
PROJECT DRAFTING AND SITE MANAGEMENT SERVICES FOR THE CONSTRUCTION OF THE
SECOND HEADQUARTERS OF THE GRAN TEATRE DEL LICEU, NAMED LICEU MAR, AND URBAN
RENEWAL IN THE SURROUNDING AREAS

TECHNICAL SPECIFICATIONS DOCUMENT

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1 PRESENTATION

The sea has long been a source of knowledge, and until relatively recently, it was the only route through which new materials, food, innovations, different ways of doing things, and cultures arrived. Growing up in a port city therefore meant, among many other things, living in a diverse, open, curious, restless, and daring city—always willing to learn, explore, innovate, and advance in the face of the unknown, with the aim of improving and thriving with determination.

Barcelona undoubtedly incorporates this creative pulse and knowledge into its DNA, exhibiting it in all its facets: its architecture, urban planning, business community, social issues, promotion of biomedical research, universities, and art in all its forms.

The Gran Teatre del Liceu is a cornerstone of this cultural Barcelona, always striving for artistic excellence and accessibility to opera and art in general. To continue tackling the challenges it faces it needs a new space where it can continue to develop its objectives, linked to creation, education, opera, music and dance, with both an international and national outlook.

And this need leads us to think that this second space would ideally be located in the Port of Barcelona. A new cultural hub close to the city and with international aspirations, which would contribute to transforming people through its activity and play its part in transforming the city. Liceu Mar, a new benchmark cultural centre that will bring cultural life to the port.

This new creative, educational, and cultural hub for opera, music, and the performing arts lends profound significance to its setting. Going to the theatre is now an integral part of the theatrical experience, and in this sense, the building defines its surroundings. Just as we can say that the Port of Barcelona embodies and has facilitated the spirit of this ancient, diverse, open, restless, and bold dynamic, driven by a desire to learn, innovate, and progress, the Liceu Mar Project must offer a fresh, comprehensive perspective on the city's advance toward the sea.

Liceu Mar brings a new vision to this space, situated at the threshold between the city and the sea. A new way of experiencing this place, where leisure and culture, activity and civic engagement are cultivated, and where the value of the humanities will strengthen the dialogue between the port and the city. The Liceu Mar hub is intended to spark transformation, to generate renewed synergy between the people and the Port of Barcelona.

2 URBAN ENVIRONMENT

2.1 LOCATION

The future development is located in El Port Vell, a trapezoidal area situated within the Port of Barcelona, specifically on Moll d'Espanya. The boundaries of the development area are detailed in Section 6, Urban Planning Criteria, of these Specifications.



2.2 SITUATION

Ciutat Vella District

Port Vell is located in the Ciutat Vella district of Barcelona, its very first district, defined by the perimeter of the old city walls and corresponding geographically to the historic centre of Barcelona. The district is bordered by Eixample to the west, the Mediterranean Sea to the east, Sant Martí to the north, and Sants-Montjuïc to the south. The Ciutat Vella district comprises four neighbourhoods: La Barceloneta to the south; El Raval to the west; Gothic Quarter in the centre; and Sant Pere, Santa Caterina and La Ribera to the east.



Gothic Quarter

The Gothic Quarter is the oldest part of the city and its historic centre, and is where most of the city's historically significant buildings and streets are located. Over the centuries it has been the centre of political and institutional representation.

The Gothic Quarter comprises at the same time, different historical neighbourhoods that conserve their own personality: El Call, Sant Just i Pastor, Santa Maria del Pi, La Catedral, Santa Anna, La Mercè and El Palau.

The historic urban layout of the neighbourhood follows the Roman *cardo* and *decumanus* axes, located at the highest point of the former Mount Tàber (Plaça de Sant Jaume).

The transformation of the neighbourhood

The structure of the neighbourhood remained intact until the 19th century, although its internal morphology changed drastically during the 18th century due to a significant increase in density. Large mansions were subdivided into irregular flats lacking basic services, every available plot was used, remaining vegetable gardens were eliminated, poorly lit and poorly ventilated rooms were created, and old houses were demolished to build new, much taller ones.

The nineteenth century marked a period of major transformation in the structure and morphology of the Gothic Quarter. The conversion of parish cemeteries into public squares, the emptying of large buildings with consequent changes in use, the demolition of the city walls, and other urban interventions meant the Gothic Quarter started to be viewed as prestigious collective heritage and a valuable urban space due to its regional and historical centrality, which needed to be preserved.

The neighbourhood's heritage value, the variety and differences between its constituent sub-neighbourhoods, and consequently the complexity of its urban processes have resulted in it specialising in the tertiary sector, becoming the most important commercial centre in both Barcelona and Catalonia.

Although the project area is administratively located within the Gothic Quarter, its urban configuration (a peninsula), its direct exposure to the seafront, and its immediate proximity to both the Barceloneta neighbourhood and the port itself, mean its character is much more closely connected to these open, maritime environments.

This is a transitional zone where the nautical, open, port-related, and contemporary character of the adjoining spaces predominates over the typical features of the historic Gothic Quarter *per se*.

2.3 IMMEDIATE URBAN CONTEXT

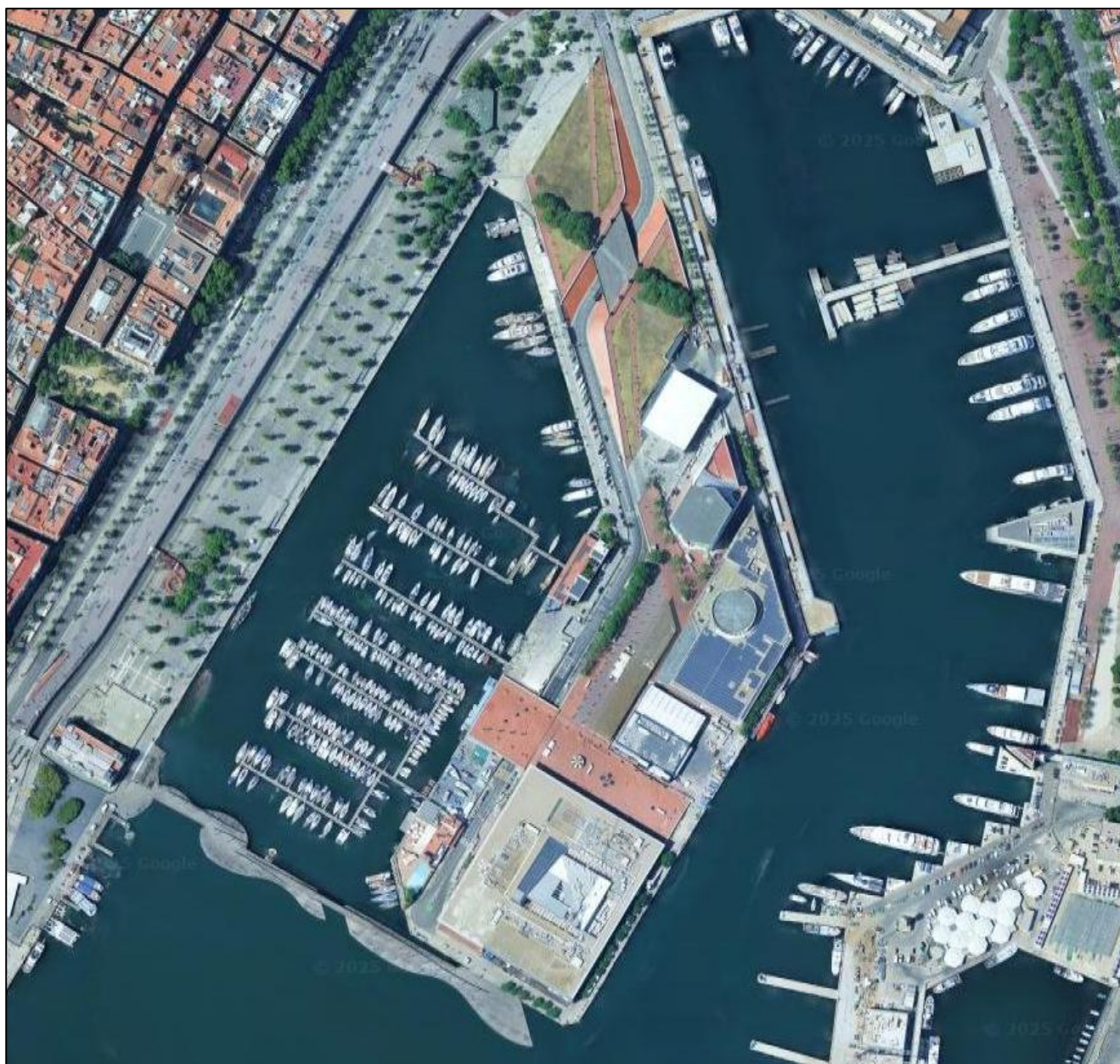
The project area is located on Moll d'Espanya, a peninsula within in Barcelona's Port Vell. This is a strategic space on the city's seafront, which has undergone profound urban transformation in recent decades.

Originally, this area formed part of Barcelona's traditional port infrastructure, intended for logistics and commercial activities linked to maritime traffic. As those uses declined and with the municipal aim of reclaiming the coastline for public use, Moll d'Espanya became the focus of an urban regeneration project launched on the occasion of the 1992 Olympic Games. This action transformed the space into a peninsula connected to the city by footbridges and promenades, facilitating new public, cultural, commercial, and recreational uses.

Today, Moll d'Espanya is home to a combination of facilities representative of contemporary urban life: Maremagnum, a large-scale shopping centre; L'Aquàrium, a cultural and museum facility; landscaped public spaces; and areas for sea-related use, such as the Club Nàutic and the Club Marítim de Barcelona sailing clubs. This functional diversity generates intense activity for residents and tourists alike, shaping a highly dynamic environment. It has a direct relationship with the sea and is progressively integrated into the urban fabric through its connection with the Rambla, the Maremagnum promenade and its proximity to the Barceloneta and Ciutat Vella neighbourhoods.

The transformation of Moll d'Espanya exemplifies a paradigm shift in the management of urban port spaces: from closed areas reserved exclusively for industrial activity to open, multifunctional spaces oriented towards public use.





2.4 PLANNING

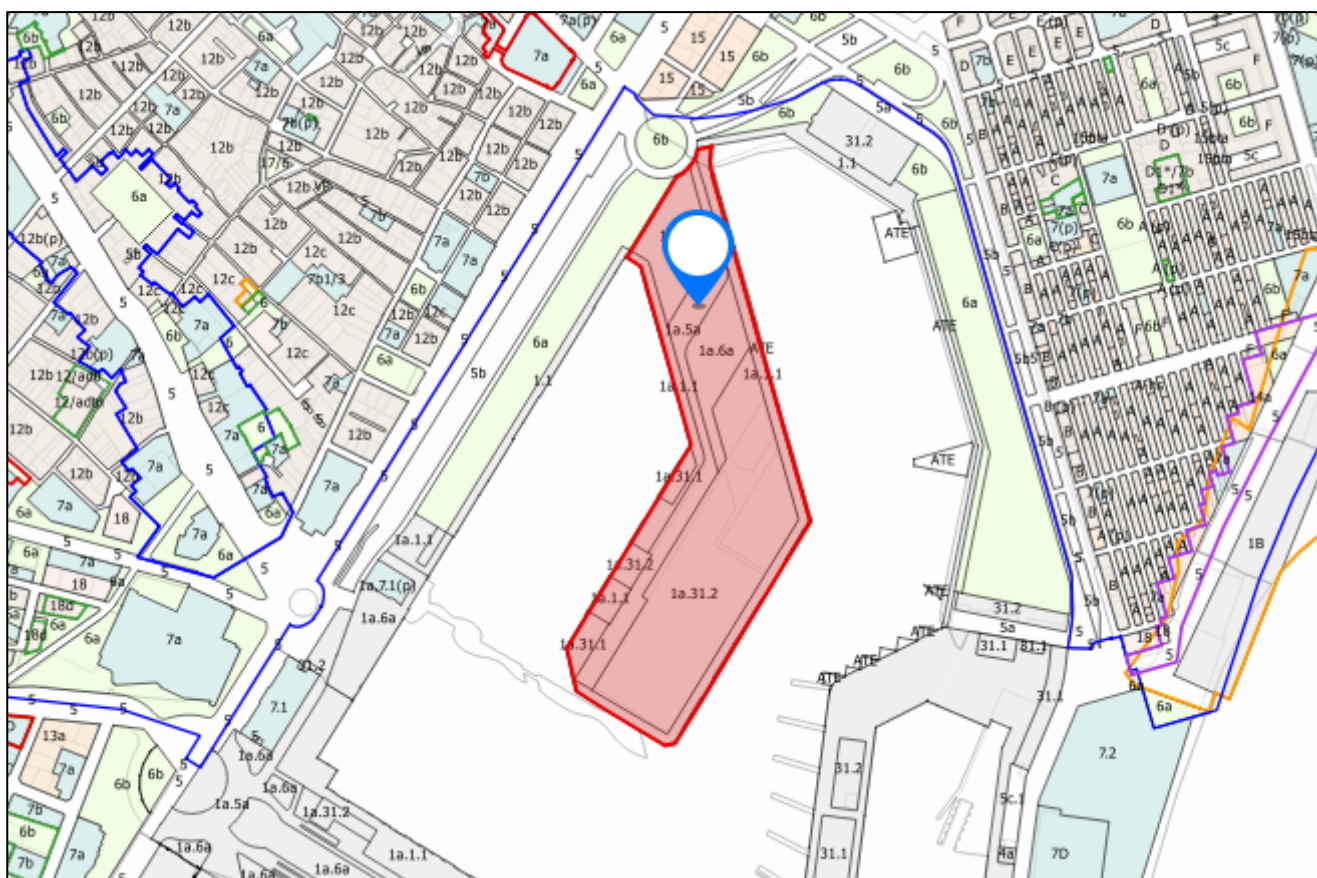
The current planning that applies to the project area is the Special Plan for Barcelona's Port Vell. This was definitively approved on 11/05/1989.

Subsequently, a modification of the Special Plan for Barcelona's Port Vell in the area of Moll d'Espanya was approved. This was definitively approved on 23/11/2001.

As a result of the intervention arising from the requirements set out in this document, a new Modification of the Special Plan for Barcelona's Port Vell will be drafted.

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3 OBJECTIVE

The Liceu Mar Project represents a new hub for organising and revitalising civic life. Its position in the port, on the seafront, acting as a hinge between sea and land, integrating urban space and the nature of the new cultural facility, is inherently twofold. Theatre and city merge in a single purpose.

The building is just as important as the surrounding area. Liceu Mar is open to the city and unfolds into its surroundings. Interior and exterior are interwoven at every scale, expressing the same human value. Through Liceu Mar, public space reclaims its urban meaning, where the new building is embedded into the city's seafront as an element in dialogue with the entire context.

For this reason, the objective of the Liceu Mar Project involves not only the creation of a new building but also the design of its surroundings. The Liceu Mar Project considers not only the architectural requirements for its construction but also the structured integration of the building into its urban context. Architecture and urban planning are inseparable in the Liceu Mar Project.

It is essential that Liceu Mar fulfils this principle. The building must have presence from afar, a human scale up close, and be welcoming when you are within it. It must engage in an organic dialogue with its surroundings.

3.1 OBJECTIVES OF THE NEW BUILDING

Liceu Mar aims to develop the following objectives:

1.- A space open to the general public and the city.

This second venue should be understood as a clear step forward in the vision of a Liceu for everyone that began in 1999, culminating in this new location where all its activities are brought closer to the public, in one of the city's most emblematic sites: the Port of Barcelona. A space conceived as a community hub for all citizens—children, young people, and adults—united by a shared desire to learn and discover. The facility must be designed to accommodate an audience that, on the one hand, given demographic trends, may be older, as life expectancy has increased in recent years, implying a potentially broader base of visitors from this group. The building must be prepared to ensure comfort and respond to the specific needs of an older audience. On the other hand, the facility wants to become a benchmark in terms of family and educational programmes. It must therefore also be exemplary in its welcoming and exhibition spaces, ensuring that children and families can enjoy a pleasant experience, without overlooking the needs of the general public.

2.- A dynamic reference space.

Sometimes, new spaces can contribute to generating new hubs of activity, in this case centred around a cultural facility. A cultural centre where, beyond the enjoyment of opera and culture, it is perceived as a place to be, to stroll around, to relax in, to lose oneself, to dream, to eat, to play, and to grow. A unique space that embodies values, especially cultural and artistic ones, associated with the city and the Mediterranean region in the twenty-first century. A new centre that surprises and stands apart, where people can interact with the building itself, independently of the activities taking place inside. Indeed, beyond the facility itself, the building is located in a privileged setting where culture can manifest in many forms—near the water, in the outdoor spaces around the theatre and so forth.

Liceu Mar must be an innovative facility in terms of cultural mediation. All the cultural policies of Liceu Mar must ensure that all citizens have access to culture. It must be a beacon of fairness and

excellence. Working from this perspective requires special conditions in the building, based on the permeability of the building itself so that, on the one hand, people make it their own, and on the other, to ensure that the Liceu Mar is a local, municipal and national facility.

3.- Developing educational activities and the Petit Liceu.

The Liceu is boosting educational activities in an important way, with the creation of new shows that link opera with the other performing arts. This proposal involves carrying out activities during most of the year, something that requires a new space in which to develop this project. Imagine that nearly 100,000 students and families could pass through the space each year.

As outlined in Objective 1, it is essential that the reception and exhibition spaces are designed with this type of audience and user in mind. For many students, a visit to Liceu Mar may be their first experience of a cultural venue, making it crucial that this experience is unique, memorable, and positive. To achieve this, the focus should not be placed solely on the performance itself, but on the entire arrival process: where and how waiting times are spent, how comfortable and suitable the auditorium is according to the students' age, and what kind of noise and lighting conditions are present in the foyer and other common areas within the venue.

On the other hand, imagining Liceu Mar as a space for carrying out participatory projects, mostly with students, but not necessarily, forces us to think about what the waiting spaces will be like, how groups will be organised, and how to create a sense of order and harmony.

4.- Setting up the International Centre for Newly Created Opera.

This centre aims to promote the creation of new opera in all its disciplines and crafts (composition, dramaturgy, stage direction, set design, costumes design, etc.). An opera creation factory for researching, testing, showcasing, and exchanging projects with other European opera houses. Exporting and importing talent with the aim of sharing creativity. At the same time, it aspires to be a space for exploring new ways of staging opera and rethinking what opera means in the 21st century. Creativity has always been part of the city's DNA, and this centre is intended to carry that spirit forward. For that reason, it is essential that the main performance space meets the expectations of this creative talent. But equally important are the areas where creative and production processes take shape: spaces that encourage sharing, collaboration, work, experimentation, trial and error, learning, and inspiration. However, this creative energy should not remain hidden within designated areas. The entire facility must embody, convey, and showcase this creative pulse. Rather than being inward-facing, this International Centre for New Creation must be perceived as a living, breathing space.

5.- Establishing a stable dance season.

The city lacks a benchmark venue that proposes a dance season, with national and international companies, encompassing the entire neoclassical up to the period for which the "Flower Market" does such a good job. The Liceu is the other major venue that is asked to programme dance, as happens with all other European and American opera houses. This new space will be the ideal place for this.

Liceu Mar aims to become a space capable of hosting dance companies in residence. This means that, for the duration of their residency, these companies should feel that the facility is their base—a place where they can create, rehearse (whether collectively for a production to be performed in the venue or individually), with complete flexibility in terms of schedule and access. Likewise, the idea is that the company's team will be able to share space and office space with the rest of the Liceu Mar team.

6.- Collaboration with other stage-musical agents in the city.

One of Liceu Mar's goals is to build networks, ensuring this space becomes a place where the entire city feels involved and connected. A new building in the city cannot be understood if it does not open up to other players: Sonar, Jazz Festival, Primavera Sound, Dansa Metropolitana, Llum Barcelona, Festival Grec, etc. Everyone must feel that the dialogue of this Liceu Mar is sincere and true.

7.- Programme of other operas (baroque or chamber) or musicals.

Zarzuela, chamber opera, baroque, contemporary and classical musicals are some of the types of shows that it makes sense to put on at Liceu Mar. This means that many of the productions presented at the venue will feature live musicians, for example through the revival of the Liceu Academy, an orchestra made up of conservatory alumni who are in the process of becoming professionals. But it also means that, as in the case of the Liceu, the Liceu Mar will become a space for rehearsals and exhibitions. It is necessary to ensure that the main auditorium is blocked out for rehearsals for as little time as possible and to find alternatives for setting up the different parts of the show without having to use this space until it is absolutely necessary. However, the main auditorium must be prepared for all kinds of concerts requiring perfect amplification.

8.- Development of public programmes.

The goal of Liceu Mar is to be a facility that connects with the public through its beauty, its human scale and its comfort. But also for all the activities and public programmes that take place in the space (conferences, discoforum, opera preparation workshops, family workshops, audience school, Liceu radio, recording of podcasts and video podcasts, Liceu al fresco, etc.). All public programmes must be able to run smoothly and organically.

9.- Versatility and usefulness of the space.

Due to the activities planned for this new centre, it will need to be versatile, divisible into different areas, have sufficient space for rehearsals and be large enough to be economically viable.

10.- Accessibility and inclusion.

In the 21st century, there should be no barriers in the cultural world and, therefore, this concept should be central to the concept of Liceu Mar. Among other aspects, the senior population must be taken into account and it must be ensured that the space is fully accessible to people with reduced mobility. It is necessary to devise a model that facilitates the creation of wheelchair-accessible areas. Furthermore, when we talk about creating, this must also include people with functional diversity, who have sight or hearing difficulties. The spaces must therefore be adapted for people with these requirements, ensuring that everyone can actively participate in cultural life.

Access must be comfortable and easy for all groups, including drop off areas and transport adapted for people with reduced mobility.

Liceu Mar should be a climate refuge, and therefore, the interior and exterior spaces must be designed with this in mind, offering comfort to the public.

Finally, a warm welcome is important, and reception areas, ticket offices, information desks, access to restaurants, etc., must be designed sensitively, promoting an inclusive, inviting and professional experience that reinforces the image and values of the facility from the very first moment.

11.- Sustainability.

It should be a reference building in terms of its environmental and eco-efficiency parameters. It must be a climatic refuge. It has to incorporate renewable energies, efficient infrastructure and low water consumption. It is necessary to preferentially use materials that are local, recycled, durable and easy to maintain.

12.- Patronage, space rental and catering.

Patronage, space rental and catering are essential elements to guarantee the economic viability of the Liceu Mar project. For this reason, for example, the facilities must include spaces designed to welcome patrons and benefactors, in the form of unique areas set aside for these stakeholders, which can also be used to attend to VIPs who come to the Liceu Mar to attend a performance in a more intimate setting.

The building must take into account the places where all those who contribute money as patrons or benefactors will be represented. Therefore, the desire for Liceu Mar to be open, accessible, creative, innovative and youthful should not be at odds with the elegant character, love of beauty and exquisite protocol and manners that have always been hallmarks of the Gran Teatre del Liceu, and which Liceu Mar must strive to inherit, albeit updated to reflect the reality of 2025.

The building must also be able to meet the needs of those who wish to hire the auditorium or other spaces (e.g., for an external concert or a meeting/conference), without this taking precedence over the main activity of the auditorium and its suitability for performances. Ultimately, it must be considered that if the facility is willing to rent out its spaces, it is necessary to ensure that these external activities can be carried out adequately at Liceu Mar. These events will be easily identifiable thanks to the Theatre's advertising media. It will be easy to connect with the outdoor spaces—which could be a possible attraction for these external agents—and spaces will have to be created to facilitate conversation in the communal areas and, as far as possible, catering companies will have to be provided with the facilities they need to offer a good service.

Finally, it is worth mentioning that Liceu Mar will have two dining spaces that should make the facility more accessible to the city and increase visitors' desire to stay.

In conclusion, Liceu Mar must become a facility with an activity of around 210 events (not including space rental), it must be in use day, evening and night (including its dining spaces), and it must be able to combine its public activity with the other projects that take place in this space, such as the newly created opera centre projects and the company in residence.

3.2 OBJECTIVES OF THE NEW URBAN DEVELOPMENT

The site where the new Liceu Mar building is to be located and the area to be developed is the Port of Barcelona, specifically Moll d'Espanya, within the limits and conditions that will be explained in the subsequent section on “Urban Planning Criteria”.

The present-day Moll d'Espanya isthmus is represented by Plaça de l'Ictineu, visually predominant with two slopes forming the inclined plane of the landscaped public space, with a concept of elevating the pedestrian so they can reach the shopping and leisure platforms located on the eastern arm of the isthmus, while the lower level of the area is used for road services. This solution, applied at the end of the 20th century, has now become, in part, a residual space in the city, although it is an important transit area for communication with the leisure area of the isthmus.

The urban renewal of this area, motivated by the implementation of the new cultural facility of the Liceu Mar, should make it possible to recover the value of this emblematic space in the nucleus of the port, linked to the social heartbeat of the city.

The planned project area, developed in Section 5, is the perimeter of the global project (building + public space), which covers the plot occupied by the current Plaça de l'Ictineu according to the layout described in Section 5, respecting the concession limit on the Barceloneta side (east), connecting with the platform of commercial and leisure activities (L'Aquàrium, the Maremagnum, Plaça de l'Odissea) and respecting the current area of the Club Nàutic on the western side of the isthmus.

For the new urban development, it will be considered that the Imax building will be demolished and its footprint freed up to become a public space, which will lead to the future remodelling of the visible L'Aquàrium façade.

The plot defined by the layout of the development area has a surface area of 46,500 m², of which 38.71% is destined for the construction of the new Liceu Mar building, with the limitation of separating the ground floor 12 m from the boundary of the quay facing the Gothic Quarter (west), and allowing upper floors to overhang that area.

The Liceu Mar development area must meet the following objectives:

1.- Encounter between the city and the sea.

The Port of Barcelona embodies the merging of the city and the sea. The new activity proposed for this site is a step forward in the trend towards new uses for the old port spaces. The overall view of the transformation must give Moll d'Espanya a fresh feel. This is an opportunity to strengthen the links between the Port Vell and the general public.

2.- Landmark on the waterfront.

Liceu Mar is a visual landmark along the city's key approach and access routes to the sea. Its position interacts with the urban fabric at multiple scales—from the broader landscape and distant views to the closer and more immediate surroundings. The quality of this urban space is closely related to its uniqueness.

The singularity of the new building, as a landmark on the seafront, must respect the existing visuals of other iconic buildings in the surroundings, preserving as far as possible the pre-existing visual communication.

3.- Quality public space to come to and stay in.

The urban space around the Liceu Mar must recognise the dual relationship with the building and the city, the dual vocation of a space for coming to, arriving at and accessing a cultural building and, at the same time, a space that is open and free for everyone, suitable for large open-air performances. The public space must facilitate and enhance the facility's accessibility to the city. All these functions must be articulated in continuity with the building.

4.- Fluidity and connection.

The entire urban intervention area must facilitate pedestrian flow. The area surrounding Liceu Mar is not the final destination, it is just another milestone in a string of spaces and services for leisure and culture. The route from Moll d'Espanya or Rambla de Mar must not be interrupted and must retain the connectivity with Moll de la Fusta, Moll de Bosch i Alsina and La Barceloneta. The arrangement of all functions and other elements must foster creativity and public enjoyment.



5.- Fluidity and connected for vehicle access.

Continuing with the concept of the previous section, the purpose of fluidity and connection by means of a vehicle is to facilitate access to the overall area (Liceu Mar, other existing activities and public space), giving priority to pedestrians and avoiding disrupting the urban space set aside for people.

Given the level of the current platform of the public space to be connected with the proposed urban development project and the level of the road with access to the existing parking area (Maremagnum), the new road will have to be underground once the isthmus area is accessed. This new road will be a two-way route, with a connection from the front of the city to the end of the Maremagnum car park and will incorporate all the elements of an urban road (vehicles and pedestrians) and the underground civil works, as well as the elements necessary to deal with the logistics of the existing activities and the new Liceu Mar, while also guaranteeing access to public transport and the rest of the existing buildings guaranteeing both interior communication and communication with the exterior public space.

Consideration must be given to the new flow of vehicles in the isthmus area, amplified by the new Liceu Mar; this must guarantee that traffic on the urban roads on the approach to the isthmus will not be altered and that traffic inside the isthmus will be able to circulate without interrupting the manoeuvres linked to the logistics of each activity and the new Liceu Mar, as well as the parking for group drop-off and pick-up.

6.- Efficiency and comfort, well-being for people.

The framework for the intervention in the urban space must be particularly mindful and respectful of the environmental reality of the Port of Barcelona, in line with the health and comfort needs of people. The management of plant species must favour these issues while focusing particularly on sustainability and conservation.

4 PURPOSE OF THE COMMISSION

The purpose is to contract the architectural and urban planning team that will carry out all the phases of the project and subsequent project management of the work on the future Liceu Mar building in Moll d'Espanya in the Port of Barcelona, as well as its urban development.

The purpose of the international design competition is to award the winning team the contract for the drafting of the preliminary and basic project for the building, as well as the preliminary and basic project for the urban development and civil works, and the documentation necessary to carry out the modification of the Special Plan for the urban development.

The possibility is contemplated, if so agreed by the contracting entity, of awarding the contracts for the drafting of the executive project and the construction management of the works after the successful bidder has been selected. These commissions will be processed by means of a new negotiated tender procedure without advertising, with the successful bidder for the tender in accordance with the provisions of Article 168, letter d) and 185.4 of the LCSP (public sector contract law).

Regardless of the form of collective accreditation of the technical solvency of the drafting team, it will be an essential requirement that the technician(s) who provide(s) accredited experience in the reference projects **effectively assume(s) technical leadership of the assignment.**

The role of general project coordination (technical project management, leadership, and technical decision-making) **and construction management must be exercised by one of the authors who provides the reference projects as proof of solvency.**

Before the award, **in the preliminary requirement**, this figure (or figures) and their assignment of responsibilities within the drafting team must be expressly identified.

Although it is necessary to consider the architectural and urban development project as a whole, the commission has 3 distinct parts:

4.1 BUILDING PROJECT

The building project must at all times meet the objectives set out in these specifications.

- Preliminary project: in addition to the minimum documentation required in accordance with the Specifications for the Drafting of the Building Project, this includes:
 - Acoustic study of the rooms.
 - Scenographic study of all the spaces that require this due to their impact on the project.
 - Movement flow study of public, technical and artistic personnel.
 - Study of logistical material flows, both internal and external to the building.
- Basic project with construction definition for the building and its surroundings: in addition to the minimum documentation required in accordance with the Specifications for the Drafting of the Building Project, this includes:
 - Detailed acoustic study of the rooms.
 - Stage project: lighting, sound, video, communications and stage machinery.
 - User experience study that responds to the objectives required by the building and the urban planning in these specifications.

These technical specialisations will have to be developed through independent partial projects, which take into account the unique aspects of each area. However, the general project will include all the corresponding installations, without these being fragmented within the aforementioned partial projects.

- Building permit application document according to prior consultation or TPC (Technical Project Conformity) with all the annexes necessary to request the mandatory reports.
- Obtaining the Technical Suitability Report.
- Assistance in the process of obtaining the building permit or TPC (Technical Project Conformity).
- Executive Project and annexes, endorsed: in addition to the minimum documentation required in accordance with the Specifications for the Drafting of the Building Project, this includes:
 - Detailed acoustic parameterisation of the rooms.
 - Stage project: lighting, sound, video, communications and stage machinery.
 - User experience study that responds to the objectives required by the building and the urban planning in these specifications.

These technical specialisations will have to be developed through independent partial projects, which take into account the unique aspects of each area. However, the general project will include all the corresponding installations, without these being fragmented within the aforementioned partial projects.

- LEED certification.
- Response to queries during the drafting phase of the tender specifications for the work.

4.2 URBAN DEVELOPMENT PROJECT AND CIVIL WORKS

- Preliminary urban development and civil works project: in addition to the minimum documentation required in accordance with the Specifications for the Drafting of the Building Project, this includes:
 - User experience study that responds to the objectives required by the building and the urban planning in these specifications.
 - Assessment of how the urban development proposal fits in with that of the building in terms of the flow of people, vehicles and materials.
- Basic Project for the urban development and civil works: in addition to the minimum documentation required in accordance with the Specifications for the Drafting of the Building Project, this includes:
 - User experience study that responds to the objectives required by the building and the urban planning in these specifications.
- Executive project for urban development and civil works, including associated demolition projects, endorsed: in addition to the minimum documentation required in accordance with the Specifications for the Drafting of the Building Project, this includes:



- User experience study that responds to the objectives required by the building and the urban planning in these specifications.
- Assistance in the municipal approval process or TPR (Technical Project Report)
- Response to queries during the drafting phase of the tender specifications for the work.

4.3 MODIFICATION OF THE SPECIAL PLAN FOR BARCELONA'S PORT VELL

Drafting of and assistance for processing the modification of the current planning to adapt it to the new architectural and urban planning proposal.

5 FUNCTIONAL PROGRAMME OF THE BUILDING

5.1 COMMON AREAS

Lobby and Foyer

When the public arrives and enters Liceu Mar, immediately they find a large access, reception and lounge area, a large, open-plan foyer that can remain open during the day as a community hub, and which can even host small exhibitions or shows (the necessary infrastructure must be provided). During intermissions, the same area will act as a foyer, thus optimising the use of space.

It must have adequately sized and adapted restroom facilities for children.

There must also be space for an automatic cloakroom with personal lockers and storage for pushchairs, bicycles and scooters and small storage rooms for booster cushions and room materials.

There will be space for a shop and ticket office.

There should be a designated area with its own separate access, segregated from the rest of the lobby, consisting of an autonomous VIP lounge to accommodate dignitaries during intermissions or for receptions.

Access control must be located in the foyer lobby, integrated into the space without obstructing the area's function as a visible, open hub accessible to the public.

The space should have good natural acoustics and be properly sound-insulated from other areas.

Shop/Box Office/Information Point

The shop should be fully integrated into the lobby with double access from inside and outside, as well as incorporating the ticket offices and an information or customer service point. All these spaces should be designed to be very fluid and open to the rest of the spaces in the lobby.

Ràdio Liceu

There must be a space dedicated to Ràdio Liceu. Part of this should be facing the public in the lobby, where the announcers are located and interviews can be held, as well as a technical control part.

Bar-cafeteria at quay level

The bar-cafeteria, adjacent to the lobby, at street level with an outdoor terrace on the quayside, is another element to demonstrate that this cultural building is a space open to the city. The theatre is an attractive space accessible to everyone. In this sense, the theatre's bar-cafeteria is a first point of contact where anyone can spend time, have a drink or eat a meal. It is a further area within the great hub the lobby represents.

Restaurant on an upper level

On an upper level above the lobby, overlooking the harbour and the sea, there should be another, self-contained restaurant space, with its own kitchen, with a very different character. It should connect easily to the lobby and should be a striking area with views of the sea and the city, and have an outdoor terrace. Its operation should be independent of the theatre's activity. It may remain open during the day, as may the lobby itself. It must be possible to go to this restaurant and its terrace at any time.

Upper outdoor space within the building with public access

The upper terrace with a good view, with easy access from the lobby, as well as a large viewing platform, is a space where small-scale performances can be staged. This terrace should be a dynamic viewpoint and meeting place for everyone, regardless of what is going on in the various rooms and on the stages.

Exterior and approach areas

The theatre experience starts long before you enter. The approach is important. All theatres must open onto a square in front of the building. The outdoor areas of Liceu Mar must fulfil this function, they must provide an ideal welcoming area for children and for all the groups that come to the theatre, and they must even allow the theatrical or musical activity to begin outside the building.

5.2 EXHIBITION AND REHEARSAL SPACES

Main Multi-purpose Auditorium - Stage

This is the theatre's main auditorium and will be the heart of Liceu Mar. For this reason it must have its own character and personality, in line with the values of the Liceu. However, the aim is to design a space that is different from Liceu Rambla, in line with the 21st century but timeless, while maintaining the Liceu's quality standards.

This auditorium will be used for all kinds of opera, dance and new-format concerts. The Main Auditorium is conceived as a multi-purpose space with a stage tower, where part of the audience area can be adapted for stage space and with a flat floor. A multi-purpose space with a stage tower of sufficient height to "hide" scenographic elements when necessary. This multi-purpose space must be flexible to configure different layouts for the audience (estimated at 20% of the shows), the orchestra pit and the stage. It should permit several configurations with different possible levels, including tiers and other elements to be defined. In any case, it is necessary to have storage for the seats that are dismantled to facilitate the multi-function nature of the auditorium, either manually or automatically.

The variable configuration of the auditorium shall in no way detract from its architectural appearance and character, nor its acoustic performance.

Beyond the stage, it is necessary to have sufficient space in the wings and backstage. This stage should be connected, on one side, to the main stage rehearsal room, an equivalent space in terms of surface area, although lower in height. This connection must guarantee the independence and acoustic insulation of the two spaces.

Acoustics

The auditorium must be acoustically designed to accommodate musical performances (particularly opera) without amplification, must have natural acoustics adaptable to different room configurations and type of performance.

The minimum requirements for natural acoustics, with a full auditorium, must be:

- Volume: $V \geq 9,000 \text{ m}^3$ (8.0 - 9.0 m³/venue)
- Reverberation time RT_{mid} (500Hz-1kHz): $1.4 \text{ s} \leq RT_{\text{mid}} \leq 1.6 \text{ s}$
- Brightness Br : $Br \geq 0.85$
- Early Decay Time EDT_{mid} (500Hz-1kHz): $EDT_{\text{mid}} \approx RT_{\text{mid}}$

Public area

The seating capacity should be between 900 and 1000 seats. The overall versatility must allow for as many audience arrangements as the programmed shows require. There may be different levels of perimeter amphitheatres so that the multi-purpose area does not affect the entire seating capacity.

To determine the visual and seating capacity, it must be taken into account that around 40% of the performances in the main auditorium will be for school and family audiences.

The audience area in the multi-purpose area must have a technical ceiling (at least 10 m high) to cover the different room setups and the type of show, for dramatic lighting or any other scenic requirements.

In addition to the technical ceiling above the most multi-purpose part of the main auditorium, there must be control booths at the back of the audience area: a technical control booth and other booths for broadcasting, simultaneous interpretation, press coverage, audio description, etc. (some of these booths may be multi-purpose).

In terms of facilities, it will be necessary to consider the possibility of operating the technical control from alternative locations for different audience and stage configurations. There must be different camera positions for recording and broadcasting. The whole room must be technologically connected (audio/video/network/announcements) and must have auxiliary or storage spaces for the necessary equipment.

The Main Multi-purpose Auditorium must include different access systems (routes and doors) around it, both for the performers and for the audience, so that it can respond to the different configurations, the setup of the audience and stage binomial so that the multifunctionality is completely natural and effective.

Stage - Stage Tower

The stage and, vertically, the stage tower, must have a width of at least 22 m between any galleries and a depth of at least 14 m, to which must be added a minimum apron of 2 m and a backstage of at least 8 m. In addition, wing spaces of at least 4 m from the vertical of the galleries must be provided on each side. The height to the fly system must be at least 20 m.

The stage elevation shall remain fixed. The height of the stage in relation to the stalls will depend on the type of configuration required at any given time. The relationship between stage height and seating arrangement is closely related to the visuals and will depend on what each show requires.

A fire curtain shall be installed between the public area and the stage box.

The stage must also incorporate various access systems (routes and doors) around its perimeter, both for performers and, where applicable, for audience members in configurations that require it.

Grid - Technical ceiling

It must be walkable. The grid must cover the entire stage tower, and the technical ceiling of the auditorium must cover the entire multipurpose area. Both spaces must be accessible via a single freight lift, which in turn must provide access to the stage level and to other storage areas.

Pit

Special mention must be made of the orchestra pit area, which must be able to be set at different levels and adapted to the needs of the opera to be staged. It is expected to accommodate 60 to 70 musicians. The pit space must be able to be incorporated, automatically or semi-manually, into the audience area to increase its capacity, or into the stage area to increase the stage space beyond the

apron. The levelling system for the stage floor and orchestra pit requires particular analysis to define the degree of automation for the platforms, risers or platforms that make up the system.

When designing the pit, special consideration must be given to the distance between the stage and the audience, ensuring this distance is kept to a minimum so that the performance is as close as possible to the public.

The pit area forms part of the hall's multi-purpose zone and, therefore, is covered by the hall's technical ceiling for the multi-purpose zone.

Backstage

The backstage area, that is, the space behind the stage tower, must be the same height as the auditorium and its maximum width (minimum 22 m between galleries). A minimum depth of 8 m will allow good access for scenic materials and scenery. It is also necessary to make provision for accommodating audiences in centre stage configurations.

Main stage rehearsal room

A rehearsal room matching the dimensions of the main stage will be required, with a minimum frontal depth of 5 meters across the width and a perimeter space around the other sides, with a minimum height of 8 meters. It must have a technical ceiling and floor, allow the movement and handling of large objects to assemble original sets directly, and provide good access for materials and external personnel in case it is rented out. It shall be technologically connected (audio, video, network, announcements). Storage space must be provided for the materials required for the rehearsals.

It should be connected to the stage so that assembled scenic elements can be moved from the main rehearsal room to the stage. The access route between the stage and the rehearsal room must be at least 4 meters wide and 7 meters high.

It should share "green room" spaces and amenities related to the stage entry area. The space should have good natural acoustics and be properly acoustically isolated from the rest of the spaces, especially from the adjacent stage. It must connect to the lobby. It should also be able to be configured, if needed, as a second small performance space with capacity for 300 people.

Secondary stage rehearsal room / dance (multi-purpose)

A second main stage rehearsal room suitable for dance must be provided, allowing subdivision with assured acoustic performance. It must be at least 5 m high and equipped for dance rehearsals with a dance-specific parquet floor, mirrors and bars. The room dimensions shall match those of the main stage. The space should have good natural acoustics and be properly sound-insulated from other areas. It must allow the introduction of large-volume materials, and therefore requires good access. It should be able to accommodate an audience and should have a connection to the lobby, in case this room is rented out. It shall be technologically connected (audio, video, network, announcements). Storage space must be provided for the materials required for the rehearsals.

Dance room

An additional dance room must be made available for the resident dance company. It must be at least 5 m high and equipped for dance rehearsals with a dance-specific parquet floor, mirrors and bars. The space should have good natural acoustics and be properly sound-insulated from other areas. It should have good access. It should be able to accommodate an audience and should have a connection to the lobby, in case this room is rented out. It shall be technologically connected (audio, video, network, announcements). Storage space must be provided for the materials required for the rehearsals.

Main music rehearsal room

This room must have excellent acoustic conditions, with sufficient surface area and volume to ensure this. It should be conceived as a specialised working space where continuous and highly demanding musical work is carried out. The acoustics must support this process by providing a balanced sound environment, with moderate reverberation time, good sound diffusion, and an absence of reflections or echoes that could distort listening. Occupational hazards related to musical activity should also be considered, especially regarding prolonged acoustic exposure. The aim is to guarantee a space that allows clear and precise listening, fostering precise, transparent work focused on interpretive quality. It must be well soundproofed from the rest of the building. It is expected to accommodate 60 to 70 musicians.

It must be technologically connected (audio, video, network, announcements) and specially prepared for recording. It must allow comfortable movement of large musical instruments and therefore requires good access routes. It must have natural light. It should be able to accommodate an audience and should have a connection to the lobby, in case this room is rented out.

Small music rehearsal room

There must be a second room designed specifically for music, suitable for choirs or particularly large chamber ensembles. It must have similar acoustic conditions to the main music rehearsal room. It must be well soundproofed from the rest of the building. It should be approximately 50% of the size of the main music rehearsal room. Despite its specific design, it must also be able to accommodate an audience, as in the rooms described above, and even other types of events related to Liceu Mar's activities.

Classrooms and multi-purpose rooms

Within the music area, there will also be four (4) properly sound-insulated music rooms that will serve as classrooms for courses or seminars. They must have good natural acoustics. They should have natural light, be open, spacious, and pleasant. These will be spaces for the work of various musical ensembles which, within the general concept of versatility of the new musical and performing arts facility, may also accommodate other activities related to musical, performing, and artistic creation in general, thereby increasing the building's versatility.

Versatility shall be a guiding principle in the design of all these rehearsal spaces; consequently, the connections and circulation routes between traditional public areas and those for regular Liceu Mar personnel, artists, or technicians must respond to a new paradigm and optimize resources to enhance functionality. They should be able to accommodate an audience and should have a connection to the lobby, in case they are rented out. They must be technologically connected (audio, video, network, announcements).

Individual rehearsal rooms

There must be six (6) small, fully soundproofed rooms for individual music rehearsal. These small rooms will complete the organisation of the artistic and musical work area, although these will not be part of the general versatility of the other workspaces around the stage environment.

5.3 TECHNICAL AREAS

Dressing rooms

Group Dressing Rooms

It will be necessary to provide a sufficiently large, subdividable area to accommodate group dressing rooms according to the needs and simultaneity of performances. The dressing rooms must be highly functional and versatile to serve all user groups.

Individual Dressing Rooms

In addition, there will be six (6) suitably equipped individual dressing rooms for soloists or other artists who require greater privacy.

Green room

Near the stage, there must be a stage entry area where technical and artistic teams can interact during performances. It will be equipped with “show relay” and communication systems linked to the stage. This space should be welcoming, cool, and spacious, allowing performers to concentrate before going on stage.

Costume Workshop – Laundry

The costume workshop and laundry must be well connected to the dressing rooms, green room, and stage. There must be sufficient workspace including counters, sewing machines, and space for costume fittings. The laundry area should be segregated and equipped with sinks, and prepared for machines such as washers, dryers, irons, ozone treatments, etc. It should allow for the movement and storage of costume racks (“burros”) for ongoing productions.

Make Up Workshop

A space for makeup and characterisation work, including maintenance of wigs, with sufficient workspace and storage for materials. It should be located near the costume workshop, dressing rooms, and stage.

Audiovisual Room

A control room is needed for live direction, announcements, editing, etc., located close to the parking area for mobile units.

5.4 STORES

Specific spaces are needed to store stage material (platforms, lighting equipment, etc.) and technical control equipment (sound, lighting, communications, etc.). The storage area must be well connected to the loading bay and goods access point, as well as to the stage, to the other rooms, and it must be located near the places where the stored materials are used.

The storage spaces must meet the building cleaning and maintenance, stage lighting, stage equipment, audio and video needs

There should be particular focus the storage area for large instruments, located in the vicinity of the music rooms and also close to the stage, with specific humidity control conditions.

This technical area of the building must also include spaces for a maintenance workshop and a small workshop to support the assembly of stage sets, including storage for the necessary materials and hardware.

Loading bay and goods access

A loading/unloading bay is required, capable of operating with articulated lorries (13.6 m trailers). This bay must be level with the trailer bed, allowing all loading and unloading operations to take place on the same working plane. The goods receiving area must have a minimum width of 4 m and a minimum length of 6 m. It must be very well connected to the backstage or tower or stage area, minimising goods handling movements, either through direct access or via a freight lift.

If the freight lift option is selected, it must be of the following minimum dimensions:

- 10 m long.
- 2.5 m wide.
- 3 m height.

Solutions using lifting platforms will be preferable to closed cabin lift systems. This freight lift does not need to be adapted for the transport of persons.

5.5 OTHER SPACES

Offices

Shared office

Two (2) areas must be considered: one coworking area for twenty (20) external or intermittently assigned individuals, and a second office area for the permanent staff of around twenty-five (25) people. The offices for the technical staff must be located close to the stage. They must have natural light.

Meeting rooms

There should also be two (2) or three (3) meeting rooms of different sizes in the office area. They must have natural light.

Staff changing rooms

The staff changing rooms, distinct from the artistic dressing rooms and the dance changing rooms, must meet the needs of the people who work in the building.

Dance changing rooms

The dance changing rooms, distinct from the artistic dressing rooms and the staff changing rooms, must meet the needs of the resident dance company.

Staff break area - Canteen

A break area and canteen must be provided, fitted with tables and a kitchenette (sink, microwave, refrigerators, etc.) for all internal staff. It must be a welcoming space where the much-needed synergies between internal personnel (musicians, technicians, artists) can take place. It must have natural light.

Dance-break room

An additional office area must be considered, specifically for the resident dance company, for five (5) full-time staff members, along with a shared lounge for approximately ten (10) people. All these areas shall be close to the dance room and dance changing rooms. It must have natural light.

Medical service

A small medical office must be provided to meet the day-to-day needs of Liceu Mar, as well as to respond to emergencies affecting both the public and staff. It must be easily accessible and well connected to the auditoriums and the areas where spectators are concentrated, as well as to the outside.

Security

It is an area designed as the security hub for the entire building. It should include all the infrastructure that allows control of the building from a security perspective (internal/external TV control, access control, fire-protection system control, etc.). It must be located close to or directly at the staff access point to the theatre.

General building systems areas

The building's utilities and services shall be designed according to eco-friendly parameters, prioritising the use of renewable energy and reduced energy consumption. In this respect, it will be necessary to study the building's solar exposure. Particular emphasis must be placed on the use of marine thermal inertia for tempering, pre-heating or pre-cooling purposes. These spaces will therefore be located where it is most appropriate for each concept.

5.6 ACCESS AND CIRCULATION

When designing and sizing the access routes (corridors, circulation routes, service lifts, etc.) for all rehearsal spaces (stage rehearsal rooms, dance studios, music rehearsal rooms, etc.) and performance areas (stage, main multipurpose hall, etc.), it must be ensured that they allow for the passage of the following elements:

- Standard Liceu transport trolleys ("dollies", measuring 3 m long x 1.15 m wide x 2.7 m high).
- Grand piano (2.8 m long x 1.6 m wide).

The service lifts must also be suitable for transporting people in addition to goods.

5.7 STAGE INSTALLATIONS

The building construction must incorporate all electrical and electronic installations associated with stage lighting, audio, video, stage communication systems, and scenography systems in general. It must include dedicated clean power networks for all stage equipment, in addition to the building's general electrical installations.

The construction must include the implementation of stage machinery: fly system and galleries, technical ceilings in the halls, overhead stage machinery, stage-level platform systems, orchestra pit, fixed or removable retractable seating tiers with corresponding seats, additional seats for backstage use or for the orchestra pit when configured as an extended stalls area, etc.

5.8 BUILDING EQUIPMENT

In the final construction phase, once snagging is complete and all systems are being commissioned, the building must be fitted with stage equipment, musical equipment, and furnishings.

5.9 TECHNOLOGY AND SIGNAGE

The building must integrate screens and systems for internal information (planning, usage, etc.) and external information (programme listings). Everything must be integrated into the preliminary project, with all the necessary equipment.

5.10 ENVIRONMENTAL AND ENERGY RATING OF THE BUILDING

The building must have an AA energy certification.

The project building must meet all the criteria required to obtain LEED Platinum environmental certification.

To this end, the project must incorporate, from the earliest stages, all necessary technical, construction, and documentation requirements to guarantee that this certification is obtained upon completion of the works, with compliance duly evidenced at each stage of development.

5.11 TABLE OF ESTIMATED SURFACE AREAS

The spaces, auditoriums and rooms described so far in each of the areas that will make up the new Liceu Mar building will be allocated the following estimated surface areas in order to be able to carry out their functions properly.



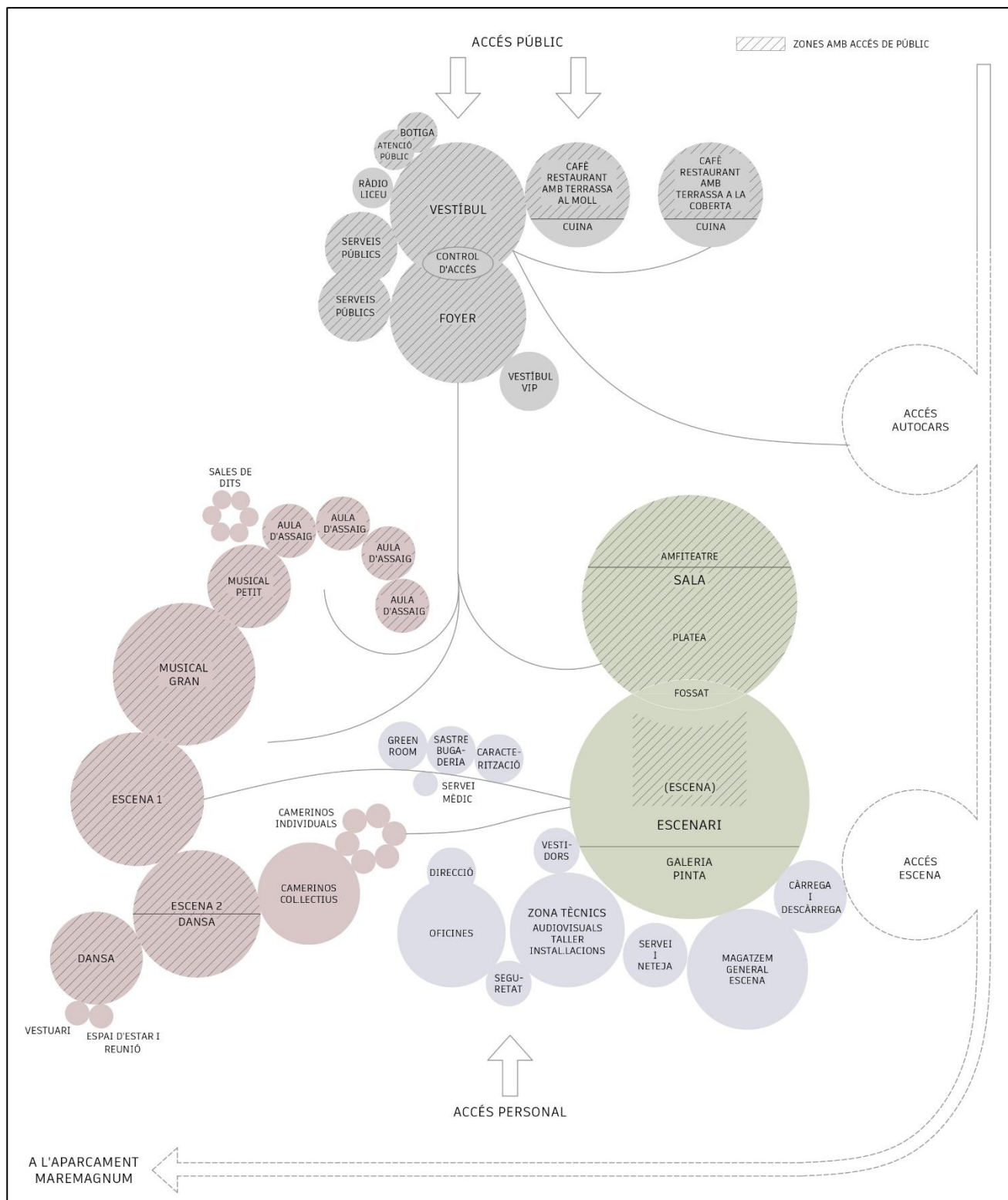
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LICEU MAR				
	Surface area in m2			
		Partials	Total useful	Total built
LOBBY	Lobby	350,00		
	Customer service	15,00		
	Shop	40,00		
	Radio Liceu	35,00		
	Foyer	350,00		
	VIP area	50,00	840,00	974,40
BAR-RESTAURANTS	Ground floor Bar-Restaurant	150,00		
	Ground floor Kitchen	40,00		
	Terrace Restaurant	150,00		
	Terrace Kitchen	40,00	380,00	440,80
PUBLIC TOILETS	Stalls Toilets	55,00		
	Amphitheater Toilets	35,00	90,00	104,40
MAIN AUDITORIUM	Stalls	562,00		
	Amphitheatre	200,00		
	Orchestra pit	88,00	850,00	986,00
STAGE	Stage	358,00		
	Rear Box	350,00		
	Stage wings	140,00		
	Galleries	70,00	918,00	1.064,88
REHEARSAL ROOMS	Stage	352,00		
	Stage and dance. Subdivisible	308,00		
	Large Musical	350,00		
	Small Musical	120,00		
	Finger Rooms - 6 units	42,00		
	Classrooms - 4 units	200,00	1.372,00	1.591,52
DANCE AREA	Dance rehearsal room	200,00		
	Break and meeting area	40,00		
	Changing rooms - 2 units	50,00	290,00	336,40
DRESSING ROOMS	Collectives - 6 units	270,00		
	Individuals - 6 units	60,00	330,00	382,80
STAGE SPACES	Loading and unloading	90,00		
	Green Room	40,00		
	Costums - Laundry	120,00		
	Make up	40,00		
	Changing rooms	100,00	390,00	452,40
STORES	Stage store	250,00		
	Pianos & instruments store	100,00	350,00	406,00
OFFICES	Offices	250,00		
	Meeting room	30,00		
	Rest room	25,00		
	Canteen	50,00	355,00	411,80
OTHERS	Medical service	10,00		
	Installations	150,00		
	Audiovisuals	40,00		
	Security	20,00		
	Services + cleaning	70,00	290,00	336,40
TOTAL USEFUL			6.455,00	
TRANSIT AREAS	20% of useful surface		1.291,00	1.497,56
TOTAL SURFACE			7.746,00	8.985,36

5.12 ORGANISATION

The following diagram presents a comparative overview of the floor areas within the new building, showing their mutual relationships in terms of affinity and proximity. The organisation chart allows us to schematically visualise the nature of the spaces and their positioning within the Liceu Mar.



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5.13 ECONOMIC STUDY

The economic study provides the estimated cost for the construction of this building. The study, based on an analysis of the surface areas and the assignment of a cost per square metre to each unit, provides the estimated budget presented here:

ESTIMATED BUDGET			
Spaces	m2	€/m2	total
Main auditorium	986,00	5.146,00	5.073.956,00
Stage (includes grid and underscene)	415,00	7.812,00	3.241.980,00
Galleries	81,00	1.612,00	130.572,00
Boxes & wings	568,00	3.596,00	2.042.528,00
Loading area and storage	510,00	2.232,00	1.138.320,00
Rehearsal rooms & large musical rehearsal room	814,00	3.968,00	3.229.952,00
Rehearsal room 2 & Dance	589,00	3.224,00	1.898.936,00
Additional rehearsal rooms & classrooms	420,00	2.294,00	963.480,00
Public lobby, VIP area, shop and box office	1.043,40	3.534,00	3.687.375,60
Bar, restaurants & kitchens	440,80	2.728,00	1.202.502,40
Stage services, offices and others	1.690,20	1.798,00	3.038.979,60
Transit areas	1.427,96	1.736,00	2.478.938,56
Total	8.985,36		28.127.520,16
19% GE and IP			5.344.228,83
CEB			33.471.748,99
Stage machinery			5.580.000,00
Total before VAT			39.051.748,99
21% VAT			8.200.867,29
CEB with VAT			47.252.616,28

This budget does not include stage and musical equipment or furniture.

The estimated budget includes the construction of the building, all the building services (air conditioning, lighting, fibre optics, etc.), the stage machinery and the installation of fixed stage equipment (audiovisual network, lighting network, etc.).

This Economic Study does not analyse or include the professional fees for the drafting of the project and construction management.

It also does not include stage equipment, musical equipment and furniture (spotlights, projectors, stage costumes, etc.). These supplies are not within the scope of this project.

6 URBAN PLANNING CRITERIA

The Liceu Mar project will be located in the service area of the Port of Barcelona, in the Port Vell area. Port Vell is the area of the Port of Barcelona open to the public, featuring port activities such as marinas and nautical services, the fishing sector, and boat repair and design. It is also a major public space in terms of leisure activities, walking areas, and tertiary activities.

This project aims to enhance the cultural dimension of Port Vell and must become an attractive, integrative element within its surroundings, spearheading the new redevelopment planned for Moll d'Espanya.

6.1 PLANNING CRITERIA

The present competitive call requires a comprehensive proposal addressing architecture, landscape, proper urban integration with the existing space and its environment, as well as the mobility of people and vehicles. For this reason, it is considered appropriate to structure the study into the following areas:

- Reflection area: the area that allows us to understand the global dynamics and intentions generated in Port Vell and the surrounding city.
- Planning area: the specific project area that will include the Liceu Mar building itself and the urbanization of its surroundings, including the roads and logistics of Moll d'Espanya.
- Building project area: this is the urban plot where the building can be located, with the limitations included in the relevant section.

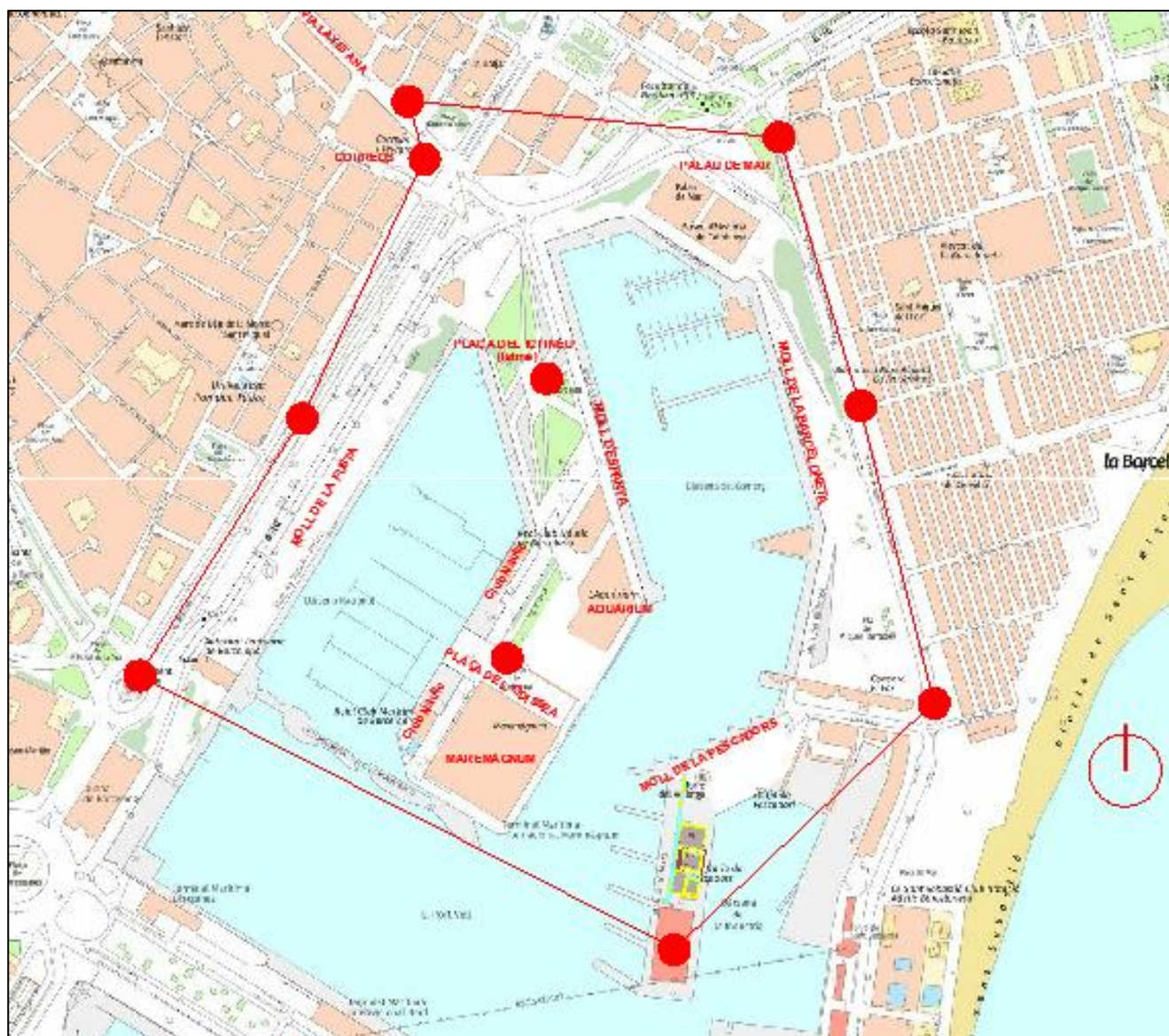
Reflection area:

The proposal for the Liceu Mar to be submitted to the call for projects must be situated within a broad area of urban reflection, including the entire Moll d'Espanya, the end of Via Laietana, Plaça de Correus, and a perpendicular strip extending on both sides, encompassing, on one side, Moll de la Fusta, and on the other, Passeig Joan de Borbó along with the surroundings of Palau de Mar.



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Planning area

The planning area for the proposal includes the “arm” of Moll d’Espanya, also referred to as the “isthmus,” which connects the leisure and sports zone from L’Aquàrium to Maremagnum with the city’s waterfront. The planning area extends, on one side, up to the boundaries of Plaça de l’Odissea, and on the other side, to Passeig Joan de Borbó and Moll de la Fusta.

The proposal will eliminate the current layout of Carrer de l’Ictineu and the so-called Plaça de l’Ictineu—currently a public space defined by two inclined planes with a pyramidal topographic profile.

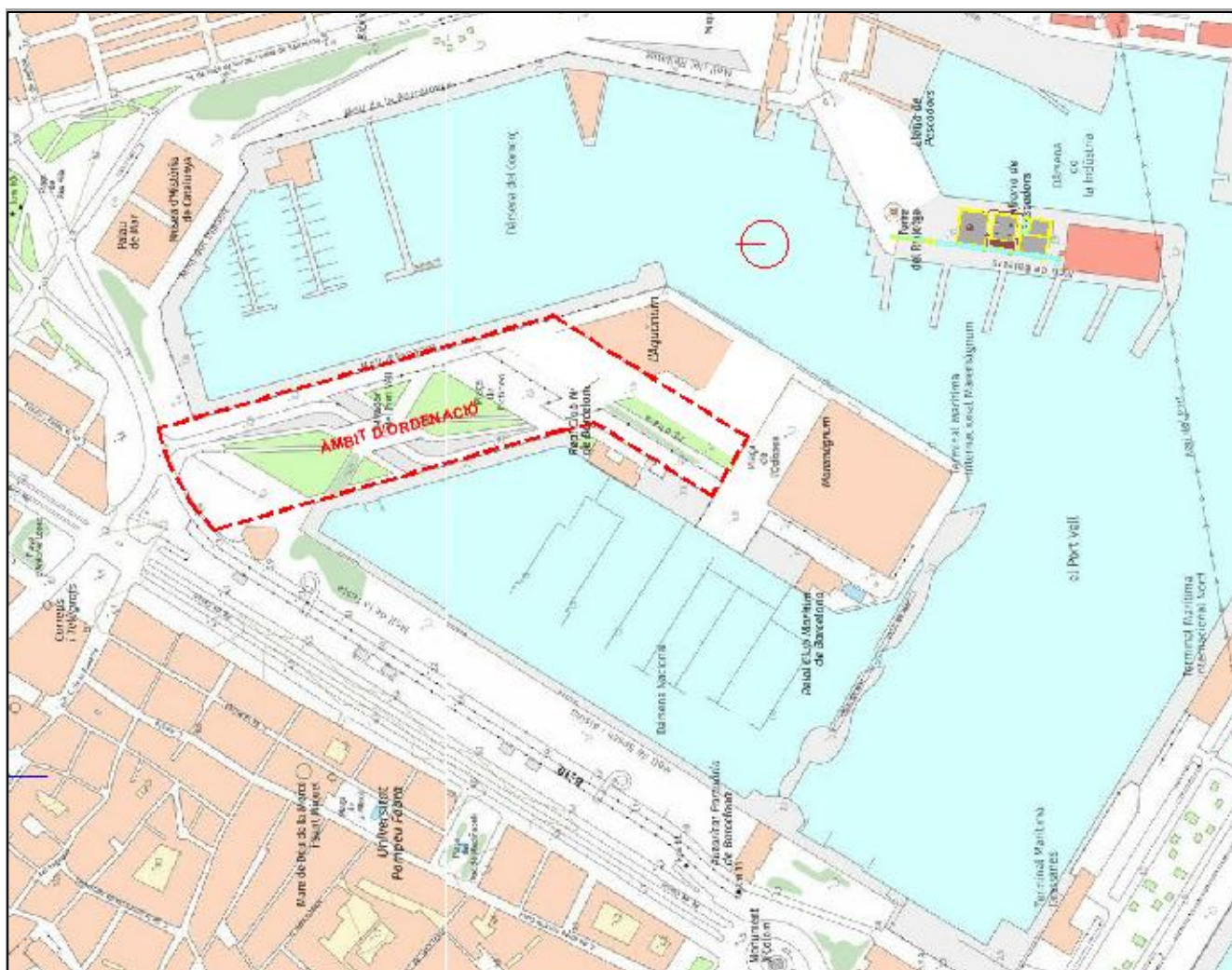
The planning area is understood as the three-dimensional space within which the following layers must be addressed:

1. The new road layout and access to Moll d’Espanya from Pas sota Muralla (city side), guaranteeing access to the Maremagnum underground car park, the Club Nàutic and Club Marítim, school coach access to L’Aquàrium, and public transport.
2. The logistics related to access for the Liceu Mar stage design lorries and supplies for the different activities on the quay.
3. Open spaces for pedestrians to sit in and walk around, integrated with the building’s layout and its surroundings; new walkways near the dock; and the coordination of potential platforms or levels needed to ensure seamless vertical and horizontal integration, as well as their interface with both the dock and the urban fabric. It is essential that the building and its surroundings invite people to enter the rest of Moll d’Espanya, improving accessibility towards Maremagnum, Rambla de Mar, and L’Aquàrium.
4. The visual impact and balance of the new building within its environment must be taken into account.
5. The project’s relationship with the water surface is also key.

Thus, the planning area will comprise the entire volumetric perimeter of the port and urban renewal subject to the call, in other words, the Liceu Mar building and its surroundings.

A note on altimetry:

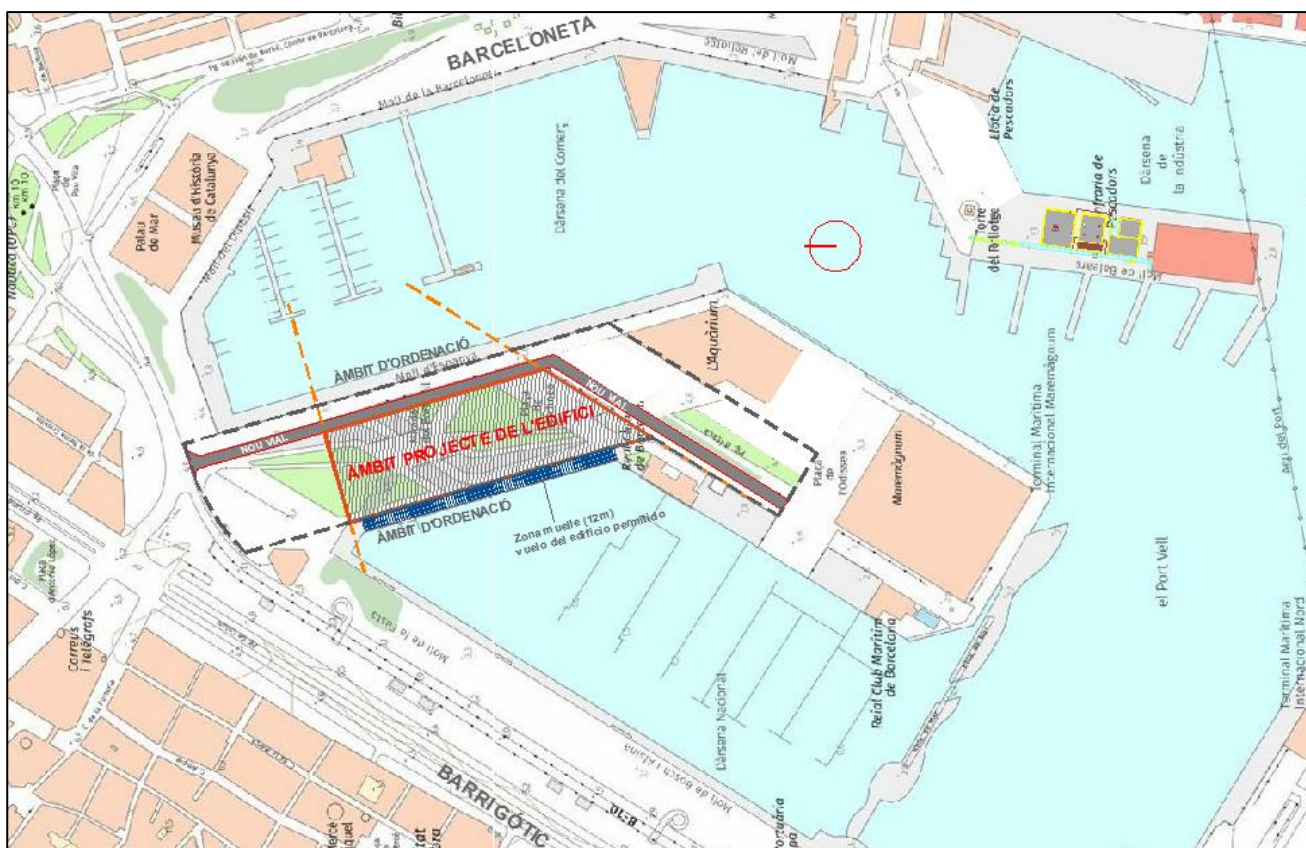
1. A key constraint within this planning scope is to maintain height continuity throughout the perimeter of the project to ensure the spatial continuity of the existing spaces to be preserved. This is detailed in Section 5.3.
2. The elevations within the planning area are key factor for the project teams to study carefully. This will encourage creative solutions to achieve the best possible integration of the building within the public space and ensure accessible routes to and across the isthmus. An elevation of -1 metre is established as the project’s lower limit.



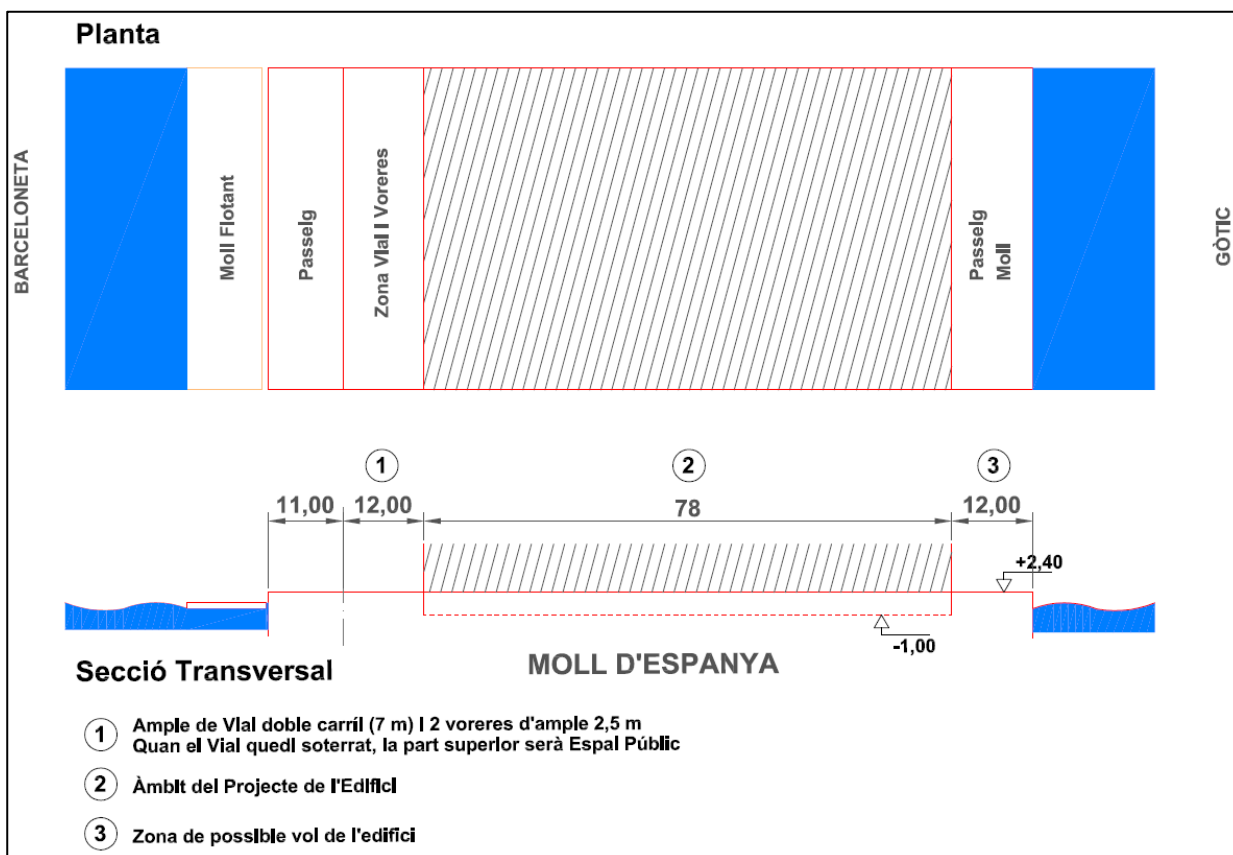
Plan showing the boundary of the planning area (Image no. 1)

Building project area

The site designated for the building, which has a trapezoidal shape, is longitudinally bounded on the east by the new road for the project and on the other side by the boundary of the concession area (either the Gothic Quarter or the Barceloneta side). Transversally, the guideline of the connecting road marks the boundary of the project area on the east side of Moll d'Espanya, while the west side extends across the full width of the dock, with the technical restriction that no structural elements may be placed less than 12 metres from the dock edge.



Plan showing the limits of the building project area. Surface area of the site: 18,000 m² (Image no. 2)

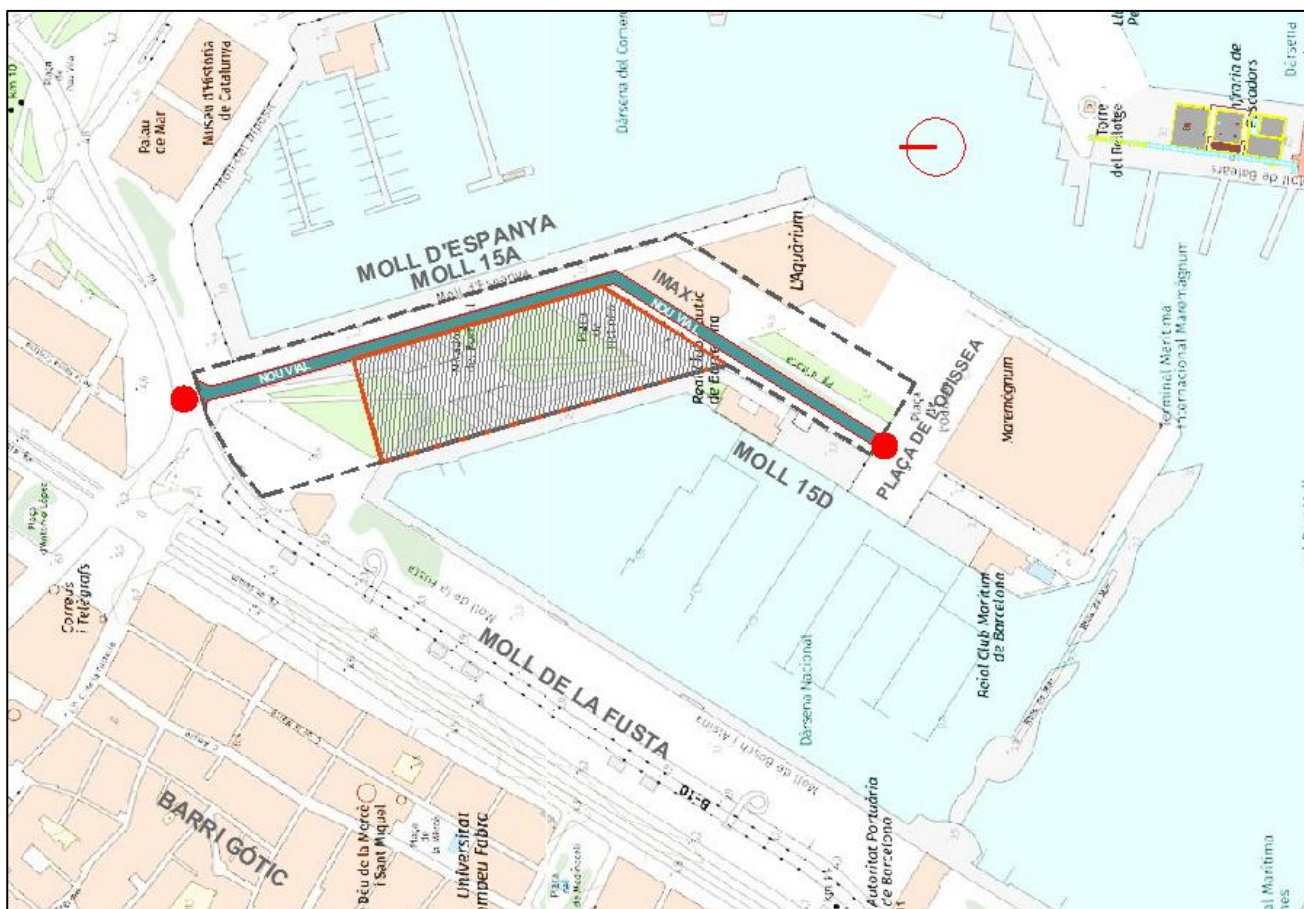


Plan and cross-section of the transverse boundaries and their conditions (Image no. 3)

New access road

To facilitate the implementation of the Liceu Mar and improve the relationship between the city, spaces, and facilities of Moll d'Espanya, the project will include a road with a simpler layout than the current one. This road will be located to the east of the dock and will guarantee vehicular access between the city and the isthmus, as shown in the attached diagram.

The new road will connect the access from the northern end of the isthmus and terminate in the area of the current underground car park beneath Plaça de l'Odissea (Maremagnum). It will start next to the northernmost part of Moll de la Fusta, continue along Moll d'Espanya parallel to dock 15A, separated by 11 metres from the current quay promenade edge, then turn before the Imax building, aligning with the current road parallel to quay 15D.



Plan of the new road layout (Image no. 4)

To free up public space, the new road will be underground. Along the new road, the following needs must be addressed:

1. Guaranteed access for public transport (taxis, buses), supply vans, goods vehicles related to the new Liceu Mar, as well as private vehicles heading to the existing underground parking (Maremagnum area).
2. A pick-up and drop-off area for six coaches (not parking).
3. A logistics area linked to the scenographic activity of Liceu Mar, consisting of a loading bay for trailers and a waiting area for an additional trailer. Additionally, there must be space for parking mobile units for filming and broadcasting.

4. A roundabout to allow a change of direction before the restricted access to the Maremagnum car park.

The starting point of the underground section will be at the discretion of the project team.

The minimum clearance of the underground road section will be 4.50 m, allowing passage of public transport, coaches, and goods vehicles related to the area's logistics, especially the new Liceu Mar, ensuring good overall functionality without interrupting general traffic flow.

The road section should be at least 3.5 m per lane and have two 2.5 m pavements. This underground road space will form part of the surrounding urban development; for this reason, its integration and quality within the overall urban design must be considered, along with pedestrian safety and comfort. Adequate lighting, ventilation openings, and natural light access must be provided.

For coach arrivals, there must be direct access for groups of visitors to the Liceu Mar building. Visitor routes from the coach pick-up/drop-off points to L'Aquàrium, Maremagnum, and the Club Nàutic and Club Marítim must also be planned.

New open space system

The demolition of the Imax building must be taken into consideration, which will take place once work on the new Liceu Mar is ready to begin. This renovation offers the opportunity to create a system of open spaces related to Liceu Mar and the rest of the existing facilities on this site. The Liceu Mar project and all the open or outdoor spaces, together with the remodelling of Plaça de l'Odissea, Via Laietana, Moll de la Fusta and Moll del Dipòsit, open up a range of opportunities that must be examined:

- Bring the city closer, not only to Liceu Mar and its activities, but also to all the facilities on Moll d'Espanya, improving the flow between the port area and the city.
- Promote access to the quay from the end of Via Laietana and Moll de la Fusta as a complementary alternative to the Rambla de Mar, further integrating the Plaça de l'Odissea.
- Design a continuous public space that links the different platforms with their different levels above the water according to the criteria established in the following section.
- Propose an appropriate and intensive use of the open spaces throughout the project area, spaces characterised in accordance with the function and meaning of the new facility: providing a specific approach area, vestibular space or open-air reception area. Achieve a good-quality multifunctional space, also open-air, for performances in a flexible configuration or connected to the artistic activity of Liceu Mar.
- Characterised by the identity of Liceu Mar, the open space must be welcoming to the public, conceived as more than just a functional resource for the building. This capacity must also address the transitional and service needs of the area.
- It must include multiple pedestrian routes, whether for walking around, heading to a specific location, meeting somewhere to rest, quiet contemplation, or a wide range of civic leisure activities, facilitating social coexistence that encompasses all such possibilities.

The position of the building must allow for pedestrian walkways on both sides of the isthmus in contact with the water. The possibility of bringing the building's surroundings closer to the water on the western side of the quay is indicative of the diversity of routes that the building may generate.

In any case, the open space must achieve the universal idea of its civic use and meet the requirements of safety and emergency services at any point, including the quays and the buildings in the area

6.2 ENVIRONMENTAL SPACE AND LANDSCAPE CRITERIA

Continuity between the port and the city

Longitudinally, the demolition of the double slope of the existing development and the new vision of a continuous public space, with no physical borders between the different areas, will facilitate the connection between the city and the new cultural facility. The proposal must address the connection between the ends of the development space, facilitating the smooth flow of the road, pedestrian routes, public and logistical access to the building, as well as the relationship with the water.

In a transverse sense, the isthmus and Liceu Mar are located in the middle of the visual line between Barceloneta and the Gothic Quarter, halfway between, depending on the observer's position, the two maritime façades. The proposal must take into account this unique aspect of the site, as well as the space closest to the seafront of Moll de la Fusta, Moll del Dipòsit and Palau de Mar. The proposal must enable visual contact with the city in such a way as to bring the new cultural facility, together with the new public spaces of the Port, closer to the public.

New system of public spaces in Moll d'Espanya

In accordance with the Liceu Mar's functional plan, the exterior approach areas and the surroundings of the new facility are essential parts of the programme.

At the start of the isthmus, within the development area, where no building is planned, there is an adjacent area where the design criteria must integrate the needs of the city with the natural approach to the Liceu Mar, reshaping it into an introductory space.

Sufficient multi-purpose space must be created so that, occasionally, events and shows of any kind can be held in a flexible configuration, without this conditioning its public nature and its openness to all local residents and passers-by.

The building must be in dialogue with these exterior spaces and, to a certain extent, must be perceived as an interior integration of the open surrounding it. There should be a certain spatial congruence between the inside and outside space where strategic points of transparency help to establish an open and diaphanous vibe for the new cultural facility.

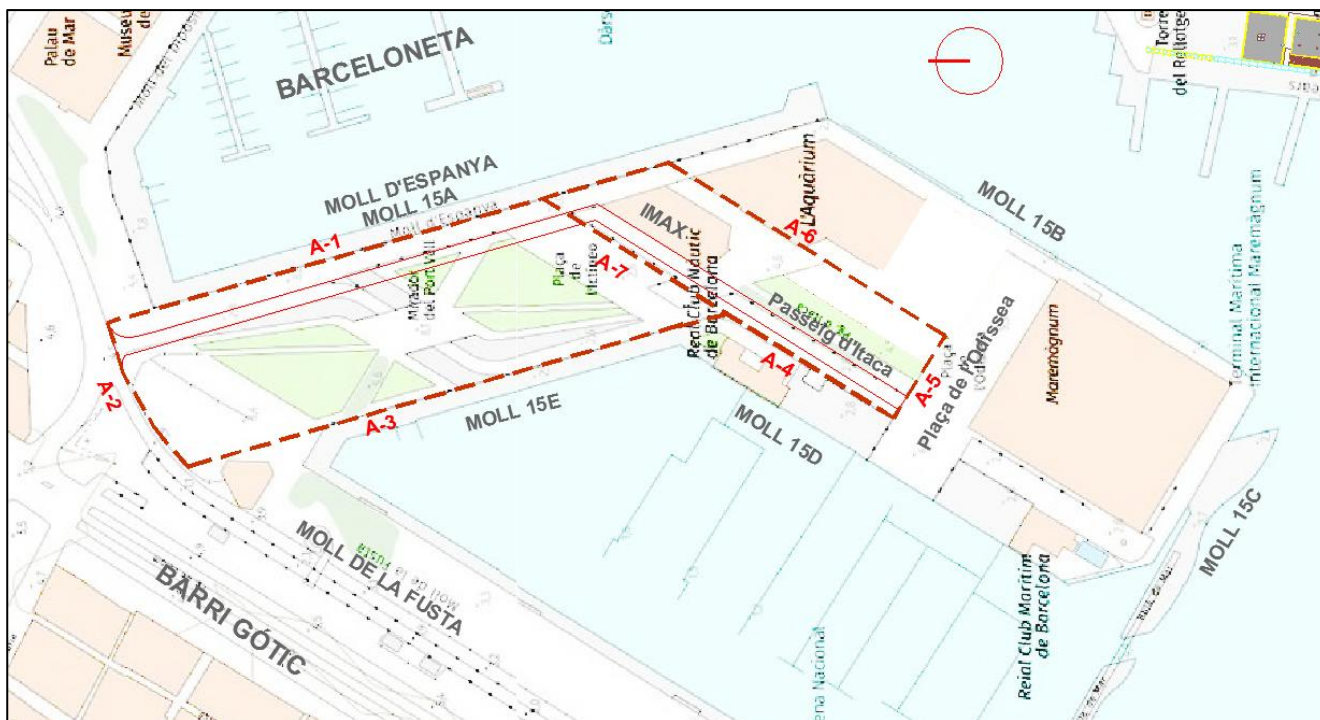
The outdoor space shall also be designed with user comfort in mind, incorporating areas or implementing mechanisms within the urban layout to accommodate waiting areas for educational groups, which Liceu Mar plans to include in its programme.

6.3 BOUNDARY CONDITIONS, SEAFRONT ROUTE

Boundary conditions

Given the scope of the project described above, it will be necessary to develop a design proposal for the public space and the urban landscape that takes into account the unique features of its boundaries so that the new facility fits as well as possible within the context of Moll d'Espanya, and at the meeting point between Port Vell and the city.

In this sense, in order to achieve this boundary condition, it will be necessary for the perimeter to connect with the following elevations, ensuring the continuity of the space:



Building alignments within the Planning Scope (Image no. 5)

In detail:

1. Alignment A1 connects with the promenade next to the Moll d'Espanya, quay 15A, Barceloneta side; the average elevation is +2.40 m.
2. The A2 alignment connects with Moll de la Fusta; the average elevation is +4.00 m.
3. Alignment A3 connects with Moll d'Espanya, quay 15E, Gothic Quarter side, and closes off the Reial Club Nàutic; the average elevation is +4.00 m.
4. Alignment A4 will be a new alignment in front of the Club Nàutic, above the new underground road, up to Plaça de l'Odisea, and the new average elevation will be +4.30 m.
5. Alignment A5 is the line between Passeig Ítaca and Plaça de l'Odisea, and the current elevation is maintained, which is +4.30 m.
6. Alignment A6, next to the western façade of L'Aquàrium, is maintained at the current elevation, with an average value of +4.30 m.
7. Alignment A7, above the new underground road, will be the junction point between the current levels of +4.30 m and +2.40 m.

The cross-section of the Moll d'Espanya isthmus at the points close to the new road and the port concessions is described in Image no. 3 (Section 5.1 Planning Criteria).

Route along the seafront

The implementation of the new road on the eastern side of the Moll d'Espanya (Barceloneta side) frees up the area next to the quay on the western side (Gothic Quarter) for pedestrians, providing a continuous connection with the Moll de la Fusta.

The proposal should be sensitive to the value provided by the water surrounding the project area and prioritise the possible promenade next to the water and, where this connection is not physically feasible, it should highlight the sea views from the different levels of the project.

Green space and biodiversity, urban ecology

The green infrastructure criterion applies to two types of Nature-Based Solutions (NBS) within the project area: the configuration of urban greenery (especially parks and gardens) from the perspective of applied ecology (functional gardening) and the creation of microhabitats for species or biological groups identified as being of key interest for Barcelona's biodiversity.

The project area has a very significant importance given its position within the city, so this action demands a global socio-environmental effort that includes initiatives such as the Metropolitan Network of Climate Refuges, Barcelona, shadow space, Barcelona Green and Biodiversity Plan 2020, Climate Plan 2018-2030, Port Vell Strategic Plan 2035 and the WHO's 2030 Sustainable Development Goals.

The proposal for the new urban development should incorporate all these targets and challenges of the city based on the development of two key aspects; green infrastructure and sustainable drainage.

Climate-comfortable healthy space

Solutions for contemporary public spaces must integrate the challenge of becoming areas that improve the well-being, health, social cohesion and ethological (behavioural) comfort of citizens. These spaces relate to each other forming urban and regional matrices with a high capacity for environmental regeneration and sustainable mobility.

Special emphasis must be placed on studying and identifying the existing vegetation within the port area as a whole and proposing a strategy that links this pre-existence with the new proposal under a common landscape criterion.

Harbour quays are generally large concrete platforms with no possibility of planting. It is unusual to see green areas within port areas. The action in Moll d'Espanya should create an urban environment capable of mitigating the impact of climate change. For this comfort objective, the presence of vegetation is a good strategy as it provides a temperature regulating ecosystem and creates a cooling effect that significantly improves the thermal sensation in urban areas.

A vibrant and safe environment

The proposal must address the relationship between the public spaces and the routes generated, the relationship between the facilities and the overall vision of Moll d'Espanya in order to achieve a safe and vibrant environment. Flexible and inclusive spaces are crucial. They must be suitable for the recreation of the residents of Barceloneta and Gothic Quarter and at the same time be a point of reference for the city.

Every aspect of the design of these spaces must meticulously bring about the comfort required. This includes lighting, spatial relationships, dimensions and detail, integration into the context, good visual perception of the whole, the presence of water and distant references.

Pre-existing Services

The isthmus is an area of intense commercial, social and sporting activity, with numerous facilities and supply services, both in buildings under concession and for the maintenance, comfort and safety of the urbanised and transit areas.

The project must take into account the facilities, services and infrastructure that guarantees these activities in the isthmus area, avoiding impact where possible, or proposing modification solutions capable of being incorporated into the competition project.

6.4 CRITERIA FOR BUILDING IMPLEMENTATION AND REGULATION

Buildable area

The maximum buildable area must be adapted to the building project by modifying the urban planning regulations. In any case, it shall not exceed 10,000 m², including any area considered a basement level.

Mobility spaces associated with the underground road, which will support the logistics of visitor groups, supply transport, equipment, and scenography, shall not be included in the calculation of the building's constructed area.

The urban planning amendment will be drafted once the winning proposal has been selected.

Occupied area

The Liceu Mar building must be located within the plan in Section 5.1. Building project area (Image no. 2).

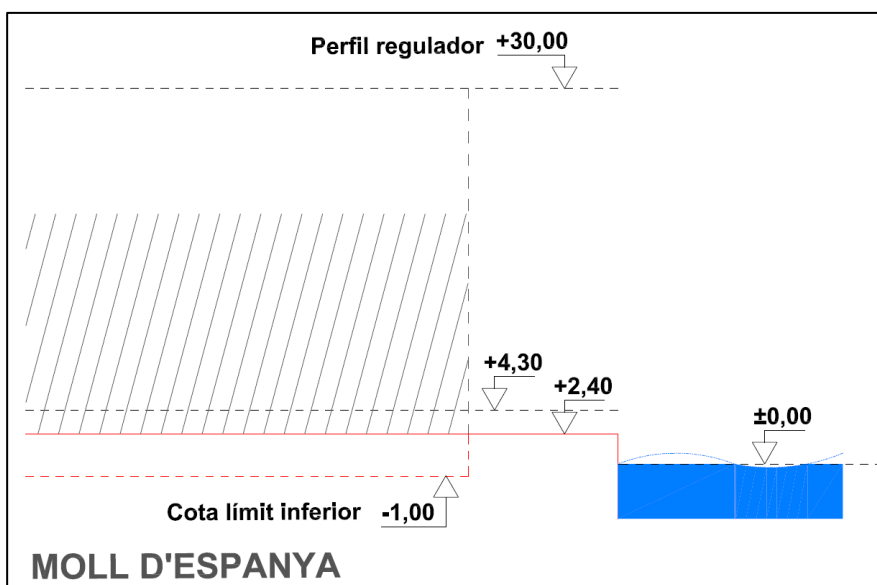
Within this trapezoid, the building may be located at the position the proposal authors consider most suitable within the 78 m-wide strip for the ground floor indicated in the "Boundary Conditions" section, while maintaining a minimum clear passage of 12 m, as shown in Image no. 3.

Above this 12 m wide clear transit area on the quay, parts of the building may cantilever provided the minimum clear height is 5 m or greater, and provided that in plan view no elements or parts of the building extend beyond the quay boundary (no projections over the water surface are permitted).

The maximum occupancy permitted within the building parcel area is 35% of the total parcel size of 18,000 m².

Regulatory profile

Liceu Mar is a building that must respond to its specific nature and adopt the image and volumetry best suited to this. The uniqueness of this new facility, its functional programme, and its location mean that the regulatory profile shall be defined at the discretion of the authors of the winning proposal, although a maximum height of 30 m above the +0.00 sea level datum is established for the stage tower.



6.5 WORK TO BE CARRIED OUT AND ESTIMATED EXECUTION COSTS

The urban development covers all the works necessary to renovate and adapt the area included within the planning scope. Within this area, demolition works, dismantling of elements and installations, provisional and variable works throughout the duration of the project must be carried out, adapting continuously to the overall progress of the works while ensuring public and vehicle access to the area. Additionally, earthworks, foundations, civil works, pavements, ventilation infrastructures, fire protection systems, etc., urban development works (paths, landscaping, play areas, squares, etc.), roof treatments as public space, urban planning installations (affected connections, new connections, urban infrastructure, drainage, lighting, data, public address system, security control, etc.), and elements for urban zones (benches, tables, bins, signage, protection, boundary markings, etc.) must be implemented.

Any affected services must be restored and health and safety measures applied during construction in this highly complex location in terms of public mobility during the works, and this must be coordinated with the Liceu Mar building works that are the reason for this overall renovation of the isthmus.

Accordingly, the following table of economic estimates is presented, incorporating all the planned works in execution packages that should include all work items likely to be required. It should be noted that the design solution for this urban development may vary significantly depending on the different competing teams and their approach to the three areas defined in the project call; therefore, the winning proposal may entail modifications to this financial estimate.

ESTIMATED BUDGET FOR URBAN DEVELOPMENT				
	m ²	€/m ²	Total	%
Demolition and demolition waste management	46,500.00	10.00	465,000.00	2.32%
Earthworks	37,200.00	12.00	446,400.00	2.22%
Civil works (roads, pavements, structures, etc.)	18,600.00	510.00	9,486,000.00	47.25%
Public space urban development works	40,500.00	220.00	8,910,000.00	44.38%
Affected services	40,500.00	6.00	243,000.00	1.21%
Health and Safety in the Urban Development Construction Works	40,500.00	13.00	526,500.00	2.62%
Total PEM			20,076,900.00	100.00%
19% Gen. Exp. and Ind. Benef.			3,814,611.00	
Contract Implementation Budget (CIB)			23,891,511.00	
21% VAT			5,017,217.31	
CIB with VAT			28,908,728.31	

**7 SUMMARY OF THE CHARACTERISTICS OF THE ACTION**

OBJECTIVE OF THE ACTION	Construction of a building and urban development works
SURFACE AREA OF THE SPACE	46,500 m ²
BUILDING SURFACE AREA	8,985 m ²
TYPE	NEW CONSTRUCTION
TOTAL COST OF WORKS	€57,363,259.99 (CIB excluding VAT)
Cost of Building Works	€33,471,748.99 (CIB excluding VAT)
Cost of Urban Development Works	€23,891,511.00 (CIB excluding VAT)

8 AVAILABLE DOCUMENTATION

The following documentation is provided to ensure a proper understanding of the area and the development of the proposal, with the aim of guaranteeing a clear, structured, and sufficient informational basis for all participating teams.

8.1 DOCUMENTS RELATING TO THE SCOPE OF ACTION

The following documents are available as urban planning information for the area:

- Special Plan for Barcelona's Port Vell. Final approval 11/05/1989.
- Modification of the Special Plan for Barcelona's Port Vell in the area of Moll d'Espanya. Final approval 23/11/2001.

The documents described are provided as part of this tender to ensure that all interested parties have the complete information in order to prepare their bids and may submit them, provided they meet the minimum requirements set out in the terms and conditions document.

NOTE: The commission includes the modification of the current planning to adapt it to the new architectural and urban development proposal.

8.2 TECHNICAL DOCUMENTATION FOR THE DRAFTING OF PROJECTS

The following documents are attached to this invitation to tender:

- Technical Specifications for the Drafting of the Building Project
- Technical Specifications for the Drafting of the Infrastructure Project
- Basic Project development document with definition of the construction, relating to new construction projects.
- Exchange Information Requirements (EIRs) Manual according to the BIM method.

8.3 OTHER

The following studies are expected to be contracted and will be delivered to the drafting team once the work has been awarded:

- Topographical survey of the area.
- Geotechnical study.

9 CONDITIONING FACTORS OF THE ACTION

The following is a description of the conditioning factors that should guide the overall action in a transversal manner.

9.1 COMPLIANCE WITH REGULATIONS

The construction project for the new building and the corresponding urban development project must fully comply with the applicable urban, technical, sectoral and environmental regulations in force, in accordance with the legal framework established by the competent authorities.

The projects must comply with, among other things:

- The provisions set out in the applicable general and detailed urban planning regulations within the area.
- The national, regional and local technical regulations regarding building conditions and urban space, as well as technical regulations concerning installations and services.

The drafting team must ensure that the design complies with these regulatory provisions, taking responsibility for verifying compliance both during the project phase and throughout the execution of the works.

Relevant supporting and supporting documentation must also be provided at all stages of the process.

9.2 SUSTAINABILITY, CIRCULARITY AND DECARBONISATION

In addition to compliance with general regulations, the Technical Instruction for the application of environmental criteria in construction projects, the criteria of the Energy Agency and the objectives of the new European directive on energy efficiency to be implemented in the coming years, the project must focus in detail on sustainability, life cycle and decarbonization approaches that are consistent, proportionate and appropriate to the action.

10 ASPECTS TO BE TAKEN INTO ACCOUNT IN THE DRAFTING OF THE PROJECT

10.1 PROCEDURES, CONTENT AND WORKING METHOD

The content of the documents to be drafted will develop in detail the prescriptions of the BIMSA's Specifications for the Drafting of Building Projects and the Document for the development of the Basic Project with constructive definition, relating to new construction projects.

Barcelona City Council and BIMSA will establish and define the workflows and formal solutions for the project. It shall be the Contractor's responsibility to prepare and finalise the project, following the criteria and premises agreed upon by all parties involved throughout the project drafting process, in accordance with the framework of requirements, economic framework, and applicable current regulations.

During the drafting process of the Basic Project for TPC/Building Permit with construction definition (which includes the Environmental Permit) and the Executive Project (which includes the Health and Safety Study, Environmental Report, and Execution Control), the utmost detail is required for the proposed solutions, so that the budget incorporated from the basic stage is as accurate as possible with regard to the actual scope of the work (all based on unit work items with TCQ).

To develop the basic project with construction definition, in addition to the project drafting specifications, the considerations of the "Document for the development of the Basic Project with constructive definition" must also be taken into account.

The project will include an Environmental Report (sustainability and environmental documents) to be structured according to the specifications, which will be provided to the drafters.

During the drafting of the project and until its administrative approval, the drafter must attend all the monitoring meetings to which they are summoned, as well as incorporate the adjustments and modifications that arise from these. The Contractor shall be responsible for drawing up the corresponding minutes of the project meetings.

Additionally, the Contractor is required to produce an energy performance certificate for the project.

During the project drafting phase, the successful bidder will have to meet with all applicable Public Space Managers (PSMs) and Municipal Managers (MMs) (according to the list provided by the City Council) in order to negotiate and agree on solutions concerning issues such as accessibility, security, vegetation, fire protection, and other related matters. Each of these Municipal Managers (MMs) will prepare a report during the Basic Project phase which, taken together, will form the Technical Project Conformity (TPC) and the Project Technical Report (PTR).

In all the project drafting phases it will be necessary to apply any Technical Specifications that the PSMs and MMs require.

The successful bidder will have to generate the specific complementary documentation so that the MM (Energy Agency, Public Space and Environment Services Directorate, etc.) can report both in the Basic Project phase and in the Executive Project phase when necessary. This documentation must comply with the criteria established in the corresponding protocols that can be found on the Barcelona City Council website.

The necessary meetings will also be held with interested local entities and neighbourhood associations, to present the project solutions. The successful bidder will also generate the necessary documentation to support these possible presentations of the project: power points, summaries, diagrams, etc.

The Executive Project shall contain all the necessary documentation for the work. The drafter of the project must incorporate, where appropriate, the corresponding price update at the time of the tendering of the works, in accordance with the official criteria and indices in force, and guarantee its adaptation to the market at the time of the call for tenders.

The drafting team must adapt the development of the project to the needs arising from the work schedule and the phases of execution.

The Executive Project must anticipate the maintenance of the building, especially with regard to actions and resources, so that the responsible body or bodies are able to plan the necessary resources to be able to carry this out.

An Executive Project is considered definitive when it has been definitively approved, once all the necessary modifications resulting from the favourable partial and final reports, the favourable audit and any possible objections to be taken into consideration as a result of the administrative approval procedures (public presentation, etc.) have been incorporated.

Following the drafting of the Executive Project, if the works proceed, a Construction Management team will be contracted.

10.2 BIM

The project shall be drafted using the BIM method. The plans shall be drawn in BIM and at a scale sufficient and appropriate to their content, ensuring complete clarity and understanding.

The Information Exchange Requirement (IER) Manual will be provided in this call for tender. Based on the specifications in the above mentioned Manual, the Contractor shall submit a BIM Execution Plan (BEP) for the project prior to the commencement of the works.

The BIM Execution Plan (BEP) submitted by the Contractor must obtain the approval of BIMSA and the Consorci del Liceu, and will be contractual in nature with regard to all BIM aspects of the project.

The BEP must take into account and develop all the information requirements specified in the Manual.

10.3 USER EXPERIENCE

The user experience must be the fulcrum of the entire proposal, it being understood not only as a functional issue, but as an integral experience that links space, perception and emotion.

The proposed architecture must dialogue with the people who will experience it. It should be born out of a deep understanding of how space is experienced, perceived and inhabited. Every design decision—be it structural, lighting, material or functional—must respond to this desire to support the user in their experience. The lighting, the materials, the transitions between spaces, the silences and sounds, the emptiness and the fullness... all of these should contribute to a coherent and meaningful experience.

Proposals must incorporate this approach from the very beginning, with a perspective that places the quality of everyday life at the centre: how the space is reached, how the visitor is welcomed, how it is discovered, how it is shared. It is not just a matter of solving needs, but of generating conditions for a rich human relationship between the space and those who inhabit it. The proposal should clearly demonstrate that it has been designed with a people-centred approach.

This user-centred approach must be specified in a specific section within the project documentation, which articulates the authors' reflection on the user's experience and how this is integrated into the different design decisions. This document will have its own value in the set of deliverables and will be



subject to analysis and discussion during the appraisal process and eventual development of the project.

11 ASPECTS TO BE TAKEN INTO ACCOUNT IN THE EXECUTION OF WORKS AND SITE MANAGEMENT

Given the general planning of the project, the execution works for the new building will be carried out simultaneously with the urban development works in the immediate area. This concurrence of actions requires precise planning and rigorous technical coordination between the two actions, in order to guarantee their compatibility and operational efficiency, as well as to minimise disruptions during execution.

The drafting team must consider this simultaneity in the definition of the project, both technically and in terms of time, incorporating the necessary measures to manage the two construction phases in a coordinated manner.

The project must guarantee that the solutions adopted comply with the criteria of quality, functionality and safety, adapting to the global execution timetable defined by the project management.

Site management includes:

- Site management of architecture, structures, engineering and all the necessary specialists required in these specifications.
- The actions necessary to obtain all the necessary permits and favourable reports.
- The energy performance certification for the finished building.
- The actions required to obtain LEED Platinum certification.
- The final works certificate.
- Final certificate for the installations.
- As-built plans and final report.

The work included in the project includes the setting out and prior verifications necessary to verify “in situ” the estimates made in the project with regard to points of interest or unique aspects.

In particular, the following setting-out tasks shall be taken into account:

- The positioning of the buildings on the plot, the general arrangement of the main project elements, and the determination of the starting point for the setting-out.
- Boundaries of the intervention area (including the plot defined in the Modification of the Special Plan).
- Confirmation of the size of the planned development on the assigned plot.
- Existence of affected services or easements: power lines, telephone lines, buried pipelines.
- Application of current regulations (urban planning, environmental, others).
- Data and location of the different connection points corresponding to all the necessary installations and services (electricity, gas, sanitation, etc.).

In addition, all other aspects considered necessary to be verified.

ANNEX TO THE TECHNICAL SPECIFICATIONS FOR THE DRAFTING OF THE PROJECT OF THE LICEU MAR
OF 30 JULY 2025

The requirement to incorporate a specialist in audiovisual communication and new technologies responds to the vision that the Opera – as an emblematic building and avant-garde cultural space – must be prepared for the technological, artistic and communicational challenges of the future. The specialist must provide knowledge that allows the integration from the initial project of the infrastructures and digital systems that guarantee an optimal and adaptable operation to the new forms of stage production, transmission and experience of art in order to comply with the purposes expressed in the technical specifications, among other sections, (5.2) exhibition and rehearsal spaces, (5.3) technical spaces, (5.5) other spaces, (5.7) stage installations and (5.9) technology-signage. In general terms, this profile must consider all those aspects and technologies, present and future, that may be applicable, such as, among others: Technological infrastructure (such as the design and provision of high-capacity fiber optic networks, advanced wireless connectivity and structured cabling that supports large volumes of data in real time, technical spaces and pipes for the installation and maintenance of state-of-the-art equipment, etc.); Audio, video and communication systems (such as the integration of immersive professional audio systems, high-definition video, internal and external communication systems (intercom, streaming, broadcast), needs assessment for projections, LED screens, stage mapping, digital management systems for visual and sound content, etc.); New technologies applied to art and scenography (such as the preparation of the building to host experiences based on augmented reality, virtual reality, metaverse, interactive digital art and adaptability of spaces to hybrid formats (face-to-face/virtual), global transmissions, etc.); Vision of the future and technological sustainability (such as advice on solutions that maintain the technological validity of the building towards 2032 and beyond, with criteria of flexibility, scalability and energy sustainability, coordination with the architecture, scenic and acoustic engineering teams to ensure an organic integration of all technological infrastructures in the design, etc.). In short, the specialist in audiovisual communication and new technologies must ensure that the new Opera House is not only a stage space of artistic excellence, but also an international benchmark in technological innovation, capable of dialoguing with contemporary and future forms of creation, production and cultural dissemination. On the other hand, this specialist will also be responsible for collaborating in the definition and integration of the theater's communication systems with its users and audience. Their role will be fundamental so that the transmission of information – programming, activities, institutional identity and messages to the visitor – is carried out through contemporary communication elements integrated into the building itself. These elements can include digital screens, information panels, projections or interactive supports, etc., among others, always designed with criteria of elegance, architectural coherence and communicative clarity. Overall, this profile must ensure that the new Opera House is a scenic and communicative space of the 21st century, in which architecture, technology and communication coexist organically, ensuring a building prepared for the cultural and technological challenges and opportunities of the future.

Barcelona, 17 October 2025