

ARCHITECTURE+DESIGN

A N I N D I A N J O U R N A L O F A R C H I T E C T U R E



KUNAL MANIAR The Plant Whisperer

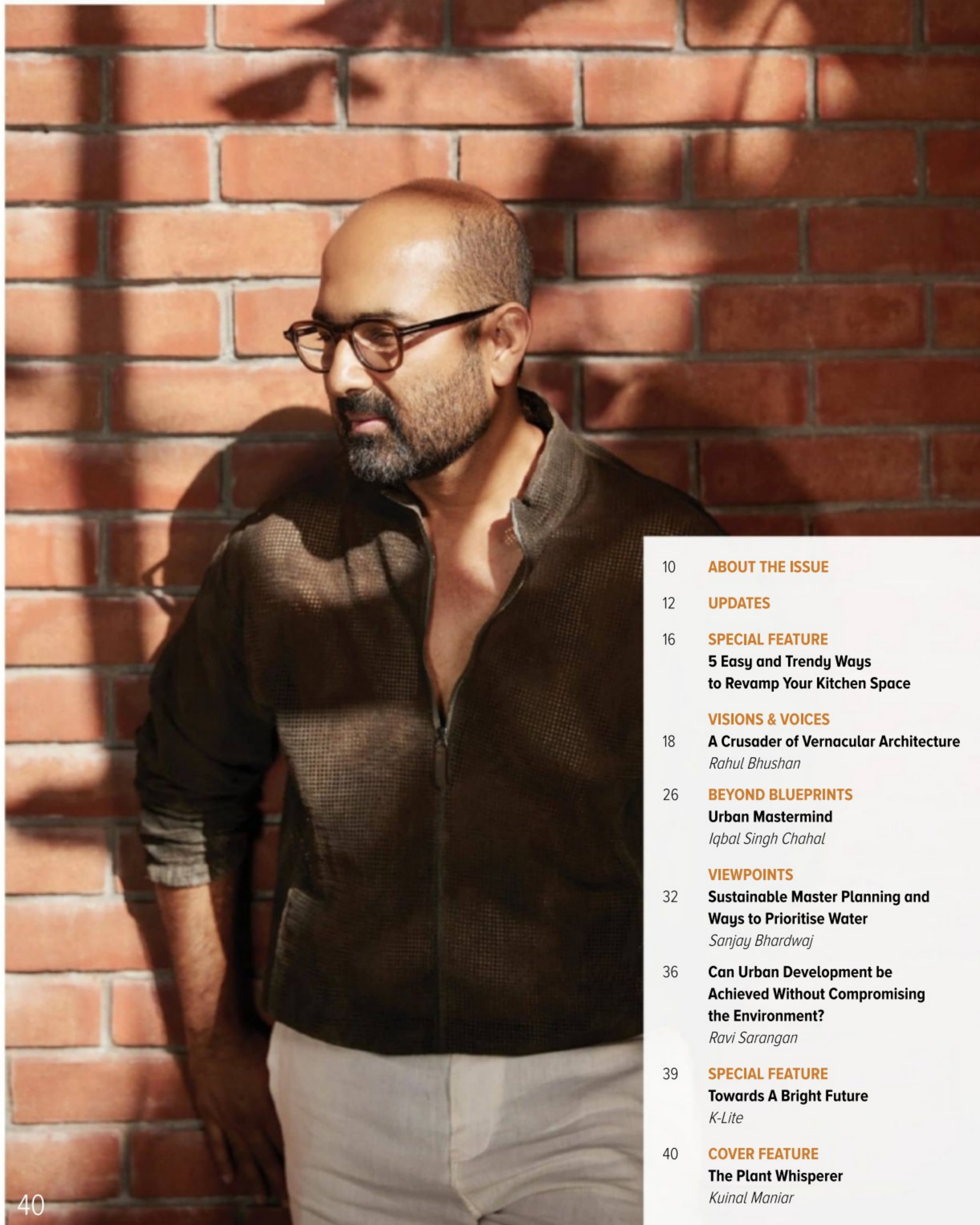
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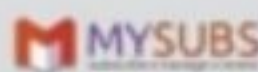
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*"Buildings are deeply
emotive structures which
form our psyche"*
—DAVID ADJAYE



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ON THE COVER:
KUNAL MANIAR

Featured: The Meso Bench
designed by Kunal Maniar

PHOTO CREDIT:
MEETESH TANEJA

Sustainability Special

All drawings and visuals for the projects and articles, unless mentioned otherwise, are courtesy the architects/authors.

“As an architect you design for the present, with an awareness of the past, for a future which is essentially unknown.”

—NORMAN FOSTER

“There is no ecological architecture, no intelligent architecture and no sustainable architecture—there is only good architecture. There are always problems we must not neglect. For example, energy, resources, costs, social aspects—one must always pay attention to all these.”

— Architect Eduardo Souto de Moura

It's impossible to have a conversation about the built environment without mentioning sustainability. Can we build without compromising on the environment? Can we build for empowerment? Can we sustain sustainability? These are the questions we should be asking ourselves. Summarizing what architect Eduardo Souto said, there's only one type of architecture—good architecture. This means anything that is being built must be responsible and mindful of its impact on the environment. One often tends to ignore the other two aspects of sustainability—social and financial. In one of our recent conversations with architect Sonali Rastogi of Morphogenesis, she says, “Social sustainability has to go hand in hand because if that doesn't exist there is no scope to think about any other form of sustainability.” In this issue, we dissect the notion of sustainability. We talk to experts and take you to spaces that stand as templates for sustainable design.

Cloud 9 Sports Centre in China envisioned by MAD Architects exhibits the synergy between technology and sustainability, the Ecove Centre for Vocational Empowerment by SEZA Architects and the Polycab Experience Centre stand as beacons of social sustainability. We also spoke to architect Rahul Bhushan of North on the importance of vernacular architecture, and his intuitive architectural journey.

I've often been told that I'm fixated on the notion of sustainability. Maybe I am. But that's only because sustainability is not just a notion or a philosophy, it is how things should be!

And now, our cover feature. Landscape architect Kunal Maniar needs no introduction. It's one thing to design a space, but it's quite something to be able to collaborate with nature. In a candid conversation with A+D, he spoke about his inspirations, his design philosophy and his thoughts on sustainability. We met at one of his magical green spaces in Alibaug, amidst bougainvillea creepers, palm trees and frangipanis, with the landscape meandering in and out of the built environment.

We hope you enjoy reading this Issue!

Here's to a more conscious way of living and building!

Happy Reading

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(Seema Sreedharan)
Editor

**Image
of the
Month**



Modern sustainable neighbourhood in Almere, The Netherlands. The city heating (stadswarmte) in the district is partially powered by a solar panel island (Zoneiland)



Market Review

TRADE NEWS

Quantra Quartz: Setting New Standards

Quantra Quartz, now available in India, is a product of Pokarna Engineered Stone Limited and manufactured in two

export-driven, state-of-the-art factories incorporating the globally-patented technology of Breton SpA of Italy. It is available in over 100 surface designs in

regular, jumbo and super jumbo sizes, with exceptional hardness (of up to 7 Mohs) and finished to resist everyday stains and abrasion. Quantra Quartz

equals and exceeds all global norms for sustainability, hygiene and food safety. Perfect for kitchen and bathroom countertops and wall cladding. Now complemented by a range of coordinated, seamless quartz sinks, basins and shower trays.

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TRADE NEWS

Modern Heirlooms: Graff India presents the Cameo Collection

GRAFF, the renowned global leader in luxury bath and kitchen fixtures, has taken the art of bathroom design to a new level with the introduction of their captivating CAMEO Collection. Inspired by the precise art of engraving precious stones and gems, this collection brings an exquisite blend of tradition and modernity to your bath space, combining intricate knurled designs with precious metal finishes to create an heirloom-worthy bathroom experience. The CAMEO Collection is poised to redefine luxury and sophistication in bathroom design, setting a new standard for modern heirlooms.





TRADE NEWS

Featherlite Unveils Premium Flagship Experience Centre in Chennai

Spanning an impressive 10,000 square feet, the newly unveiled Featherlite Experience Centre is housed at Featherlite's – The Address, in Pallavaram, Chennai.

With a commitment to fostering creativity, collaboration, and productivity,

Featherlite's Experience Centre offers a comprehensive range of contemporary pods, workstations, chairs, and more. Each piece is thoughtfully crafted to embody the perfect synergy of functionality and style, catering to the diverse needs

of modern work environments.

"At Featherlite, we understand the pivotal role that well-appointed office furniture plays in shaping dynamic workspaces," said Manohar Gopal, Director, Featherlite. Featherlite's Experience Centre is more than just a

showroom – it is a hub of design inspiration and ideas.

"We believe that every workspace has its own unique story to tell," said Lav Jawahar, Director, Featherlite, "With thousands of furniture solutions meticulously displayed within our Experience Centre, we aim to inspire our clients to craft spaces that not only reflect their brand identity but also respond to changes in work culture and environment, so as to foster innovation and success."

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TRADE NEWS

Innovative Design Studio brings Giopato & Coombes to the Indian market

Renowned for their fusion of Italian craftsmanship and innovative design, Giopato & Coombes creates lighting fixtures that are both functional and artistic, standing out for their meticulous attention to detail and commitment to quality. IDS unveiled the Maehwa collection by Giopato & Coombes, a stunning series of lighting fixtures inspired by the delicate beauty and natural harmony of the plum blossom. +



5 EASY AND TRENDY WAYS TO REVAMP YOUR KITCHEN SPACE



Your kitchen is one of the most important rooms in your home. It's where you cook, eat, and gather with family and friends. But if your kitchen is looking a little tired, it's time for a revamp. You can easily update your kitchen's look without breaking the bank. Here are 5 easy and trendy ways to revamp your kitchen space:

1 Paint your cabinets. A fresh coat of paint can make a big difference in the look of your kitchen cabinets. Choose a bright, modern colour like blue, green, or yellow to give your kitchen a new lease on life. You can even opt for an enamel to enhance and protect your wooden and metal surfaces like the Nippon Paint

Satin Enamel, the Nippon Paint Bodelac Enamel or Pylox Laser Spray Paint.

2 Update your backsplash. A new backsplash, which is a protective and decorative panel typically installed behind the stove or sink area, is a great way to add personality and style to your kitchen. Choose a tile backsplash in a trendy pattern or a statement wallpaper to make your kitchen stand out. You can take this one step ahead by using an Epoxy Grout from Nippon Paint making it highly resistant to stains, chemicals, and moisture.

3 Add some colour. Don't be afraid to add some colour to your kitchen. A pop of colour on the walls, appliances,

or even the countertops can brighten up the space and make it feel more inviting. The Spotless NXT interior emulsion from Nippon Paint is a great option known for its low maintenance and stain-resistant swan back technology. It is available in various colours and provides a durable and washable surface.

4 Add some greenery. Plants are a great way to add life and freshness to any room, including your kitchen. A few potted plants or even an herb garden on the countertop or windowsill can help to make your kitchen feel more inviting and relaxed. You can opt to use a DIY-friendly adhesive like the Nippon Paint V tack reusable sealant to keep your mini plant pots from moving around on your countertop.

5 Clean your chimney. Chimneys play a vital role in every kitchen space. Maintaining a clean chimney is a tedious task on its own which becomes easier with the Selleys RP7 from Nippon Paint. It is an effective multipurpose lubricant, cleaner, and rust remover that ensures you have sparkling clean chimneys. It can also be used on doors, windows, and squeaky cabinets to keep them well-lubricated.

With these easy tips, you can easily revamp your kitchen and create a space that you'll love to spend time in. Here's how you can start your revamp journey:

- Start by decluttering your kitchen. This will help you to see the space more clearly and make it easier to plan your makeover.
- Measure your space before you start shopping for paint. This will help you to avoid buying too much or too little paint.
- Use a primer before you paint your cabinets. This will help the paint to adhere better and last longer.
- Be sure to follow the manufacturer's instructions when you're painting. This will help you to get the best results.
- Don't be afraid to experiment with different colours and patterns. The best way to find the perfect look for your kitchen is to try different things.

With a little planning and effort, you can easily revamp your kitchen space with Nippon Paint and create a space that you'll love to spend time in.

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RAHUL BHUSHAN: A CRUSADER OF VERNACULAR ARCHITECTURE

Architect Rahul Bhushan is on a mission to revive vernacular architecture.

In this interview, he discusses his growth trajectory, his passion for local architecture and running an architectural practice in the mountains

Interview by: Seema Sreedharan



Founder Principal Architect
Rahul Bhushan

An architect, an educator and an activist—for Rahul Bhushan, all these roles converge. His studio NORTH is not just an architectural practice, but an organisation that works towards the economic growth of indigenous communities, cultural preservation, environmental sustainability, and social development. His passion for vernacular architecture is palpable, and he is on a mission to educate the world about its importance. Sustainability is more than just a philosophy for Rahul; for him, it's the only way forward.

We sat down with him for a candid chat, and what ensued was a passionate conversation about one's roots, climate change, and the environment. We've often asked the question, "Can design change the world?" Rahul truly believes good design can change the world. Here's an excerpt from the conversation.

Seema Sreedharan (SS): You speak about architecture and design with such passion. One would imagine that you always wanted to be an architect. How did architecture happen to you?

Rahul Bhushan (RB): I chanced upon the architecture entrance exam while trying to avoid the dreaded engineering degree that my family had been pursuing for generations followed by an obvious government job. I always wanted to start my own thing and I aced the exams, getting accepted into all the NITs. My childhood always revolved around building my own team and assigning them tasks—for things like cleaning up an area in the forest to build a shivling, or starting a club in college that was a community of creative people who helped each other through their fields. More than specifically architecture, I always wanted to do righteous deeds inspired by our rich mythology. I would say looking back, I think all the dots were perfectly aligned to what I am doing now, as if I found my ikigai and followed it with a pure, undoubting faith and let the universe unfold its magic and its plan for me.

SS: Do you remember your first encounter with architecture and the impact it left on you? Were you always inclined towards indigenous architecture? During your days as a student of architecture, did you decide that you will go back to your roots?

RB: The first impact of architecture was our old wooden home in Shimla, small and compact, high risers of staircase, small wooden shuttered windows, and a hamam (wood fired water heater).



“Looking at the world struggling from one crisis to another, be it climate change, environmental degradation, cultural loss or low quality of living, I felt a responsibility and purpose in dedicating myself to be a part of the solution. Hence, NORTH.”

There, I remember my walks with my grandfather through the colonial buildings on the Mall Road and the Mall Road itself. On the contrary, while growing up in Shimla, Kangra, Kullu and Hamirpur, I saw all the concrete buildings around, and I used to always ask why not build like old times? It had human scale, the materials had character and emotions attached to wood and stone. I used to think of myself as a magician, imagining a bird's eye view of the mountains; I would make all the concrete buildings disappear and replace them with forests and natural wooden homes. I guess I still do that but unfortunately, I cannot make the buildings disappear.

I got into Architecture and found my zone. At NIT Hamirpur, I diversified into various design disciplines, from music to photography, mural art to cultural activities. During this time, I decided to become an entrepreneur inspired by Richard Branson and Steve Jobs. I started a club in NIT for creatives, artists to come together to do impactful projects. I almost lost my interest in mainstream architecture, when during my thesis I picked up a project of Himalayan ski village. That's when I researched Kathkuni and Himalayan architecture for the first time and reconnected with my roots.

I followed my intuition and got into CEPT for Masters, where I did my research on indigenous building practices in the western Himalayas. Since then, I never looked back and followed my gut feeling of reviving it. I found my answers for future development in that. What I imagined in my mind as an introverted kid, came out in my design practice and as the philosophy of my organisation today.

(SS): NORTH came into existence soon after your graduation. Tell us more about its genesis.

(RB): Looking at the world struggling from one crisis to another, be it climate change, environmental degradation, cultural loss or low quality of living, I felt a responsibility and purpose in dedicating myself to be a part of the solution. Hence, NORTH. I belong to Himachal Pradesh, a small state in the Western Himalayas. I started NORTH as an organisation to work towards the economic growth of our indigenous communities, while being carefully balanced with cultural preservation, environmental sustainability, and social development.

We try to bring back lessons from the past and show how to apply them in today's time. Our way of living and working is inspired

“The initial days of NORTH were the most inspiring for me, when I formulated the ideas into reality. I was soon joined by interns, we did exhibitions, mapped craftspeople, cleaned forests, did crafts workshops for travellers, and soon the word spread.”



Experience of village walk for workshop

from the Himachali way of life, which is also reflected in our work culture, architecture projects, along with the natural cabin where we host travellers. I realised the need for a regional centre in Himachal Pradesh—a space dedicated to empowering local communities, where grassroots-level research and development of contextual circular systems can be built, where we are documenting our heritage, preserving indigenous oral wisdom, facilitating collaborations between artists and craftspeople. A place that flourishes and defines our culture for the present and future generations. We are constantly sharing our practical lessons and learnings with the world and hosting travellers who learn these values and live a more self-reliant life. I believe we are working with the purest intentions to improve the lives of not only people but the entire ecosystem—our coexistence with nature and a better future for all.

SS: How difficult is it to run a practice in the Himalayas? Take us through the initial days of setting up NORTH.

RB: It may be difficult if we look at it from an outside perspective, but for me this is my purpose—to work for the Himalayas. I enjoy every challenge and with each step we are growing much stronger. I love working within my local community, to tell my people of all the assets we have got, realigning them with our values, and to give them modern day solutions built upon vernacular wisdom. This is my home ground, and nothing can be better than having a campus in the village in the mountains, surrounded by nature and centuries old culture to inspire us. That's our uniqueness and differentiator.

I started NORTH soon after my Masters. I had my research thesis as a base, and I decided to apply that by restoring an abandoned building in Himachal. I got an opportunity to do that in Naggar. So here I was, in an old British range quarter in a forest above Naggar, where I started NORTH. I restored the building with my own hands, with the help of some volunteers. I was reading, observing, documenting villages and Kathkuni houses, talking to craftspeople and I used to write a lot. I lived a self-sustaining life, growing my own vegetables, cooking my own food, developing the land, restoring the home with mud and wood. Soon, I started sharing my lessons with students through workshops. The initial days of NORTH were the most inspiring for me, when I formulated the ideas into reality. I was soon joined by interns, we did exhibitions, mapped craftspeople, cleaned forests, did crafts workshops for travellers, and soon the word spread.

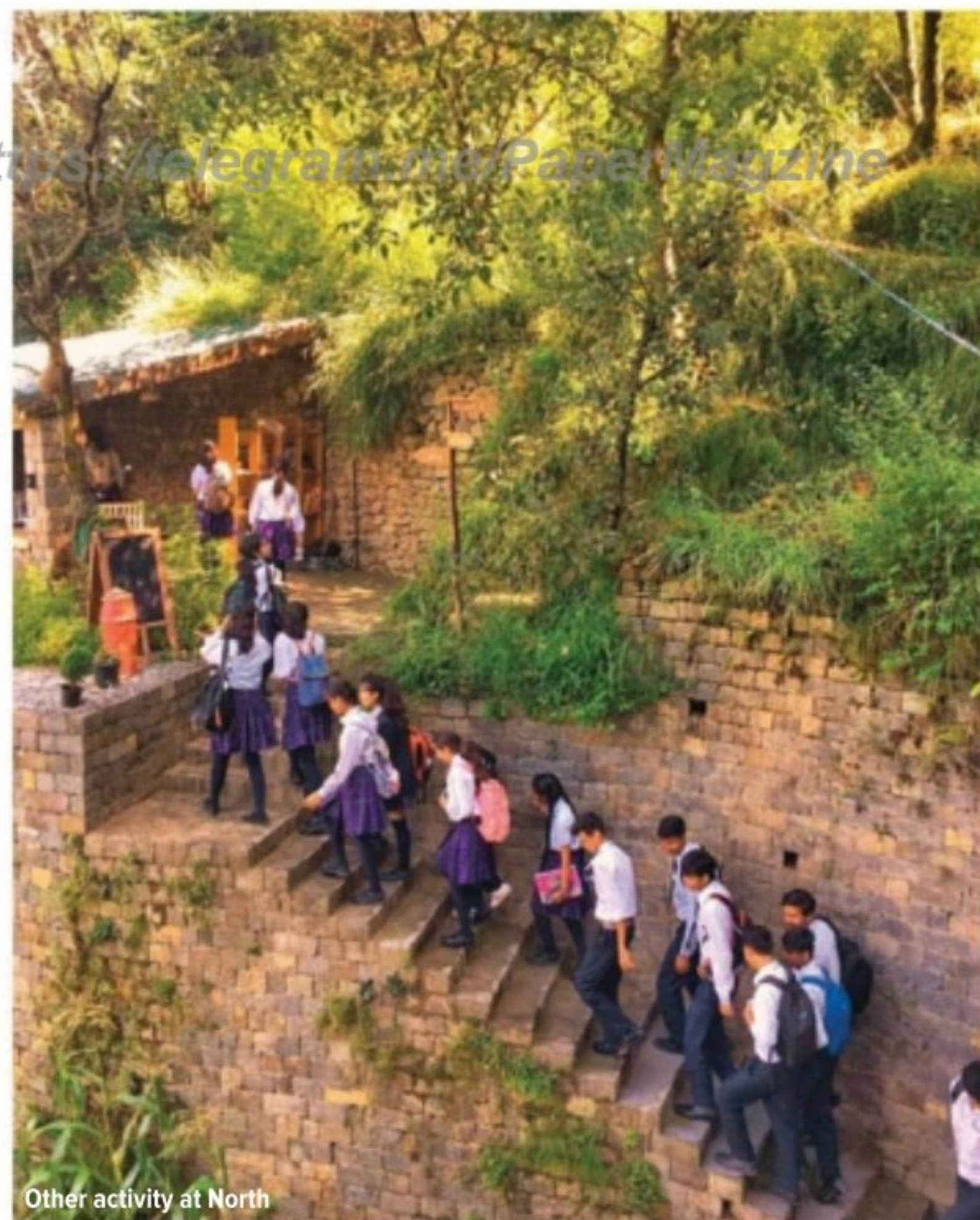
SS: NORTH is different from other architectural practices. Take us through a typical day at NORTH...

RB: We live on a land surrounded by forest on three sides, on the mountain slopes looking at the wide Beas valley below, towards the west. In our campus, the entire team lives together, by the self-reliant ways of mountain living. We have a home, a studio, a workshop space and the Dhajji cabin in our orchard, beyond which we have wild meadows towards the forest. It's a creative campus, where we live, cook, make art and architecture as we grow together.

At NORTH, our interns and team host travellers, to come and stay with us and experience this life. We get to meet like-minded people, share our work and research with them, they see our passion and experience living in the kind of architecture we are promoting. They get a taste of our culture and leave with an impression of our mission and values. Here, we start early, have responsibilities to maintain our campus, work outside for some time before we start our studio, where we design projects from furniture to interiors, from architectural scale to urban scale, from research to hands-on experimentation. We work tirelessly toward one common goal— sustainable development of the Himalayas, and holistic solutions for the same.



Rahul at Dhajji on early stage



Other activity at North

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Dhajji Deck



Guest experience
at NORTH

We also build for people with our trained teams of local craftspeople, and we host artist residency programs for contemporary artists and craftsmanship workshops for travellers. Our philosophy of work is to give our best, with passion and determination, and hence there are no working hours as such; one may go for a small hike to the forest in the day and come back and finish their deadlines as per their schedules. We live together and share all of this at our campus.

SS: You've worked on some interesting projects – ranging from restoration to new structures using indigenous techniques. Take us through some of your current projects. Which projects are looking forward to?

RB: We are working on design + build projects, which is also our unique expertise of innovated dhajji dewari and kathkuni techniques. We are also working on large scale public projects such as the Rohtang ropeway, cultural hatts, restoration of heritage buildings, urban design of traditional mountain villages, and building/restoring Himalayan temples. Our studio practice is to adapt and be context driven, so even if it is something we have never ventured into before, we gain that knowledge, research everything about it and figure our way forward with it. In fact, that's the exciting part of the process.

I am looking forward to designing and building NORTH's new campus, which is in an offbeat location nearby. It would be a totally off-grid campus, showcasing the best of indigenous wisdom of settlement patterns, techniques of building, Vastu amalgamated with innovative ideas and latest technology. It would be like a small self-sustaining village, but a larger version of our current campus. I will build it with my own hands, along with my team of craftspeople just



Diyar Cabin

“We have a home, a studio, a workshop space and the Dhajji cabin in our orchard, beyond which we have wild meadows towards the forest. It’s a creative campus, where we live, cook, make art and architecture as we grow together.”

like our communities used to do. I can’t wait to start this project, and I am also looking for like-minded people to join me on this project.

SS: Your thoughts on sustainability? What would you suggest should be our path to sustainability?

RB: I don’t like using that term because it is so saturated and has many meanings. I think our present is enough of a clue for people to realise that global warming is not a conspiracy theorist’s imagination. It is here and I don’t have all the answers, but there is no way forward in ignorance, it really isn’t bliss. We need to be true to ourselves, and ask whether we want our children to live in this world we are creating? Sustainability is not an option; it must be a fundamental value in everything we build. We can’t afford to be narrow minded and selfish; we need collective thinking for common good.

SS: Tell us more about your Kathkuni revival journey?

RB: Kathkuni’s revival journey has been one of the best experiences of my life. I would say through this, I have built my character. From understanding the fundamentals of this vernacular system, to the roles of craftspeople involved in the process, I spent years understanding

the values and lessons embedded in it. On this journey, I learnt that even more important than the techniques and joineries, is the wisdom of the material. Exploring regional species of wood, stone, experimenting with mud and other local materials, I think of myself as a craftsman, working with the materials, having the skills and knowledge from our time-tested techniques and innovating on that.

SS: What is your vision for NORTH?

RB: The vision for NORTH is to flourish our culture and our coexistence with nature, to inspire a community-driven way of living, and to be a place where we work towards a holistic future of the world. At NORTH, we have five verticals: It starts with the Architecture and Design studio, where we do research and development of the projects; the building construction company that is bridging modern technologies with vernacular wisdom; the educational company that’s dedicated to sharing this knowledge and skills; the eco-tourism company that shares these values and way of living with people/travellers; and a foundation which gives back to our community and environment. It’s like an ecosystem, a campus that supports each other. I want NORTH to be a brand that represents Himachal and become one of the leading social enterprises/organisations in today’s time.



SS: What are your thoughts on Adaptive Reuse?

RB: We have so many buildings that were made using kathkuni, dhajji dewari in Himachal, and similarly in other parts of the world, which were made using local resources and vernacular techniques. These buildings cannot be made in today's time, in the same scale and proportions. They carry the character of those times and our rich cultural heritage. They also have an emotional value that connects with the communities. Hence, it is so important to preserve them and put the buildings to adaptive reuse.

SS: What inspires you?

RB: My inspiration comes from a deep purpose to serve and value the assets we are given as our heritage and traditions. I see myself as a part of nature, and how can I forget that when I think of our collective future. My team and craftspeople inspire me as I have the responsibility to make things happen; they have trusted my dream and decided to join my mission. This sense of belonging as a community inspires me. When our elders feel proud of our work and young kids from villages look up to us, that inspires me.

SS: Who would you like to collaborate with and why?

RB: I would like to collaborate with organisations, philanthropists, and people who really want to make a positive impact on our communities and environment. UNESCO and other similar international organisations, foundations that are working towards these common goals, I would like to invite them to join us or contribute together, as we bring the most updated grassroots level research and practical inputs. I would also like to collaborate with private stakeholders and investors to invest in this future we are looking at, while we bring a strong foundation of our knowledge and experience for holistic development of our world. We can also be a part of CSR activities for many international brands to create positive impacts. I would like to collaborate with universities across the world, to help us educate upcoming professionals and to publish scientific research papers. The Himalayas have so much to offer to the world in terms of applied sustainability, empirical knowledge systems, time tested techniques and much more; I would love to bridge this gap and invite collaborators to join me on this journey.

SS: You recently collaborated with architect Hiren Patel on a temple. Could you tell us about the collaboration?

RB: We were invited to design and build a temple inspired by the ancient temples of the Himalayas. I saw it as an opportunity to show the world the exclusive Himalayan craftsmanship of woodworking. It was a journey outside Himachal, to explore new regions, new context and gain hands-on exposure. We built the temple in 90 working days, which itself sets a benchmark on how we look at building with wood. The temple design evolved from typical pagoda style of triple-layered pitched roof, the structural framework was made with wooden beam, and interlocked with joineries as learnt from Kathkuni architecture system, and roofing was done with overlapped slate stone.

It's also for the first time in the last century that a pagoda style temple was built from scratch. This not only brings pride to our team and craftspeople, but to all Himachalis to see us promoting our culture and indigenous wisdom. All of this was considered as something that belonged to the past, but our team of local craftspeople and passionate architects showed that it's not the past but the future of building with natural materials and resilient frameworks. It has a unique artistic character that can inspire mankind and give hope to how we can take the vernacular architecture systems forward.



Other social activity in artist residency with mahila mandal

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“Our philosophy of work is to give our best, with passion and determination, and hence there are no working hours as such; one may go for a small hike to the forest in the day and come back and finish their deadlines as per their schedules.”

SS: Which country/region leads the path in sustainable architecture?

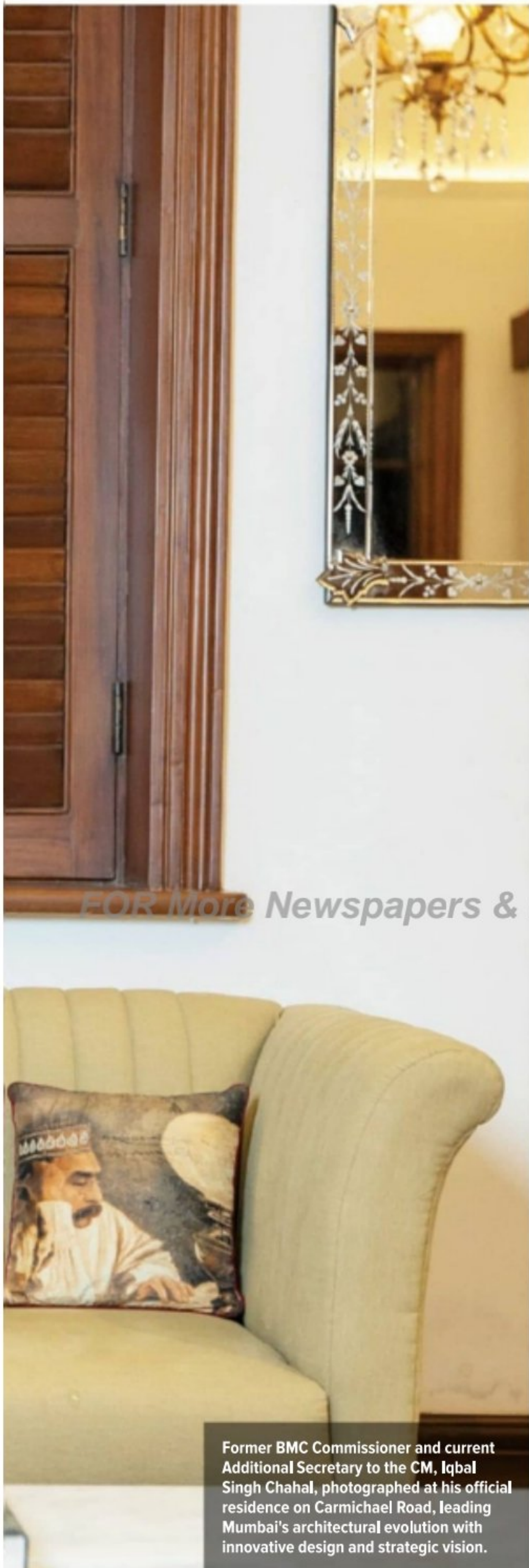
RB: Japan is one of my favourite countries, then Bhutan, followed by few in Europe as well. As I understand, the key is to have strong foundations and a sense of belonging to your region/ culture. That's where the values are, which are important to develop the right perspective towards sustainability, especially in today's time when the word has been overused and abused. We must not forget the time-tested wisdom; those are our strong foundations to learn from and then build new ideas and innovation. Our world is so unique, be it context and terrain, be it people and our ways of living; the only architecture that will be truly sustainable is the one that sustains the holistic growth of our economies balanced with cultural preservation, environmental balance and social development. I can see these values in Japan, Bhutan and that's my vision for the Himalayas too.

SS: If you had a superpower what would that be and what would you do?

RB: Everyone seems to know that climate change is happening, the air quality surrounding us is dangerous for lives in many cities, not just for us but for our future generations as well. We are on high alert when it comes to natural disasters, so much of nature and wildlife is on the verge of extinction. The world is moving from one crisis to another, yet most of us know this and still are just ignorant about it, as if it will not happen to us or when it happens, it will be dealt with then. The more people I meet, the more I realise that only a few feel this responsibility, and we really need to gather people together to work towards this. The only superpower I wish to have right now is to be able to convince such people to see the realities of our actions. To show them the urgency of this matter, for my voice to be heard and to act together. ✚



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Former BMC Commissioner and current Additional Secretary to the CM, Iqbal Singh Chahal, photographed at his official residence on Carmichael Road, leading Mumbai's architectural evolution with innovative design and strategic vision.

IQBAL SINGH CHAHAL: URBAN MASTERMIND

In an exclusive conversation, the former BMC Commissioner and esteemed bureaucrat discusses setting new benchmarks in urban development—transforming Mumbai into a model metropolis with mega initiatives—such as the Coastal Road Project, Mumbai Beautification Project, upcoming Central Park by RWITC, and ongoing “Third Mumbai”—each one a bold stroke in gifting the city its new skyline and future

Interview by: Ankita Rathod ■ Portraits: Jagdish Limbachiya

Meet Iqbal Singh Chahal, the Covid Warrior who didn't just fight a pandemic but also reimagined the urban landscape of Mumbai. As BMC Commissioner, he spearheaded the transformative Coastal Road Project, reclaiming 111 hectares and constructing India's largest sea tunnels, earning coverage from the Discovery Channel as a mega-structure. His visionary Wastewater Treatment Initiative aims to recycle 66% of Mumbai's wastewater by 2027, revitalising marine life and enhancing the city's ecological balance. Picture this: fish swimming in clean city waters, thanks to his relentless efforts.

Inspired by New York's iconic green oasis, Chahal's Central Park Project is set to give Mumbai its own verdant retreat, promising recreational space, biodiversity, and aesthetic appeal, drawing inspiration from both Central Park and London's Hyde Park. He's also a heritage hero, reviving the BMC headquarters and ancient forts, striking a perfect chord between modern marvels and historic charm. At just 22, Chahal shattered records as the youngest IAS officer and served an unprecedented four-year tenure as BMC Commissioner. His academic brilliance, boasting two doctorates, paved the way for his transformative roles in the Indian bureaucracy.

Now, as Additional Secretary to the Chief Minister of Maharashtra, Chahal's vision extends to creating a whole new urban centre between Panvel and Raigad. This 'Third Mumbai' is poised to ease the city's growing congestion and sculpt its future. His drive for transformative change continues to shape Mumbai's future, earning him widespread respect and admiration. Chahal's audacious vision and fearless execution are setting new benchmarks for urban development across India. With him at the helm, Maharashtra is undoubtedly in the best hands, and the future is not just bright—it's brilliantly blinding.

Excerpts from the interview...

Q. To begin with, you became the youngest IAS officer in India at the age of 22, which is a remarkable achievement. Tell us a little bit about your background, where you started off, and your early influences in life.

Iqbal Chahal: I was born to a father who was in the army, which meant we moved frequently. We lived in places like Patiala, Pathankot, Ahmednagar in Maharashtra, Jodhpur, Faizabad in UP, and Tezpur in Assam. I had to change schools seven times to complete my 10+2 education. My brother and I studied in Kendriya Vidyalaya Central Schools under CBSE. Despite these frequent relocations, I consistently stood first in my class from 1st to 12th grade. After completing my schooling, I pursued engineering at Thapar University in Patiala. I was fortunate to clear the IAS exam on my first attempt and joined the IAS academy in 1989. My father's dedication to his military career and the discipline it instilled in our family were significant influences on my life and career choices.

Q: How did IAS happen and how were you able to achieve it?

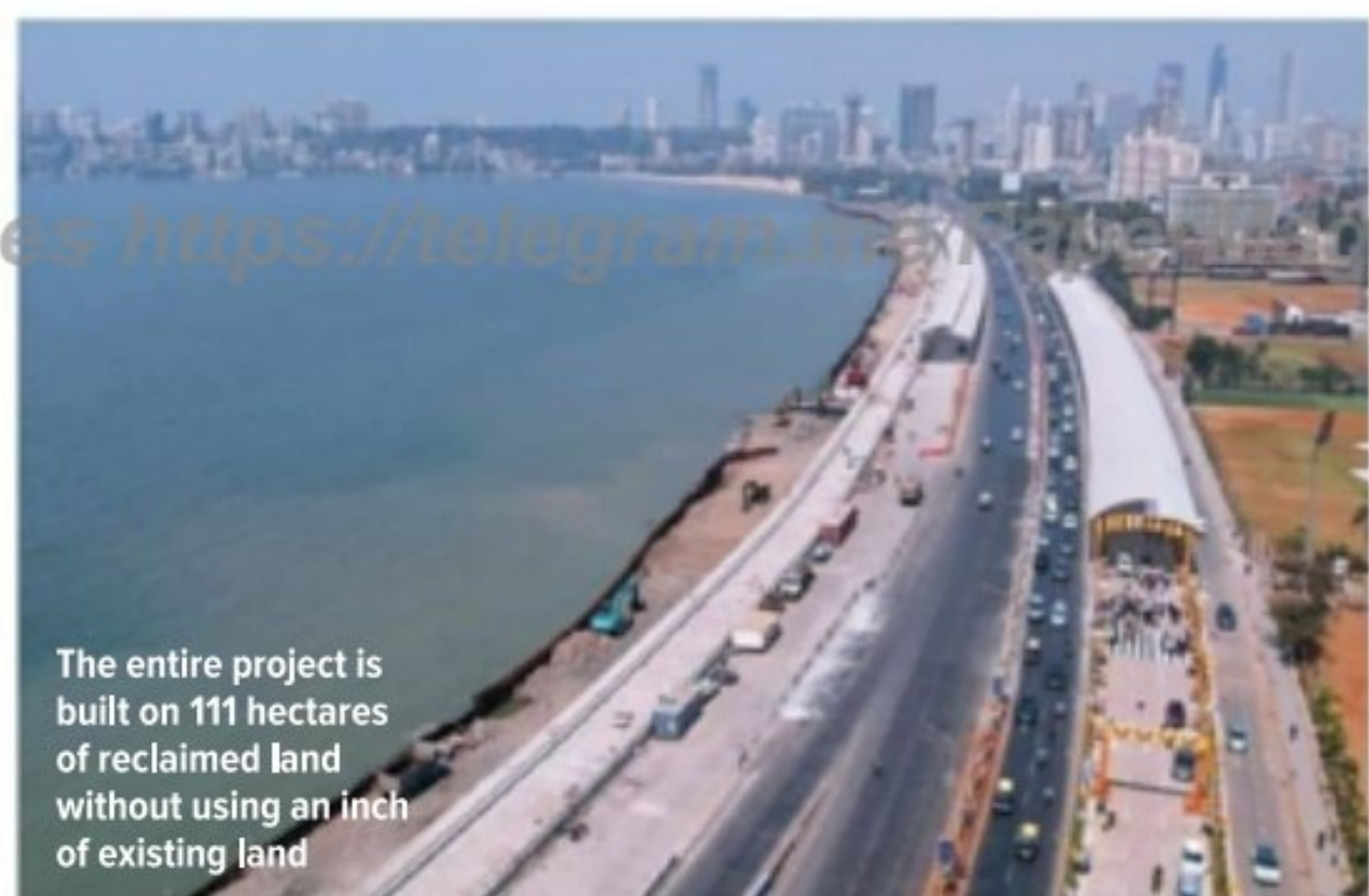
IC: To crack IAS, you must be very studious. I never ranked second from class 1 to 12; I always topped. Despite frequent relocations, I maintained academic excellence, standing third in India in the CBSE exams and first in biology with 99%. I topped my engineering college

too. After graduating at 21, I immediately took the IAS prelims in 1988. It took 16 months to clear all stages before joining the IAS academy in 1989. The day my IAS result came, one of my teachers, who was the head of the department of electronics and telecommunication, met me. He said, 'Iqbal, today your 21 years of fixed deposit, which you invested in yourself, has matured. This maturity will take you to the skies.' What he meant was that I had worked hard for 21 years of my life, and now, by getting into the IAS, the sky was the limit.

Q: How did your career in the IAS shape your approach to urban planning and development, especially in a city as dynamic as Mumbai?

IC: My career in the IAS taught me to be a generalist, learning on the job and adapting to various roles. Whether it was rural development as a district collector or urban development as BMC Commissioner, each role added to my understanding of governance and infrastructure development. Handling the COVID-19 crisis in Mumbai was a significant challenge, but it also provided an opportunity to streamline operations and make quick, impactful decisions. The experience of managing different aspects of administration, from law and order to resource management, has given me a comprehensive perspective on urban planning.

“For mega structures like the coastal road, structural engineers are the primary architects. We conducted global bids to ensure we had the best experts working on this project.”



Q: Could you explain the hierarchy in the Indian bureaucracy and how it influenced your journey to becoming the youngest BMC Commissioner?

IC: The IAS follows strict seniority, progressing batch by batch. I'm from the 1989 batch. When COVID-19 struck in March 2020, the Government of India was dissatisfied with the BMC's response and decided to replace the commissioner. Despite being number 36 in seniority, I was appointed as the BMC Commissioner, bypassing four batches, due to my track record and performance, making me the youngest to hold the position.

Q: What challenges did you face during the coastal road project, particularly concerning environmental and structural aspects?

IC: One of the major challenges was relocating coral reefs to obtain environmental clearance. This required the expertise of global specialists to ensure proper relocation and certification. Constructing the tunnels under Malabar Hill was another significant challenge due to the hard igneous rock, which necessitated the use of tunnel boring machines instead of traditional blasting methods. Additionally, we had to address the vibrations caused by tunnelling to prevent damage to buildings above. Monitoring these vibrations and ensuring structural integrity were crucial to the project's success. The involvement of local communities, such as the fishermen from Worli Koliwada, also required sensitive handling to address their concerns and secure their cooperation.

Q. During your tenure, you have spearheaded several key projects in Mumbai. Give us a deep dive into the coastal road project and the engineering feats involved?

IC: The Coastal Road Project is a mega initiative designed to enhance mobility and public transportation. The entire project is built on 111 hectares of reclaimed land without using an inch of existing land. It includes the construction of India's largest sea tunnels, with a 12.19-metre diameter. Unlike the porous rocks of the Himalayas, the igneous rock under Malabar Hill required the use of tunnel boring machines. Unlike traditional sea links, the coastal road features multiple interchanges to improve connectivity and reduce traffic congestion. For instance, at Haji Ali, there are 16 interchanges allowing for smoother traffic flow. Added to the charm is the scenic route along the coastline which will transform commuting for Mumbaikars along with easing traffic and experiencing a beautiful drive.

Q: What role did architects and structural engineers play in this project, and how were they chosen?

IC: For mega structures like the coastal road, structural engineers are the primary architects. They ensure the stability and safety of the construction. We collaborated with top firms from Hong Kong, Singapore, and the USA for aesthetic elements and structural design. The coastal garden, which is part of the project, involved AECOM, a renowned American company, to develop a world-class theme park on the reclaimed land. We conducted global bids to ensure we had the best experts working on this project. These international collaborations brought advanced engineering techniques and aesthetic considerations to create a functional yet visually appealing infrastructure.

Q. Your involvement with the Royal Western India Turf Club (RWITC) is another notable aspect of your career. Could you elaborate on this experience?

IC: The RWITC is one of the oldest and most prestigious turf clubs in

RACE COURSE PLAN LAND DIVISION LAYOUT



India. The lease had expired in 2013, and there was a deadlock with the government and BMC regarding new laws and lease renewal. After multiple meetings with the management committee, I proposed creating a 300-acre Central Park on the RWITC premises. I explained the vision for the park and the benefits it would bring to Mumbai. An online vote followed, and 77% of the members supported the proposal, allowing us to move forward without any legal challenges. This project aims to provide a green oasis in the heart of Mumbai, similar to Central Park in New York or Hyde Park in London, enhancing the city's livability.

Q: How did the idea of a Central Park in Mumbai come about, and what are its expected features?

IC: The idea of a Central Park in Mumbai was inspired by my visits to Central Park in New York and Hyde Park in London. I always wondered why such a facility was not available in our country. This park will be located on the reclaimed land from the coastal road project. It will be a massive green space with diverse recreational facilities, including jogging tracks, cycling paths, playgrounds, and picnic areas. The park will also feature cultural spaces for performances and art installations. We have allocated 700 crore rupees for developing this park, with renowned companies like AACOM involved in its design. This project aims to provide Mumbaikars with much-needed open space and a green oasis amidst the urban hustle.

Q: Considering the complexity of maintaining a large-scale park, do you believe the citizens and institutions of this city are equipped to handle such a responsibility?

IC: Absolutely, our Marine Drive is far cleaner than Oxford Street today. So, the world is changing, and you just have to create a product. For example, the day Central Park was announced, I received messages from prominent business leaders expressing their willingness to participate in its development. Many industrial houses are keen to get involved. They are ready to invest a thousand crore rupees to build and maintain this garden. So, you have to create an ecosystem, and then people take over.



Mumbai beautification involved 1,250 initiatives enhancing flyovers, city lights, traffic islands, and heritage sites

Q: Could you tell us about the Mumbai beautification project and its impact on the city's landscape?

IC: The Mumbai beautification project was initiated under the leadership of our Chief Minister, Mr. Eknath Shinde. This project involved almost 1,250 initiatives, including the beautification of hundreds of flyovers, lighting up the city, upgrading traffic islands, and restoring heritage properties like Worli Fort and Bandra Fort. We also focused on improving public spaces like gardens, making them safer and more enjoyable for citizens. The project included installing LED lights throughout the city, ensuring continuous illumination from Mantralaya to Dahisar. These efforts have significantly improved Mumbai's aesthetics and livability. The initiative reflects our commitment to transforming Mumbai into a world-class city with well-maintained public spaces and vibrant cultural sites.

Q: How have your projects in Mumbai addressed sustainability concerns, particularly in terms of sewage management?

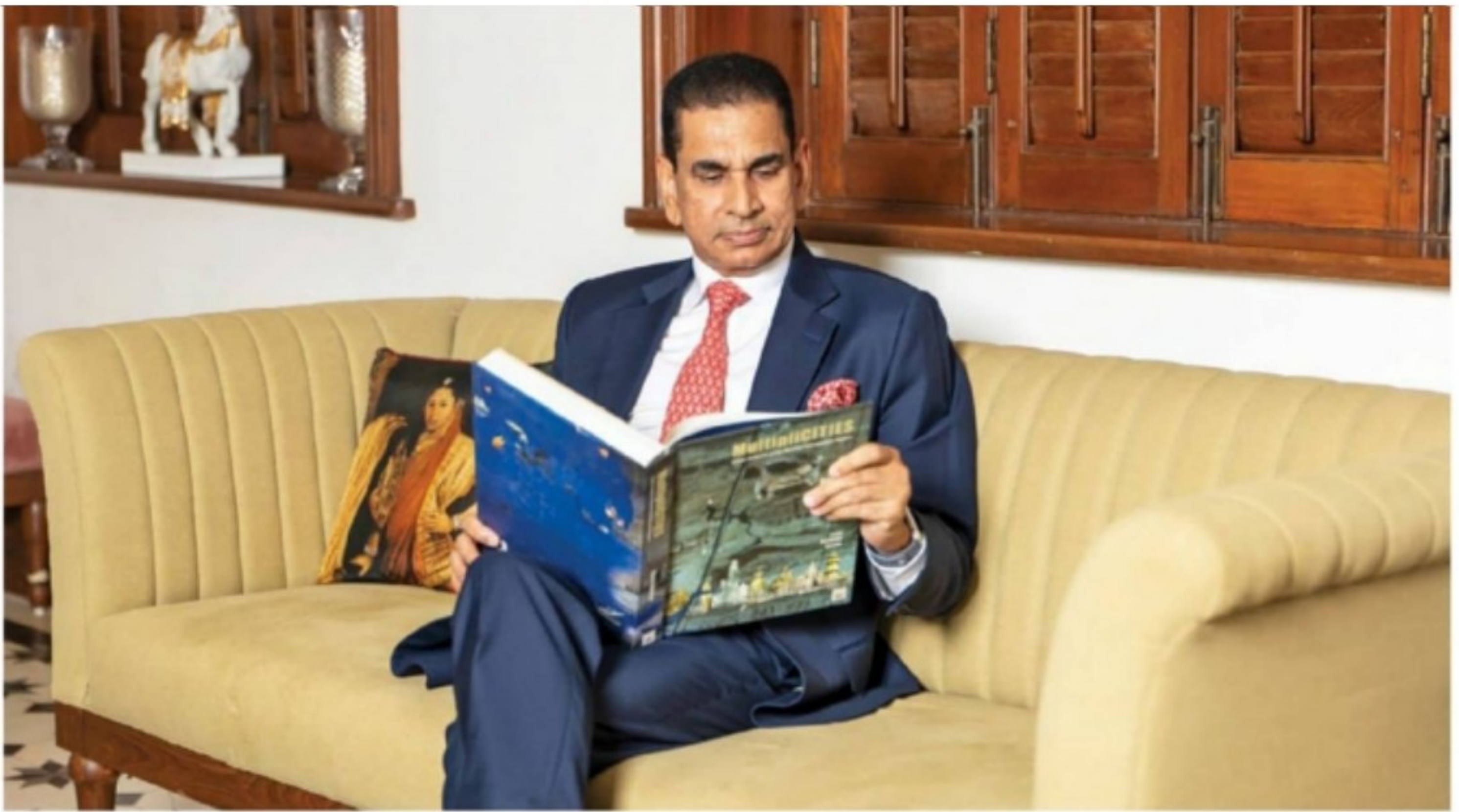
IC: Sustainability is a cornerstone of our projects. For instance, we are constructing seven wastewater treatment plants to recycle Mumbai's sewage water, preventing marine pollution and providing potable water. By 2027, 66% of this treated water will be converted into drinking water. This initiative addresses long-term environmental concerns and ensures a sustainable water supply for the city. Additionally, introducing 10,000 electric buses will reduce carbon emissions, and the desalination plant will convert seawater into drinking water, eliminating the need for further deforestation to build dams. These projects collectively contribute to the long-term sustainability of Mumbai's urban ecosystem, ensuring development does not come at the expense of the environment.

Q: Can you share insights into the restoration projects you have led, particularly the BMC headquarters and other heritage structures?

IC: Restoring the BMC headquarters was a significant project, costing 270 crore rupees. The restoration work, led by heritage architect Abha Narain Lambah, has transformed the building into a modern marvel while preserving its historical essence. We have also undertaken the restoration of forts like Sewri, Worli, Bandra, and Mahim, as well as upgrading the Crawford Market, ensuring these heritage sites remain integral to Mumbai's cultural landscape. These projects involved meticulous planning and collaboration with heritage experts to maintain the architectural integrity while updating the facilities to modern standards. The successful restoration of these structures reflects our commitment to preserving Mumbai's rich history amidst its rapid modernisation.

Q: How do you manage the balance between urbanisation and heritage preservation?

IC: Balancing urbanisation with heritage preservation is crucial. Mumbai has a heritage committee that acts as a watchdog to ensure no heritage structure is touched without proper clearance. We have created many heritage precincts, like the Marine Drive Heritage Precinct, to protect the architectural integrity of historical buildings. These efforts ensure that while Mumbai evolves as a modern city, it retains its cultural and historical essence. The heritage committee comprises experts from the private sector who ensure that any renovation or development work does not compromise the city's historical landmarks. This approach allows us to celebrate Mumbai's rich history while paving the way for future growth."



“Mumbai has the potential to become a global financial hub. The government is showing keen interest in investing in projects towards improved infrastructure to attract international investors. The vision is to make Mumbai a world-class city with top-tier facilities.”

Q: How do you see Mumbai’s status as a global financial hub and its cleanliness initiatives?

IC: Mumbai has the potential to become a global financial hub, competing with cities like Singapore, Dubai, and Hong Kong. To achieve this, we need to upgrade our infrastructure and beautify the city. The government is showing keen interest in investing in projects towards improved infrastructure to attract international investors. The vision is to make Mumbai a world-class city with top-tier facilities.

South Mumbai today is cleaner than many global cities like New York and London. Cleanliness initiatives have included removing garbage and unauthorised settlements, upgrading gardens, and maintaining traffic islands. For example, a family living under the Kemp’s Corner flyover was resettled with over a crore rupees to keep the area clean. The LED lighting project ensured no missing poles from Mantralaya to Dahisar. These efforts have significantly improved the city’s cleanliness and safety, making Mumbai a model for other urban centres.

Q: Looking beyond India, are there any cities or urban development projects abroad that particularly inspire you?

IC: Dubai is an exemplary model of urban development. Despite being a desert with no natural resources like oil, Dubai has transformed into a global hub through visionary leadership and resource mobilisation. They achieved this by creating a business-friendly environment with no income tax, attracting companies and investments from around the world. The success of Dubai highlights the importance of strategic planning and innovative solutions in urban development. Dubai’s ability to build a thriving metropolis from scratch, focusing on tourism, business, and technology, serves as an inspiration for cities worldwide.

Q: During your tenure as BMC Commissioner, what was one of

the most impactful moments or projects you managed?

IC: One of the most impactful moments was during the COVID-19 crisis, specifically the night of 17 April 2021. Mumbai was facing a severe oxygen shortage, with 168 patients in six hospitals at risk of dying within hours. We mobilised 200 ambulances and transferred all 168 patients to our Jumbo centres with larger oxygen reserves. This operation was unprecedented and saved many lives. The media praised our efforts, and even Gurdas Maan, a legendary singer from Punjab, told me to narrate this story to my grandchildren. This experience underscored the importance of quick decision-making and effective crisis management in saving lives.

Q: What legacy do you hope to leave behind, and what are the most pressing challenges for Mumbai’s future development?

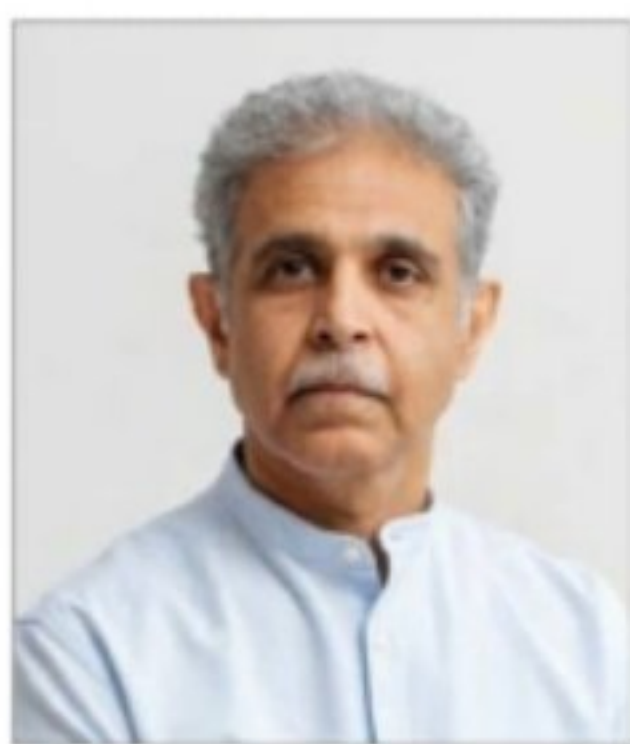
IC: The biggest challenge is balancing rapid urbanisation with heritage preservation and sustainability. Transformative projects during my tenure aimed to integrate modern infrastructure with sustainable practices. Ensuring Mumbai evolves while maintaining its cultural heritage and addressing environmental concerns is crucial for its future development.

Q: What’s next on your agenda in your new role as Additional Secretary to the CM of Maharashtra?

IC: In my current role, I am focused on implementing the government’s vision, including the development of a third Mumbai between Panvel and Raigad. This ambitious project will require meticulous planning and execution, aiming to create a new city that complements Mumbai’s growth while addressing the needs of future generations. By developing this new urban centre, we aim to alleviate the pressure on Mumbai’s infrastructure and provide a sustainable, well-planned environment for future residents. +

SUSTAINABLE MASTER PLANNING AND WAYS TO PRIORITISE WATER

Architect Sanjay Bharadwaj highlights the need to re-evaluate planning and building technologies that planners and designers use to ensure a sustainable masterplan for urban India



SANJAY BHARDWAJ
Partner, team3

Sanjay Bharadwaj is a Partner at team3, an award-winning, multi-disciplinary architectural practice that aspires to create human-centric and contextual architectural expressions. The work of the practice draws on contemporary influences while responding to local climatic, historical and social settings. With over 30 years of prior experience in the field, Sanjay brings an expertise in delivering complex projects at the scale of urban planning, mixed-use developments, and housing. His forte lies in balancing sustainability and financial viability to create context-responsive designs.

India has witnessed some of the hottest pre-monsoon months since the beginning of the last century. Recorded land surface temperatures cross 50 degrees regularly, the latest being when the national capital hit 52.3 degrees Celsius last week. Fluctuations in rainfall have led to droughts, water scarcity and floods – with many areas being flood-affected, as seen in Manipur and water shortage affecting urban cores of Bengaluru, Chennai etc. But, unfortunately, we are not discussing these crises with as much attention as they merit.

Over the past few years, it has become quite clear that sustainability in the built environment has to go beyond the formulaic approaches of green building certification programs, and instead needs to tackle water resource issues along with seriously reducing cooling and heating demands. This requires carefully re-evaluating planning and building technologies that planners and designers use.

NEED FOR DATA AND ANALYSIS

A significant challenge in master planning in India stems from insufficient data, a lack of technical expertise, and a generally non-comprehensive planning process. In the absence of 2021 census data, it is estimated that India today has over 10,000 towns and cities, most of which lack efficient master planning. Although progress has been made with GIS-based master plans, these documents often lack pertinent analyses and recommendations for water management. Typically, mapping and identifying catchment areas, channels, urban water bodies, rivers, and floodplains, should inform land-use recommendations and

delineate conservation zones within a region.

Unfortunately, this fundamental exercise is often neglected, leading to water shortages, flooding, and pollution of water bodies. While the Town and Country Planning Organisation (TCPO) has developed river-centric urban planning guidelines, further work is needed at specific sites to address regional and local issues. This necessitates a legislative rethinking of the master planning process. A comprehensive state-level legislation is necessary to incorporate these elements into our master-planning framework. States like Bihar, Kerala, Maharashtra, and Tamil Nadu have begun to address this issue hierarchically and comprehensively, but such efforts need to be replicated nationwide. Hence, for water resources to be effectively conserved





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At Dream City Nxt, a housing development at Amritsar, the design focuses on enhancing a holistic and healthy lifestyle. The township's layout prioritises small pockets of green adjoining each home that provide residents with spill-out spaces while also creating a lush and vibrant streetscape.

and managed, they must be incorporated into the master planning process at various administrative levels.

LOCALISING WATER MANAGEMENT THROUGH AREA-BASED MASTERPLANNING

Projecting the broad recommendations of a city-level master plan into smaller, manageable, and measurable components will facilitate implementation. If regional or metropolitan master plans successfully identify underground aquifers, urban water bodies, and river systems, their management can be decentralised into smaller area-based master plan projects. Local issues, such as stakeholder identification and interest group management, can be more effectively addressed at these smaller scales. It is particularly effective

for wastewater treatment and reuse, as well as rainwater recharge and harvesting, allowing local and private groups to participate actively.

This approach was incorporated in our township design for Ambuja Utsodhaara Teesta in Siliguri, in northern West Bengal. The master plan is derived from the location of the river and its natural water flow along the site with recreational areas planned around the promenade. The design achieves a harmonious blend of built and open areas, offering numerous opportunities for people of all ages to engage in exercise and enjoy nature through thoughtfully crafted open spaces. Heavy rains storm the city for a long rainy season of six months; therefore, green pockets are distributed across the site to retain maximum rainwater and yet avoid water-logging.



The masterplan for the upcoming Utsodhaara project in Siliguri harmoniously integrates residential clusters, urban infrastructure, schools and retail establishments with a public plaza that reinstates the riverfront as a public centre in the city.

Water bodies and rivers have historically played a vital role in our settlements. Traditionally, local communities knew where to construct bunds, embankments, ghats (series of steps leading down to a body of water or wharf), and how to store and channel water.

Planned as per the natural slope of the site, these green pockets are depressed and have recharge wells in them. Following the water's existing drainage channels, the excess rainwater is designed to flow toward the natural stream to the south of the plot. With a sensitive approach, the planning ensures that construction development does not disturb the present water ecology.

DESIGN FOR WATER RESOURCE OPTIMISATION

For the design of AIPL Dream City Nxt, a township development in Amritsar, water resource optimisation emerged as a key consideration. An in-depth examination of the local water channels assessed the site's feasibility for development, which was further informed by a review of regional infrastructure and agricultural practices to shape the site's programming. We identified local rural drinking water sources, so that any new developments would not pollute them. Wastewater treatment plants were sited to avoid any accidental contamination of local water sources. Overflow channels based on the local topography were also identified and necessary assistance from the local government was sought to be able to connect to this.

Within the site, the intensity of building was determined by a fine grain analysis of the soil and water conditions. It was established through soil resistivity analyses that the

optimum means of water recharge would be through horizontal shallow trenches that allow slow and filtered percolation to the underground aquifers. Careful modulation of the topography resulted in an intricate cluster design which combined social spaces and circulation – but the surface area given to each use was determined by percolation potential and maximising local water conservation.

ENGAGING COMMUNITIES IN SUSTAINABLE WATER PLANNING

Water bodies and rivers have historically played a vital role in our settlements. Traditionally, local communities knew where to construct bunds, embankments, ghats (series of steps leading down to a body of water or wharf), and how to store and channel water. Recognising, documenting, and conserving this critical aspect will maintain ongoing engagement with these resources, thereby facilitating water conservation efforts. Involving local communities in our planning efforts is crucial for a project's success. When all stakeholders are actively engaged in decision-making processes, they are more likely to understand and appreciate the significance of the initiatives being undertaken. This collaborative approach not only enhances the effectiveness of water conservation and sustainable master-planning strategies but also promotes a shared vision for a healthier, more resilient and sustainable future. +

CAN URBAN DEVELOPMENT BE ACHIEVED WITHOUT COMPROMISING THE ENVIRONMENT?

Architect Ravi Sarangan advocates the philosophy of building less for more, emphasis on the importance of vernacular architecture and mixed-use developments



RAVI SARANGAN
Co-founder & Director,
Edifice Consultants

Edifice Consultants Pvt. Ltd. is one of India's premier design consultancies and impactful practices headquartered in Mumbai. Founded in 1989 by Ravi Sarangan and Sanjay Srinivasan, Edifice holds over 34 years of experience and has done more than 1200 projects.

India grapples with surging housing and infrastructure needs – all while striving to balance growth with minimal environmental impact from construction. The concept of building 'less for more' has gained significant importance in recent times due to the alarming effects of climate change and depleting natural resources. Understanding the causes and effects of urban sprawl and its impact on urban redevelopment requires a multidimensional perspective. In addition, policy options must be discussed to steer urban development towards more sustainable pathways.

Reducing Demand and Repurposing Spaces

In the context of sustainable urban development in India, 'building less for more' can prove to be beneficial as it prioritizes compact, efficient, and multi-functional design to optimize space and resource utilization, thereby reducing energy and materials required for construction, minimizing environmental impact, and enhancing the efficiency of transportation and infrastructure. To maintain a progressive outlook on evolving paradigms of enhancing space quality, architects must continuously learn and adapt to new ideas and technologies while repurposing existing structures.

A conscious and compassionate design approach

'Building less for more' emphasizes the need for repurposing spaces and reducing the demand for building new structures. This approach aims to promote sustainable urban development by utilizing the available resources efficiently, reducing the carbon footprint, and creating a healthier and more livable environment for the present and future generations.

Urban development is fraught with numerous challenges, such as greenhouse gas emissions,

air pollution, road congestion, and a need for more affordable housing. In addition, developing areas near newly planned transit lines results in price hikes in the associated real estate. Urban redevelopment can be a difficult transition for the city's original inhabitants as it requires adaptation to long-term changes. Therefore, preventing inconvenience and finding sustainable ways to allow organizational planning that does not sever neighborhoods is a crucial aspect of urban redevelopment. Architects, designers, and industry leaders must adopt a forward-looking approach to designing and developing spaces that serve their purpose while minimizing environmental impact.

The Principle of New Urbanism: Smart Growth/ Mixed-use Development

Smart Growth or Mixed-use Development is the fundamental principle that helps mitigate the issue of urban sprawl. Smart growth is an overall approach of development and conservation strategies that help protect our health and natural environment and make our communities more viable and resilient to climate change. Such advanced developments are encouraged to prevent rural areas from becoming more populated due to constant urban expansion. Moving towards sustainable cities provides a new perspective on urban sprawl and its causes and consequences.

The next decade bears the potential to define the growth of Indian infrastructure. However, development confines its own pros and cons. The growth of G.D.P. is accompanied by several positive social impacts, including improved access to food, education, employment opportunities as well as investments in real estate. On the contrary, we must acknowledge the cons of such policies, resulting in poverty alleviation and disposable incomes causing waste.



Atal Akshaya Urja Bhawan, Headquarters of the Ministry of New and Renewable Energy (MNRE) in New Delhi, designed by Edifice Consultants is a new paradigm for sustainable infrastructure development in India

Photo Credit: © Purnesh Dev Nikhanj

Over the course of three decades, we have analyzed our projects at Edifice to understand and be critical/ensure ourselves of the best possible deliverables. For a decade, we have designed optimal spaces, gone overboard in the next decade, and relooked at the aspects: Environment, energy, and water. The analytical data revealed that utilities and spaces were being used at only 60% capacity, which led us to relook at the cost of life cycles of the past three decades. After careful analysis, the conclusion made us rethink our design approach to design for need rather than excessive build.

Design strategies to emerge from Urban Sprawl

The development of vertical living spaces must be approached with deliberate inclusivity and sustainable strategies. Regrettably, most real estate developers must be aware of the adverse consequences of poorly designed high-rise buildings. To address this issue, India, the most populous country in the world, could greatly benefit from adopting Ebenezer Howard's 'Garden City' theory, which proposes limiting the size of cities and constructing satellite towns to prevent urban sprawl.

High-rise development leads to a concentration of growth that needs to be more inclusive. To maintain balance and significantly improve the country's infrastructure development, we must prioritize sustainable, low-rise radial development that is inclusive. Furthermore, such design considerations must include provisions for the growth opportunities of future generations. Thus, promoting low-rise and radial development can prove to be a practical solution to reducing carbon emissions in the future.

Challenges faced to make sustainable buildings more widespread in India

In the 70s and 80s, reducing, reusing, and recycling

played a significant role in India's supply and demand chain. Due to short supply, luxury was considered an ornamental addition to design rather than a priority. In current times, it is essential to balance the need for both - growth and demand. In a rapidly growing country such as India, where demand is skyrocketing, easy access to affordable housing development schemes can tackle the need for building more/spatial requirements. The reliance on F.S.I. is causing harm to both the environment and the quality of life.

Ideally, it would be beneficial to construct spaces with similar codes and specifications, with open spaces democratically determined by population density. Such spaces should be consistent across affordable, M.I.G., and H.I.G. developments. Any luxurious elements should be limited to finishes and other features. High penalties should be imposed on imported materials to reduce environmental harm, given their contribution to fossil fuel consumption during transportation and the potential for ecological damage.

Relooking how vernacular architecture influences spatial consumption/mixed-use designs in a contemporary context

Incorporating the influences of vernacular architecture and spatial consumption, as well as mixed-use designs, is advantageous in the contemporary context. As a well-known adage dictates, "one can never forget history, lest they be condemned to repeat it." Hence, vernacular and conventional wisdom serve as valuable resources. By returning to our roots, we can distinctly identify the fundamental principles of architecture that they have developed over time - encompassing light, ventilation, orientation of the built mass, and materiality - all of which remain relevant today.

Mixed-use buildings and communities can accommodate multiple services, and reduce the need

Smart growth is an overall approach of development and conservation strategies that help protect our health and natural environment and make our communities more viable and resilient to climate change.

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By returning to our roots, we can distinctly identify the fundamental principles of architecture that they have developed over time - encompassing light, ventilation, orientation of the built mass, and materiality - all of which remain relevant today.

for separate structures for each use. This, in turn, can help to conserve resources, reduce the carbon footprint of construction and transportation, and promote more sustainable and livable communities. To limit the carbon footprint, adaptive reuse through repurposing an already-built space is crucial. Additionally, developing multi-purpose spaces during the design stage can ensure 100% utilization and result in building less for more.

1. What are the factors taken into consideration to repurpose a structure?

The primary concern is to reduce the carbon footprint, which means, ideally, avoiding new construction, especially in areas with existing buildings. The preferred approach is adaptive reuse—rethinking and repurposing existing structures. In most cases, this is feasible, as long as the buildings are structurally sound, have natural light and ventilation, and adhere to the latest National Building Code standards for habitable spaces in terms of dimensions, heights, and, if needed, staircases.

2. Explain how satellite towns can prevent urban sprawl.

Decongestion emerges as the prevailing course of action, aligning with my steadfast belief in Ebenezer Howard's visionary concept of the

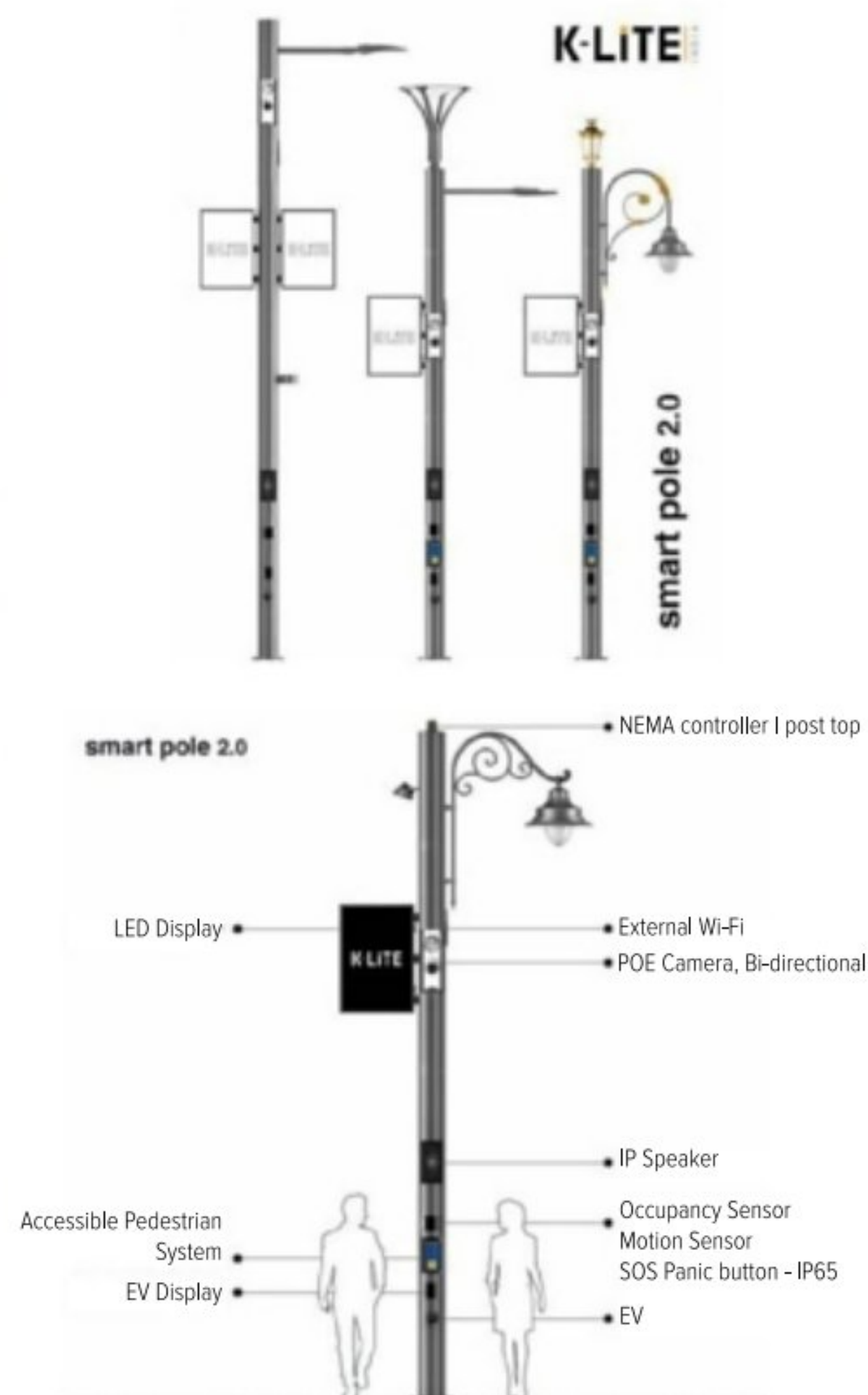
Garden City from 1898. In this innovative urban design, a municipality was meticulously crafted to accommodate 32,000 inhabitants, and once this population threshold was attained, the blueprint called for the establishment of yet another Garden City. A satellite town, as envisioned by this concept, encapsulates this ethos. Liveability is the need of the hour. Satellite Towns underscore the contemporary imperative for enhanced liveability, epitomizing a paradigm where one's existence harmoniously intertwines living, working, and leisure activities, all conveniently encompassed within a compact 5-kilometer radius.

3. What are the factors that define an ideal well-designed high-rise building?

A community-centric design approach in residential planning is essential when designing a holistic and well-designed high-rise building. In our mission of building for India by building green, our approach towards strategic master planning in residential spaces requires us to cater to the needs of each individual/user, while also embracing and promoting sustainable living and energy-conscious community living.

For instance, our recently completed residential project— 'Serein Housing, Thane' showcases 658 apartments encased within three towers in a 7.5-acre parcel of land – with a mix of 1-, 2- and 3-bedroom residences and duplexes accompanied by amenities such as sports facilities, children's play area, a swimming pool, a community hall and an open-air theater, distributed equitably among the dwellers.

Another example is our upcoming project located in the heart of Matunga, Mumbai — 'Godrej Five Gardens,' which boasts 27,000 sq. ft of open space, comprising 45% of the total area. Urban Greens are linked beyond gated enclaves through radial planning, characterizing a pedestrian zone of 15,000 sq. ft. Incorporating rich landscaping and radial planning elements found in garden cities, the masterplan offers multiple activity nodes for various purposes. Similarly, located in the middle of metropolitan Mumbai, another one of our ongoing projects 'Godrej Urban Park' comes with its own 'Pure-Air Zone' providing up-to 98.5-99% pure air for the intended area and is an attempt to promote community living enclosed in the natural landscape. The design and construction will be established in phases, consisting of an all-around Residential Complex with various amenities, facilities, shopping plazas, and expansive landscape avenues for Smart Homes. Additionally, interactive spaces are designed to preserve the existing greens to the north edge of the site with rooftop hill views, ensuring 60% open spaces with a dedicated 400 sq.m. dense plantation area, and a 5-meter vertical garden wall. +



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TOWARDS A BRIGHT FUTURE

K-Lite's smart city poles are an ideal solution for city planners to address challenges of digital connectivity, environmental sustainability and energy efficiency

In the fast-paced urban life, the concept of smart cities has become an innovative approach to addressing the interconnected challenges of digital connectivity, environmental sustainability and energy efficiency. With over half of the global population dwelling in urban centers, the evolution towards smarter, more efficient urban environments has become imperative. At the heart of this evolution lies the convergence of Internet of Things (IoT) technology and urban infrastructure. Imagine a cityscape where lampposts are not merely sources of illumination, but hubs of connectivity and intelligence. This vision comes to fruition with the advent of smart city poles – a transformative solution by K-Lite that integrates sensor

networks and wireless communication into the fabric of urban lighting infrastructure. Smart city poles embody versatility and integration, serving as multifunctional service platforms tailored to the diverse needs of modern urban life. From traffic management to environmental monitoring, from public safety to electric vehicle charging, these poles stand at the forefront of urban innovation. K-Lite's smart city poles, or as they're aptly named, Intelligent Poles are designed with modularity in mind. These poles boast a range of customisable features to adapt to the evolving needs of smart cities. The hallmark of K-Lite's Intelligent Pole lies in its flexibility. Comprising a main pole with the capacity to accommodate

one to five modular units, these poles offer a myriad of configurations to suit specific requirements. Whether it's integrating additional sensors, expanding connectivity options, or enhancing functionality, the modular design of these poles ensures adaptability and scalability. From a single cohesive unit to a dynamic combination of modules, the smart city pole is a versatile solution for urban planners and city administrators alike. With K-Lite's Intelligent Poles, the blueprint for smarter, more connected cities takes shape, promising a future where urban landscapes not only illuminate streets but also illuminate possibilities.

Website: www.klite.in



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WARDROBE STYLIST: ISHA BHANSALI

COVER FEATURE

KUNAL MANIAR:

The Plant Whisperer

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In a candid chat, the landscape architect elaborates on his journey through design, his thoughts on sustainability and his experiments with product designing

INTERVIEW: **SEEMA SREEDHARAN**

PROJECT PHOTOGRAPHS: **GAJENDRA MANDREKAR**; PORTRAITS: **MEETESH TANEJA**

L

andscape architect Kunal Maniar is a perfectionist, a purist in the true sense. There's something infectious about his confidence, attention to detail, and sensitivity towards ecology. He describes his design philosophy as 'studied negligence', where nature is handed back the power to assert its own design statement freely.

We meet at one of his surreal projects—where the built and the unbuilt seem entangled in a symbiotic relationship. One encounters seemingly uncultivated plantations of bougainvillea, frangipani and palm trees...nature runs wild here.

The landscape meanders in and out of the house: It's a testimony to the spectacular collaboration between the architect and landscape architect. "I was thrilled when Shobhan Kothari from ADND approached me for this project. We were working together on a project after a gap of 8 years. That made it very special," Kunal says.

Whilst an architect envisions fixed forms, a landscape architect must work with constantly changing elements. "The key is to embrace transience, and work in tandem with nature," says Kunal. He strongly believes that creativity cannot be compartmentalized, and his bespoke landscapes take inspiration from varied disciplines like fine art and craft, product design and even fashion.

His oeuvre is replete with prestigious clients, most of whom he prefers to keep classified. Kunal has worked on greenspaces for Mukesh and Nita Ambani, Shahrukh and Gauri Khan, Ranbir Kapoor and Alia Bhatt, Mahendra Singh and Sakshi Dhoni. We sit down with this master craftsman to understand what inspires him, and what nudged him towards this incredible journey! Here's an excerpt from the interview:

THE BEGINNING: FOLLOWING THE GREEN ROUTE

Seema Sreedharan (SS): Landscape Architecture is an extremely niche segment within the design stream. What veered you towards it?

Kunal Maniar (KM): I grew up in Mumbai with a view of the

Hanging Gardens atop Malabar Hill. Living in this city but still being surrounded by lush green trees felt like a privilege. It made me realise the importance of integrating the natural environment back into the urban fabric. This eventually translated into an interest in placemaking, and that's how I got drawn towards landscape architecture.

SS: Were you always inclined towards design? Or was there a turning point in your life that encouraged you to pursue design?

KM: I think every human is inherently creative, but we're all walking different paths in life and some just choose to explore this creative dimension within themselves. You know, oddly enough, I was never even really into sketching, so I'm just grateful to have fallen into this world of design and to be able to create something new with every project. I pursued horticulture after school and this quite organically led me to pursue a postgraduate degree in Landscape Architecture at the University of Melbourne.

SS: Take us through the early span of your career. As a landscape architect was it easy to set up your own practice?

KM: I started my practice in 2002. This was a time when landscape architecture was given little recognition in India, even within the design fraternity. Landscape architects were usually relegated to horticulturists who merely added pretty flowers and lush planting to spaces, instead of being considered as planners of the built environment. A key challenge was to change this misconception, and make interior designers and architects realise that landscape architecture is a specialised, holistic field in its own right.


My first few Alibaug projects were my initial opportunities to get my hands dirty and see my ideas come to life in the form of living art. My core ethos emerged during this phase; I began my journey of experimenting with different making processes and materiality, and became more confident about my design language. Of course, none of this would have been possible without team members like Pandurang Patil, Hamza Barafwala, and Tejas Kathe.

“

To be very honest I think the word 'sustainability' has just become a marketing buzzword. I think we should be focusing on fostering ecological symbiosis — and sustainability will be an organic derivative of that effort.”

—KUNAL MANIAR, Founding Partner and Principal Architect, Kunal Maniar & Associates

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Permeable hardscape optimises
percolation and water conservation
amidst a house designed by architect
Shobhan Kothari from ADND



Flowers colonise a pergola, mist floats in the distance lending a dreamlike quality to the garden.



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The softscape meanders in and out of the built form



A forest-like poolscape created with Frangipani, ferns, gravel and boulders

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I never interned or worked for anyone after graduating. However, as most landscape projects involve collaboration, I had the opportunity to work alongside many celebrated architects at a young age. I would definitely credit architects like Noshir Talati and Nozer Panthaky, Nozer Wadia, and Pinakin Patel for many crucial learnings during the early stages of my career.

SS: You have worked on some amazing projects. Take us through some of your most memorable projects.

KM: I still clearly recall working on Praful Patel's private terrace garden at Ceejay House in Worli. We transplanted 40-year-old trees that weighed a ton each, which was a crazy endeavour but we pulled it off. I think of it as a breakthrough, only because it gave our team confidence to think big and not compromise on a vision just because it seems intimidating. An exciting upcoming project is a massive aviary in Delhi, which has been a super interesting experience so far because the primary clients are birds and not humans.

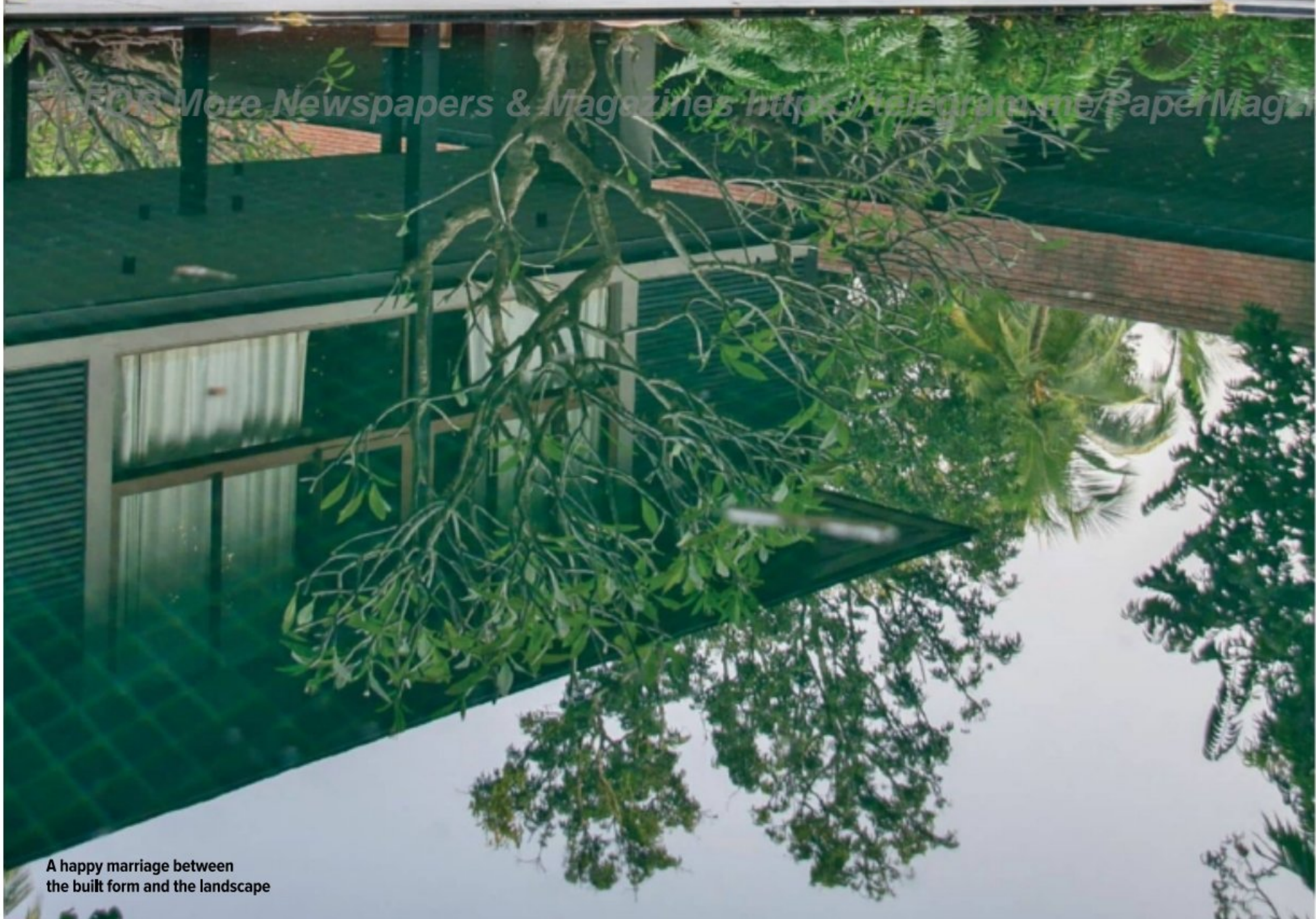
SS: Tell us about the dynamics between the architect, interior designer and the landscape architect. How do you manage when there are multiple strong creative voices involved? How do you balance it?

KM: Over the years I have realised, if you keep your egos in check, if you know as a landscape architect that you must merely play the role of a negotiator, then everything is smooth sailing.

CREATING SUSTAINABLE COMMUNITIES: THE ROLE OF A LANDSCAPE ARCHITECT

SS: Sustainable communities are a growing concern for urban planners, designers, and policymakers, who are looking for ways to create healthy, vibrant, and resilient environments. What do you think is the role of landscape architects in creating sustainable communities?

KM: To be very honest, I think the word 'sustainability' has just become a marketing buzzword. I think we should be focusing on fostering ecological symbiosis—and sustainability will be an organic derivative of that effort.



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A happy marriage between
the built form and the landscape



Pool nestled amidst dense foliage



A spot for al fresco family brunches surrounded by indigenous trees and shrubbery

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“

I prioritise dense vegetation, and ensure that no more than twenty five percent of a given site is lawn space. Through widespread use of native species and xerophytes like cacti, subscribing to principles of “xeriscaping,” we can save gallons of water.”

—KUNAL MANIAR, Founding Partner and Principal Architect, Kunal Maniar & Associates



Lush green terrace garden designed by Kunal in the heart of South Mumbai

“

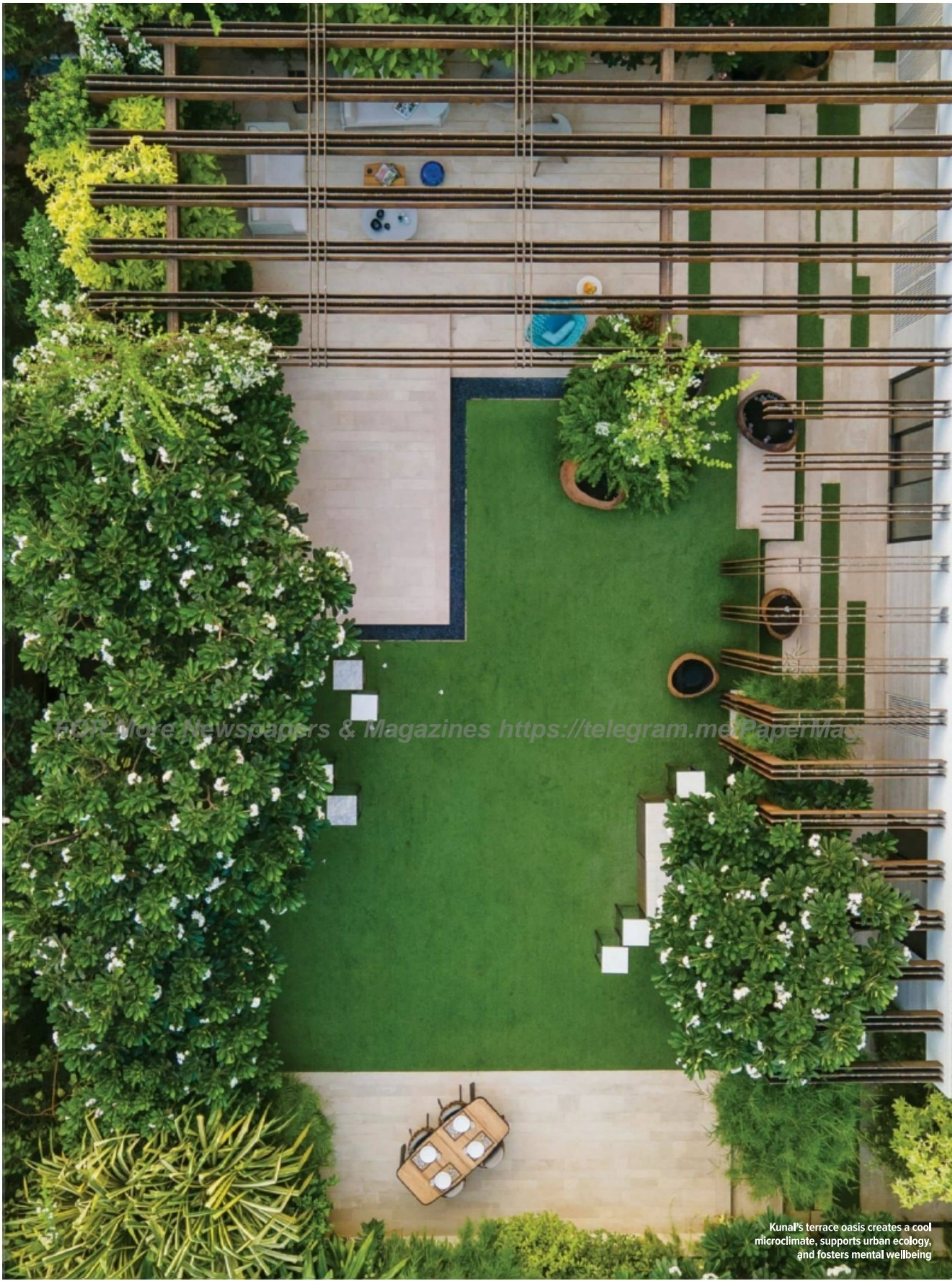
Landscape design, especially my stream of work in the luxury sector, is often misconceived as a frivolous field, but in reality, mindful landscape planning can be the real game changer in our collective efforts towards sustainability.”

—**KUNAL MANIAR**, Founding Partner and Principal Architect, Kunal Maniar & Associates

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Rich tropical planting to screen off unsightly views of construction in the city



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Kunal's terrace oasis creates a cool microclimate, supports urban ecology, and fosters mental wellbeing



RAPID FIRE

If not a designer, what would you be?

A chef!

If you had one superpower, what would that be?

The ability to turn cities into forests.

Your dream collaboration?

The dream project would be a home made by Nari Gandhi with the landscape designed by Made Wijaya, and myself as the client, silently observing the icons at work, weaving their magic.

A project you wish you had designed.

The Highline in New York City.

Your biggest design pet peeve?

Over engineering.

Who inspires you?

Luis Barragán, the Bawa brothers, James Corner, Rajesh Pratap Singh, the list is endless...

If you were to trade places with one eminent personality, who would that be and why?

Fashion designer Sabhyasachi Mukherjee. I would love to just experience a day in his life; there's such genius in how he straddles business and creativity.

Books or movies?

I love coffee table books and design publications, but Netflix is a guilty pleasure.

At 80, you would be...

Somewhere in Italy, eating great food and going to all the shops and galleries.

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I think it is crucial that we shift away from gimmicks and look towards genuine, simple, high-impact design solutions to build resilience against the effects of capitalogenic climate change.

Landscape design, especially my stream of work in the luxury sector, is often misconceived as a frivolous field, but in reality, mindful landscape planning can be the real game changer in our collective efforts towards sustainability. Whilst planning a site or curating a planting palette, a key question to ask oneself should be: “How much water is this scheme going to require?” It feels unethical that while large amounts of water are consumed by a single family’s sprawling lawns in Alibaug, entire villages nearby have to bear the brunt of water scarcity. Not only is lawn space highly water intensive, it is also expensive to maintain, and the lack of diversity in the soil microbiome ruins soil health. As a rule of thumb, I prioritise dense vegetation, and ensure that no more than 25 percent of a given site is lawn space. Through widespread use of native species and xerophytes like cacti, subscribing to principles of ‘xeriscaping,’ we can save gallons of water.

SS: What is Xeriscaping?

KM: Xeriscaping is an inherently sustainable approach to landscape design that requires minimal maintenance, and conserves water. This goes beyond merely using succulents; it also involves prioritising native species, minimising lawn space, and using resource-efficient techniques like drip-irrigation.

SS: Water-management must be a huge component of landscaping? How do you approach this aspect?

KM: When it comes to water management, a vital aspect is thoughtful hardscaping; maximising permeable surfaces allows rainwater to percolate into the soil, recharging groundwater storage and reducing stormwater runoff, which in turn mitigates flood risk. My go-to material for a driveway in an outhouse, for instance, is gravel, but I also like to experiment with different patterns using grass pavers.

I wish permeable pavers were more widely used in the contemporary Indian city too, for instance, in Mumbai, where each year the monsoon is a time of struggle for many, and disproportionately affects certain demographics. Currently, most of us prescribe to a system of make-use-throw. Shifting away from a linear model of wasting to a circular economy, wherein the lifespan of materials is extended, is a challenge that the construction industry as a whole needs to rise up to. While zero-waste may seem overly idealistic, I like to think that small efforts could have large impacts if they are turned into the norm.

Over the past few years, I have been actively trying to incorporate simple tactics in my design practice. For example, I have started repurposing construction debris into hardscape material, for instance, crushing waste bricks and using the aggregate as a gravel with a distinctive red colour. Integrating nature into the urban fabric is at the crux of coping with climate emergencies, and improving our collective physical and mental wellbeing. While Elon Musk searches for his billion-dollar carbon capture technologies, I advocate for the obvious, yet seemingly forgotten—plants and trees.

SS: What’s your vision for a city like Mumbai?

KM: There is a dearth of ecologically sound urban planning in our cities; perhaps, this could be remedied through increased collaborations between the government and private landscape practices on urban acupuncture projects. Urban voids and derelict sites could be transformed into pocket parks in every neighbourhood, mitigating the urban heat island effect that we are currently plagued with. In Mumbai, more mangrove parks could facilitate natural coastal protection in light of recent development projects. Could the Bandra Kurla Complex be reimaged as an office park immersed in an urban forest? These ideas are purely speculative, but for a problem as complex as the climate emergency we face, radical change in the built environment is likely the only viable option.

“

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The 'Shanti Bench' - a pristine white concrete monolith inspired by the form of Lord Shiva's trident



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Rock Console | Rock Bench

The Rock bench is a response to nature's demand for a space to sit. It is a piece of nature that has been brought into the interior. The bench is made of a single piece of stone, which has been shaped into a form that is both functional and aesthetically pleasing. The bench is made of a single piece of stone, which has been shaped into a form that is both functional and aesthetically pleasing.

As a granite boulder with a super-polished top surface, the Rock bench looks to exemplify how mindful, human intervention can co-exist effectively with the natural. Through the juxtaposition of texture, the bench makes larger ideas on socio-ecological symbiosis, and humans being in sync with nature.

The 'Rock Bench' and 'Rock Console'- collectibles crafted from boulders that emerge from the ground during construction

“

Creativity can't be compartmentalised; I often find myself drawing inspiration from fashion, fine art and craft, and even food!”

—**KUNAL MANIAR**, *Founding Partner and Principal Architect, Kunal Maniar & Associates*

My own work within city limits primarily consists of adopting principles of biophilic design to create terrace sanctuaries for families—meditative environments where plants filter out noise and air pollution and unsightly views of construction. If such green roofs were made a norm, a microclimate could be created via the magical cooling effect that vegetation brings through evapotranspiration. An unfortunate reality is that most people do not have access to such terrace spaces. Access to nature and good air quality have become luxury commodities, which is supremely unfair!

BEYOND LANDSCAPING: EXPERIMENTING WITH PRODUCT DESIGNING

SS: You recently launched your furniture line. What inspired this stint in product design?

KM: Creativity can't be compartmentalized, and sometimes inspiration finds you in weird and unexpected ways. I have a very vivid childhood memory of my mother dicing potatoes in the kitchen. She would always leave the peel on, and as kids we would add toothpicks to the potatoes to make hedgehogs, and so on. This odd fragment of memory resurfaced when I saw the boulders that emerge from the ground during excavation. I envisioned the boulders as unpeeled potato slices, and just as I would once add toothpicks, I imagined giving the rock brass legs for support. This lent itself to a deep dive into repurposing the boulders into artworks that also serve as functional décor elements.

Whilst the works were conceived with a sense of nostalgia and play, they inherently subscribe to principles of circular economy and sustainability. Through both process and materiality, the collectibles are truly 'Made in India' works. These heavy-duty, limited-edition pieces—the 2.8-ton, 14.7-foot-long console and the 1.6-ton, 9-foot-long bench—were produced using locally sourced black granite, with the support of local craftspeople with expertise in stonework.

The 'Rock console' and 'Rock bench' are a response to humanity's greatest tragedy—our failure to accept nature as it is. There's a perpetual need to mould nature to suit twisted ideals of perfection, be it by tampering with landscapes, genetically modifying food, or effort to change skin tones. Our misguided meddling has brought forth adverse consequences, including anthropogenic climate change. As granite boulders with super-polished top surfaces, the pieces seek to exemplify how minimal, mindful human intervention can co-exist effectively with the natural. Through this juxtaposition of texture, the works invoke larger ideas on socio-ecological symbiosis, and humans being in sync with nature. +



Kunal in his natural habitat

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THE HIDDEN GEM OF SUSTAINABLE BUILDING: WHY ZINC IS THE KEY TO A GREENER FUTURE



Sustainability has become a critical consideration in the construction industry, influencing the choice of materials used in building projects. As architects and builders seek to reduce environmental impact and enhance building longevity, sustainable building materials are gaining prominence. Among these materials, Zinc stands out for its unique properties that contribute to both environmental sustainability and the durability of structures.

THE ROLE OF ZINC

Zinc has emerged as a key material in sustainable architecture, offering numerous benefits that align with environmental and economic sustainability goals.

Durability and Longevity: Zinc is known for its remarkable durability, often lasting over a century with minimal maintenance. Zinc cladding panels from NedZink by Aludecor are designed to withstand harsh weather conditions, making zinc an ideal building material.

Recyclability: Zinc can be recycled indefinitely without losing its properties. The recycling process for zinc is also less energy-intensive compared to the production of new zinc.

Energy Efficiency: Zinc panels from NedZink by Aludecor reflect a significant portion of solar radiation, helping to keep buildings cool in warm climates and reducing the need for air conditioning.

Self-Healing Properties: Zinc develops a protective patina over time, which not only enhances its aesthetic appeal but also acts as a self-healing layer that repairs scratches and minor damages. This ensures that zinc panels from NedZink by Aludecor retain their

structural integrity over time.

Aesthetic Versatility: Zinc panels from NedZink by Aludecor are available in various finishes, enabling creative freedom in architectural design.

APPLICATIONS AND CASE STUDIES

Roofing: NedZink by Aludecor offers roofing solutions that combine functionality with design flexibility. Zinc roofs can last for over a century with minimal maintenance.

Facades: Zinc cladding is popular for building facades, providing a modern, sleek appearance. The versatility of zinc allows it to be used in various architectural styles. NedZink by Aludecor Zinc products are particularly valued for their ability to maintain a cohesive aesthetic while providing excellent protection against the elements.

Interior Elements: Zinc is also used for interior design elements, such as wall panels, countertops, and accents. Its unique appearance and durability make it a favourite among designers looking to create stylish, sustainable interiors.

Zinc panels from NedZink by Aludecor are being used in an array of commercial and residential projects all over India.

■ Guru Gobind Singh Indraprastha University in New Delhi, which stands as a testament to the harmonious blend of aesthetics and durability.

■ The Gwalior Airport in Madhya Pradesh was recently enhanced with zinc cladding from NedZink by Aludecor.

Here are some remarkable ways zinc has been globally utilized to promote sustainability in construction:

■ Eli and Edythe Broad Art Museum in

Michigan, USA, uses zinc panels to create a dynamic facade that not only serves an artistic purpose but also enhances energy efficiency.

■ Zinc House in Dublin, Ireland, utilizes pre-weathered zinc to achieve a striking aesthetic while benefiting from zinc's sustainable properties.

■ Musée du Quai Branly in Paris, France, features zinc cladding that develops a unique patina, providing both aesthetic value and long-term protection against the elements.

■ Bristol Brunel Academy in the UK, which features extensive use of zinc cladding, has received high sustainability ratings for its innovative design and energy-efficient features.

■ Port of Brisbane Office Building in Australia incorporates recycled zinc in its design, showcasing how sustainable materials can be used effectively in modern construction.

■ VM Houses in Copenhagen, Denmark, project demonstrates how durable materials can reduce the environmental impact associated with frequent renovations.

Sustainable building methodologies are essential for reducing the environmental impact of the construction industry. The use of innovative materials like zinc, particularly products from NedZink by Aludecor, plays a significant role in this effort. Zinc's blend of aesthetic flexibility, enduring durability, and eco-friendliness makes it an ideal material for modern architectural projects.



A large, thick, black stylized letter 'Q' that serves as a background graphic. It is positioned on the left side of the page, with its tail extending towards the bottom right.

The Sustainability Special

In architecture, sustainability is not just a trend, it's a blueprint for a harmonious future, where design meets environmental stewardship.

In this segment, we shine the spotlight on residences, commercial spaces and industrial hubs that tick all the right boxes when it comes to conscious design.

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ON CLOUD NINE

PROJECT: Cloud 9 Sports Center, China; **ARCHITECTS:** Ma Yansong; **PHOTOGRAPHS:** MAD Architects

Shijiazhuang's urban fabric is poised for a metamorphosis as MAD Architects' latest tour de force optimally intertwines architecture, nature, and an active way of life

Text by: Kashish Kaushal

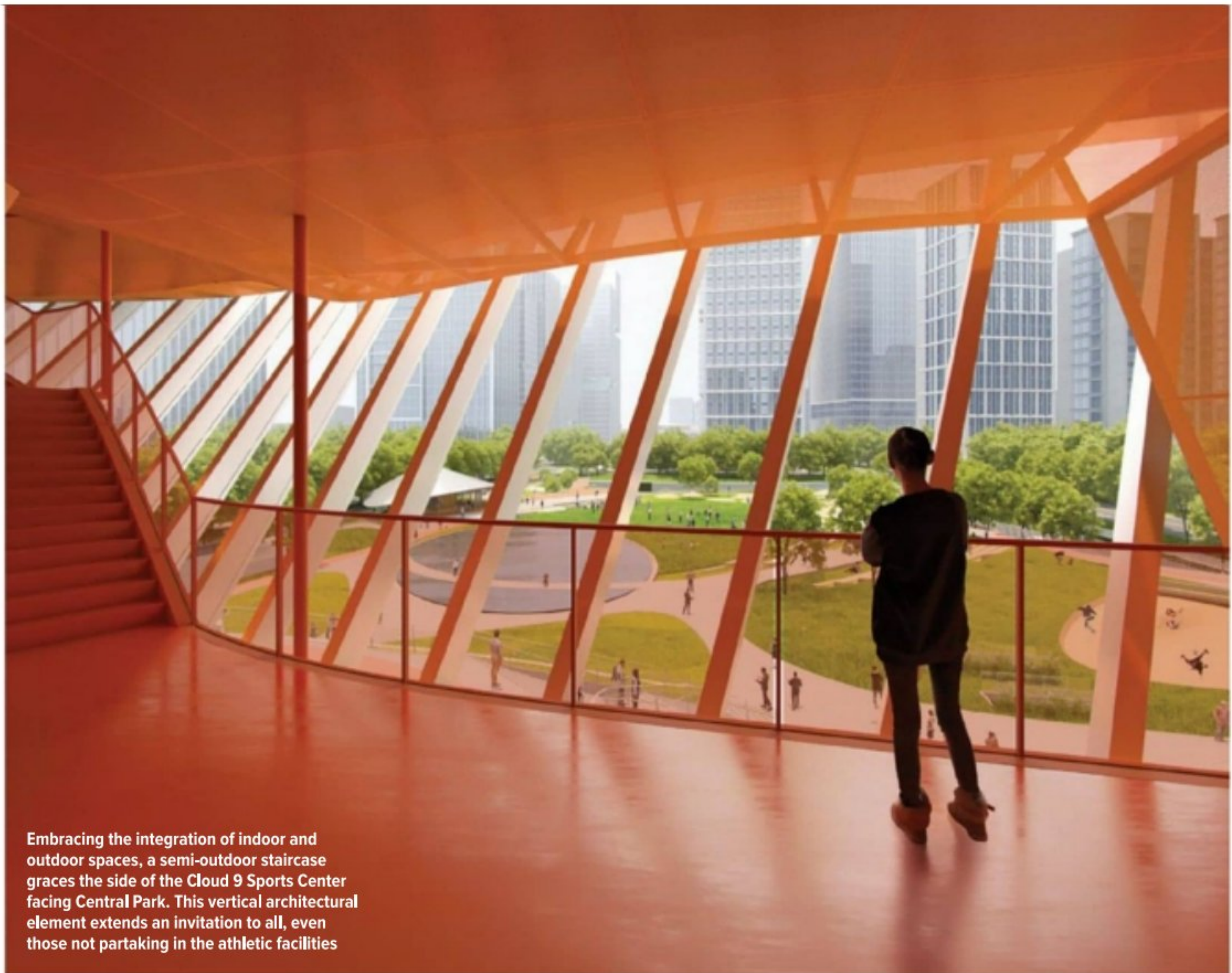
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Nestled within Central Park, the Cloud 9 Sports Center stands as an architectural marvel. Spanning across 6,000 square meters in the northern reaches of Shijiazhuang's Central Business District, this creation by Ma Yansong/MAD Architects is a comprehensive athletic sanctuary. Its facilities encompass a state-of-the-art gym, indoor and outdoor tennis courts, and a thoughtfully curated array of commercial spaces, seamlessly blending fitness, recreation, and modern amenities into one cohesive masterpiece



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An urban oasis amidst the bustling cityscape, Central Park envelops the Cloud 9 Sports Center, offering a much-needed respite for locals. Surrounded by residential, commercial, and recreational amenities, this verdant expanse represents a unique sanctuary, where the rejuvenating embrace of nature intersects with the modern conveniences of urban living



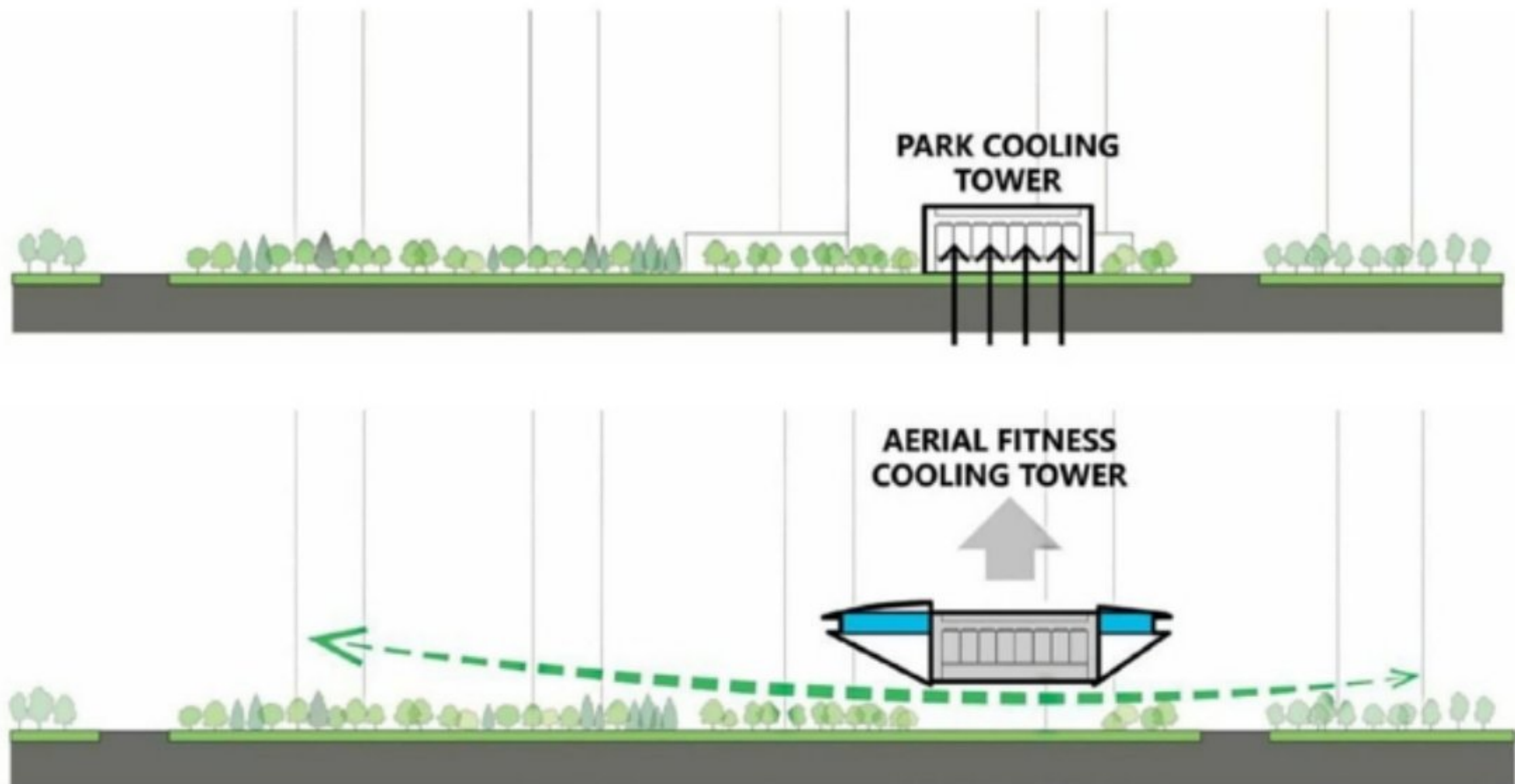
Embracing the integration of indoor and outdoor spaces, a semi-outdoor staircase graces the side of the Cloud 9 Sports Center facing Central Park. This vertical architectural element extends an invitation to all, even those not partaking in the athletic facilities



Visitors can ascend the stairs, pausing at the inviting rest bar along the way, before reaching the crowning glory – a third-floor observation deck that unveils panoramic vistas of the park's natural splendor and the surrounding urban tapestry

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Clad in an innovative ETFE membrane material with a metallic coating, the outer skin of the second and third floors seamlessly integrates the Cloud 9 Sports Center with its surroundings. This ingenious design consideration not only reflects the urban and natural environment, effectively concealing the building's volume, but also mitigates any visual obstructions caused by the cooling tower



“The gym on the top floor features a fully transparent glass curtain wall, offering a 360° view of the urban and natural surroundings to those exercising. Similarly, the indoor tennis court is linked to an underground commercial street and subway, benefiting from a transparent glass curtain wall that allows natural light to illuminate the space.”

—MA YANSONG, *Founder and principal architect, MAD Architects*

In a world where sedentary lifestyles and concrete jungles have become the norm, Ma Yansong's latest masterpiece, the Cloud 9 Sports Center, stands as a defiant reminder that “all work and no play” is a surefire recipe for dullness. The integration of thoughtfully designed spaces that promote fitness and recreation has become a non-negotiable element in shaping vibrant urban fabrics. For cities across the globe, including those in India, this remarkable project serves as an inspiration, challenging the conventional notion that urban development must come at the expense of physical and mental well-being.

Shijiazhuang, a city steeped in the history of early 20th-century railway construction, is undergoing transformation, and the Cloud 9 Sports Center is poised to be the crown jewel of this revitalisation effort. With its immaculate fusion of recreational facilities, commercial spaces, and natural surroundings, the sports center is a masterclass in creating environments that nurture

both the body and the soul. Its fluid form, wrapped in a luminous membrane material, mirrors the natural world, inviting visitors to embrace the harmonious coexistence of architecture and nature – a concept that holds profound relevance for urban planners and architects worldwide.

More than just an athletic complex, this project integrates recreational facilities, including a gym, indoor and outdoor tennis courts, and commercial spaces, with the natural surroundings of the park. The center's design serves as an exercise venue and an extension of the park. The building's soft exterior, encased in a translucent membrane material, creates a luminous “cloud” that mirrors the natural surroundings. From the strategically positioned cooling towers that optimise air circulation to the partially green-covered first-floor roof that blends with the surrounding environment, every aspect of the design has been carefully crafted to enhance functionality and minimise environmental impact.



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More than just an athletic complex, this project integrates recreational facilities, including a gym, indoor and outdoor tennis courts, and commercial spaces, with the natural surroundings of the park.

“The gym on the top floor features a fully transparent glass curtain wall, offering a 360° view of the urban and natural surroundings to those exercising. Similarly, the indoor tennis court is linked to an underground commercial street and subway, benefiting from a transparent glass curtain wall that allows natural light to illuminate the space,” shares founder and principal architect Ma Yansong. MAD Architects designed the green slope and second-floor platform to act as a buffer between the Sports Center and the city. A circular running track connects the building to Central Park, along with outdoor courts, terraced squares, and observation decks enhancing recreational space for sports, relaxation, and leisure.

However, what takes the cake is the center’s exterior—with its ETFE membrane material and metallic coating reflecting the urban environment and visitor activities, transforming the sports center into an immersive display of urban life. And for those seeking a unique perspective, the semi-outdoor staircase leading to the third-floor observation deck offers breathtaking panoramic views of the park and surrounding cityscape. As the Cloud 9 Sports Center breaks ground in March 2024, with an anticipated completion date in 2025, it promises to elevate the concept

of urban fitness to new heights. MAD Architects have once again demonstrated their mastery in creating spaces that transcend mere functionality, elevating the human experience to a level where fitness becomes not just a physical pursuit but a celebration of life itself! 🏆

FACTFILE

Timeline: 2021 – 2025

Type: Sports Center

Partners: Ma Yansong, Dang Qun, Yosuke Hayano

Associate Partner: Li Jian

Design Team: Guo Xuan, Pan Siyi, Miao Fangyi, Lai Hanzhang, Deng Wei, Qiao Xuantong, Faye Wong, Wang Lei, Li Cunhao

Client: Shijiazhuang Central Business District Development Co., Ltd.

Architectural Design: MAD Architectural Affairs Institute

Grade A Design Institute: Northern Engineering Design Institute Co., Ltd.

Interior Design: MAD Architectural Office, Hong Kong Yihui Commercial Design Co., Ltd.

Landscape Consultant: SWA Group

Curtain Wall Consultant: Yinghaite Engineering Consulting (Beijing) Co., Ltd.

Lighting Consultant: Beijing Ningzhijing Lighting Design Co., Ltd.



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STANDING TALL AND STOIC

PROJECT: The Stoic Wall Residence, Kannur, Kerala; **ARCHITECTS:** LIJO.RENY.architects; **PHOTOGRAPHS:** Turtle Arts Photography

Designed by Lijo Reny Architects, this Kerala mansion redefines modern living, offering a sanctuary that is both deeply rooted in its regional context and bold innovations

By Ankita Rathod



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(Facing Page)

Situated strategically for privacy, the formal living room features a semi barrel vault that maintains an 8-foot height, enhancing volume and temperature control. Exposed laterite walls seamlessly connect indoor and outdoor spaces visually, enriching the ambiance

In the art of architectural design, precision and purpose are the cornerstones of creating spaces that resonate with elegance and functionality. This meticulously crafted residence exemplifies these principles through its thoughtfully designed zones, each serving distinct functions while maintaining a seamless flow.

Perched in the heart of Kadirur, a picturesque town in the northern district of Kannur, Kerala, 'The Stoic Wall Residence' is more than a home—it's a dialogue with nature. In a region where the monsoon rains breathe life into the land and the tropical heat wraps you in a warm embrace, emerges this serene masterpiece by design studio Lijo Reny, led by Reny Lijo and Lijo Jos, both architects and artists. As dusk falls and the gentle breeze carries the scent of wet earth and blooming jasmine, this home comes alive, enriching the beauty of harmonising human life with the timeless rhythms of nature.

Spanning 7,317 square feet, the mansion appears as if it has organically emerged from the landscape, embracing the irregular contours of its surroundings, mature trees, a gentle northeast slope, and dual road access. The home features a formal living area, foyer, outdoor sitting space, car porch, open family living and dining area, indoor courtyard, kitchen, three bedrooms, a pooja/prayer area, adjacent courtyard, private corridor, entertainment room, master bedroom with a semi-open lounge area, dressing area, bathroom, and a protective screened upper floor.

Design that Blends Consideration with Aesthetics

Strategically aligned along a north-east axis, the house minimises solar heat gain while enhancing privacy, embodying a design that is as considerate as it is stunning. Upon entering, you are greeted by a formal living area, a foyer, and an inviting outdoor sitting space. This area is beautifully separated from the main structure by an open-to-sky landscaped courtyard, offering a refreshing welcome to visitors.

The car porch, integrated into this space, elegantly connects to the rest of the home via an internal ramp, ensuring a seamless flow while accommodating the site's natural contours.

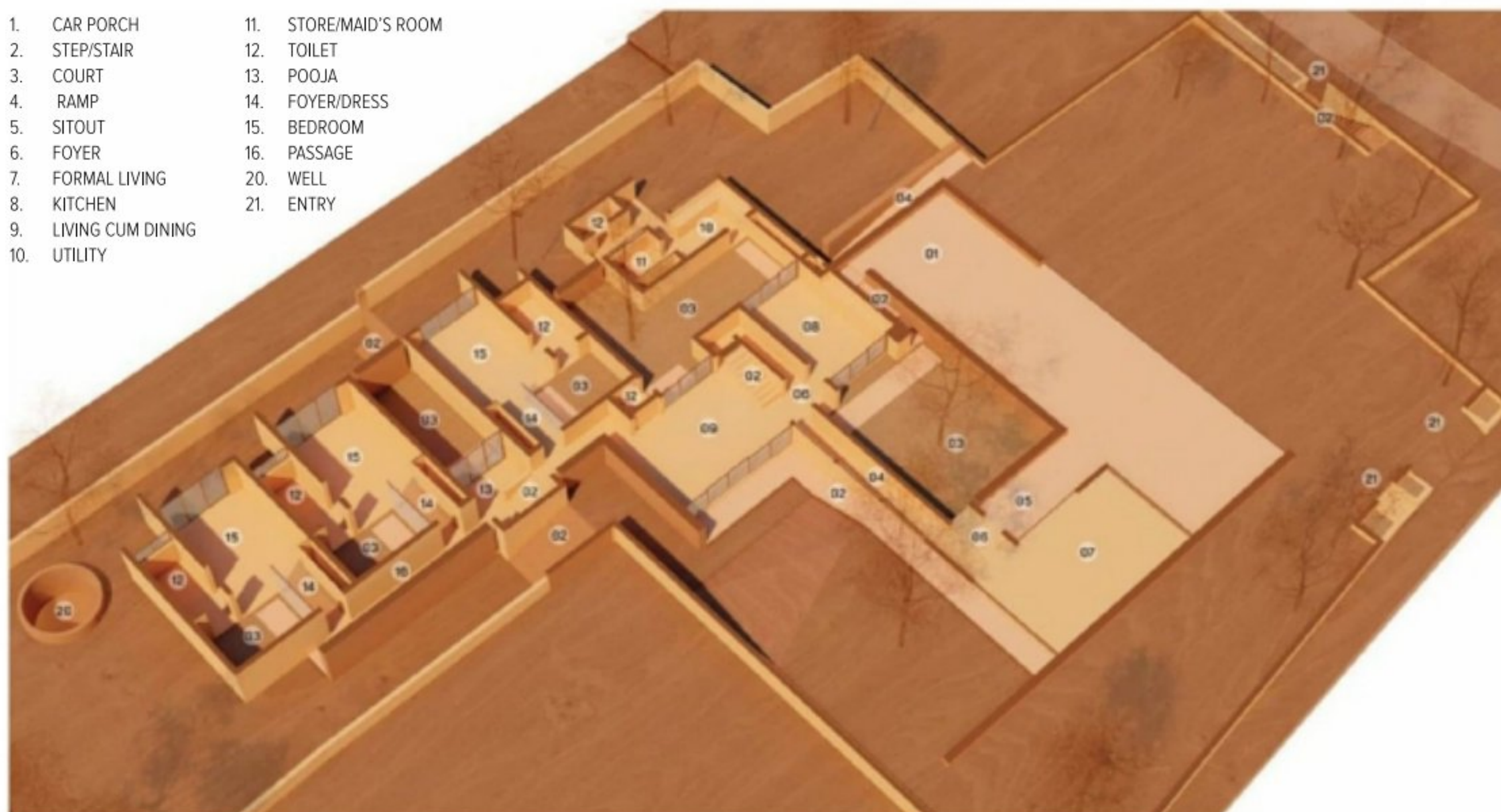
Elegance and Functionality in Design

In the art of architectural design, precision and purpose are the cornerstones of creating spaces that resonate with elegance and functionality. This meticulously crafted residence exemplifies these principles through its thoughtfully designed zones, each serving distinct functions while maintaining a seamless flow. The heart of the home is designed to foster family interactions and a harmonious connection with nature. The family living and dining spaces merge effortlessly with the outdoor landscape, creating a seamless indoor-outdoor experience. An indoor courtyard enhances cross ventilation, providing a constant flow of fresh air. The kitchen and related areas are strategically positioned to ensure privacy and convenient access, maintaining a balance between openness and discretion.

Private and Secluded Living Spaces

The private living spaces are thoughtfully secluded—housing three bedrooms, a pooja/prayer area, and an adjacent courtyard. These areas are accessible via a private corridor, ensuring tranquillity and seclusion. One of the bedrooms is conveniently located on the same level as the family area, catering to those with mobility challenges. Each bedroom opens to an internal open-to-sky courtyard, allowing residents to enjoy the invigorating winds and soothing monsoon rains, enhancing the living experience with natural elements.

- | | |
|----------------------|-----------------------|
| 1. CAR PORCH | 11. STORE/MAID'S ROOM |
| 2. STEP/STAIR | 12. TOILET |
| 3. COURT | 13. POOJA |
| 4. RAMP | 14. FOYER/DRESS |
| 5. SITOUT | 15. BEDROOM |
| 6. FOYER | 16. PASSAGE |
| 7. FORMAL LIVING | 20. WELL |
| 8. KITCHEN | 21. ENTRY |
| 9. LIVING CUM DINING | |
| 10. UTILITY | |



GROUND FLOOR PLAN - LOWER LEVEL

- | |
|------------------|
| 2. STEP/STAIR |
| 3. COURT |
| 12. TOILET |
| 14. FOYER/DRESS |
| 15. BEDROOM |
| 16. PASSAGE |
| 17. HOME THEATRE |
| 18. BALCONY |
| 19. SKYLIGHT |
| 20. WELL |
| 21. ENTRY |

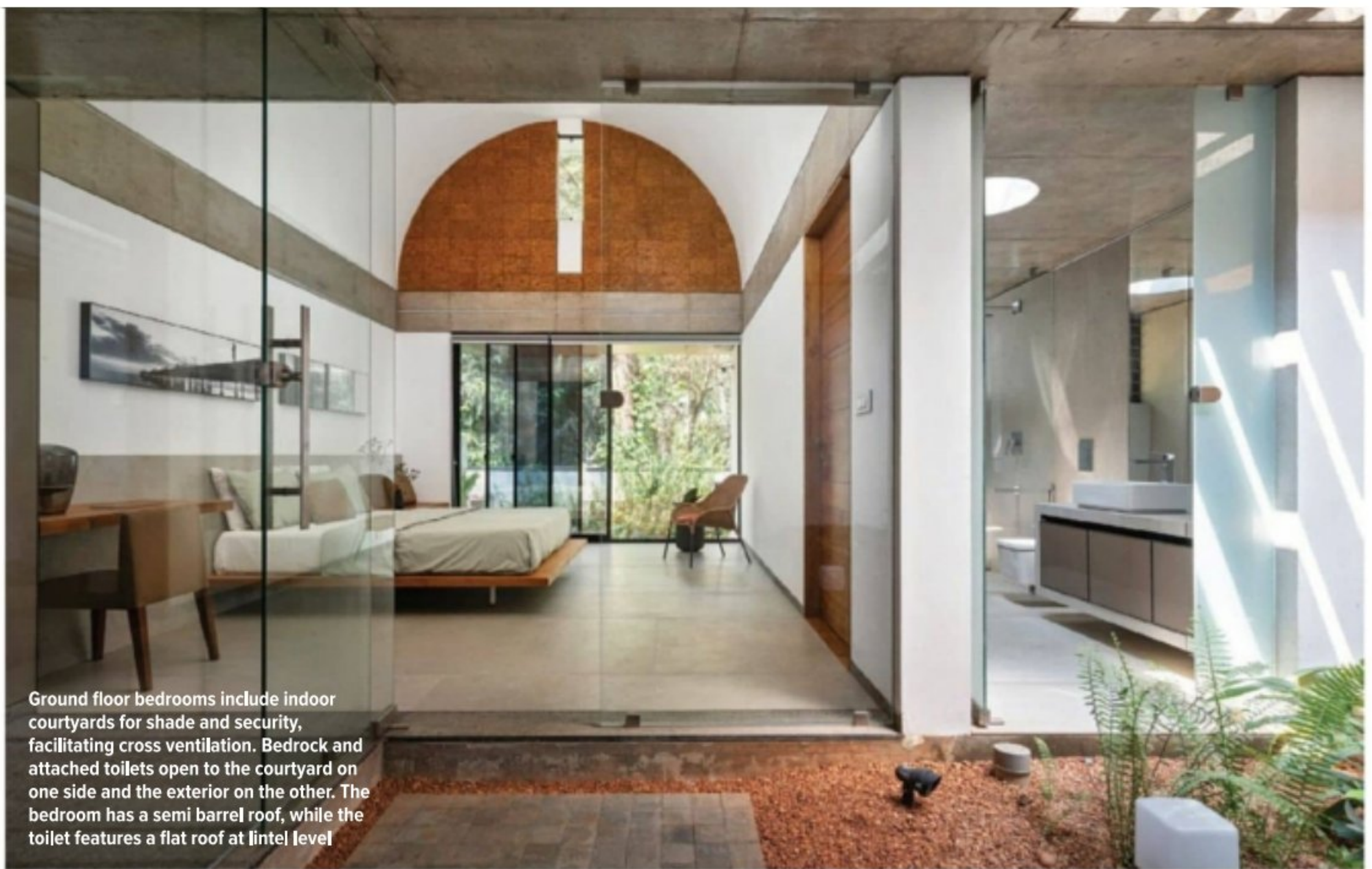
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FIRST FLOOR PLAN



ELEVATION



Ground floor bedrooms include indoor courtyards for shade and security, facilitating cross ventilation. Bedrock and attached toilets open to the courtyard on one side and the exterior on the other. The bedroom has a semi barrel roof, while the toilet features a flat roof at lintel level

Overall, by embracing the natural contours of its surroundings and integrating elements that enhance the living experience, the Stoic Wall residence creates a serene, functional, and aesthetically captivating space.



Several rooms in the house open directly to landscaped outdoors, contributing to cooling and creating a spacious and open atmosphere. The dining area, for instance, opens into the garden, doubling as a private spill-out space during get-togethers

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RENY LIJO AND LIJO JOS

Founders, LIJO.RENY.architects

Founded in 2005, LIJO.RENY architects is a pioneering design studio based in Thrissur, Kerala. Led by Reny Lijo and Lijo Jos, both architects and artists, the studio's journey began with their shared passion for art, which continues to inspire and drive their exploration of unconventional architectural expressions. With a rich professional background and a commitment to experimentation, LIJO.RENY architects remains at the forefront of architectural innovation in Kerala, leaving an indelible mark through their site-specific art installations and groundbreaking designs.

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The dining space, centrally positioned, connects blocks and floors effortlessly. With an indoor courtyard on one side and an external garden on the other, it serves as a primary functional room. Unlike other areas, it boasts an exposed concrete ceiling, complementing the restrained colors and materials of the interiors

(Facing Page Bottom)

Shielding the entire first floor, a protective screen crafted from thin fluted terracotta blocks elegantly slides onto a vertical metal tube framework. This shield offers protection from the intense sun and rain while providing a private passage accessible from every room.



SECTION

1. CAR PORCH
2. STEP/STAIR
8. KITCHEN
9. LIVING CUM DINING
14. FOYER/DRESS
15. PASSAGE
16. PASSAGE
17. HOME THEATRE
18. BALCONY

Harmonious Flow on the First Floor

A staircase leading to the first floor unveils an entertainment room and a master bedroom that seamlessly transitions into a semi-open lounge area, creating a harmonious flow of spaces. The inclusion of a dressing area and an en-suite bathroom further enhances the functional elegance of this retreat. Wrapped in a protective screen of fluted terracotta blocks, the first floor combines traditional architectural elements with modern functionality. These blocks serve as a brise-soleil, effectively shielding the interior from the harsh sun and rain while maintaining a breathable facade that enhances natural ventilation.

Artful Simplicity and Rich Material Palette

Inside, the design maintains a charming simplicity. The furniture and decor, selected with a keen eye for detail, enhance the overall aesthetic. Fine art photography by the homeowner's brother adorns the walls, adding a personal touch. The choice of materials and colours—exposed laterite, terracotta, teak wood, stone pavers, and exposed concrete—imparts warmth and character. The landscape design further enhances the ambiance, integrating native plant varieties and trees to create a cohesive and serene environment.

Captivating Exterior and Interior Interplay

The house's architectural form captivates from every angle, with its exterior reflecting the internal volumes and offering glimpses of the interiors. Unlike the expressive walls of 'The Running Wall Residence,' 'The Stoic Wall Residence' features robust exposed laterite walls that project from the building, creating secluded recesses within the landscape. Extending its living spaces outdoors, it employs a harmonious blend of light and substantial materials. The clean linear

designs find a counterpoint in numerous courtyards that connect and diffuse the spaces, imbuing the home with a sense of weightlessness. Each primary room on the ground floor opens to landscaped external areas, internal open-to-sky courtyards, or both, creating a seamless flow between interior and exterior realms.

Key Takeaways

Overall, by embracing the natural contours of its surroundings and integrating elements that enhance the living experience, the Stoic Wall residence creates a serene, functional, and aesthetically captivating space. Every detail speaks of a deep respect for nature and an unwavering commitment to creating a home that breathes with the rhythms of the land. It is a place where modern design meets timeless tradition, where the lines between indoors and outdoors blur, and where the beauty of simplicity and the richness of material palette come together in perfect harmony. ✚

FACTFILE

Client: Sreekumar Raghavan and Family

Site: 1,880 Sq m

Built up area: 680 sq m

Architects: LIJO.RENY.architects

Principal Architects: Ar. Reny Lijo and Ar. Lijo Jos

Project Team: Dhanayan KS, Ar. Mohamed Shamel, Ar Alfred Francis, Ar Bibin Jacob and Dinesh D

Interiors: LIJO.RENY.architects

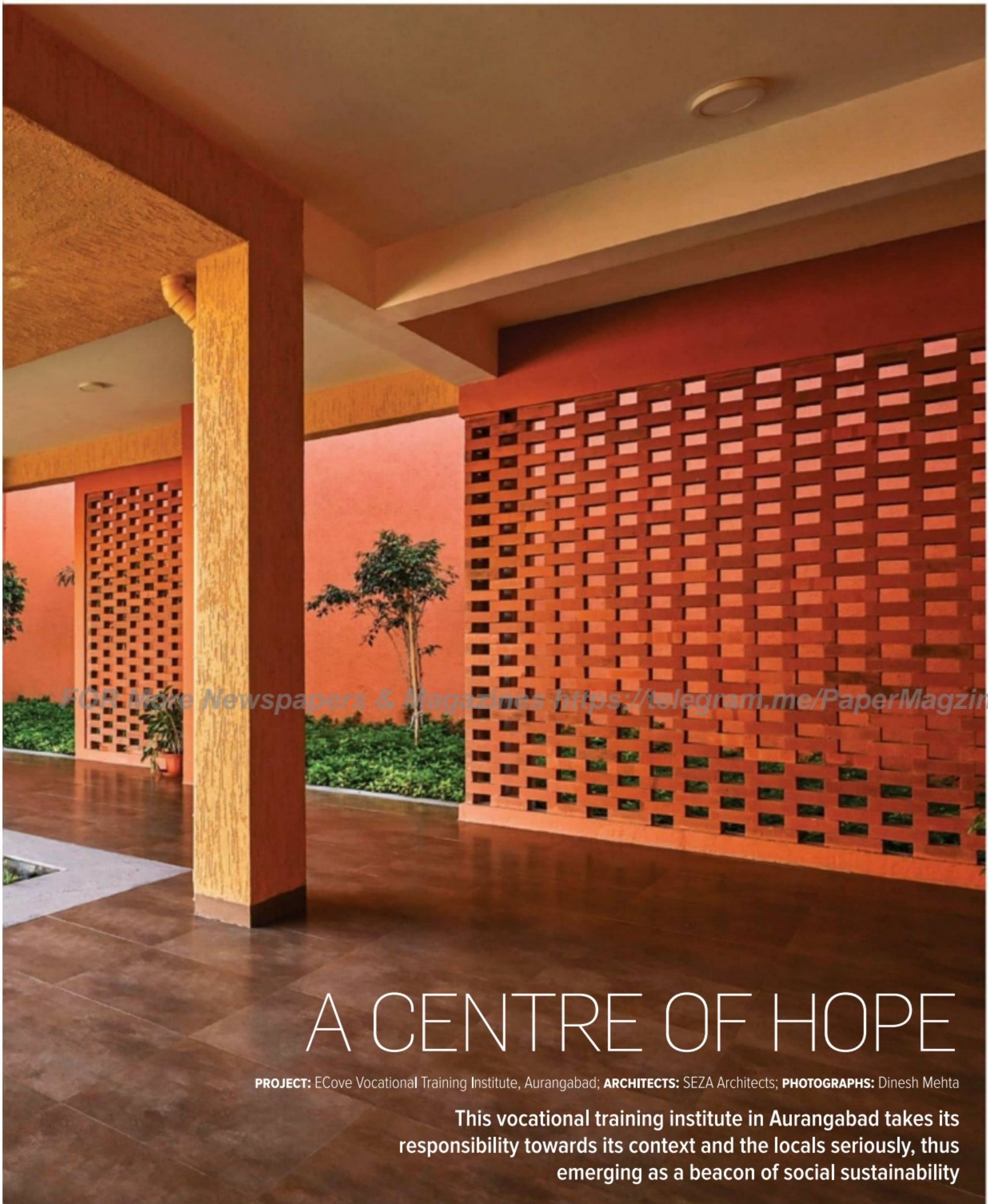
Landscape: Plain Spaces and LIJO.RENY.architects

Structural Design: Er Rosemy George - Keystone Engineers

Year of Completion: 2023



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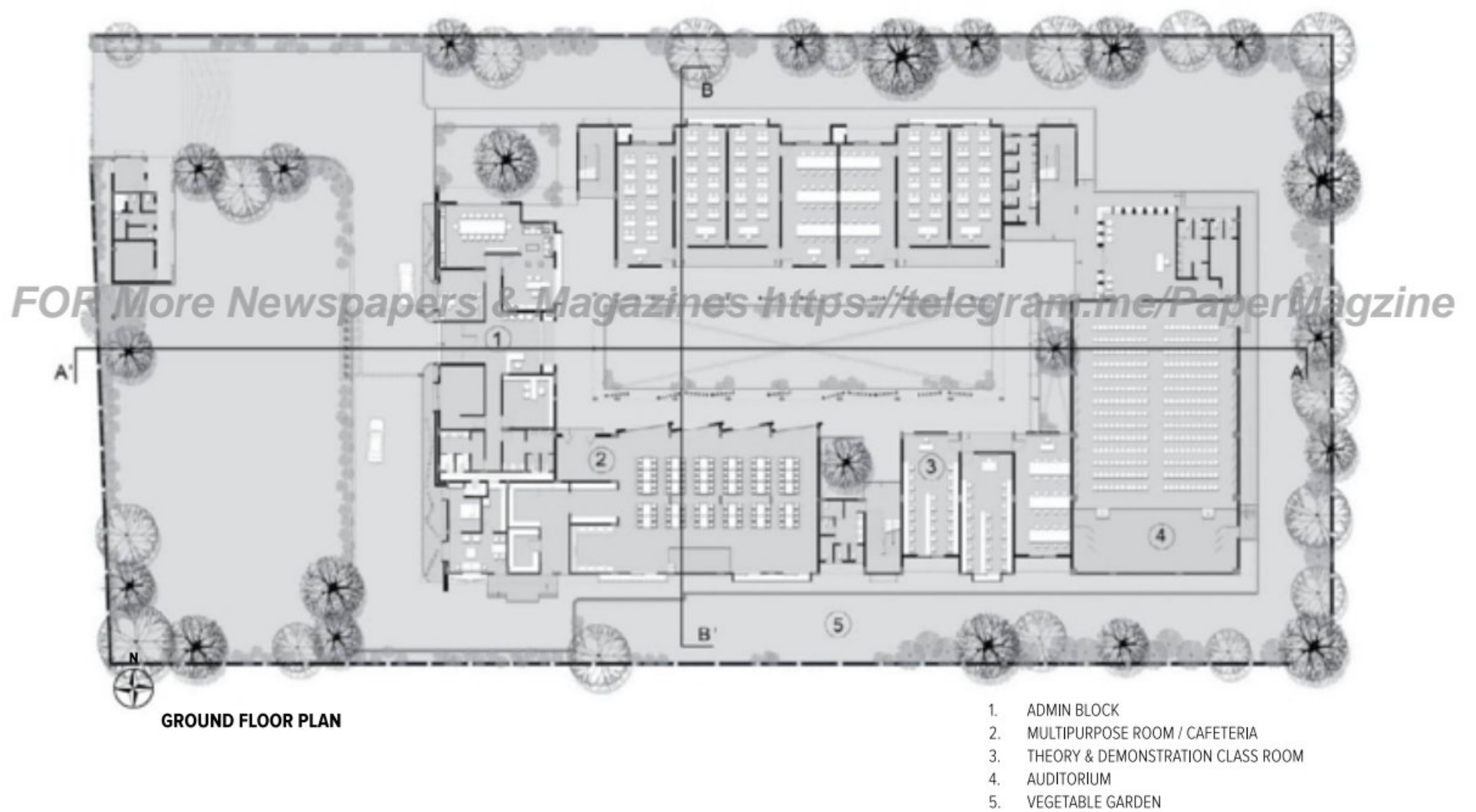


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A CENTRE OF HOPE

PROJECT: ECove Vocational Training Institute, Aurangabad; **ARCHITECTS:** SEZA Architects; **PHOTOGRAPHS:** Dinesh Mehta

This vocational training institute in Aurangabad takes its responsibility towards its context and the locals seriously, thus emerging as a beacon of social sustainability





The design is a reinterpretation of the courtyard concept, here the administration area opens onto a series of corridors having classrooms, technical rooms, a canteen, and an auditorium all arranged around the courtyard.

“Our aim for the Vocational Training Institute in Aurangabad is to give the village children a chance to be able to stand on their own feet by learning a vocation that can enable them to sustain a simple lifestyle. The centre is contemporary while honouring the historical context of its surroundings. It is locally apposite and takes its cues from the cave complex in spreading a message of hope for the villagers.”

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 —SEEMA PURI, Principal Architect, SEZA Architects

All conversations about sustainability usually tend to focus on environmental sustainability. While it is crucial what we build mindfully, it is imperative that we think about the other aspects of sustainability—financial and social. A building can never be truly sustainable if it isn’t financially viable. Increasingly, the concept of social sustainability is taking prominence. Social sustainability in architecture aims to design spaces that promote well-being, inclusion and community cohesion. With the ECove Vocational Training Institute, Seema Puri and Zarir Mullan of SEZA Architects creates a template of socially sustainable architecture.

“In villages with poor public infrastructure, social interaction centres are not so much about architecture, but rather they symbolize social improvement. They become an expression of human dignity, possibility and community areas. Our aim for the Vocational Training Institute in Aurangabad is to give the village children a chance to be

able to stand on their own feet by learning a vocation that can enable them to sustain a simple lifestyle,” explains architect Seema Puri. Aurangabad is a city in the state of Maharashtra in India, known for the Ajanta Ellora caves, which is a UNESCO World Heritage site. It is one of the largest Hindu rock-cut cave complexes in the world, which has panels from the two main Hindu epics. The caves have sculptures and carvings from three faiths, namely Brahmanism, Jainism and Buddhism, thereby advocating the spirit of tolerance and hope.

“The centre is contemporary while honouring the historical context of its surroundings. It is locally apposite and takes its cues from the cave complex in spreading a message of hope for the villagers,” explains Seema. The architecture is a reinterpretation of the courtyard concept. The administration area opens onto a series of corridors with classrooms, technical rooms, a canteen and an auditorium, all arranged around the courtyard. It offers vocations such as sewing, computers, dye making, electrical courses and basic English language.



The centre, like the Ellora caves, symbolizes hope and universal acceptance for the villagers. It helps them learn a vocation thus offering them an opportunity to thrive, redefine their personality, and live a respectful life.



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The central courtyard and the transitional corridors fosters interaction between the students.



SECTION



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The biophilic design of the space using natural materials, natural light and plants create an atmosphere the villagers could enjoy learning in.



The use of local materials and craftsmen ensured that the space was not just environmentally sustainable but also socially sustainable.

“We segregated the activities into different blocks, interconnected by small courts and transitional pathways, creating a dynamic mix of indoor and outdoor community spaces. Our aim was to create a biophilic design using natural materials, natural light and plants, creating an atmosphere the villagers would enjoy learning in.”

—SEEMA PURI, *Principal Architect, SEZA Architects*

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“We segregated the activities into different blocks, interconnected by small courts and transitional pathways, creating a dynamic mix of indoor and outdoor community spaces. Our aim was to create a biophilic design using natural materials, natural light and plants, creating an atmosphere the villagers would enjoy learning in,” informs the architect. None of the classrooms are air-conditioned. The spaces rely on natural ventilation to keep them cool. The passive ventilation and daylighting systems create a learning atmosphere that lies in harmony with the natural environment.

Angular brick screens punctuate the corridors reducing the intense heat and making them more comfortable. Here, the temperatures in the summer range go up to 40-45 degrees. Staggering the classrooms created additional social interaction spaces besides the multiple courtyards. We wanted the centre to become a welcome break for them. The multipurpose hall across the classrooms is semi-open; this area is designed as an adaptable space and used as a cafeteria, for yoga and assembly.

“An auditorium was added in the second phase, the roof of which houses the solar panels, which provide power for lighting. Building

this on the outskirts enabled us to provide employment for the villagers. Incidentally, the project materialised during the pandemic, when the villagers were in need of employment. The materials and labour were locally sourced keeping with the project’s broader sustainable and ecological ethos.”

The centre, like the Ellora caves, symbolizes hope and universal acceptance for the villagers. It helps them learn a vocation thus offering them an opportunity to thrive, redefine their personality, and live a respectful life. +

FACTFILE

Project Type: Institutional Buildings

Designed by: SEZA Architects & Interior Designers

Size: 37673 Sq.ft

Principal Architects: Zarir Mullan & Seema Puri

Team Design: Datta Nishandar, Paritosh Chavan, Baljeet Singh & Pooja Jangam

Year of Completion: 2022



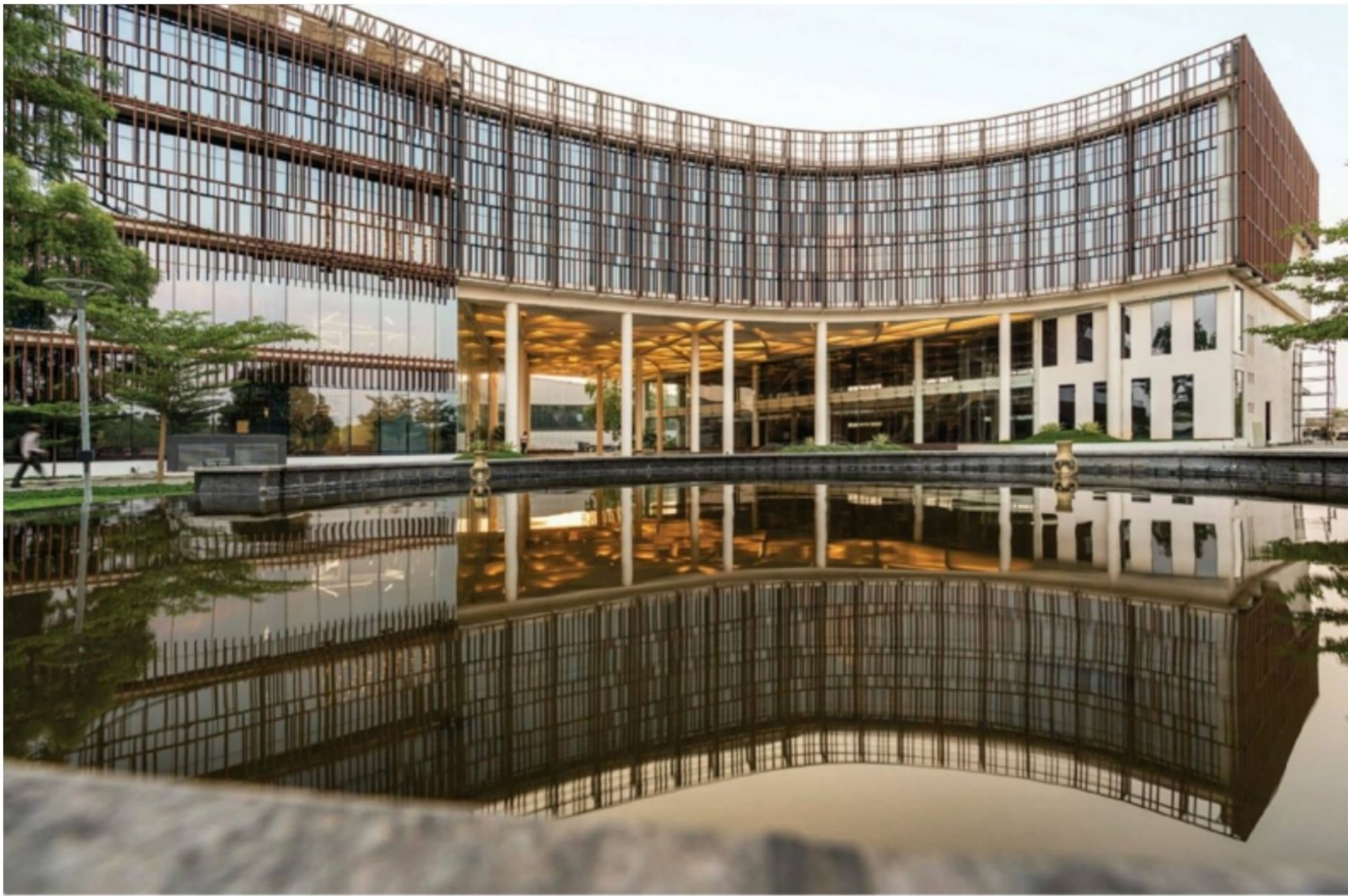
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TOWARDS A SUSTAINABLE FUTURE

PROJECT: Polycab Experience Centre, Halol, Gujarat; **ARCHITECTS:** FHD India; **PHOTOGRAPHS:** Shamanth Patil

This experience centre designed for Polycab respects its context and serves as a template for sustainable building methodology

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Located in Halol, the industrial hub of Gujarat, the Polycab Experience Centre, designed by architect Sriram Ramakrishnan of FHD India, aims to bring together 3 primary programs – a corporate office, experience centre, and an auditorium under one sustainable roof. Polycab is one of India's largest cable manufacturers.

The geometry of the building intends to protect the existing trees on site. The auditorium floats above an atrium, connecting the office zone and experience centre, while the atrium connects to the factory behind. The double block configuration self-shades the central landscape court, while the conference room as a bridge connects the

two blocks across the court. The Basement G+ 3 storey office block houses the employees and amenities. The experience centre houses a museum of the company's exhibits and conference facilities. The auditorium is accessible from both spaces.

A 15m cantilever gate marks the arrival from the main road. The drop-off is at the shaded atrium, from where the user can enter either the office or the experience centre. The atrium expresses curvilinear intersecting beams at the ceiling. The office has a triple height naturally lit entry lobby. The wall mural depicts the "Banyan tree", characteristic of the local culture, as well as copper that carries energy inside a cable to create light. The mural is complemented by suspended glass leaves forming the chandelier on the roof.

1. ENTRY GATE/SECURITY
2. DROP-OFF
3. FOYER
4. WAY TO FACTORY
5. OUT SEATING/LANDSCAPING
6. BASEMENT PARKING
7. SERVICES



The geometry of the building intends to protect the existing trees on site. The auditorium floats above an atrium, connecting the office zone and experience centre, while the atrium connects to the factory behind.

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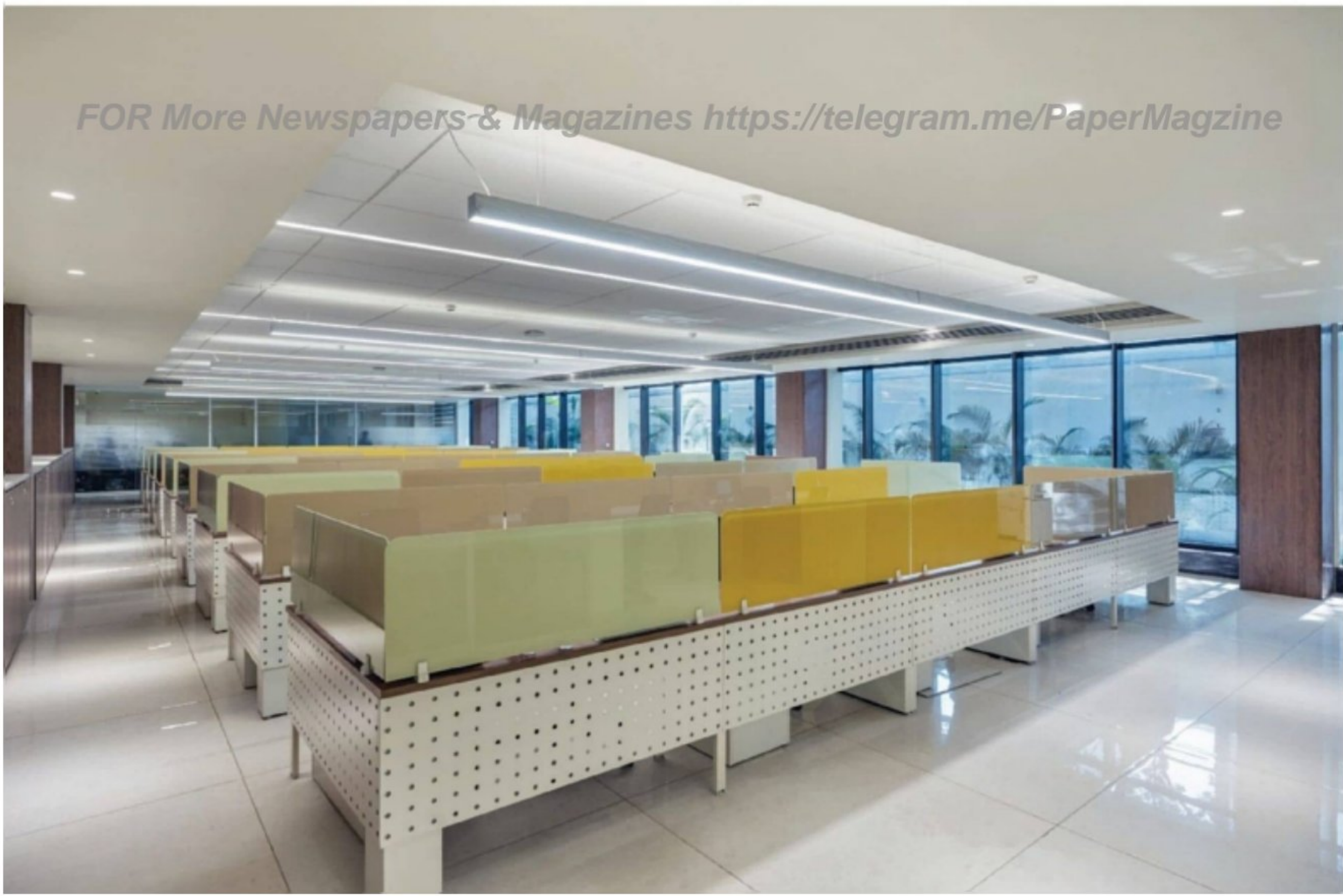
1. PORTICO
2. ENTRANCE LOBBY
3. COURTYARD
4. CONFERENCE ZONE
5. OFFICE SPACES
6. EMPLOYEE CAFETERIA
7. OUTDOOR TERRACE
8. AUDITORIUM
9. SERVICE TERRACE
10. MEETING ZONE
11. EXPERIENCE CENTER
12. BASEMENT



 **SECTION**



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The project is designed to become a Net-Zero energy building. The balcony overhangs horizontally shade the southern façade. The façade is designed with Low-E glass and aluminium fins on the East that are designed as per solar angles.

Each office floor overlooks the central atrium. The cafeteria on the top floor is naturally lit while overlooking the natural views. It has an accessible activity terrace above the conference bridge, overlooking the landscape. The landscape uses repurposed – cable packing trays that are locally available.

The project is designed to become a Net-Zero energy building. The balcony overhangs horizontally shade the southern façade. The façade is designed with Low-E glass and aluminium fins on the East that are designed as per solar angles. The fins are designed to maximize views of the nearby hills and maximize daylight to the office areas while shading the direct sun. The combined setup reduces the energy requirement of the building by 20% from the base case of unshaded regular glass.

The solar system on the roof designed for 195KW capacity offsets 40% of all energy needs of the building. The additional solar panels laid on a neighboring factory of the same project, aspires to offset the other 60% of the energy needs, thereby making it a true Net-Zero building. 70% of all construction materials involved were procured within a 100km

radius to limit embodied energy. Efficient water fixtures and rainwater well reduce the water need of the building by 30%. The project has been presented as a case study in several international forums such as IDAC Mumbai- 2022 - Green Pavilion for its Sustainable design and Zak-World of Facades 2022, Hyderabad for its innovative Façade design. +

FACTFILE

Architects: FHD India
Director-Design: Mathan Ramaiah
Lead Architect: Sriram Ramakrishnan
Team: Shageer Khatri, Sundar, Dhurgai Kumaran
Site Area: 2.5 Acres
Built up Area: 100000 ft²
Contractor: Vikram Builders
Landscape Design: Kiasma
Mechanical, Electrical, Plumbing: Eco First Services Limited
Façade: Alustruct Glazing
Year of Completion: 2022

Conscious Architecture



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As one approaches the building, the pavilion emerges as a striking presence amidst the lush, landscaped entry. The architectural detailing exudes a sleek and contemporary aesthetic, achieved through the artful articulation of metal and glass, creating a harmonious dialogue between the built form and its natural surroundings



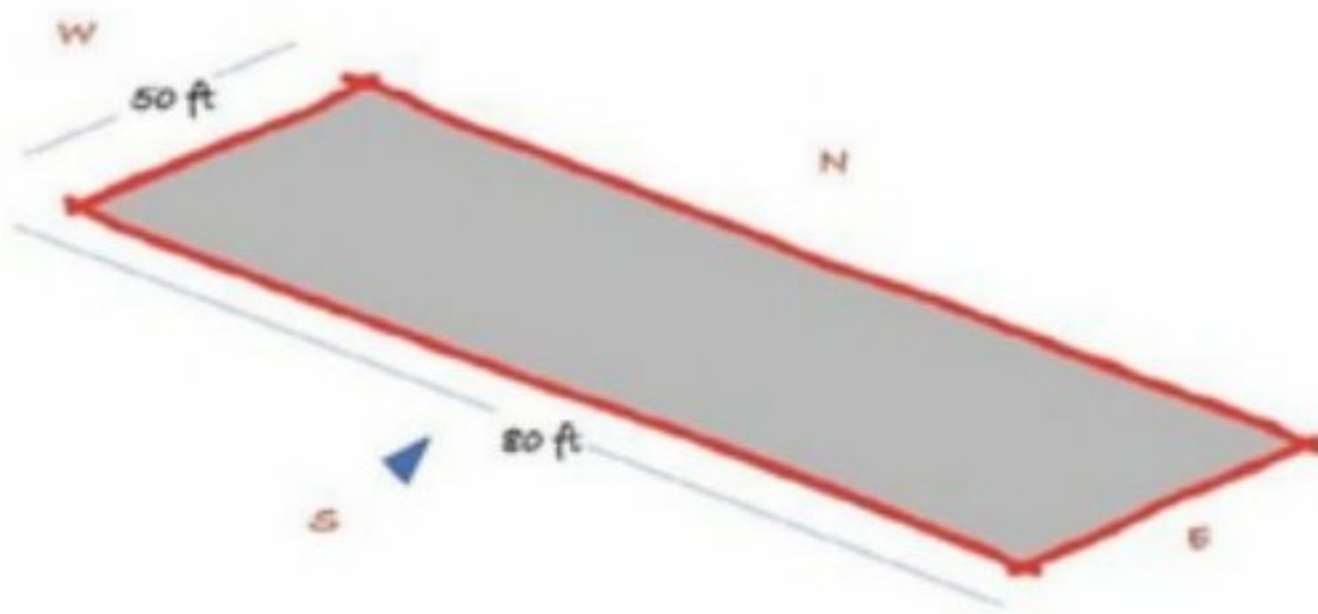
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EMBRACING THE MONDAY BLUES

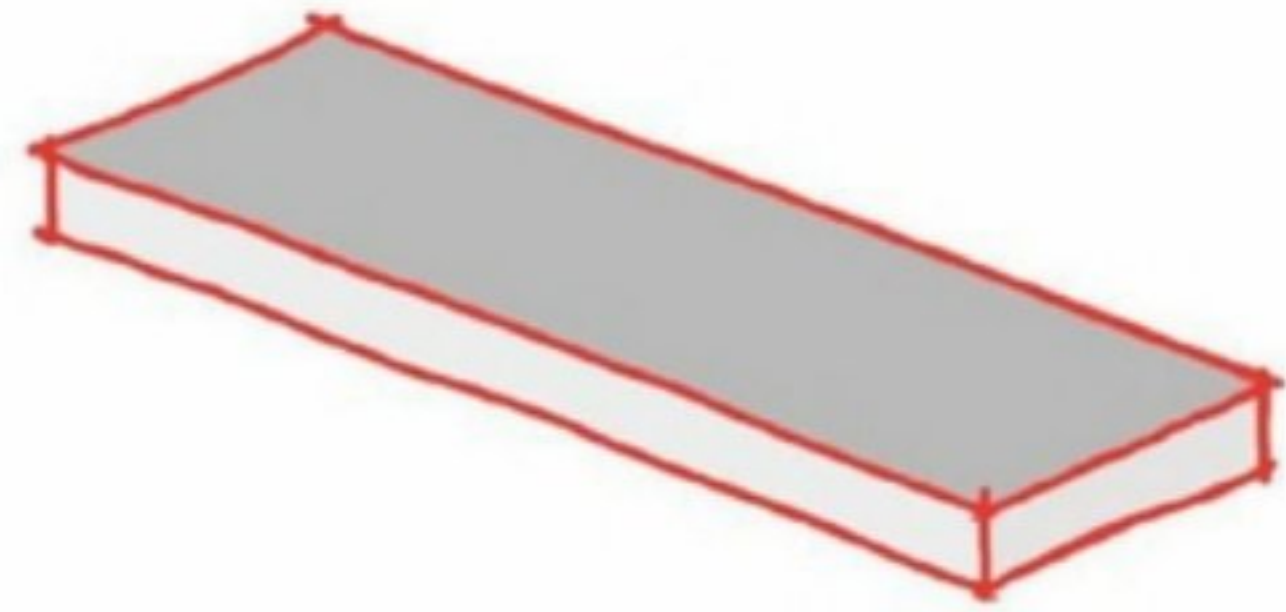
PROJECT: Office for Titanium Techpark, Bengaluru; **ARCHITECTS:** Workshop Inc; **PHOTOGRAPHS:** Studio Kunal Bhatia

A breathtaking fusion of nature and modern architecture, this office redefines the concept of workplaces, transforming it into a serene haven where productivity blossoms amidst lush greenery and thoughtful design elements

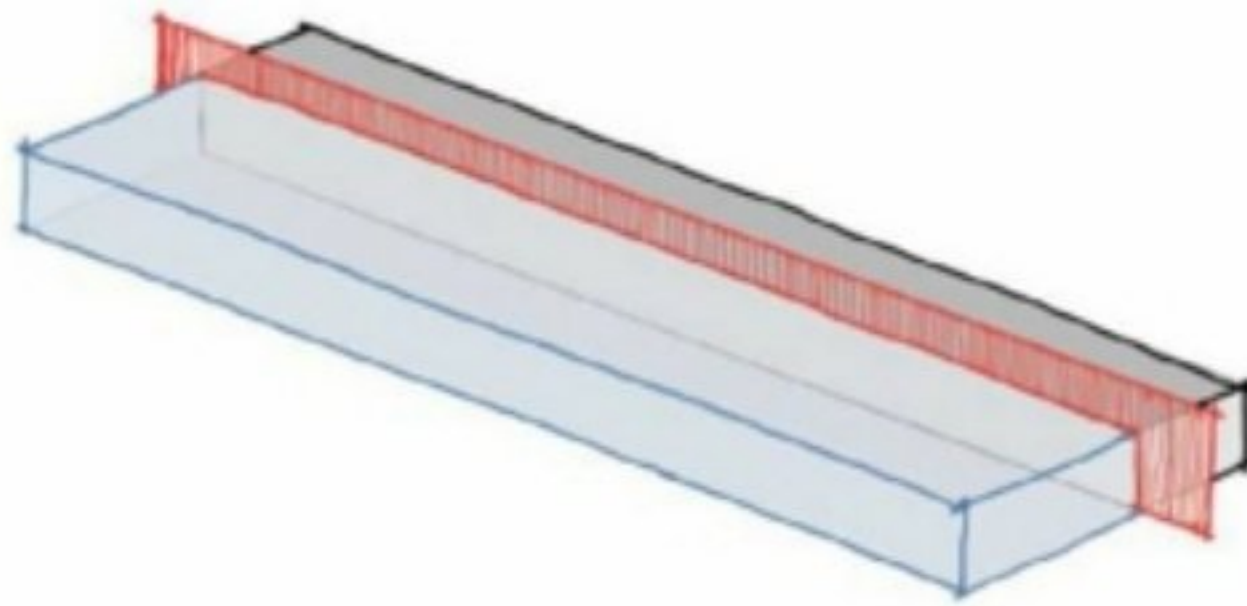
Text by: Kashish Kaushal



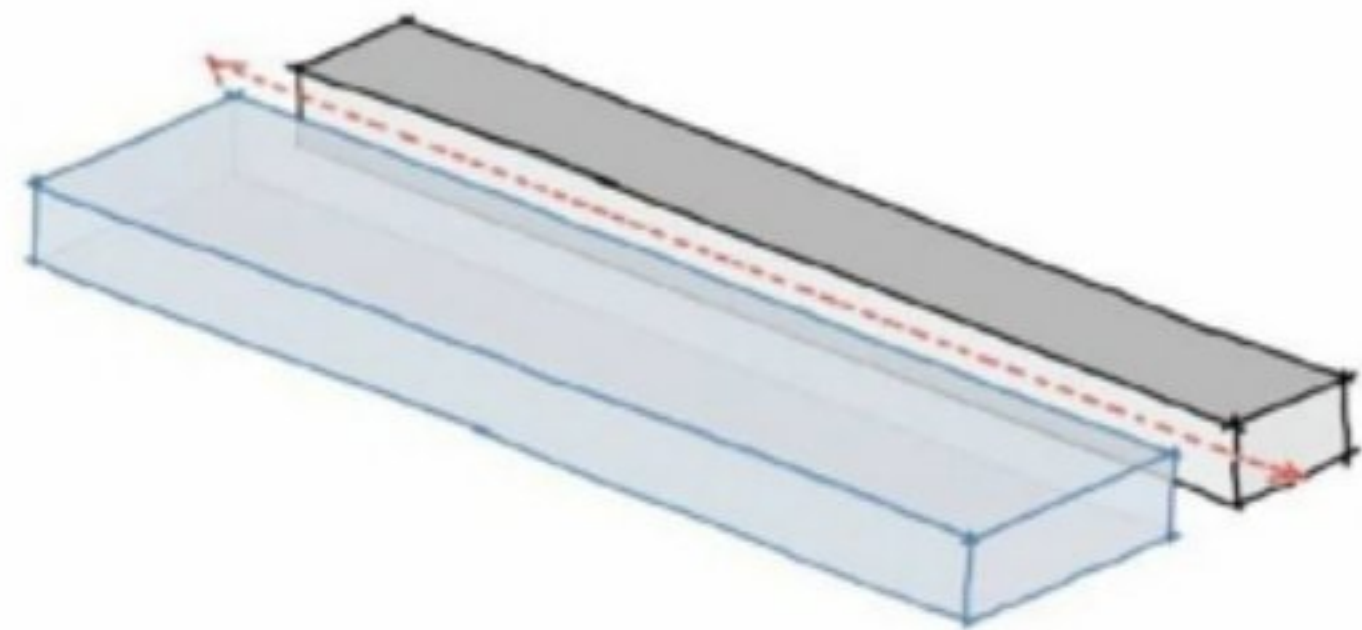
Floor Plate



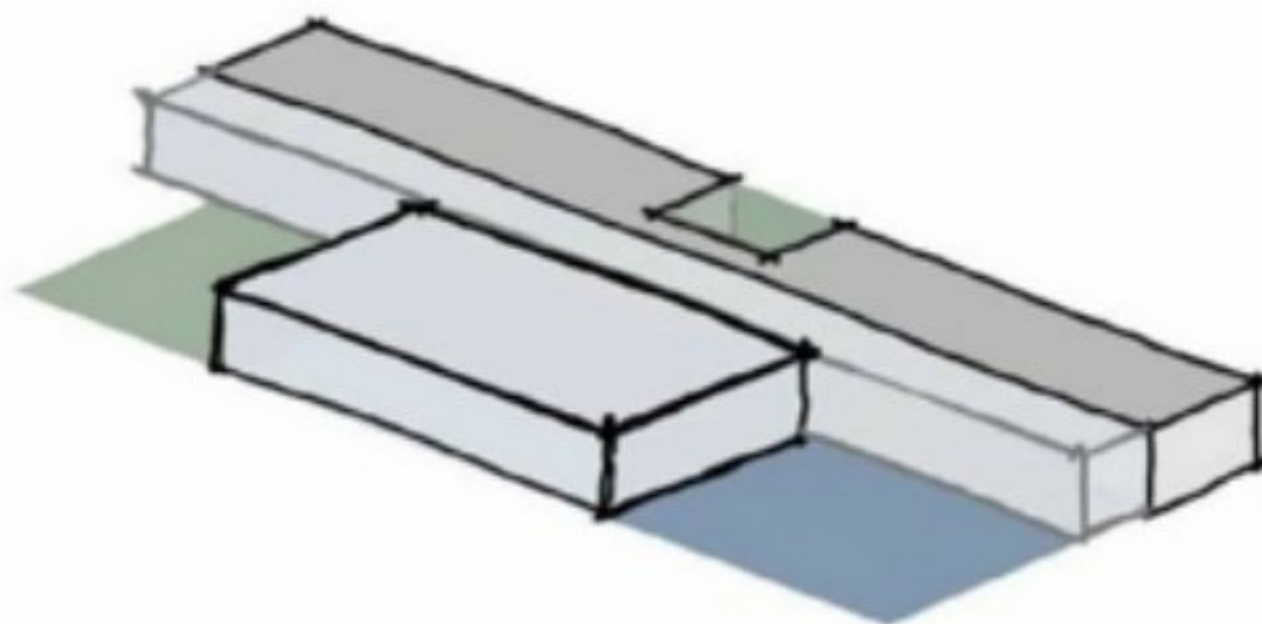
Total Volumetric Mass



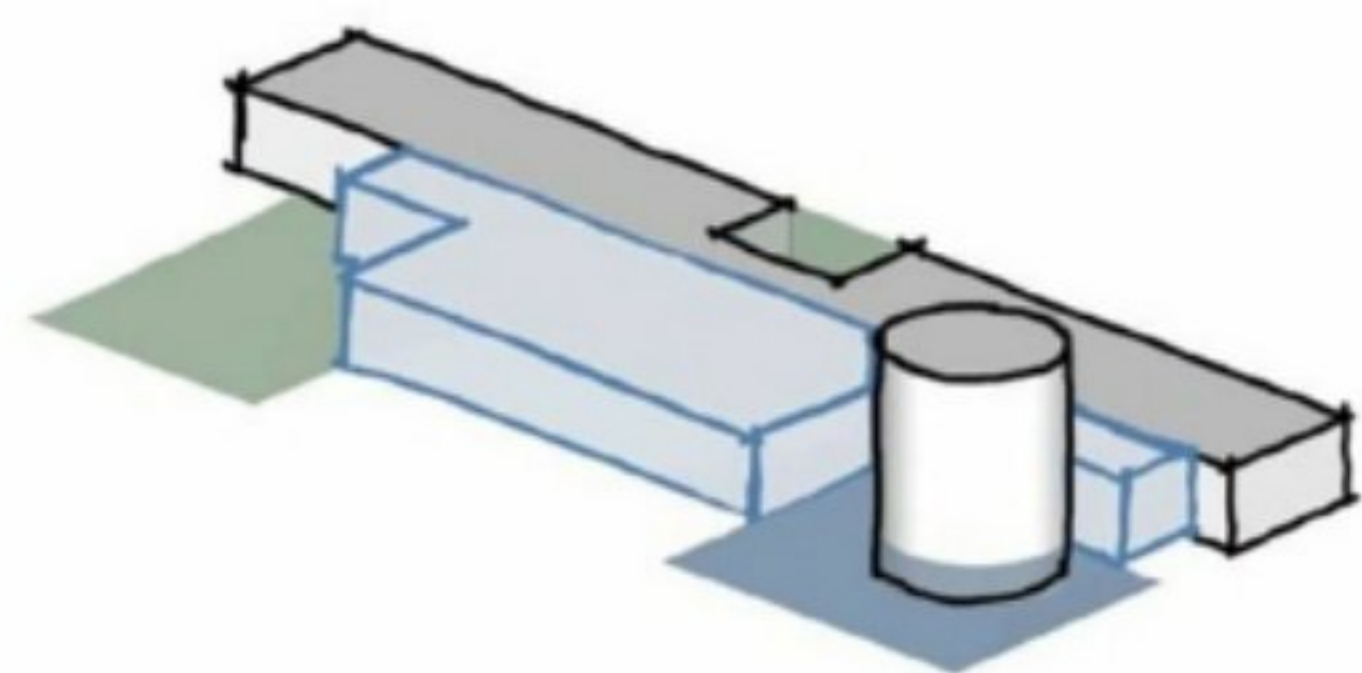
Dividing by Primary Axis



Creating the Movement Path connecting all the spaces



Addition of Greens and Water Elements to modulate the mass



Inserting Circular mass within the waterbody

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Imagine starting your workday in a tranquil setting, surrounded by lush greenery and filtered natural light. The gentle rustling of leaves and the occasional birdsong create a soothing backdrop, instantly transporting you to a realm of calm and focus. In the fast-paced world of modern office life, where deadlines loom and stress levels soar, finding solace in one's workspace can be a rare luxury. Yet, the visionary minds at Workshop Inc, led by Keta and Varun Shah, have defied the norms by crafting an architectural masterpiece that redefines the very essence of an office space. Amidst the bustling metropolis of Bengaluru, their latest project stands as a testament to their unwavering commitment to seamlessly blending nature and modern design, creating a serene oasis where productivity thrives.

From the moment you set foot on the premises, a sense of tranquility envelops you, inviting you to embark on a journey that celebrates the symbiosis between the built environment and the natural world. "Situated next to a reserved forest area, the existing site contains old warehouses, to be demolished over time, as the new buildings are constructed in two phases. After mapping the boundaries of the old and new buildings, the office was placed so that it can be retained up to the project's completion. The

architectural concept stemmed from the idea of creating a space within a lush green environment, reflecting the location of the proposed development surrounded by the reserved forest areas," reveals the designer duo Keta and Varun.

The office is strategically positioned on a linear strip of land, divided by a primary axis into two distinct zones. At the rear, a closed mass exudes a sense of privacy and seclusion, while the front portion features an open, transparent mass, inviting visitors to experience the site's evolution firsthand. "The cylindrical insert is a special VIP lounge that is surrounded by a lilypond and dense foliage, to facilitate private, yet candid, conversations amongst visitors," further reveals Keta.

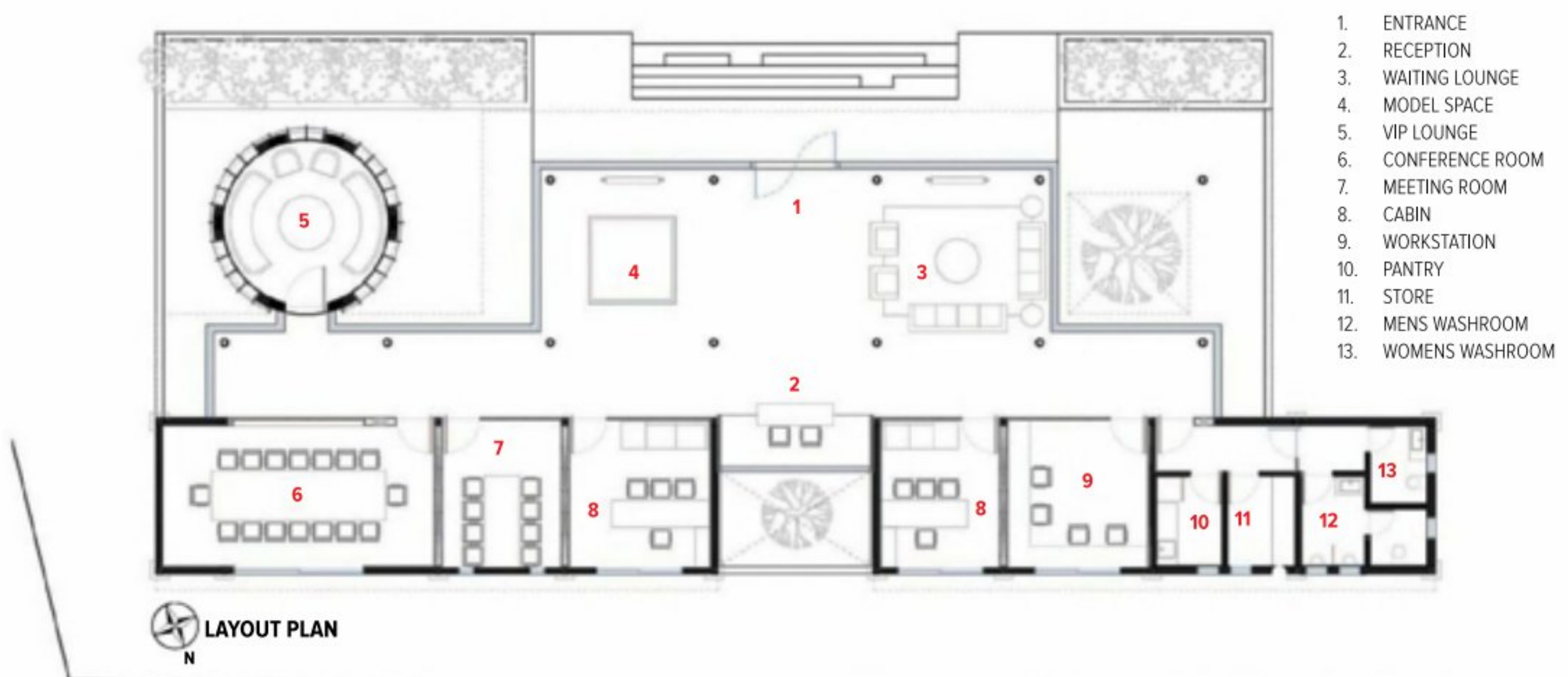
As you ascend the steps, you are ushered into the transparent public volume. This large, cohesive space seamlessly incorporates the reception area, a welcoming waiting lounge, and a captivating model showcasing the entire development. Structurally and functionally divided into three bays, three large circular light fixtures gracefully punctuate the reception, waiting lounge, and model space, serving as elegant focal points that guide the visitor's eye. The design team at Workshop Inc artfully curated a selective material palette, drawing inspiration from the natural surroundings. Local black granite, wood, and metal adorn the space, creating a harmonious and timeless aesthetic.

“The architectural concept stemmed from the idea of creating a space within a lush green environment, reflecting the location of the proposed development surrounded by the reserved forest areas.”

—KETA SHAH, *Principal Architect, Workshop Inc*



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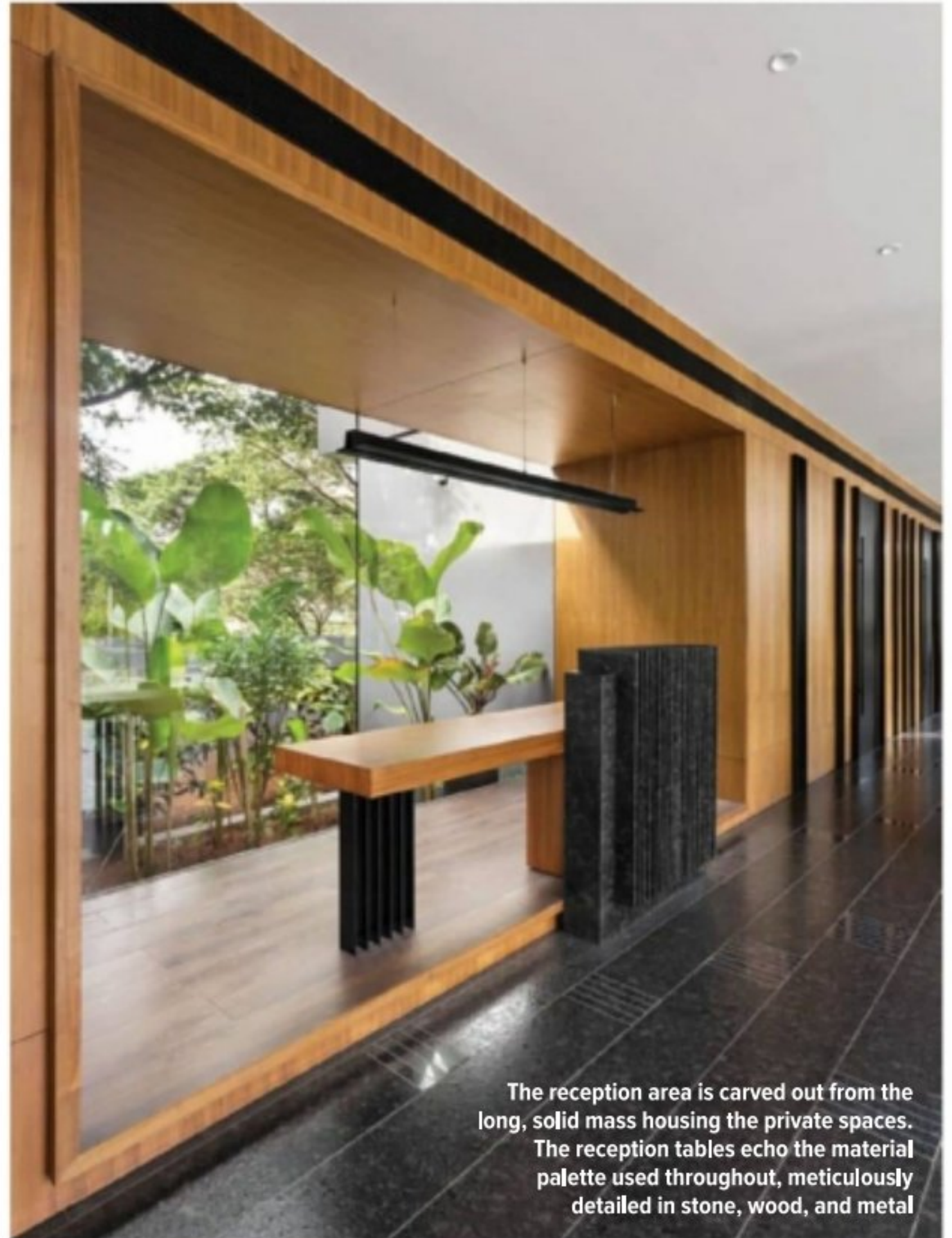
The overall aesthetic embraces understated neutral tones, creating a calming canvas that allows the surrounding lush plantation to provide bursts of natural colour. The VIP lounge, however, sports a refreshing tinge of blue, offering a subtle contrast and a sense of vibrancy. Furniture pieces from Ekamatra complement the space with their sleek and elegant designs



VARUN AND KETA SHAH

Principal Architects & Partners, Workshop Inc

Workshop Inc is a design practice based in Ahmedabad operating within the fields of architecture, interior design and exhibition design. Headed by Keta Shah and Varun Shah, graduates of CEPT University, they bring their varied interests and skills to the table to undertake projects across the sectors of hospitality, retail, commercial, healthcare, workspaces and residences. The firm strives to create meaningful work, where experiential narratives, fresh ideas and relevance to the context become driving factors of the design.



The reception area is carved out from the long, solid mass housing the private spaces. The reception tables echo the material palette used throughout, meticulously detailed in stone, wood, and metal

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A custom-made lighting fixture adds a touch of sophistication to this welcoming space



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Replicating the design ethos of the transparent pavilion, the long passages are thoughtfully crafted. In these spaces, one can witness a serene lotus pond, reflecting light into the interior, creating a mesmerising interplay of natural and artificial illumination

“All the services had to be seamlessly concealed to create a space that is so minimal, that it almost disappears into the surrounding landscape. Bengaluru is known for offering a rich diversity in open as well as semi-open spaces that are set amidst a lush, tropical landscape.”

—VARUN SHAH, *Principal Designer, Workshop Inc*



The transparent, open glass pavilion is crowned by three large circular custom-made stretch ceiling lights, which become the focal point in the evenings as the surrounding landscape gradually fades into darkness with the onset of dusk

At the heart of the design lies the circular mass, a space dedicated to entertaining special guests and fostering informal conversations in a private yet casual atmosphere. The openings on either side create a dramatic display of light within the space, while tall, enveloping greens recreate the experience of sitting within a tropical garden. The linear passage connecting all these spaces is defined by the rhythmic order of circular columns. This transition space is designed to offer multiple experiences as one moves along, inviting moments of pause and reflection while enjoying the view of the lush greens, the rippling raindrops in the water, and the dancing light that reflects across the ceiling.

Among the various spaces that compose this architectural marvel, the transparent public pavilion stood out as the most captivating and challenging design endeavor for the team at Workshop Inc. “All the services had to be seamlessly concealed to create a space that is so minimal, that it almost disappears into the surrounding landscape.

Bengaluru is known for offering a rich diversity in open as well as semi-open spaces that are set amidst a lush, tropical landscape. To recreate such a scenario, on a construction site that is bound to get dusty, the challenge was to detail out the exterior glazing in a way that it is as minimal as possible and offers a seamless transition between the inside and the outside spaces,” further elaborates Varun. This architectural masterpiece is a true embodiment of nature’s embrace, inviting visitors to pause, reflect, and reconnect with the beauty that surrounds them. +

FACTFILE

Location of the project: Whitefield, Bengaluru

Area: 4400 Sq ft

Design Team: Keta Shah, Varun Shah, Pratik Latwe, Mauli Jash

Website: www.workshopinc.in