

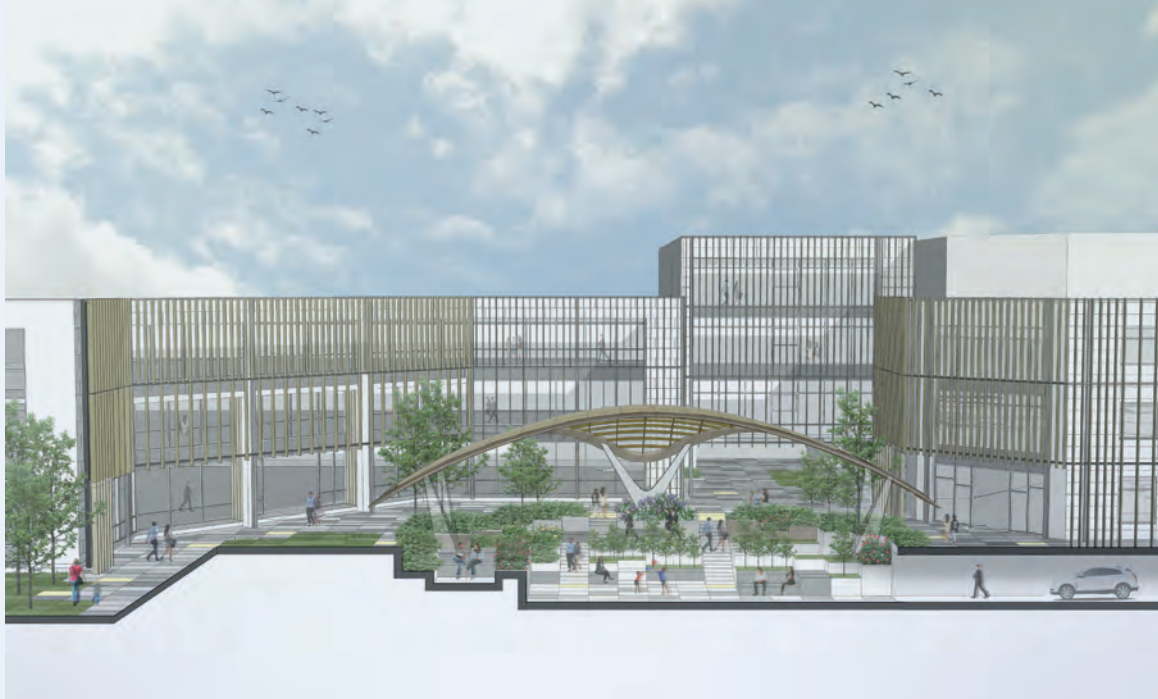


Environmental etiquette is under review

Navigating the expectations of a modern workplace and appropriately addressing the spiralling climate crisis, advanced by construction practices, is not an easy task. The search for a path forward plays out theatrically in The Campus, Cherrywood. MOLA's public realm enhancements to Spear Street Capital's Business Park received the 2024 National Property Award for Sustainability Initiative of the Year. The project includes the addition of meeting rooms, a sunken garden, and alterations to existing office buildings' facades. Each intervention advances the urgent and ongoing investigation into what is sustainable commercial architecture.

Three cylindrical glass pods sit elevated over a sparsely planted slope. Surveying the south Dublin outpost through the fixed vertical timber louvres of the meeting room pods, the horizon of Dublin Bay is visible over trees to the east. To the west, The Campus office buildings frame the flora-rich embankments of the open attenuation pond. The UFO-like structures are anchored to earth by smooth concrete columns. A corten steel gangway reaches out from each pod to the pond's loop walk, welcoming card-wielding inhabitants of The Campus to gather at the round table centred in each meeting room. The pods are tactical in carrying out their assignment to convert Cherrywood Business Park to The Campus, a modern workplace well-versed in environmental etiquette. Humble in their interactions with the earth, the new arrivals make contact only twice, acknowledging the detrimental impact of business-as-usual construction on local biodiversity. The structures adopt a light-touch approach to the soil, minimising physical connection and influencing how we interact with other species, viewing life from above.





Canopy Section

The reserved approach to the pods' footprint is counterbalanced by their hungry resource harvesting. Aware of the potential of local weather conditions and echoing the rhythm of the facade's timber louvres, the pods are fitted with vertical-axis wind turbines, solar panels, and batteries. The result is a micro-electricity generator that produces three times the electricity used by the meeting rooms. The surplus electricity is used to power the public realm lighting throughout The Campus. In the dialogue between man and nature, The Campus pods do not shirk their identity. Approaching the meeting pods from the N11 green belt, it is clear the energy-harvesting pods are the proud product of an industrialised society. The concrete columns supporting the circular rooms do not branch out in a cold imitation of the neighbouring trees but as elongated cogs of a gear.

This quiet undercroft display of pride in design and innovation is loudly absent from the alteration to existing office buildings 2, 3, and 4, which currently host Dell, CapVentis, and BMC.

To guide the office blocks of the former Cherrywood Business Park into the well-being-centric Campus, the existing facades are wrapped with steel frames lined with vertical timber louvres. Echoing the sentiments of an embarrassed renter, resorting to hanging posters to distract from the tasteless decor of their landlord, the dynamic sweeping curves of a large glulam ring beam distract from the masked facades. Stretching above the courtyard and reaching towards the screened buildings to each side, an elevated dome-like structure disrupts prevailing wind flow, creating a moment of respite in the sunken garden beneath.

The glulam canopy protects a terraced stone-lined void, punctured with planters providing outdoor seating and temporarily protecting regulars of the surrounding workplaces from rainfall, wind, and unanswered emails. Rainwater hitting the curved glass panels stretched over the mass timber lattice canopies is funnelled into ground-level planters. The water makes its journey through the sequence of stepped beds before reaching

a tank concealed under the basement-level paving. Arrivals to The Campus via car may exit the basement-level car park through the sunken garden, briefly immersed in the green-curated quarry, cast in geometric shadows by the bi-curved glulam lattice above.

The canopy and sunken garden at The Campus, Cherrywood demonstrate the principles of biophilic design. Its form is shaped by careful analysis of local wind conditions; it supports connection with nature through the use of natural materials, daylight, and plants. The precision-engineered CNC-cut canopy utilises technological advances to imitate a tree, providing shelter and distributing water to the plants below. The exposed carbon-sequestering canopy demonstrates the structural potential of mass timber. Biophilic design in a modern workplace is the signature of a species flirting with remorse over their emancipation from life-supporting ecosystems but unsure if they are willing to risk regressing to their primal self by getting too close to the chaos of an unsealed ground.



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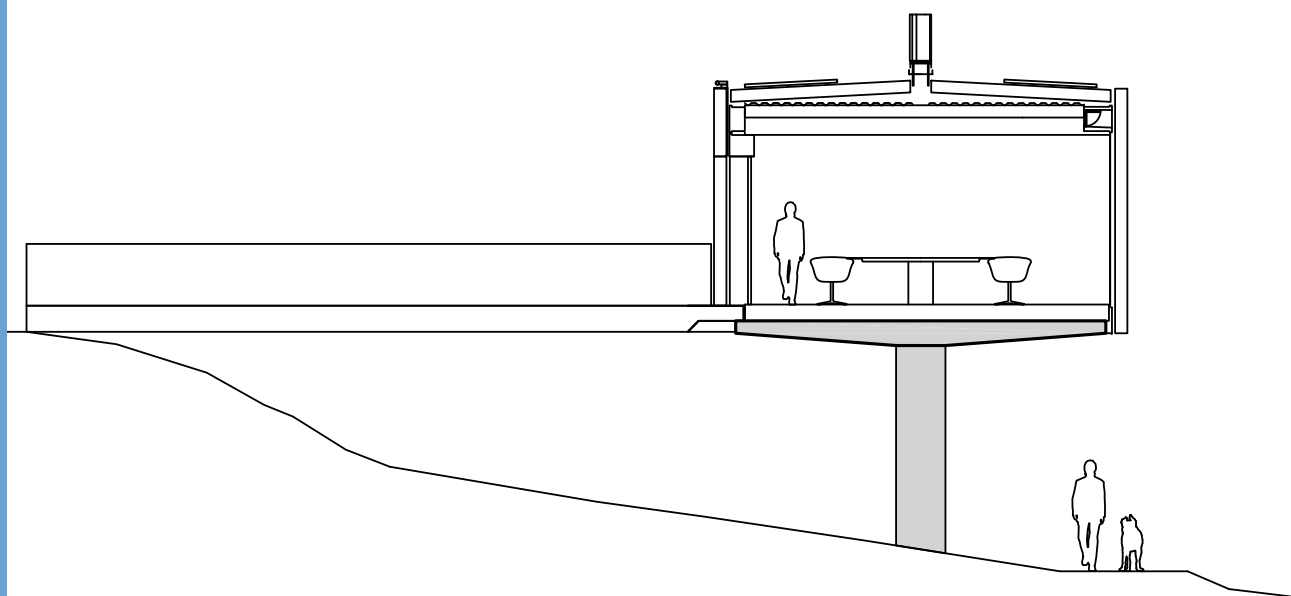


MOLA cautiously tests the designed, and now familiar, segregation of the workplace from natural systems. Stepping out of the glazed pods and crossing the corten gangwalk, employees of The Campus move along the pondside walkway towards their next appointment. The journey requires tactile connection with a vegetated environment; insects may cross your path, and fresh air may be inhaled. The path expands and contracts, projecting over the pond below and carving into the hill. Concrete benches set into the grass hill allow for moments of pause in green surroundings. This seemingly organic oasis in a far-flung Dublin business park is facilitated by reevaluating the potential of the existing water management system – a strategy of altering existing infrastructure to support connection and biodiversity, repeated in the partial conversion of the basement car park to a terraced garden.

Having provided a gradient of scales of connection with nature throughout the site, The Campus turns to ask questions of advanced environmental etiquette. The meeting room pods received three Institute of Designers in Ireland (IDI) Awards in 2023. They are convincing in their image of considerate, capable guests in the landscape, limiting disruption to soil life, producing and sharing electricity. The awards reference the long-term sustainability of the structures, designed to be disassembled, with the carbon-intensive materials of glass and concrete recycled. An honourable plan. The chequered shared surface paving throughout The Campus is marred by the installation of speed bumps and marked parking spaces. This is an indication that the life of The Campus may diverge from the intentions of the design – a warning sign that justifying the use of environmentally costly materials by enabling disassembly may be more of an optimistic aspiration than a likely future.

Although questions on how to ensure a circular life for carbon-intensive materials remain, MOLA's public realm enhancements to The Campus, Cherrywood demonstrate the immediate feasibility of increasing biodiversity, generating power, and the potential of low-carbon structures, advancing commercial Irish architecture towards environmentally positive practice.

Review by Róisín Cahill



Section



Section



Site Plan

- 1. Canopy and sunken garden
- 2. Sustainable meeting pods

The Campus, Cherrywood

Loughlinstown, Co. Dublin



Items considered private are marked 'undisclosed'. Items not available or applicable to the submitted projects are marked 'n/a'. Information that is not available but is in the process of measurement is marked 'TBD'.

Area

Site Area	n/a
Floor Area	n/a
Plot Coverage	n/a
Plot Ratio	n/a
Unit Density	n/a

Procurement

Client	n/a
Building Type	n/a
Contract	n/a
Value	n/a

Performance

BER	n/a
Airtightness	n/a
Biodiversity Net Gain	n/a
Certification	n/a

Performance (cont.)

measurement	project value	RIAI 2025 target	RIAI 2030 target
Primary Energy Demand (Part L) ¹	n/a	n/a	n/a
Primary Energy Demand (estimated) ²	n/a	75 kWh/m ² /yr	55 kWh/m ² /yr
Primary Energy Demand (in use) ³	n/a	75 kWh/m ² /yr	55 kWh/m ² /yr
Embodied Carbon ⁴	n/a	970 kgCO ₂ e/m ²	750 kgCO ₂ e/m ²
Potable Water (estimated)	n/a	< 95 l/p/day	< 75 l/p/day
Potable Water (in use)	n/a	< 95 l/p/day	< 75 l/p/day
Overheating	n/a	25-28 °C maximum for 1% of occupied hours	
Daylighting	n/a	> 2% av. daylight factor, 0.4 uniformity ratio	
CO ₂ levels	n/a	< 900 ppm	
Total VOCs	n/a	< 0.3 mg/m ³	
Formaldehyde	n/a	< 0.1 mg/m ³	
Radon	n/a	< 50 bq/m ³	

Architects' description

The transformation of Cherrywood Business Park into The Campus, Cherrywood under the ownership of Spear Street Capital, and guided by MOLA Architecture's masterplan, marks a shift towards sustainability and innovation. The redevelopment prioritises biophilic-inspired spaces and public realm strategies, emphasising a connection to nature throughout the site.

At the heart of The Campus are the sustainable meeting pods, designed to offer eco-friendly meeting spaces powered by renewable energy sources such as solar panels and wind turbines. These pods not only exemplify sustainable practices but also encourage collaboration and well-being among business park tenants. They demonstrate meticulous design and construction, producing surplus energy and contributing to the site-wide lighting system, thus promoting a harmonious relationship with the environment.

The Cherrywood canopy and biophilic sunken garden demonstrate an innovative approach to sustainable design. Constructed primarily from glulam timber, the canopy serves as a catalyst for social interaction within a natural environment. Structural challenges were overcome through careful material optimisation, with the rejection of steel in favour of sustainable timber setting a precedent for future projects to explore sustainable materials and construction strategies.

The project's commitment to sustainability extends beyond its physical structures. From material selection to fabrication techniques, every aspect is scrutinised to minimise environmental impact and promote well-being. Additionally, the project emphasises the importance of conservation, with careful consideration given to maintaining the surrounding green spaces and minimising disruption to the natural ecosystem.

The primary objective of the project was to create a hyper-sustainable environment which promotes interaction and well-being. The design and construction strategies employed to achieve this objective were scrutinised to reflect this overall aim and encourage a sustainable discussion throughout the entire process.

In conclusion, The Campus, Cherrywood sets a new standard for sustainable architecture, demonstrating the possibilities of integrating innovation, collaboration, and environmental stewardship into the built environment. Through thoughtful design and construction practices, it not only revitalises the business park but also inspires a more sustainable approach to urban development.

Photography

1. The glulam canopy protects a sunken garden.
2. Aerial view of The Campus in context.
3. The meeting pods connect to the loop walk via corten steel gangways.
4. Rainwater hits the canopy's curved glass panels and is channelled to ground-level planters.
5. The cylindrical glass meeting pods have fixed external timber louvres.
6. View from pod to landscape.
7. The sunken garden includes terraced seating and planting.
8. The new structures minimise physical connections to the ground.
9. A glulam lattice creates the canopy's form.

Photography by Donal Murphy

Credits

Architect

MOLA Architecture

Client

Spear Street Capital

Notes

1. Excludes unregulated loads, calculated using DEAP/NEAP.
2. Includes regulated and unregulated loads, calculated using a performance-based standard/software.
3. Includes regulated and unregulated loads, calculated using metered or utility bill verification.
4. Measured using EN 15978 and Level(s) GWP.

Density diagram and block types based on the Spacemate, developed by M. Berghauer Pont and P. Haupt in *Spacematrix: Space, density and urban form*, Rotterdam, NAI Publishers, 2010.