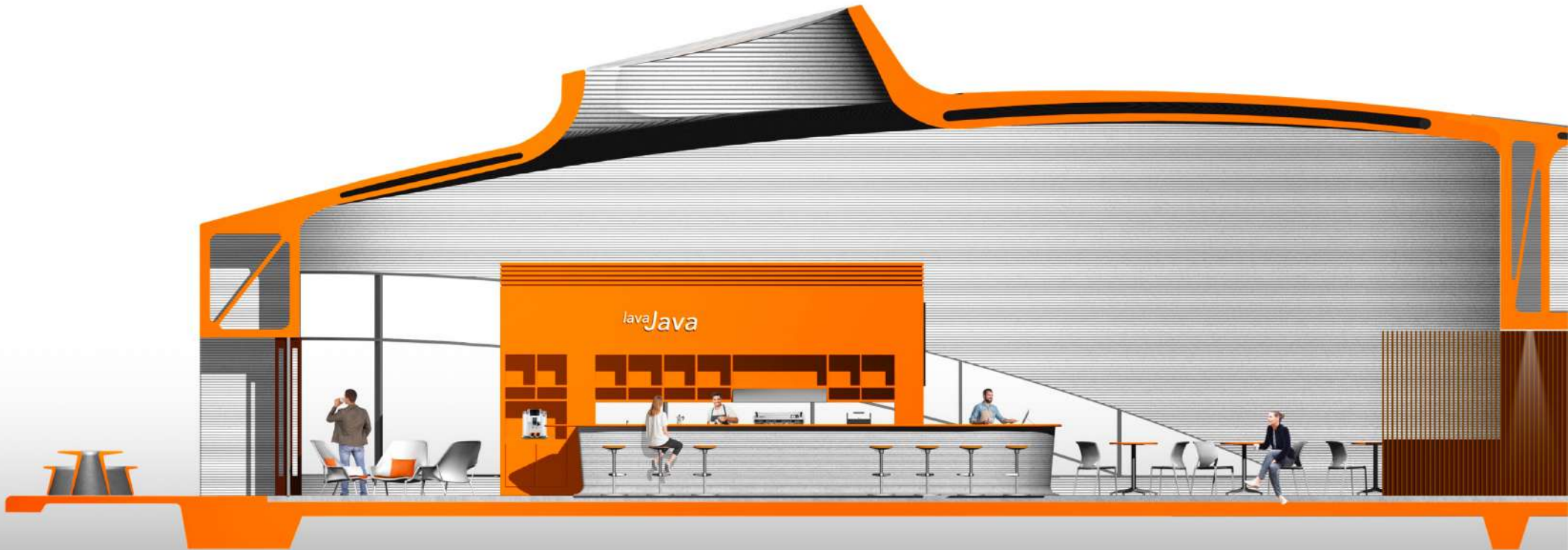


lavaJava



ARCHITECTURE COMPETITION

ICELAND VOLCANO COFFEE SHOP

Partners:

Landeigendur Vogar ehf
(Landowners of Vogar farmland)



Introduction

The Iceland Volcano Coffee Shop competition tasked participants with designing a coffee shop to be located at the base of the Hverfjall volcano in northern Iceland. Working in partnership with Landeigendur Voga ehf (Landowners of Vogar farmland), the competition called for submissions for a visitors centre that would offer visitors a place to grab a drink, a snack, and learn a little more about the history of the incredible volcanic crater looming above their heads.





The Competition

Iceland Volcano Coffee Shop

For the Iceland Volcano Coffee Shop competition, Buildner architecture competitions partnered with **Landeigendur Voga ehf (Landowners of Vogar farmland)** as part of a series of competitions based in Iceland. For Iceland Volcano Coffee Shop competition, architects were called to submit designs for a coffee shop that would be located at the base of the Hverfjall volcano. The new coffee shop needed to include facilities for a new visitor center and a small exhibition room that would give visitors information about the volcano's history.

Winning designs were put forward for construction consideration, and needed to strike a balance of practical ideas and creative design that were sustainable, unique, and in keeping with the landscape.

Hverfjall volcano

Hverfjall in northern Iceland is a tephra cone or “tu ring” volcano. Located to the east of the volcanic Lake Mývatn, the volcanic explosion crater is 1 km wide and roughly 140 meters deep, and is a popular hiking destination. Visitors can easily access many parts of the crater via public hiking trails, where its ridges can reach up to 200 meters in height.

Believed to have been created during a volcano eruption, Hverfjall is almost perfectly symmetrical, apart from a landslide that took place several years ago, and its dark, captivating colours make it a popular tourist attraction and photography spot. The site is protected, so visitors can only use the two approved hiking trails to access the crater, with all other areas restricted.





Mývatn region

Mývatn is the spectacular region in the north of Iceland that is home to some of the country's most awe-inspiring natural wonders and is considered the Northern Lights Capital of Iceland. The lake region is home to Iceland's fourth largest body of water, Lake Mývatn, which is 36.5 square kilometers in size and is home to a wealth of natural wonders and wildlife.

Making up part of the Diamond Circle – a popular travel route in the north of Iceland – Lake Mývatn and the surrounding region are an idyllic location to go birdwatching or fishing, or to relax in the natural hot springs and explore the eerily beautiful lava fortress of Dimmuborgir. Of course, one of the most spectacular sights to see are the Northern Lights themselves, which are spotted more often in the northern region of Iceland.



South Elevation



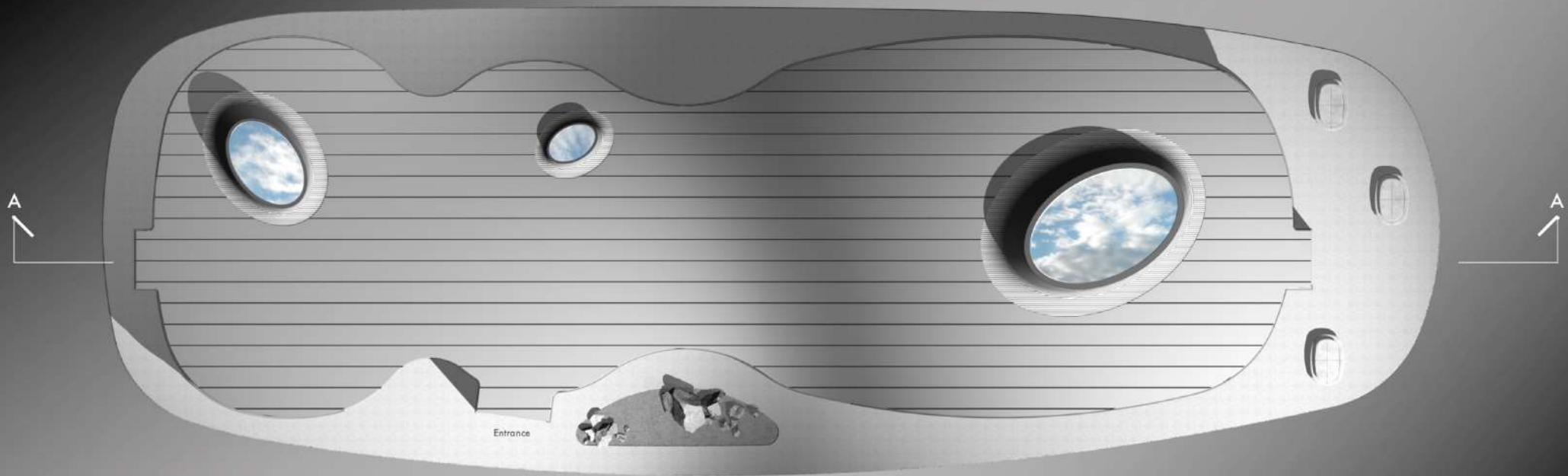
ICELAND VOLCANO
COFFEE SHOP



North Elevation



Section



Roof PLAN

Information Gallery

The information Gallery presents Regional and Hverfjall history on double sided displays visible from the exterior.



Coffee Shop

The *lavaJava* coffee house features a central espresso and coffee bar offering multiple beverage and food selections to the cafe and lounge patrons





N 65° 36' 48.8" W 16° 52' 29.6"

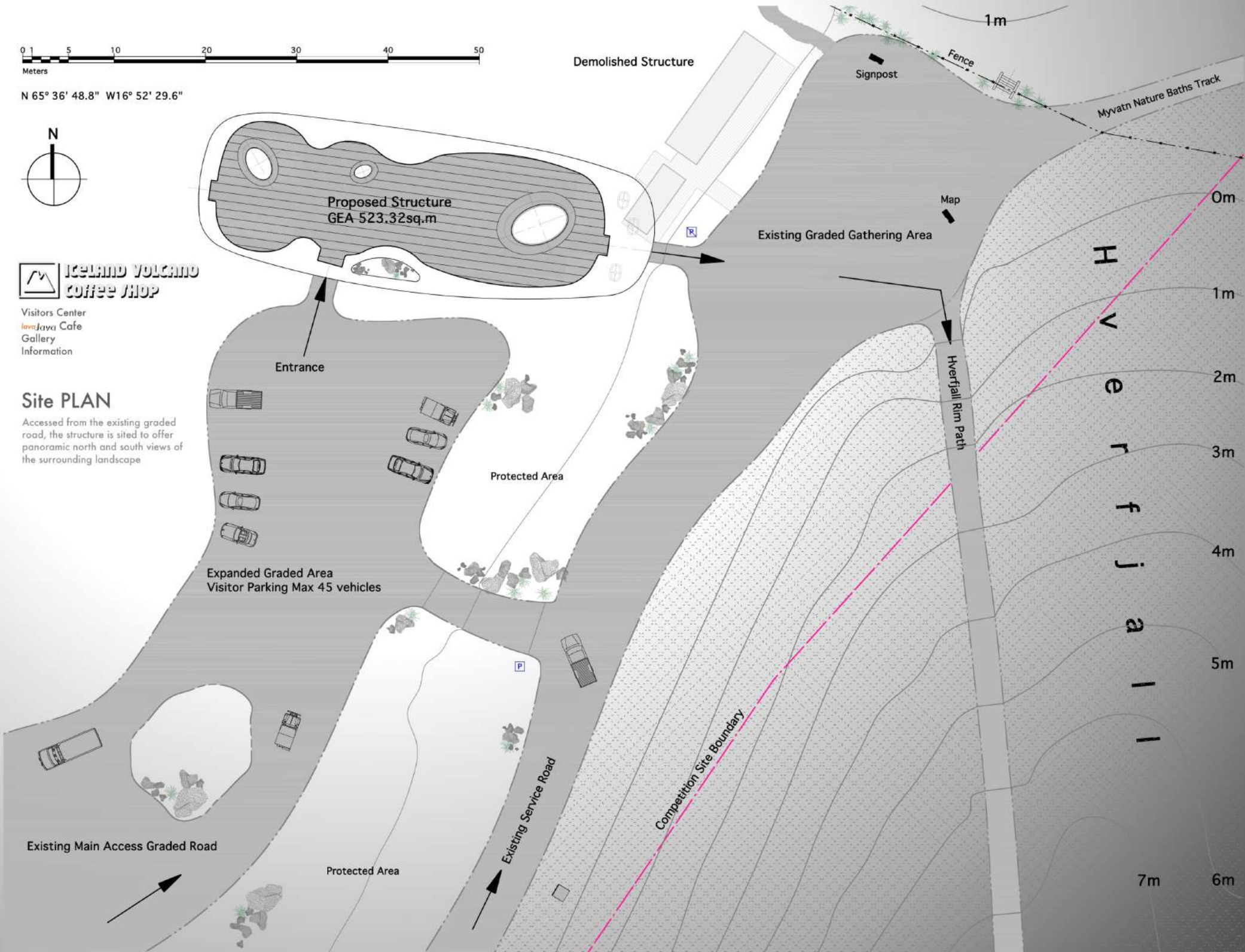


ICELAND VOLCANO
COFFEE SHOP

Visitors Center
lavaJava Cafe
Gallery
Information

Site PLAN

Accessed from the existing graded road, the structure is sited to offer panoramic north and south views of the surrounding landscape



Proposed Structure
GEA 523.32sq.m

Demolished Structure

Signpost

Map

Existing Graded Gathering Area

Entrance

Protected Area

Expanded Graded Area
Visitor Parking Max 45 vehicles

Hverfall Rim Path

Competition Site Boundary

Existing Main Access Graded Road

Protected Area

Existing Service Road

H
v
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f
j
a
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l
i

0m

1m

2m

3m

4m

5m

7m

6m

Materials



Roof

The rolled zinc sheet metal double standing seam roofing system protects the building structure against wind and weather, is 100% recyclable, and suited to contoured shaped structures.



Wood Panelling

Lined with board and batten wall panels, the central access corridor is fabricated from reclaimed native birch with an 'espresso' colored stained finish.



Interior Finishes

To evoke glowing lava, interior selections for laminate surfaces, painted cabinetry, furniture and textiles, are selected to accent warmth and contrast.



Wall + Ceilings

All wall and ceiling surfaces express the striated layers inherent in the 3D mortar printing process. Utilizing proprietary formulations incorporating fine lava sand aggregates.



Concrete Floors

Natural concrete floor surfaces are sealed and polished. The on-grade floor slab, with perimeter grade beams, is formulated with lava aggregates.

Concept

The *lavaJava* Coffee Shop and Information Gallery project, is a 3D printed structure designed to welcome visitors to the Hverfjall volcano tuff ring crater experience.

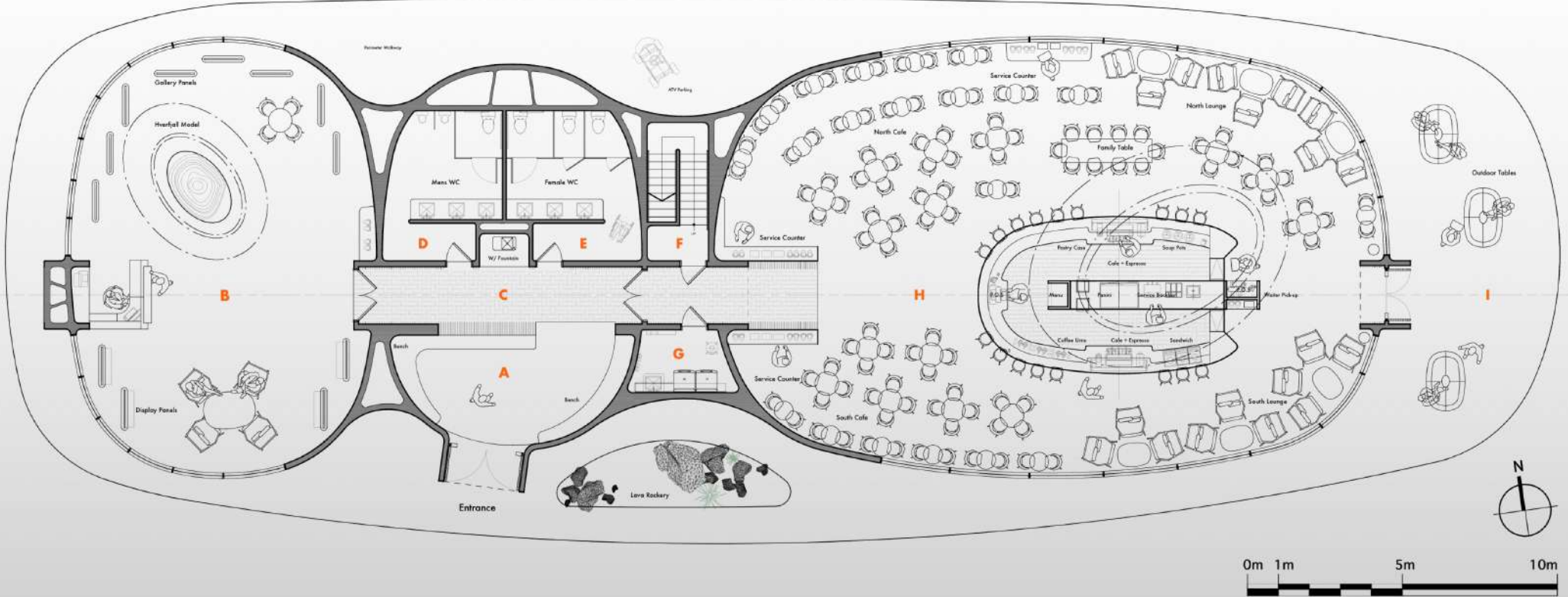
Inspired by the morphology of the Hverfjall crater and surrounding Myvatn landscape, the structure is expressed as an undulating volcanic form, articulated by conical roof lights.

Aesthetically, the 3D printed structure evokes lava striation layers, the specular surface reflecting ambient light to integrate the *lavaJava* project into the landscape.



Ground Floor PLAN

KEY : **A** Entrance / Meeting Area **B** Information Gallery **C** Corridor **D** Mens WC **E** Womens WC **F** Stair **G** Maintenance **H** JavaJava Cafe **I** Terrace

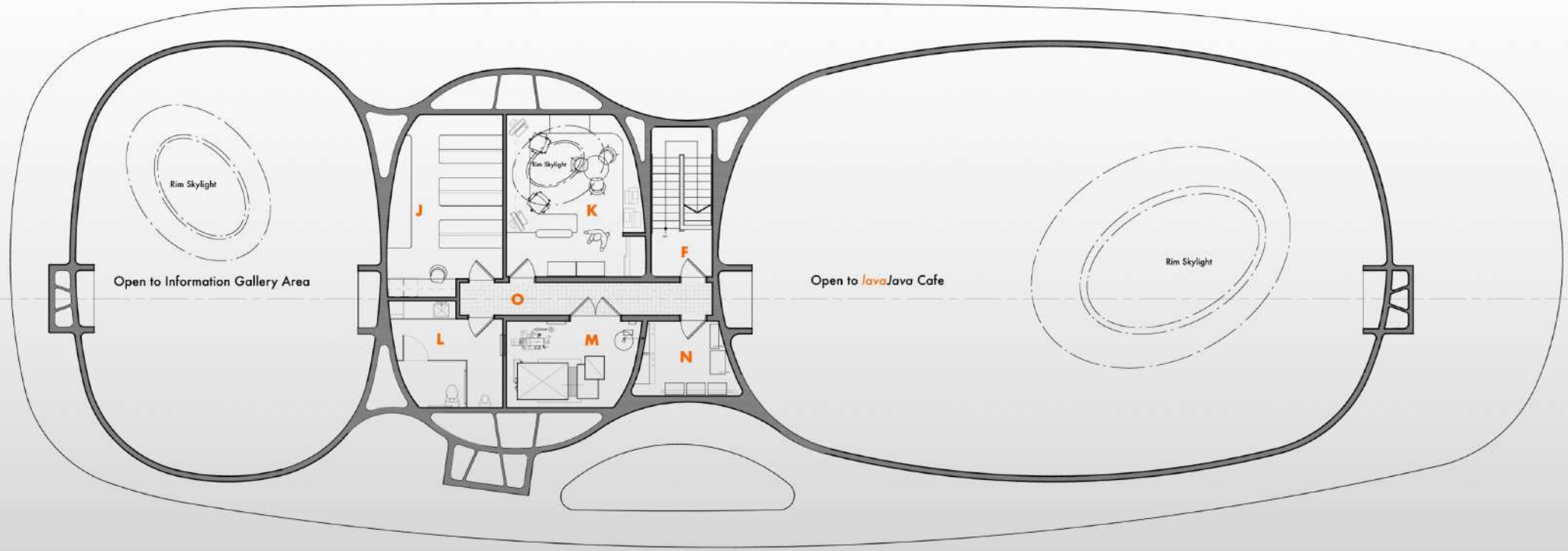


Area Analysis - Iceland Volcano Coffee Shop

Description	Qty	Unit	m ²	Description	Qty	Unit	m ²	Description		
Ground Floor Areas - NET Internal Area (NIA)				First Floor Areas - NET Internal Area (NIA)				Designed Occupancy Cafe Seating		
Java Cafe - 3 pers. staff	250.14	m ²		Office - 2 pers. staff	22.27	m ²		2 pers Table	20	seats
Gallery - 1 pers. staff	33.39	m ²		WC	10.81	m ²		4 pers Table	15	seats
Information Center	46.09	m ²		Storage	19.98	m ²		Community Table	1	seats
WC - Mens - 1 HC 2 Urinals 3 lavs	18.41	m ²		Stairwell	9.62	m ²		Lounge Seating	6	seats
WC - Womens - 1 HC 2 Urinals 3 lavs	16.00	m ²		Electrical / IT rms.	6.96	m ²		Outdoor Seating	3	seats
Stairwell	8.85	m ²		Mechanical	11.42	m ²		Cafe Bar Seating	17	seats
Maintenance - 1 pers. staff	6.05	m ²		Circulation	8.70	m ²				
Entrance	37.06	m ²								
Circulation	36.16	m ²								
Ground Floor Areas - NET Internal Area (NIA)	468.16	m²		First Floor Areas - NET Internal Area (NIA)	89.76	m²		TOTAL Seating		164
TOTAL Floor Area - NET Internal Area (NIA)	557.92	m²		Building Area - GROSS External Area (GEA)	523.32	m²				

First Floor PLAN

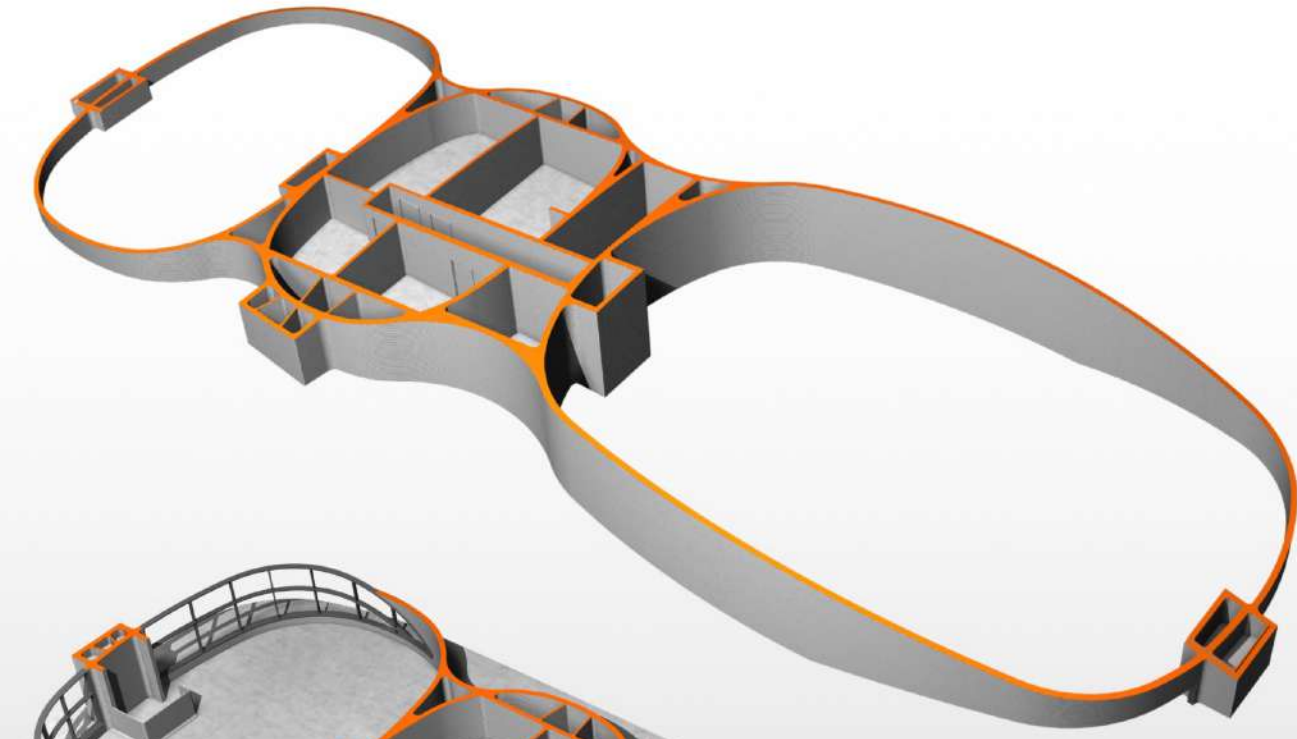
KEY : J Storage K Office L Toilet M Mechanical N Electrical/IT F Stair



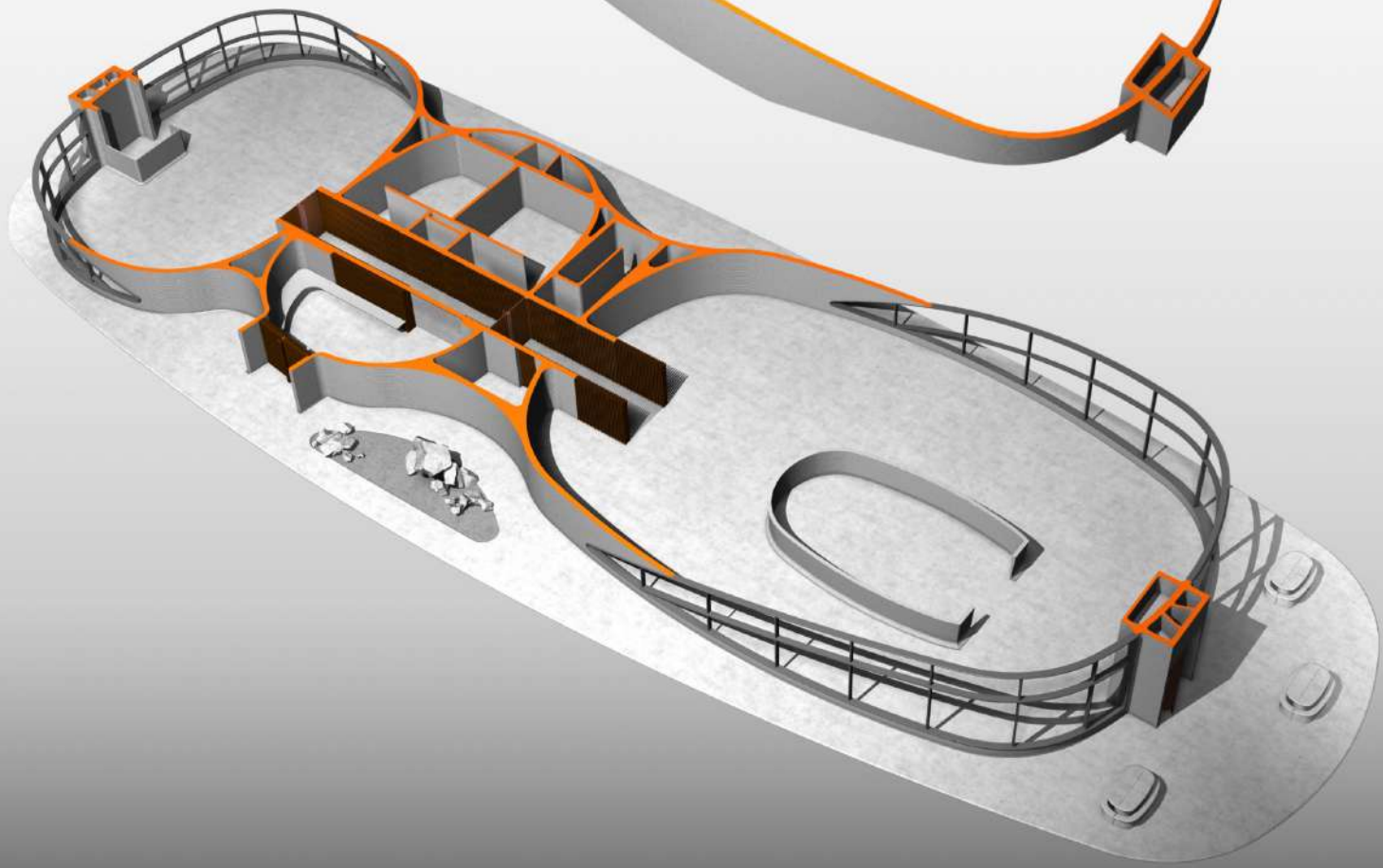


Aerial Perspective





1st Floor



Ground Floor



South Elevation



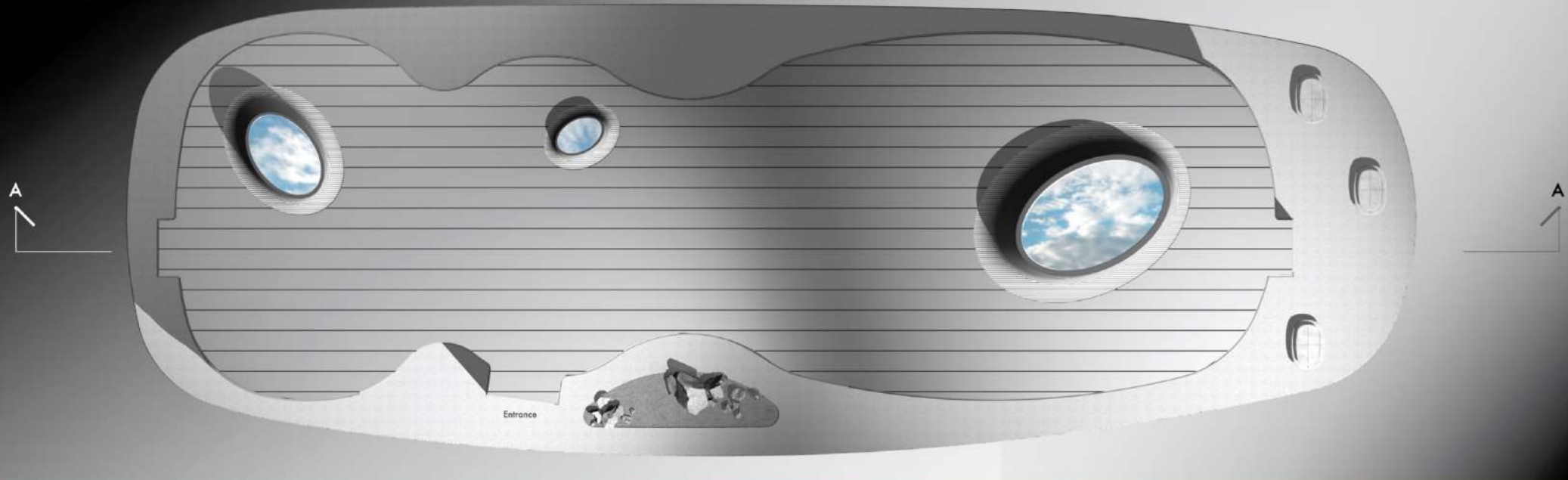
North Elevation

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ARCHITECTURE COMPETITIONS

Roof PLAN



SECTION A-A



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Roof

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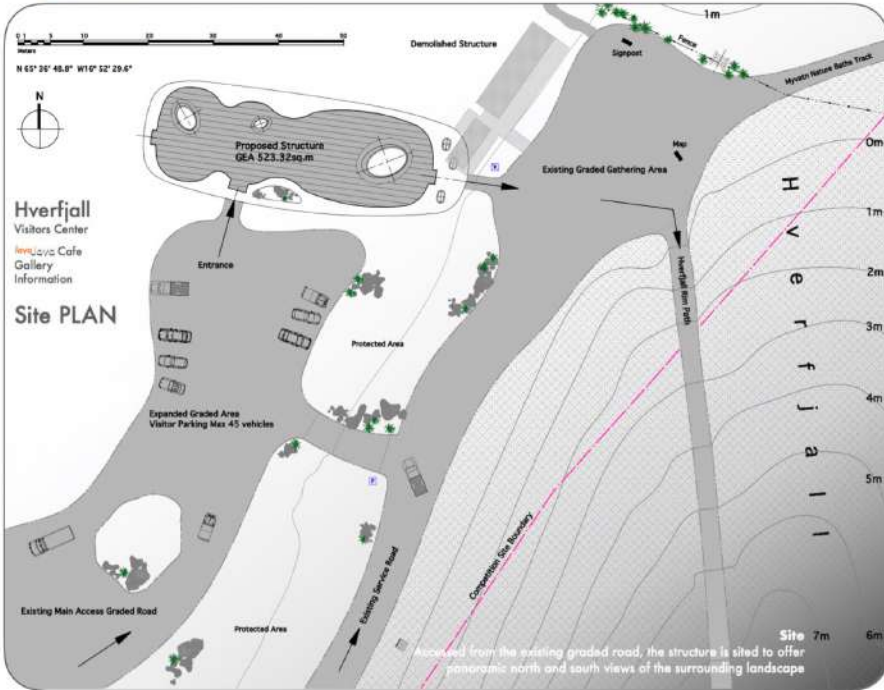


Concrete Floors

Natural concrete floor surfaces are sealed and polished. The on-grade floor slab, with perimeter grade beams, is formulated with lava aggregates.



Materials

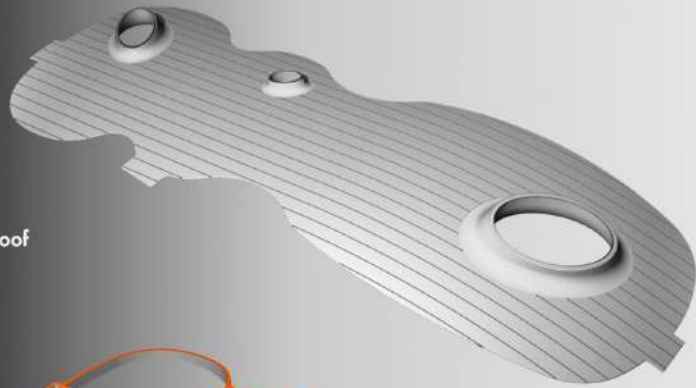


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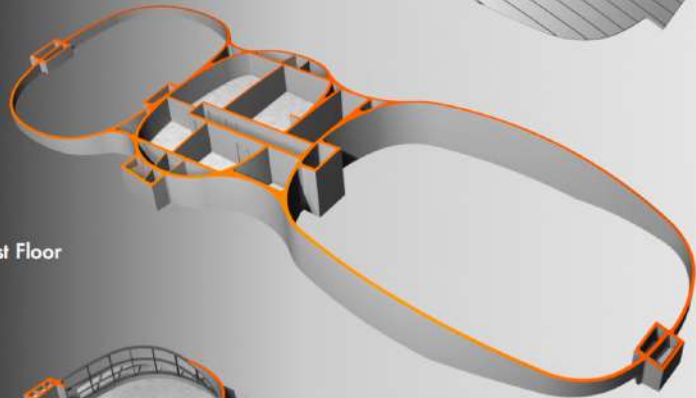
First Floor PLAN

KEY : J Storage K Office L Toilet M Mechanical N Electrical/IT F Stair

Roof



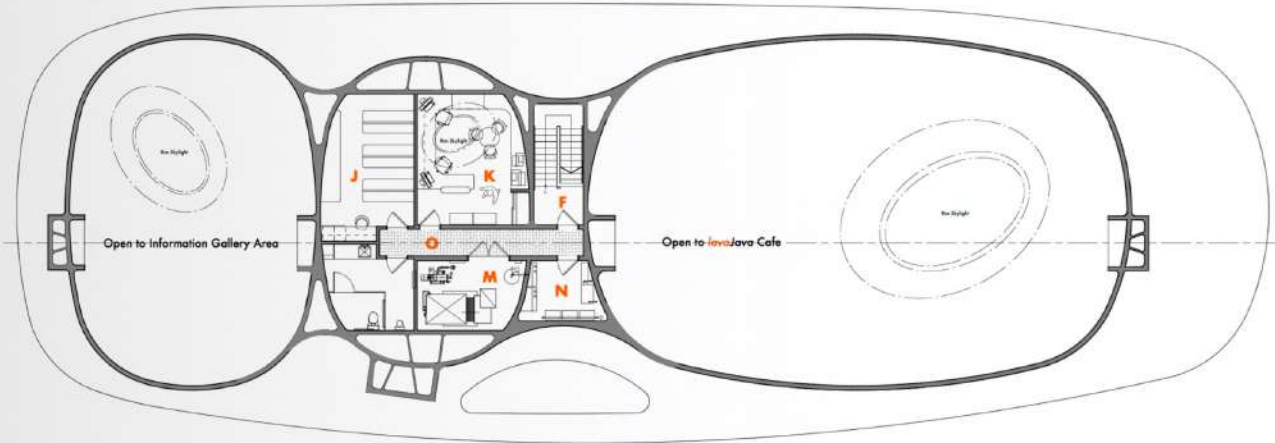
1st Floor



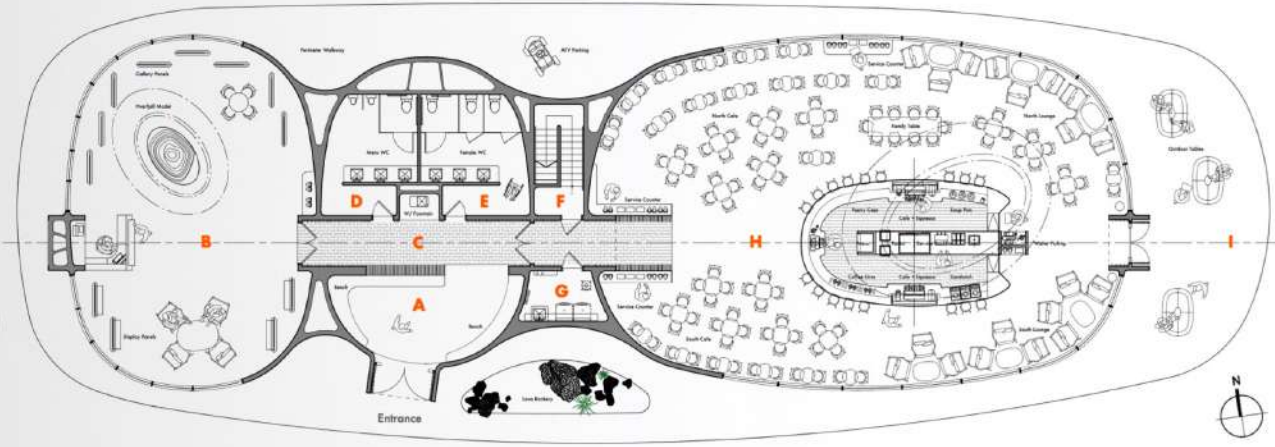
Ground Floor



Sectional Perspective



Description	QTY	Units	Description	QTY	Units	Description	QTY	Units
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Ground Floor PLAN



The **HAIGH**Architects+Designers studio was founded in New York in 1985 by **Paul Haigh** and **Barbara H.Haigh**. The practice is recognized as a leading multi-disciplined architecture and design firm for its portfolio of award winning projects. The studio has completed projects for a wide variety of cultural and commercial clients in the United States, Italy, United Kingdom, France, Japan and Australia.

This book presents the entry for the Iceland Volcano Coffee Shop International Design Competition



