Gold Coast Cultural Precinct | Design Competition

Zaha Hadid Architects (Lead Architect)

Gold Coast Cultural Precinct

Bollinger & Grohmann (Structural Engineering)

Max Fordham (MEP & Sustainability)

Lord Cultural Resources (Museum Consultant)

Zaha Hadid Architects (Lead Architect)

Statement of Skills

Zaha Hadid Architects (ZHA) is an award winning, international practice with projects that have been covered in nearly every major publication related to art, architecture and design in a way that few other architects have enjoyed. Dame Zaha Hadid (DBE), founder of Zaha Hadid Architects, was awarded the Pritzker Architecture Prize (considered to be the Nobel Prize of architecture) in 2004 and is internationally known for her built, theoretical and academic work.

Capability

Established in 1980, ZHA has acquired over 30 years of experience building some of the most acclaimed architecture in the world and has been engaged in the design of over 900 projects in 44 countries. Key to the success of the practice is our 350 staff from over 55 nationalities. We are an international office, with the capability to deliver projects around the world. Where necessary we form collaborative inter-disciplinary teams working with locally based consultants to ensure smooth project delivery.

Suitability

Our design team combines world-leading experts in the fields of Architecture, Engineering and Cultural programming and we are confident in our ability to transform the existing Evandale site into a vibrant new Cultural Precinct with a range of exciting and economically sustainable cultural facilities. The projects shown here have been selected for their relevance to the Cultural Centre project.

Team Composition (Key Team Members)

The design team will be led by Zaha Hadid Architects (UK) working closely with Local Architects Peddle Thorpe Architects (Brisbane) Key members of the design team are as follows: Lead Architect (Zaha Hadid Architects): Zaha Hadid & Patrik Schumacher; Project Director: Nils Fischer; Project Architect: Konstantinos Mouratidis; Local Architect (P Peddle Thorpe Architects): Peter Gardiner, Brett Hudson; Theatre Design (Arup): Tateo Nakajima and Ed Arenius; Acoustics/Audio-visual (Arup): Raj Patel; Transportation (Arup): Trent Lethco; Bollinger & Grohmann (Structural Engineering) MEP & Sustainability (Max Fordham): Henry Luker; Museum Consultant (Lord Cultural Resources): Catharine Tanner

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Glasgow Riverside Museum (11000 m²), Scotland, completed 2011

Tokyo National Stadium, Japan 2018 (won in competition - contract negotiation)

Guangzhou Opera House (70000 m²), China, completed 2010

Heydar Aliyev Centre (57000 m²), Baku, Azerbaijan, completed 2013

Rosenthal Center for Contemporary Art (8000 m²), Cincinnati, USA, completed 2003

Eli & Edythe Broad Art Museum (46000 m²), East Lansing, USA, completed 2012

Grand Theatre de Rabat (27000 m²), Rabat, Morocco (under construction)

MAXXI: Museum of XXI Century Arts (30000 m²), Rome, Italy, completed 2009

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Concept
Zaha Hadid’s design proposal for the Gold Coast Cultural Precinct revolves around the idea of an open landscape. Key intervention to organize the space is a large, cellular structure, introducing a layer of connecting elements, structuring the site into functional and thematic zones, and creating a rich and diverse topography integrating all functional requirements and allowing the visitor to consciously explore and experience the setting of the complex. The architecture emerges as part of this topography – much like plants, caves and other features of a natural landscape. Transitional typologies like open canopies and shaded walkways contribute to a fluid, gradual transition between landscape and building, inviting the visitor to perceive the outdoor space between as a key component of experiencing the Cultural Precinct, not only with an introvert focus on the architectural components, but also vice versa from within the built clusters towards the surrounding land and waterscape.

Master Plan
The key building components, Living Arts Centre, New Arts Museum and City Council Chambers, are expressed as clusters of volumes emerging from the cellular landscape pattern, representing parts of their internal organization, complemented by peripheral canopies, courtyards and walkways. This cluster strategy allows for an integration of existing structures (the City Council Chambers and the main Theatre are intended to remain on site) whilst avoiding them to appear like disturbances; further they can be replaced successively without compromising the overall composition. The cellular landscape structure, forming the substrate for all architectural components of this proposal, serves both as a partially elevated connector between different points on the site and as means of organization in plan and section. It bifurcates from the site’s main level and introduces a second access layer, concealing the main vehicular access points from the west on level +3 and two levels of car park, delivery and drop off routes, as well as a drop-off zone with direct access to the climatized building zones. Pedestrian access is undisturbed on the landscape level above.

Further, locally elevated footpaths (North-Eastern quadrant of the site) allow a green wetland layer to flow underneath the visitor’s walk ways without disturbances, accessing proposed boat-piers connecting the Cultural Precinct to the waterway system.

Building Components
The Living Arts Centre’s main lobby welcomes visitors approaching from the main access bridge to the north. The Theatres are arranged in cells on a horse shoe shaped loop around the existing main theatre, allowing for ticket sales and lobby operations and secondary entrance connects the main space to the heart of the development, with independently ticketed and operated venues within the complex. Between the main lobby and the lake to the east is a grand amphitheatre, using the modelled embankment of the lake for casual audience seating, and a floating stage on pontoons for performances, allowing for it to completely disappear into “garages” under the landscape if not in use. Similarly, the New Arts Museum is structured into two emerging clusters with a canyon like thoroughfare on the landscape level, allowing the audience to pass in between the dedicated volumes for permanent and visiting/temporary collection. On the service level +3, these two volumes are connected, allowing for central servicing and internal visitor flow between the two parts of the museum. Sunken courtyards as part of the cellular topography allow for shaded courtyards with sculptures and large objects, complementing the housed-in parts of the collection.
Environmental Strategy

The proposed pavilion-like clusters work like onions in layers, both in their aggregation and on an actual building scale. Multiple layers of buffer zones around highly controlled interiors create an efficient transition from outside to inside conditions.

The building clusters are surrounded by shading pavilions, creating comfortable conditions for visitors exploring the outside and keeping sunlight off the facades. The actual facades are equipped with arrays of external shading louvers designed for optimum direct sunlight protection. A glass façade allows for a strong visual connection to the surrounding landscape and for the internal circulation spaces to be naturally ventilated, where permissible, and climatized to human comfort level. The last ring of the onion is a heavy internal wall serving as a thermal buffer and separating the tightly controlled performance and exhibition spaces from the visitor circulation, keeping the volume of these onerously conditioned spaces to a minimum.

Construction

All pavilions are proposed as mushroom or arch supported structures in layered wood grids, supporting the roof from a central support. Closed structures are complimented with a self-supporting diagrid façade sub-structure, holding a glass façade and external horizontal wooden shading louvers. The inner exhibition and performance spaces are housed by heavy sandstone or concrete walls serving as thermal buffers.

Vented roofs with a white ceramic rain screen serve as light reflectors and lower the surface temperature in the vented plenum over the actual weather envelope protecting the interiors. Perforations in the rain screen allow for daylight intakes where adequate.