

# SWIMMING STADIUM

OLYMPIC SWIMMING POOL for  
TARANTO 2026 – XX MG

TARANTO OLYMPIC SWIMMING STADIUM DESIGN COMPETITION FOR  
THE XX MEDITERRANEAN GAMES - TARANTO 2026.

## Design Competition Brief



**TARANTO 2026**  
XX GIOCHI DEL MEDITERRANEO





ORGANIZING COMMITTEE OF THE XX MEDITERRANEAN GAMES TARANTO 2026  
MUNICIPALITY OF TARANTO

**Drafting of the Design Competition Brief**

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## 1. Introduction

It has been established with a notary deed the Organizing Committee of the XX Mediterranean Games “Taranto 2026”. The following figures sit as the directive and executive board of the Organizing Committee: **Apulia region, The city of Taranto** as founder members which are included as ex-officio members The Italian National Olympic Committee (**CONI**), The Italian Paralympic Committee (**CIP**) **The Government of Italy** and **The Province of Taranto**;

The committee after having approved the **Masterplan** (<https://taranto-2026.it/masterplan/>) for the organization of the Mediterranean Games, is planning the construction of the **Olympic swimming pool** in Taranto. The town and the organizing committee have identified the navy property facing Torre D’Alyala as a suitable area for the realization of the swimming pool. This area has been under investigation by the Archaeological Superintendence having a geomagnetic prospection as a feasibility study in order to safeguard any potential archaeological discovery.

The **Organizing Committee of the 20th edition of the Mediterranean Games- Taranto 2026-** has promoted a two-stage tendering for the realization, from scratch, *-ex novo-* of the swimming stadium in Taranto, the recovery and refunctionalization of the adjacent historical building Torre d’Ayala and the external area.

### 1.1. The XX Mediterranean Games - Taranto 2026: towards a positive legacy

The Mediterranean Games are a multidisciplinary Olympic event, attended by sports delegations from nations bordering the Mediterranean Sea, and have been officially held every four years since 1951. The event is organized under the supervision of the International Committee of the Mediterranean Games (Comité International des Jeux Méditerranéens - CIJM). Together with the Organizing Committee - chaired by the President of the Puglia Region - the CONI and the Municipality of Taranto, ASSET has played a strategic role in the drafting, first of the Candidacy Dossier, and then in the realization of the Masterplan of the sports facilities of the Games. The great sporting event will take place from **13 to 22 June 2026** in Taranto, the city of the two seas, a Capital city of the Mediterranean during the classical age.

During the event, **32 sports will involve 25 facilities for the competitions and 15 for the training**. A big part of the event will take place in the existing structures, in the perspective of a regional sports assets recovery. Only a few structures will be built from scratch (ex novo) and, through an integrated design with **the local heritage**, they can become iconic architectures for the city, representative of a process of transformation and renewal: a Swimming Stadium, a Federal Nautical Center and a multidisciplinary Sports Center.

**Taranto 2026 is an opportunity to change the image of the city and** of the entire Ionian Arch, to give different life prospects to the citizens and to make the city more welcoming, for its inhabitants and consequently also for the massive incoming tourist flows.



FIGURE 1 | HOMEPAGE OF XX MEDITERRANEAN GAMES TA2026 WEBSITE: [HTTPS://TARANTO-2026.IT/](https://taranto-2026.it/)

## 2. Competition theme

Taranto 2026 is an opportunity to change the image of the city and of the entire Ionian Arch, to give **different life prospects** to the citizens and to make the city more welcoming, for its inhabitants and consequently also for **the massive incoming tourist flows**.

The spot for the Swimming Stadium straddles an important jump in altitude, and this configuration of the soil, will allow the construction of a **bridge-building** between the level of the road and the sea level. The project makes accessible, tangibly and through the creation of a series of optical cones, a coastal area not currently in use. Except for important urban tracts, such as the seafront “Vittorio Emanuele III”, the multiple and different sea fronts of the city of Taranto are often underused, or occluded by other latent resources, such as the buildings and properties of the Navy. As written in the strategic plan “*Taranto Futuro Prossimo*” the sea is recognized as a great opportunity for the redevelopment of the city: the sea as an extraordinary and diversified “**endowment of public blue**”. The Swimming Stadium is seen as one of those projects capable to recover an important stretch of coast, now abandoned, and return it to civic uses.

The **containment of energy consumption** will be essential for an economically and ecologically sustainable management. The main goal will be the realization of a greater environmental comfort of users, having the maximization of energy containment and lower operating costs in relation to consumption and maintenance: the goal can be achieved by pursuing these results:

- maximum containment of energy requirements
- maximization of returns
- priority use of renewable sources
- design of the “simple” plant system, using elementary generative and functional processes, with easy management
- accessibility, plant division

Recent history, dictated by the new energy-saving rules, has certainly led to the optimization of the building envelope, drastically reducing the heat requirement for dispersion, and to the improvement of the yields of production systems.

It is correct to say that in case of a swimming system the volumes of renewal air are and remain important (required by regulatory standards) and the water consumption linked to the DHW requirement remains high, and therefore it is a " **energy-intensive system**".

It is also true, however, that the pool is a large medium-temperature water container, which can act as a balancer for areas where summer-spring cooling is required, thus creating plant synergies that other systems cannot provide.

### 3. General framework

#### 3.1. The context

This section provides an information framework on the landing site of the competition which for simplicity will be defined as the "**Torre d'Ayala area**", as it is characterized by the presence of the historic Ayala Tower. The section also provides a general overview of the territorial and regulatory references, that can be useful for preparing the draft of the proposal to participate and to be submitted in the competition. The Torre D'Ayala area is in the "Italia - Montegranaro" district of the municipality of Taranto - in **a residential** section - characterized by the prevalent presence of homes, shops and offices. The project area is currently inaccessible and is part of a densely built-up area with no public green spaces. *Viale Virgilio*, despite being close to the coastline, is in effect a "*caesura*" that does not allow a view towards the sea.

The site of interest identified for the project would make it possible to create, in an area currently not very attractive, a new polarity, in absolute coherence with the other two **guiding macro-actions** planned for the Mediterranean Games: **The Nautical Center** in the former "Torpediniere" Station and **the Salinella Park**.

In the following image it is highlighted: in orange the main attractions of the city (historical and naturalistic); the intervention area in red; the action of the games in blue and the existing sports facilities in black.

The *Torre D'Ayala* area is bordered on the north-east side by the *Viale Virgilio* road artery, while on the west side it coincides with a portion of the coastline of the *Mar Grande*. The area also borders on the north pertaining to the New Military Naval Base. The area of interest has an extension of 4.26 ha and the combination of all these factors allows the creation of an integrated project that enhances not only the swimming sports (also providing the possibility of holding competitions in open water) but also fitness activities to be carried out in the open area in the surrounding park. The area is currently well connected by bus and will also be accessible via the upcoming BRT public transport power line. In addition, the SUMP (Sustainable Urban Mobility Plan) of Taranto provides for the implementation of the waterways assuming a stop right near the neighboring pier (150 m away). The project area can also be reached via a recently built cycle path which leads from Torre D'Ayala to the "*Ponte Girevole*"- (Swing Bridge)-, and which connects to the existing cycle path in *Viale Jonio*.





**FIGURE 2 | FRAMEWORK OF THE COMPETITION AREA**



**FIGURE 3 | THE AREA CALLED :“AREA DI TORRE D’AYALA”. PHOTOMAP**



FIGURE 4 | BACKGROUND ELEVATION OF THE PROPERTY -TORRE D' AYALA

### 3.2. Territorial design and urban planning

The following urban and territorial planning tools have been analyzed:

- **PRG - Comune di Taranto** | Urban Plan of Taranto;
- **P.P.T.R. - Regione Puglia** | Regional Territorial Landscape Plan- approved with resolution n.176 of 16 February 2015, published in BURP the Official journal-of record of the Apulia Regional Authority (BURP) n.39 of March 23, 2015;
- **P.A.I. - Regione Puglia** | Regional hydrogeological assessment plan Apulia Region:

#### PRG | URBAN PLAN OF TARANTO



FIGURE 5 | EXCERPT PRG WITH THE IDENTIFICATION OF THE AREA OF INTEREST

The Torre d' Ayala area is entirely included in the **Special Constrained Zone A3**



### P.P.T.R. | REGIONAL TERRITORIAL LANDSCAPE PLAN

The site is thus protected

#### Landscape assets:

- Art. 136 of the code: **buildings and areas of considerable public interest**, governed by article 79 of the N.T.A. of the P.P.T.R.;
- Art. 142 of the Code: **coastal territories**, governed by Article 45 of the N.T.A. of the P.P.T.R..

#### Further contexts:

Hydrogeological components: hydrogeological constraint:

Cultural components: adjacent to a road with **landscape value and a panoramic road**

The planned interventions will be subject to the Landscape Authorization provision pursuant to art. 90 - P.P.T.R. Pursuant to art. 95 P.P.T.R. public works or works of public utility can be carried out in derogation from the provisions of Title VI of these rules for landscape assets and other contexts, as long as the landscape authorization or the landscape assessment verifies that these works are compatible with the quality objectives referred to in art. 37 and have no location and / or design alternatives.



FIGURE 6 | EXCERPT P.P.T.R. WITH THE IDENTIFICATION OF THE AREA OF INTEREST

### P.A.I. | REGIONAL HYDROGEOLOGICAL ASSESSMENT PLAN

From the hydrogeological assessment the area that encloses the building does not have any critical elements.

### Torre D'Ayala | Environmental and Cultural Heritage preservation constraints and prescriptive guidelines

The constrained situation in force on the historic Ayala Tower has been also investigated. The property has been declared **of important historical and artistic interest** pursuant to art. 10 c.1 of Legislation (D.lgs-no.42 /2004 with D.D.R 19/05/2011. By virtue of the State-owned **Cultural**

**Federalism**, the Municipality of Taranto has applied for the renewal of the transfer procedure of the Torre d'Ayala property belonging to the State Cultural Heritage. Among the assets identified by the municipality, Torre d'Ayala seems to be very relevant, registered in the Land and Buildings Cadastre on sheet 253, parcel 7, and registered in the Register of assets belonging to the Historic Artistic property of the State at card nos. TAD0030, in order to include it in an economically sustainable cultural enhancement program.

### 3.3. Archaeological and Historical Framework

The area of Torre d'Ayala is located in the south-west sector of the town of Taranto and precisely at street numbers n. 152, 154 and 156 of Viale Virgilio, once called *Strada dei Casini*, and it is located a few meters from the coasts of the Mar Grande. The Tower was born as a summer residence, a holiday resort. During the French occupation, the entire area where the tower stood was identified as a coastal battery for the defence of Taranto, as a military city. This function has been maintained continuously since 1938, the year of the purchase of the property by the Kingdom of Italy for military purposes, by its historical heirs, belonging to the D'Ayala family; until 1982 the structure was used as accommodation for the Navy's family members, it was organized in 17 homes for a total of 35 rooms and is still belonging to the Navy.

The area from the Tower to the sea was used from 1943 to 1945 by the Allied Headquarters as an evacuation camp for refugees. In 1946 it hosted the "International Fair of the Sea", which proved to be a national success, with dedicated sectors to naval architecture, scientific instruments, port facilities, publishing, and nautical tourism. Many studies have made it possible to reconstruct, even though partially, some aspects of the development and conformation of the Tower. The information is borrowed from the Notarial Deeds of the years 1795-1853, which attests to the presence of the structure before the end of the '700. This was divided into four floors, with a walled garden used by the D'Ayala's and around the central nucleus there were supposed to be other structures used as stables and kitchens. The addition of the tower should be placed, according to historical reconstructions, in the second half of the '800, when new changes were made to the Casino, related to the construction of the road to *Leporano*, which was a big transformation in terms of viability, encouraging commercial traffic between the two centers<sup>1</sup>. In addition to the Tower, declared of cultural interest pursuant to art. 10 of Legislative Decree 42/2004, the whole entire strip of land identified around it has also been included among the areas at archaeological risk, as well as a wide strip to the west and south-west of the architectural complex as it is an area located just outside the wall circuit that closed the Greek city on the Mar Grande. In this territorial sector, in fact, numerous finds are attested, especially of funerary nature, referable to the necropolis of both Greek and Roman times. In addition, some preventive surveys carried out on a private property near the area in question, have documented the intense exploitation of the area also for production purposes.

The area has a sub-flat trend sloping towards the west where there is a strong jump in altitude determined by a large, terraced wall built in recent years and which separates the east sector, located

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<sup>1</sup> Campagna Porfiri G. 2009, La Torre D'Ayala, Taranto.

further upstream, from the west one located close to the coastline. The wall demarcates a high altitude that must have been there in ancient times and in correspondence of which, in all probability, used to pass the walls of the city that from today's *Viale Lucania*, where a stretch of the defensive wall and moat was found, they headed towards the sea and then bent to the north, most likely at the height of the altitude jump demarcated today by the wall.



FIGURE 7 | TARANTO: ORIGINAL HYPOTHESIS OF THE WALL TRAIL OF THE LOWER CITY (DA E. LIPPOLIS)

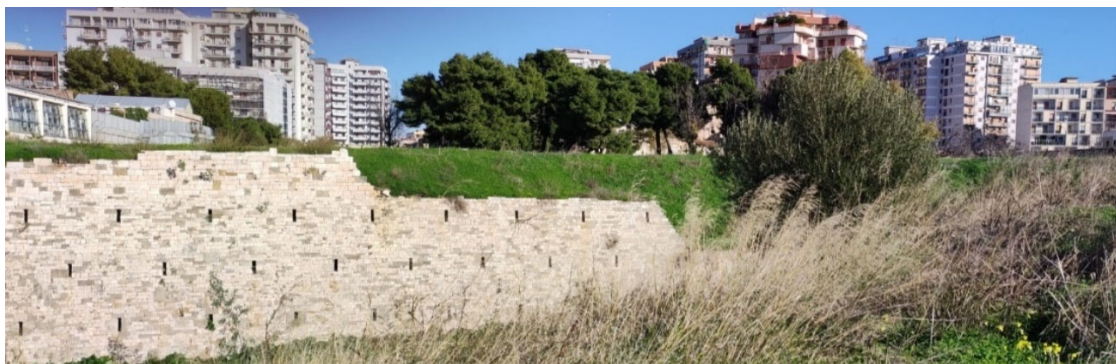


FIGURE 8 | TERRACED WALL MARKING THE MOST RELEVANT DIFFERENCE IN HEIGHT NEAR THE COAST LINE





FIGURE 9 | TOPOGRAPHIC PLAN OF TARANTO 1881 WITH THE LOCALIZATION OF THE CINTA MURARIA (DA MARTA)

## 4. The competition area

### 4.1. External area

The outdoor area extends for approx. 4.7 hectares, includes a strip perpendicular to the sea located at altitudes between +20 m and 0 m AMSL. from *Viale Virgilio* to the coast, has a flat course in the summit part of the plateau while the slopes are steep and have altitude jumps in terraces. Along the West border there is a strong jump in altitude determined by a large, terraced wall built in recent years, which separates the eastern sector, located further upstream, from the east located close to the coastline. The wall demarcates a high altitude that must have been there in ancient times. Currently the external area is an abandoned field with spontaneous vegetation and a wooded area in the central part in front of the Tower, while much of the sector close to the sea is characterized by the presence of dense Mediterranean scrub with wild olive trees and thickening of rubble and waste along the coast. The land has a flat course sprinkled with turf, in some places you can perceive some irregularities of the ground caused above all by the presence of rubble and modern drains deposited like a leopard on the whole area.





FIGURE 10 | FRAMEWORK OF THE INTERVENTION AREA. PHOTOMAP OF THE COMPETITION AREA



FIGURE 11 | OVERVIEW OF THE WEST SIDE OF AREA.



FIGURE 12 | OVERVIEW OF THE AREA SEEN FROM THE SEA.

#### 4.2. Torre d'Ayala

The property consists of a lot in a rectangular shape and flat position with some ancient artifacts attached; It is of large proportions and consists of three floors above ground. The structure is in load-bearing masonry and the roof of some rooms consists of barrel vaults of various heights. The main façade has a large window and architectural details in Liberty style, with a large portal at the main entrance, a long balcony with wrought iron railing on the first floor, and a smaller balcony on the second floor. The accesses to both balconies are flanked on each side by two Corinthian columns. On the inside, the atrium has two large, decorated pavilions, which once used to be a coach house, and whose upper parts differ in the two environments, while being equally dominated by the friezes of the family and the wolves and jackdaws of the family coat of arms. The area surrounding *Torre d'Ayala* has undergone several changes over time due to the construction of a series of unnecessary extras.

#### 4.3 Archaeological investigation

##### Greek era (V - III BC)

The analysis carried out highlighted, for the Greek phase, the presence of:

- remains of the Greek walls in *Via Emilia* (point 1)
- remains of a foundation structure identifiable with a probable defense tower of the city gate, V cent. found in *Viale Virgilio* at the corner with *via Lucania* (point 2)
- remains of the moat and a road ballast in the area at the north of Torre D'Ayala (point 4)
- important attestations relating to the necropolis of the Hellenistic phase (III BC) along *Viale Virgil*, between the fortification and the moat described above (point 3), concerning two tombs



of considerable size, containing a set of over three hundred vases belonging to the same ceramic workshop, dating back to the III century BC.

### Roman era (II-I BC)

The analysis carried out highlighted, for the Roman phase, the presence of a large necropolis, found during the construction of the “Ruta” garage, near *Viale Virgilio* 164 (point 5).



**FIGURE 13 | FRAMEWORK OF THE ARCHAEOLOGICAL EVIDENCES**

### **SENSITIVITY OF HISTORICAL PERIODS** According to indicators (numerical value from 1 to 4)

#### **Greek era**

Uniqueness: YES 4

Rarity: 3

Antiquity: 4

State of conservation: 4

Artistic value: 4

Tot. value 19/20. The sensitivity is VERY HIGH

#### **Roman era**

Uniqueness: YES 4

Rarity: 3

Antiquity: 4

State of conservation: 3

Artistic value: 4

Tot. value 18/20. The sensitivity is VERY HIGH

Historical period	Sensitivity (1-5)	Partial risk pr (0-3)	Total risk
Greek era	Very high (5)	3 High: Highly contextualized area	15
Roman era	Very high (5)	3 High: Highly contextualized area	15
<b>Total cumulative risk: High</b>			

From what we know so far, it can be easily deduced that the area could be affected by archaeological presences whose nature and extent is not known. In agreement with the Superintendency, the necessary preliminary geognostic and archaeological investigations were carried out, in order to verify the admissibility of the design of the swimming complex and the conditions of protection for any historical findings.

For this reason, the ASSET agency has entrusted, pursuant to art. 36, paragraph 2, lett. a) of Legislative Decree no. 50/2016 and subsequent amendments, to Dr. Laura CERRI the task of technical support for the realization of **geomagnetic surveys**<sup>2</sup> on a total area of about 43,000 square meters (4.3 h). In order to make the area inspectable, ASSET has also provided, with DGd no. 67/2022 of 17/02/2022, to entrust the company Bitella s.r.l. with the cleaning and safety activities by mowing shrubs and weeds of the areas.

The survey for this area is planned to be completed through the assignment of a Preventive Verification of the Archaeological Risk pursuant to art. 25 d.lgs. 50/2016. The results will be made available through the contest platform. The survey activity, in accordance with the regulations provided by the Directorate General for Education, Research and Cultural Institutes of the MIC and with the Superintendence of Taranto, will include:

- Realization of **5 preliminary archaeological tests** of 10x2 meters each, in the points of anomaly highlighted by geomagnetic prospecting;
- Survey of any archaeological evidence and topographic survey of the area carried out with total station;
- Collection, cataloguing and first restoration of archaeological finds found during the operations (restorations to the structures are excluded);
- Drafting and submission in paper and digital format (including tables and phase plans) of written and photographic documentation (interpretation of archaeological evidence);
- Archaeological reconnaissance of the seabed, visual and instrumental.

## 5. General objectives

The general objective of this International Design Contest is to start the construction of the Swimming Stadium for the **XX Mediterranean Games 2026** in Taranto, in other words to allow competitive swimming activities on an international level connected with the recovery of the Torre

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<sup>2</sup> Please refer to **Annex 4**



D'Ayala, and the arrangement of the area with the creation of an architecture that enhances the landscape context and the historical pre-existences.

The work is extremely important for the city, in terms of the excellence of the function and impact that the overall intervention will have on the redevelopment process of the area, and it will have to pursue the following principles:

- **INCREASE** sports and social and environmental activities. An adequate supply of high-level facilities and their correct territorial distribution is an essential condition for maintaining and increasing the competitive level of swimming as well as the culture of sport and more generally the culture of quality of life;
- **VALORIZE** the pre-existing archaeological and historical sites by increasing the cultural itinerary for informational and tourist purposes that includes the guided movement of groups, associations, informal groups through the Archaeological Park of rediscovery of the Ancient Walls and up to the Tower, including the usability of the tower;
- **OFFER** a suitable site for national and international swimming sporting events;
- **CONNECT** the city and the sea from an ecological-fruition, visual and landscape point of view, creating an opening to the sea through the public space;
- **COMMON SPACES AND SERVICES** of great quality as a heritage of the city itself;
- **SUSTAINABILITY** of the work and containment of energy consumption for economically and ecologically sustainable management;
- Technological **INNOVATION** and environmental comfort, obtaining the maximization of energy containment and lower management costs in relation to consumption and maintenance;
- **LANDSCAPE INTEGRATION** of contemporary intervention in relation to the context, a balanced and effective dialogue with the natural context. The *roofing* theme takes on a technical but also landscape value and it will have to enhance the visual connection and public usability.

Sporting infrastructures play a strategic role in the urban and functional organization of the cities. These are architectures that also have a function as **social aggregators** with identity values and enhancement of the sense civic duty. A city with many sports facilities has repercussions on the promotion of health and sociality. These belong to the category of essential urban "services". As well as green public spaces, health and welfare services, they are recognized as a mandatory standard for a balanced development of cities. Essential services that must be accessible to the population and sized in relation to the number of inhabitants of the different urban areas.

The **metaproject** prepared by the Organizing Committee of the XX MG Ta2026 shows a guiding solution, not binding on a formal level, which clarifies the minimum dimensional entity of the project, the relationship between inside and outside, the potential locations of the plants with combined routes and services.



**FIGURE 14 | CONCEPTUAL RENDER OF THE INTERIOR OF THE INDOOR SWIMMING-POOL – METAPROJECT OCMG TA2026.**



- |   |                                   |  |
|---|-----------------------------------|--|
| 1- Ingresso e area parcheggio                 | 5- Area parcheggio                | 9- Ingresso di servizio "eventi sportivi" (atleti, autorità, primo soccorso) |
| 2- Manufatto storico - Torre d'ayala          | 6- Stadio del Nuoto e servizi     | 10- Ingresso pedonale  |
| 3- Area archeologica - Necropoli di età greca | 7- Piscina esterna                | 11- Area parcheggio "eventi sportivi" atleti, autorità e primo soccorso      |
| 4- Area archeologica - Le antiche mura urbane | 8- Tribune e manufatti temporanei |  |

**FIGURE 15 | GENERAL PLAN, METAPROJECT OCMG TA2026.**

The **preliminary investigations** carried out have brought to light **two areas of particular archaeological interest** (Necropolis, chamber tombs and ancient surrounding wall) **located**

**upstream of the area**, near the Tower. On the other hand, downstream, near the sea, the geo-magnetic prospecting did not reveal characters of particular archaeological importance.

In the general scheme of the project, the competitors will certainly have to take into account the areas of archaeological interest and their integration with the "Stadio del Nuoto". The articulation of the accesses, the distribution of the paths, the parking areas and the positioning of the building will be issues that the design solution will have to address, motivating the choice with respect to the objectives previously described.

The overall size of the area necessary for the construction of the new Stadio del Nuoto is about 5,000 square meters for the **indoor pool**, about 4000 square meters for the **outdoor pool**; for a total of **approximately 9,000 square meters**, which can be spread over several levels by exploiting the changes in altitude and the irregularity of the ground.

The swimming sports facility must therefore be equipped with **two swimming pools**, one indoor and one outdoor, which **must comply with the minimum standards** for the "**Olympic Games**" and the conduct of the **Swimming and Water Polo disciplines**, giving a more complete offer both for **free time but above all for sport at a competitive level**.

If positioned at two different levels, the two swimming pools must be connected not only physically, for example through a system of ramps, but also visually, maintaining a **relationship with the sea and the landscape**. The architecture of the building **will have to exploit the conformation of the ground** and create a continuity and permeability between the outside and the inside until it reaches the coast where the activities can be carried out in the open sea.

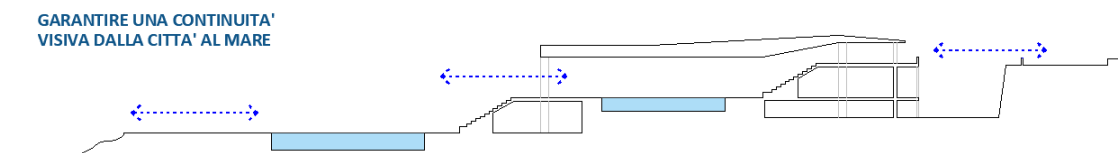


FIGURE 16 | SCHEMATIC SECTIONS, OCMG TA2026 META PROJECT.

The outdoor pool must in fact be equipped with a free surface near the coast, called "**solarium**", useful for various functions such as "heliotherapy" and direct access to the sea. In addition it will be useful for **setting up** public entertainment events and **temporary grandstands**, useful for international competitions (as for the XX Mediterranean Games) and again as access to the sea for **specific sports activities** that require it.

There is another important theme related to the **large roof which must be designed in continuity with the external space**. In this case, the architectural solution will have to draw a relationship between places, between buildings and nature.

Materials, colors, transparencies and opacities must be correctly managed to avoid the effect of a box and propose a solution that is **integrated into the context**.



The designers will have to evaluate and adopt solutions that contemplate **building envelopes capable of creating positive effects on environmental parameters** (reduction of the heat island, better management of rainwater, absorption of air pollutants) and that **reduce the consumption that weighs on the management of the sports facility** (winter heating of the pool room, air changes, water management in the pool).



FIGURE 17 | SCHEMATIC SECTIONS, OCMG TA2026 META PROJECT.

Proposing **systems for capturing** / shielding solar radiation through glass surfaces both for the **management of temperatures** within the sports space and to lighten the monolithic nature of the volumes from an architectural point of view; the theme of natural lighting must also be analyzed from a sporting point of view, **avoiding possible glare** during training and competitive activities.

**From a functional, distributive and technical sporting point of view**, the dimensions and spaces organization, both for activities and support as well as those dedicated to the public, must comply with the national sports technical regulations (CONI STANDARDS FOR SPORTS FACILITIES approved by resolution of the CONI National Council No. 1379 of 25th June 2008) of a general nature and **specifically related to Swimming Facilities (Article 10.2)** as well as the international technical regulations drawn up by the sports federations for the determination of the characteristics of the competition field (FINA Rules for the Facilities, competition fields 2017/2021, part IX) for the “Olympic Games” standards. **For the technical and sporting aspects of the facility and the minimum standards, please refer to Annex 1.**

## 5.1 Overview of strategic interventions in the Torre d'Ayala area

### TORRE D'AYALA

The building Torre d'Ayala is currently in disuse and is therefore not exploited according to its potential. The Municipality of Taranto signed with the Ministry of Defense and the State Property Agency - in September 2022 - a memorandum of understanding for the implementation of a program for the rationalization and re-functionalization of state-owned military buildings and compounds in the municipal area. The Parties have started an institutional collaboration relationship with the activation of virtuous processes aimed at maximizing the performance and potential use of public buildings located in the municipal area of Taranto in order to guarantee the satisfaction of the respective and interconnected needs of urban redevelopment and rationalization of spaces. The institutional cooperation between the Parties concerns a series of sites, including the Torre D'Ayala



area and the Tower itself for which the enhancement program "Architectural restoration and cultural recovery - Torre d'Ayala of Taranto" has been developed".

The program includes a series of actions which, in consideration of the historical-artistic value of the property, appear to be respectful of the original morphological structure and of the original materials, where preserved.

Specifically, the Tower will be used as a **visitor center for hospitality**, obtaining **exhibition spaces** to be dedicated to the theme of **athleticism**, with particular reference to the extraordinary tradition that Taras expressed in the world of sport in antiquity. Taranto, the capital of Magna Graecia, boasts extraordinary evidence of the life and sporting achievements of its ancient athletes, praised by historical sources and archaeological discoveries demonstrating their glories. The program proposes to systematize the iconic elements of this ancient tradition and transform them into urban installations, so as to connect the representative testimonies of the city's past with the contemporary. The exhibition spaces will also be the place to exhibit **an exhibition dedicated to the design competition for the swimming stadium**.

The following **functions** must be allocated in the new spaces:

- a front office for activities related to the 2026 Mediterranean Games and the Stadio del Nuoto;
- a restaurant bar;
- a bookshop and a wi-fi zone, spaces for teaching and reading;
- exhibition spaces, for the organization of temporary and permanent exhibitions;
- the open spaces can be used for workshops, as stages for performances and cineforums, and for all activities, laboratories and entertainment for users;

The re-functionalization of the tower will therefore have a triple effect:

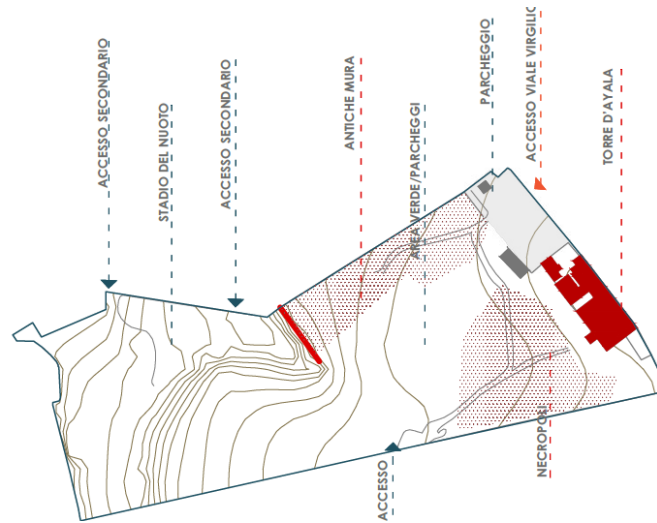
- Redevelop and regenerate an abandoned property in order to remove a "detractor" from the city, increasing the widespread quality both from an urban-architectural point of view and from a socio-economic-environmental point of view;
- To transform the aforementioned building from a "detractor" into an "attractor" capable of attracting new flows and at the same time activating a "virtuous regenerative circle" able to regenerate local socio-economic development;
- Enhance the historical-cultural (architectural) heritage, linking it to a type of use integrated with the cultural offer of the city and with the activities related to the Stadio del Nuoto, also through the synergy of skills between all the public, institutional and private actors involved.

**Competitors are called to seek qualitative solutions at an architectural and functional level, capable of safeguarding the building complex in its entirety and ensuring a virtuous relationship with the urban context of insertion.**

#### **THE ARCHAEOLOGICAL PARK OF MEDITERRANEAN ATHLETES**

The external area (portion between Torre d'Ayala and Swimming Stadium) is affected by important archaeological presences which will be put into a system in an integrated project, an equipped urban

park with a series of episodes immersed in nature and strongly characterized by the presence of an iconic architecture, the swimming stadium.



**FIGURE 18 | EXTERNAL AREA, DIAGRAM OF FUNCTIONS**

The area facing Torre D'Ayala represents an important opportunity to return equipped public green spaces to the city. The theme of athleticism is identified as thematic and iconic element for the set-ups of the equipped park, with particular reference to the extraordinary tradition that Taras expressed in the world of sport in antiquity.

Taranto, the capital of Magna Graecia, boasts extraordinary evidence of the life and sporting achievements of its ancient athletes, whose praises are praised in historical sources and the archaeological discoveries prove their glories strange.

These tell us about the glorious deeds of Icco: he won the Pentathlon and Pausanias defines him as the best athlete of his time.

Archaeological excavations have brought to light the Tomb of the Athlete, an extraordinary and unique testimony dating back to 500-480 BC. The sarcophagus contains the skeleton of a young athlete of around thirty with whom four Panathenaic amphorae were placed, trophies of his victories at the Panathenaic in Athens. Studies have shown that the Athlete from Taranto was a champion in the disciplines of running, on foot and with carts and the long jump and that he died due to arsenic poisoning, used in antiquity as a tonic for the body.

Another discovery that bears witness to the important sporting tradition of Taranto in the ancient world is the Tomb of the Athletes, a monumental collective deposition intended for athletes, containing seven sarcophagi and a set of vases and objects that recall the glorious athletic feats of the men deposited there. dated to the sixth century. B.C. The tombs of the athletes of Taranto are kept in the National Archaeological Museum (MArTa), and are to be considered among the most important examples of sporting tradition in the ancient Mediterranean.

## INTERNATIONAL CAMP OF ARCHAEOLOGY

Preliminary investigations carried out in the area have attested the presence of the final curtains of the walls that encircled the ancient Taras starting from the 5th century. B.C. and a large necropolis area probably belonging to the Greek and Roman phases. The anomalies that emerged from the geomagnetic prospecting can also be investigated and brought to light through the organization of an international and participatory excavation site, which will allow for:

- increase the scientific value of the discoveries and the possibility of sharing knowledge, through the involvement of the Departments of Cultural Heritage of the Apulian, national and international universities in partnership with companies and private professionals, creating an open and participatory excavation site;
- strengthen the role of cultural heritage for the purposes of human and sustainable development and quality of life, activating identity-based and inclusive knowledge actions and processes.

### 5.2 Circulation inside the site and parking areas

Considering that around 3,000 people will be able to attend the area during the XX Mediterranean Games 2026 and that around 2,000 will arrive on foot, by bike, by motorcycle or by urban public transport, **it is estimated that parking needs will be around 300 places (1,000 people).**

An area already intended for parking is located **near via Virgilio**, next to the Tower with **about 55 places available**. The other parking areas must be located, as far as possible, within the area, inserted between the green areas and those of archaeological interest, both for spectators but above all **for users, athletes and authorities (service parking lots adjacent to the sports facility).**

For the remaining 245 seats, therefore, the need would be for an area of about 7,000 square meters but probably only a part of it would be foreseen within the area. **The activities planned, or already existing, in the neighboring areas must be taken into account.**



FIGURE 19 | NEARBY AREAS WITH ACTIVITIES AND FUNCTIONS OF INTEREST.

From a survey (and a phase of comparison started with the private entities concerned, the public bodies and the Municipality of Taranto) the highlighted areas provide functions and activities coordinated with the future swimming facility.

Neighboring activities of interest that will implement the services:

- **A zone (orange)** pertaining to the Chamber of Commerce with parking area and internal roads with direct access;
- **B zone (purple)** the construction of a private recreational sports facility is planned with parking and green areas with direct access;
- **C zone (yellow)** private parking areas in expansion.

### 5.3 Green Areas

The presence of green and equipped spaces is to be considered an aspect of primary importance within the area, to complete the functions listed in this document.

In other words, it is a question of extending outdoor places for sport and culture, areas for relaxation and free time, such as real gardens and parks to expand the use of the area during holidays and weekends. It is therefore planned to organize the current spaces into three different categories:

- **Relax Green Areas:** equipped with small sports and/or leisure equipment; represents those park and garden spaces of an urban nature that can be used by all users as well as by citizens, respecting the regulations and limitations provided;
- **Green Systems/natural shieldings:** useful for filtering and shielding the building tasks facing the area, landscape detractors such as the adjacent building (Chamber of Commerce) which insists on the urban traces of the ancient city walls. In the external arrangement project, the archaeological areas must be enhanced and integrated with the context;
- **Equipped Green Areas:** equipped with seats, gazebos, tables, canopies (or similar) to ensure suitable places for socializing and small commercial activities.

Eventually (at the discretion of the designer) a large green space suitable for hosting events and manifestations may be provided. If properly equipped, this space can be reconfigured by combining the spaces of the points mentioned above.

The designer should be guided by the following concepts:

- establish a "hierarchy" of open spaces that vegetation must strengthen and improve;
- The sequencing and continuity of spaces must be defined and optimized also through the use of greenery;
- Plants and greenery in general should provide solutions for various functional needs, that is, providing shade for activities and for outdoor use areas, favoring the organization of spaces, "hiding" service areas, etc. Furthermore, in the areas characterized by the archaeological presence, the plant essences must be chosen so that the development of the roots cannot affect the remains;
- Provide for the recovery/reuse of rainwater and automated irrigation and monitoring systems.



#### 5.4 Accessibility

The sports facility must guarantee access to people with disabilities, accessible routes must be provided towards and within the structure, including the fruition areas of the archaeological park and the Torre d'Ayala.

The design must therefore be carried out in compliance with the principles of accessibility and visitability provided for by Law 13/1989, by the relative regulation D.M. 236/1989 and by the D.P.R. 503/1996. Accessibility must be evaluated taking into account the various meanings: motor, visual, auditory, etc.

#### 5.5 Sustainability

The main objective of this intervention is to create a complex that meets the needs of the client and end users and in parallel with the principles of environmental sustainability. The need to create a building that not only complies with the minimum requirements set by the legislation in terms of energy saving but which also has a limited environmental impact has become even more urgent today. In recent years, various treaties have been signed in favor of environmental protection, aimed above all at reducing energy consumption and greenhouse gas emissions. Added to this is the waste of no longer renewable resources such as water and the ever increasing pollution of soil and air.

Specifically, please refer to the detailed information in **Annex 1**.

### 6. Functions indications, requirements and needs to be satisfied

In order to achieve the above stated general objectives participants must take into account the attached **Annex 1**.

### 7. Technical requirements as in the in force technical legislation

The intervention must be carried out in full compliance with current Community, national and regional legislation on Public Works, Environment, Safety, regulations and technical standards for the implementation of Municipal instruments, as well as the internal regulations of the Contracting Authority.

The project must foresee the following macro-categories:

- a) Swimming Stadium
  - structural works;
  - technological and special plant engineering works;
  - swimming pool water treatment works;
  - works for the production of energy using renewable sources;
  - insulation and waterproofing works;
  - finishing and set-up works.
- b) External Areas
  - works for the provisional viability coinciding with the definitive viability;

- green works;
- external arrangement works;
- Street furniture.

All the indications given below must be further verified at the time of design according to the indications of the sector regulations and the relevant control bodies, as well as during the acquisition of the necessary authorizations at the Service Conference. The following presentation is purely summarizing and not exhaustive. The complete determination of the applicable rules and standards is left to the designers.

### REGULATIONS ON GENERAL ASPECTS

#### **Building and urban planning:**

- Presidential Decree 380/2001 and subsequent amendments Consolidated Building Act.
- General Town Plan of the Municipality of Taranto;
- Building Regulations of the Municipality of Taranto approved by resolution of City Council n. 325 of 9/9/1974;
- Regulation of Hygiene and Public Health of the Municipality of Taranto, approved with the Municipal Council's resolution no. 120 of 11/20/1998 and subsequent amendments
- Legislative Decree 50/2016

#### **Environmental and landscape protection:**

- Legislative Decree 152 of 3rd April 2006 "Name in environmental material";
- Ministerial Decree 11.10.2017 - "Minimum environmental criteria for the commitment of design services and works for the new construction, renovation and maintenance of public buildings";
- Regional Territorial Landscape Plan - PPTR updated to DGR Resolution no. 1801 of November 15, 2021

#### **Preservation of cultural and archaeological heritage:**

- Legislative Decree no. 42 of 22 January 2004 "Code of cultural heritage and landscape";
- Legislative Decree no. 156 of 24th March 2006 "Corrective and supplementary provisions to the legislative decree 22 January 2004, n. 42, in relation to cultural heritage";
- DPCM February 9, 2011 "Assessment and reduction of the seismic risk of cultural heritage with reference to the technical standards for buildings referred to in the Ministerial Decree 14/01/2008";
- Circular no. 26 of 02/12/2010 "Guidelines for the assessment and reduction of the seismic risk of cultural heritage aligned with the new technical standards for buildings (Ministerial Decree 14/01/2008)";
- Guidelines "Evaluation, by way of derogation, of building projects subject to protection pursuant to Legislative Decree no. 42";
  - Ministerial Decree 22 August 2017, n. 154 "Regulation on public works contracts concerning cultural heritage protected under the legislative decree n. 42 of 2004, referred to in legislative decree no. 50 of 2016";
  - Legislative Decree 28 May 2010, n. 85 "Attribution to municipalities, provinces, metropolitan cities and regions of their own assets, in implementation of article 19 of law no. 42".

**Sports facilities:**

- Ministerial Decree of 18 March 1996 "Safety regulations for the construction and operation of sports facilities"
- CONI RULES FOR SPORTS FACILITIES approved by resolution of the National Council of CONI no. 1379 of 25 June 2008
- Water Polo Technical Regulations, approved with resolution no. 112 - Federal Council of 12.09.2019
- Regulations of the stadiums of the National Professional League
- UNI EN 13200-1 Installations for spectators - Part 1: Criteria for the arrangement of observation spaces for spectators
- UNI EN 13200-3 Installations for spectators - Part 3: Separation elements - Requirements
- UNI EN 13200-4 Installations for spectators - Part 3: Seats - Product characteristics

**Sports Technical regulations:**

- FINA Regulations for Facilities, 2017/2021 competition fields, part IX
- Water Polo Technical Regulations, approved with resolution no. 112 - Federal Council of 12.09.2019

The equipment dedicated to sporting activities must comply with current national legislation, particularly specific for Olympic "swimming facilities"; the "competition field" pools must comply with FINA international homologation for Olympic and World Competitions; in addition, for the conduct of international events, the sports facility must offer all the specific support services required by the international federation (FINA), such as:

- offices for maintenance management;
- media areas (press gallery, flash interview areas, mixed zones, conference room, press room, interview rooms, etc.);
- Presence of a "mobile pontoon" for the management of the pool surface (both internal and external).

**REGULATIONS ON STRUCTURAL ASPECTS**

- Circular no. 7 of 21/01/2019: Instructions for the application of the "Update of technical standards for constructions"
- Ministerial Decree MIT January 17, 2018 "Update of Technical Standards for Construction"
- Prime Minister's Decree of 20/03/2003 n. 3274 and subsequent amendments and Prime Minister's Decree 21/10/2003
- Law no. 64 of February 2, 1974 and subsequent amendments "Provisions for buildings with special requirements for seismic areas"
- Law 1086/71 "Rules for the regulation of reinforced, normal and prestressed concrete and metal structure works"

**REGULATIONS ON ACCESSIBILITY PEOPLE WITH DISABILITIES**

- Presidential Decree 24.07.1996 No. 503 - "Regulation laying down rules for the elimination of architectural barriers in buildings, spaces and public services";
- Ministerial Decree June 14, 1989, n. 236 - "Technical requirements necessary to guarantee the accessibility, adaptability and visitability of private and public residential buildings, for the purpose of overcoming and eliminating architectural barriers".

- Design criteria for accessibility to sports facilities (Italian Paralympic Committee - National Coni).

### **STANDARDS REGARDING HYGIENE, HEALTH AND SAFETY**

The design of the environments must take into account the requirements set out in the Regulations of Hygiene and Public Health of the Municipality of Taranto, as well as in Legislative Decree 81/08 and subsequent amendments. and related technical standards of the sector for the determination of the indices and requirements of aeration and ventilation of the environments, crowding, natural lighting, toilets, etc.

### **ASPECTS RELATED TO THE TECHNOLOGICAL EQUIPMENT**

The technological equipment of the building must be focused on the architectural integration and must be inspired by the following solutions (by way of example and not exhaustive):

- presence of basic plant equipment;
- low consumption internal and external lighting systems that ensure compliance with the levels of illumination, reflection, glare and uniformity required by the standards for the individual intended uses;
- use of high-efficiency air conditioning and air exchange technologies that allow adequate control of the thermo-hygrometric and air quality parameters;
- adoption of technologies aimed at increasing the passive acoustic requirements of the building, through the use of appropriate building components and systems that mitigate external and internal noise sources;
- presence of WIFI and HOTSPOT coverage also available to users of common areas/ spaces;
- use of VOIP technology;
- fire detection, emergency lighting and safety systems;
- sanitary and waste water system;
- use of “home automation” and remote management/ remote control systems from a remote location (for example at the monitoring stations); also aimed at pursuing energy saving;
- video surveillance systems using IP systems;
- use of automatic switching on/ off systems for lights in common areas and toilets;
- use of the EVAC emergency evacuation sound system;
- provide for electrical continuity systems in the event of a power failure.

The design and execution of the systems must be in accordance with the provisions of the Ministerial Decree 37/2008, by the Presidential Decree 462/2001 and by further applicable national, regional and good practice regulations. The design must be conducted in compliance with the UNI, UNI EN, CEI, CIG regulations in force.

The design, construction and management of the plants must take place in compliance with the Regional Council Resolution of 24 July 2018, n. 1333 - “Guidelines for the prevention and control of Legionnaires 'disease” in implementation of the “Operational guidelines for the clinical and environmental surveillance of Legionnaires' disease in the health and assistance structures of the Puglia Region”.



Furthermore, the impact that the aforementioned systems may have on the building must be carefully assessed. By way of example, artificial lighting must ensure the natural perception of materials, colors and supplies. Technological equipment and systems (air conditioners, antennas, etc.) are also to be excluded on the building elevations; these devices must be placed on parts of the building that are not visible from public spaces or passageways.

### **ARTIFICIAL ENLIGHTENMENT**

The average lighting levels must in any case be deduced from the general standard UNI EN 12464-1 on the workplace in terms of:

- local and surrounding lighting;
- uniformity;
- glare (direct or reflected);
- reflections.

As regards the lighting of the outdoor area, among other standards the following ones must be observed:

- EN 62471 2008-2 / 2009 "Photobiological safety of lamps and lighting systems";
- Regional Law of 23 November 2005 n ° 15 concerning "Urgent measures for the containment of light pollution and energy saving".

The emergency lighting must guarantee a safe exit from the building through appropriately marked escape routes. The prompt identification of fire alarms and equipment along the exit routes must also be ensured.

For the **SPORT COMPETITION FIELD**, the lighting system must comply with the CONI regulations, for the basic use of the pool, and the technical regulations for its use in the event of World Championships or Olympic Games:

- CONI RULES FOR SPORTS FACILITIES approved by resolution of the National Council of CONI no. 1379 of 25 June 2008
- FINA Regulations for Facilities, 2017/2021 competition fields, part IX
- Water Polo Technical Regulations, approved with resolution no. 112 - Federal Council of 12.09.2019

### **SECURITY SYSTEM**

An electrical safety system must be provided, powered by a special source distinct from the ordinary one, which must be powered:

- a) security lighting, including that indicating the passages, exits and routes of escape routes;
- b) public address system and/ or alarm system.

In addition, an automatic fire detection system must be provided in the individual rooms. The electrical systems must in any case be built in accordance with the provisions of the relevant sector regulations.

### **MECHANICAL AND AIR CONDITIONING SYSTEMS**

With regard to the thermo-hygrometric conditions, please refer to the following legislative and regulatory sources:

- Circular 16/1951: specifications on ducts and air intakes;
- UNI 10339 Aeraulic systems for wellness purposes. General information, classification and requirements. Rules for the request for quotation, offer, order and supply;
- UNI EN 16798-3: 2018 Energy performance of buildings - Ventilation for buildings - Part 3: For non-residential buildings - Performance requirements for ventilation and air conditioning systems for environments;
- UNI EN 16798-7: 2018 Energy performance of buildings - Ventilation for buildings - Part 7: Calculation methods for determining the air flow rates in buildings including infiltration.

The fluid mechanical systems must be designed in accordance with the current legislation, to be applied in accordance with the intended use of the project environments, in order to ensure high energy efficiency and high thermo-hygrometric comfort for the occupants.

Appropriate testings must be conducted regarding compliance with the acoustic requirements of mechanical systems.

To reduce the risk of Sars Covid 19 spread through air conditioning and air treatment systems, the indications contained in the ISS COVID-19 Report no. 33/2020 - "Indications on ventilation/ air conditioning systems in non-health community facilities and in domestic environments in relation to the spread of the SARS-CoV-2 virus" must be verified.

## **ACOUSTICS**

As far as the acoustic conditions are regarded, the existence of the acoustic well-being requirements within the building must be assessed; in compliance with the minimum environmental criteria (Decree of 11 October 2017) for the award of design services for the new construction, renovation and maintenance of public buildings. The following specific regulations must also be observed:

- Law 26.10.1995, n. 447 Framework law on noise pollution ";
- Ministerial Decree 16.03.1998 - "Techniques for detection and detection of noise pollution";
- Prime Minister's Decree 14.11.1997 - "Determination of the limit values of sound sources";
- Prime Minister's Decree 05.12.1997 - "Determination of the passive acoustic requirements of buildings".

## **FIRE PREVENTION REGULATIONS**

For the fire prevention design of buildings, the following specific regulations must be observed:

- Ministerial Decree 30/11/1983 "Terms, general definitions and graphic symbols of fire prevention";
- Ministerial Decree 10/3/1998 "General criteria for fire safety and emergency management in the workplace";
- Fire prevention code DM 3 August 2015 and technical standards according to the activities that will be placed in the buildings subject to intervention;
- relevant UNI standards;
- Circular no. 4 of 1 March 2002 "Guidelines for evaluating fire safety in workplaces where disabled people are present";
- Guidelines "Evaluation, by way of derogation, of building projects subject to protection pursuant to Legislative Decree no. 42".

## REGULATIONS ON PUBLIC CONTRACTS

The design must be conducted in compliance with the provisions of Legislative Decree n.50/ 2016 and the provisions in force related to the 207/10 Presidential Decree. Reference must also be made to the Implementing Decrees of Legislative Decree 50/16, the ANAC Guidelines and the "Guidelines for the drafting of the technical and economic feasibility project to be used as the basis for the award of public works contracts of the PNRR and of the PNC "(Article 48, paragraph 7, of the decree-law 31 May 2021, n. 77, converted into law 29 July 2021, n. 108).

Furthermore, for the recovery of the Tower, since it is a cultural asset, also from the D.M. 154 of 22.08.2017.

## 8. Recommendations for the design and additional technical procedures on which the design has to be based

### *Aspects related to the execution of the works in relation to the surrounding activities*

In the formulation of the construction site project hypothesis, particular attention must therefore be paid to interferences with external activities, providing specific technical-practical provisions aimed at safeguarding internal and external safety in the construction site area. In particular, the burden of vehicular traffic in the area where the intervention in question is located must be reduced. Furthermore, interventions to reduce the risk of noise pollution during construction and dust production in the surrounding areas will have to be defined.

As regards the choice of construction technologies for the recovery of the Tower, it is preferable that, in the design phase, the following strategies are followed:

- technical solutions, materials and construction technologies adopted for the purpose of reducing the impact of the construction site on the activities existing in the urban context;
- construction solutions that take into account the limits imposed by the location of the construction site in the urban and neighborhood context.

### *Functional aspects*

The design must comply with the aforementioned dimensional and quality standards referred to the technical annex contained in this document, and must be inspired by the principles of:

- clear identification of internal and external functions and paths;
- rationality and simplicity of use of the spaces;
- accessibility and usability by people with disabilities.

In particular, the two swimming pools must comply with the standards for "Olympic Games and World Championships" of 50m in length for the SWIMMING and WATER POLO disciplines. The choice is to have an 8 (eight) lane tank inside and a 10 (ten) lane tank on the outside. The use of mobile pontoons in the tanks must be provided to make the competition plan divisible according to needs.

### *Archeological aspects*

The design must comply with the indications of the National Superintendency for Underwater Cultural Heritage, which will be obtained following the analysis of the documentation produced.

## 9. Budget limits

The two-phase design competition, pursuant to art. 152 of Legislative Decree no. 50/2016, provides for an estimated all-inclusive budget of **€ 15,700,000**.

SWIMMING STADIUM				
CATEGORY OF WORKS	FUNCTIONAL DESTINATION	ID-WORKS Category of WorkS Identification Code (DM 16.06.2016)	PERCENTAGE	AMOUNT
Building	Sport Building	E12	35%	€ 5.495.000
Structures	Structures	S.04	20%	€ 3.140.000
System	Plumbing-sewage-gas-fire systems, water treatment system	IA.01	15%	€ 2.355.000
	Heating, cooling, air conditioning, air treatment, solar thermal heating systems	IA.02	15%	€ 2.355.000
	Electrical and special system	IA.03	15%	€ 2.355.000
<b>Estimated Construction Cost (including Worksite Safety Cost)</b>				<b>€ 15.700.000</b>

## 10. Technical specifications contained in the minimum environmental criteria (CAM) laid down in art. 34 of Legislative Decree no. 50 2016

The project for the recovery of the building and the arrangement of the Torre d'Ayala area with the construction of the new Stadio del Nuoto must comply with the technical specifications contained in the Annex to the Ministerial Decree of 11 October 2017 (in the Official Gazette General Series n. November 2017) "Minimum Environmental Criteria for the award of design services and works for the new construction, renovation and maintenance of public buildings", as far as materially applicable.

## 11. Technical specifications for building materials, elements and components to ensure durability and resilience of the works, energy efficiency and safety and functionality of the systems

During the design phase, particular attention must be paid to the aspect of the durability of the building components, defined as the ability to perform the required functions during a specified period of time under the influence of the agents expected in operation, with reference to the UNI 11156 standard "Evaluation of the durability of building components".



Competitors will take care to indicate the estimated useful life and the parameters for evaluating the durability of the building components, in particular for the preparation of the contents of the various design phases, for the preparation of specifications, design drawings and accompanying technical reports and in the verification and control phases of the project.

The application of Regulation (EU) No. 305/2011 of the European Parliament and of the Council of March 2011 the 9th related to the CE marking of construction products must be provided. For each process that involves the use of materials with marking, the relevant harmonized standard of reference and the relative certification method during the execution of the works must be indicated.

It must be provided the design of thermal systems, suitable for heating/ cooling/ production of domestic hot water, with higher energy efficiency appliances and systems, such as: condensing boiler, heat pump, hybrid systems, biomass systems, solar collectors must be envisaged. thermal, micro-cogeneration, district heating.

All the envisaged systems (mechanical, electrical and special) must be integrated into the same Building Automation system in order to ensure their optimization, guarantee energy savings and economic savings in terms of management and maintenance costs.

The design must ensure the safety of users in relation to the following aspects:

- structural safety, intended as resistance to vertical and horizontal loads and to seismic actions;
- plant safety, intended as compliance with the reference technical standards, paying particular attention to the type of end user;
- fire safety and emergency management, intended as compliance with the fire prevention regulations of activities subject to fire prevention to be installed in buildings;
- health and hygiene safety, intended as compliance with the requirements of Legislative Decree 81/08 in the workplace and with the additional applicable health and hygiene requirements;
- usability of spaces and safety to ensure total accessibility to users with reduced motor and sensory capacity, and the safety of the building to prevent the risk of fires, accidents and intrusion.

## **12. Informative Specification according to UNI 11337-UNI EN ISO 19650 legislation and according to the Ministerial Decree n. 560/2017 on electronic methods and tools (BIM)**

Please refer to the attachment to this document.

## **13. Attachements**

The Contracting Authority provides participants with the following documentation:

### **Annex 1 \_Minimum quality standards and design guidelines**

## **Annex 2\_Informative Specifications**

### **Annex 3 \_Illustrations:**

- Tav.01 | | General overview of the urban context*
- Tav.02 | Urban Context Photomap*
- Tav.03 | Map of known archaeological evidences*
- Tav.04 | Planning Framework and Constraints from The Regional Landscape and Territorial Plan (PPTR)*
- Tav.05 | Planning Framework and Constraints from The Urban Plan in Force (PRG)*
- Tav.06 | Policy Framework: Preliminary Planning Document (DPP) and Urban mobility forecasts*
- Tav.07 | Photomap of the Competition Area*
- Tav.08 | Photomap with Level curves*
- Tav.09 | Photogrametric Map of the Competition Area*
- Tav.10 | Cross-sectional Profiles and photographic survey*
- Tav.11| Design indications: Swimming Stadium functional scheme*
- Tav.12| Design indications: meta-project masterplan*
- Tav.13| Design indications: meta-project views*
- Tav.14| Design indications: functional scheme - level 0*
- Tav.15| Design indications: functional scheme – level -1*
- Tav.16| Design indications: functional scheme - level -2*
- Tav.17| Design indications: sections and calculation of visibility*
- Tav.18| Swimming Pools and Stands Dimensions*
- Tav.19 | Torre D'Ayala - Ground Level Plan*
- Tav.20 | Torre D'Ayala - First Level Plan and Second Level Plan*
- Tav.21 | Torre d'Ayala - Third Level Plan and Roof Plan*
- Tav.22 | Torre D'Ayala - Elevation on Viale Virgilio and Cross Section*

## **Annex 4\_Archaeological investigation documentation**