

Architectural designer / drafter

portfolio.

PAUL VALLEJO

R e s i d e n t i a l D e s i g n



Paul Vallejo

✉ paulv_86@hotmail.com

☎ +1 704 2313520

📍 Charlotte, NC

www.linkedin.com/in/paul-vallejo-arch

<https://heyzine.com/flip-book/a0be5d81e7.html>

SUMMARY

Architectural Drafter and Designer with 14 years of experience supporting architectural teams in the production of coordinated construction documentation for residential, multi-family, emergency housing, educational, and public space projects.

Proficient in Revit, AutoCAD, and 3ds Max, I produce plans, sections, elevations, construction details, and 3D models across SD, DD, and CD phases, ensuring technical accuracy and consistency with design intent.

I work closely with architects and designers to translate concepts into clear, build-ready drawing sets, contributing to efficient project delivery through strong organization, attention to detail, and reliable technical execution

PROFESSIONALS & TECHNICAL SKILLS

- Illustrator / Photoshop / Premiere / InDesign
- Revit, Autocad 2d / 3d
- 3ds Max / V-Ray, Twinmotion
- Unreal Engine
- Bluebeam
- Microsoft Office suite

Architectural documentation by phases:

- (SD)- (DD)- (CD)
- Visual presentations (renders, moodboards, etc.)
- Archviz

Creative & Media Production Skills

- Photography for architectural and environmental documentation
- Videography, including visual storytelling for design and presentation purposes
- Drone operation for aerial footage, documentary-style content, and real estate videos.

PERSONAL SKILLS

- Adaptable
- Detail Oriented
- Proactive and Curious
- Accountable
- Team player
- Easy going

EDUCATION

Master's in Real-Time Architectural Visualization
Specialization in 3ds Max, V-Ray, and Unreal Engine
2020 - 2022

Butic the New School, Madrid, Spain

Master's in Real Estate Management for Urban
Regeneration
2016 - 2018

Pontificia Universidad Catolica del Ecuador

Bachelor's Degree in Architecture.
2008- 2013

Universidad Internacional SEK del Ecuador

LANGUAGES

- Spanish (Native)
- English (B2)

01 Tula House

Architectural and Landscape Designer

02 Cayo - Acantilado

Beach house / Single Family House

03 Santa Rosa Residential Houses

Multifamily Housing Complex

Tula House

beach house | Single Family House

Where: Jipijapa - Manabi (EC)

When: 2022

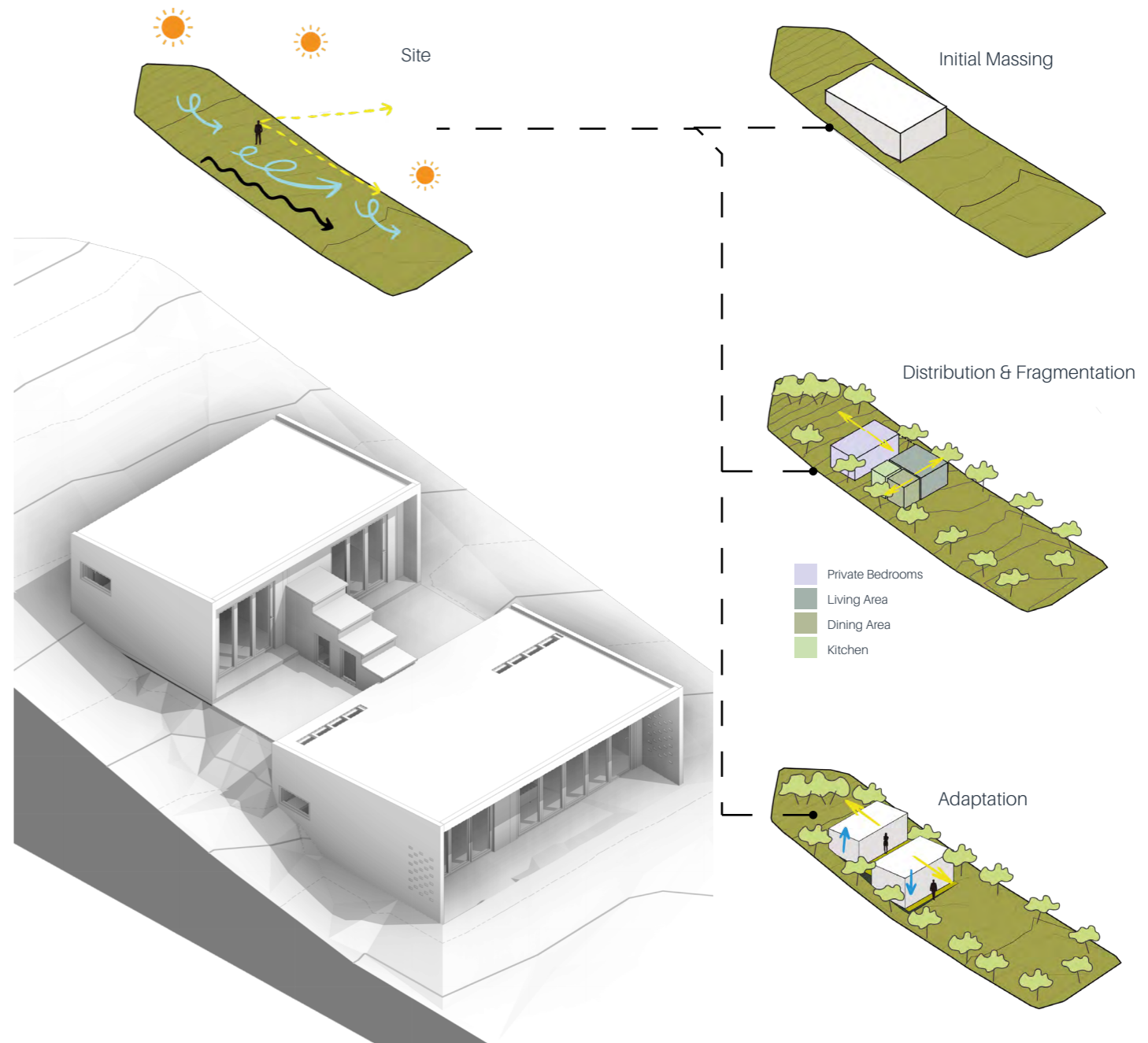
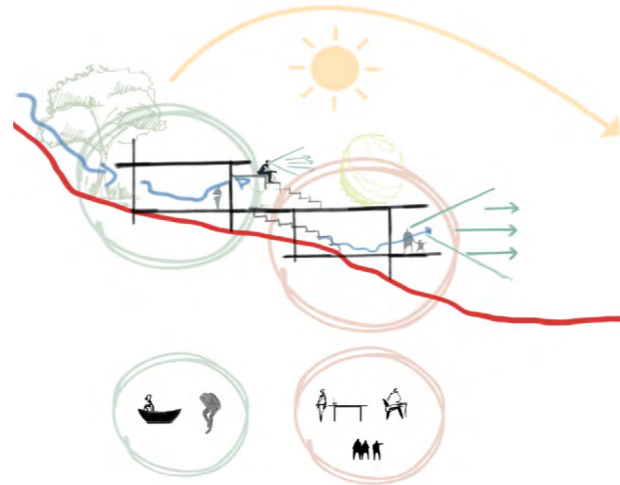
What: Single-family residence

Design Phases: SD,DD,CD

Tools & Workflow: AutoCad,Revit,3dsMax, Illustrator, Indesing

Land Area: 3,230sqft

Construction Area: 645 sqft

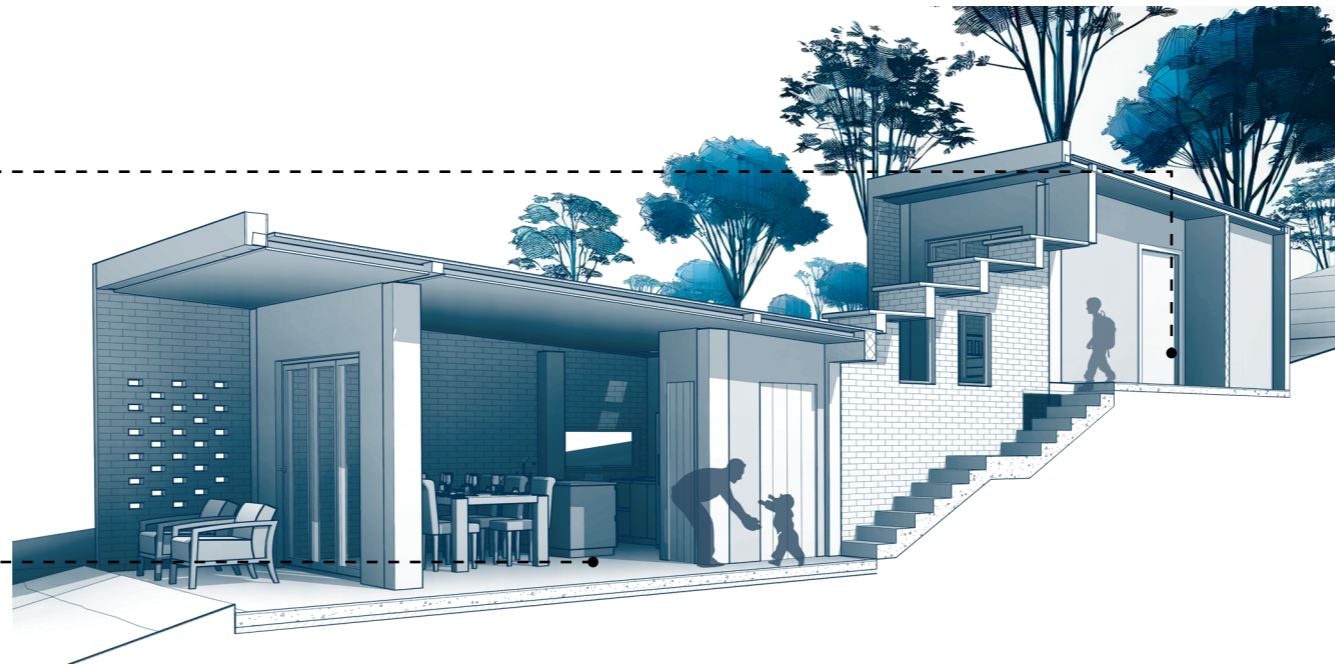
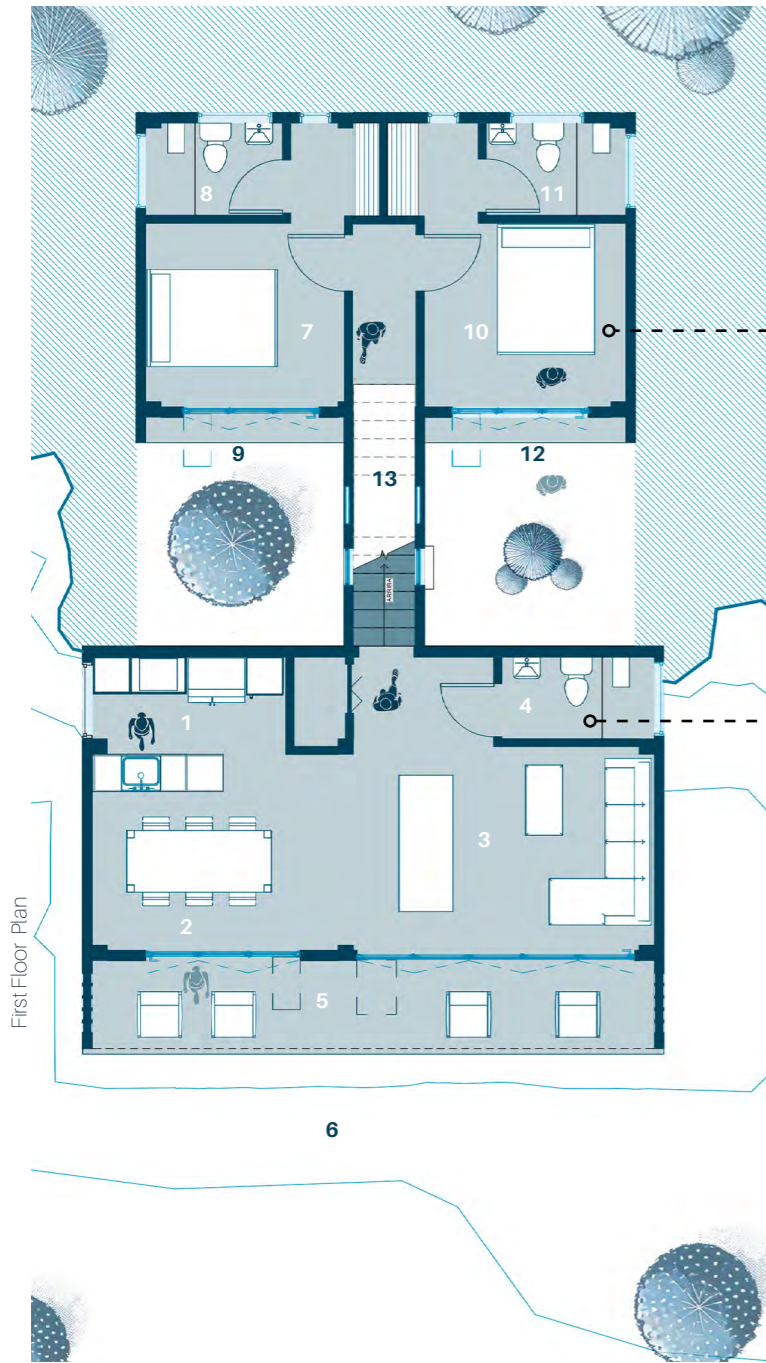


Tula House was developed for an American client who had acquired the property years earlier, facing the challenge of designing a residence in a warm coastal climate and on a sloped site, where thermal performance, constructability, and contextual integration were critical.

The project was developed through SD, DD, and CD, ensuring continuity from architectural concept to execution. Passive strategies such as optimized orientation, cross-ventilation, and a terraced site response informed both spatial organization and technical resolution. The integration of locally sourced

materials and experimental construction techniques enhanced sustainability, thermal efficiency, and material performance.

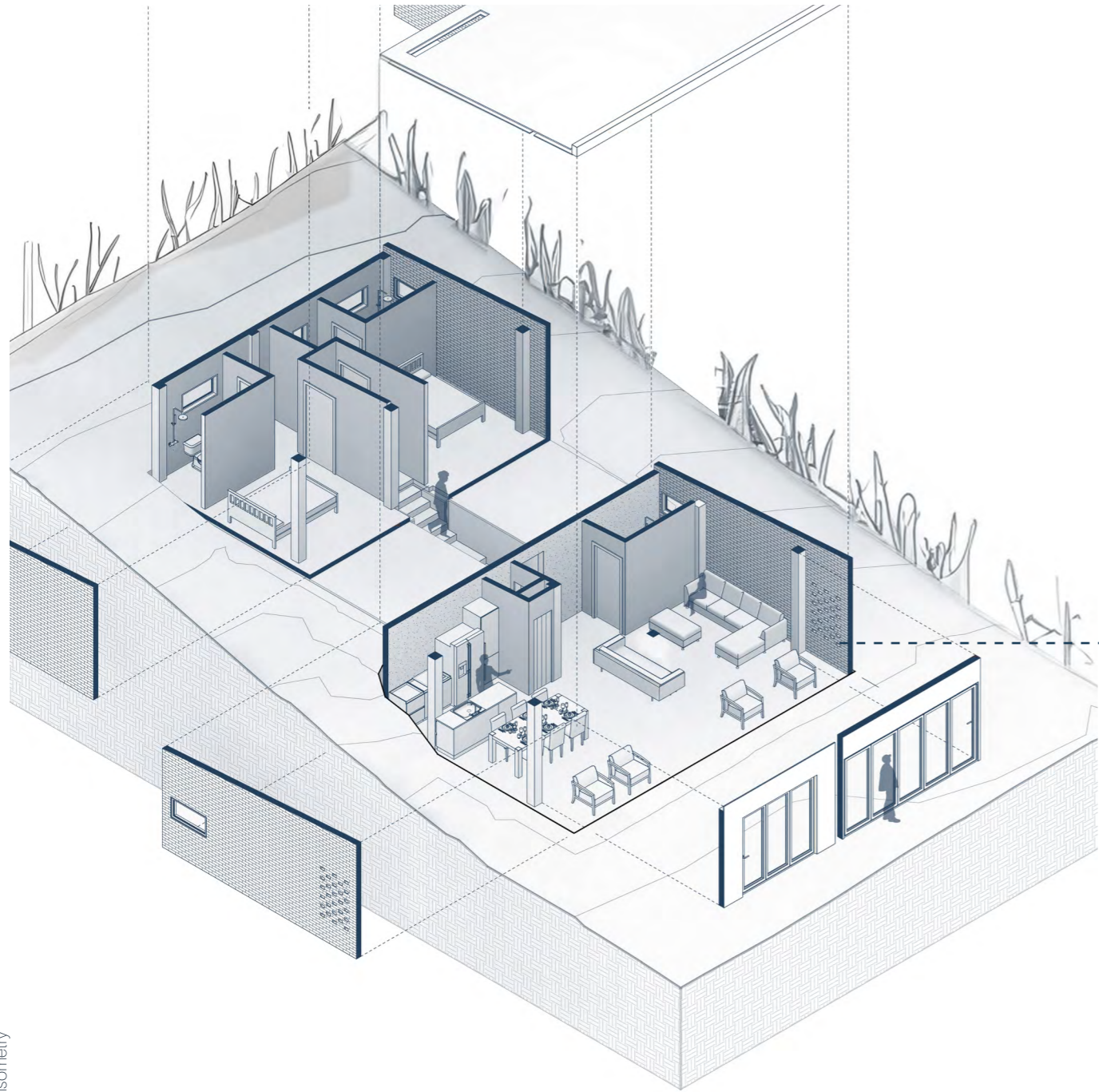
Conceived as a performance-driven single-family residence, Tula House combines exposed brick, microcement surfaces, and handcrafted wood elements to express material honesty and regional identity. The project also opened opportunities with new American clients, bridging local architectural practice with international client expectations.



- 1. Kitchen
- 2. Dining room
- 3. Living room
- 4. Bathroom
- 5. Terrace
- 6. Yard
- 7. Bedroom
- 8. Bathroom
- 9. Terrace
- 10. Bedroom
- 11. Bathroom
- 12. Terrace
- 13. Stairs



Exterior Photograph



Microcement



Mango Wood



Microcement



Microcement

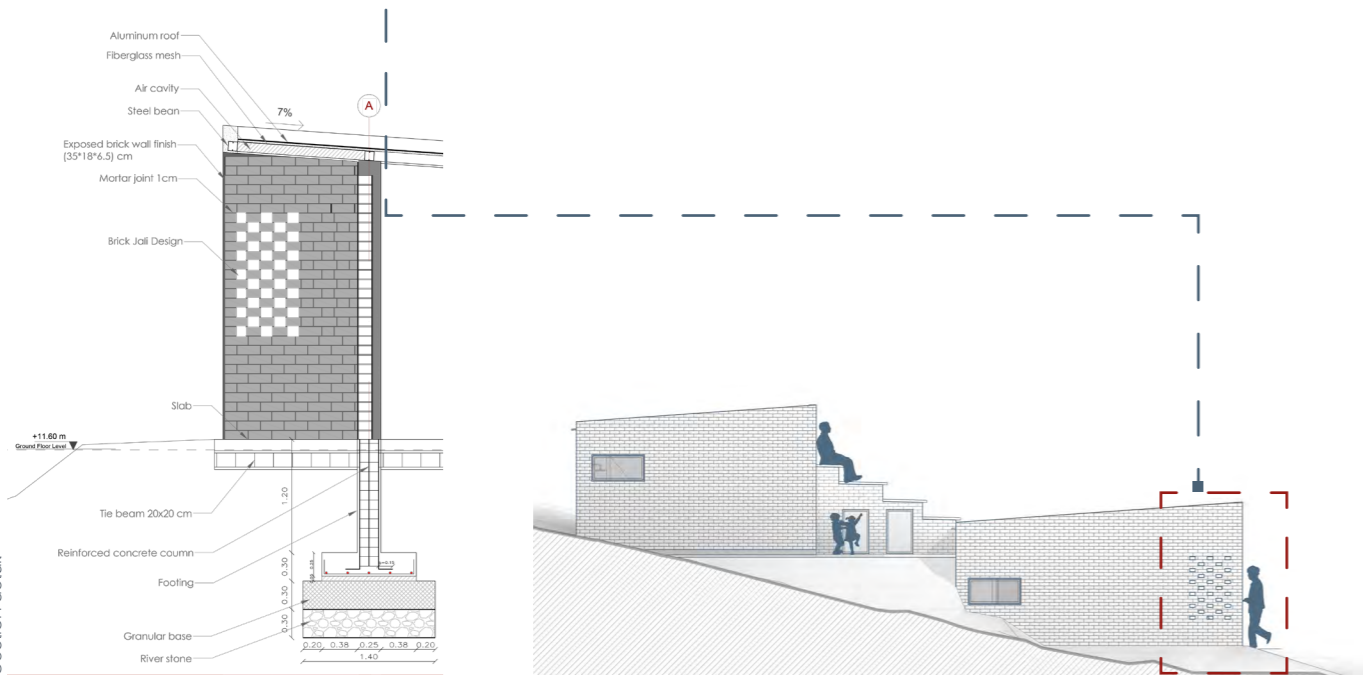


Exposed Brick

Exterior Render



Section detail



Elevation North

Exterior Render



Exposed Brick
Laurel Wood




Guadua Bamboo Enclosure



Exposed Brick





Click to watch the project video. 



General exterior photo

Cayo - Acantilado

beach house | Single Family House

Where: Jipijapa - Manabi (EC)

When: 2024

What: Single-family residence and Bungalows

Design Phases: SD,DD,CD

Tools & Workflow: Revit, Twinmotion, Illustrator, Indesign

House Area: 1,829 sqft

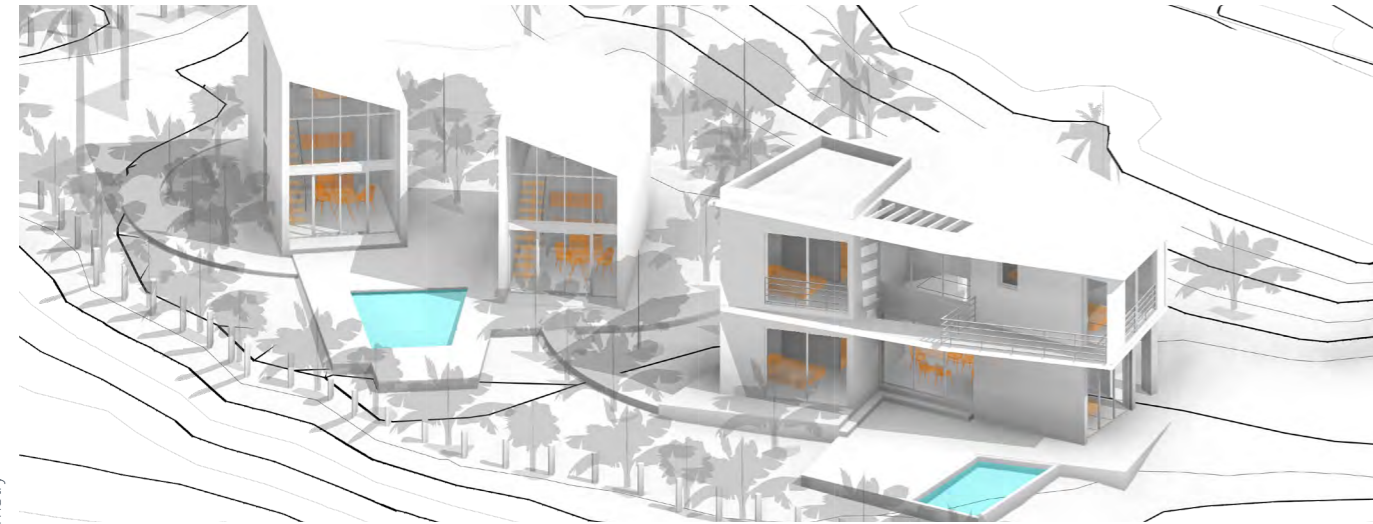
Bungalow Area: 538 sqft (each)

Land Area: 6,458 sqft

Construction Area: 2,690 sqft



02



isometry

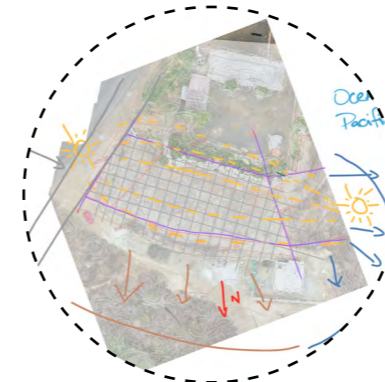
Cayo Acantilado is an architectural project located on a steep hillside at the top of a mountain in Puerto Cayo, Ecuador, overlooking the Pacific Ocean.

The project addresses the challenge of designing within complex topography, limited infrastructure, a warm coastal climate, and a constrained budget, while maximizing panoramic views and ensuring privacy for both residents and guests. The architectural strategy is based on a site-responsive approach that adapts to the natural slope rather than reshaping it.

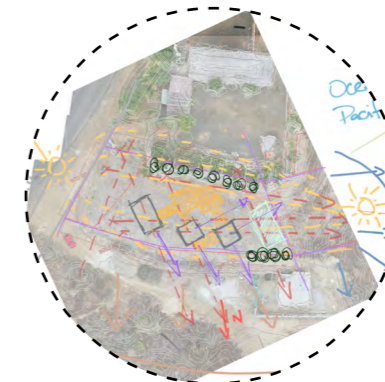
The project is composed of a private residence and two

independent bungalows, carefully positioned to balance visual openness with spatial separation. Simple and efficient volumetric forms, combined with precise orientation, strengthen the relationship between architecture and landscape.

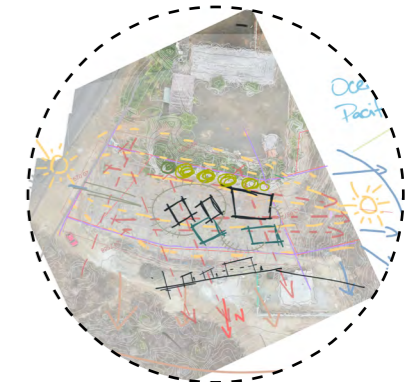
Material selection prioritizes locally sourced, low-maintenance materials, ensuring durability and visual integration with the surrounding environment. In response to the absence of a public sewage system, the project incorporates a sustainable wastewater management strategy, separating rainwater, black water, and soapy water to minimize environmental impact.



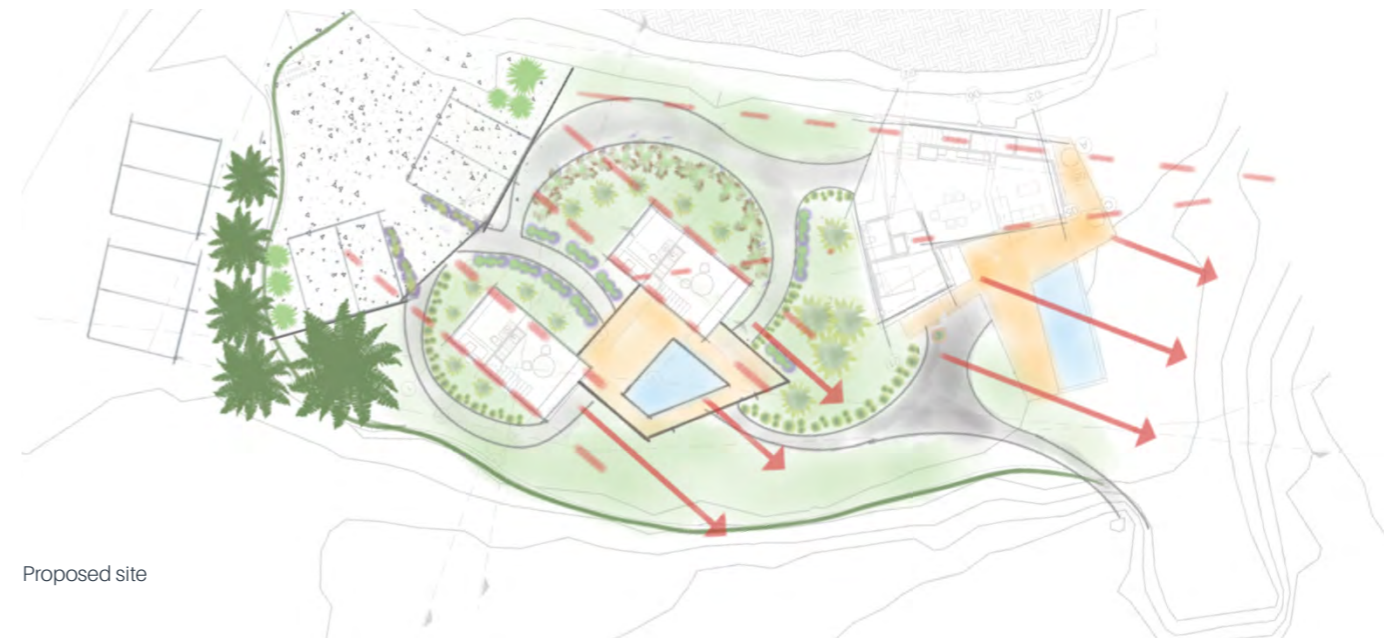
view & sun path



Circulation



Zoning & Orientation

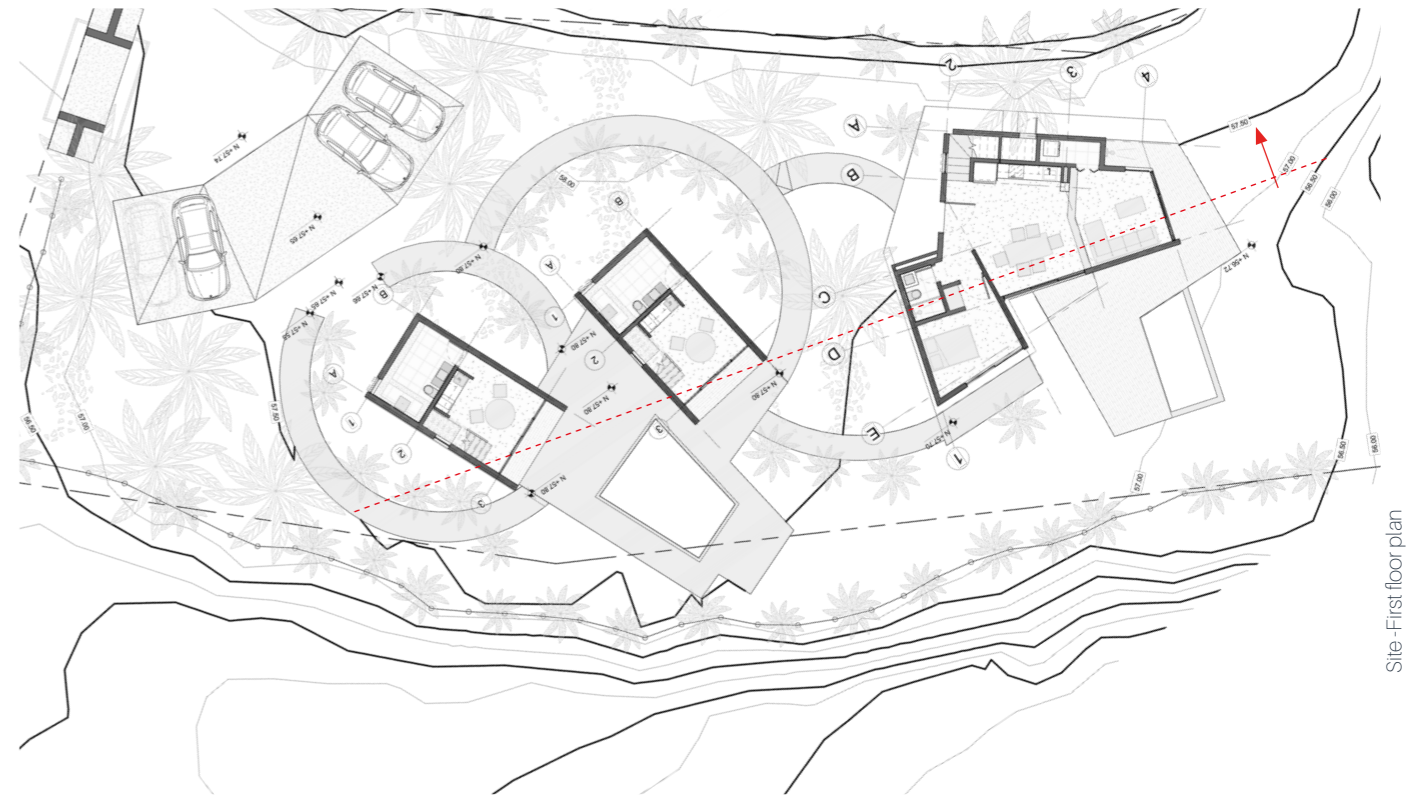
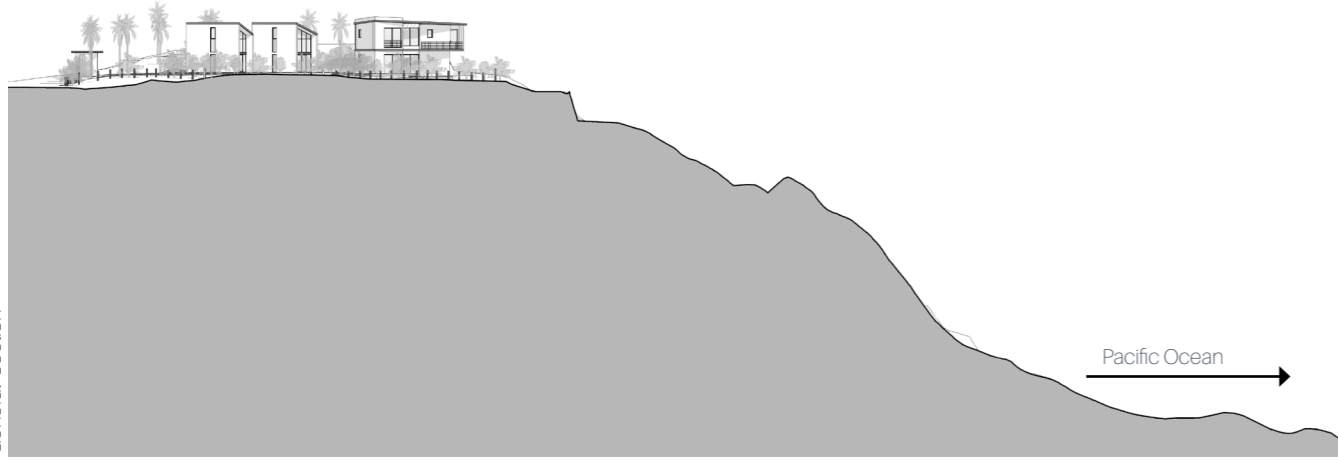


Proposed site

Site Plan



General Section



Site-First floor plan

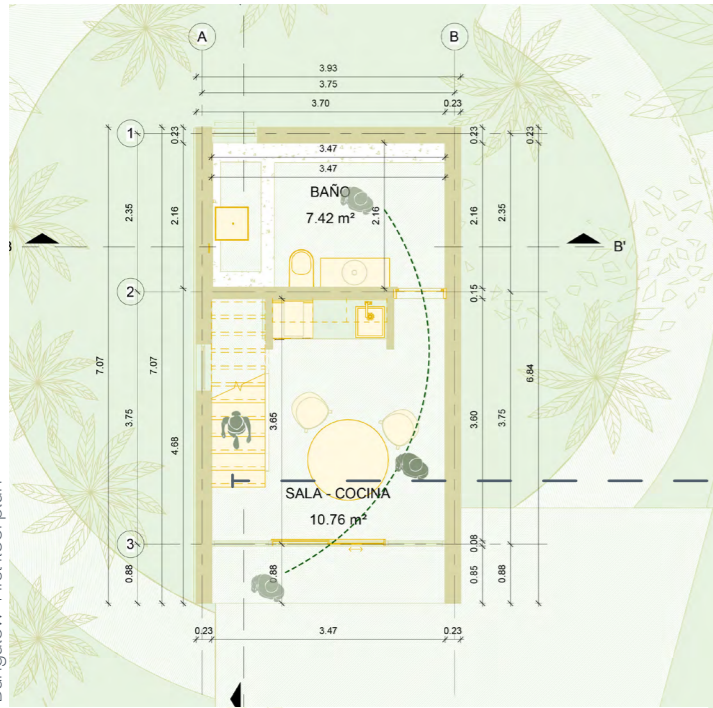


General Section

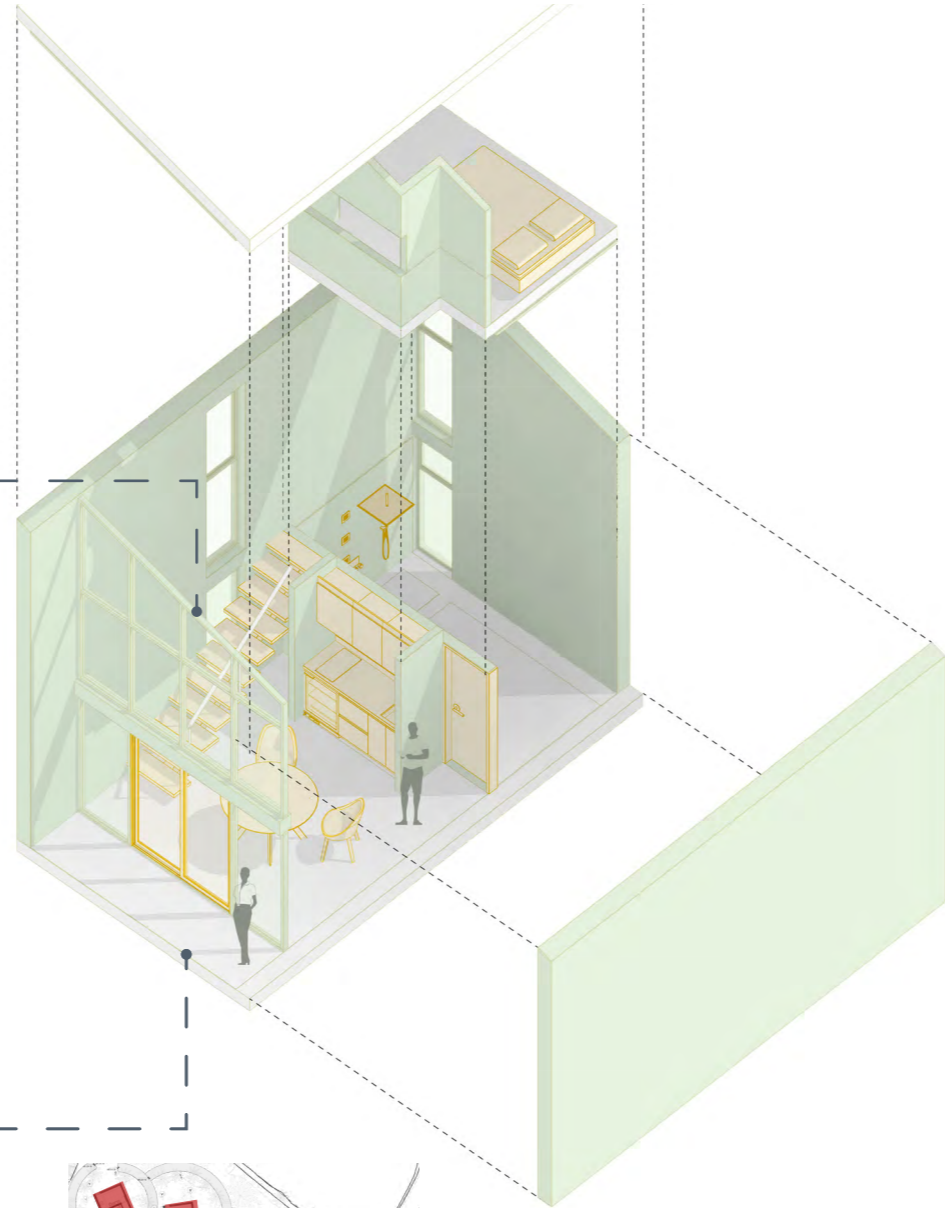
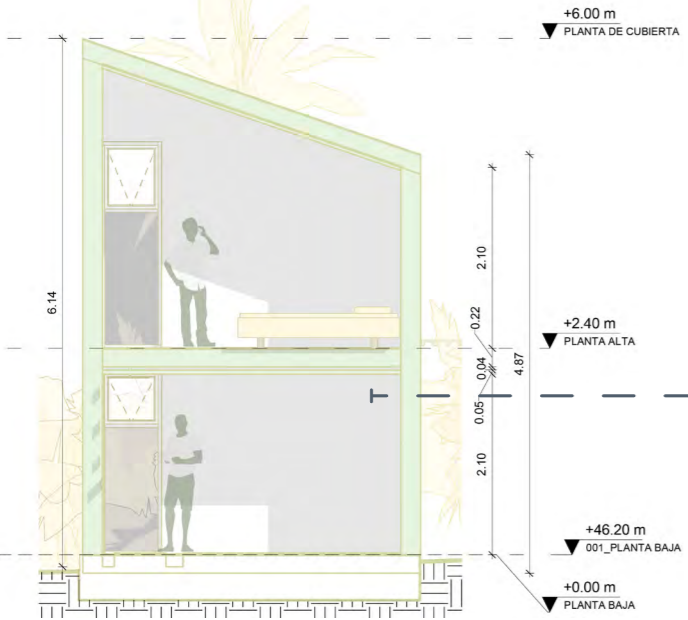


View from the Site

Bungalow- First floor plan

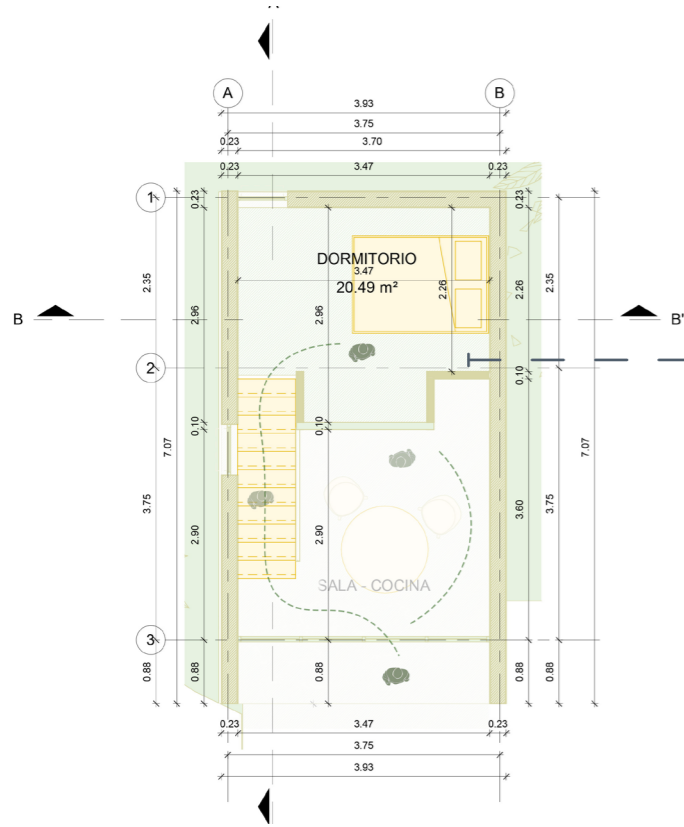


Longitudinal section



Interior Render

Bungalow-Second floor plan

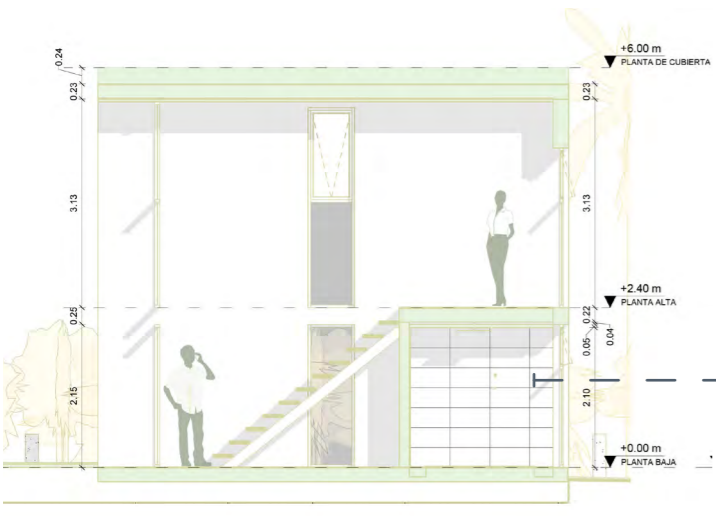


Interior Render



Exterior Render

Cross section



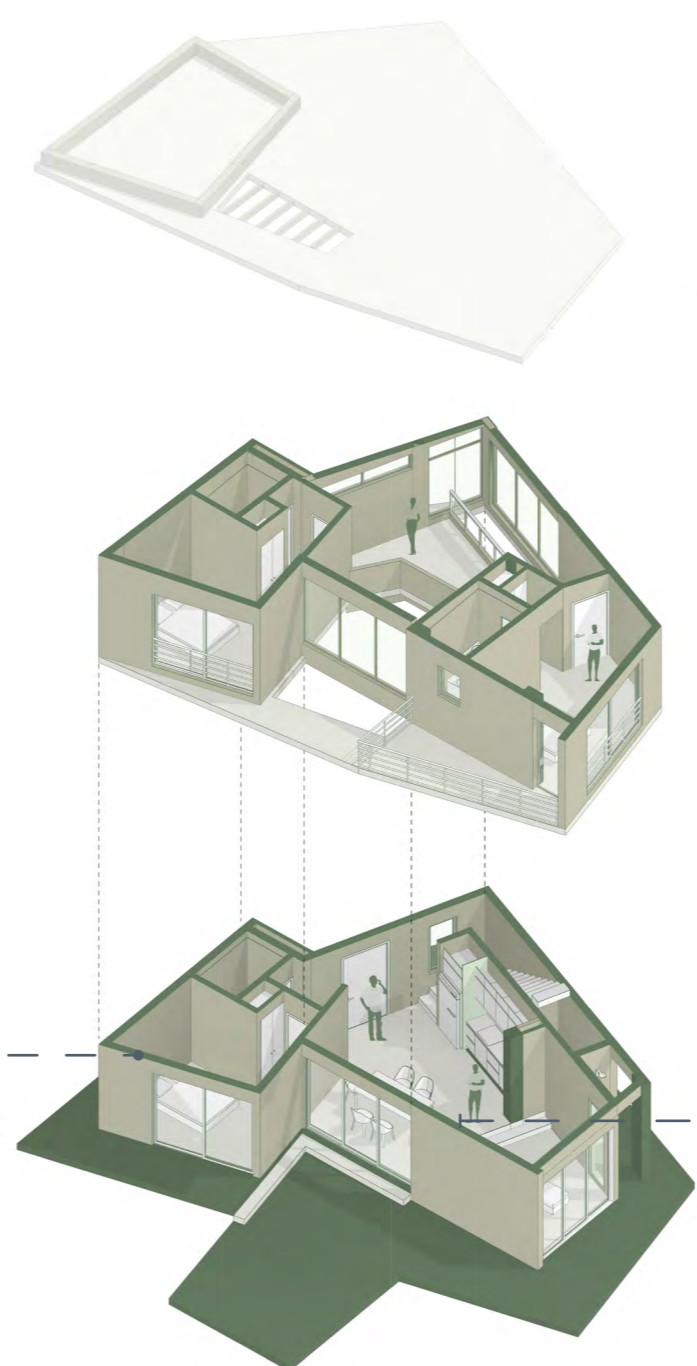
House - First floor plan



Cross section

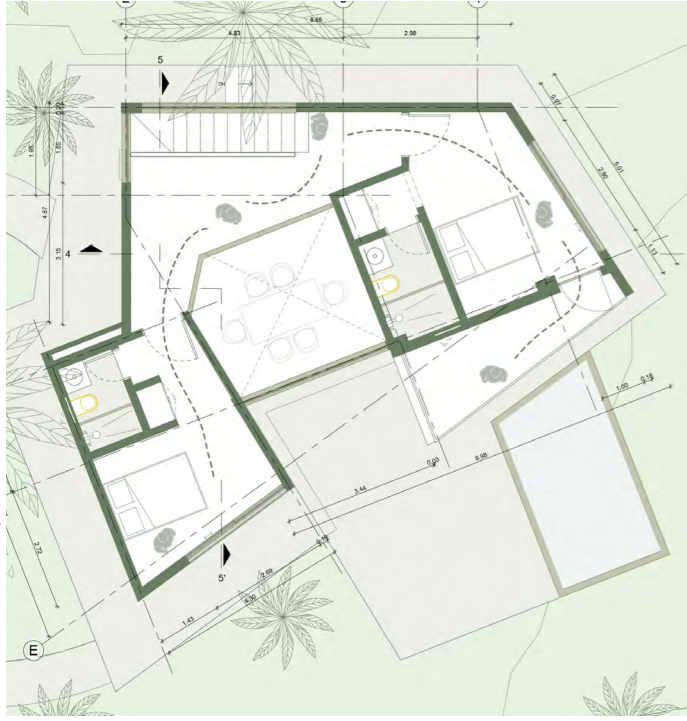


Private residence 1,800 sqft custom-designed to meet the specific needs of the client.



Interior Render

House - Second floor plan



Cross section



Interior Render



Exterior Render



Exterior Render

Santa Rosa Residential Houses

Multifamily Housing Complex

Where: Ambato (EC)

When: 2022

What: Multifamily Housing

Design Phases: SD, DD, CD

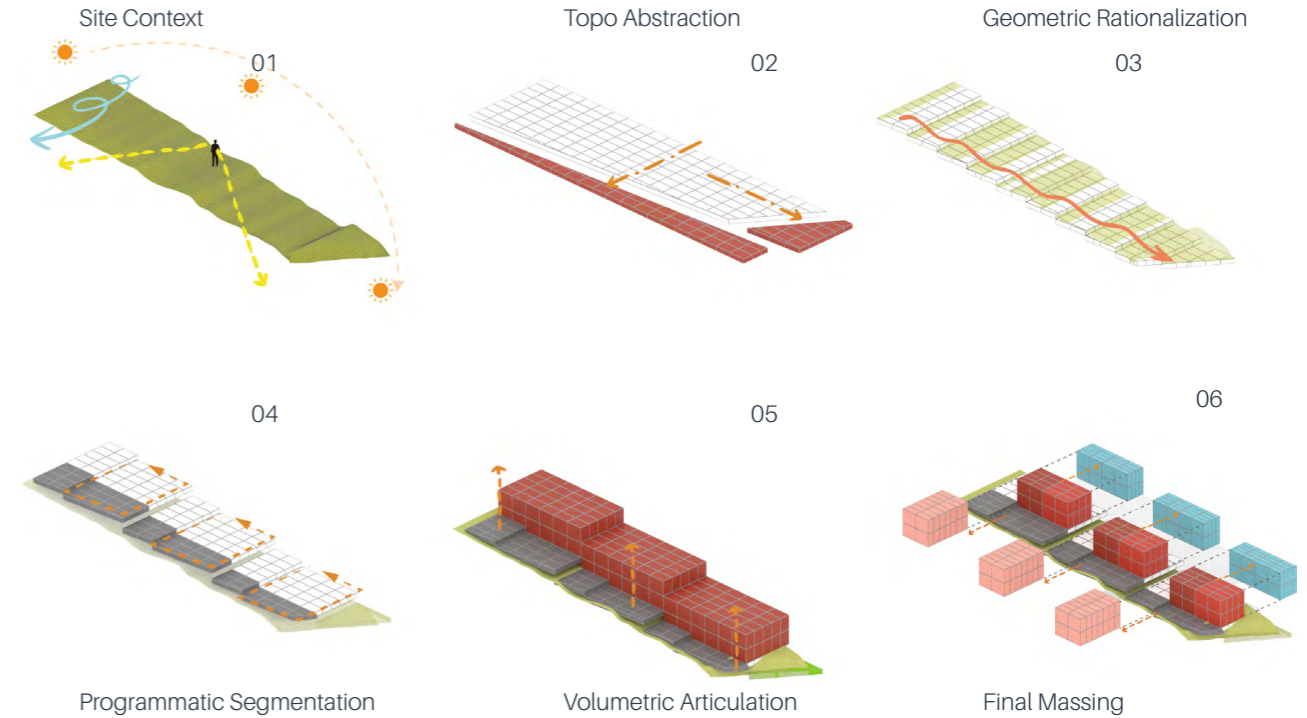
Software: Revit, 3dsmax, Illustrator, Indesign

Land Area: 12,792.37 sq ft

Construction Area: 15,816.28 sq ft



03

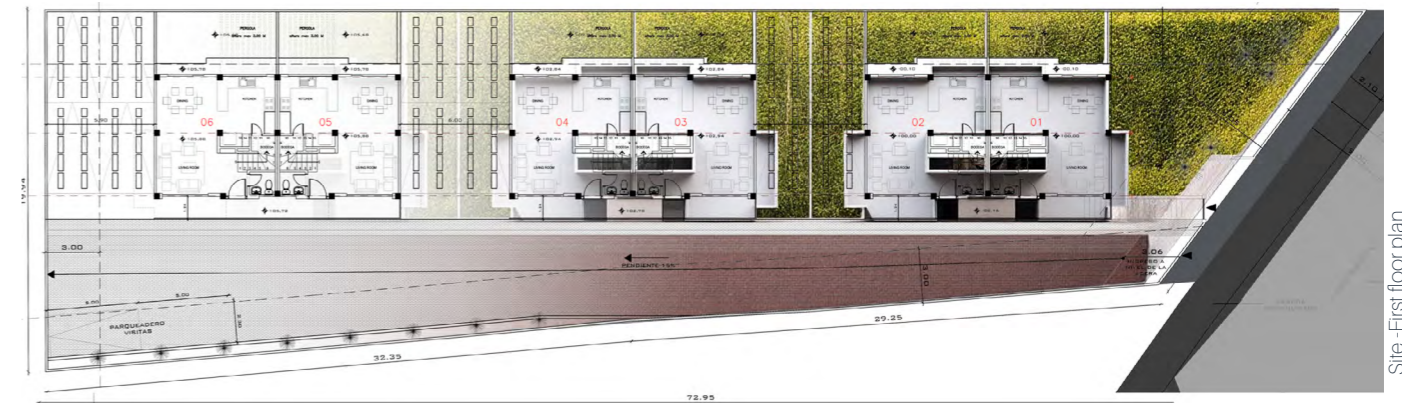


Santa Rosa Residential Houses is a six-unit multifamily development located on a steeply sloped site in Ambato, Ecuador. The primary challenge was to resolve significant topographic variations while ensuring constructability, structural efficiency, and functional access to each unit.

The project implements a stepped platform system that follows the natural terrain, reducing excessive excavation and minimizing the need for retaining walls. Each dwelling is positioned on a controlled level change to optimize structural stability, drainage performance, and independent access. The configuration ensures visual privacy between units while

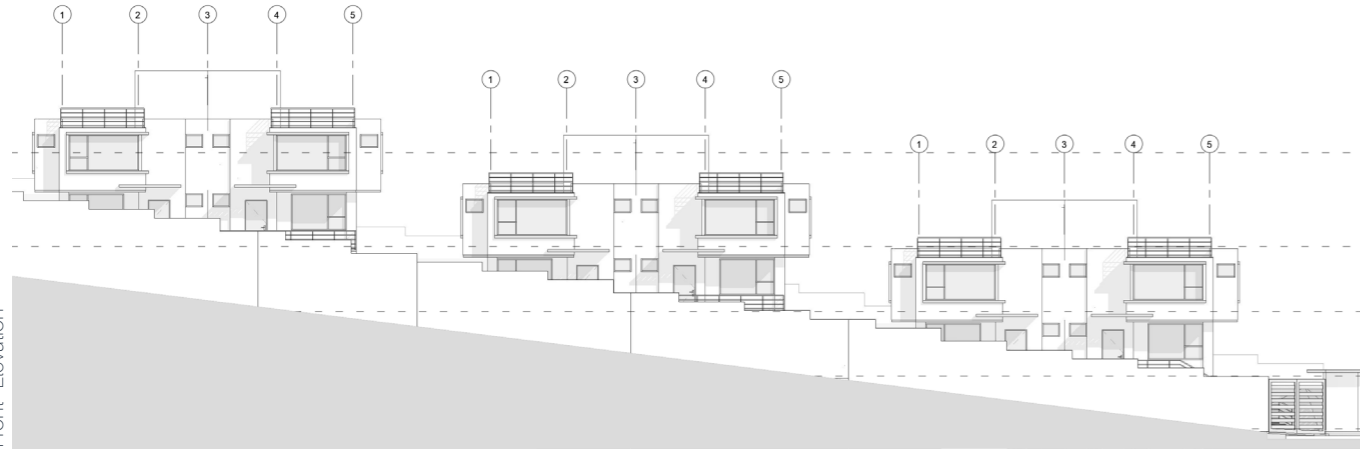
maintaining adequate natural light and cross-ventilation.

Developed through SD, DD, and CD, the project included site adaptation studies, geometric rationalization, volumetric coordination, and detailed construction documentation. The result demonstrates an integrated approach to hillside housing design, balancing environmental responsiveness, structural logic, and efficient land use.



Site - First floor plan

Front Elevation

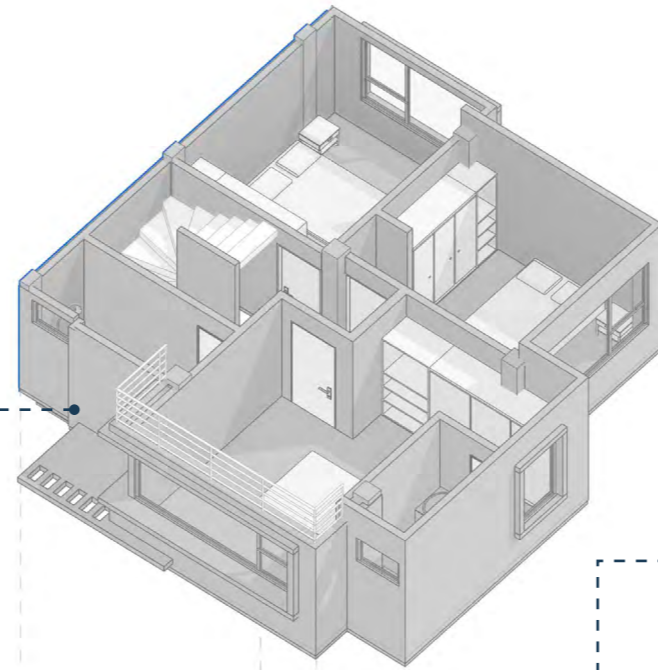
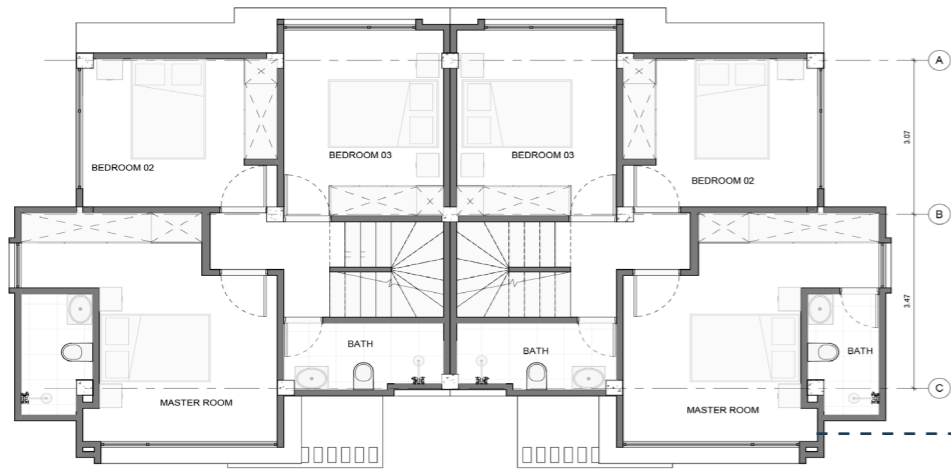


Exterior Render

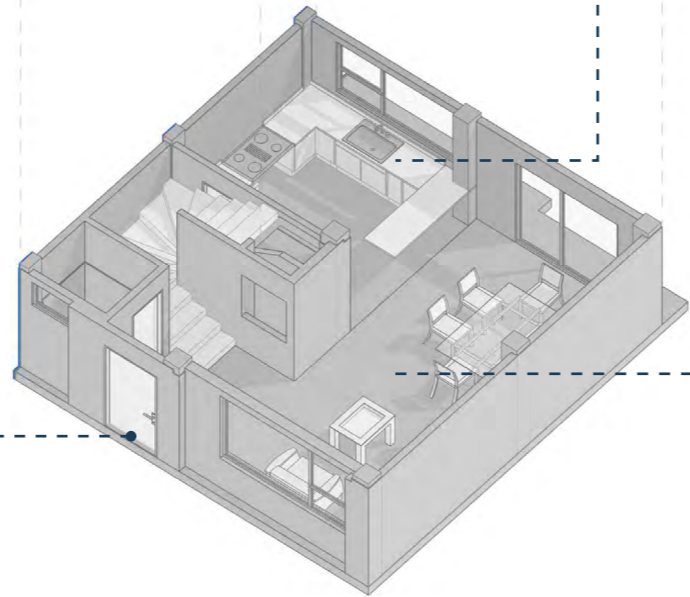
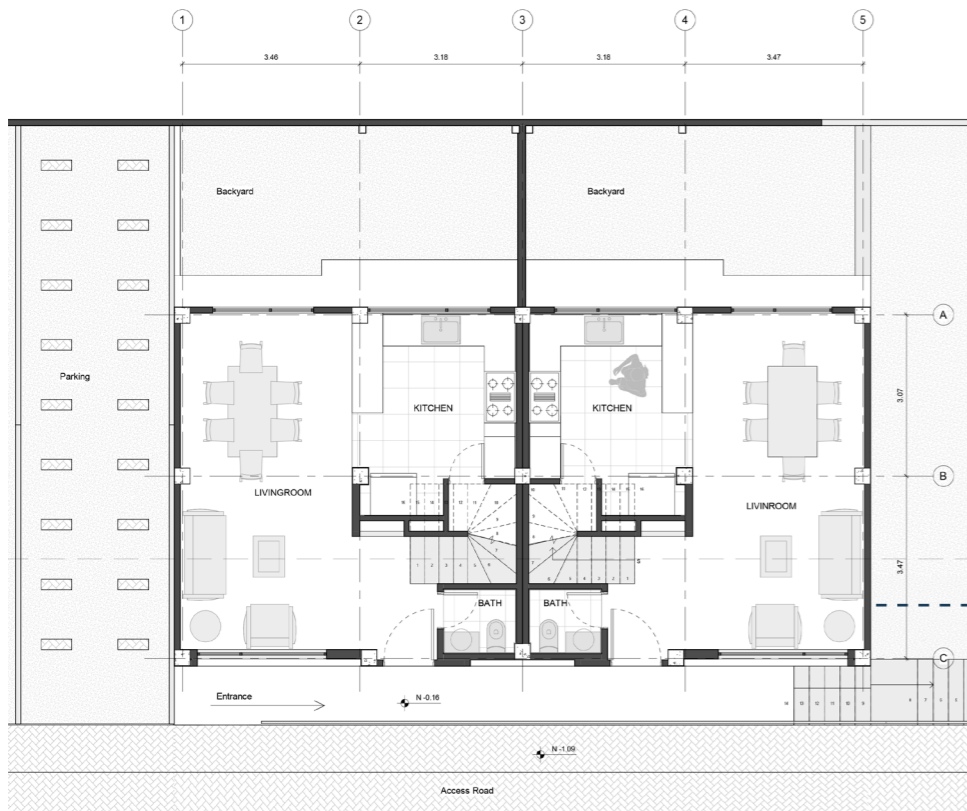


Interior Render

House - Second floor plan



House - First floor plan



Interior Render



Interior Render



Interior Render



Exterior Render

Interactive Architectural Experience

Standalone - Unreal Application

3DS MAX - Unreal Engine 5 · Quixel Megascans

Full development: modeling, lighting, UI interaction, app packaging



Material Switching in Real Time

This project explores the creation of an interactive architectural experience using Unreal Engine 5.

I developed a standalone desktop application that allows users to walk through a fully modeled interior space and change wall, floor, and furniture materials in real time. The project was programmed using Blueprints and designed to run smoothly on any standard PC without the need for Unreal Engine installed.

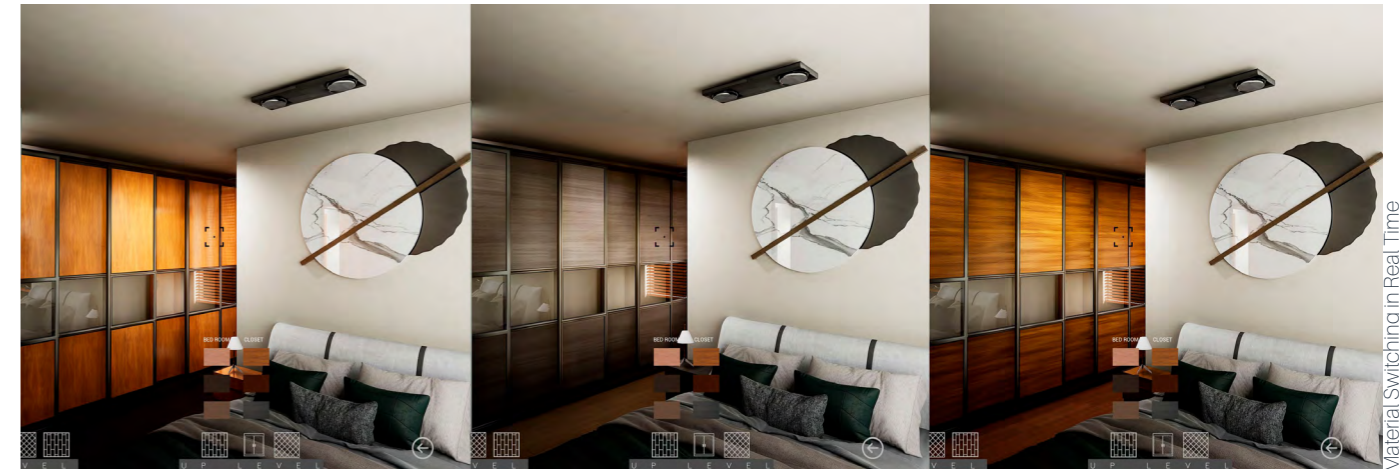
The goal was to push real-time visualization beyond rendering, creating a functional and interactive platform that can be used for design presentation client decision-making, and virtual showrooms.

This tool demonstrates how architectural visualization can evolve into a dynamic design communication method, offering immediate feedback and greater immersion.



Main Menu Interface

The main menu is fully customizable and can be adapted to meet each client's specific needs — from branding to functionality and user interface



Material Switching in Real Time

Press play to watch how the **app works**

Click to watch the project video.

PAUL VALLEJO
Architectural Designer & Drafter

Charlotte, North Carolina
+1 (704) 231-3520
paulv_86@hotmail.com

[LinkedIn](#)

For additional architectural visualization projects, please explore my Archviz portfolio:

[The Rookies](#)
[CGConnect](#)

Thank you for reviewing my work.