GREENWICH PENINSULA

THE TIDE

The Tide Fact Sheet

Project Description

The Tide will be a 5-kilometre network of public spaces and gardens embedded into the daily rhythms of Greenwich Peninsula. Both an elevated and at-grade walkway, with programming split across both levels, The Tide activates spaces above and below to provide a layered network of recreation, culture, and wellness. The Tide will stitch together diverse ecosystems, emerging neighbourhoods, and distinct cultural institutions, connecting north to south, east to west, centre to periphery, and city to river. The Tide is both fast and slow. It is simultaneously a running track, a walking promenade, a series of quiet gardens, and a network of social and cultural hubs.

The Tide is conceived of as a series of elevated, landscaped islands where the public is invited to slow down, linger, and overlook the life of the Peninsula. Each island is distinct, defined by unique trees and planting, and by their surrounding views and sounds. These elevated gardens are designed as clusters of structural supports that create elevated planter beds, containing soil and channelling both gravity loads and water down to the ground. The sculptural structure supporting The Tide gardens above also frames and shelters the path below, creating arched pavilions that mark thresholds and passages at the ground level public realm.

Opening July 5, 2019, the first phase of the project will be 1 kilometre long, and will feature a linear public walkway, elevated gardens, pocket cafes, and an architectural promontory overlooking the Thames River.

Location

Greenwich Peninsula is located in south-east London near Canary Wharf, within the Royal Borough of Greenwich, and is bound on three sides by a loop of the Thames River. A former industrial site with a rich history, it is an area quickly transforming. Although known mostly as the site of the O2 Arena today, it is an evolving community with plans for 15,000 new homes, a design district, and a large central park.

Owner

Knight Dragon

Design Team

Diller Scofidio + Renfro (Lead) in collaboration with Neiheiser Argyros

Milestones

September 2015	Knight Dragon commissioned Diller Scofidio + Renfro to design a public space strategy integrated into the planned development of Greenwich Peninsula.
January 2016	The masterplan by Diller Scofidio + Renfro, in collaboration with Neiheiser Argyros is submitted, proposing a new concept for a 5km linear park that connects the cultural and social attractions across the peninsula.
May 2016	Based on a phased approach, the design team begins to develop the first segment of the park along the eastern waterfront that connects inland to the Peninsula Plaza. Gross Max (landscape design) and AKTII (structure) and AECOM (mechanical systems) join the design team.
July 2017	Planning permission from the Royal Borough of Greenwich of Greater London is granted for the elevated portion of Phase 1 of the Tide.
January 2018	Steel Fabrication by Cimolai begins in Italy.

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June 2018	Planning permission from the Royal Borough of Greenwich of Greater London is granted for the at-grade waterfront portion of Phase 1 of The Tide.
September 2018	First steel sub-islands arrive on site, having travelled by sea from Italy, and up the Thames.
March 2019	Installation of the steel sub-islands and links is completed.
April 2019	Landscaping for the project is completed.
July 2019	Phase 1 of The Tide opens to the public.
August 2019	Design work to begin on future phases of The Tide.

Phase 1 Features

Island 1 Number of Structural Supports: 11 Number of Elevated Trees: 13 Platform Height: 5.5 metres (lower), 9 metres (upper)	Located with convenient access to the North Greenwich Tube station, the main entry to the Tide features a generous stair from Peninsula Plaza and elevator for disabled access. Island 1 contains a large amphitheatre space overlooking Peninsula Plaza and the O2 Arena. Two structural sub-islands are stacked to create a multi-level elevated public space.
The Tide Prism **Height: 14 metres**	Designed by Neiheiser Argyros, the Prism utilizes a perforated metal sculptural enclosure wrapped around a London Underground Vent Shaft to obscure and reveal the infrastructure contained within, creating a subtly dynamic veil that changes expression throughout the day. The pavilion contains a large digital media screen, a small cafe, and public restrooms.
Islands 2, 3, 4 Number of Structural Supports: 10 Number of Elevated Trees: 13 Platform Height: 5.5 metres - 6 metres	The three "middle" islands contain distinct experiences: Island 2 features an errant structural support that creates seating between the dramatic twin ventilation towers of the bustling Tube trains. Island 3 features an immersive garden, secluded by mounded trees and grasses. Views from Island 4's seating are oriented towards the adjacent Upper Riverside Event Plaza and Thames River beyond.
Island 5 Number of Structural Supports: 7 Number of Elevated Trees: 8 Platform Height: 5 meters at promontory, descends to waterfront	Located at the heart of the new Upper Riverside neighbourhood adjacent to a planned event plaza, Island 5 gradually descends from the elevated walkway to the waterfront. This knot-like segment diverges to form multiple trajectories at varying elevations. A sunken garden and café with outdoor seating are nestled within the knot, while a cantilevered promontory brings visitors closer to the Thames River.
Waterfront	Linking the Thames Clipper Station and The Jetty, small sheltering canopies in the same steel vernacular as the structural supports and bridges provide water points, wifi charging stations, shade, and custom contoured benches.

Materials

The Tide's material palette is comprised of a painted steel structure, glass balustrade, composite rice husk decking, hardwood benches, bonded metal trim, exposed concrete, stone pavers, and vegetation.

Structural Supports and Bridges

The Tide's first phase is comprised of 28 unique structural supports. They cluster together to form tripod-like structures that support the elevated gardens and walkways above while creating canopies for shelter and reflected illumination at the plaza level. Systems for lighting, electrical distribution, data, and landscape (vegetation, soil, water supply and drainage) are integrated seamlessly into each structural support. The islands are connected by prefabricated steel bridges forming a continuous 2.4m wide path with spans up to 26 meters. Every support and bridge is composed of welded plate steel inner ribs and outer skins forming an aircraft wing-like structure that is lightweight and minimizes impact to the London Underground station box directly below. The custom structures were fabricated by Cimolai in Italy, shipped directly from shop to site via the Thames River, and bolted together in days. The design of the structural elements was a special architectural and structural collaboration with AKTII using parametric software to maximize material efficiency and minimize fabrication complexity. The result is an integrated architectural and structural expression without superfluous cladding.

Landscape

The plantings along the first phase of The Tide adapts to the landscape of the local context that it passes through. The overall framework of tree planting has been optimized to create comfortable micro-climates that take wind studies into account. Phase I features clustered plantings of native birch and pine at both the ground and elevated level. Tree plantings along the waterfront consist predominantly of native waterside trees such as Alnus, Salix, and Poplar. Sweeps of groundcover, herbaceous plants, seasonal bulbs, and ornamental grasses enhance the Tide's atmosphere with additional colour and texture.

Tide Lines

A striped pattern marks the path of The Tide, emphasizing the tempo of movement between cultural and social destinations as an orientation and wayfinding tool. The continuous pattern is rendered in a thin layer of epoxy for elevated portions, while asphalt and granite Portuguese paving stones is used for the ground level.

Design and Construction Team

Designers: Diller Scofidio + Renfro (Lead) in collaboration with Neiheiser Argyros

Diller Scofidio + Renfro: Ben Gilmartin (Partner-in-Charge), Elizabeth Diller, Charles Renfro, Ricardo Scofidio, Anthony Saby, Bryce Suite, Ning Hiransaroj, Alex Knezo, John Newman, Swarnabh Ghosh, Erioseto Hendranata

Neiheiser Argyros: Ryan Neiheiser (Partner-in-Charge), Xristina Argyros, Giorgio Piscitelli, Eleni Vagianou, Danae Haratsis, Nikolas von Schwabe, Athina Zafeiropoulou, Catarina de Almeida Brito, Thalia Chrousos, Chris Yuan, Kevin Larson

Landscape Designers: Gross. Max.
Structural Engineers (Elevated Portion): AKT II
Structural Engineers (Ground Level Portion): Arup
MEP, Lighting: AECOM
Accessibility Consultant: David Bonnett Associates
Cost Consultant: Gardiner and Theobold
Planning Consultant: NLP Planners
Principal Designer for Risk, Health and Safety: Stace
Transportation and Access Consultants: WSP
Steel Fabricator: Cimolai
Canopy and Seating Fabricator: Urban Street Design
Contractor (Elevated Portion): Mace
Contractor (Ground Level Portion): Maylim