



Comune di
Milano

NUOVA BIBLIOTECA LORENTEGGIO

CONCORSO INTERNAZIONALE DI PROGETTAZIONE

INTERNATIONAL DESIGN Competition

PRELIMINARY DESIGN DOCUMENT

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The Lorenteggio district is situated in the southwestern part of the City of Milan. It dates back to the post World War I time (1938-1944) as IFACP district (fascist institute for social housing). It becomes the symbol of reception and solidarity. As of the '80s, the gradual disappearance of industrial activities as well the weakening of the role of community centres and the shifting of low-income classes towards the outskirts of the city, contributed to shape conditions of severe social isolation and housing discomforts. Among the social housing measures, aiming at attaining the highest savings, the Lorenteggio district represents one of the most significant examples. Very often, densely populated areas host a high number of different ethnic groups living together in the same urban space. For the City Government, differences among them and the multi-ethnic character entail great potential for social development.

The district includes six sections bordered by the following roads: Via Lorenteggio in the north, Via Odazio and Via Inganni in the east and west and Via Giambellino in the south. The lot of land that will host the Odazio Library – object of the present Competition – lies in the eastern part of this district. The Municipal Government believes that the realization of a new library, that shall not only be a place for reading, studying and borrowing books, but also a place to foster culture, promote social cohesion and inclusion, will improve public green spaces. Further, this Competition is in line with the ruling Programme Agreement for the implementation of the plan for urban sustainability of the Lorenteggio district, signed on 3 May 2016.

In order to better understand the City Government's overall plan for urban regeneration, please make reference to the attachments and among others to *Masterplan Programme for Urban and Sustainable Development, Lorenteggio district* and *The Library of the Lorenteggio-Giambellino District – functional guidelines*.

OVERALL OBJECTIVES OF THE COMPETITIONS

The Government's objectives of the Competition for the Design of the New Library in Via Odazio pursue the general improvement of the urban fabric. The work will also involve the park in Via Odazio where the new building will be located. This intervention should not merely focus on a building with strong identity and architectural importance, but it shall also forge connections and synergies with the surrounding environment.

The result of the Competition shall be a project that contributes to reduce specific critical aspects such as: strong feeling of unsafety, lack of integration among the various groups of users (elderly people, young people, families of different ethnic groups), the lack of infrastructures within green spaces, non-differentiated lighting in the whole area and physical and/or functional barriers (e.g. fences in the dog area) that break down green spaces.

The designer is required to rethink this space that entrails major opportunities for social and urban development in the district, thanks to its excellent position and to numerous services (covered market, library, the so-called *green house*, etc). Hence, the goal is that of transforming it into a landmark and aggregative space for its inhabitants and into a positive polarity for a broader area, with the aim of expanding the catchment area and eventually increasing the level of safety.

Strengthening the attractiveness of services in Via Odazio, despite being outside the traditional area of social housing in the Lorenteggio district, plays a pivotal role for the entire district and the whole process of urban regeneration. The library shall increase infrastructures and services and act as meeting place and element of openness to the city.

Here, the realization of the New Library shall be conceived as an innovative service where traditional functions meet with laboratory, training and information activities; it has to be conceived as a space to access to knowledge and shall be open to the entire community.

To this extent, the New Library embodies the opportunity to re-design the entire area within Via Odazio, Via Lorenteggio and Via Giambellino, that shall, in turn, become the connective tissue of the entire district and shall build on urban attractiveness, play a social role and become a fundamental element in the elaboration of pedestrian paths that go through and connect the district.

The current building of the library, with a small section of fenced green space on its back part, shall be renewed and become a place for local associations. A pivotal role will be played by connective spaces among the different functions, green spaces in proximity of the building and furnished green spaces. The designer shall provide development guidelines for these three above mentioned elements.

2.1 The urban context

As already mentioned, the area object of the present Competition is a vast green area that spans from Via Lorenteggio to Via Giambellino; here the covered municipal market and its parking space, a fenced dog area, and the so-called “Green House” (headquarter of different associations) are located; it is surrounded by a portion of pertaining green space, the current building of the library, a playground, a furnished area with a big fountain and a “water house” (public water dispenser), realized for Expo Milano 2015. Moreover, every Thursday morning on Via Segneri and Via Odazio a local market enlarges the commercial offer.

The area interested by the Competition includes numerous social housing buildings with many ethnic groups living there who also often public spaces.

The detailed description and all information concerning the urban context where the new intervention will be implemented, shall be found in the *Masterplan Programme for Urban and Sustainable Development, Lorenteggio district* attached to present Competition. The Masterplan is an integral part of the Programme Agreement.



1. View over the area interested by the Competition

2.2 Identification of the scope of action

The area interested by the Competition is defined in the document 3.1 *Chart with perimeter of the Competition* attached to the present Competition. The above-mentioned area is divided into two fields of intervention:

- **Perimeter 1: marked in red**

This area shall host the project of the New Library and its relative outbuildings. The ground on which the building is constructed, and its external area connected to the building shall be included in this area, furniture and lighting, too. The degree of elaboration shall be adequate to the design project that the competitor is willing to present. The project shall also precisely define those outdoor areas that are connected to the new building (that can also be fenced) and shall also define those areas broadly and strategically connected both to the New Building and the furnished green spaces around the library, thus always bearing into account the perimeter.

- **Perimeter 2: marked in green**

For this area, the designer shall provide guidelines for green spaces, lighting, pedestrian and bike paths and lanes, street furniture, so to define, along with the project for *Perimeter 1*, an overall synergic framework of intervention on the entire lot. When setting up their guidelines, competitors are invited to consider following requirements:

- in the elaboration of the guidelines for green spaces, candidates shall consider care and protection of existing trees according to document 3.3 - Document *Current situation*;
- make use of tree and shrub species that are typical of the Milanese urban landscape; they shall be of easy maintenance and appropriate to public spaces and shall well combine with existing vegetation. Please bear in mind that the management and cleaning cost of public Milanese green spaces is equal to € 2,00 sqm/year;
- existing services shall be well connected to the library in order to make it easy accessible and usable, also through pedestrian paths and bike lanes;
- the green area will be endowed with a lighting system that will be located along the pedestrian paths; this lighting system will strengthen the existing one;
- implementation of works of completion, partial replacement and extraordinary maintenance of pavement, flower-beds and vegetation with the aim of recovering and enhancing existing green belts. The competitor shall assess major transformation of the pavement also from an economic perspective;
- the existing fountain shall be maintained and enhanced;

-
- elements of urban furniture (seating, benches, litter bins, dissuaders, parapets, etc) shall be of the same type currently used in Milan's public parks;
 - durable and easy-to-maintain materials shall be used; these materials shall well complement existing materials and those foreseen for the New Library, to implement a relevant transition between the two areas. Pavements material shall be easily removed and replaced in case of partial demolition and reparation for works at underlying services;
 - the playground shall be, if necessary, moved to another area, in order to design a bigger and more adequate space.

2.3 Restrictions and design guidelines

Perimeter 1 and Perimeter 2 present specific restrictions: existing trees, underlying services in this area, along with restrictions linked to two bike-sharing stations and a pedestrian and bike lane that the City Government shall implement in the future.

In the area interested by the Competition, there are trees of great natural beauty that shall be preserved, trees that can be moved through a precise transplantation procedure and other trees that may substitute those that might be torn down.

For types and categorisation of trees, correct position of bike-sharing stations, bike lane and underlying services, please refer to the document 3.3 - Document *Current situation* attached to the present Competition notice.

For bike-sharing stations, please note that:

- *station 1*, included in the *Area for Library project - Perimeter*, will be one-sided with 30 stalls, equal to 25x2 m; it will temporarily be located in the public parking space of the covered market next to 4 places for free-car-sharing and 4 places for station-based car-sharing ("mobility hub"); once the New Library will be completed, station 1 will be moved into the project area (no specific indication on the position is given in order to not to pose further restriction to the designer). Station 1 will be endowed with a system of low voltage at one of the two ends of the bike rack with a well (40x40cm) for the positioning of the switch; the station shall be placed close to the public market to enable reallocation of bikes with a service van;
- *station 2*, included in the *Area for green guidelines, Perimeter 2* shall include 30 stalls with enough space for manoeuvring bikes, shall be situated next to the pedestrian and bike lane (to be implemented in the future) and shall foresee a belt to protect existing trees and their roots.

It remains important to provide the two bike-sharing stations with adequate accessibility for maintenance vans that reallocate and control proper functioning of bikes.

Concerning the future pedestrian and bike lanes, the City Administration underpins the importance to guarantee continuity with the bike lane spanning from Piazza Napoli to Via Giambellino towards Via Giambellino. Moreover, the connection between Via Giambellino and Via Lorenteggio shall be enhanced, whereby the bike lane will be extended along the green belt next to the mobility hub till the sidewalk, thus guaranteeing, with a proper slide, access for bikes from the street of Via Lorenteggio to the bike lane and vice versa. The pedestrian and bike lane within Perimeter 2 shall also guarantee access to Via Degli Apuli.

Further indication on lighting: the entire lot has 5 functioning light-towers. The project is supposed to replace the two towers in *Perimeter 1* and to replace them with an equally effective lighting system, however it shall be proportionate to a more “urban scale”; the three towers in *Perimeter 2* shall be preserved and perhaps enhanced through luminaires placed on shorter light posts. Please refer to the document 3.4 - *Plan of subservices*.



2. View of light-towers to be eliminated

The project shall take into account connections between the New Library and public spaces/buildings, among others, the covered public market that spans outwards through a raised platform, (designed by the Gruppo di Lavoro G124 - Renzo Piano); this platform aims at attaining continuity between the inner commercial space and the outdoor space, thus enhancing the area towards the park.



3. View of the raised platform just outside the covered market.

The existing library will be removed of its current functions; however, it will still be part of the urban fabric. The building will be renovated and will host those associations that now avail themselves of the so-called “Casetta Verde” (so-called “green house”).

The City Government has decided to keep the existing library, that was designed by engineer Arrigo Arrighetti in 1957. According to the document *Linee di indirizzo funzionali* (functional guidelines), Mr. Arrighetti developed the building as a “district library” of the ‘60s, thus including it in an urban fabric featuring high-population density and numerous buildings of social housing.

The building recalled a pavilion with gable roof, two interlocking volumes, similar in shape, but of different dimension: the smaller part hosted the entrance door, toilets and a small office; the bigger one consisted of a one-room space, with no pillars and flexible; it hosted the reading hall with open shelves, broad windows overlooking the garden. The overall surface is equal to 220 sqm.

The transparent shuttings of the two opposing facades were made of steel and timber profiles for windows. The architectural layout preserves its original features; the southern façade, with direct sunlight has smaller windows, as a result of the two architectural volumes. The northern façade, with indirect sunlight is broad and has no sunshade and directly overlooks the garden. In 2012, following an action of asbestos removal, the building underwent significant amendments, such as the replacement of windows profile of the northern façade. Further interventions have been carried out, however with no consistent project.

The building, whose furniture has been substituted over time, preserves a similar setting to the original one. Currently, the library is under-sized if compared to the needs and it is not sufficient in terms of the functions and services it should provide.



4. View of the front part of the Library - Lorenteggio District



5. View of the “Casetta Verde” that will be knocked down once the New Library will be ready

Please note that the southern border of *Perimeter 2* hosts a fountain/ amphitheatre made of stone and brick designed by architect Antonello Vincenti back in the '50s/'60s, whose architectural imprinting strongly marks the area and that shall be preserved.



6. View of the fountain/amphitheatre

For assessment on the accessibility of the lot, please note that the area includes working sites of Metro 4 for the implementation of the metro station “Gelsomini”, at the crossroad between Via Lorenteggio and Via Primaticcio. This station stands for an added value for the entire district, as well as a pivotal element to reach the New Library from the rest of the City,



7. View of the working site of the future Station “Gelsomini” - Metro M4

The building complex that will host the New Library and its functions shall entail an adequate architectural design and shall comply with a number of general requirements that are relevant for the effectiveness of the project.

3.1 Volumetry and morphology of the building complex

The building complex of the New Library shall have a minimum dimension of 1,500 sqm and a maximum extension of 2,0000 (overall surface). Moreover, it shall also entail a further amount of external pertaining area, that shall be well defined and separated from the rest of the area of *Perimeter 1*. All parts not included in the future building and in its pertaining area will be part of the guidelines project.

As to the morphology of the building, it can revolve on a maximum of two levels above ground (it can also be conceived on a single level). Upper storey or double volumes are allowed; if necessary a basement or hypogean space, used solely as warehouse, logistics or service space for the proper functioning of the library can be foreseen. With regard to the composition and architecture, the building shall have strong recognizability and identity in order to become a reference place for the district.

3.2 Recognizability, identity and relationship with the context

The designer shall give the New Library a strong architectural identity with a distinct “iconic value”. The building shall be clearly visible from the nearby streets, for those reaching the library on foot, by bike or by car from Via Lorenteggio or Via Giambellino. The complex shall be visible, easy to grasp in all its parts. Roads and paths from nearby areas towards the building shall also be easily visible, so that orientation and movements for users will be easy. The designer shall give special attention to the elaboration of pedestrian pathways and external connections (that might also go through the library), as well as connections with the covered market, the garden, the existing library and surrounding public spaces. The designer shall also take into account connections with the areas hosting buildings of social housing, as well as possible interferences between the market’s parking space and the connection with Via Lorenteggio as underlined in *Perimeter 1*. It is appropriate to foresee a main entrance overlooking the square/park where all external connections and pathways may converge. However, the lateral sides shall not appear as secondary. When users enter the building, they shall easily recognise all functions and be smoothly oriented to reduce the use signs/boards to the minimum. The new image of the building shall convey the idea of an open, friendly and culturally vibrant place. No “psychological barriers” shall prevent people from entering the library, a place that is supposed to promote the exchange of ideas, meeting among people, learning and creativity. The designer shall consider the building in relationship to its use in terms of time and perception. Eventually, the building shall live 24/7, despite the fact that its opening hours will not reflect this timing.

3.3 Continuity and perception of outdoor and indoor spaces

Attention must be paid to aspects of continuity and integration between building spaces, outdoor spaces strictly pertaining to the Library and outdoor public spaces, also assessing the possibility to exclude a real solution of continuity between them.

The relationship between “indoor and outdoor spaces” can be translated into a series of precise architectural choices. For example, opting for transparency and permeability among spaces will enable looking into spaces and inner activities, thus also designing those spaces with no seamless solutions between indoor and outdoor spaces. Uniformity of material for pedestrian pathways, that might reach the inner part of the building, could promote this transparency and permeability.

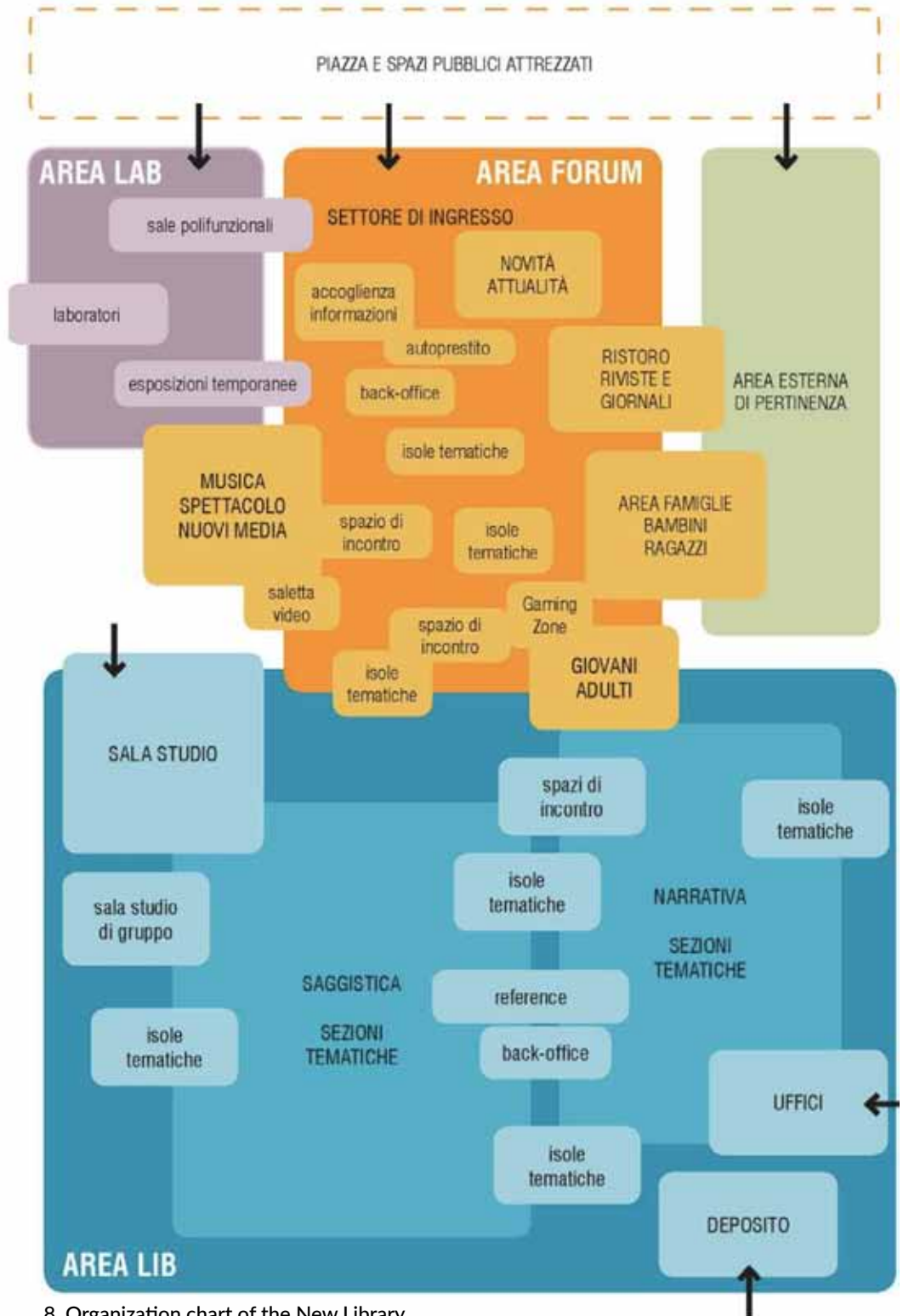
A pedestrian pathway crossing the building can be conceived, so that the occasional passer-by feels immersed in the activity of the new building, thus remaining an external observer. To this extent, the project shall match “closure and secrecy” pivotal for the building, with the principles of “permeability and crossing” that are essential for the context in which the building is located, thus finding a proper balance between the two needs.

The green element is a fundamental principle of the Library’s design. It can be used as an element of integration and continuity of the building with the urban context and can also permeate the inner spaces (greenhouses, winter garden, etc) or it can be absorbed through innovative technology (e.g. green roof). The designer shall take into account “green building” aspects. Issue related to energy, energy savings, renewable energies, ecology and reduction of environmental pollution.

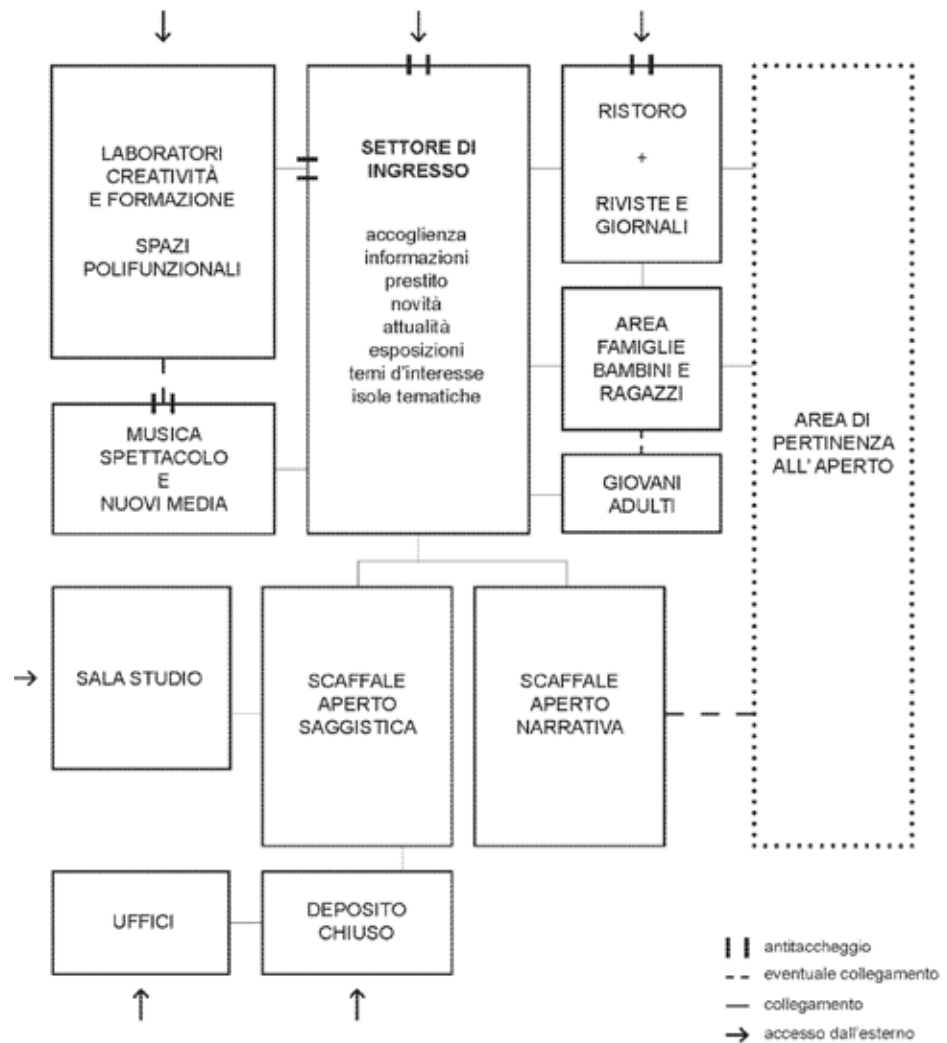
The aim – that is by now consolidated on a global level – is that of limiting or eliminating the building’s negative impact on environment and users, thus harmonizing to the highest extent the building with the context. It will be possible to foresee strategies of passive building and protocols to assess and improve energy and environment aspects.

3.4 Organization of spaces and internal pathways

Inner setting and organization of activities of the complex shall be clear and well structured, according to the guidelines of the document *Functional guidelines* and as outlined below.



8. Organization chart of the New Library



9. Functional chart of the New Library

The designer, according to the present indications, shall conceive a project where space and path hierarchy enables inner circulation and easy-to-read organization of functions. The building project shall be easily understood in its single parts and connections. Proposals where flexibility of spaces according to their use will be awarded. Specific parts of the building can be defined, in order to shape “isles” that could temporarily host different activities than reading or book loan. Inner distribution and structure shall pursue an adequate organization of spaces, so that a differentiated use of the various parts of the library is possible. This shall be taken into account also to elaborate a proper differentiation (as to time and modes) of air-conditioning and lighting. Specifically, the building shall foresee the chance of using specific areas/rooms for “civic purposes” for the inhabitants, also at times when library services are closed to the public.

Inner pathways shall be short, easily recognisable, directly and smoothly accessible; they shall be clearly identified from the entrance, so to enable easy orientation. Pathways for the public and users shall be different from those for staff people, loading and unloading of material (especially documents for book loans, but not exclusively) for which access of transport vehicles must be taken into consideration.

Library spaces can revolve around different levels, but no more than two levels above ground. Upper storey, mezzanine floor or double volumes are allowed, however they shall be always accessible in order to shape a fluid and diverse space where curiosity and desire for exploration is fostered.

An essential element for such building is natural lighting. As a matter of fact, sunlight, if duly controlled, is a major resource to provide visual comfort to the audience of the library; on the contrary, if neglected, it can be a source of nuisance for readers. To provide highest comfort, the designer shall give great attention to direct sun radiation hitting possibly existing transparent parts of the building, thus conceiving smart solution to prevent sunlight refraction and to control light.

3.5 Materials and finishes

Materials shall be simple, long-lasting and functional. For example, when choosing materials for glass-windows, functional and aesthetic elements, as well as technological repercussions on climate control (cost for the system and energy) shall be carefully assessed. Moreover, management and maintenance costs shall be considered, also in the light of the critical social context of the district. The designer shall provide its work, making reference to all specific materials that are to be implemented, with special attention to construction technologies in relation to their realization timing, durability, environmental sustainability and maintenance. In this regard, the building shall always be clean and well-maintained, both internally and outside, so that it can be seen as “new” and last as long as possible, thus preventing episode of vandalism.

Inside, the choice of material and finishes will strongly mark the Library’s quality and the environment. Following features (and many more) will represent the foundation of the perceptive experience of the inner space and will directly involve users’ sense perception: colours and features of surfaces, rough or smooth, hard or soft, matt or shiny; how surfaces will absorb or reflect light, the sound they could echo or absorb, the sound they would produce if touched, hit, stepped on; how they react to aging, abrasion resistance.

The New Library, through a careful selection of material, lights, colours, shall be designed with the intention of enhancing the feeling of safety of the building and of its surrounding spaces, also taking into account opening hours.

The designer is invited to implement the most suitable materials for the building, thus considering both their aesthetic and functional value and taking into account all specific features of each single material (e.g. sound absorption) and how they can be used at their best in the public library.

3.6 Furniture

The designer is required to provide the architectural plan of the building and also the furniture and layout for the New Library. As a matter of fact, the City Government – within the economic framework for the realization of the library – has allocated a specific sum for both standard and tailor-made furniture.

The amount for tailor-made furniture shall not be higher than 20% of the overall sum for internal layout. The designer shall feel free to opt for standard or customized elements of furniture. However, furniture represents an added value of the project and shall contribute to the overall synergy of space and library's functions and activities. The furniture design also includes the lighting plan that shall guarantee the proper amount of light (merely lux) and also improve the general inner atmosphere of the library, thus identifying the right degree of lighting for all spaces.

3.7 Engineering of the building complex

The architecture and the engineering that define the building represent an added value for the work and shall comply with the regulatory framework on functional safety.

The main design guidelines of the plant engineering system are listed below:

- provision of energy and connection to network facilities: the building shall be endowed with just one source of energy for each type of plant to be connected to the public networks. Utilities shall be realized according to indications given by public utilities operators;
- electrical and lighting installations: spaces included in the project shall be classified according the ruling regulatory framework, in order to establish suitable protection measures against direct and indirect contacts included in the current technical legislation. Electric plants shall be conceived as a "Zone-oriented architectural design". A zone is an environment and/or space with equal purpose of use/function. Single zones shall be endowed with distinct protection systems on different circuits (e.g. for light circuits and terminal energy sockets). Zone surface plan shall be adequate to the project with maximum dimension of 600 sqm. Energy distribution shall be designed to guarantee maintenance activities to the plant, after its implementation, thus enabling safe access to all parts of the plant. In order to guarantee resilience of the plant, terminal circuits shall respond to criteria of subdivision of functional utilities, both during activities and in case of lack of service due to failure or malfunctioning. Technical lighting systems shall be chosen according to standard solutions targeted at reducing energy consumptions, at making use of natural light, when compatible with restrictions of the architectural design. Lighting requirements, both during ordinary functioning and emergency lighting, shall comply with applicable technical regulations. Specifically, the emergency lighting system shall foresee emergency lighting options in all areas of the building with specific devices where it might be necessary and/or possible to fix the malfunctioning and restore the standard functioning. In the light of the increased citizens' awareness to electric mobility, the project shall also assess the opportunity to include stations to recharge e-bikes;

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- plants powered by renewable energy: the building shall be endowed with systems fuelled by renewable energy, according to the applicable regulatory framework. Plants shall be included on outer building's covers and roof. Specifically, installation station of plants shall be in line with legislation on workplaces and be safely accessible to operators;
 - automation systems: automated systems (e.g. automated entrance, windows) ameliorates the building's usability. Should such systems be included, complete systems available on the market are to be preferred to systems to be assembled;
 - TV, radio and antennas: the project shall assess the opportunity to install DVB and SAT TV channels;
 - electronic equipment: electronic equipment, such as fieldbus and regulation systems shall be designed using open systems with standard protocols. Open systems shall enable the connection of actuator and sensor devices, also from different producers. Electronic cables and wiring shall be separated from the electric ones. The designer shall foresee an anti-intrusion protection system, in line with the applicable regulation. The Administration shall be able to remotely control the system. Due to the various functions of the library, some spaces may include sound and broadcasting systems for meetings and conferences. In order to guarantee flexibility of the amplification system, microphone shall be radio-frequency ones. The building shall have fixed LAN connection and WI-FI;
 - heating and air-conditioning: the project shall comply with the applicable legislation on limitation to energy consumption. Preferably plants shall be implemented through the use of a heat pump. Highest energy savings shall be attained. Validity of solutions shall be demonstrated through calculations according to the applicable legislation. Considered the specific use of the building, the system shall contain a low-noise system and be in line with ruling regulations. The system shall be divided into homogeneous areas, thus adopting the very same standards indicated for the electric plant. Moreover, it shall be endowed with a system of automatic self-regulation according to the thermohygro-metric inner conditions. Specific attention shall be given to components' positioning and typology, in order to limit malfunctioning caused by non-authorized users' behaviour. The solution adopted shall guarantee easy and safe access to operators and functional subdivision of circuits shall be functional to the prevention of malfunctioning episodes. The system shall be endowed with remote management controls, that will be then provided by the Administration;
 - ventilation of spaces: engineering for this part shall be elaborated according to the same criteria for heating and air-conditioning;

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- lifting facilities for people and cargo: if architectural barriers are present, specific solutions to overcome them are to be implemented;
 - fire protection: the building shall have an adequate fire protection system, according to applicable legislation. Fire detection systems shall communicate and be interconnected with the specific equipment provided by the Administration.

3.8 Furniture design quality

As to architecture and materials, it is important to assess durability and maintenance of pieces of furniture. These elements will indeed undergo significant stress and will strongly affect the quality of spaces. Consequently, choice of furniture is pivotal to attain an excellent product. Each piece of furniture shall be selected/designed to convey the feeling of an informal, contemporary and attractive space. Further, as already outlined for space, the layout shall be conceived in a flexible manner (e.g. library spaces can be temporarily used for events, book presentations, conferences or event parties. At the same time, other spaces can be used for other activities (e.g. courses, meetings). All seats shall be ergonomic and easy-to-use also for elderly people. Shelves shall be accessible for all users and shall contribute to make spaces flexible thanks to modular systems or wheels.

Please find here a list of pieces of furniture (not exhaustive):

- any type of seats;
- tables and desks for reading and consultation;
- one-sided and two-sided bookshelves;
- containers/boxes for newspapers and magazines (latest unbound copies), with flap for the most recent number and space behind to store older numbers;
- container units with drawers, matt or transparent doors (storage of document on special supports, storage of little used documents, etc);
- elements for signs: panels to be placed on the sides of shelves, support for panels (to be installed on the upper part of shelves and bookcases); tags (to be inserted or magnetic – to be place on the front parts of shelves); self-bearing elements to be inserted among book (in plastic o timber, with tags or names).

Particular attention shall be given to the choice of finishes, with regard to tactile comfort (roughness of surfaces, thermal behaviour of materials, etc), acoustic aspects (noise produced by accidental impacts, or as a result of laying books, capacity of absorbing and reflecting plane noise, etc), visual impact (colour and material consistency, disturbing light reflections, etc).

As to display units for audio-visual documents, please find here a list of elements (not exhaustive):

- container with one or two horizontal trays to welcome CDs, VHSs, with also underlaying drawers, if necessary;
- tilted container, with scaled shelves;
- exhibition panels to be fixed on the walls (especially for CDs and DVDs), unlockable anti-theft systems with key to enable reading covers;
- pull-out shelves or tilted shelves to show VHSs, CDs, DVDs, ect.;
- simple vertical panels with pockets or low-depth shelved to show CDs or DVDs.

As to the furniture for CDs and DVDs, please note that within a short time, these elements might become obsolete and might be replaced by other devices; it would be then appropriate to buy

normal shelf systems to be equipped with tilted shelves and pull-out elements to show CDs and DVDs. All types of shelves being produced for library, currently enable this solution, which is considered as the most appropriate.

COMPULSORY FINANCIAL LIMITS AND ESTIMATED COSTS FOR THE INTERVENTION

Within the Program Agreement, the maximum forecast expenditure for the realization of the New Library and its pertaining areas is equal to € 3,860,000 (VAT excluded).

- The amount for the construction works is equal to € 3,400,000 (VAT excluded). This figure includes also adaptations of facilities for underlying services linked to the New Library.
- The amount for the internal layout is equal to € 460,000 (VAT excluded) that shall cover standard (80%) and customized furniture (20%), lighting, audio-visual equipment and Radio-Frequency Identification equipment for book self-loan and self-return and for the management of anti-theft systems at gates.

Within the above-mentioned figures, the categories included in the works are outlined in the following chart, that describes the composition of the work and correspondences between:

- Classification according to Decree of the President of the Republic 207/2010;
- Classification according to Law 143/1949 (and following amendments and integrations);
- Classification according to Decree of the Ministry of Justice of 17.6.2016.

Amount of the work	Categories DPR 207/2010	Categories Law 143/1949	Categories DM Of Justice 17.6.2016
€ 1.440.000,00	OG 1	ID	E.13
€ 630.000,00	OG 1	IG	S.03
€ 465.000,00	OG 11	IIIB	IA.02
€ 465.000,00	OG 11	IIIC	IA.04
€ 370.000,00	OS 24	IB	E.17
€ 370.000,00	OS 24	IC	E.18
€ 90.000,00	OS 32	ID	E.19

€ 3.830.000,00 Overall amount of works

€ 30.000,00 External charges for safety

€ 3.860.000,00 sum

REGULATORY FRAMEWORK

Main regulations, both of technical and procedural nature, are listed below. These shall be used for the design of the object interested by the present Competition

The list given by way of indication only; competitors shall comply with the entire Italian technical regulation applicable to the intervention, also taking into account nature and specific features of each project

Building Law

Legislative Decree No. 50 - 18.04.2016 - Code on public procurement as subsequently amended and supplemented;

Decree of the President of the Republic No. 207 - 05.10.2010 subsequently amended and supplemented for its still enforceable parts

Decree of the President of the Republic No 380 - 06.06.2001 as subsequently amended and supplemented Consolidate Law on regulatory framework for the building sector

Health and safety in the workplace

Legislative Decree No. 81 of 09/04/2008

“Implementation of art. 1 Law No. 123 – 3.8.2007, concerning the protection of health and safety at the workplace” and subsequent amendments and integrations: Legislative Decree No 106 – 3.8.2009; Law No136 – 13.8.2010; Legislative Decree 50/2016

Local Regulations

Regulation on construction of the Municipality of Milan

Regulation on hygiene of the Municipality of Milan

Regulation on the use of Green Spaces

Green roofs

Requirements document No.6 in the attachment B of the Regulation on construction UNI Standard 11235-2015

Structures

Technical regulatory framework for construction 2016

02.02.2009 – Ministerial Circular No. 617

Instructions for the application of the New Techniques for Construction as of Ministerial Decree 14.1.2008

Ministerial Decree 14.01.2008 – Official Journal No. 29 of 04.02.2008

“Approval of the new techniques for Construction”

22.12.2005 – Provision of the Lombardy Region No. 8/1566

Implementation of the consolidation Act No. 380 of 6.6.2001

“Structural and aseismic adaptation”

Regional Law No. 12 - 11.03.2005

“Prevention from geological, hydro-geological and seismic risks.”

And following amendments and integrations as of Regional Law No. 5 – 10.10.2009 (for its still enforceable parts)

Law No. 1086 05.11.1971

“Technical regulation for reinforced, normal and pre-compressed concrete and for metal structures”

Acoustic**Law of the Region of Lombardy No. 13 10.08.2001**

Law of the Region of Lombardy against noise pollution

Decree of the President of the Council of Minister 05.12.1997

Noise passive requirements for buildings

Law No. 447 – 26.10.1995 (and following amendments and integrations) Framework Law on noise pollution

Decree of the President of the Council of Minister - 1.3.1991

Maximum limits of noise exposition in living and external environments

Energy saving**Decree of the Director of the organizational unit No. 176 - 12.01.2017**

«Update on the provisions concerning energy efficiency in buildings and energy performance certificate – it substitutes the provision of the following decrees: No. 6480/2015 and No. 224/2016»

Provision of the Commission of the Regional of Lombardy No. VIII/5018 of 22.12.2008

Provisions concerning building's energy certificate, implementing Legislative Decree No.192/2005 and articles 9 and 25 of Law of the Region of Lombardy 24/2006

Legislative Decree No. 311 of 29.12.2006

Amendments and integrations to the Legislative Decree No. 192 - 19.08.2005 (Implementation of EU Directive 2002/91/CE on buildings' energy performance)

Law of the Region of Lombardy No. 24 - 11.12.2006

Regulation on prevention and reduction of emissions to safeguard health and environment

Decree of the President of the Republic No. 412 of 26.8.1993

Regulation on provision for planning, installation, functioning and maintenance of buildings' thermal plants for energy saving purposes, according to art. 4 of Law No. 10 – 9.1.1991;

Law No.10 - 09.01.1991 (and following amendments and integrations)

Regulations on the implementation of the National Energy Plan, concerning energy, energy savings and development of renewable energy sources

Minimum Environmental Criteria

Decree 11.1.2017 - Adoption of minimum environmental criteria for inner furniture, building sector and textile products;

Decree 5.2.2015 - Minimum environmental criteria for the purchase of urban furniture products

Decree 13.12.2013 - Minimum environmental criteria for the concession of services related to maintenance of green areas, purchase of soil improvers, ornamental plants and irrigation systems and supply of electrical equipment and electronic office equipment

Obstacles in the built environment

Decree of the President of the Republic No. 503 - 24.07.1996

Regulation on the elimination of barriers in buildings and public space

Ministerial Decree – Public Works No. 236 14.06.1989

Technical provisions to guarantee accessibility, adaptability and visibility of private buildings, social housing, in order to overcome obstacles to the built environment

Law of the Region of Lombardy No. 6 - 20.02.1989 n.6

Provisions on the elimination of obstacles to the built environment and technical prescriptions for adaptation

Safety and anti-fire prevention

Decree of the Minister of Home Affairs - 07.08.2012

“Provisions on application of fire prevention and documents to be attached, according to art. 2, paragraph 7 of the Decree of the President of the Republic No. 151 - 1.8.2011”

04.05.2012 – Protocolo note No. 6334

Explanations to the note of 07.02.2012 protocol DCPREV No.1324 - “Guide for the installation of photovoltaic plants - Edition 2012

07.02.2012 - Note DCPREV protocol No. 1324

“Guide for the installation of photovoltaic plants”

06.12.2011 - Decree

Amendments to the Decree of 3.11.2004 on the installation, maintenance of the devices for the opening of doors installed on escape routes, concerning safety in case of fire

06.10.2011 – Letter No. 13061

“Regulation on provisions for fire prevention, according to art. 49, paragraph 4-quater, of the Legislative Decree No.78 31.5.2010, converted with amendments by Law No. 122 – 30.7.2010” First applicative provisions”

Decree of the President of the Republic No. 151 - 01.08.2011, n. 151

Regulation on the simplification of the discipline for fire prevention procedures, according to art. 49, paragraph 4-quater, of the Legislative Decree No.78 31.5.2010, converted with amendments by Law No. 122 – 30.7.2010”

Ministerial Decree 09.03.2007

“Measures for fire-resistance of buildings for those activities subject to the Control of the National Fire Brigade” and Letter P414-4122 – 28.3.2008 and further explanations”

16.02.2007 – Decree of the Minister of Home Affairs

Fire-resistance classification of products and elements for the building sector

Ministerial Decree 15.03.2005

“Requirements of fire reaction for products of the building sector installed for activities subject to specific technical provisions for fire prevention according to the European class system”

Ministerial Decree of 10.03.2005 amended by Ministerial Decree of 25.10.2007

“Fire reaction classes for products of the building sector to be used in works where fire safety is mandatory”

07.01.2005 – Decree of the Minister of Home Affairs

Technical and procedural provision for the classification and homologation of portable fire extinguishers

03.11.2004 - Decree of the Minister of Home Affairs

Provisions for the installation and maintenance for devices for doors installed on escape routes, concerning safety in case of fire.

07.06.2001 Circular of the Ministry of Home Affairs P741/4101

Clarifications on fire prevention activities (to be transmitted Via computer)

Ministerial Decree 06.03.2001

Amendments and integrations to the Ministerial Decree 19.8.1996

Ministerial Decree 10.03.1998

General criteria on anti-fire safety in case of emergency at the workplace

23.01.1997 Circular of the Ministry of Home Affairs No.1

Explanations and operational guidelines to Ministerial Decree - 19.8.1996

19.08.1996 Decree of the Ministry of Home Affairs

Technical fire prevention rules for the design, construction and operation of public entertainment venues

D.M. 30.11.1983

General terms, definitions and charts for the fire prevention

UNI EN Standard 1992-1-2

Planning of structure made of concrete- Part 1-2 – General Rules – Structural planning against fire

UNI VVF10779 - UNI EN 12845

Hydrants network

Vertical provisions for single activities for fire prevention.

Estimation

Municipal price list vol. 1.1, 1.2, 2.1, 2.2, & vol. Technical specification

Provisions for measurement and assessment to be found in vol. 1.1, 1.2, 2.1 e 2.2 of the above mentioned municipal price list.

Further:

Legislative Decree No. 17 del 27.01.2010

Implementation of EU Directive 2006/42/CE on machinery, amending Directive 95/16/CE on elevators

Decree of the President of the Republic No. 459 - 24.07.1996

“Directive on machinery” limited to the still enforceable articles of Legislative Decree No.17/2010

Ministerial Decree - 01.04.2004

Environment and territory protection – Use of eco-active materials

Legislative Decree No. 152 - 03.04.2006

Consolidated Law on Environment

Ministerial Decree No. 37 - 22.01.2008

Regulation on art. 11 -quaterdecies, paragraph 13, letter of Law No. 248 - 2.12.2005, on the reform of the provisions on the installations of plant within building and following amendments and integrations

UNI standard 8612 - Provisions on motorized gates for the building sector;

UNI standard 8725 - Provisions on elevator for residential buildings;

UNI standard 9801 - Provisions on elevator for disabled people;

CEI standard 648 - 11/17 - Provision on electric plants;

ISO standard 9001 - Provision on certificates for quality systems;

Specific UNI provisions for special services due to special processing or materials of projects.

