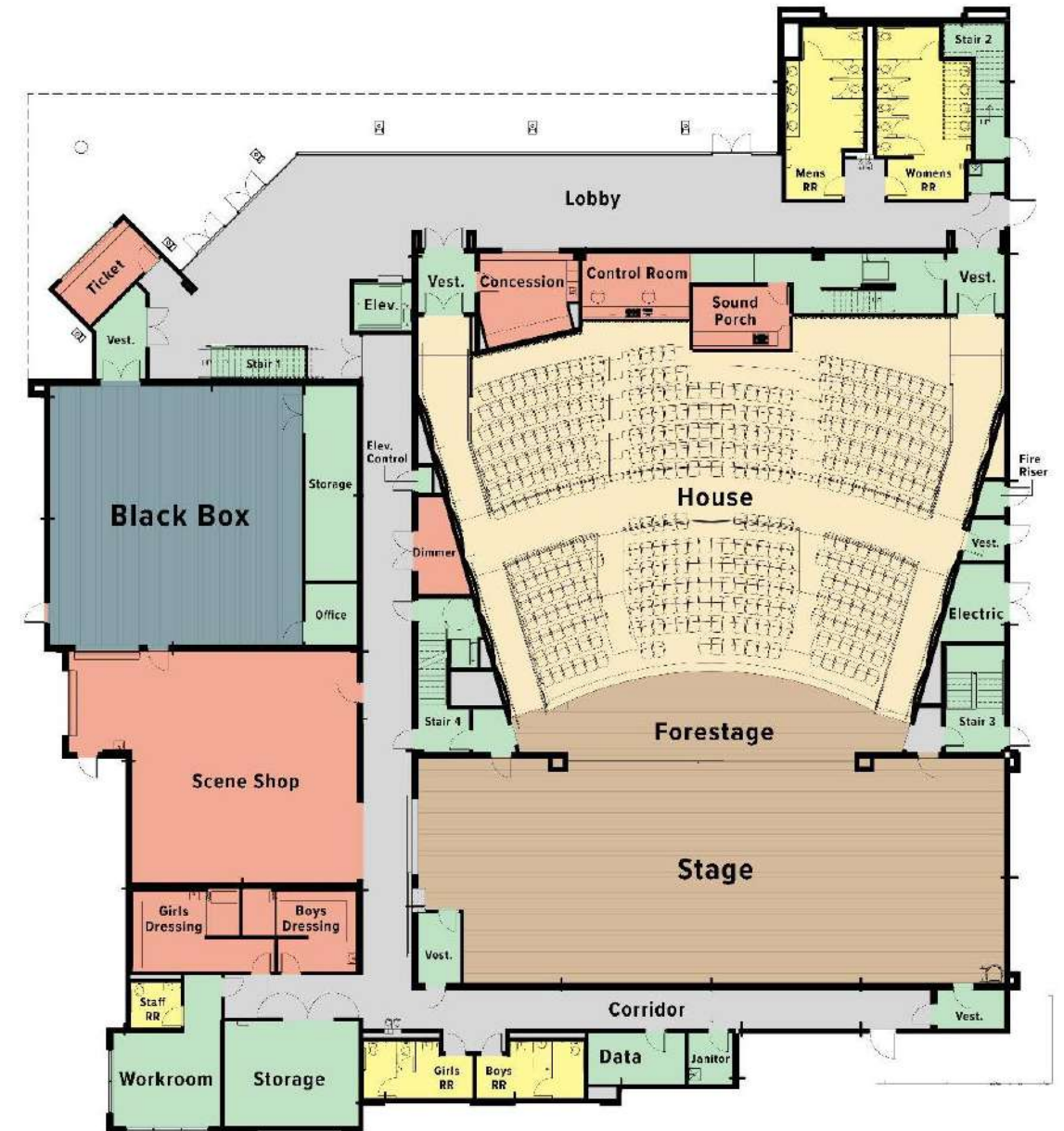
Irvine USD Woodbridge High School Performing Arts Center



CAMPUS AERIAL



SITE PLAN & GROUND LEVEL PLAN



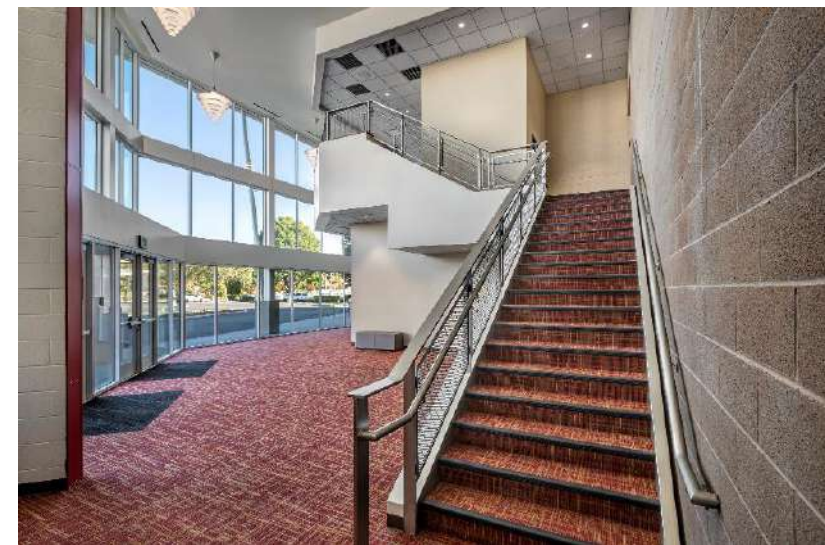
RENDERING



PAC ENTRY & LOBBY



LOBBY and BLACK BOX



AUDITORIUM and STAGE



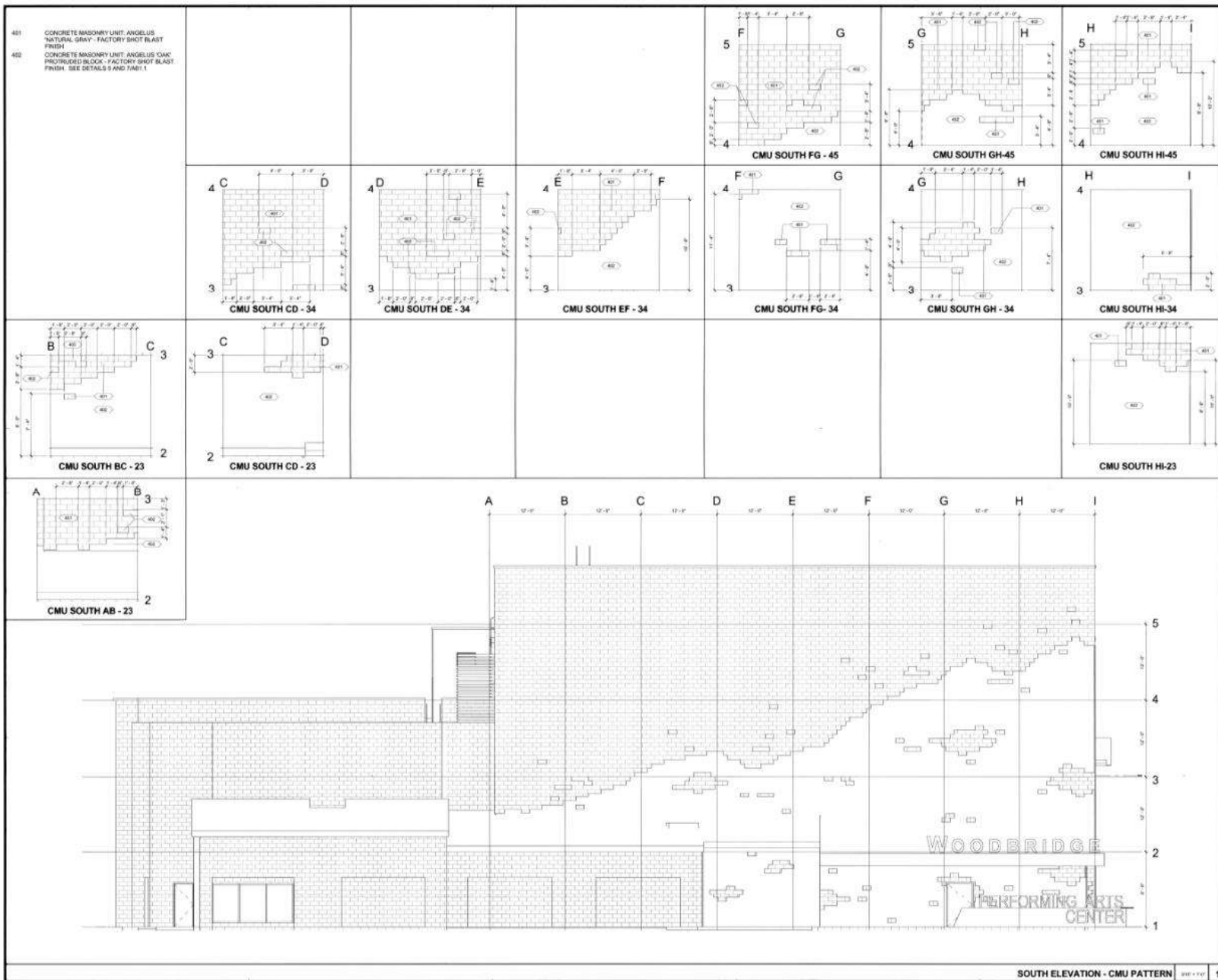
RENDERING



FLY LOFT at STREET CORNER



CMU PATTERN (SOUTH)



OWNER: IRVINE UNIFIED SCHOOL DISTRICT
PROJECT NAME: PERFORMING ARTS CENTER
WOODBRIDGE HIGH SCHOOL
CLIENT ADDRESS: 2015 ROOSEVELT, IRVINE, CA 92620



IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
AP 04-116646

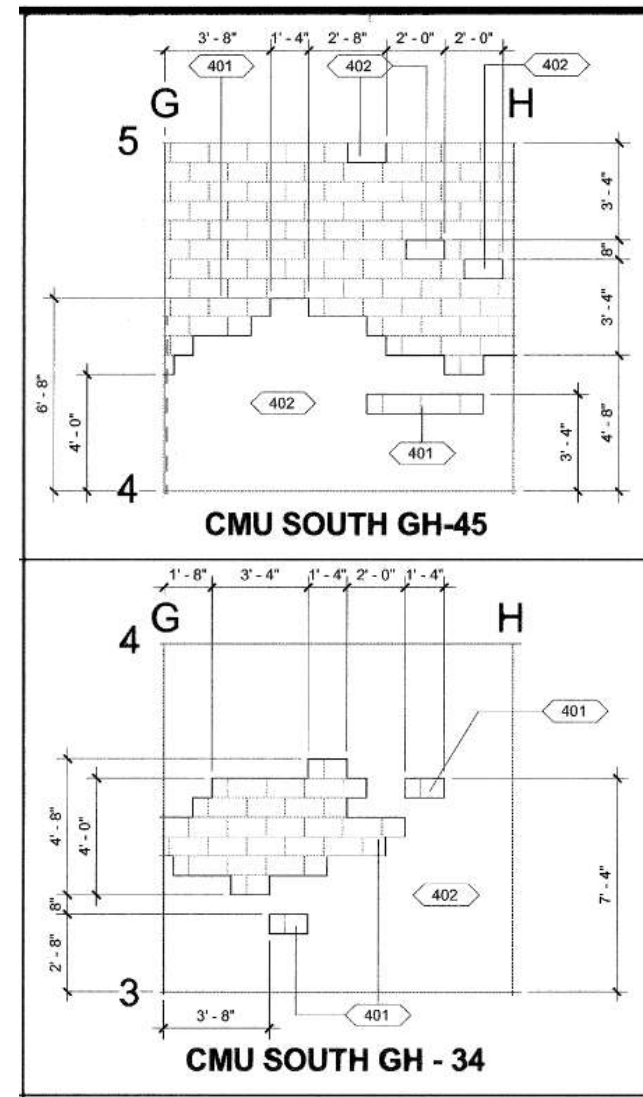
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DATE: 04/11/2016

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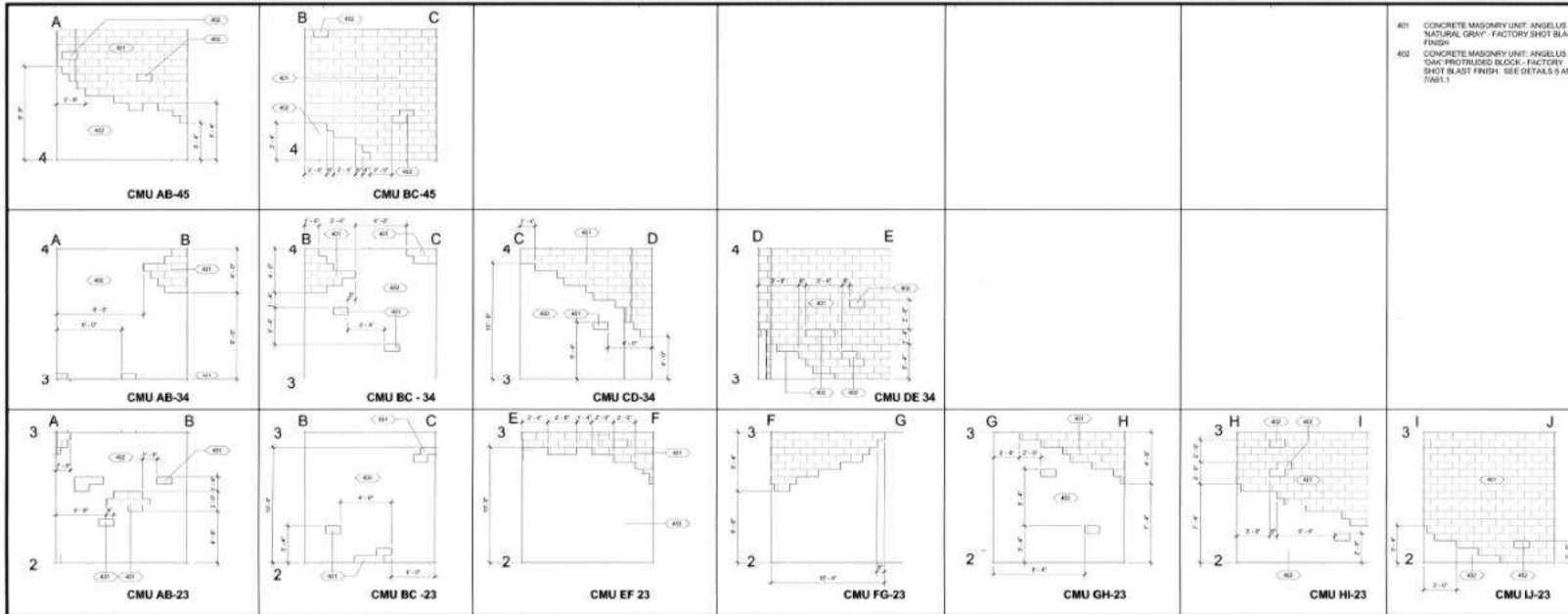
DATE ISSUED: 04/11/2016
PROJECT NO: PTNR 73620-227
SCALE: As indicated

SHEET NUMBER: A21.5
SHEET TITLE: EXTERIOR ELEVATION SOUTH CMU PATTERN

EXTERIOR
ELEVATION
SOUTH CMU
PATTERN



CMU PATTERN (EAST)



OWNER: IRVINE UNIFIED SCHOOL DISTRICT

PROJECT NAME: PERFORMING ARTS CENTER
WOODBRIDGE HIGH SCHOOL

CLIENT ADDRESS: 2515 ROOSEVELT, IRVINE, CA 92606

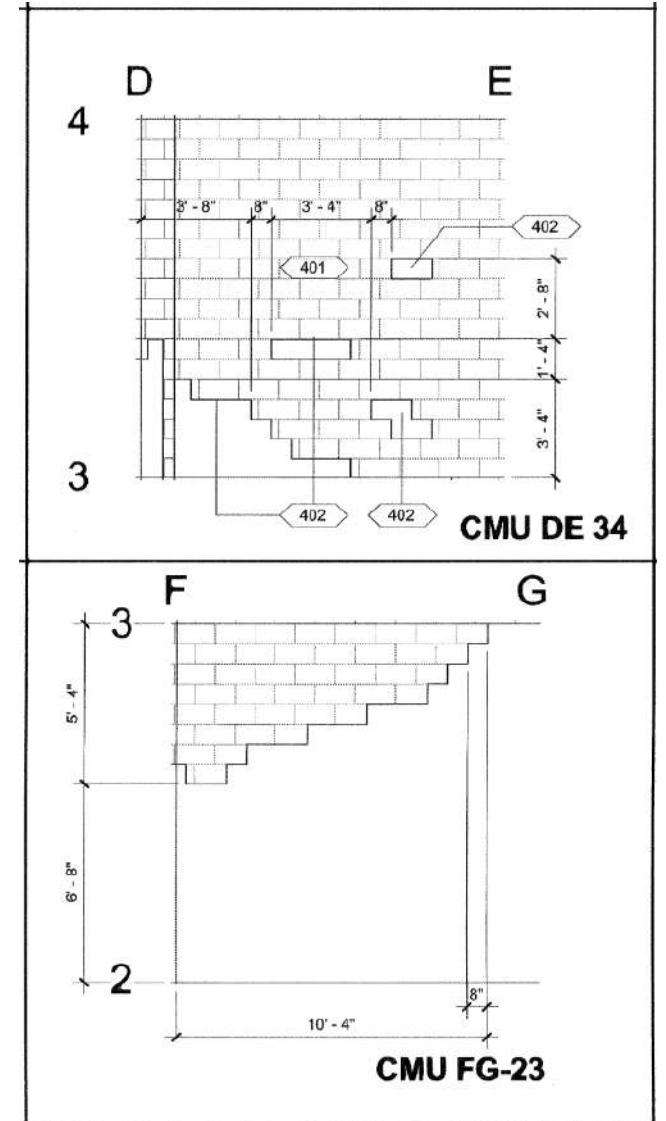


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OFFICE OF REGULATION SERVICES
A# 04-116646
AS: PLS: DS: AA:
DATE: APR 13 2016

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2	ISSUED FOR PERMIT	04/13/2016

DATE ISSUED:
PROJECT NO: PTNE 73855-237
SCALE: As indicated
SHEET NUMBER: **A21.6**
SHEET TITLE:

EXTERIOR
ELEVATION
EAST CMU
PATTERN



CLOSE-UP of SIGNAGE



AERIAL VIEW

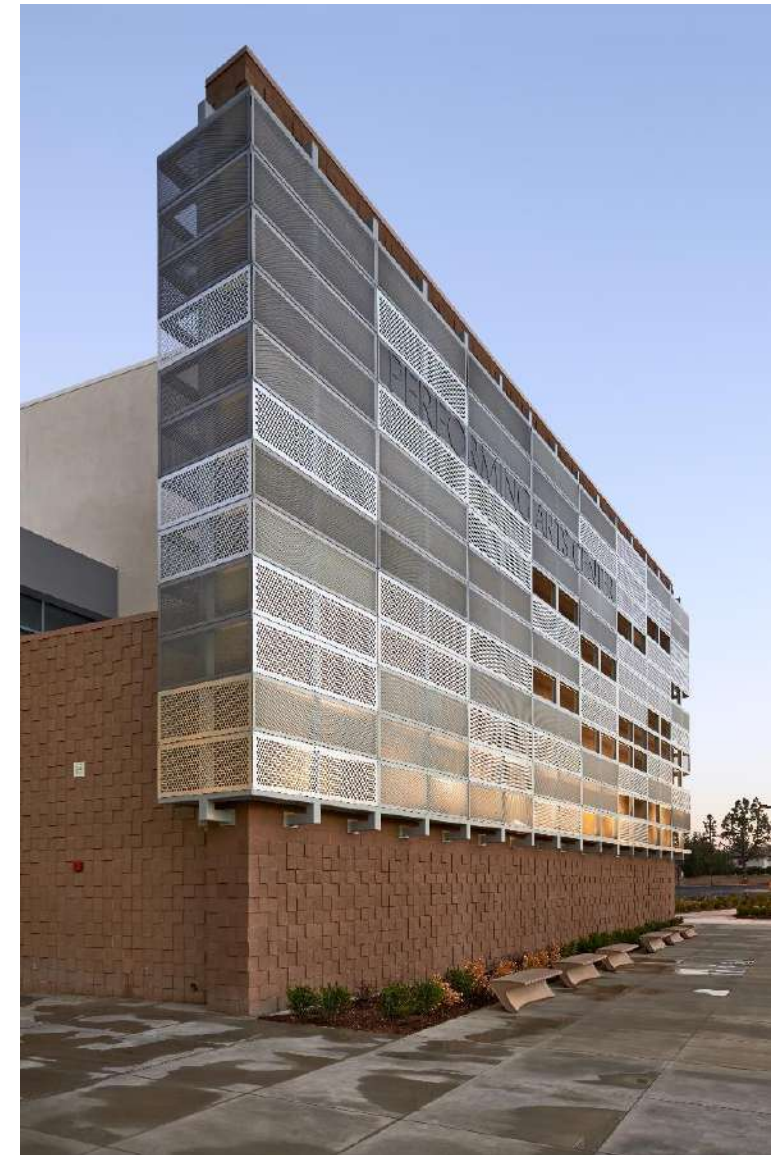




Placentia-Yorba Linda USD District Performing Arts Center



PLACENTIA-YORBA LINDA USD DISTRICT PAC



PLACENTIA-YORBA LINDA USD DISTRICT PAC



PLACENTIA-YORBA LINDA USD DISTRICT PAC





Newport-Mesa USD Costa Mesa HS Performing Arts Center



COSTA MESA HIGH SCHOOL PAC



COSTA MESA HIGH SCHOOL PAC



GYMNASIUM, AQUATIC CENTERS, FIRE TOWER, MILITARY HOUSING





- Over 90% of new homes are wood-framed.
- 73% of mid rise Multi Family is built out of wood framing



- 6,833 structures were burned in the Palisades Fire





LIVE PACIFIC PALISADES

wooden structure. It's amazing.
I was here on Monday. They

WILDFIRE RECOVERY

PACIFIC PALISADES HOMEOWNER TALKS REBUILDING PROGRESS



NASDAQ

-7.732 ▼

6:46

57°



WOOD FRAMED WALL WITH STUCCO

The total cost for wood-framed walls with exterior stucco and interior drywall typically ranges from **\$25 to \$40+ per square foot of wall surface**. This includes approximately \$7–\$16/SF for framing, \$7.50–\$10/SF for stucco, and \$15–\$20/SF for insulation/drywall, although costs vary based on labor rates and structural complexity. 🗨️ Reddit +3

MASONRY WALL

The cost of a masonry wall typically ranges from **\$10 to \$45 per face square foot** for materials and labor. Standard brick walls average around \$25 per square foot, while concrete block (CMU) walls generally cost between \$10 and \$20 per square foot. Natural stone walls can run higher, ranging from \$25 to \$80+ per square foot. 🗨️ LawnStarter +3



Wow. That's awesome. Why aren't more built that way?
Cost?



- **1824:** Joseph Aspdin patents "Portland Cement," heating lime and clay to create a stronger, modern binding agent.
- **1849:** Joseph Monier invents reinforced concrete (adding iron mesh) to improve tensile strength.
- **Early 1900s:** Poured concrete foundations become common, leading to widespread modern use. 

Ingalls Building

[Article](#) [Talk](#)

From Wikipedia, the free encyclopedia

The **Ingalls Building**, built in 1903 in Cincinnati, Ohio, is the world's first reinforced concrete skyscraper. The 16-story building was designed by the Cincinnati architectural firm Elzner & Anderson and was named for its primary financial investor, Melville E. Ingalls. The building was considered a daring engineering feat at the time, but its success contributed to the acceptance of concrete construction in high-rise buildings in the United States. It was converted to a hotel, the **Courtyard by Marriott Cincinnati Downtown**, in 2021.^[1]

Man has used brick for building purpose for thousands of years. Bricks date back to 7000 BC, which makes them one of the oldest known building materials. They were discovered in southern Turkey at the site of an ancient settlement around the city of Jericho.

The first bricks, made in areas with warm climates, were mud bricks dried in the sun for hardening. Ancient Egyptian bricks were made of clay mixed with straw. The evidence of this can be seen today at ruins of Harappa Buhen and Mohenjo-daro. Paintings on the tomb walls of Thebes portray Egyptian slaves mixing, tempering and carrying clay for the sun dried bricks.





In the 1930s, the popularity of cinder blocks exploded as they became the go-to building material for construction projects of all kinds.

Cinder blocks, also known as concrete blocks, are a widely used construction material known for their durability and strength. They have been a staple of the construction industry for over a century, and their history can be traced back to the early 1900s.

The earliest known use of cinder blocks dates back to 1900, when Harmon S. Palmer invented a machine that could produce concrete blocks. These early concrete blocks were made with a mixture of cement, sand, and water, and were reinforced with steel to increase their strength.

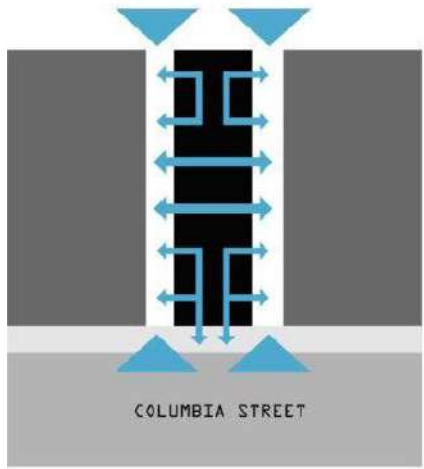
It wasn't until the 1920s that the cinder block as we know it today was invented. In 1920, the first hollow concrete block was created by Harmon S. Palmer's son, Harmon H. Palmer. The new design allowed for more efficient use of materials, making the blocks lighter and easier to handle. The hollow design also allowed for better insulation, which made them more suitable for building homes and other structures.

In the 1930s, the popularity of cinder blocks exploded as they became the go-to building material for construction projects of all kinds. The low cost of cinder blocks made them ideal for use in public works projects, such as highways, bridges, and dams. They were also used in the construction of homes, commercial buildings, and industrial facilities.

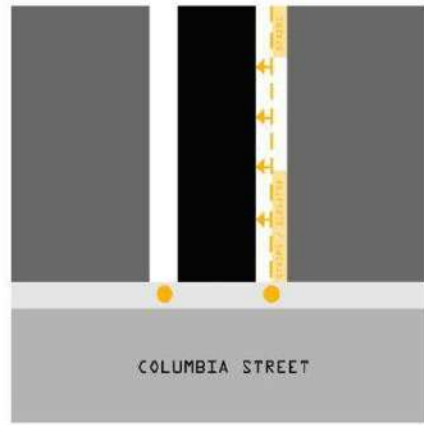
During World War II, the use of cinder blocks became even more widespread as the demand for building materials skyrocketed. In the aftermath of the war, cinder blocks were used to rebuild devastated cities and towns, and they played a crucial role in the post-war construction boom.

In the years that followed, cinder blocks continued to evolve and improve. In the 1950s, the use of lightweight aggregates such as pumice and perlite made the blocks even lighter and more insulating. By the 1960s, cinder blocks had become a ubiquitous building material, used in everything from retaining walls to garden beds.

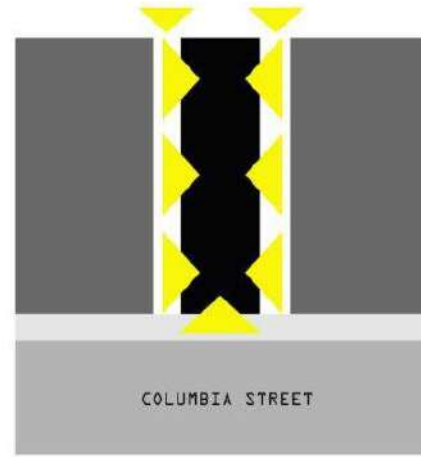
Today, concrete blocks remain a popular choice for construction projects of all kinds. They are widely available and relatively inexpensive, making them an attractive option for DIY projects and small-scale construction projects. Despite the availability of other building materials, the cinder block remains a tried-and-true choice for those looking for a strong, durable, and cost-effective building material.



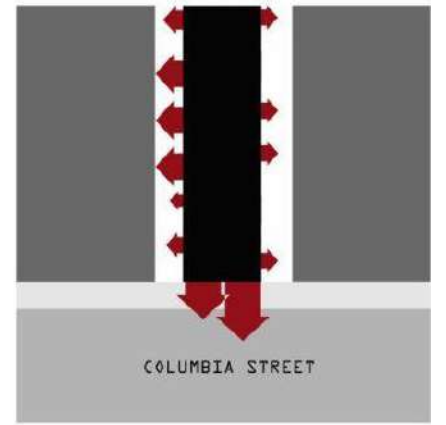
AIR INFILTRATION



CIRCULATION

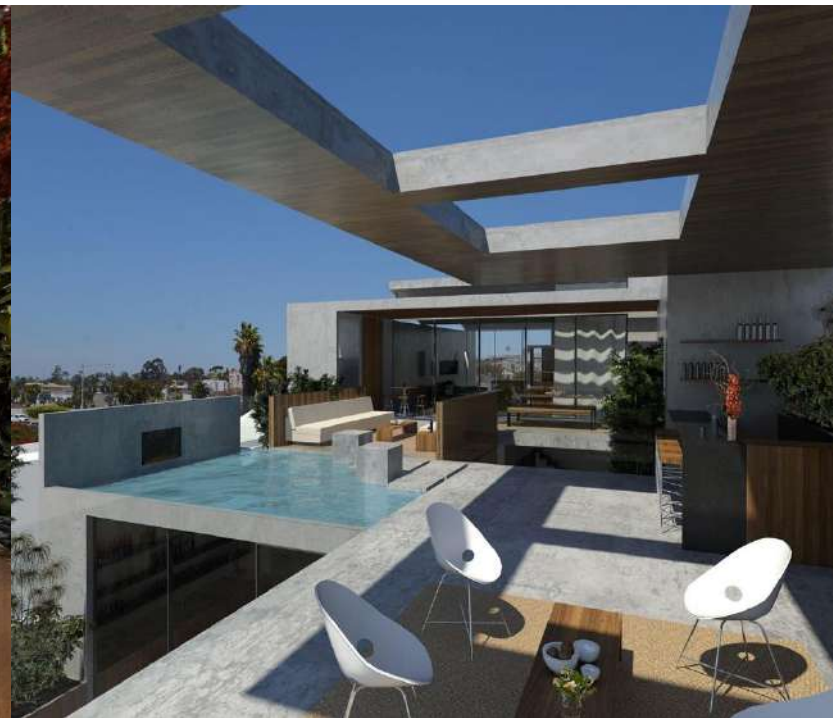


LIGHT WELLS



FENESTRATIONS

SR1: 18 UNIT DESIGN / BUILD

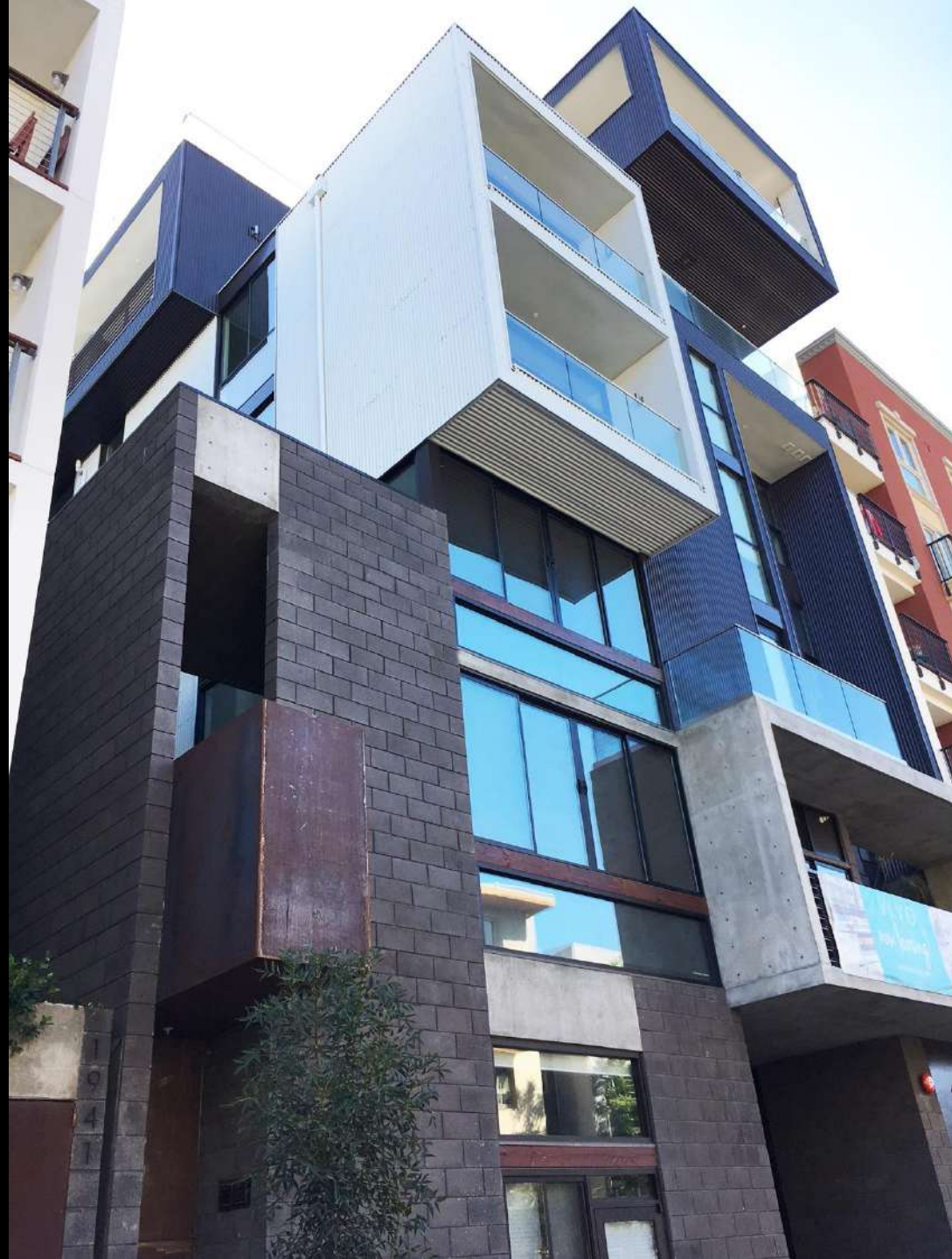




CONVENTIONAL BUILDING METHODS / MATERIALS







FRAMER



INSULATOR



DRYWALLER



BASEBOARD / CARPENTER



PAINTER

WATERPROOFER



EXT STUCCO OR DENSGLASS + FINISH MATERIAL





MASON



WATERPROOFER







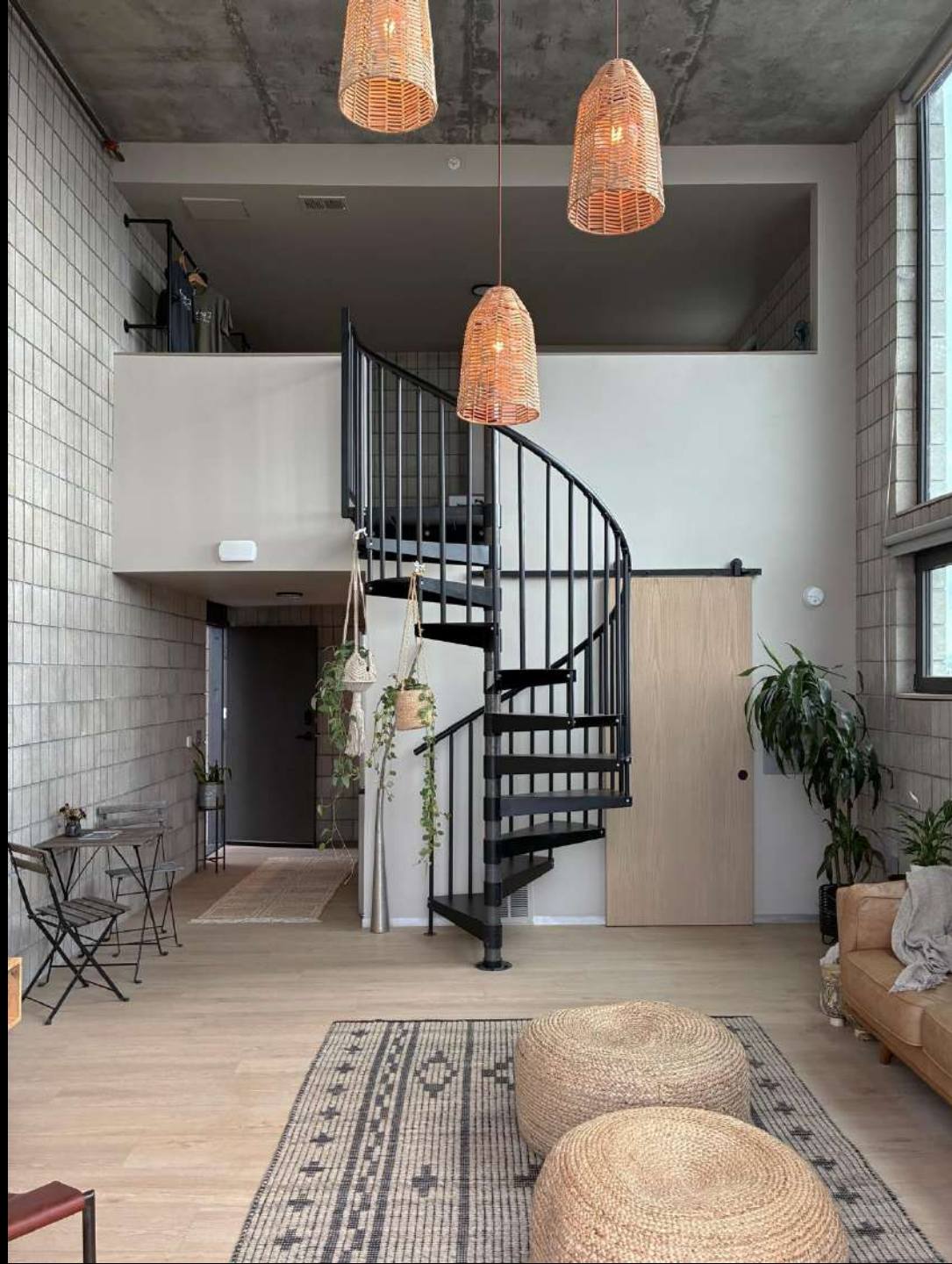


Leparcsd.com





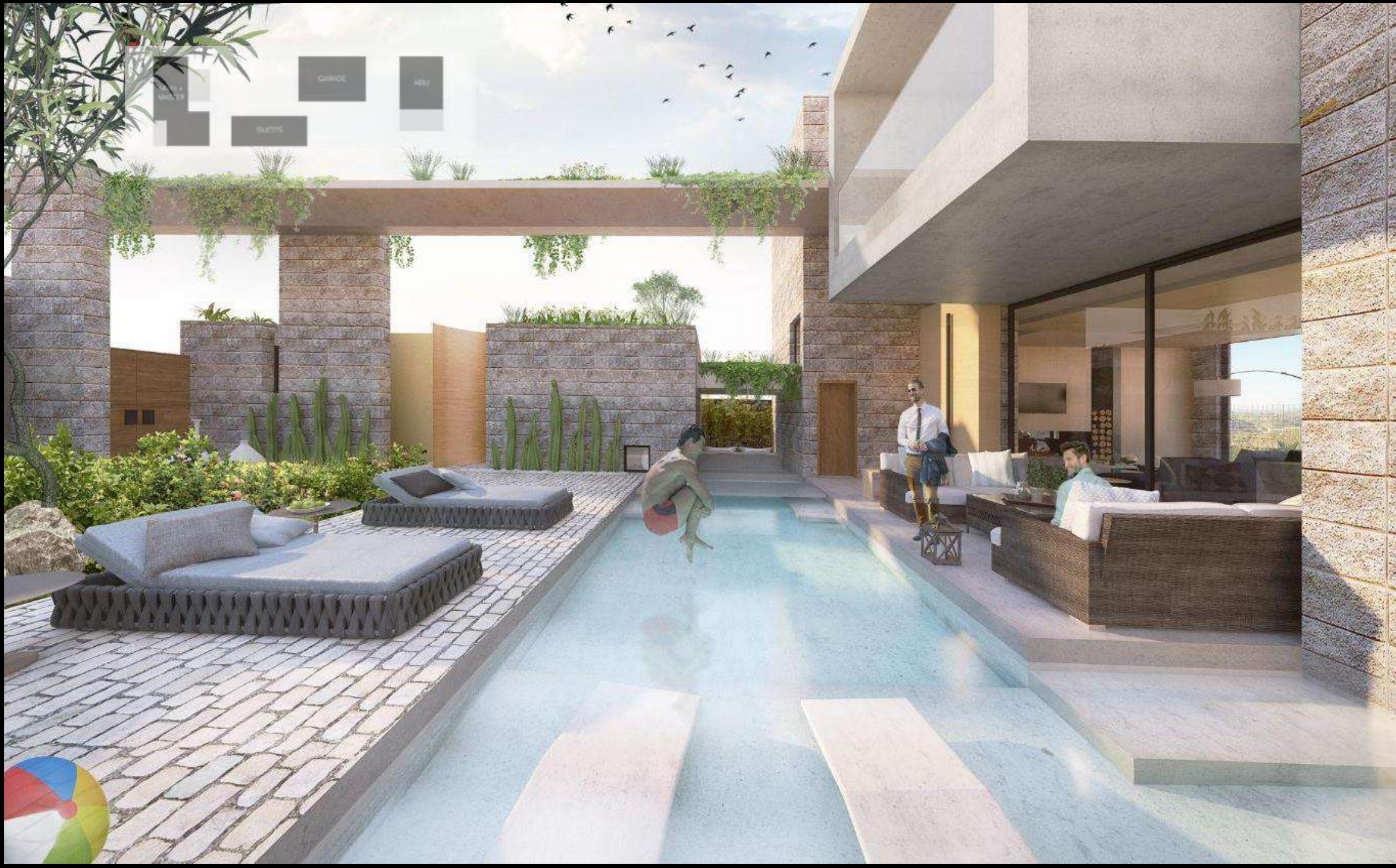




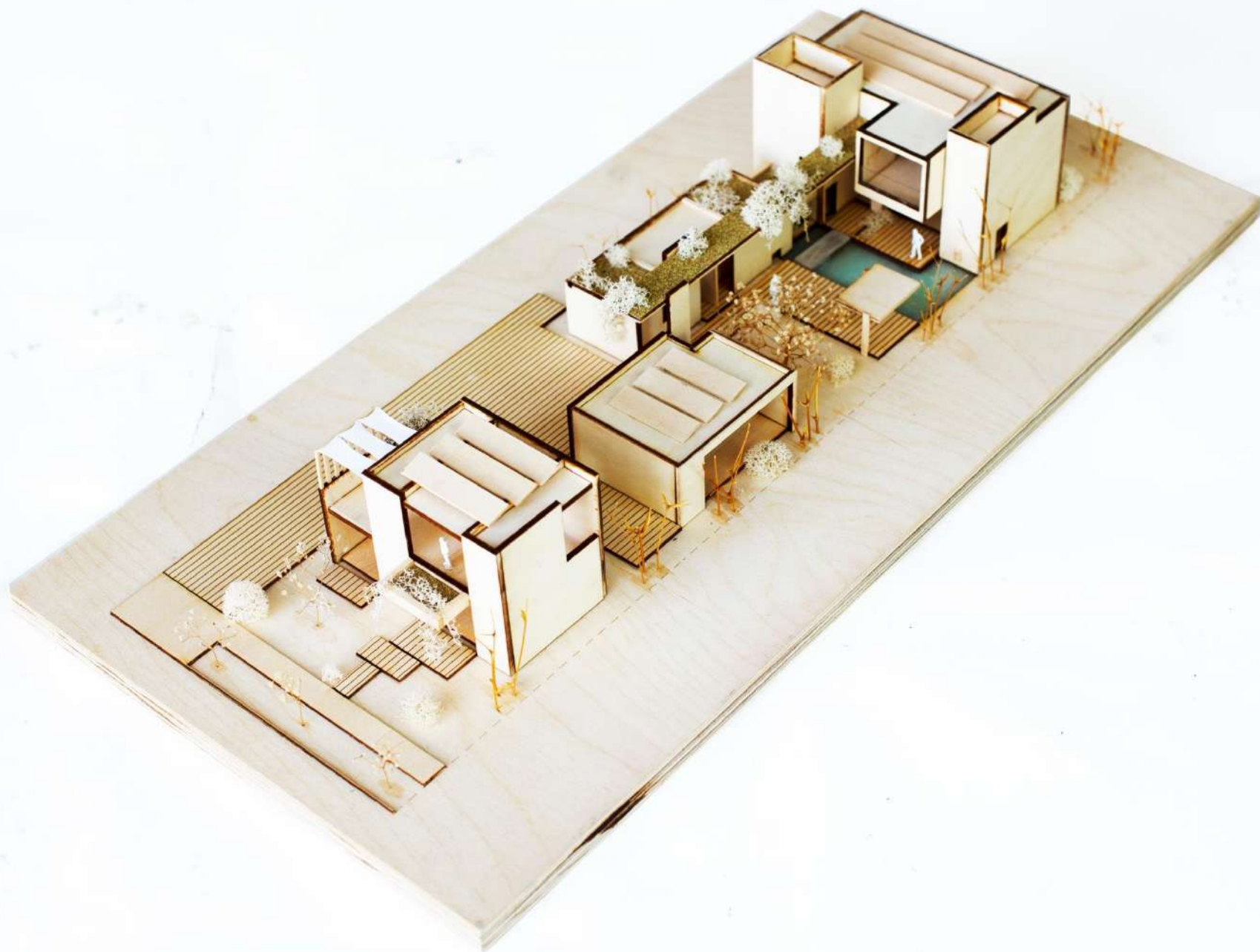














PROJECT

34

[oo-d-a]
studio inc.

20
26

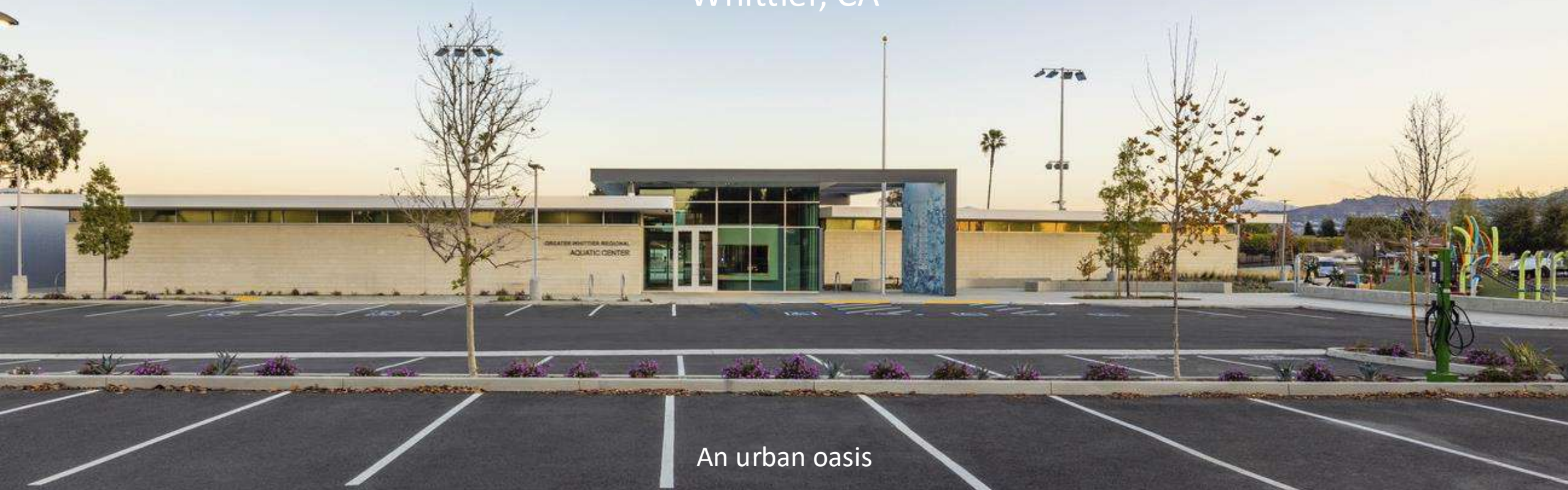






Greater Whittier Regional Aquatic Center

Whittier, CA



An urban oasis

The Team

 **ARCADIS**

 **MORILLO**
CONSTRUCTION, INC.

 **ORCO**
BLOCK & HARDSCAPE
Family Owned Since 1946

miyamoto. EARTHQUAKE +
STRUCTURAL
ENGINEERS

 **R & R MASONRY, Inc.**

GREATER WHITTIER REGIONAL
AQUATIC CENTER

2022
1951
1926
1881
1804
1711
1750
6000
40000
15000000



An Urban Site within a Concrete Dominated Landscape

- 25x50-meter Competition Pool
- 25x25-meter Recreation Pool
- 10,800-square-foot Pool Building - Neighborhood Park



CONTEXT

- SOLAR EXPOSURE
- ACCESSIBILITY
- RESIDENTIAL AMENITY
- PREVAILING WIND
- COMBINED USE
- TRAFFIC VS. RESIDENTIAL

AQUATIC



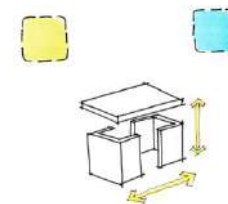
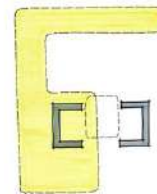
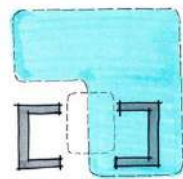
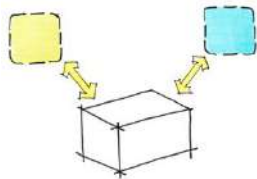
LANDSCAPE

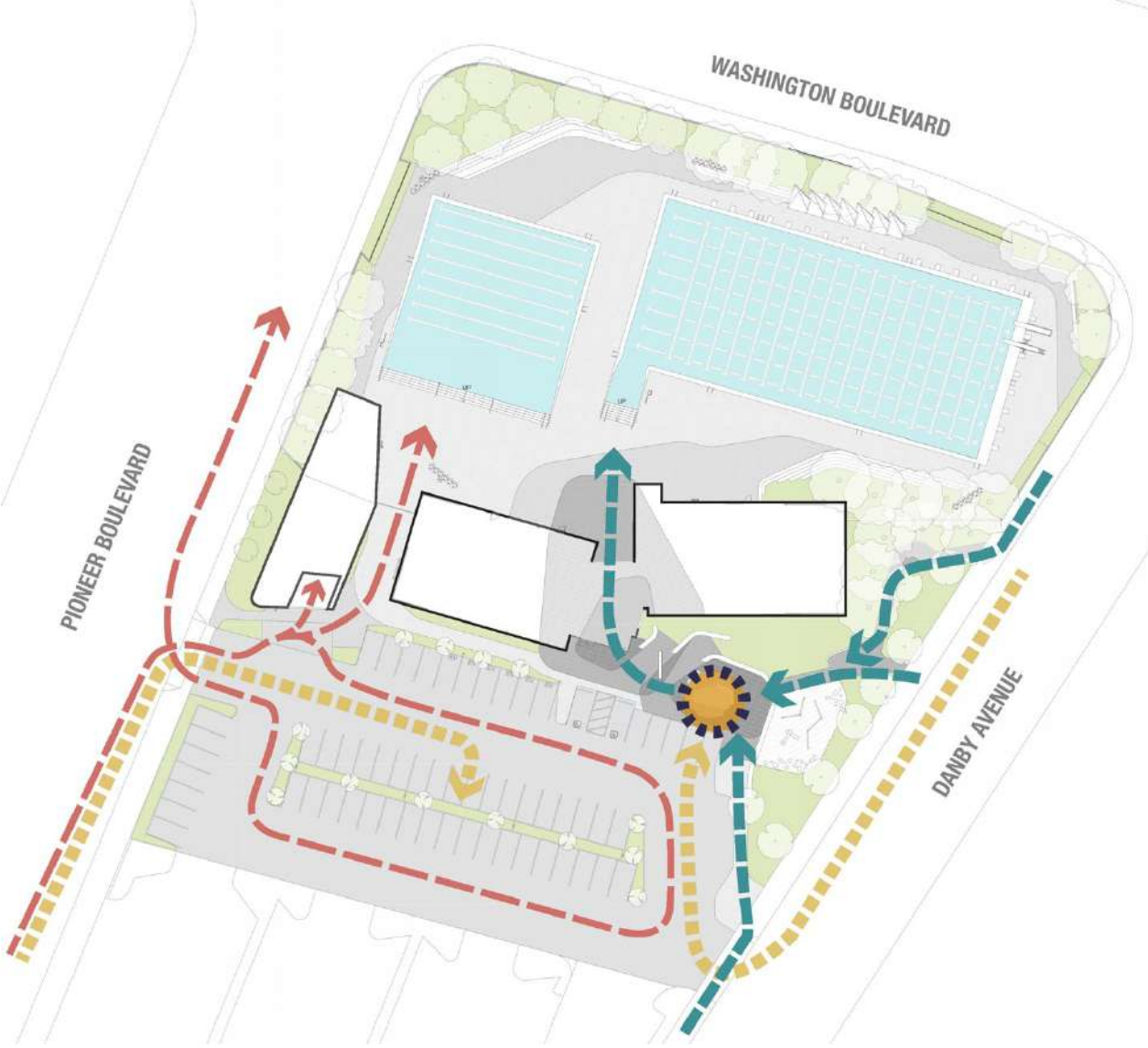


ARCHITECTURE



PROJECT SYNERGY





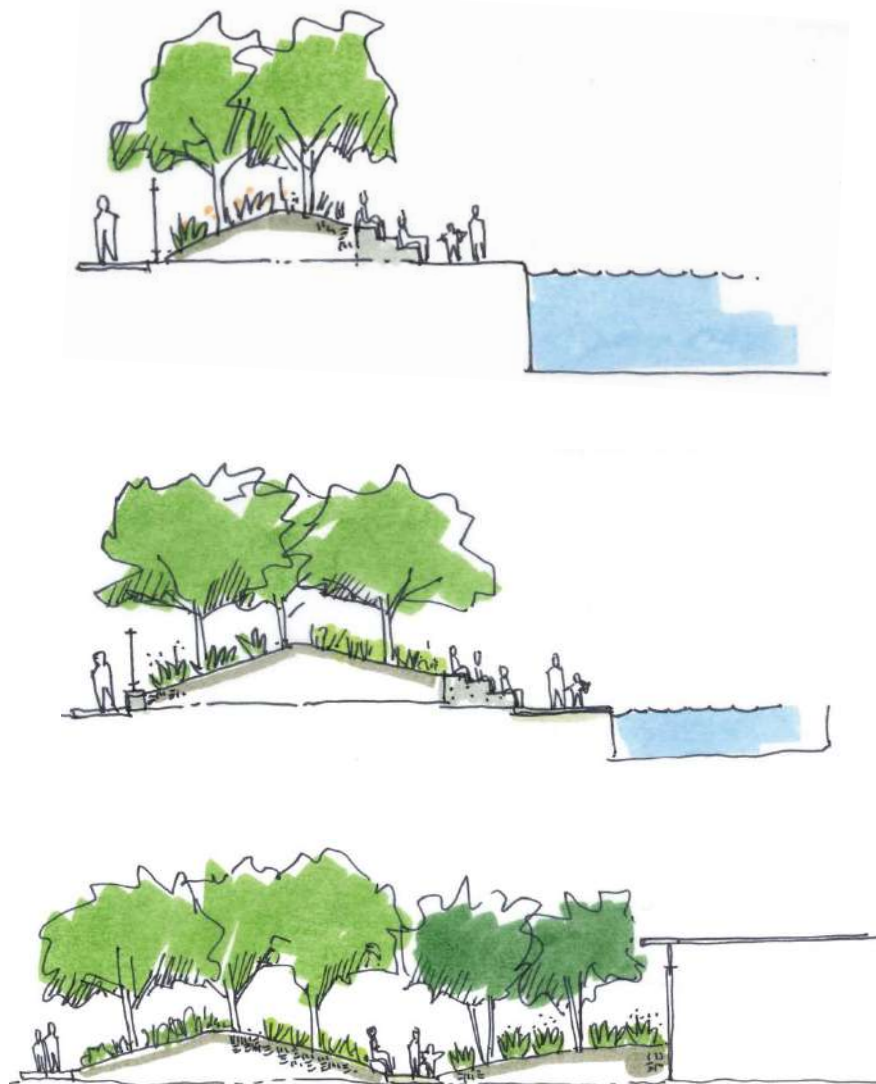
SITE PLAN DESIGN

SITE ACCESS

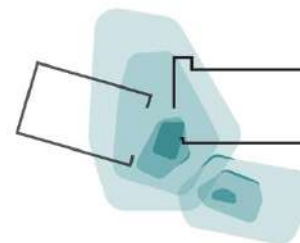
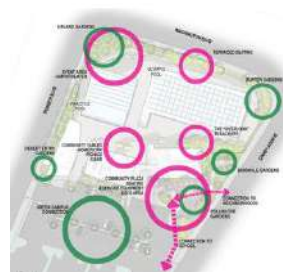
-  ENTRY PLAZA
-  PUBLIC VEHICULAR ACCESS
-  PEDESTRIAN ACCESS
-  DELIVERY UTILITY

DESCRIPTION

- | | | |
|------------------------------|---------------------------|--|
| 1. ENTRY PLAZA | 6. SHADE CANOPIES | 11. BICYCLE PARKING |
| 2. PUBLIC PARK | 7. DIVING BOARDS | 12. DELIVERY ACCESS & TRASH ENCLOSURE SERVICE ACCESS |
| 3. PLAY AREA | 8. COMPETITION LIGHTING | 13. VIEW ACCESS POINT |
| 4. LANDFORMS | 9. DRINKING FOUNTAIN | |
| 5. CONCRETE TERRACED SEATING | 10. (6) EV PARKING SPACES | |



DESIGN EXCELLENCE – INTEGRATED APPROACH



- 10,000 SF PARK = RIPPLE CONCEPT
- LANDFORMS DEFINE DECK PERIMETER = NATURAL SPECTATOR SHADING





- SIMPLE PALETTE
- TIME TESTED MATERIALS

MATERIALITY - DURABILITY



CMU



CMU



CMU-1
Main Pool Building



CMU-2
Storage Building

EP-2
Storage Building



STUCCO -
Smooth Finish

EP-1
Pavilion



CONC-1

CONC-2

CONC-3

CONC-4



SAGHE HANDELS REGIONAL
KZINCISZET





THANK YOU



Thank You!

**#masonry
matters**

**CALIFORNIA
MASONRY**
SUMMIT
& EXPO
2026

www.CaliforniaMasonryCouncil.org

