Project Information

Palindrome
-Site | 1.97 Acres, Summit Club, Las Vegas, NV
-Programming Requirements
-9,387 sf (livable), 2,593 sf (garage) = 11,980 sf overall
-Casita/Office (separate from home) w/secret garden and roof deck
- (4x) Bedroom (including Master and Suite), (6x) Bath, (2x) Powder, BOH
(Laundry, Mud, Pantry), Kitchen+Living, Wine + Bar, Gym, Sauna, Private
Garden, Central Courtyard, Outdoor Living, and immersive art space

The conceptual design process for the project started with an understanding of
the lifestyle and function of the home's use, along with a thorough understanding
of the site, natural environment, and how it would affect the overall design.

The project began to take shape with simple geometry that explored forms and
plan layouts. This process led to diverse results, yet all the concepts remain
closely linked. Vignettes of light, shadow, sound, and texture contrast against
the tranquility of the natural environment. The earth tones and rich color palette
of native desert plants and trees will pop with raw beauty against the monolithic,
yet soothing exterior architecture.

The exterior materials explored in the design are meant to handle the harsh desert
environment by being durable, relevant, and having a true beautiful decay effect.
The floor plan is rooted in classic architectural layouts that then molded to fit the
specific function of the program while maximizing site views and maintaining
central privacy.

The interior elements will explore softer materiality to compliment and contrast
the desert Brutalism of the exterior facade treatments. The use of indoor/outdoor
space and internal courtyards will create moments of reflection, contemplation,
and serenity. The home effectively utilizes elements of shading, screening, natural
daylighting, and passive heating/cooling with air flow throughout the space.
Architectural vignettes curate external and internal scenes of the surrounding
environment that will evolve with time and create unique experiences that are
always different, but still feel like home.
The home utilizes elements of shading, screening, natural daylighting, and passive heating/cooling with air flow throughout the space. Board formed concrete walls are used to create narrow courtyards. These slot canyon-like spaces are well shaded with cross ventilation, allowing for year round use of the outdoor spaces. The concrete walls also help keep the home warm in the winter months and cool in the summer due to thermal mass. The project uses strategies such as renewable solar electricity, evaporative cooling, cross and stack ventilation, daylighting, as well as geothermal heating and cooling.
Material Choices

Key Materials - Board formed concrete and Weathered steel (or known as COR-TEN)
The home’s key materials are ideal for the harsh Las Vegas desert environment as they are strong, durable, require minimal maintenance, and slowly patina in texture, color, and form blending in well with the surrounding Red Rock Mountains. Locally available materials and concrete will be used for the board formed walls. The weathering steel will slowly develop the protective “rust” layer due to the influence of the desert weather. Natural elements such as rust bleeding down the concrete walls will be embraced as part of the patina process.

“Build your architecture from what is beneath your feet.”
- Hassan Fathy
Site Context | 40 mi radius

- Red Rock Mountains
- Mount Charleston
- Las Vegas Strip
- Hoover Dam
- Red Rock Casino Resort Spa
- Downtown Summerlin
- Downtown
- Charleston Blvd
- Sahara Ave
- Durango Dr
- Flamingo Rd
- Rusiell Rd
- Discovery Land Company and The Howard Hughes Corporation JV
- Bear's Best Las Vegas
- The Ridges
Site Photos
Site Analysis
Concept Sketch Evolution

office

living and office
guest

garage and service

carved out exterior space

junior suite

fitness

master suite
1. MASS
PARALLEL MASSING FOR EAST AND WEST SETBACKS. INITIAL MASS BEFORE PROGRAM IS INTRODUCED.

2. PUSH
THE NORTH AND SOUTH FACADE IS PUSHED TO ALIGN WITH SETBACKS AND IMPROVE VIEW CORRIDORS.

3. SUBTRACTION
LARGE COURTYARDS ARE SUBTRACTED FROM THE MASS TO ALLOW FOR AIR CIRCULATION AND VENTILATION TO THE CENTRAL CORE.

4. CIRCULATE
TWO ORGANIC SPLINES ARE INTRODUCED TO CREATE THE MAIN CIRCULATION PATHS AS WELL AS CREATE THE CANYON EXPERIENCE.

5. PALINDROME
THE NORTH AND SOUTH FACADES ARE PUSHED IN TO CREATE DEEP OVERHANGS. THE MOVE CREATED A SEQUENCE THAT READS THE SAME BACKWARDS AS FORWARD.

5. GREEN CARVE
GARDENS, NATURAL DAYLIGHT, AND MICRO CLIMATES ARE INTRODUCED TO PROGRAMED SPACE.

5. ADAPTATION
THE PROGRAM ADAPTS TO THE SHAPE OF THE BUILDING WITH THE CLIENTS GOAL OF PUBLIC VS PRIVATE SPACE.
Main Design Elements

- Overhanging roof canopy clad in corten steel
- 1'-0" thick board formed concrete walls
- Perforated metal outdoor trellis
- Central courtyard with water feature
- Private courtyard with access to roof deck
Elevations + Concept Massing
Perspective | Exterior Entry
Perspective | Master Suite
Perspective | Master Suite
Perspective | Fitness + Sauna
Perspective | Office
NVU18230

RAISED DECK - REFER TO FLOOR FINISH PLAN

SHOP FABRICATED HANDRAIL OF METAL PIPE - REFER TO DETAILS

3/4" STEEL PLATE GUARDRAIL WELDED TO STAIR TREAD TUBE STEEL - REFER TO SPECIFICATIONS

TUBE STEEL CANTILEVERED RISER - REFER TO STRUCT.

STEEL PAN W/ CONC. FILL WELDED TO TUBE STEEL

EDGE OF LEVEL 2 (ROOF DECK)

STEEL IMBED POSTS - REFER TO STRUCT.

CONC. WALL RECESSED STAIR LIGHT TYP. - REFER TO SPECIFICATIONS

PER MANUF., TYP. 5A7.00

6 7/8" TYP.

CL 4A7.00

2" STANDOFF FITTINGS, TYP. - REFER TO SPEC.

TUBE STL. POST - REFER TO STRUCT.

TUBE STL. ROLLED STRINGER - REFER TO STRUCT.

BASE PLATE - REFER TO STRUCT.

CONC. FOOTING - REFER TO STRUCT.

STEEL PAN W/ CONC. FILL WELDED TO TUBE STEEL, TYP.

TS CANTILEVERED RISER, TYP. - REFER TO STRUCT.

PER STRUCT.

PER STRUCT.

PER STRUCT.

PER MANUF. CL 6 7/8"

2'-10" 3'-4"

3/4" STEEL PLATE GUARDRAIL WELDED TO STAIR TREAD TUBE STEEL - REFER TO SPECIFICATIONS

METAL PIPE HANDRAIL BEYOND

1" = 1'-0"6

DETAIL (SECTION)

DETAIL (SECTION)