7 | REGULATORY REFERENCES

8 | ANNOTATED BIBLIOGRAPHY ON THE ARTEMIO FRANCHI STADIUM

We would like to thank the Directorate of Archaeology, Fine Arts and Landscape of the MIBACT [Ministry of Cultural Heritage, Activities and Tourism] and the Superintendence for Architectural and Landscape Heritage for the provinces of Florence, Pistoia and Prato, which have provided useful materials as a background to draw up this document.

Introduction

This introduction summarises the main objectives which the city council of the Municipality of Florence intends to achieve through the organisation of an international competition.This Planning Guidance Document (PGD) is an integral document to proceed with the correct planning and design.

The city council intends to redevelop the Campo di Marte Nord area which is currently mainly used for green spaces and sports activities. The area encompasses the Artemio Franchi Stadium designed by Pierluigi Nervi in the 1930s and still used for sporting and entertainment events.
The area, which extends over 25 hectares, encompassing Viale Manfredo Fanti, Viale Ferruccio Valcareggi and Viale Pasquale Paoli, includes:

- the Artemio Franchi stadium together with an adjoining gym and swimming pool as well as underground parking area
- the Davide Astori sports centre used by ACF Fiorentina, with football pitches, a gym and other ancillary areas
- a baseball stadium with the adjacent gym with a geodesic dome roof
- the Affrico multi-sports complex, consisting of a volleyball/basketball sports hall, a bowling alley, tennis courts, a football and five-a-side football pitch, changing rooms, toilets, a bar and a restaurant
-the Cerreti football pitches and the adjoining restaurant
- a skatepark
- the Niccolò Galli public garden
- an area for the local market
- some areas intended for surface parking lots.

The city council has planned to redevelop the Franchi stadium to make it usable for both football and non-football events, with a capacity of at least 40,000 seats, adapting it to international standards, allowing daily use of the facility by incorporating multi-functional areas or sections dedicated to other activities (i.e. a football museum) as well as major events of great appeal.

The architectural design of the stadium must follow the requirements issued by the MIBACT with the recent brief which allows, among other things:

- to “replicate the terraces of the stands” to reduce the distance from the pitch
- to construct a roofing system and a transparent cladding of the outer part of the terraces
- to create suitable volumes in which to relocate various services and activities, including commercial ones.

The city council also indicates the possibility of:

- removing the gym and swimming pool which are currently underground (Maratona side) whilst anticipating the construction of a new swimming pool in the Campo di Marte Nord area
- redeveloping the areas of the Affrico multipurpose complex by creating a sports hall for at least 700 spectators even in a different location
- extending the public garden
-maintaining the baseball stadium whilst anticipating, if necessary, a redevelopment of the ancillary spaces
- maintaining the local market, albeit in a different place

- maintaining the sports centre's gym used by ACF Fiorentina, removing the training football pitches as ACF Fiorentina has recently started the construction of a new sports centre
- building a gross useable surface area of 15,000 m2 to be allocated to management, tourist-receptive and commercial activities to support the overall redevelopment of the Campo di Marte
- removing the Cerreti football pitches
- change the location of the skatepark.

As best illustrated in this document, the architectural design must strictly consider some key elements of the area's transport system (albeit external to the intervention area), such as:
- the presence of the railway station of Campo di Marte
- planning the tramline 3.2.2, in the scheme design stage, which is expected to be operative by 2026
- planning a ground-level and multi-storey car park for about 3,000 parking spaces in the railway area along Via Campo di Arrigo, for which agreements with the owner are currently being established.

The city council has chosen to organise an architectural design competition to ensure, by comparing several proposals, the best quality of design.
The two-stage architectural design competition is the most suitable method for the type of intervention which the city intends to promote by acquiring, at the end of the competition, a technical and economic feasibility project considering the possibility, already stated in the call to tender, of assigning the other stages of the design and the construction management stage through a negotiated procedure, also by lots.

1 | THEMES AND OBJECTIVES OF THE COMPETITION

1.1 | Rationale behind the design competition

The choice to promote an international design competition comes after a plethora of reflections and considerations regarding the stadium and the city's team. Regardless of the heated citizen debate on the subject (a new stadium versus restoration of the Franchi stadium), also dating back over time, starting from the most recent amendment approved by Legislative Decree 50/2017 (which takes into consideration the restoration/restyling of existing sports facilities), the idea is put forward that the Artemio Franchi stadium, a cultural asset pursuant to Legislative Decree 42/2004, can be remodelled and subsequently adapted *to international standards of public safety, health and security*.

Below is the extract of art. 62 of Legislative Decree 50/2017 coordinated with the amendment introduced with Legislative Decree 39 of 28.02.2021, to fully understand the philosophy:

(…) «1-bis. In order to prevent land waste and to make sports facilities intended to host professional competitive competitions more efficient, as well as ensuring the adaptation of such facilities to international standards of public safety, health and well-being, the ***person who intends to carry out the interventions referred to in the previous paragraph*** *may also proceed by way of derogation from Articles 10, 12, 136 and 140 of legislative decree 22 January 2004, no. 42, and to any declarations of cultural or public interest already adopted,* ***in compliance only with the specific structural, architectural or visual elements which***

are strictly necessary for witness purposes to be preserved or reproduced even in different shapes and sizes to the original one. *The identification of these elements, if present,* ***is left to the Ministry of Cultural Heritage and Activities, which indicates the methods and forms of conservation, even if separate from the new sports facility, through renovation or building replacement interventions aimed at improving the usability of the building itself.*** *The provision referred to in the previous period is adopted within ninety days from the request of the owner or operator of the sports facility, which can be extended once for a further thirty days to request documents that the territorially competent Superintendency does not yet have and which are necessary for the preliminary investigation.* ***If this deadline elapses without the Ministry having completed the verification, the artistic, historical and cultural protection constraint falling on the sports facility will be denied and the effects of any declarations of cultural interest already adopted cease.***

1-ter. By adopting the provision referred to in the previous paragraph, the Ministry of Cultural Heritage and Activities takes into account that the need to preserve the testimonial value of the facility is recessive with respect to the need to guarantee the functionality of the facility itself for the purposes of public safety, health and security, as well as the adaptation to international standards and the economic - financial sustainability of the facility. The aforementioned prevailing need is also relevant for the purposes of assessing the environmental impact and landscape compatibility of the intervention".

In a note dated November 2020, ACF Fiorentina asked the Ministry to *identify only the specific structural, architectural or visual elements of which conservation or reproduction is strictly necessary for testimonial purposes, even in different shapes and sizes from the original, and to indicate the methods and forms of conservation, even separate, from the sports facility.*

The Ministry responded with the provision pursuant to paragraph 1bis of art. 62 of Legislative Decree 50/2017, clearly setting the limits within which the design can work and move. The following is an extract of the text of the Ministry's provision:

*"(…) **WHEREAS***
the legal obligation to enact this provision, taking into "account that the need to preserve the testimonial value of the facility is recessive with respect to the need to guarantee the functionality of the facility itself for the purposes of public safety, health and security, as well as the adaptation to international standards and the economic - financial sustainability of the facility" as stipulated by paragraph 1-ter of article *62 of Decree-Law 24 April 2017, no. 50, introduced with article 55 bis of Decree-Law 16 July 2020, no. 76;*

IT LISTS
*the following "**specific structural, architectural or visual elements whose conservation is strictly necessary for testimonial purposes**":*
- *the thin, slender canopy in its original form, placed to cover the central grandstand;*
- *the spiral staircases to access the Maratona stand and the Fiesole and Ferrovia [the "Railway End"] stands);*
- *the Torre di Maratona [Tower of Marathon];*
- *the original structural ring of the standard spans consisting of the column-beam system, on which the terraces stand and which, with their repeated succession define, also as a significant visual element, the external appearance of the stadium .*

IT INDICATES

*the following "**methods and forms of conservation [...] through building renovation or replacement interventions aimed at improving the usability of the facilities**" deemed compatible with the need to preserve the testimonial value of the aforementioned elements together with the need to guarantee the functionality of actual facilities for the purposes of public safety, health and security, as well as compliance with international standards.*

Functionality of the system for the purposes of public safety, health and security

Having taken note of the contents of the aforementioned technical reports from which the possibility of intervention on the existing structure clearly emerges, the following can be carried out:

- *interventions to redevelop the structural, architectural or visual elements indicated above, both in relation to conservation issues - static and material - and to those of functional adaptation;*
- *interventions to reinforce structural elements, with specific techniques for reinforced concrete structures, both for the purpose of overcoming the detected static criticalities and improving the behaviour of the structure during an earthquake;*
- *methods and techniques of reinforcement and protection, even superficially, aimed at minimising the need for maintenance of the concrete surfaces;*
- *interventions to adjust and/or replace the facility's engineering and sanitation components;*
- *an integral roof system of the stands can be created, with vertical supports outside the current perimeter of the stadium, using a cantilever canopy and a roof structure which can be continuous, in a light material, with partial interruptions in correspondence with the Tower of Marathon and the canopy covering the VIP grandstand, allowing the overall development of the stadium to be maintained and appreciated and, at the same time, protecting both the spectators and the architectural structure from rainwater;*
- *transparent cladding can be created, with large, glazed surfaces, of the external part of the terraces, thus obtaining a large volume to be used for services (including toilets) and various activities, including commercial ones, leaving only some signs of the original layout.*

Adaptation to international standards

Having acknowledged the critical issues represented by the Municipality of Florence regarding the need to adapt the structure to current UEFA regulations, the following may be carried out:

- *interventions to replicate the terraces of the Fiesole and Ferrovia stands parallel to the current ones, in order to reduce the distance from the pitch;*
- *interventions to redevelop the terraces;*
- *interventions to modify and/or replace the lighting system;*
- *interventions to create suitable volumes in which to relocate various services and activities, including commercial activities.*
- *interventions to construct suitable volumes, even partially underground, also intended for hospitality, making quality additions to the existing structure."*

Having evaluated the Ministry's guidelines and clarified that the restoration of the Artemio Franchi stadium is a common public goal and there is a clear desire to preserve the monument by allowing the necessary interventions to adapt it to the current brief the City Council, as owner of the Stadium, it has decided, with Resolution of the Municipal Council no. 37 of 16.02.2021, to promote an international architectural design competition to compare multiple solutions and choose the one which best reconciles and synthesises the two

most important objectives and with the Resolution of the Communal Committee no. 307 of 07.06.2021 has defined the guidelines of the design competition.

Restoring the stadium becomes an important opportunity to redevelop the part of the Campo di Marte connected to it, re-thinking the system of sports facilities also in light of the divestments which follow the construction of the new Fiorentina sports centre in Bagno a Ripoli.

The competition therefore intends to steer and guide the design by working on two different scales, notwithstanding the level of detail of the technical and economic feasibility project for both:

- the restoration and adaptation of the Artemio Franchi stadium which requires a scale of detail and representation typical of the architectural building;
- town planning relating to that portion of the Campo di Marte which is to be redeveloped.

Below is the framework of the building and the context to be redeveloped which would be useful for contextualising the proposed intervention.
The call to tender contains all the technical specifications which would be useful for a coherent and exhaustive representation of the project.

2 | FRAMEWORK

2.1 | The Campo di Marte | the background

As countryside at the slopes of the Fiesole hill, crossed by streams such as Affrico and San Gervasio and characterised by farmhouses and mills, from the first half of the 19th century, the area began to host military exercises and for this reason it took on the name of “Campo di Marte” (i.e. Field of Mars or Field of War). But it was only with the proclamation of Florence as the Capital of Italy (1864) that an actual area dedicated to military training and parades, a parade ground, was created. The Campo di Marte, initially envisaged by the plan drawn up by the architect Giuseppe Poggi in another area of Florence, in front of the Cascine park on the other side of the Arno river, was transferred to the current area due to the infrastructure elements already present in the north-east part of the city: the new route of the railway line, the freight yard, viale Militare (later viale dei Mille), a customs barrier of the duty belt. In 1896, the “Campo di Marte” railway station was inaugurated.

In the first decades of the 20th century, numerous residential buildings began to rise around the area, such as along Viale dei Mille, where the neo-Gothic church of the Sette Santi was inaugurated in 1909, or the IACP blocks of public housing (in via E. Rubieri.

In 1910, an airfield was built in the Campo di Marte, a sort of “mini airport” where competitions and actual aviation shows were organised. The infrastructure remained active until 1930, when a decision was taken to close it down given the lack of safety with the presence of houses nearby.

Between 1930 and 1932, the municipal stadium “Giovanni Berta”, later “Artemio Franchi”, was built in the

area of the disused airport. The stadium expressed the synthesis between modernity and tradition so dear to fascist propaganda. For some time, the city needed a multi-purpose sports complex. Already back in 1929, a far smaller structure had been anticipated than the one later built. Later, after acquiring a large part of the Piazza d'Armi from the War Ministry, the proportions of the project changed dramatically. The work was designed by the engineer Pier Luigi Nervi in 1929 and built in two successive blocks; the construction of the Tower of Marathon was also assigned to Nervi in 1931. The new stadium was immediately praised for its originality and innovative character : a combination of aesthetic finesse and structural rigor with the elegant and daring structures in reinforced concrete.

Campo di Marte's sporting vocation was definitively consolidated by the localisation over the years of a series of facilities such as the Palazzo dello sport arena, the baseball facility and the athletics stadium.
The Sports Palace arena, originally only conceived for swimming, is designed as a large multi-purpose structure capable of hosting very different sports activities and disciplines (athletics, gymnastics, basketball, volleyball, tennis and boxing). Thanks to the hugely flexible layout, accommodating between 3,400 to 7,500 spectators, it is often used for large events and shows. The outdoor spaces are traditionally used for summer film festivals.

2.2 | The stadium

Extending over an area of some 50,000 m2 between the viale M. Fanti, F. Valcareggi, P. Paoli and the Maratona, the "Giovanni Berta" stadium (later "Comunale", then "Artemio Franchi") characterises the Campo di Marte district, proposing itself as a large open space within the orderly grid of residential buildings built at the beginning of the 20th century and in the years between the two wars.
The work was designed by the engineer Pier Luigi Nervi in 1930 and built in two successive phases, between December 1930 and December 1932. In addition to being one of the most innovative examples of architecture nationwide at the time and one of the most significant applications of reinforced concrete in public architecture, it represents the first and main example of a series of sports equipment at the service of the district and the city that would rise up in the immediate vicinity and which will constitute the Florentine sports centre of Campo di Marte.
The stadium has an asymmetrical floor plan. The layout shows the sectors of the terraces, the VIP grandstand, the distributive elements constituted by the external spiral staircases to access the terraces and finally, on the side opposite the tribune, the Tower of Marathon.
In the 1930s, the stadium had a capacity of around 45,000 spectators but during the 20th century, it hosted up to 70,000 spectators thanks to the addition of the numerous metal stands. In addition to the pitch, it included a 219.60-metre distance athletics track which gave the facility its characteristic D-shape.

The stadium in Florence is a significant work in Nervi's career as one of the first architectural examples for subsequent design experiments and as a manifesto for the affirmation of a design method which Nervi would continue to pursue, in the constant search for new forms connected with new structural solutions. The "Giovanni Berta Stadium" is a testimony to continuous research on the relationship between functional programme, application of structural calculation and invention of the architectural form. The synthesis of these three factors has produced architecture which, thanks to its remarkable technical innovations and significant aesthetic solutions, has contributed to the renewal of the culture of design, which took place from the 1920s in Italy and around the world.

In the Florentine stadium, Nervi translates his exceptional confidence in the "magnificent plastic qualities of reinforced concrete" by creating structures which, until then, were wholly unprecedented, combining the boldness of the constructive and formal solutions with an exceptional cost-effectiveness of construction, essentially due to the modularity of the project and the extreme organisational rationality of the site. The VIP grandstand is characterised by the intimate connection between the supporting structure of the terraces and the corbels supporting the canopy, built without the encumbrance of intermediate columns; the structure of the external staircases is based on the intersection of two helical beams on one of which the 3 m wide stairway is cantilevered, wedged at the ends to the structures of the terraces themselves, which in turn are designed following criteria of maximum convenience.

The **main façade** is made of a punctiform fixing structure in reinforced concrete with brick infill: in the regular façade, the central portion becomes more evident thanks to projecting pilasters with a curvilinear profile that support the entablature with the "Stadio Comunale G. Berta" frieze. There is plaster masonry above a plinth in pietra forte. The lateral wings are marked by pilasters with a contained projection. All the mirror effects defined by the vertical elements are occupied by large windows. The fixtures are metal and the access doors, also made of metal, are worked in a decorative geometric pattern. Inside, the floors are made of marble and the doors of wood; there is a curvilinear, internal staircase.[1]

The designer has chosen a **structural system** based on the serial reiteration of the standard span consisting of a column and a shaped beam: the terraces are located on this support system. The punctiform support structure and the intrados of the terraces define an open but covered space, which is mostly free, with the exception of the portion adjacent to the monumental front which was originally occupied by the service premises at the stadium.[2]

In the **seriality of the structure** of the terraces, salient constructive examples stand out. Near the VIP grandstand, there is a large canopy with an overhang of about 22 metres, unprecedented in Italy until that moment. The stands and the Maratona grandstand are accessed via three twin spiral stairwells. The central stairwell is enriched by the Tower of Marathon, which rises, tapering, for about 55 meters and has a slender shape thanks to the slightly triangular plan.
At the base, the tower has a cantilevered platform extending towards the pitch, while inside there is a lift which takes you to the top. The portion of the tower towards the stadium is defined by a continuous backlit window which, according to some project drawings, could have housed a vertical advertising sign.[3]

The **static** and consequently architectural **solutions** of the canopy for the covered grandstand and the spiral staircases are innovative. For the canopy, the static scheme is such that "the entire structure of the covered stands was set on a geometry that imposed the position of the centre of gravity, even in the presence of accidental overload, inside the foundation supports: this, according to Nervi himself, meant he could avoid the inconvenience of ballasting the supports, with consequent material waste to avoid positive pressure on the foundation plane". The spiral staircases were solved "by means of a grid structure formed by two helical beams that cross one another and one of which cantilevered the slab".[4]

The canopy and the helical stairs are perfectly integrated into the architectural ensemble. The reiteration of the structural framework of the terraces connotes and powerfully defines the general image of the stadium, as it has been seen throughout the world over time and as it appears today in the eyes of its visitors. In addition, the tall Tower of Marathon acts as a counterpoint to the horizontality of the serial

structure, enriching a skilfully balanced architecture in all its parts.[5]

Over time, there have been various interventions on Nervi's architecture and the engineer himself actually proposed a project to extend the stadium (1950-58), which, however, was not implemented.

In the **1950s**, the terraces at the corners were doubled, provisional stands were inserted in the space between the pitch and the existing terraces, and lighting towers were built for the new lighting system. On 18 May 1952, the Florentine stadium registered a record number of spectators who came to watch the international friendly between Italy and England. 84,000 tickets were sold, excluding guests, the Press and the Police, with a total of 95,000 people in attendance.

In the **1970s**, the most obvious intervention was the introduction of two iron canopies adjacent to the ends of the existing canopy, resulting in the latter becoming less visible due to partial lateral concealment.

Subsequent and significant changes to the original layout were implemented for the occasion of the **FIFA 1990 World Cup** to adapt the stadium to the needs of the international event. The reorganisation, expansion and restoration of the structures aims to rationalise general services, reorganise access and security and increase the capacity of visitors.
The project was entrusted in 1984 to a group of professionals coordinated by the architect Italo Gamberini, put into operation in 1988 and completed in 1990. The intervention included:

-the restoration of the reinforced concrete structures and the elimination of the architectural elements added in the last forty years, restoring the building to its original state;
- the elimination of the athletics tracks and the lowering of the level of the pitch to a height of about 2.2 m lower than the pre-existing one, in order to create a new internal amphitheatre and expand the capacity of seats to seating up to 49,000 spectators;
-the addition of two stairwells to the three spiral staircases designed by Nervi;
-the construction of underground volumes for the swimming pool, gym, changing rooms and other service premises;
- the erection of the metal fence;
- the extension of the canopy of the VIP grandstand with new metal roofs.

After the works of Italy '90, with the reduction of the capacity of the stands, but with the addition of the parterre, the new capacity was 47,246 spectators (CPVLPS, Provincial Supervisory Committee of Public Performance Venues accessibility of 14.09.1995).
Law No. 210 of 17 October 2005 came into force in 2005, regulating further measures against violence in sporting competitions commissioned by Pisanu who was the Minister of the Interior at that time. The main interventions carried out in application of the aforementioned law were the following:

- organisation of the pre-filtering of the external areas;
- addition of turnstiles;
- creation of the control room for O.S.G. (Operational Safety Group).

In recent years (2012-2015), functional improvements have also been made to improve the usability of the stadium. The main functional improvements made have been:

- the creation of the Sky Boxes placed under the curved vaults of the canopy covering the VIP grandstand;
-the enhanced visibility with removal of the barriers at the edge of the pitch in the Maratona and Tribuna [Grandstand] sectors.

After the most recent functional redevelopment works carried out by ACF Fiorentina, the new capacity is equal to 43,118 spectators (CPVLPS accessibility of 22.08.2019).

In order to provide organic development and implementation to the seismic verification programme of the municipal structures, also in implementation of motion no. 01005/2015 of the City Council, the Local Authority, with Resolution 264 of 08.07.2016, approved a multi-year programme grouping the buildings with homogeneous priority in relation to the risk parameters provided for in the regulations in force, applying the highest priority to buildings or architectural complexes which currently host "relevant" school and sports-recreational functions. The Artemio Franchi stadium has been inserted in this programme.

The Municipality of Florence has been active on one hand by using its offices to carry out tests, sampling and take measurements, etc. and, on the other hand, by appointing the University of Florence for studies, research and simulations aimed at assessing the **earthquake resistance of the structures** of the Artemio Franchi Stadium.

The structure of the Stadium is made up of freshly mixed reinforced concrete elements cast on site which can be grouped into 24 different structural blocks placed side by side with joints of varying thickness. The sub-division into blocks was achieved by doubling the main vertical frame on which the terraces are supported.

The blocks are characterised by a high level of seriality: in particular, one can identify the presence of only 8 different types of vertical frame with evident similarities between them in terms of geometric and structural characteristics (reinforcement, quality of materials, etc.).

The Test Report, drawn up by the engineer Vittorio Tognetti between 1932 and 1933, helps us deduce the quality of the materials used and retrace the various stages of design and verification of the structures of the building in question.

From 1932 to today, over 150 load tests have been carried out on the various elements of the stadium (terraces, roofs, floors, the Tower of Marathon, metal elements, parapets, fences, lighting towers, etc.) as well as several dozen tests on the materials as shown by the certifications attached to the various tests.

For a more complete characterisation of the materials and an assessment of their possible deterioration, on-site conducted research had to be carried out, developed according to three successive levels of in-depth analysis.

The first on-site research was carried out between August and September 2018. On this occasion, always referring to the concept of seriality of the structural elements present, some samples of the aforementioned structural elements were identified based on the original material found and surveys carried out on site, on which it was possible to detect the number and position of longitudinal bars and brackets through testing or stripping the reinforcements through localised removal of concrete cover and carrying out 19 cover meter tests. To characterise the concrete, 14 Sonreb tests were carried out, which consist of the combination of ultrasound tests and sclerometer tests, in addition to the extraction of 9 cores, 5 of which were made with the concrete of the stands, 2 from elements defined with the concrete of the stairways and 2 from the Tower of Marathon. To determine the characteristics of the steel, it was possible to extract 2 reinforcing bars for the related tensile tests in the laboratory, in addition to carrying out 3 durometric measurements on bars stripped by the tests.

The second on site enquiry campaign was carried out in November 2019. Like the previous test campaign and the first analysis and verifications, the number of tests was increased to determine the number and position of longitudinal bars, and 70 cover meter tests were carried out. To characterise the concrete, 21 Sonreb tests were carried out, in addition to the extraction of 3 cores on elements made with the concrete of the stands. The mechanical properties of the steel were finally defined by extracting a reinforcement bar with its tensile test in the laboratory and the creation of 10 durometric measurements on bars stripped by the tests.

Following the structural modelling and checks of the structural elements making up the structure in question, it was decided to carry out a third test campaign on all sectors of the stadium to achieve an exhaustive understanding of the constructive details of the structure and the characteristics of the materials. A choice was therefore made to investigate the areas found to be critical from the first analyses, in order to resolve for these, where possible, any uncertainties on the strength of the materials and on the geometric and structural characterisation. As for the tests aimed at defining the strength of the concrete, given the historical-architectural value of the structure, in order to minimise the destructive tests to be conducted, it was decided to carry out additional 10 cores equally divided into 4 sectors and 25 sonreb tests, also divided into the 4 zones, as well as 32 cover meter tests, 16 tests with georadar and 17 tests with concrete demolition and subsequent restoration for a reliable analysis of the type and quantity of the reinforcement bars present.

In the exploratory process of the structure, a vast body of graphic material is added to the Test Report and the results of the tests on site, consisting of architectural tables, technical details and site photos found in the Historical Archive of the Municipality of Florence, the Pier Luigi Nervi archives at the MAXXI museum in Rome and the Study Centre and Communication Archives of the University of Parma.
Based on the original material found, with particular reference to the exhaustive report of the first testing of the structures, of the historical-critical analysis, of the geometric survey and of the construction details and finally of the characterisation of the materials present, an LC3 level of knowledge could be defined for the entire stage with a corresponding confidence factor of unit value.

The next stage towards learning more about the structure, in accordance with the methods described above, consisted of creating a 3D model and checking the main elements, in correspondence with the analysis of the behaviour of the building both under static and seismic actions, with reference to the current Technical Construction Standards (NTC2018).
From a static point of view, the checks on vertical loads only (maximum load of spectators in each sector) were positive for the cutting actions and only in some cases not satisfied due to bending problems. Thanks to the restoration work already carried out on the Stadium, however, on 21.04.2021, the 10-year certificate of static suitability of the sports facility was drawn up, which certified a capacity of 41,456 seats, with a reduction of a mere 1,662 seats overall. And the static adaptation interventions are currently underway with an FRP structural reinforcement system, composed of a unidirectional high-strength carbon fibre fabric and an epoxy resin for impregnation and gluing, which will allow the full capacity to be restored.
From a seismic point of view, for each structural block, the University performed a calculation in order to identify the capacity in terms of peak ground acceleration (PGA); this value was compared with the acceleration expected by law, thus calculating the vulnerability index. The structure has some critical issues with regard to the seismic action of the project according to NTC2018. These critical issues were widely foreseeable since we are dealing with a reinforced concrete structure built in the 1930s, when no seismic analysis was contemplated. The Municipality of Florence is planning the necessary seismic improvement interventions according to the vulnerability index of the individual structural blocks.

2.3 | The current state | the surrounding area

The Campo di Marte district (District 2), located in the north-eastern quadrant of the city of Florence, in an area between the ring road of the old town centre, a hilly area and the course of the river Arno. It is one of the most prestigious residential areas of the city, characterised by the simultaneous proximity of the old

town centre, a UNESCO World Heritage Site, the green arch of the hills, which rise north towards Fiesole and east towards Settignano, and by the wide spaces of the lungarni or river banks, lying to the south along the river.

In addition to the value of the urban and environmental context, the strong residential vocation is also due to the widespread presence of public and private services, to a widespread and easily accessible commercial fabric, to an offer of public greenery which develops both in a central position with respect to the inhabited area, with city gardens equipped with extended parks, characterised by a high degree of regrowth and regeneration, located in a perimeter position along the Arno and the non-urbanised foothill area.

The area also represents the sporting heart of the city, characterised by the presence of the Campo di Marte area, which contains the main public sports facilities of the Municipality of Florence, and the Federal Technical Centre of Coverciano, headquarters of the technical sector of the Italian Football Association (FIGC) and the retreats of the Italian national team.

The original heart of the district, located in the area next to the ring road avenues and around the sports area of Campo di Marte, has a late-nineteenth-century urban conformation, characterised by the regular alternation of quadrangular blocks with an internal courtyard and a orthogonal roadway network occasionally varied by diagonal axes and radial squares. There are buildings which were constructed built between the end of the nineteenth century and the beginning of the twentieth, with frequent insertions of buildings dating back to the second post-war period. Conversely, the area of the district located to the north and east was built during the second half of the twentieth century and has a typical urban layout of the time, with a lesser definition of the design of the blocks and a composition with independent buildings.

The design of the district is also characterised by the presence of two important elements of an urban scale: the railway track and the large sports area of Campo di Marte, the subject of the competition. The railway axis crosses the district centrally in a north-west - south-east direction; the area, formerly used as a freight yard, is of a magnitude to represent a strong sign within the neighbourhood. The Campo di Marte railway station lies along the route, an important public transport hub for this part of the city. The sports area of Campo di Marte is located in a central position with respect to the neighbourhood. Due to its size and its layout, it represents one of the most evident town planning signs, not only for the area, from which it takes its name, but for the city as a whole.

The entire district is now part of the buffer zone of the UNESCO site, approved on 6 July 2015 by the World Heritage Committee, on the occasion of their 39th session in Bonn, Germany (Decision 38 COM 8B.44). It covers 10,480 ha and includes the hillsides around the city of Florence, involving the Municipality of Florence, the Municipality of Sesto Fiorentino, the Municipality of Fiesole and the Municipality of Bagno a Ripoli.

The registration of the Old Town Centre of Florence in the UNESCO List of World Heritage (art. 11.2 of the Convention on the Protection of World Cultural and Natural Heritage) as site no.174 dates back to 17 December 1982, during the sixth session of the UNESCO World Heritage Committee with the motivation reported in the Declaration of Outstanding Universal Value, whose Retrospective (revision) was adopted in 2014. The document on the Old Town Centre of Florence is available in Italian on the following link: http://www.firenzepatrimoniomondiale.it/wp-content/uploads/2015/11/Traduzione-Retrospettiva-OUV-Firenze-Patrimonio.pdf.

The geographical area registered in the List is designated as a Core Zone or World Heritage Site and has an extension of 505ha. This area corresponds to the part of the city surrounded by avenues and medieval walls, a choice dictated by the enormous concentration of cultural assets present in different public, private

and religious properties.
The subsequent definition of the Buffer Zone was found to be fundamental to guarantee greater protection and guardianship of the registered site, in particular to safeguard the urban skyline and control the transformation that can have an impact on the Old Town Centre, considering the constant urban development of the city and the possibility that this may affect the universal value of the site.

2.4 | Participation

The Municipality of Florence has recently launched the participation process [https://firenzeprossima.it/percorso/] linked to the definition of the new town planning tools, Structural Plan and Operational Plan, which the City Council must renew to pursuant to Regional Law 65/2014. It is clear that the city debate around the stadium has, in particular, affected the Campo di Marte district which has always considered the stadium and the large sports area with its numerous events as a defining element, the main place of the city for the enjoyment of multiple and diversified sports services but also as a source of unease/disturbance.
Stage 2 of "Opening up to the city" dedicated to the active participation of individual citizens and organisations is currently underway, and the scheduled public meeting for district 2 was recently held, the report being attached herewith.

2.5 | The Campo di Marte

The sports area of Campo di Marte is over 37 hectares in size and has an immediately recognisable conformation in the urban design of the City due to its quadrangular shape demarcated by the semi-circular head on the north-east side. The area is served by a ring road which acts as a by-pass (Viale Manfredo Fanti, Viale Malta) and by a central axis (Viale Ferruccio Valcareggi, Viale Pasquale Paoli) which divides the area into two parts centrally. There is also a secondary axis (Viale Pierluigi Nervi) which surrounds the Franchi stadium, serving the public car parks present.

The area of the Campo di Marte contains the main sports facilities of the city:

-the "Artemio Franchi" stadium with the attached gym and pool.

- the "Luigi Ridolfi" athletics stadium | a facility dedicated to athletics, built following the removal of the internal track at the Franchi stadium. It was inaugurated in 2003. The covered stands and the open terraces can accommodate 7591 people. The structure is equipped with an indoor sports hall for the athletes to warm up.
- the "Nelson Mandela Forum" sports hall | is one of the main sports halls in Italy due to its capacity, with approximately 7800 seats. It hosts sports events, shows, concerts, congresses and various events.
- the "Davide Astori" sports centre | The centre, built by ACF Fiorentina, is equipped with a football pitch located near Viale Paoli. ACF Fiorentina has recently started work on the construction of a new sports centre located near Florence, in the municipality of Bagno a Ripoli. The new structure will take the place of the existing one.
- the "Paolo Costoli" Municipal swimming pool | an Olympic sized outdoor pool, which can be covered with pressure balloons. The facility is widely used by the Florentines, especially in the summer, also thanks to the surrounding large, tree-lined green area. A fencing gym was also built in the early 2000s.

-the “Padovani” rugby facility | consisting of two regulation pitches, the first in natural grass with an adjoining grandstand, the second in artificial grass, a geodesic structure and a series of service areas, including a bar/restaurant.
- The “Pier Paolo Cesare Vita” Baseball stadium | with an attached geodesic dome gym and restaurant. The stands can accommodate 2991 spectators.
- the multi-purpose complex “Affrico” | consisting of a volleyball and basketball hall, a bowling green, 4 tennis courts with seasonal coverage, a regular synthetic grass football pitch, a five-a-side football pitch and area for training, changing rooms and toilets, a bar and restaurant and a multi-purpose and entertainment area.
-The “Cerreti” football pitches | made up of 2 regulation synthetic grass pitches, changing rooms and toilets.
- the “Grazzini” sports facility, consisting of a regulation football pitch in synthetic grass, a football pitch covered with a geodesic structure and changing rooms and toilets.
- the “Costolina” swimming pool | inaugurated in 2011, with an attached restaurant.
- the multi-purpose gym in viale Malta | built at the same time as the athletics stadium, it is equipped with two outdoor tennis courts and changing rooms and toilets.
- The “Campo di Marte” skatepark.

The area, as well as the normal availability of parking along the main road, is equipped with three areas for parking:

- car park on the south-east side of the Franchi Stadium (Piazzale Campioni del ’56, capacity for about 35 coaches and 150 cars);
- car park on the north-east side of the Franchi Stadium (Piazzale Campioni del ’69, capacity for around 120 cars);
- Mandela Forum car park (Piazza Enrico Berlinguer and south service road viale Paoli up until the service station, capacity for around 300 cars).

The Piazzale Campioni del ’56 car park hosts the local market of Viale M. Fanti, which is held daily from Monday to Saturday.
There are two equipped public green areas, positioned at the two ends of the sports area; the “Niccolò Galli” Garden, located at the semi-circular section of Viale Fanti, with an area of about 2.5 hectares, and the Viale Malta garden, adjacent to the avenue of the same name, with an area of 1.5 hectares.

2.6 | The forecasts of town planning instruments

The town planning of the Municipality of Florence is divided into two different inter-related tools: the **Structural Plan** (planning tool), which contains the statutory and strategic discipline, and the **Town Planning Regulation** (a local governance act) which defines, in compliance of the guidelines outlined in the Structural Plan, the rules and actions for the protection, redevelopment and enhancement of the settlement and territorial heritage by governing the urban, building and infrastructural transformations compatible with them.

The **Structural Plan** places the Campo di Marte area within the *invariant of the historical fabrics and the relationship with the open landscape*, which includes the historical fabric of nineteenth-twentieth century

formation outside the circle of viali [avenues], the historic villages and small old town centres present in many parts of the urban and peri-urban territory, as well as the interwoven relationship with the open landscape. The Structural Plan also inserts the area of the elementary organic territorial unit (UTOE in its Italian acronym) no. 2, described as follows:
today, this part of the city represents the sports hub of Florence due to the central presence of the large Campo di Marte area with the Artemio Franchi stadium, the Ridolfi stadium and the countless sports facilities. It is a residential area which is well loved by the Florentines, which they consider one of the most liveable of the city.

The **Town Planning Regulations** place the Campo di Marte area within the context of the compact fabric of the 19th/20th century formation, which identifies the wide strip located beyond the by-pass avenues which grew mainly due to unitary intervention and additions between the end of the 19th and early 20th centuries. The area is to be considered a homogeneous area A pursuant to the ministerial decree of 2 April 1968, no. 1444.

These both outline the Campo di Marte area, defining its character as a public asset entirely intended for sporting activities and equipped green areas. By analysing, in particular, the Town Planning Regulations' cartography, one can distinguish the current functional organisation of the area characterised by the presence of areas intended for public green areas/ parks and areas for sports facilities, the numerous existing parking areas are also highlighted. The Franchi Stadium, unlike other sports facilities, also stands out with the black background relating to emergencies of a historical architectural - cultural heritage value, as a property protected under Legislative Decree 42/2004 (Part II, Title I).
The Regulation also refers to the route of the project's tram network. The new infrastructure, which will be built over the next few years, will run along viale dei Mille, turn right near the Franchi Stadium, and surround the southern section of the Campo di Marte sports area following viale Malta and viale M. Fanti up to the intersection with viale T. Mamiani. With regard to public mobility, the Town Planning Regulations also mention the layouts of the existing cycle paths and the project's cycle paths.

Campo di Marte's inclusion in the Buffer Zone of the UNESCO site was implemented with the second medium-term variant to the Structural Plan and the Town Planning Regulations - approved by the City Council on 13.05.2020 - which introduced new forms of protection in the areas identified as a Core Zone and a Buffer Zone of the Old Town Centre of Florence, with a specific discipline for safeguarding the Exceptional Universal Value of the site and protecting the views to and from the old town centre.
The previous variant of the 2015 Town Planning Regulations of Florence already stipulated that "transformation interventions which modify the existing skyline must be subject to verification of the correct insertion with the lookout points and the Buffer Zone of the Medici Villas as reference identified in the Structural Plan (Table 3 Protection)". However, the planning tools did not mention the Buffer Zone as, at the time of their entry into force, this was not yet approved by the World Heritage Committee. The subsequent definition of the Buffer Zone was found to be fundamental to guarantee greater protection and guardianship of the registered site, in particular to safeguard the urban skyline and control the transformation that can have an impact on the Old Town Centre, considering the constant urban development of the city and the possibility that this may affect the universal value of the site.

The Structural Plan and the Town Planning Regulations are available online at the following address: http://webru.comune.fi.it/webru.

2.7 | The vision | Our vision for the Campo di Marte

2.7.1 | The design competition | an opportunity

The City Council's long road towards defining the best solution to restore the Artemio Franchi stadium, equipping it with everything needed to make it a safe, suitable and comfortable sports facility, is an opportunity to re-think the north-eastern part of the Campo di Marte. It is an important opportunity linked to multiple factors and a favourable contingency which leaves room for a substantial review of the current layout.
A large part of the area subject to general reorganisation, as stated above, is currently occupied by 4 football pitches for training (2 by AC Fiorentina and 2 by Cerreti) which the city council has decided to hand over to re-design the entire area, no longer a sum of enclosures dedicated to sport, but like a city park which contains a series of examples (also dedicated to sport) but free and immersed in a highly regenerated area compared to the current condition.
The idea is therefore that the design competition, which will have as its main theme the development of the technical and economic feasibility project of Artemio Franchi, will also involve the redevelopment of the north-eastern part of the Campo di Marte.
The area covered by the competition, represented below, has a surface area of 25 hectares.

2.7.2 | Design elements

1 | the city park
2 | the market
3 | the skateboard track
4 | the geodesic gym facilities
5 | the baseball field
6 | Affrico
7 | the Fiorentina gym
8 | the gym and the pool
9 | Cerreti football pitches
10 | parking areas
11 | viale Ferruccio Valcareggi/Pasquale Paoli
12 | the new surface areas

1 | the urban park | the main element of the overall re-organisation is the public garden which must be re-thought and expanded, also by using the different heights which morphologically distinguish the garden from the sports fields (raised with respect to the garden/road level of about 2 metres). This would become the element of regrowth and regeneration where different activities may occur, also necessary, as we shall see later, to place/relocate some functions which can be integrated into the park. The Campo di Marte garden is a neighbourhood focal point/ place of identity where most inhabitants (of all ages) spend their free time. Currently the surface area is about 25,000 m2, but with the removal of the football pitches, the surface area

could more than double, passing from the typical size of a neighbourhood garden to an actual city park (about 37,000 m2 + 25,000 m2 = 62,000 m2).

2 | the daily local market | in Campo di Marte, which occupies the car park adjacent to the public garden every morning, is another element which characterises neighbourhood life which the project must not renounce. Around 1700 m2 is needed to house all the market stalls, each stall needing 20/30 m2. The position must guarantee easy accessibility both to operators' vans and to the public.

3 | the skateboard track | its 1,500 m2 surface area marks the corner between viale Pasquale Paoli and via Pierluigi Nervi and is a meeting place for the neighbourhood, frequented especially by teenagers. A new position is suggested, but above all, one which is a more suitable integration in the park system.

4 | the geodesic structures for the gymnasium | along viale Manfredo Fanti between the baseball field and the public garden, there is a very popular gym with two geodesic structures placed side by side. In the general re-organisation of the area, it is worth considering a structure which is better integrated into the context.

5 | the baseball field | with an entrance from Viale Manfredo Fanti, the baseball sports facility must remain in its current location as well as the stands and the sections below. As part of the general re-organisation of the city park, consideration can be made to enhance ancillary and complementary services which can vitalise the sports facility.

6 | Affrico | the historical sports facility of Campo di Marte stands on land owned by the city council, it is a facility that has grown over time which houses football, five-a-side football pitches and tennis courts, a bowling green, a gym/sports hall which is no longer sufficient for basketball teams playing in the Association. For some time, the company assigned the spaces has asked if it can demolish and rebuild the current building to rebuild a larger one suited to the needs of the teams. Therefore, this competition seems to be an excellent opportunity to rethink the area of Affrico, also using part of the neighbouring space. This could allow a new entrance to the sports facility to be built and a new multi-purpose building (basketball, volleyball) with a capacity of about 700 spectators and service spaces, preserving the other functions currently present and rationalising the organisation of the sports facility as much as possible.

7 | the Fiorentina gym | the building that currently hosts the training gym as well as a small swimming pool for the Fiorentina team's physiotherapy must be maintained as it has been recently renovated and in excellent condition. On the other hand, the structures with one elevation above ground and one at basement level which house additional services can be demolished.

8 | the gym and swimming pool | on the Marathon Stand side, there are two underground structures built for the 1990 World Cup consisting of a swimming pool and a gym, both very popular and frequented by the inhabitants of the neighbourhood and not just them. By anticipating possible problems relating to their permanence in the current location due to the roof support or the creation of complementary spaces of the stadium, it is believed that it is possible to plan their reconstruction. While the functions of the underground gym may be reabsorbed by the current Fiorentina gym, the pool will have to be reallocated at all costs, with an area of approximately 1,000 m2 including changing rooms and toilets, with a 25 x 12.5 metre swimming pool.

9 | the Cerreti football pitches | as already mentioned, the city council has decided to remove the 2 football pitches to allow a general redevelopment of the area. In this sense, the present buildings can be re-positioned and redesigned inside the new city park.

10 | the car parks |the city council's objective is to concentrate parking in the multi-modal railway/tram/road park and ride hub to be built in the Campo di Marte railway area on the Via Campo d'Arrigo side in order to eliminate the areas currently present next to the stadium, transferring them to the general city park system. The parking areas can be located in the railway area of the Campo di Marte station located between the two pedestrian walkways. The general checks carried out so far suggest a hypothesis of parking spaces substantially above ground in the facility (or with only one basement floor) for a total of about 3,000 car parking spaces as better illustrated in the section dedicated to mobility which also verifies its sustainability in terms of accessibility.
The parking areas along the southern side of viale Valcareggi / Paoli and the Mandela Forum car park (piazza Enrico Berlinguer) must maintain their function but may be subject to redevelopment and mitigation aimed at increasing permeable, green and tree-lined areas.
The project must consider the issue of parking in that dimension and location as resolved because the City Council will work on this outside this competition.
An exception is the existing underground car park belonging to the stadium, which can remain and be extended up to a maximum of a further 150 parking spaces.

11 | viale Ferruccio Valcareggi/Pasquale Paoli | in light of the strategic decision to concentrate parking spaces in the Campo di Marte railway area, giving rise to a multi-modal park and ride hub, the role of viale Valcareggi/Paoli must also be re-considered at least up to the intersection with viale Manfredo Fanti. Currently the avenue has 2 lanes in each direction and serves a series of sports activities as well as a petrol station and serving some parking areas (linear and aerial).
The idea is to proceed to reduce the carriageway, which must no longer be used for crossing but rather as a service road to the present and planned activities. The new layout of viale Paoli does not allow the current service station to remain. The building which hosts the Misericordia di San Pietro Martire is excluded from the area of intervention.
Vehicular access which must remain:

- the stadium's underground car park
- "Padovani" rugby facility
- "Nelson Mandela Forum" sports hall
- "Paolo Costoli" municipal swimming pool
- Misericordia di San Pietro Martire.

With this intervention, which takes the form of a semi-pedestrianisation of Viale Paoli, additional urban space would be obtained starting from the elimination of a substantial area of asphalt to restore permeable, green and tree-lined areas.

12 | the new areas | in support of the stadium restyling operation, the City Council has decided to provide for a quota of new buildings for non-residential use which may have the role of support/ a compendium for the activities which will be established within the stadium and which can be open daily even outside the sporting events and not to be held in the facility.

It is assumed that this will be a maximum of 15,000 m2 of gross useable surface and it is suggested that it can

be divided into the following uses:

- tourist - receptive 5,000 m2
- commercial use in a medium-sized sales structure 5,000 m2
-managerial use including activities without services 5,000 m2

The gross useable surface for intended use can vary up to 20% of the overall area (3,000 m2). Applying flexibility, subject to the total gross useable surface, the articulation of the intended uses can be modified, with the exception of the commercial destination as a medium-sized sales structure which can only be subject to decreasing flexibility. We remind you that setting up of large sales structures is not allowed (Sales surface area> 2,500 m2). On the other hand, the aggregation of more medium-sized sales structures (Sales surface area <2,500 m2) and neighbourhood businesses (Sales area <300 m2) is permitted. The establishment of commercial use in neighbourhood establishments (including bars and restaurants) within the gross useable surface quotas for tourist-receptive purposes and management use is allowed.

Intended use means:

- tourist-receptive
- commercial use in a medium-sized sales structure
-managerial including activities without services.

Article 19 of the NTA of the Town Planning Regulations attributes already established and newly established uses in the area into a list that classifies them and breaks them down into activities. The list is not exhaustive but illustrative: other activities not directly mentioned must be attributed to the classification according to the criterion of analogy. Here follow the lists relating to the afore- mentioned uses:

- **tourist-receptive (5):** (5a) reception in hotels, boarding houses, motels, inns, tourist hotel residences, holiday homes, hostels (including residences such as hotel facilities of mini-apartments or rooms with staff and common customer assistance services, etc.), hotel disseminated pursuant to regional legislation; (5b) reception in equipped outdoor facilities (campsites, tourist villages, parking areas for camper vans);

- **commercial use in a medium-sized sales structure (4):** (4b) trade in medium-sized sales structures (with sales surface area 300 m2 <sales surface area≤2,500 m2); (4c) trade in neighbourhood businesses (with sales surface area≤300 m2); (4d) food and drink establishments: restaurants, trattorias, pizzerias, wine bars and similar places, bars, breweries, pubs and similar places; [the current Town Planning Regulations prohibit the establishment of large retailers, the establishment of neighbourhood businesses is always allowed, editor's note];

-**managerial including activities without services (3):** (3a) management activities in complexes (tertiary activity centres; buildings and aggregates of offices independently organised as executive and management offices of agencies, private companies; trade fairs and product exhibitions; congress and research centres); (3b) small-scale personal and residential service activities, carried out in individual property units, integrated into buildings that include other uses and activities (professional offices, various agencies, administrative, banking, insurance, financial services, intermediation, research, preparation of meals and ready meals in general and/or direct production of food without administering the same, such as bakers, pastry shops, ice cream parlours, pizzas by the slice and/or for take-away or with home delivery, delis, box-offices for musical, theatrical, cinematographic shows, etc.),

entertainment and animation agencies, funeral parlours, beauty salons, wellness centres, salons for hairdressers, tattoo artists and piercings and the like; (3c) civic centres and social centres; headquarters of trade union, political, category, cultural, sporting associations; (3d) cultural and recreational services: entertainment, sport, culture, leisure; multiplexes and multi-room cinemas, cinemas, theatres, fitness and sports practice centres, swimming pools, gyms, exhibition and museum premises, discos and dance halls, gaming and betting rooms, multipurpose centres and halls; (3e) activities for socio-health services, medical clinics, clinical analysis centres and laboratories, private clinics and nursing homes, social and health assistance centres including protected residences with social assistance services, physiotherapy rehabilitation centres, veterinary practices; (3f) temporary hospitality activities other than receptive activities such as student residences (in compliance with the law 14.11.2000, no. 338 and Appendix A, Ministerial Decree MIUR 27/2011), colleges, convents, guesthouses, equipped with common services; (3g) private activities for training and/or for educational services: seats of private universities, private schools, private nurseries, vocational training centres, higher vocational training schools, higher education and business development schools, vocational training campuses, business incubators and accelerators, private schools for languages, computer science, music, dance and acting, driving schools.

The choice of location of the new surface areas remains free in the intervention area although, in the general philosophy of the area rearrangement, they will preferably be integrated into the urban park with the other elements listed.

2.8 | The mobility strategy

2.8.1 | Description of the current status

The Campo di Marte area is today the largest sports centre in Florence, due to the central presence of the Artemio Franchi stadium, the Ridolfi stadium and the numerous sports facilities spread across the large space bordered by Viale Fanti and Viale Malta.

This is an area which, in recent years, has not seen substantial changes in terms of both infrastructure and mobility services. However, it is destined to be involved in the transformation of a large sector of the city, linked to the construction of the tramway line 3.2.2 Libertà - Rovezzano, which will cross it from west to east along its entire length, connecting the Centro di Coverciano [Coverciano Training Centre] to Piazza della Libertà le Cure and then, towards the south-west, Rovezzano station.

The part of the city that hosts the Campo di Marte area has three railway stations: the Campo di Marte station, used for both regional and high-speed services, and the Cure station located on the branch connecting the Faentina line and the Campo di Marte station, and also that of San Marco Vecchio, also on Faentina, with two tracks that connect it, one with Campo di Marte, the other with Santa Maria Novella and northwards with Borgo San Lorenzo and Faenza.

Figure 1 shows the passenger flows of regional rail transport on the Florentine network and the number of people who get on in the stations; the Campo di Marte Station serves about 6500 passengers on weekdays, in addition to approximately 1700 passengers of the high-speed services and is the second largest urban station for the number of passengers, after Santa Maria Novella.

If the presence of the Station gives a certain urban centrality to the Campo di Marte area, on the other hand the area suffers greatly from the infrastructural barrier constituted by the railway line, which separates it in the south from the city centre (viali del Poggi) and from via Aretina, due to the scarcity of vehicular, cycling paths and walkways. The railway link in the Campo di Marte area is crossed by three road overpasses and two pedestrian walkways, while in the Rovezzano area there are two road underpasses in Via del Gignoro and Via Corilla Olimpica.
Consequently, transit of cars throughout the Campo di Marte area is negatively affected by the presence of the three overpasses on the railway line (Cavalcavia delle Cure, Ponte del Pino and Cavalcavia dell'Affrico) which act as traffic concentrators causing frequent congestion situations in the connected roads.
The road junction of the Cure was emblematic of the critical issues caused by the railway hiatus for a long time, where the simultaneous presence of three railway tracks, the Torrente Mugnone and the popular local market, created for decades a significant impasse in the fluidity of traffic, up to the redevelopment of the square, completed in 2019, which, through the reorganisation of the market areas and the adoption of a new solution for vehicular traffic, has made it possible to significantly reduce the negative effects on mobility.
Public transport by road is also negatively affected by the required passages on the railway which, being barely sufficient to ensure a fluid connection between the two parts of the city, did not allow for preferential routes, except for one direction on the Ponte al Pino.
Nevertheless, many of the main urban TPL [Local Public Transport] lines affect the Campo di Marte area, ensuring a strong connection with the rest of the city; in particular lines 11, 17 and 20, which use the Ponte al Pino, Line 1 which uses the Cavalcavia delle Cure and Line 6 which uses the Affrico Overpass, are part of the main strong lines of the urban network, which draw diametrical connections between opposite sectors of the city (see Figure 2).

A particular criticality is represented by the scarcity of universally accessible pedestrian and cycle links between the two sides of the railway: the two pedestrian walkways which cross the track work of the Campo di Marte station are both free from demolition of the architectural barriers, while the station underpass of station connects the tracks in operation but does not continue until it reaches the north face of the railway area on Largo Gennarelli.
In fact, only the cycle and pedestrian underpasses of Piazza delle Cure and Via di San Salvi and, partially, the pedestrian underpass of Via Lorenzo di Credi allow you to cross the railway tracks by bicycle, as long as it is carried, although there are even greater difficulties for the transit of a wheelchair for the disabled, painting a picture of the need for a decisive intervention of adaptation.
For the same reasons, the city cycle network, albeit richly developed on both sides of the railway, with tracks that affect the main road axes (Viale Gramsci, Viale Mazzini, Viale Fanti, Viale Malta, Viale dei Mille, Viale Paoli, the axis along the Affrico) has evident deficiencies in the connection between the two parts of the city, forcing bicycle users to travel along the overpasses with motor vehicles or to carry bicycles on the pedestrian walkways.

The criticalities outlined above are naturally accentuated by the heavy urban load that occurs cyclically on the occasion of sporting events at the Franchi Stadium or concerts and various events at the Mandela Forum which, by attracting a considerable number of people, cause considerable congestion on road infrastructures and parking in the surrounding areas.

2.8.2 | Changes in the mobility system

The transformation strategies of the mobility system in the Campo di Marte area are part of a broader plan for change outlined in the Town Planning of Sustainable Mobility, approved by the Metropolitan Council in April 2021.
In particular, the urban strategy for the mobility system is based on a solid and coherent combination of actions with a great impact on the modal distribution of transport:

- the key feature of the strategy is the creation of the backbone of ***high-capacity and efficient public transport,*** with the completion of the Florentine tram network, the enhancement of railway services, the construction of new BRT systems in the area not served by the train and the reorganisation of road services;
- this is accompanied by the ***construction of park and ride and exchange hubs,*** designed to maximise the use of the TPL [Local Public Transport] backbone network and modal diversion from private vehicles;
- the most innovative element of the system is the ***Scudo Verde***, an innovative mobility regulation measure consisting of a ZTL [Zona a Traffico Limitato, Limited Traffic Area] extended to a large part of the inhabited centre and governed by a telematic control system, capable of producing, where necessary, like a pace-maker of the system, reorientation towards public transport, both through an environmental discipline, which includes driving bans for the most polluting vehicles, and through road policy pricing capable of raising awareness among users of the greater sustainability of public transport compared to private transport. The scope of the Scudo Verde allows access to the terminals of the tramway network and to the park and ride system at the terminus, to encourage modal diversion towards public transport (Figure 4).

Of equal importance are the policies aimed at encouraging more sustainable forms of mobility, such as ***cycling mobility***, for which the metropolitan Biciplan, included in the PUMS [*Servizio di progettazione di fattibilità tecnico-economica*], Technical-economic anticipates robust actions to complete the infrastructure network alongside softer incentive and promotion measures, ***sharing mobility, electric mobility and pedestrian mobility.*** The measures aimed at increasing the performance efficiency of the system are also very relevant, such as info-mobility and governance measures (Smart City Control Room).
This strategic framework also includes interventions to ***improve the road infrastructure equipment***, which, however, are not aimed at attracting new demand components towards private transport, but are strictly connected to the accessibility of the new *TPL* [LPT] backbone network and in particular the tram network.
In fact, the construction of the tram system in the Florentine area brings with it numerous interventions on the road network, characterised by a high level of functional integration with the tramway network. These interventions are aimed at increasing the accessibility of the tram system from different urban sectors or help to solve potentially critical situations connected with the different use of the roadway and with the modification of the current mobility structure. They also allow you to easily connect the new parking lots near the tramways to the primary road network, in order to facilitate modal interchange between private cars and public transport.

The declination ***in the Campo di Marte area*** of the overall transformation strategy of urban mobility therefore passes through a series of specific interventions, envisaged in the PUMS, [Piano Urbano per la Mobilità Sostenibile, Town Planning for Sustainable Mobility] which constitute the fundamental anchors for the design of the object of interest.
In the first place, with regard to the ***railway system***, with the construction of the high-speed underpass, a

restructuring of the railway area is planned near the current Campo di Marte Station, which will see the construction of a new bridge station with access of equal status both from Campo di Marte and on Viale Mazzini. An important contribution to lightening vehicular traffic will come from the targeted use of the metropolitan track, with the enhancement indicated in the PUMS of the current frequencies of the trains from Santa Maria Novella towards the Valdarno and Val di Sieve.

The tram system is integrated with the road system and in particular ***Line 3.2.2***, whose route, in the final design phase, will allow to cross Line 2 in Piazza della Libertà and to connect the sports centre of Campo di Marte, continue up to the sports facilities of Coverciano and get off as far as the railway stop and the Rovezzano park and ride (Figure 5).
In this view, the hub of the Cure and Viale dei Mille, lightened by the vehicular traffic crossing, can be served by the tramway and completely redeveloped and return to being a Piazza and a Boulevard mainly intended for residential traffic and cycle and pedestrian activities.
The tram line will serve the Campo di Marte station from the north side, creating an important intermodal hub for public transport, capable of significantly improving the level of service for users of the integrated train-tram system.

The construction of the tramway on the northern front of the Campo di Marte station (Figure 6) will also provide an opportunity for the redevelopment of the entire railway area and for the creation of a new intermodal node, which provides for a wide availability of parking for private vehicles, in order to contribute to significantly decongest the north-eastern part of the city.

The hypothesis of creating ***park and ride parking lots*** with the tramway is shown in the following Figure and provides for a possible allocation of 3,000 parking spaces in multi-storey structures. This would allow the use of the car parks both to meet the needs of parking during sporting events at the Franchi Stadium, and to accommodate, on normal working days, the vehicles of commuters who park and ride with the tramway to reach the more central areas of the city or other diametrically opposed urban sectors connected to the tram network.
The parking tariff system must be well calibrated, in order to incentivise its use for intermodal park and ride, providing integrated tariffs both with public transport by tram and with the Congestion Charge system based on the Scudo Verde. This will favour a massive use of car parks not only during sporting events, but also during ordinary operating periods, helping to significantly lighten the presence of private vehicles circulating in the city.
Access to the car park could also be allowed to residents during the night (and in the absence of events), helping to reduce the pressure of parking and the recovery of road areas to be allocated to forms of soft mobility.

As regards the ***road system***, this part of the city will be affected by the effects of the construction of some infrastructures envisaged by the PUMS, aimed at improving access to the tramway network and to the intermodal hub system, which, operating in a coordinated manner with the Scudo Verde, will determine significant traffic decongestion.

In particular, the main interventions planned are the following:

- the ***Varlungo-Rovezzano underpass*** that connects the area in front of the northern terminal of the Varlungo Bridge with Via della Chimera, crossing (underground) both the Lungarno de Nicola and the Florence - Rome railway line (see. Figura 9.a);
- construction of a ***junction system at the extreme north of the Ponte di Varlungo*** [Varlungo Bridge], which allows the Varlungo-Rovezzano underpass to be interconnected with all the main roads: the Lungarni de Nicola and from the Church, the carriageway located at upper level and the one located at the lower level of the Ponte di Varlungo; this junction system would therefore make it possible to use the railway underpass and the east ring road system which departs from it both coming from the main road along the Arno (via Aretina nuova and Valdisieve) and coming from the raccordo Marco Polo (A1 motorway, S.P. [Strada Provinciale, Provincial Road] no. 34 from Rosano and Via Pian di Ripoli). In this way, the underpass would be used in a more efficient and versatile way, amplifying the reduction of traffic flow on the stretches of the river Arno closest to the city centre and on the ring road boulevards (see Figure 9.b);
- the ***Chimera - Palazzeschi road network***, a new stretch of road, which would separate off from Via della Chimera with a north-south trend and, skirting the expansion of the Mensola stream, would form a connection with the end stretch from Viale Palazzeschi and via della Torre. In this way, a functional connection would be created between the northern terminal of the Ponte di Varlungo and the system of ring roads to the east of the inhabited centre (viali Palazzeschi, Verga, Duse, Volta). This would allow a significant reduction in traffic flow affecting the innermost stretches of the river Arno (De Nicola, Moro, Colombo, Tempio) and the ring roads themselves, thanks to the possibility of intercepting direct movements upstream in the areas of Campo di Marte, Cure, Coverciano (see. Figure 9.c).

The combination of the three described interventions would allow better permeability to and from the ring roads towards the east (via del Gignoro, Viale Verga, Viale Duse) and therefore a lightening of the traditional access (and exit) roads to the central areas of the city with origin from the east and south-east, as well as a significant improvement in the connection of the Campo di Marte area with the extra-urban access routes (and in particular with the A1 Firenze Sud), reducing the isolation of this sector of the city determined by the presence of the railway infrastructure.

In addition, interventions a) and b) connecting Varlungo-Rovezzano would significantly increase the transport functionality of the 3.2.2 Libertà - Rovezzano tram line, which thanks to these, would become easily accessible from the Firenze Sud motorway exit, as well as from Valdisieve.
Therefore, the users of private vehicles coming from South Florence could decide, also with the help of an ITS system of information in real time on the occupancy status of the parking lots, to park and ride with the line 3.2.1 Libertà - Bagno a Ripoli in the Viale Europa park and ride or, thanks to the extension of the Varlungo junction, reach the Rovezzano car park (which is expected to be extended) to use the 3.2.2 Libertà - Rovezzano line to get to the city centre.
The aforementioned interventions on the rod network in the eastern area, therefore, would be strongly interconnected with the construction of the tram network and would allow the creation of an integrated system capable of determining a significant reduction in private traffic both on the infiltration roads from the east and on the ring roads.
With a view to improving the transport functionality of the Stadium area, the improvement in accessibility that would be achieved through the aforementioned interventions is evident, both in the hypothesis of reaching the sports area by private vehicle, and in the hypothesis, even more favourable, of using the Rovezzano intermodal hub.

As regards the latter issue, as part of the design of the 3.2.2 tramway line, the intermodal Hub of Rovezzano will be built, which will guarantee a wide possibility of park and ride, thanks to the presence of the railway stop, the extra-urban lines on the high-frequency road (including the BRT Greve in Chianti - Rovezzano, being designed by the Metropolitan City), to the expansion of the park and ride for cars, to the construction of structures for access to forms of shared mobility such as bike sharing (also with pedal assisted bikes) and car sharing (including electric cars), the availability of adequate infrastructures for bike parking and the improvement of accessibility through the cycle and pedestrian mobility network. The hub will then be configured as an intermodal Hub to support the concept of Mobility as a flexible service that can be planned by users (MaaS).
Figure 10 schematically identifies the candidate areas to host Rovezzano's intermodal hub.

The expected reduction in vehicular flow at the level of the entire urban agglomeration, resulting from the construction of the tramway, the Scudo Verde and the intermodal hub system will make it possible to recover ***road space to be used for pedestrian use***.
In the area in question, this can be done in particular in the central alignment of the sports area Viale Valcareggi - Viale Paoli, on which vehicular access can be limited through a limited traffic area only to reach the car parks or to the users authorised to access sports facilities.
In this perspective, the southern perimeter of the sports area (Viale Malta) will preferentially be dedicated to public tram transport, while the northern perimeter (Viale Fanti) will be used by road vehicles.

As far as the system of ***walkway-cycle links*** is concerned, the planned interventions must aim, on one hand, to overcome the barriers determined by the presence of the railway infrastructure, and on the other hand to allow the completion of the existing network, as clearly emerges from the analysis of Figure 11.
In particular, the completion of the existing underpass of the Campo di Marte station is of fundamental importance for the purposes of soft mobility connections, which must reach the north side of the station in largo Gennarelli and be free of architectural barriers, so as to constitute a convenient and universally accessible connection between the two city areas.
Again with this in mind, the reconstruction of the ***pedestrian walkway*** that passes over the trackwork at the height of Via Sarpi, triggered by the construction of the multi-storey park and ride area in the railway area, must foresee the elimination of architectural barriers, with the construction of a system of lifts which can be used by all categories of users.
It would also be appropriate to expand the section of the Ponte del Pino to insert, on a special cantilevered structure, a bi-directional cycle link with its own location.
As regards the completion of the cycle network in the Stadium area, the need for a connection in the part of Viale Fanti in front of the Franchi stadium is evident, so that the entire ring enclosing the sports district is equipped with a complete cycle infrastructure.
The development of the required project design must be based on the following assumptions:

-tramway line 3.2.2. built
-park and ride in railway area built
-active Green Shield system
- intermodal hub of Rovezzano built.

The new breath of life which the City Council intends to give to the Artemio Franchi stadium hinges on two substantial aspects: the first is certainly that of restoring the stadium by offering spectators a system which *takes into account, on the one hand, the need to preserve the testimonial value of the facility while ensuring the functionality of the facility itself for the purposes of public safety, health and security, as well as compliance with international standards and the economic-financial sustainability of the plant.*
For this reason, the protection measures operating on the building are reiterated below, also providing further elements of interpretative analysis of the same as a synthesis of the principle of active conservation expressed by the law and by the ministerial decree.
The second concerns the use of the stadium which cannot be exclusively the current one or mainly linked to the events which envisage, as is customary, an occasional use of the facility. The council would like the facility to truly become a welcoming facility for the city where multiple interests can find dedicated open spaces even when no sporting events and events are taking place.

For this reason, the operational and operating modes of the facility and the surrounding areas must be anticipated and described, with the different functions that exist in these, in three different scenarios:

- match days (Series A or Coppa)
- daily activities and events (non- match days)
- UEFA EURO tournament, if awarded, 2028 and/or later.

These 3 scenarios anticipate different ways of managing flow, safety and areas and, in the case of UEFA EURO, require the relocation of additional areas necessary for the proper conduct of an event of such international significance (Media areas, hospitality areas, commercial activities, logistics, etc.).

The functions that could be hosted in the new or renovated areas of the stadium are listed below, divided by functions which are strictly necessary for the correct functioning of the stadium for events and those that could be inserted to ensure its daily vitality.

3.1 | Detailed morpho-typological guidelines

As already illustrated above, the protection measure (attachment *01_DecretoVincolo*) issued pursuant to art. 10 paragraph 1 by the Regional Commission for the cultural heritage of Tuscany with Decree no. 15 of 20 May 2020, with which the building called “Stadio A. Franchi” has been declared to be of a cultural interest and subjected to all the provisions of Part II of the Code, the MiBACT provision is followed, expressed pursuant to paragraph 1bis of article 62 of Legislative Decree 50/2017 (attachement*02_ProvvedimentoMiBACT*). The MiBACT provision contains some guidelines for the protection, conservation, functionality, safety and adaptation to international standards of the building. In the spirit of collaboration between entities, the Directorate of Archaeology, Fine Arts and Landscape of the MIBACT [Ministry of Cultural Heritage, Activities and Tourism] has made the preliminary documentation produced by the local Superintendence on the Franchi stadium available to Florence City Council. The extract of this documentation (Appendix 3_*EstrattoRelazioneMiBACT*) is a valuable tool to refine the knowledge of the protected building, also offering a qualified and reasoned version of some possible functional interventions for the conservation and redevelopment of the Florentine stadium.
In addition to what is reported in the aforementioned appendix, the Municipality of Florence spoke with the

MIBACT to better define the guidelines relating to the roof support system. For this purpose, the City Council sent a formal request and received a positive response to the possibility of any internal support of the roof system where the competition expressed better solutions than the external support indicated in the MIBACT provision.

3.2 | The features

As already mentioned, the dual role that the building will have to assume in the future leads to the definition of:

- support functions for the main activity of sporting events which, by their very nature, require areas that are essential for the proper functioning of the system, defined in general by the sector regulations
- functions that we could define as complementary that allow a more extensive use in terms of time and variety of the offer only partially connected to sports.

3.2.1 | Functional requirements

The following table describes the necessary functional requirements that must be anticipated in the design phase for proper operation of the system, both during the days when the matches will take place, and during the performance of daily activities other than the match day.
For each functional area of the stadium, the necessary requirements are detailed which must be met in the design idea of the facility and which are based on the requirements required to host matches up to the quarter-finals of a UEFA EURO tournament. (At the time this call to tender is published, the infrastructural requirements for hosting the matches of the UEFA European 2028 have not yet been made public. For this purpose, the UEFA EURO 2024 criteria have been taken into consideration. It is understood that if the publication of the new requirements takes place prior to the submission of the final documents, the latter will replace those detailed here.)

Theme	Requirements	Description
Stadium capacity and availability	40,000 net capacity (42,000 – 43,000 headcount)	The net capacity of seats means all seats available for sale during the tournament and excludes all seats for the Media, all seats that are made unavailable due to the installation of temporary structures for the purposes of the tournament (e.g. camera platforms) and all places with an obstructed view of the playing field. For this reason, the new facility must have an effective capacity of 42,000-43,000 seats.
Spectator services/facilities	Roof cover	All seats must be under cover.

	Seating	Individual seats must preferably be equipped with the following minimum dimensions: General public: stepped walkway depth 800 mm, seat width from centre to centre 500 mm VIP and Sky box seats: stepped walkway depth 1000mm, seat width from centre to centre 600mm.
	View	No seat must have a view over 190m from the furthest corner flag; All seats must have a minimum c value of 90 mm (in some areas, a variation could be acceptable).
	Walkways	Sufficient space must be provided for safe evacuation, for a smooth flow of people during an event and for easy access to first aid or assistance facilities. A minimum space of 0.35 m2 per person in the walkways is recommended.
	General spectator catering	For each sector, there must be a counter for the sale of the Food & Beverages of at least 7 metres per 1,000 spectators.
	First aid rooms	Each sector must have its own first aid room.
	Toilets	A sufficient number of toilets must be provided, considering an audience of 65% men/35% women and a ratio of 1 toilet per 200 men and 1 per 50 women, 1 urinal per 85 men and 1 toilet per 15 disabled people.
	Accessible facilities	There must be at least 210 wheelchair seats, 210 service spaces and 210 easy-to-access seats, each with an equivalent number of 210 seats for carers sitting alongside.
Playing field	125 m x 85 m	The playing field must have a standard size of 105m x 68m. The total area available must be 125mx85m.

Players and competition officials	2 changing rooms for the teams	The teams' changing rooms must be 200 m2 each.
	2 rooms for the coaches	The rooms for coaches must be 24 m2 each.
	2 changing rooms for the referees	Referees' changing rooms must be 30 m2 each.
	Room for competition delegates	The room for the competition delegates must be 16m2.

	Medical room	The medical room should be 30 m2
	Doping Control Room	The doping control room should be 50 m2.
	Functions on the same level	All the above functionalities should preferably be grouped on the ground floor level (L00).
Hospitality	VIP seats	At least 10% of the total capacity of the stadium must be dedicated to hospitality areas. These must be divided into various segments with areas and services as below: - 5% Bronze/Sponsor (net 1.5 m2 per person) - 3% Gold/Silver (net 2 - 2.5 m2 per person) - 2% Platinum (net 2.5 m2 per person). For European championships, at least 450 VIP seats are required with an adjacent VIP room of 1,125 m2; these correspond to Platinum places. The areas must preferably be designed to be able to increase the % of seats up to 15% of the total capacity where necessary.
	Sky Boxes	50 sky boxes must be planned with over 500 seats in total, offering 2.5 m2 per person in each sky box. Additional hospitality for the European championship can be provided in temporary external structures.
Safety	Control room	A control room with a view of the stadium basin must be provided.
	Checking access	All sectors of the stadium must have dedicated turnstiles (max 600 people per turnstile).
Media & Broadcast Structures	Press conference room	The Press conference room must be 350m2 and located at the level of the facilities dedicated to the players.
	Mixed area	The mixed area must be 350m2 and located at the level of the facilities for the players.
	TV studios	2 television studios must be anticipated with a view over the pitch of 20m2 each.
	Platforms for television cameras	The platform for the main television camera (22x2m) must be located in the west stand (main) with a 13-16º angle to the centre of the pitch. 2 platforms must be anticipated for television cameras of 16m of 2x2m each at the same level as the main television camera. There must be 2 camera platforms behind the goal of 2x2m each with an unobstructed view of the penalty spot from above the crossbar. All other Media and television broadcasting facilities may overlap (but could have an impact on the net capacity of the stadium).

Moreover, Florence's ambition is to host the matches of a future EURO UEFA tournament, until the quarter finals. It will therefore also be necessary to anticipate relocation of areas and added functions will be needed to hold this international event if it is awarded by the city.

The following are the additional requirements that must be provided if a UEFA EURO event is hosted but which may consist of temporary structures to be installed only in conjunction with the event itself:

-Installation of a dedicated external safety perimeter;
- Provision of a (temporary) space that can accommodate the outdoor Broadcast Compound of 6,000 m2 with an additional space of 2,000 m2, located within 400 m of the main grandstand;
- Media Centre of the stadium (temporary): 1,850 m2;
- Tensile structure to be allocated to temporary hospitality areas of UEFA clubs: 4,500 m2, near the East Grandstand;
- Tensile structure to be allocated to temporary Corporate hospitality areas of UEFA clubs: 6,750 m2, near the East Grandstand.

3.2.2 | Support features

The functions that exist today are mainly located below the covered grandstand, in the nucleus of the premises built according to the original project whose main access is from viale Manfredo Fanti 4, and are inadequate for sizing and location; the changing rooms, for example, are not very functional because they are distributed on several levels, the areas for journalists and photographers are very limited in terms of surface area as well as the lounge areas which need to be located elsewhere and extended.

The support functions may be completely redesigned and relocated even in areas other than the current ones and must include the areas described in paragraph 3.3.4; Here are some specific indications regarding:

1 | Rooms for the Media and events;
2 | Refreshment areas and restaurants;
3 | VIP parking spaces.

1 | Rooms for the Media and events | Subject to the provisions of the sector legislation, the areas intended for the Media must include a conference room intended for the Press conferences of players and coaches to be held before and after the match (see also what is indicated below for the football museum centre), with a corridor with a dedicated access from the outside, next to the changing room area and adjacent to a suitably sized Press room, which will serve as a working area for journalists and photographers, complete with the installation equipment necessary to support the activity of the conference room. The conference room and Press room must be adaptable for the organisation of various kinds of events on days in which no competitions are held such as company presentations, seminars and training courses, but also live broadcasting of matches, a cinema room and more.

2 | Refreshment areas and restaurants | Refreshment areas distributed in a widespread and uniform manner must be provided to minimise waiting times and offer a fast service to spectators, possibly positioned near the points from which the access stairs to the stands branch off, sized in accordance with UEFA standards; in each of the stands there will be a pub open seven days a week.

A suggestion is to place the refreshment area at a distance from the toilets to avoid overlapping the flow of people.
Finally, at least two restaurants must be provided, one located at the Maratona grandstand and another at the central grandstand; these activities must also be planned considering that they can remain open and useable every day of the week.

3 | VIP parking |In the underground areas, there are currently 148 parking spots which need to increase to up to 300 spots, also with the possible re-use of the area currently occupied by the underground gym and swimming pool, maybe with the possibility of preferential connections to the parking spaces, VIP grandstands, lounge areas and restaurants. These parking spaces, used on the days of the competitions by the VIP public, will be able to remain at the service of the district and above all of those who will use the services offered by the stadium on the days when no competitions are held to participate in events organised in the multipurpose areas or to access the restaurants or even the museums.

3.2.3 | Additional features

The stadium will not just have functional areas for sporting activities, but a hub of functions capable of making it alive and visited throughout the week, even on days when no competitions are held; not just a place where football is played, but a building that can always be visited by enthusiasts and interested people and, at the same time, an exclusive workplace for companies to organise events, meet customers or hold small private events.

For this reason, a series of complementary functions will be provided, in some cases multifunctional areas, such as:

1 | Hospitality areas - lounge areas
2 | Sky Boxes
3 | Fans' rooms
4 | Nursery
5 | Football museum and stadium tour
6 | Fiorentina store.

Below are some guidelines for the design, leaving the architect maximum freedom to effectively define the sizing, location and further technical requirements, whilst respecting the provisions of the applicable sector standards.

1 | Hospitality areas - lounge areas | Lounge areas must be provided for different target audiences, designed as areas that will offer those who can access them a series of special comforts and services for a superior quality experience (restaurant service and reserved bar, any private meeting rooms , comfortable seating, Wi-Fi connection). As described in the table above, at least 10% of the total capacity of the stadium must be dedicated to hospitality areas.
The lounge areas can be connected to the grandstands with preferential direct routes to allow guests to reach their seats.
Each lounge area can be equipped with the necessary service spaces including reserved toilets and possibly common kitchens, suitably positioned with respect to the rooms served to guarantee a quality catering

service.
The lounge areas must be designed with maximum flexibility, possibly close to one another and modular in order to be open to the public on days when no matches are played, adapting them to alternative uses, public and private events, business meetings, conferences, temporary exhibitions, product presentations and more.

2 | Sky boxes | At least 50 sky boxes must be anticipated, also possibly replacing the existing ones, in order to restore the full visual perception of the covered grandstand designed by Pier Luigi Nervi. The sky boxes shall be designed as reserved private lounges with a privileged view of the playing field with an open, unobstructed view, equipped with outdoor armchairs overlooking the playing field in separate areas from the standard stand seats. The sky boxes can also be used on days when no matches are played as exclusive meeting rooms for companies and businesses interested in welcoming their customers in an exclusive place, different from the classic corporate office, with a strong emotional impact.
The dimensions of the skyboxes shall ensure a capacity of 10 people, each with an independent entrance, private toilets and must be equipped with a small kitchen space, leaving the designer free to design small lounges with different sizes and equipment, suitable for satisfying different usage needs;, they shall be designed with maximum flexibility, also providing the option of merging with movable walls.

3 | Fan rooms | In the area of the Fiesole stand, there will need to be rooms for fans who will thus be able to have their own meeting place inside the stadium. A meeting/get-together room may possibly be designed, a room dedicated to the preparation of choreography, a room dedicated to the creation of new banners and the storage of those already made during previous competitions; finally, areas will be provided, including along corridors and areas for the distribution of flow of people, where fans can freely create murals.

4 | Nursery |One or more dedicated areas can be provided for the hospitality of young fans to offer a babysitting service in order to encourage the presence of families at sporting events but also to offer an active service throughout the entire week, thus increasing the services to citizens in the neighbourhood. Sizing may be proposed in relation to the stadium capacity.

5 | Football museum centre and stadium tour | A museum centre open to the public every day will have to be inserted in above-ground rooms or even possibly in basement rooms where three different museums will be located which will relate the world of football under different aspects:

- museum of the Italian Football Association, FIGC;
- museum of Fiorentina;
- museum of the History of Football.

The three museums with a dedicated total area of about 1,500÷2,000 m2, may share a series of common areas for related services such as:

-welcome area/ticketing/cloakroom
- coffee shop
- shop
- toilets
- a conference room that could coincide with the Media conference room described above
-Storage room for digitalisation activities.

For each of the three museums there will be separate rooms for the administrative offices, a warehouse for each museum, and a meeting room that can also be shared.
Each museum must be equipped with the most modern technology necessary for setting up multimedia and

interactive exhibitions to make the itineraries engaging and experiential.
The project shall take into account that the visit to the museums and in particular the Fiorentina Museum may be combined with a tour of the stadium, during which fans can experience the "behind the scenes" and the daily life of their football team, including for example the changing rooms and other areas that are usually off-limits, a tour visit that could also be offered during the events organised by the Football Club or even by those companies that could organise meetings, conferences etc. in the multifunctional spaces of the stadium.

6 | Fiorentina store | an area of about 300 m2 must be provided for the official Fiorentina store by the Marathon stand; additional smaller sales points will be set up in other sections of the stadium.

3.3 | Technical requirements

3.3.1 | Capacity, visibility, organisation of sectors

The planning of the redevelopment of the stadium must be aligned, from a qualitative and quantitative point of view, with the large facilities of European football clubs, with particular attention to the choice of typological and technical solutions capable of optimising the visibility and comfort of spectators, to ensure a high standard for the reception areas and stands, for journalists, for the areas for the players and staff, to ensure a rapid flow at the end of the events and to better integrate the stadium with its surroundings.
The total capacity of the stadium shall be at least of 40,000 spectators, (around 43,000) subdivided into 5 distinct sectors:

- Grandstand
- Maratona
- Fiesole Stand
- Ferrovia Stand
- Guest Areas (with 5% capacity of the total amount).

Spectators with limited mobility must have seats distributed in all sectors of the stadium. All sectors must be covered.

The current access control and management systems to the stadium may take on a different configuration even with the eventual removal of metal gates and turnstiles, however in compliance with art. 8-bis of Ministerial Decree 18/03/1996 "Safety regulations for the construction and operation of sports facilities". The following, therefore, must be guaranteed:

-a "maximum security area", where the access gates to the facility are located
-a "service area attached to the facility" or "pre-filtration area" consisting of uncovered spaces free from obstacles for the outflow of spectators spaced at least six metres from the perimeter of the facility and with a surface area which can guarantee a crowding density of two people per square metre.

The current configuration of the external fences of the Franchi Stadium was definitively authorised by the Provincial Commission on Public Entertainment Venues in Florence on 11.04.2007, followed by the prefectural decree of 12.04.2007. The current solution provides for a derogation from the norm in the execution of the prefiltration fence in the "Covered Grandstand" sector on the inhabited front of Viale Fanti, authorised by the National Observatory on 20.12.2006, with the installation of fixed and removable barriers,

1.1m in height and compliant with the UNI 10121/2 standard.
The main design guidelines must be:

- enhancement of the fans' experience (proximity, visibility and orientation of seats, protection from atmospheric events, integration of excellent areas - pitch-view lounge, refreshment points with a view of the pitch, sky box, planning places for "choir-leaders and animators"etc.);
- safety (exits, enclosures, etc.);
- efficiency (compactness, cost reduction, availability of the necessary service areas, etc.).

In particular, to enhance the fans' experience, the first design objective is to have a geometric layout which allows all spectators to enjoy optimal visibility of the pitch from the shortest possible distance.
This objective will be the guideline for the design of the new stands inside the existing ones. To evaluate the visibility from the stands, the so-called "C-value" is used, which is a variable that defines the quality of the viewer's line of sight above the head of the person in front and is commonly referred to as "the line of sight" .
This variable must be included between 120 mm (ideal) and 90 mm (acceptable).
In order to improve visibility and in accordance with the new concept of the most recent stadiums, the separation between the sporting activity area and the spectator area will be achieved through a height difference of 1.00 m and the installation of an upper glass parapet of 1.10 m in height, with characteristics compliant with UNI 10121-2 standards. Spectators will thus be placed at a short distance from the pitch and in conditions of optimal visibility, with the lawn extending into contact with the stands.
The dimensions of the playing fields must, nevertheless, allow for international rugby events to be held.

3.3.2 | Construction technology

The project will need to adopt innovative constructive technological solutions, but with proven efficiency and feasibility, whose technical and economic feasibility must in any case be guaranteed.

The technological solutions adopted must meet the requirements indicated in the provision prot. no. 1218 of 15 January 2021 of the Ministry for Cultural Heritage and Activities and Tourism, and in particular, for the functionality of the system for the purposes of public safety, health and security, may be carried out:

- *"interventions to redevelop the structural, architectural or visual elements indicated above, both in relation to conservation issues - static and material - and to those of functional adaptation;*
- *interventions to reinforce structural elements, with specific techniques for reinforced concrete structures, both for the purpose of overcoming the detected static criticalities and improving the behaviour of the structure during an earthquake;*
- *methods and techniques of reinforcement and protection, even superficially, aimed at minimising the need for maintenance of the concrete surfaces;*
- *interventions to adjust and/or replace the facility's engineering and sanitation components;*
- *an integral coverage system of the stands can be created, with vertical supports outside the current perimeter of the stadium, using a cantilever canopy and a covering, even continuous, in a light material, with partial interruptions in correspondence with the Tower of Marathon and the canopy covering the VIP grandstand, allowing the overall development of the stadium to be maintained and perceived and, at the same time, protecting both the spectators and the architectural structure from rainwater*
- *transparent cladding can be created, with large, glazed surfaces, of the external part of the terraces, thus obtaining a large volume to be used for services (including toilets) and various activities, including commercial ones, leaving only some signs of the original layout".*

the following can also be carried out to adapt to international standards:

- *"interventions to replicate the terraces of the Fiesole and Ferrovia stands parallel to the current ones, in order to reduce the distance from the playing field;*
-*interventions to redevelop the terraces;*
- *interventions to modify and/or replace the lighting system;*
- *interventions to create suitable volumes in which to relocate various services and activities, including commercial activities.*
- *interventions to construct suitable volumes, even partially underground, also intended for hospitality, making quality additions to the existing structure."*

The achievable objectives, also in relation to the most recent technological innovations adopted by the production market and by the manufacturing industry applied to the construction chain, concern:

- the reduction of production times;
- the reduction of production costs;
- greater safety;
- greater flexibility and adaptability;
-greater eco-sustainability, so that the elements, thanks also to the ease of assembly-disassembly, can be recycled, replaced (in the case of degraded elements) or reused, making any future disposal less impactful;
-the reduction of on-site work and consequently the reduction of interference with the surrounding environment.

The project must demonstrate the sustainability of construction times, taking into account the particular construction characteristics and the use of cutting-edge processes, technologies and materials, also targeting the goal of containing construction costs, always in line with the maximum amount of work foreseen by the call to tender.
The choice of the construction system, in addition to the above characteristics, must be based on the principles of environmental sustainability and bio-architecture.
The choice of materials should be steered in accordance with the criterion of minimising the environmental impact with regard to production, transport, the construction process, but also the entire useful life of the buildings, with a view to sustainability and circularity.
A recommendation is to consider the structural and construction choices also according to the impact produced by the construction phase, indicating a possible organisation of the methods and phases of implementation.

3.3.3 | Specific technical requirements for the different functions

The specific technical requirements for the various functions must comply with the specific national and international sports regulations on sports facilities which are listed below:

- Ministerial Decree 18/03/1996 "Safety regulations for the construction and operation of sports facilities"
- CONI standards for sports facilities, approved with Resolution no. 1379 of 25 June 2008
- Regulations of the Stadiums of the National Professional League
- UNI EN 13200-1 Installations for the spectators – Part 1: Criteria for the layout of observation spaces for spectators

- UNI EN 13200-3 Installations for the spectators – Part 3: Elements of separation - Requirements
- UNI EN 13200-4 Installations for the spectators – Part 3: Sessions – Product features
- UEFA, Stadium Infrastructure Regulations, 2018 edition
- UEFA, Regulations of the UEFA Champions League 2018-2021
- UEFA, Stadium Lighting Guide, 2016 edition
- UEFA EURO 2024 Tournament Requirements
- UEFA EURO 2028 Tournament requirements (when published)
- Guide to Safety at Sports Grounds – 6th edition ("Green Guide")
- UEFA Safety and Security Regulations 2006
- Access for All – UEFA and CAFÉ Good Practice Guide to creating an accessible stadium and matchday experience.

The equipment dedicated to sporting activities must include:

- changing rooms for the athletes and the technical team
- warm-up areas
-changing rooms for the competition judges and ball-boys
- changing rooms for the employees
- areas for first aid and anti-doping checks
- support areas for match delegates, and UEFA or FIFA officials in international matches.

The equipment dedicated to supporting the management of events must include:

- a room available for the Safety Operating Group for event management, with a view of the entire basin
- meeting and administrative rooms for the management of events, suitable for hosting the medical rescue teams, the Police and the Fire Brigade present during the course of the events
-Police area
- maintenance management offices
- warehouses, with a sufficiently spacious deposit for grass cutting machinery
- Media areas (Press stand, flash interview areas, mixed zone, conference room, Press room, interview rooms, etc.)
- billboards and advertising spaces
- toilet areas and loading areas.

In the new stands, two access tunnels to the field must be provided for the access of maintenance, rescue and safety vehicles.
An area called "OB VAN AREA", an area reserved for parking vehicles equipped for audiovisual broadcasting from the outside ("Outdoor Broadcast Van Area") must be provided in the vicinity of an access to the Stadium.

The equipment dedicated to the public, distributed in the various sectors, must include:

- toilets
-First aid rooms
- food and drink sales outlets

Particular attention must be paid to the design of the toilets: the toilet facilities must be designed to withstand heavy use for short periods of time, as the majority of visits will occur before the start of the game, during the interval between the two halves and after the final whistle. Their design must therefore facilitate the flow of people in and out of these areas during these peak times. The relationship between men's and women's toilets must meet the specific criteria defined by the federation and in accordance with national and international guidelines. A suitable number of washrooms for disabled people must also be available, placed on every floor and distributed uniformly along the entire perimeter of the stadium. It is also recommended that wash rooms have facilities for changing babies' nappies

3.3.4 | Installation equipment

The design of the installation equipment must meet the following objectives:

- Comfort and well-being of the users: guarantee the best conditions of comfort for the spectators and, in general, for all the people who will use the stadium;
- Energy efficiency: optimising the energy performance of the stadium and the activities located therein through an integrated strategy of highly efficient and renewable solutions;
- Resilience: ensure the continuity of stadium operation, in accordance with best practices for stadium design;
- Flexibility, adaptability and future proofing: ensure the flexibility and adaptability of the stadium systems, also taking into account the continuous evolution of technological solutions and market demands;
-Innovation : use materials, technologies and innovative facility solutions.

Strategies aimed at maximum energy conservation will need to be adopted, with particular reference to:

- containment and reduction of energy consumption, pursued with the adoption of biocompatible and energetically performing materials, connected to facility types characterised by high energy yields, therefore with reduced consumption;
-extensive use of energy recovery equipment, such as, for example, the cogeneration system;
- extensive use of heat recovery equipment in air renewal systems;
- use of thermal storage systems in order to rationalise energy production and extend the useful life of the equipment;
- exclusive use of high-efficiency equipment, also characterised by simplicity and cost-effectiveness of maintenance, modularity of installation and standardisation of spare parts;
- possible use of renewable energy sources (geothermal, solar photovoltaic, solar thermal, etc.).

The Stadium redevelopment project must include the complete overhaul of the mechanical, electrical and special systems, at the service of both the existing parts and the new volumes created.
The new lighting system of the playing field, with LED technology, must be integrated into the new roof and guarantee compliance with the highest lighting standards required by national and international standards: requirements of the Elite Level A class of the UEFA Stadium Lighting Guide, combined with the requirements of FIGC.

3.3.5 | Flexibility and adaptability

Given the rapid evolution of the framework of the brief over time, one of the characteristics of the stadium's redevelopment is that of the organisational and functional flexibility of the areas and the adaptability of the new volumes to any future needs.
The new volumes must, therefore, be characterised by a layout that will allow maximum flexibility of the internal organisation of the functions, guaranteeing possible future reconfigurations to any unexpected needs that may arise in the medium and long term: in this sense, adaptability must be applied in particular to the structural system and to the technological and plant system.

3.3.6 | Durability and maintainability

The stadium redevelopment project must take into account the need to ensure maximum durability, with particular attention to the solutions adopted to limit the need for ordinary and extraordinary maintenance, optimise management costs and reduce maintenance costs.
The proposal must therefore be characterised not only by its aesthetic and functional values, but also by the economic implications of the architectural solutions adopted, with the aim of ensuring maximum durability and functionality of the works.
The design solution must also be able to wisely integrate the plant equipment in an integrated design perspective.
The characteristics of the materials and construction technologies adopted in the project will need to be assessed also in relation to the practicability of maintenance operations according to the criteria of:

- accessibility and ability to inspect the individual facility components, for example if it will be possible to carry out maintenance or replacement of facility and technological elements (networks and machinery) without this involving interventions or restorations on the building components;
- substitutability of elements and components;
- long-term availability of components;
- ease of sanitation and cleaning in consideration of the activities hosted;
- possibility of renewal in relation to technological progress and innovation.

Particular attention must be paid to the ability of the architectural body to be maintained both internally and externally, in order to remain efficient for as long as possible. It is therefore necessary to evaluate the methods of ageing, resistance to abrasion and use, in order to reduce the overall cost of the work and, in particular, in the choice of finishes, construction details and types of materials proposed so that the maintenance is easy to manage, with costs which are consistent with standards. In fact, long-lasting and easily replaceable materials are preferable, which do not pose problems of disposal or toxicity during operation and which do not require long laying times.
The project will have to recall the specific materials it intends to use for the various parts of the building complex, also with reference to the construction technologies linked to the construction times, environmental sustainability, durability and maintenance of the same.
The proposal must favour a choice of simple, durable and functional materials and finishes while taking into account the perceptual experience linked to the use of the paths and spaces and the properties of the materials (colour, characteristics of the surfaces, way of reacting to light, the sound emitted by touch, impact or tread), paying particular attention to the use of materials with remarkable insulation and noise reduction performance for the separation of environments, ensuring adequate fire resistance. For example, in determining the glass surfaces, both the functional and aesthetic values, the technological implications

on the control of the internal climate (plant and energy cost), and the management and maintenance costs must be carefully evaluated.

4 | SUMMARY OBJECTIVES, INDICATIONS AND REQUIREMENTS

Please note that the following prospectus constitutes a summary and is provided for the sole purpose of facilitating competitors, who are in any case required to consider and comply with all the provisions contained in the previous pages of the PGD.

Scope A | Campo di Marte Nord		
objectives		**indications/requirements**
A.1	The city park	To expand the public garden to include the area currently occupied by the Cerreti and ACF Fiorentina football pitches. The new surface areas and functions to be relocated can be placed inside the park.
A.2	The local market	To design an easily accessible and operational, public area for the daily local market. The surface area to house the market is around 1700 m2.
A.3	The skateboard track	To relocate the skateboard track, more suitably integrated into the park system.
A.4	The gym in viale M.Fanti	To redesign/relocate the existing gyms with a geodesic roof along Viale M. Fanti for enhanced integration in the context.
A.5	The baseball field	To consider how to enhance ancillary and complementary services to the baseball sports facility which must remain in its current location along with the stands and sections below.
A.6	Affrico sports club	To redesign the area also using part of the neighbouring space to create a new multi-purpose building (basketball, volleyball) with a capacity of about 700 spectators, preserving the other functions currently present, rationalising the organisation of the sports facility. To design a new entrance area.
A.7	Fiorentina gym	To maintain the main building; buildings which host the ancillary services can be demolished.

A.8	The underground gym and pool (side of the Marathon grandstand)	To relocate the existing in-ground swimming pool giving it an area of approximately 1,000 m2 with a swimming pool measuring 25x12.5 metres.

objectives		**indications/requirements**
A.9	Parking and the new mobility of the area	To eliminate the existing parking areas next to the stadium, transferring them to the general city park system. To redevelop the parking areas available along the south side of viale Valcareggi / Paoli and the Mandela Forum car park (piazza Enrico Berlinguer) anticipating an increase in permeable, green and tree-lined areas.
A.10	Viale F.Valcareggi/P.Paoli	To redesign viale Valcareggi / Paoli at least up to the intersection with viale Manfredo Fanti. To semi-pedestrianise viale Paoli to obtain an additional permeable, green and tree-lined urban space, with a reduction of the carriageway which will be used as a service road to the present and planned activities. To remove the service station. Vehicular access to maintain: - stadium's underground car park -"Padovani" rugby facility - "Nelson Mandela Forum" sports hall -"Paolo Costoli" municipal swimming pool - Misericordia di San Pietro Martire.
A.11	New built surfaces	To anticipate new surfaces for a total of 15,000 m^2 of gross useable surface to create support functions/compendium of the activities that will be established in the stadium, open daily. The surfaces are divided into the following intended uses to which the flexibility indicated in the PGD is applicable: -Tourist-receptive 5,000 m2 -commercial use in a medium-sized sales structure of 5,000 m2 - managerial including activities without services 5,000 m2.

Scope B | Stadium	
objectives	**indications/requirements**

B.1	Compliance with the indications/requirements contained in provision no. 1218 of 15.01.2021 of the MIBACT and its integration	To ensure correct conservation by means of suitable solutions. To respect the further indications of paragraph 3.1 of the Planning Guidance Document
B.2	UEFA standards	To design the restoration intervention so that the sports facility is adequate to at least category 4 UEFA standards.
B.3	Capacity	To expect a total of at least 40,000 spectators, net of places reserved for the Press and for service accreditations.
B.4	Additional requirements for the stadium's internal support functions	Plan for: - the flexibility of the rooms for the Media - the network distribution of the refreshment areas -the extension of the existing underground car park belonging to the stadium up to a total of 300 parking spaces.
B.5	Insertion of additional functions within the stadium.	Provide for the inclusion within the stadium of the following additional functions with the requirements of paragraph 3.2.3 of this Planning Guidance Document: - hospitality areas - lounge areas - 50 skyboxes - fans' rooms - nursery - football museums and stadium tour - Fiorentina store.
B.6	Security Measures	Guarantee the safety and security measures pursuant to art. 8-bis Ministerial Decree. 18/03/1996 also by modifying the external fences ensuring: -a "maximum security area", where the access gates to the facility are located -a "service area attached to the facility" or "pre-filtration area" consisting of uncovered spaces free from obstacles for the outflow of spectators spaced at least six metres from the perimeter of the facility and with a surface area which can guarantee a crowding density of two people per square

		metre.

objectives		indications/requirements
B.7	Enhancement of the fan experience	To guarantee the maximum enjoyment of the events but guaranteeing: - seats close to the playing field -visibility and orientation of optimal seats -protection from atmospheric events -places for “choir-leaders and animators”.
B.8	Visibility	To design new stands for C-values between 90 mm (acceptable) and 120 mm (ideal) To separate the sports activity area from the spectator area with a height difference of 1.00 m and provide for an upper glass parapet 1.10 m high in compliance with UNI 10121-2 so that the lawn can extend up to under the stands
B.9	Possibility to play rugby matches	To guarantee the size of the playing field to allow international rugby events to be held

5 | THE ENVIRONMENTAL STRATEGY

VAS [Strategic Environmental Assessment] | VIA [Environmental Impact Assessment]

The Municipality of Florence is preparing the new town planning tools pursuant to Regional Law 65/2014, Structural Plan and Operational Plan, as an update of the current instrumentation expiring on 31.12.2021. The redevelopment of the Campo di Marte Nord and the stadium is a theme, as seen in the dedicated paragraph, related to the participation process, related to the new planning and the relative Strategic Environmental Assessment (VAS) which goes hand in hand with the definition of the new forecasts step by step. The objectives and expectations contained in this document will be subject to evaluation as part of the development of the tools which will evaluate (in an integrated manner) the impacts deriving from the interventions on the Campo di Marte and on the stadium together with all the interventions (infrastructural and otherwise) which will affect the area.

The competition therefore is limited to asking the sole winner to explore the environmental issue with specific reference to the solution adopted to coordinate, if necessary, with the Environmental Impact Assessment (VIA) verification procedure which however must be carried out on the project pursuant to art.19 of Legislative Decree 152/2006.

Mitigating impact

As clearly emerges from the objectives which the City Council intends to achieve, the redevelopment of the Campo di Marte Nord revolves around important actions to be implemented which could substantially change the impact, perception and overall use of the area. The increase in accessibility via public transport (rail + tramway), the search for a different location for the parking areas (railway area of Campo di Marte), make it possible to rethink the area by substantially reducing the dedicated water-resistant areas to cars (roadways, parking areas) in favour of a substantial increase in the green component (increase in permeable soil and tree mass) useful for reducing the urban heat island effect and flooding caused by violent and concentrated rainfall recorded more and more frequently.

Sustainability of the stadium

The City Council's ambition is to create a modern and sustainable stadium. Within the context of the first stage of the competition, bidders can put forward suitable solutions to create a sustainable stadium. In the second stage of the competition, the required sustainability requirements will be provided (as an example: LEED, BREEAM or others).

6 | THE UNESCO HERITAGE IMPACT ASSESSMENT (HIA)

The Heritage Impact Assessment (HIA) is a tool developed by ICOMOS International (Advisory Body of the UNESCO World Heritage Committee) for World Heritage sites. The reference document for the application of this methodology is the Guide to the Impact Assessments on Heritage for World Heritage Cultural Sites of 2011 (attached *Guide HIA ICOMOS 2011 - Italian translation*), which is currently being updated and revised.

The HIA is an adequate and decisive tool for monitoring the possible future effects (positive and negative) of changes and transformation projects on the specific values and attributes of a World Heritage site. In fact, it provides a global approach to the site compared to other binding assessment tools (e.g. Environmental Impact Assessment and Strategic Environmental Assessment) as it focuses on the Exceptional Universal Value of the site.

The functions of the HIA can be summarised as follows:

- Identification of the potential impacts of development and or transformation actions/projects on the values and attributes of Outstanding Universal Value and potential of the World Heritage site;
- Systematic and coherent evaluation of the identified impacts;
- Recommendations for the implementation of mitigating measures to guide interventions and limit their negative effects on the site.

The potential of this methodology has already been recognised in *Appendix A - Launch of the Operational Plan Procedure and variant Structural Plan - Preliminary Strategic Environmental Assessment document* of the Municipality of Florence in paragraph §4.1.3.1 relating to the UNESCO World Heritage Old Town Centre

(pages 35-36), which sees the elaboration of the Operational Plan (OP) as: "an opportunity to integrate the contents of the evaluation to which plans and programmes (Strategic Environmental Assessment) are obligatorily subjected to some of the main elements of the impact assessment on assets (HIA)".

6.1 | Preliminary Investigation Model

In 2019, the *Preliminary Investigation Model* (attached *Preliminary Investigation Model*) was developed by HeRe_Lab - Heritage and Research(joint laboratory of the Florence World Heritage Office and relations with UNESCO of the Municipality of Florence and the University of Florence). This Model was developed following the same mechanisms and procedures as the HIA, with the difference that it was created *ad hoc* for the Old Town Centre of Florence, and therefore more suitable for integration with decision-making processes and administrative and technical procedures of the competent institutions in the area.
More information and in-depth materials on the subject can be found on the following page of the website of the Florence World Heritage Office and relations with UNESCO of the Municipality of Florence:https://www.firenzepatrimoniomondiale.it/heritage-impact-assessment-hia/.

6.2 | Application of the Heritage Impact Assessment for the Artemio Franchi Stadium

The design solution must be accompanied by the documents requested from the bidders of the second stage of the competition containing the information useful for carrying out the Heritage Impact Assessment.
To prepare the documents, the tools mentioned above can be used (ICOMOS *Guide* of 2011 and HeRe_Lab *Preliminary Investigation Model* of 2019). Taking into consideration the following factors:
a) Safeguarding the visual relationship with the context
b) Innovation and opportunity
Creating additional asset value leading to positive impacts in terms of:
- effects on the economic-relational and economic-commercial system through the creation of areas also for commercial use, revitalising the economic activities of ground floors (natural shopping centre);
- relations between the physical environment and the territorial boundary prescription for a greater enhancement of the city's historical identity (perception of the unity of the old town centre from the highest point of the 'modified' object);
- restoration of a cultural function linked to football.

7 | REGULATORY REFERENCES

Please find below, subject to the reference to the general rules, as an example and not exhaustive, the main regulatory references to which the design will have to refer as regards:

PUBLIC WORKS

- Ministerial Decree 27 March 2018 no. 49 "Approval of the guidelines on how to carry out the functions of the Works Manager and the Implementation Manager"

- Legislative Decree 18 April 2016, no. 50 and additions and amendments, Code of Public Contracts
- Presidential Decree 5 October 2010, no. 207 and subsequent additions and amendments, Regulations for the execution and implementation of Legislative Decree 12 April 2006, no. 163

CAM CRITERIA

- Assignment of design services and works for the new construction, renovation and maintenance of public buildings (approved with Ministerial Decree 11 October 2017, in the Official Gazette General Series no. 259 of 6 November 2017)
- Assignment of energy services for buildings, lighting service and motor power, heating/cooling service (approved by Ministerial Decree of 7 March 2012, in Official Gazette no.74 of 28 March 2012)
- Acquisition of light sources for public lighting, the acquisition of public lighting fixtures, the assignment of the design service for public lighting systems (approved by Ministerial Decree of 27 September 2017, in Official Gazette No. 244 of 18 October 2017)
- Public green management service and supply of green care products (approved with Ministerial Decree no. 63 of 10 March 2020, in Official Gazette no. 90 of 4 April 2020)

CULTURAL AND LANDSCAPE HERITAGE

- Legislative Decree 22 January 2004 no. 42 "Code of cultural heritage and landscape, pursuant to article 10 of the law of 6 July 2002, no. 137" and additions and amendments
-

SPORTING STANDARDS AND REFERENCES

- Ministerial Decree 18/03/1996 "Safety regulations for the construction and operation of sports facilities"
- CONI standards for sports facilities, approved with Resolution no. 1379 of 25 June 2008
- Regulations of the Stadiums of the National Professional League, edition
- UNI EN 13200-1 Installations for the spectators – Part 1: Criteria for the layout of observation spaces for spectators
- UNI EN 13200-3 Installations for the spectators – Part 3: Elements of separation - Requirements
- UNI EN 13200-4 Installations for the spectators – Part 3: Sessions – Product features
- UEFA EURO 2024, Tournament Requirements
- UEFA EURO 2028 Tournament requirements (when published)
- Guide to Safety at Sports Grounds – 6th edition ("Green Guide")
- UEFA Safety and Security Regulations 2006
- Access for All – UEFA and CAFÉ Good Practice Guide to creating an accessible stadium and matchday experience
- UEFA, Stadium Infrastructure Regulations, 2018 edition
- UEFA, Regulations of the UEFA Champions League 2018-2021
- UEFA, Stadium Lighting Guide, 2016 edition
- Sports Federation Standards (FIP [Italian Basketball Federation] – FIPAV [Italian Volleyball Federation] – FIGC [Italian Football Federation], etc.)

FIRE PREVENTION

- Fire Prevention Code: Ministerial Decree 3 August 2015 "Fire prevention technical standards, pursuant to art. 15 of Legislative Decree 8 March 2006, no. 139", published in Official Journal no. 192 of 20/8/2015 – Ordinary Supplement no. 51

-Decree of 7 August 2012 "Provisions relating to the procedures for submitting applications concerning fire prevention procedures and the documentation to be attached, pursuant to Article 2, paragraph 7, of the Presidential Decree of 1 August 2011, no. 151

- Presidential Decree 1 August 2011 no. 151 "Regulation containing the simplification of the discipline of proceedings relating to fire prevention, pursuant to Article 49, paragraph 4-quater, of the decree-law of 31 May 2010, no. 78, converted, with modifications, from Law 30 July 2010, no. 122"
- Ministerial Decree 20/12/2012 "Technical fire prevention rules for active fire protection systems installed in activities subject to fire prevention controls"
- Ministerial Decree 13/7/2011 "Technical fire prevention rules for the installation of internal combustion engines coupled to an electric generating machine or other operating machine and cogeneration units serving civil, industrial, agricultural, craft, commercial and service activities"
- Ministerial Decree 9/3/2007 "Fire resistance performance of buildings in activities subject to the control of the National Fire Brigade"
- Ministerial Decree 16/2/2007 "Classification of fire resistance of products and construction elements of construction works"
- Ministerial Decree 3/11/2004 "Provisions relating to the installation and maintenance of devices for opening doors installed along the escape routes, relating to safety in the event of fire"
- Ministerial Decree 10 March 1998 "General criteria for fire safety and emergency management in the workplace"
- Ministerial Decree 12/4/1996 "Safety regulations for the construction and operation of sports facilities"
- Ministerial Decree 18/03/1996 "Safety regulations for the construction and operation of sports facilities"
- Ministerial Decree - 30 November, 1983 (fire prevention terms, general definitions and graphic symbols)

ARCHITECTURAL BARRIERS

- Presidential Decree of 24 July 1996 no. 503 and subsequent additions and amendments, Regulation containing rules for the elimination of architectural barriers in buildings, spaces and public services
- Ministerial Decree 14 June 1989 no. 236 technical requirements necessary to ensure the accessibility, adaptability and visibility of private buildings and public residential buildings, for the purpose of overcoming and eliminating architectural barriers
- Law no. 13 of 09 January 1989, Provisions to facilitate the overcoming and elimination of architectural barriers in private buildings

STRUCTURES

- Circular no. 7 of 21/01/2019: Instructions for the application of the "Update of technical standards for constructions"
- Ministerial Decree MIT 17 January 2018 "Update of Technical Standards for Construction"
- Prime Ministerial Decree of 20/03/2003 no. 3274 and additions and amendments and Prime Ministerial Decree 21/10/2003
- Law no. 64 of 2 February1974 and additions and 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"

MECHANICAL FACILITIES

- All the regulations relating to the systems issued by ISPESL, VV.F., UNI, CTI, CEI, CIG, IMQ, ENPI, ASL, etc.

- Ministerial Decree 22 January 2008 no. 37 (pursuant to Law no. 46/90) "Regulation concerning the implementation of Article 11-quaterdecies, paragraph 13, letter a) of Law no. 248 of 2 December 2005, concerning the reorganisation of provisions on the installation of systems inside buildings"
- Law no. 10 of 9 January 1991 “Rules for the implementation of the National Energy Plan on the rational use of energy, energy saving and development of renewable energy sources”
- Presidential Decree no. 412 of 26 August 1993 "Implementation regulation of Law 10/91 on energy saving"
- Presidential Decree no. 551 of 21 December 1999 “Regulation containing additions and amendments to Presidential Decree 26/08/1993 no. 412, concerning the design, installation, operation and maintenance of the thermal systems of buildings, for the purpose of containing energy consumption”
- Legislative Decree no. 192 of 19/08/2005 “Implementation of Directive 2002/91/EC on the energy performance of buildings”
- Legislative Decree no. 311 of 29/12/2006 “Corrective and supplementary provisions to the legislative decree 19 August 2005, no. 192, implementing the actions of Directive 2002/91/EC on the energy performance of buildings”
- Presidential Decree 2 April 2009, no. 59 “Regulation for the implementation of article 4, paragraph 1, letters a) and b), of the legislative decree 19 August 2005, no. 192, concerning the implementation of Directive 2002/91/EC on energy performance in buildings"
- Legislative Decree 03 March 2011 “Implementation of Directive 2009/28/EC on the promotion of the use of energy from renewable sources, amending and subsequently repealing Directives 2001/77 /EC and 2003/30/EC
-Decree of 26 June 2015 Reference layouts and methods for the compilation of the project technical report for the purpose of applying the prescriptions and minimum requirements for energy performance in buildings. (15A05199) (GU General Series no.162 of 15-7-2015 - Ordinary Supplement No. 39)
-UNI/TS Standard 11300-1 “Energy performance of buildings - Part 1: Determination of the building's thermal energy needs for summer and winter air conditioning"
- UNI/TS Standard 11300-2 “Energy performance of buildings - Part 2: Determination of primary energy requirements and production for winter air conditioning and for the production of domestic hot water";
- UNI Standard 10339-95 “Aeraulic systems for the purpose of well-being. General information, classification and requirements. Rules for the request for quotation, offer, order and supply”
- Ministerial Decree 1 December 1975 “Safety regulations for appliances containing hot liquids under pressure”
- Collection “R” 2009 edition pursuant to Title II of the Ministerial Decree 1 December 1975”
- UNI Standard 8199-98 “Measurement and evaluation of the noise produced in environments by heating, air conditioning and ventilation systems”
- Legislative Decree 475/90 (Personal protective equipment - PPE with CEI marking)
- Legislative Decree 9 April 2008, no. 81 “Implementation of article 1 of law 3 August 2007 no. 123, concerning the protection of health and safety in the workplace"
- Legislative Decree 3 August 2009, no. 106 "Supplementary and corrective provisions of legislative decree 9 April 2008, no 81, concerning the protection of health and safety in the workplace"

ELECTRICAL SYSTEMS

- CEI Standards 11-17 Facilities for the production, transmission and distribution of electricity - Cable lines
- CEI Standards 17-5 Low voltage equipment
- CEI Standards 17-13 Assembled protection and switching equipment for low voltage

- CEI Standard 17-43 Method for determining overtemperatures, by extrapolation, for non-series low voltage protection and switching equipment (ANS)
-CEI Standards 20-22II Fire-retardant cables
- CEI Standards 20-35 Flame-retardant cables
- CEI Standards 23-3 Automatic overcurrent switches for domestic and similar uses
- CEI Standards 23-18 Differential switches for domestic and similar use and differential switches with built-in overcurrent releases for domestic and similar use
- CEI Standards 23-51 Requirements for the construction, verification and testing of distribution panels for fixed installations for domestic and similar use
- CEI Standards 64-8 Electrical systems using voltage not exceeding 1000V in alternating current and 1500V in direct current
- CEI Standards 64-12 Guide for the implementation of the earthing system in buildings for residential and tertiary use
- CEI Standards 64-50 Residential construction - Guide for the integration of user, auxiliary and telephone systems in the building
- CEI Standards 70-1 Degrees of protection provided by enclosures (IP code)
- CEI Standards 81-10 Protection against lightning
- CEI Standards EN 50086-1 Pipe systems and accessories for electrical installations
-UNI 12464 Standards Lighting of internal places with artificial light
- Ministerial Decree 22 January 2008 no. 37 (pursuant to Law no. 46/90) "Regulation concerning the implementation of Article 11-quaterdecies, paragraph 13, letter a) of Law no. 248 of 2 December 2005, concerning the reorganisation of provisions on the installation of systems inside buildings"
- Legislative Decree 475/90 (Personal protective equipment - PPE with CEI marking)
- Legislative Decree 9 April 2008, no. 81 "Implementation of article 1 of law 3 August 2007 no. 123, concerning the protection of health and safety in the workplace"
- Legislative Decree 3 August 2009, no. 106 "Supplementary and corrective provisions of legislative decree 9 April 2008, no 81, concerning the protection of health and safety in the workplace".

8 | ANNOTATED BIBLIOGRAPHY ON THE ARTEMIO FRANCHI STADIUM

Please refer to the attached *03_ExtrattoRelazioneMiBACT*, part 7.2 Appendix, by the Superintendency for Architectural and Landscape Heritage for the provinces of Florence, Pistoia and Prato. It should be noted that this bibliography, made available by the MIBACT in the spirit of collaboration of institutions, does not intend to be exhaustive as it was drafted over a short period and during a pandemic, which made access to funds, archives and libraries difficult.