

DENIA NAVARRO
ARCHITECT. SUSTAINABLE DESIGN



VASICO.studio
Architecture & Sustainability

PORTFOLIO



PHOTOGRAPHY: IRONBARK Architecture + Design

1. RESIDENTIAL. *One/Two House*

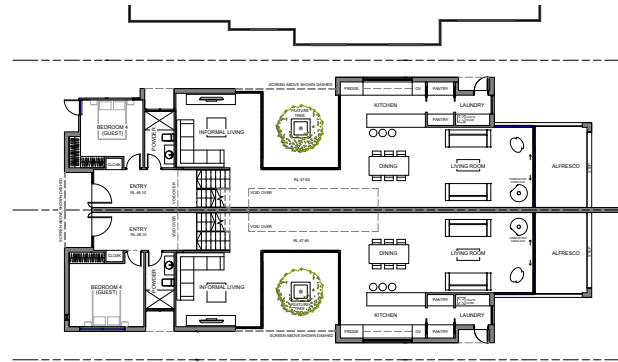


Location: Miranda, Sydney, Australia
Project type: Dual Occupancy
Firm: IRONBARK Architecture

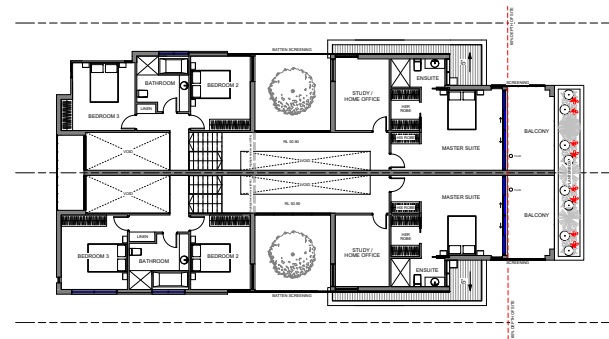


PHOTOGRAPHY: IRONBARK Architecture + Design

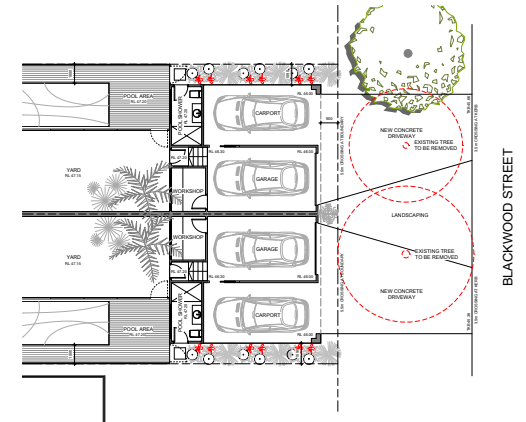
1. RESIDENTIAL. *One/Two House*



Ground Floor



Upper Floor



Yard & Garage Plan

BLACKWOOD STREET

Location: Miranda, Sydney, Australia
Project type: Dual Occupancy
Firm: IRONBARK Architecture
Role: Graduate Architect, design work and documentation for development application to council, prepare reports and associated documentation to accompany DA submission and undertake BASIX assessment
Software: Revit
Project Architect: Chris Freeburn (NSW Architect Reg No 9421)

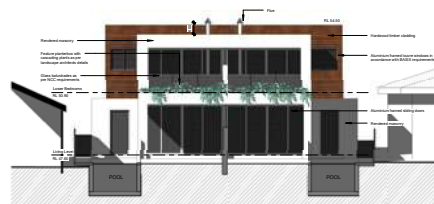


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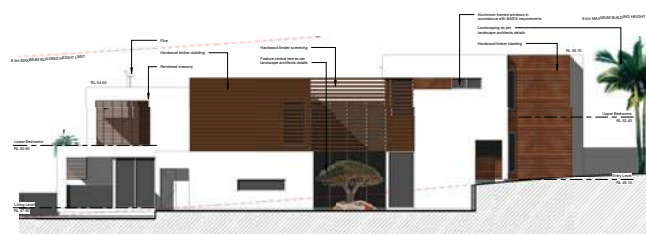
ELEVATIONS



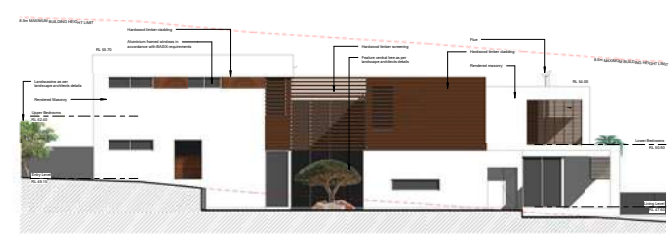
1. South
Scale 1:100



2. North
Scale 1:100



4. West
Scale 1:100



3. East
Scale 1:100

1. RESIDENTIAL. *One/Two House*



PHOTOGRAPHY: IRONBARK Architecture + Design

Location: Miranda, Sydney, Australia

Project type: Dual Occupancy

Firm: IRONBARK Architecture

Role: Graduate Architect, design work and documentation for development application to council, prepare reports and associated documentation to accompany DA submission and undertake BASIX assessment

Software: Revit

Project Architect: Chris Freeburn (NSW Architect Reg No 9421)



PHOTOGRAPHY: Andy MacPherson

Location: Grays Point, Sydney, Australia
Project type: Residential, additional studio + pool
Firm: IRONBARK Architecture



PHOTOGRAPHY: Andy MacPherson



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Location: Grays Point, Sydney, Australia

Project type: Residential, additional studio + pool

Firm: IRONBARK Architecture

Role: Graduate Architect, design work and documentation for development application to council, prepare reports and associated documentation to accompany DA submission and undertake BASIX assessment.

Testing 3d models for daylight analysis & thermal comfort

Software: Revit

Project Architect: Chris Freeburn (NSW Architect Reg No 9421)



PHOTOGRAPHY: Andy MacPherson

3. MIX USE. *Health City*



Location: Queretaro, Mexico

Project type: Mix Use development

Firm: GVA Architects

Role: Graduate Architect, design work, development of conceptual project, 3d modeling and presentation

Software: Rhino, InDesign

Project Architect: Ignacio Lara, Associate Director GVA

Rendering: Monolito Studio



3. MIX USE. *Health City*

Location: Queretaro, Mexico

Project type: Mix Use development

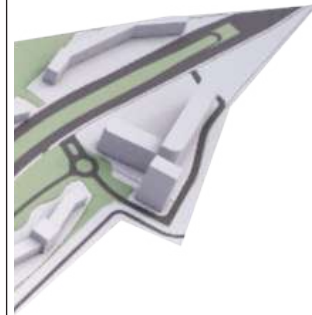
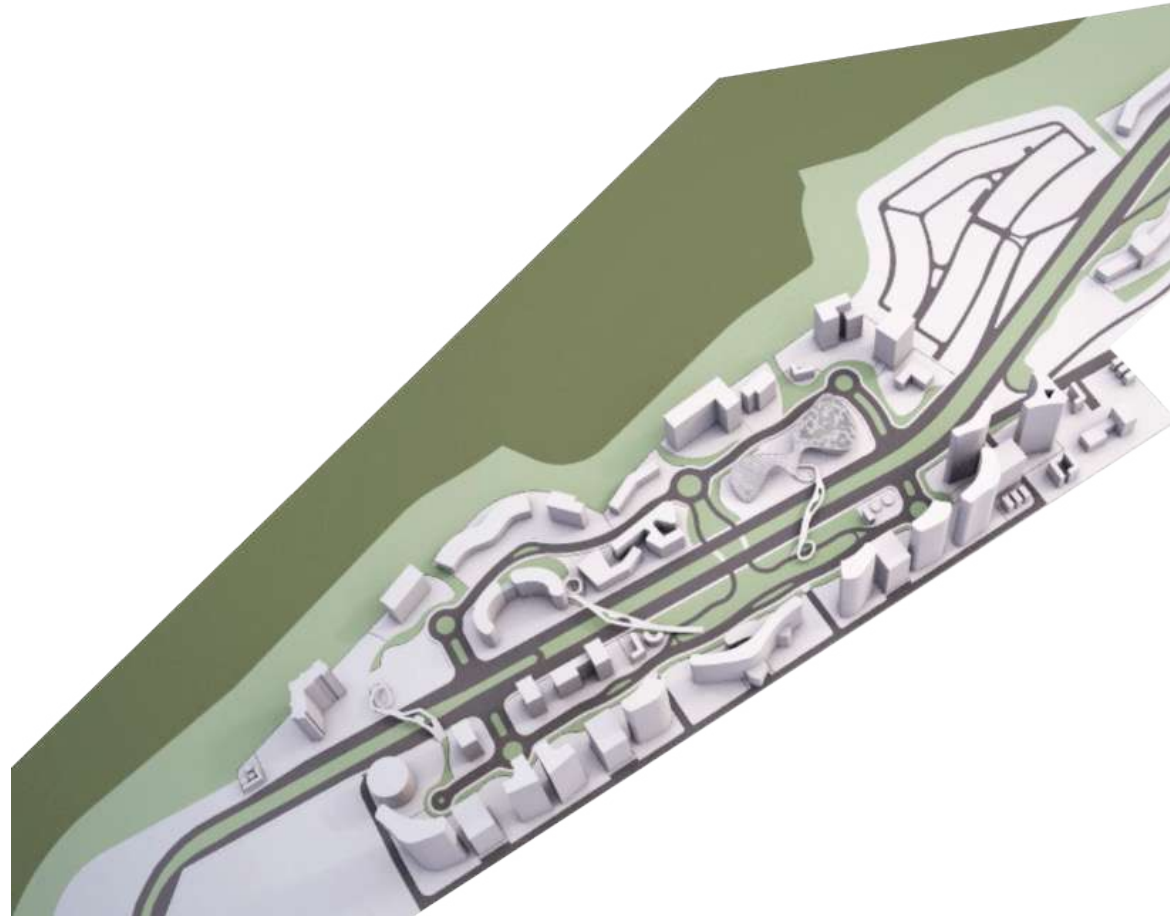
Firm: GVA Architects

Role: Graduate Architect, design work, development of conceptual project, 3d modeling and presentation

Software: Rhino, InDesign

Project Architect: Ignacio Lara, Associate Director GVA

Rendering: Monolito Studio

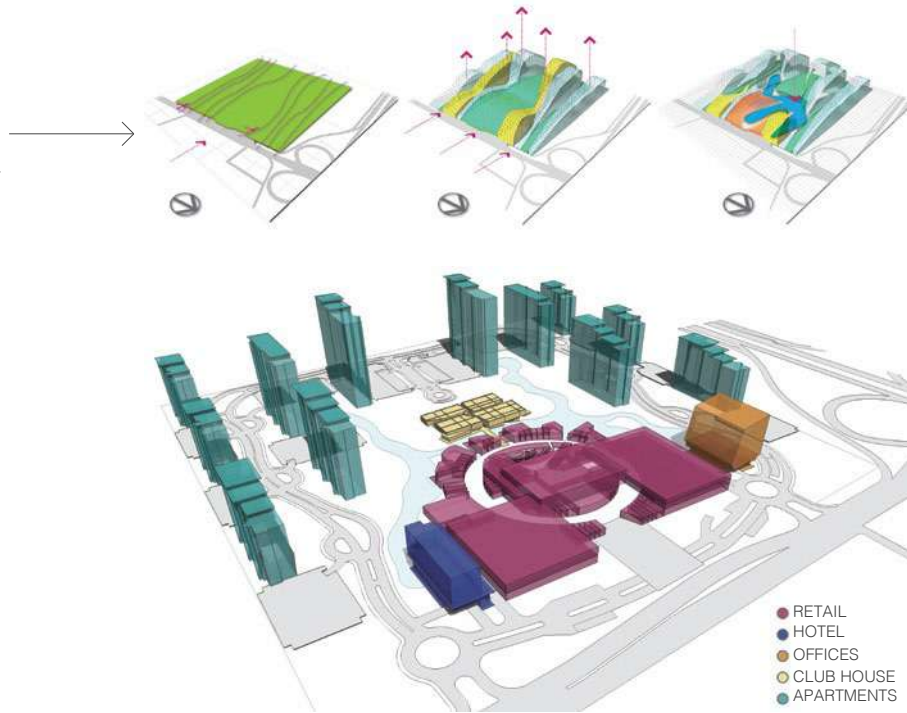




Location: Merida, Mexico
Project type: Mix Use - Master Plan development
Firm: GVA Architects
Role: Graduate Architect, design work, development of conceptual project, Site analysis 3d modeling and presentation
Software: Rhino, InDesign
Project Architect: Jose Lopez, Associate Director GVA
Rendering: Monolito Studio

Concept Diagrams

Forms as an expression of nature in the creation of mountains, valleys and lakes.



- RETAIL
- HOTEL
- OFFICES
- CLUB HOUSE
- APARTMENTS

Location: Merida, Mexico
Project type: Mix Use - Master Plan development
Firm: GVA Architects
Role: Graduate Architect, design work, development of conceptual project, Site analysis 3d modeling and presentation
Software: Rhino
Project Architect: Jose Lopez, Associate Director GVA
Rendering: Monolito Studio





View to the Golf course - West

Location: Aguascalientes, Mexico

Project type: Mix Use - Multifunctional building in a Golf course

Firm: GVA Architects

Role: Project Architect, design work, teamwork in development of conceptual project, Site analysis and sustainable solutions, 3d modeling and presentation

Software: Rhino, InDesign, Photoshop

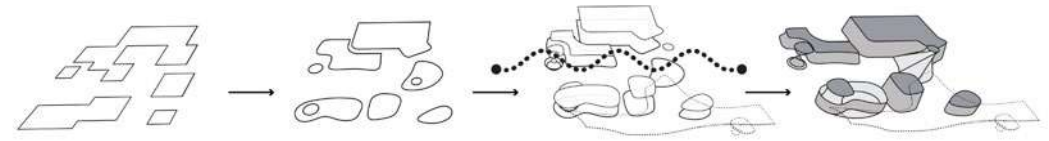
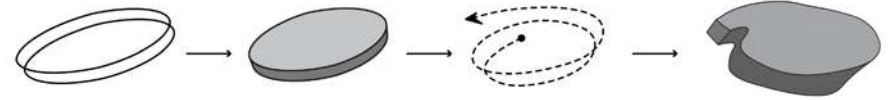
Project Architect: Luis Muniz, Denia Navarro, Junior Associates GVA

Rendering: Monolito Studio

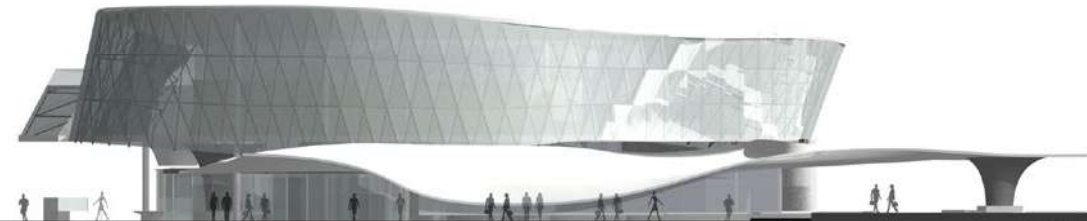
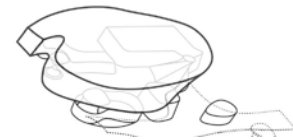
5. MIX USE. *Club Campestre*



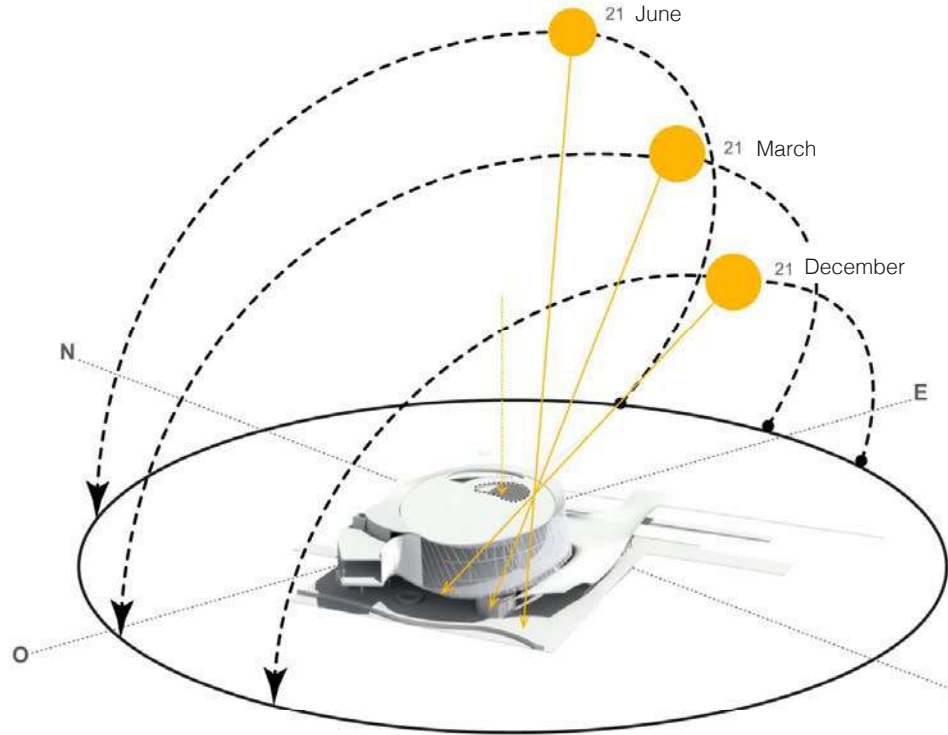
Interior View - Restaurant



CONCEPTUAL GEOMETRY



SOUTH ELEVATION



CAMPESTRE, AGUASCALIENTES, MEXICO

21°55' 11.34" N , 102°19' 09.97" O

Shadow Diagrams - Year round analysis of solar radiation
Software: Revit

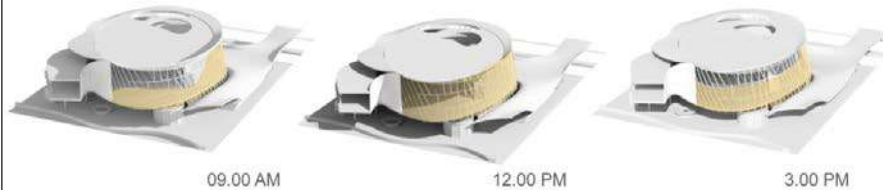
Summer



Winter



Spring



Location: Aguascalientes, Mexico

Project type: Mix Use - Multifunctional building in a Golf course

Firm: GVA Architects

Role: Project Architect, design work, teamwork in development of conceptual project, Site analysis and sustainable solutions, 3d modeling and presentation

Software: Rhino, InDesign, Photoshop

Project Architect: Luis Muniz, Denia Navarro, Junior Associates GVA

Rendering: Monolito Studio



Main Entrance View - East



Location: Ajijic - Chapala, Mexico

Project type: International Competition - Micro home

Role: Project Architect, design work, teamwork in development of conceptual ideas, Site analysis and sustainable solutions, 3d modeling and presentation.

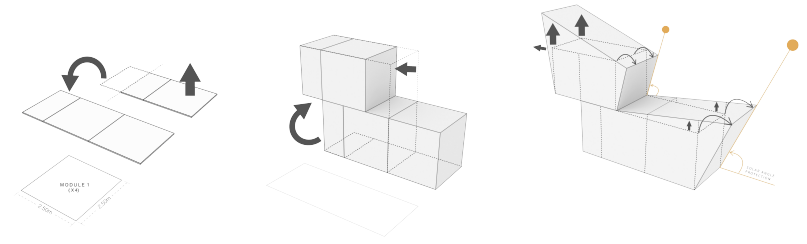
Software: Rhino, Revit, Photoshop

Project Architect: Denia Navarro. Urban Planner Luke Norris

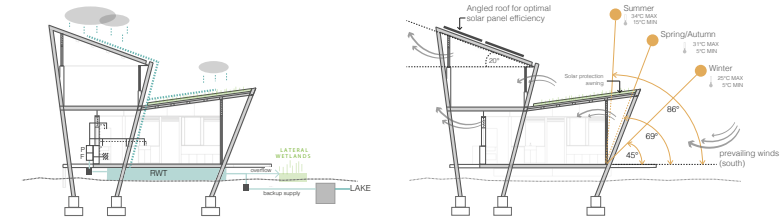
Rendering: Antonio Gomez



6. MICRO HOME. *Casa Viva*

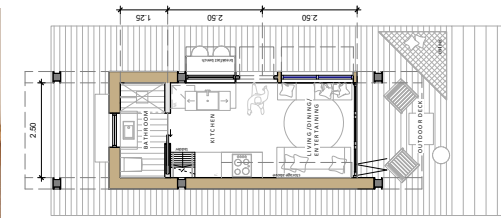


CONCEPTUAL GEOMETRY

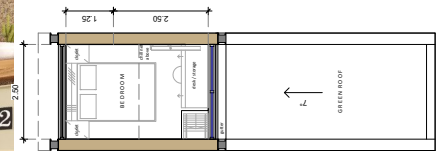


SUSTAINABLE STRATEGIES

6. MICRO HOME. *Casa Viva*



Ground Floor



Upper Floor

Location: Ajijic - Chapala, Mexico
Project type: International competition Micro Home
Area: 25m²
Materials: Steel structure + Hempcrete walls
Sustainability Features: Off grid, passive design

Location: Puerto Vallarta, Mexico

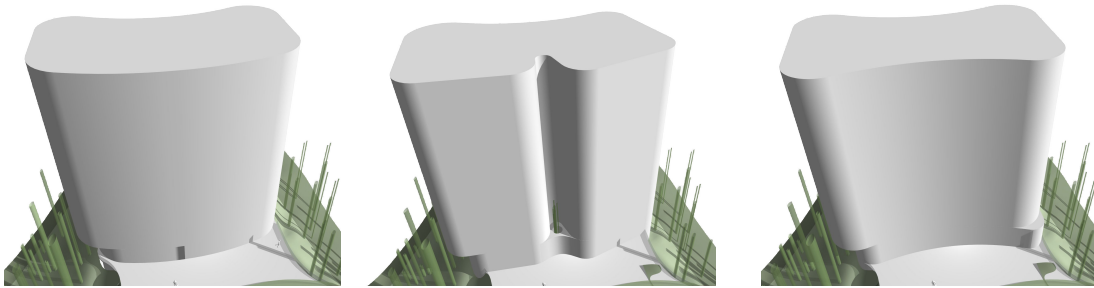
Project type: Residential Building - looking for green building certification

Role: Project Architect, design work, teamwork in development of conceptual ideas, Site analysis and sustainable solutions, 3d modeling , Project manager.

Software: Rhino, Revit, Photoshop

Project Architect: Denia Navarro

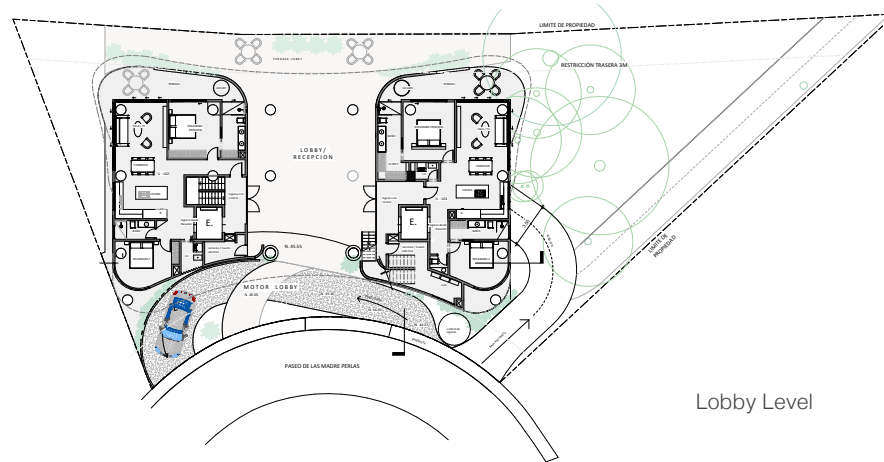




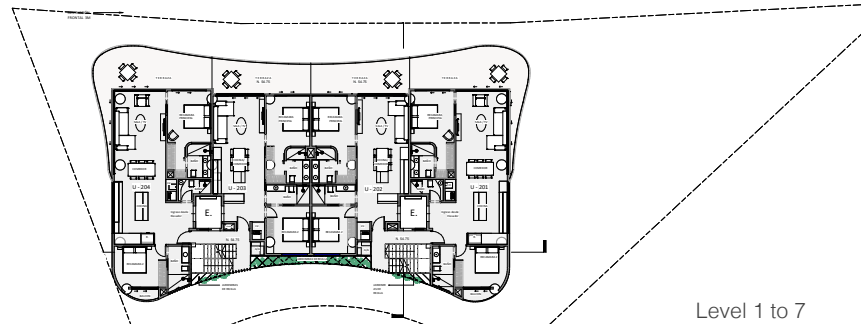
CONCEPTUAL GEOMETRY ANALYSIS



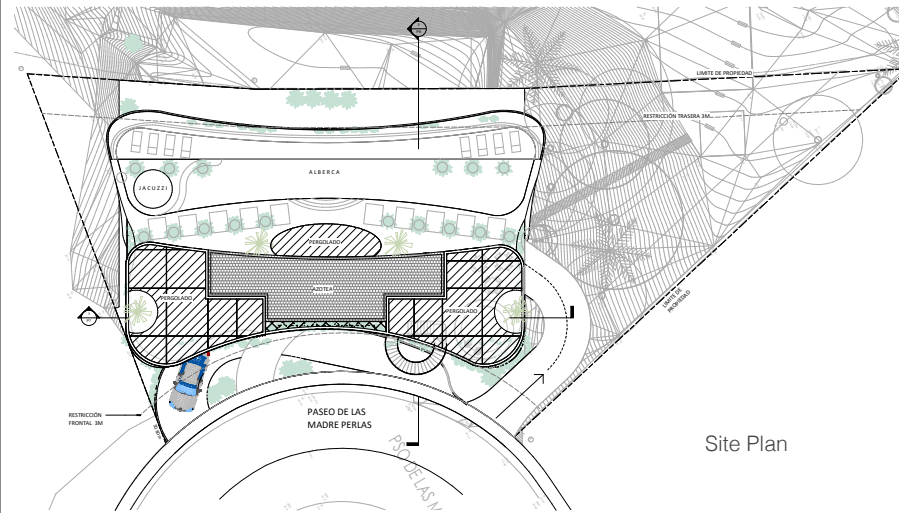
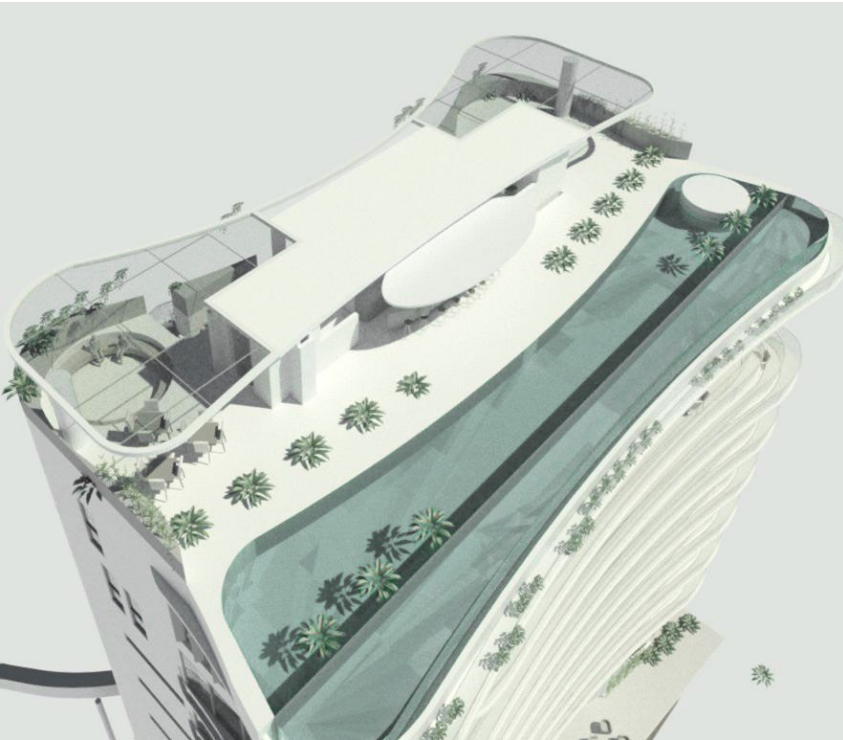
7. RESIDENTIAL BUILDING. *The One*



Lobby Level



Level 1 to 7



Site Plan

Location: Puerto Vallarta, México
Project type: Residential Building
Areas: 2 Basements
Lobby Level
7 Levels (4 apartments per floor)
Roof top pool

Sustainability Features: passive design,
Solar panels, electric powered, green walls



Location: Ajjic - Chapala, Mexico

Project type: Cohousing development. Sustainable community
Rancho La Salud Village.

Role: Project Architect, design work, teamwork in development
of conceptual ideas, Site analysis and sustainable solutions,
project manager, currently under construction.

Software: Rhino, Revit

Project Architect: Denia Navarro

Rendering: Antonio Gomez

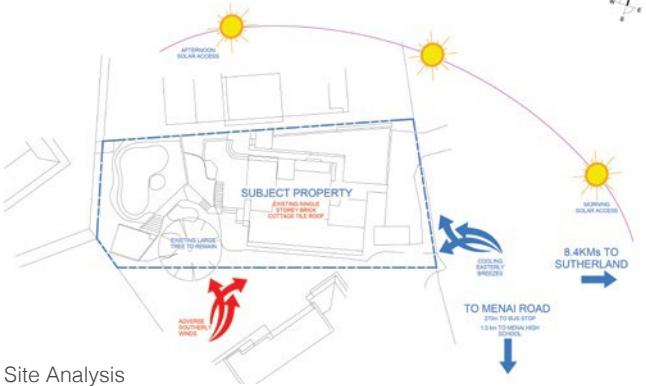
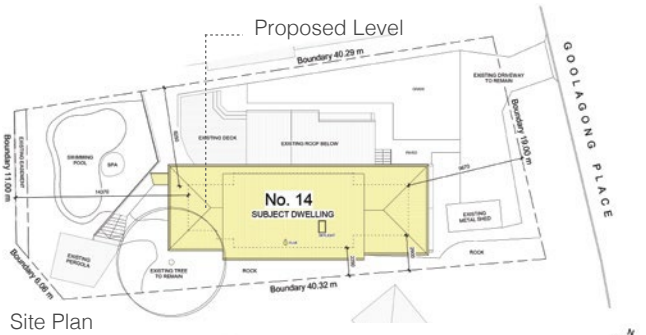




Entry gate

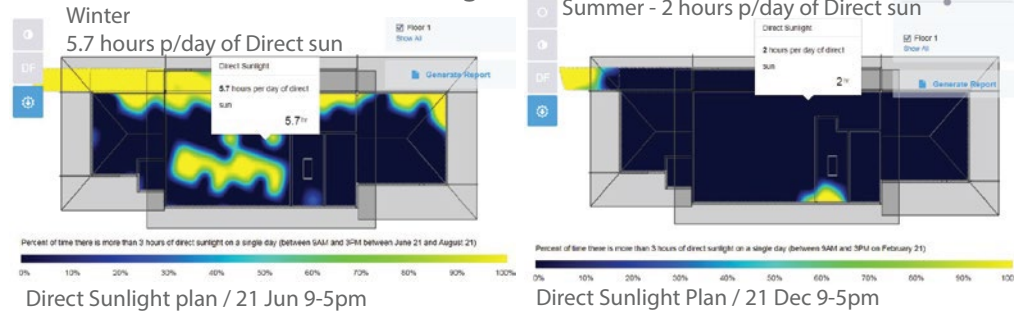


Organic gardens / food production / Pool area



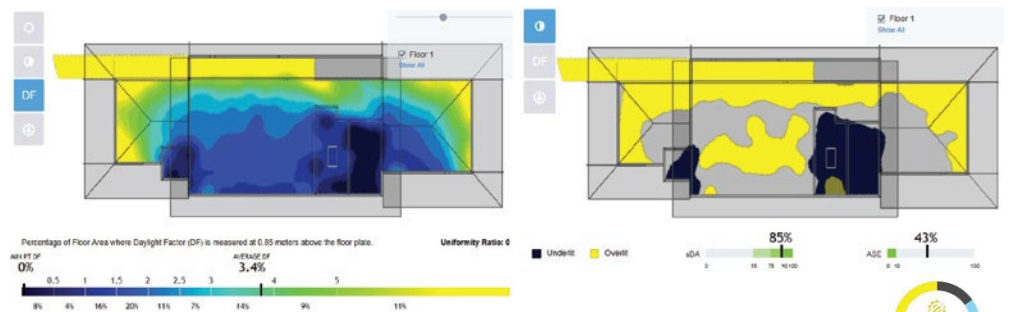
Location: Menai, Sydney, Australia
Project type: Renovation and addition on an existing dwelling
Firm: IRONBARK Architecture
Role: Graduate Architect, documentation for DA application development for Sutherland Shire Council, including BASIX certificate compliance and Bushfire assessment report. Daylight factor analysis and thermal assessment diagrams.
Software: Revit + Sefaira
Project Architect: Chris Freeburn (NSW Architect Reg No 9421)

SEFAIRA RESULTS_ Direct Sunlight



The roof Overhangs 900mm
Winter
 The angle of the roof allows direct sunlight, providing solar radiation needed.
Summer
 The eaves protect from direct sunlight preventing from over heating.

SEFAIRA RESULTS_ Daylight Factor_ Underlit & Overlit



Daylight Factor represents a worst-case scenario under an overcast sky.
 sDA Spatial Daylight Autonomy recommended more than 75%
 ASE annual sunlight exposure range from 0-100%

RESULTS

DF 3.4%	sDA 85%	ASE 43%
Overlit 43%	Underlit 15%	Wellit 41%

Orientation: The new design take advantage of the northern solar access ensuring private open space to be naturally ventilated and illuminated .



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DENIA NAVARRO
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