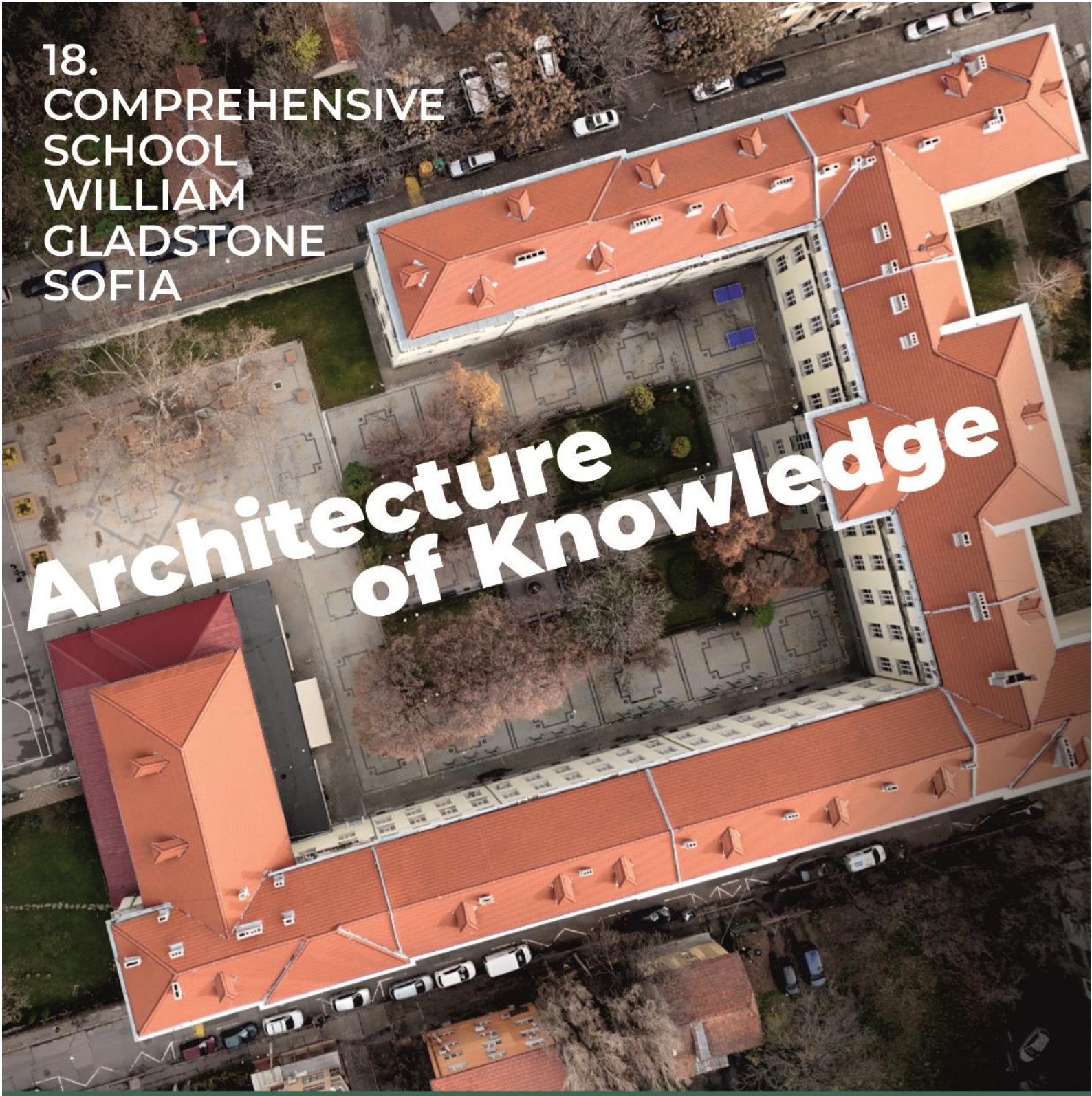
18.
COMPREHENSIVE
SCHOOL
WILLIAM
GLADSTONE
SOFIA



Architecture of Knowledge

NEW INTERNATIONAL
ACADEMIC ARCHITECTURAL
WING COMPETITION

Technical Brief

18. COMPREHENSIVE SCHOOL WILLIAM GLADSTONE SOFIA

Architecture of Knowledge

INTERNATIONAL ARCHITECTURAL COMPETITION

NEW ACADEMIC WING

Technical Brief

Contracting Authority:

Director of 18. Comprehensive School "William Gladstone"
under Art. 5, para. 2, item 14 of the PPA

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01. Introduction

Accumulated history is not a frozen memory, but a living environment that demands development.

18. Comprehensive School “William Gladstone” is among the oldest educational institutions in Sofia and a symbol of enduring tradition in Bulgarian education. Today it is also the largest school in the country – a community of hundreds of students, teachers and families that continues to grow. In the 2025/2026 school year, the school has 2,289 students from first to twelfth grade.

The competition for a new academic wing aims to expand the school in order to enable the development of its educational resources and the transition of students to a single-shift timetable. The need for a new academic wing is driven by the real need for more space, better conditions and a contemporary learning environment that responds to the dynamics of modern education.

The extension will support the transition from the current two-shift system to a full-day organisation of the educational process, creating better learning conditions and opportunities for more diverse educational and extracurricular activities.

The extension must preserve the spirit of the school – architecture that respects tradition while also creating a new identity.

02. The Competition

Subject

The subject of the competition is the selection of a concept architectural design for a new academic wing of 18. Comprehensive School “William Gladstone” – Sofia.

The competition proposal must also include the functional organisation and landscape design of the existing schoolyard, which will be reorganised in line with the future development of the new academic wing, as well as the organisation of access points and circulation to ensure the safe movement of students, teachers and visitors.

Competition Objectives

The competition seeks an architectural solution that will open the next chapter in the history of 18. Comprehensive School “William Gladstone”.

Competition proposals must meet the following requirements:

01 To create a contemporary learning environment that responds to the dynamics of the educational process and the diverse needs of students and teachers.

02 To form an integrated educational complex uniting the new building, the main school building and the Bulgarian-Japanese Cultural Center.

03 To propose a clear and recognisable architectural concept that combines tradition and modernity, respecting the historical identity of the school while displaying a distinctive contemporary architectural signature.

04 To treat the school as an organic part of the wider urban context – responsive to the character, scale and historical setting of the central city area.

03. About 18. Comprehensive School

Development of Schools in Bulgaria

In modern Bulgarian history, education was one of the first driving forces behind the creation of the new state after the Liberation in 1878. Until then, Bulgarian schools were mainly located in churches and monasteries, and secular education could only be obtained in Greek schools. The first Bulgarian secular schools appeared in the mid-19th century.

After the Liberation, education began to be regulated by the state so that schools could be free, secular and compulsory for both boys and girls.

Three levels of education were introduced, with a total of 11 years of schooling, under the supervision of the Ministry of Public Education. Subsequent changes in the 20th century included extending schooling to 12 years, compulsory primary education, the introduction of entrance examinations for secondary schools and the transfer of responsibilities to local authorities.

After the coup of 9 September 1944, the new socialist regime brought schools into a single educational system, the same for girls and boys, and introduced the new state ideology into the curriculum. Increasing emphasis was placed on training a workforce for the developing industry. Subsequently, schools became specialised at upper-secondary level and were divided into science and mathematics, humanities, vocational and other schools. After 1979, secondary education became compulsory.

After the fall of the regime in 1989, the system was largely retained, but the curriculum changed, with ideological subjects and compulsory Russian language lessons abolished. Private schools also opened. In recent years, compulsory education has been changed to end at grade 10 (first upper-secondary stage).

Current Trends

In recent years, Bulgarian education has been undergoing an active process of development and modernisation, gradually moving closer to established European and international standards. Results from international studies such as PISA still show areas where further effort is needed. Nevertheless, there are positive trends related to the renewal of the learning environment, the introduction of contemporary teaching methods and the fostering of students' skills. The Bulgarian education system is actively implementing STEM (science, technology, engineering and mathematics) approaches and building modern STEM centers and high-tech classrooms that encourage hands-on learning, interdisciplinary thinking and the development of digital skills. Bulgarian students continue to achieve impressive results and win medals at prestigious international science olympiads, demonstrating the high potential of the education system.

Demographic processes in the country pose challenges to the school network, leading to the restructuring or closure of schools in a number of smaller settlements. At the same time, the large cities, and above all Sofia, are developing in the opposite direction – student numbers remain high and in some districts are even increasing.

This creates a need to expand the existing educational infrastructure, as some schools still operate a two-shift system due to a shortage of teaching space.

This is why investment is increasingly being made both in new teaching buildings and in the modernisation of existing schools, such as the planned new building of 18. Comprehensive School "William Gladstone". This investment is part of a broader trend towards creating a higher-quality, contemporary and sustainable learning environment that combines modern architecture, innovative educational technologies and conditions for applying contemporary teaching methods in line with European and international standards.

History and Context

The history of today's 18. Comprehensive School "William Gladstone" began in the 1907/1908 school year as the Third Boys' High School – successor to the three-grade schools in Sofia's Yuchbunar district and a branch of the First State Boys' High School.

Officially consecrated in 1910 and named after William Gladstone – the statesman who spoke out in defence of the Bulgarians in 1876 – the high school quickly established itself as a model educational institution of high academic standing. Its teachers included some of the most erudite Bulgarian intellectuals, and its alumni include figures who left a lasting mark on Bulgarian science, culture and public life.

The period in which the high school was built was marked by intensive population growth in the capital, a shortage of school places and a growing need for suitable buildings with hygienic conditions for educating thousands of children. At that time, many school buildings provided an unhealthy environment for students, with heating, ventilation and lighting often of very poor quality. At the same time, due to the shortage of building stock, some Sofia schools and their branches were housed in private buildings entirely unsuitable for quality education. "The poisonous air that children are condemned to breathe for a full 6 hours in unhygienic, low, cramped and rotting rooms; the poor and unhygienic lighting of these rooms; the seats, utterly unsuited to their age and uncomfortable, on which they are condemned to sit for hours – these are the main causes of the frailty, short-sightedness and spinal deformity of your children" – these eloquent words were spoken by the headmaster Dr Panchev on the occasion of the consecration of the Third Boys' High School in 1910. All this reveals the pressing need to construct new school buildings at the beginning of the 20th century. This urban, architectural and social challenge was even more pronounced in the peripheral and severely underdeveloped districts of the capital, such as "Yuch Bunar" ("Three Wells"). In this context, the modernisation of educational infrastructure in Sofia became a leading priority during the terms of several Sofia municipal administrations. Particularly favourable were the periods under mayors Martin Todorov (1905–1908) and Evstati Kirkov (1908–1910), when the old Third Boys' High School – today's 18. Comprehensive School "William Gladstone" – was built.

The chronology of the building's construction begins in 1904, when the site for a new high school in "Yuch Bunar" was designated. The choice of location was not accidental; it expressed the idea of supporting the development of Sofia's large working-class district. The foundation stone of the new building was laid in December 1905 in the presence of the then Minister of Education, Ivan Shishmanov. Construction continued until 1909, and on 22 September of that year

the high school moved into the newly built building. The official consecration took place at the beginning of 1910 in the presence of Prince Boris of Tarnovo, Minister of Education Nikola Mushanov and General Kiril Botev. The presence of the heir to the throne reveals the high public importance of the project. The Third Boys' High School was erected as an architectural symbol both of the modern school buildings of the early 20th century and of the efforts to improve the city's peripheral districts.

Over more than a century, the school has gone through wars, bombings, social transformations and educational reforms – from a classical high school to a polytechnic school and a contemporary language-focused and specialised institution.

The building was used as a hospital during the First World War. In 1939, the third floor and the gymnasium extension were built. During the bombings of the Second World War, the east wing was damaged. Between 1945 and 1947 the building was restored and acquired the appearance in which it has functioned since the war to the present day.

Today, 18. Comprehensive School is the largest school in Bulgaria – a dynamic community of students and teachers that continues to grow and expand. The new academic wing is a natural continuation of this history.

The competition seeks an architectural solution that combines respect for heritage with a clear vision for the future – a space that supports contemporary educational practices, fosters community and creates conditions for the development of future generations. This is an opportunity for architecture to become an active bearer of tradition and a new chapter in the school's more than century-long history.



source: Zdravko Petrov https://historicalroutes.bg/



source: http://www.stara-sofia.com/





source: http://www.stara-sofia.com/

Architectural Character

The significance of the building project is confirmed by the fact that its design was commissioned from the architectural office of Georgi Fingov and Kiro Marichkov. Georgi Fingov and Kiro Marichkov rank among the most prominent representatives of the first generation of Bulgarian architects after the Liberation. The two were fellow townsmen, classmates and friends from Kalofer; Fingov graduated in architecture in Vienna in 1898, and Marichkov in Karlsruhe in 1900. Their joint office worked during the first decade of the 20th century and left a number of remarkable examples of Secession architecture in Sofia. These include the Adolf Funk House at 59 “Knyaz Aleksandar Dondukov” Blvd., the “Maria Luisa” School of Home Economics at 30 “Lavele” Str., the Drenkovi House at 33 “San Stefano” Str., the House of General Kiril Botev at 23 “Shipka” Str., and others. These buildings testify to the great skill with which the two architects created striking façades featuring Secession-style decoration and detailing.

Their most notable public building is the Third Boys’ High School itself, built as a “temple of enlightenment” in the words of headmaster Dr Panchev. The building is a valuable example of representative school architecture from the early 20th century and has been designated an immovable cultural heritage asset of local significance. Its architectural appearance combines Neo-Renaissance and Neoclassical elements characteristic of the period with the influence of early Secession – a style marking the transition to modern European architecture.

The architects Fingov and Marichkov designed a building with an approximately H-shaped plan, comprising a central block and two side wings. This form allows for both an inner schoolyard and an additional open space towards “Pirotska” Str., which reinforces the monumental impact of the building. The main façade is distinguished by symmetry and a harmonious arrangement of openings, with the central axis emphasised by the main entrance. It features three rectangular openings, a motif continued on the floor above with three large arched windows. The façades are treated with decorative forms characteristic of the Secession, including garlands, medallions, under-window panels, pilaster strips and friezes. Harmonious combinations of floral and geometric motifs create distinctive forms that also appear on the side façades facing “Strandzha” Str. and “Sredna Gora” Str. The composition of the building is clearly organised, and the façades are notable both for their rich modelling and for the repetition of elements and rhythmically arranged windows.

Originally, the building comprised a basement, two main floors and an attic floor. At a later stage, an additional storey was added. Before this addition, the slightly projecting risalits on the main façade were topped with distinctive tower-like

elements with Secession ornamentation. Another distinctive feature was the original wooden doors with striking wrought-iron grilles.

The interior of the building is rich in ornamentation, conveying an impressive aristocratic atmosphere. The marble staircase up to the second floor, dating from the construction of the building in 1910, has been preserved, as have the floor finishes with the original tiles resembling Roman mosaics.

After 2007, the building was renovated: the rich ornamentation of the façade was restored and the windows were replaced.

Despite the interventions, the building remains among the most monumental examples of public buildings from the Secession period and is an invaluable monument to the architectural aesthetics of the early 20th century, bearing the signature of the distinguished architects Fingov and Marichkov. Beyond its architectural and artistic value, the school today remains an important symbol of educational tradition in Sofia.

The planned new academic wing should continue this tradition by offering contemporary, functional and sustainable learning spaces while respecting the historical architecture. The new intervention must provide the necessary expansion of the school without compromising the identity of the existing ensemble, and create a harmonious dialogue between historical heritage and contemporary educational architecture.


18 СУ "УИЛЯМ ГЛАДСТОН"


18 СУ "УИЛЯМ ГЛАДСТОН"





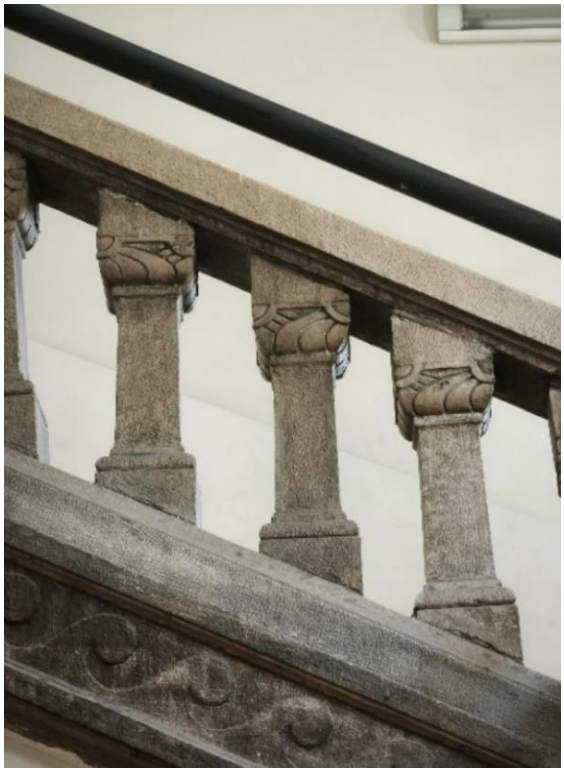






















The School Today

18. Comprehensive School “William Gladstone” is one of the most prestigious and recognisable schools in Bulgaria, successfully combining more than a century of tradition with a vision for modern and innovative education.

The school is an established national leader in foreign language teaching. Alongside the traditional European languages – English, German, French, Spanish and Russian – it is a pioneer in teaching Eastern languages such as Japanese, Chinese, Korean, Arabic and Persian. Thanks to this unique combination, 18. Comprehensive School has become an educational and cultural center that builds bridges between cultures and prepares students for careers in a global environment. International partnerships, student exchange programs and participation in national and international projects contribute to the high quality of the educational process and broaden the students’ horizons.

In line with national policies for the modernisation of education, the school is actively developing STEM education, digital technologies and project-based learning. In 2025, a new high-tech STEM space was opened, including laboratories for robotics, green energy and natural sciences, enabling students to develop engineering thinking, research skills and the competences needed for the professions of the future.

The school’s strategic vision focuses on building a contemporary, open and high-tech learning environment in which academic knowledge, foreign language skills, digital competences and creative thinking develop in parallel.








the Elements





Bulgarian-Japanese Cultural Center

A Bulgarian-Japanese Cultural Center has been established at 18. Comprehensive School “William Gladstone”.

The center was created for educational and cultural exchange and opened in the 2007/2008 school year.

It was built in partnership with the Japanese government and is used for teaching students in the Japanese-language classes at primary and upper-secondary level. Extracurricular activities related to Japanese culture are also held there.

It hosts language classes, exhibitions, demonstrations of traditional Japanese arts, cultural events and educational initiatives. Japanese Culture Days are held every year.

A complementary element of the center is the Japanese garden – a space created in the spirit of traditional Japanese landscape philosophy, where nature, architecture and human presence coexist in harmony. The garden offers a calm setting for rest, informal learning and outdoor events, while enriching the schoolyard with a place for contemplation, interaction and cultural experience.











Existing Functional Program

Key Data

	Main school building	*Bulgarian-Japanese Cultural Center*
GFA	8 030 m²	501 m²
Eaves height	+ 15.60 m	+8.00 m
floor	area (m²)	area (m²)
-1	1465	160
0	2369	166
1	2219	175
2	1977	-

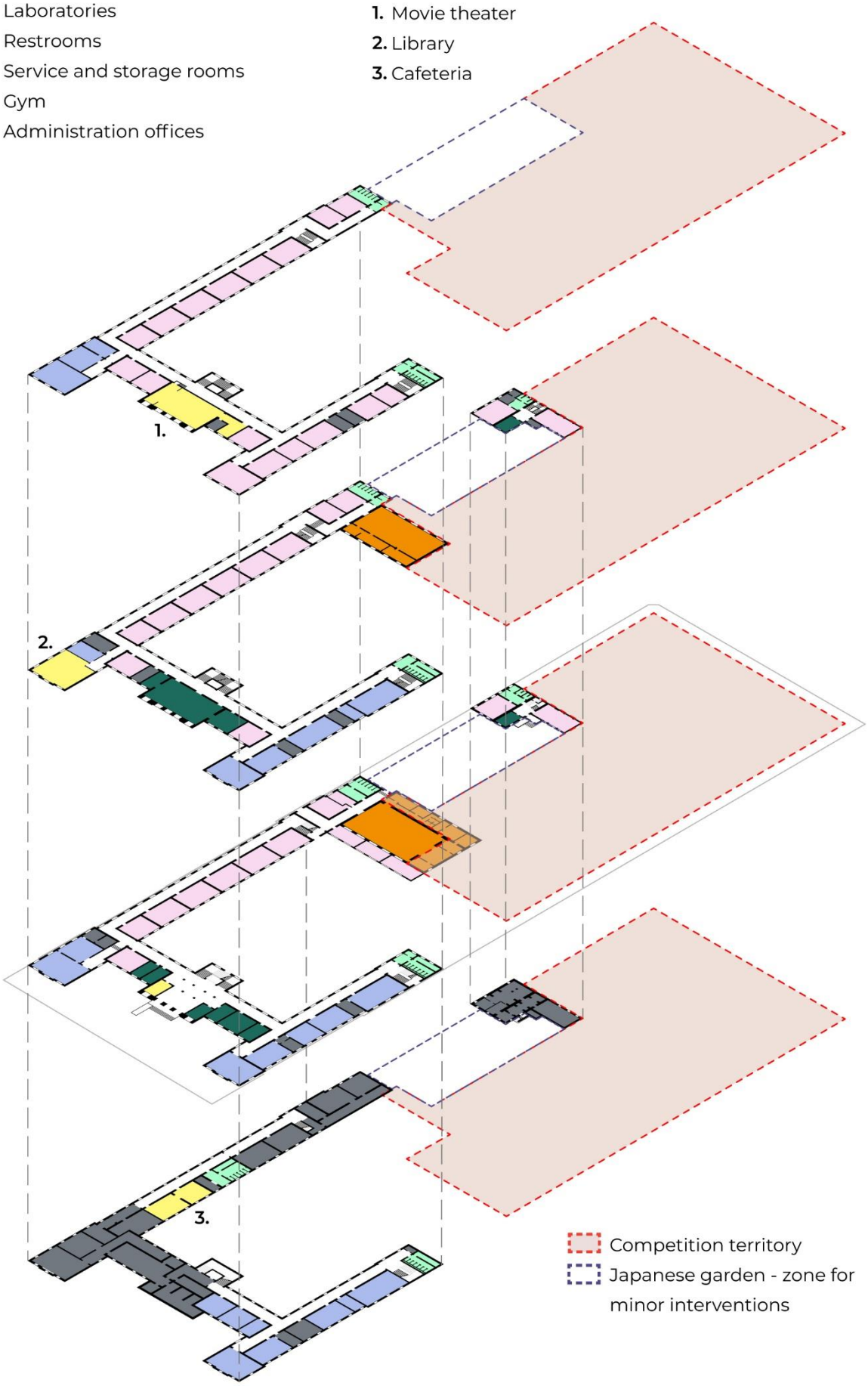
Functional units

Main school building		*Bulgarian-Japanese Cultural Center*	
Functional units	**number**	**Functional units**	**number**
Classrooms	48	Classrooms	4
Science classrooms	5	Staff rooms	2
Science classroom storerooms	4		
Computer labs	4		
Language department offices	4		
Gymnasium	2		
Canteen	1		
Library	1		
Study room	1		
Speech therapist’s office	1		
Medical office	1		
Administrative offices	8		
Staff room	1		
Technical room	1		
Cinema hall	1		

Existing program

- Classrooms
- Laboratories
- Restrooms
- Service and storage rooms
- Gym
- Administration offices
- Common spaces

1. Movie theater
2. Library
3. Cafeteria



Competition territory
Japanese garden - zone for minor interventions

The Yard

The outdoor space of 18. Comprehensive School “William Gladstone” is organised into two functionally distinct zones – a school park located between the two wings of the main building, and sports zones comprising courts and areas for physical education and active recreation.

Part of the yard is laid out as a landscaped park with tall trees, lawns and paths that create a favourable microclimate and a comfortable environment in all seasons. These spaces serve both for breaks between lessons and for outdoor classes and various school events.

The planting unites the individual parts of the school complex into a harmonious and recognisable environment in which nature plays an active part in the educational process. The yard plays its own role as a recreational, accessible and inspiring space that supports the physical and emotional wellbeing of the students and creates conditions for a richer school life.

A larger part of the outdoor space is organised into sports zones, which are used daily both in teaching and in the students’ extracurricular activities.

The existing sports facilities currently comprise:

- 2 basketball courts
- 1 volleyball court
- 2 football pitches

Before and after the school day, the yard serves as a gathering and waiting area for students and parents, making the access points critical for safety. Controlled access and security are provided to guarantee the safety of the students.

School events, celebrations and outdoor activities are held in the yard, turning it into a multifunctional communal space for the entire school community. The yard includes a recreation area with benches and loungers that is actively used.

The last comprehensive renewal of the paving and planting was carried out in 2022, when the established trees and shrubs were supplemented.

The yard also has a special role in the context of the Bulgarian-Japanese Cultural Center, whose building is a direct part of the school complex. The outdoor space adjoining the Bulgarian-Japanese Cultural Center is shared for cultural events and activities, enriching the functional and symbolic potential of the Japanese garden as a connecting element between the two institutions.

Of particular importance is the relationship between the individual elements of the school – the yard, the Japanese garden, the existing school building, the Bulgarian-Japanese Cultural Center and the future new building, which is to be located in the open part of the yard where the sports courts are currently situated.

Participants are free to propose different development options, taking into account the need for sports courts and facilities.

The school currently has no lift, but an external lift is planned to be built onto the building, located immediately next to the rear entrance of the school leading to the inner yard.

School yard and landscape

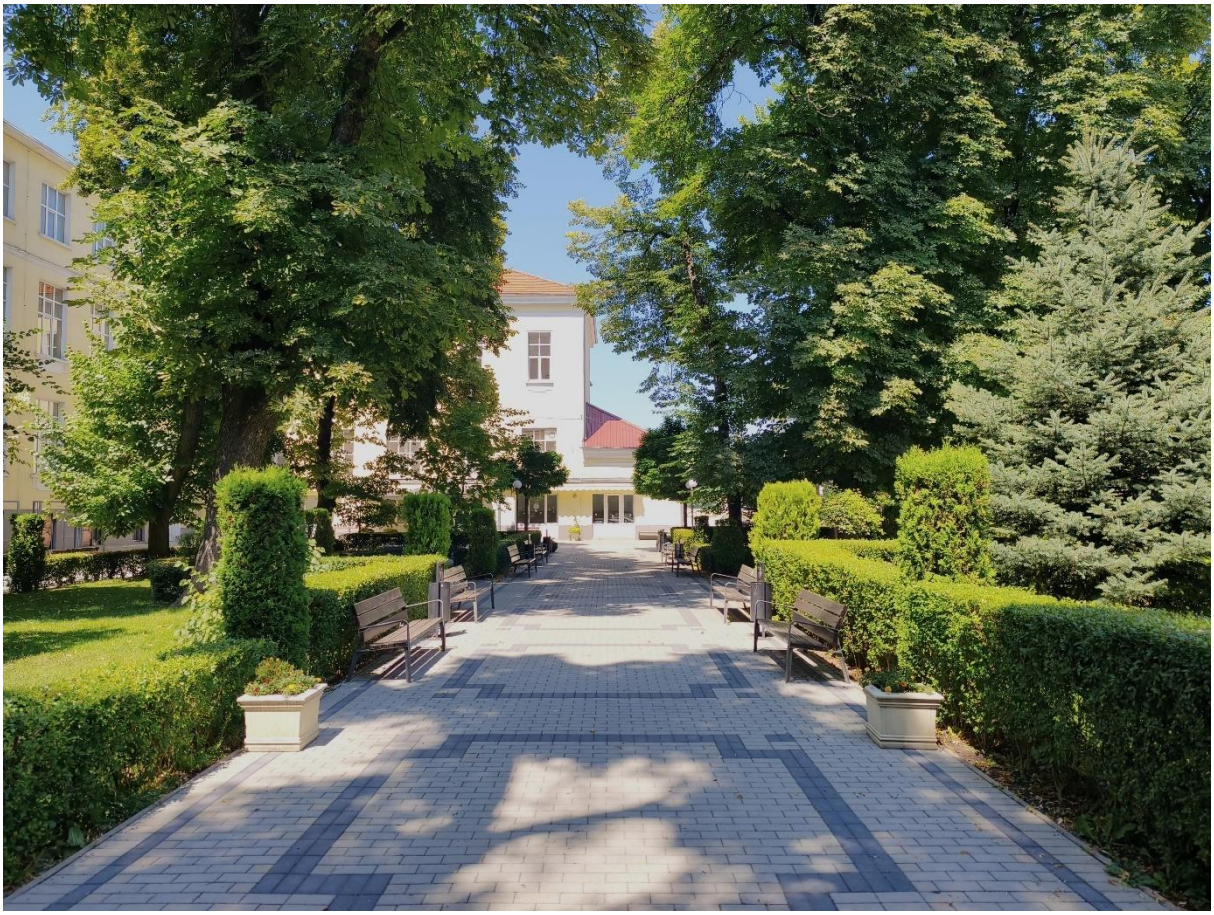


01 18. Comprehensive School
02 Bulgarian-Japanese Cultural Center
Competition territory
Old trees
New trees
Future location of lift



















04. Competition Scope

Location

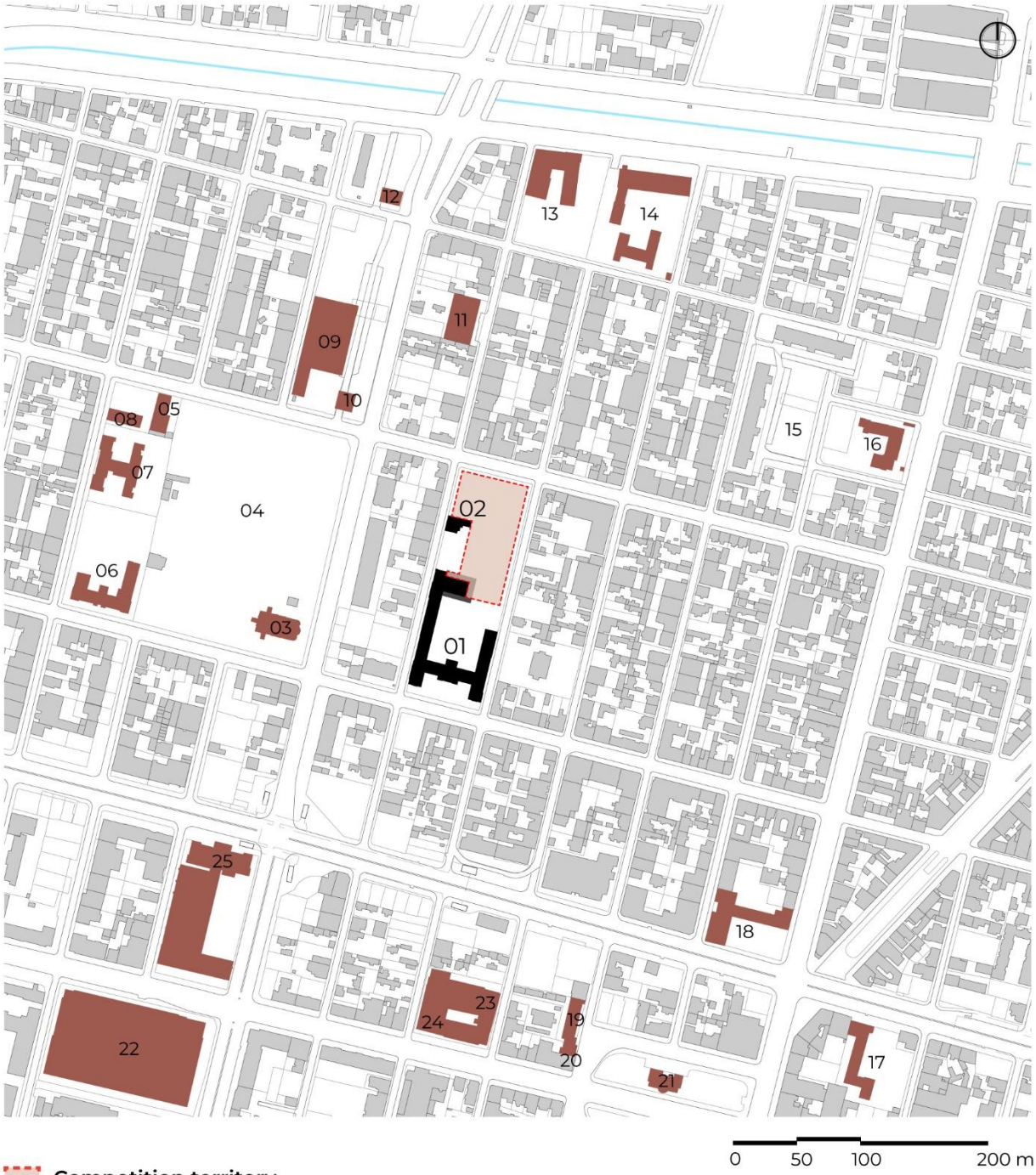
18. Comprehensive School “William Gladstone” is located in the central part of the capital of Bulgaria – Sofia, on “Pirotska” Str., one of the oldest and most emblematic commercial streets in the city, which took shape at the end of the 19th and the beginning of the 20th century.

The street is an important element of the urban fabric, linking the city center with the western districts, and is characterised by dense development and active ground floors with retail uses.

At a larger scale, the area lies within walking distance of the center of Sofia, to the west. The district has highly characteristic early 20th-century architecture and carries a rich urban memory and a multi-layered cultural history.

The school occupies the urban block bounded by “Pirotska” Str., “Sredna Gora” Str., “Tsar Simeon” Str. and “Strandzha” Str. Its location places high demands on the future development of the school complex – both in terms of integration into the existing urban and architectural context, and in terms of the organisation of access points, connections and interaction with the public realm.

Key sites in the district



Competition territory

01. 18. Comprehensive School “William Gladstone”
02. Bulgarian-Japanese Cultural Center
03. “St. Nicholas of Sofia” Church
04. “St. Nicholas of Sofia” Park
05. Medical Centre
06. 134th “Dimcho Debelyanov” Secondary School
07. Kindergarten
08. “Hristo Botev – 1917” Community Centre
09. BILLA
10. Gas Station
11. National Polytechnic Museum
12. Gas Station
13. “St. Luke” National High School of Applied Arts
14. “M. V. Lomonosov” Vocational High School
15. Yuchbunar Garden
16. 46th “Konstantin Fotinov” Primary School
17. 76th “William Saroyan” Primary School
18. 32nd “St. Kliment Ohridski” Foreign Language High School
19. Regional Department of Education
20. Shalom Jewish Cultural Centre
21. Vazrazhdane Square
22. Shopping center “Mall of Sofia”
23. Sofia Municipality – Vazrazhdane District
24. National Social Security Institute
25. Centre for Eastern Languages and Cultures at Sofia University “St. Kliment Ohridski”

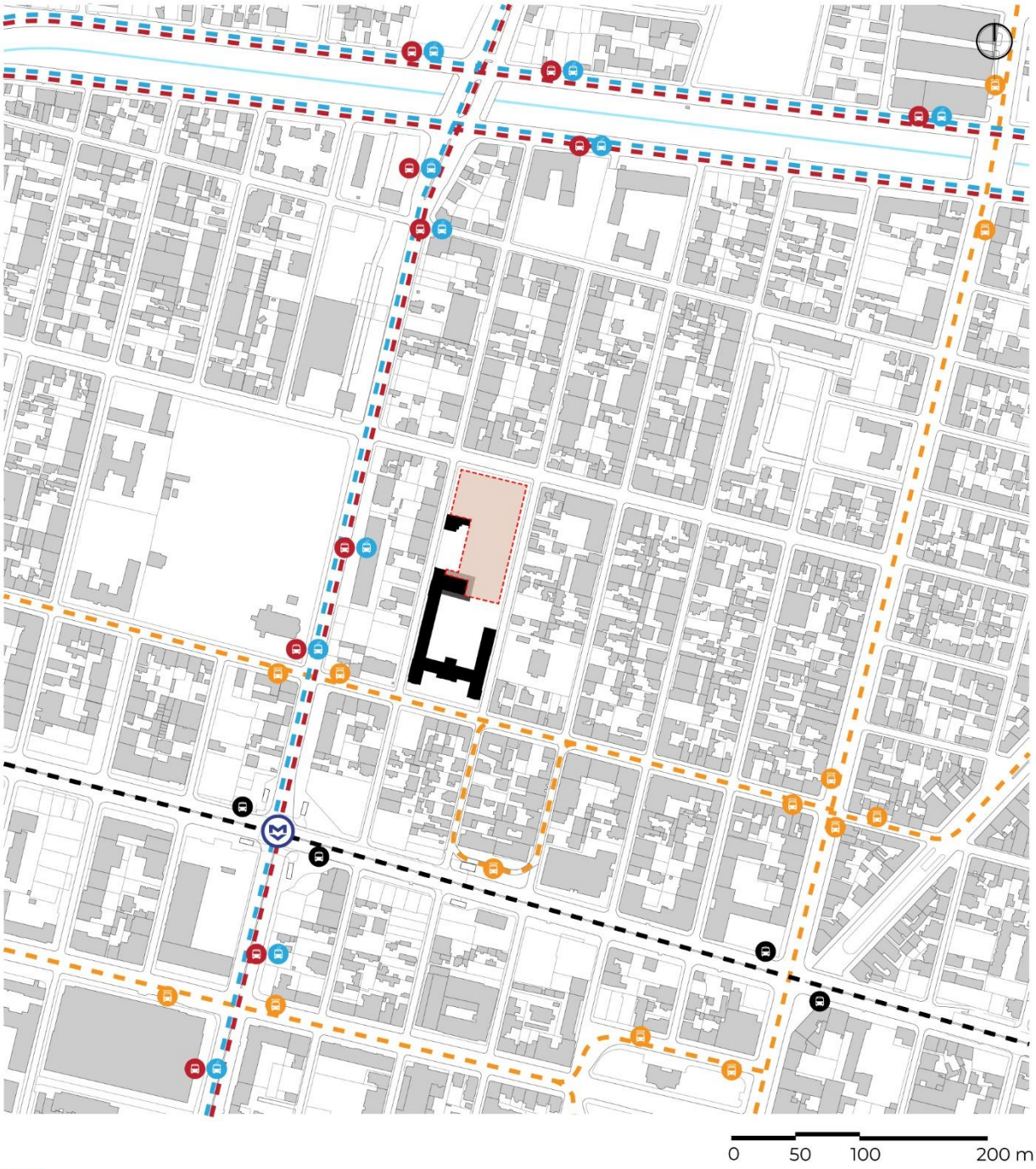
Transport and Access

The availability of three modes of public transport makes the area one of the well-connected urban zones in central Sofia. As a result, the school is integrated into an active and easily accessible environment.

A tram line runs along “Pirotska” Str., where the main entrance of the school is located, providing a fast and convenient connection to various parts of central Sofia.

The school is located in an urban area bounded by four main arterial roads – “Slivnitsa”, “Opalchenska”, “Hristo Botev” and “Todor Aleksandrov” boulevards, served by buses and trolleybuses. “Opalchenska” metro station is located on “Todor Aleksandrov” Blvd.; it is part of Sofia Metro Line 1 – one of the city’s main and busiest transport axes. Running parallel to this boulevard is “Aleksandar Stamboliyski” Blvd., which is also served by a tram line.

Public transport



04. Competition Scope

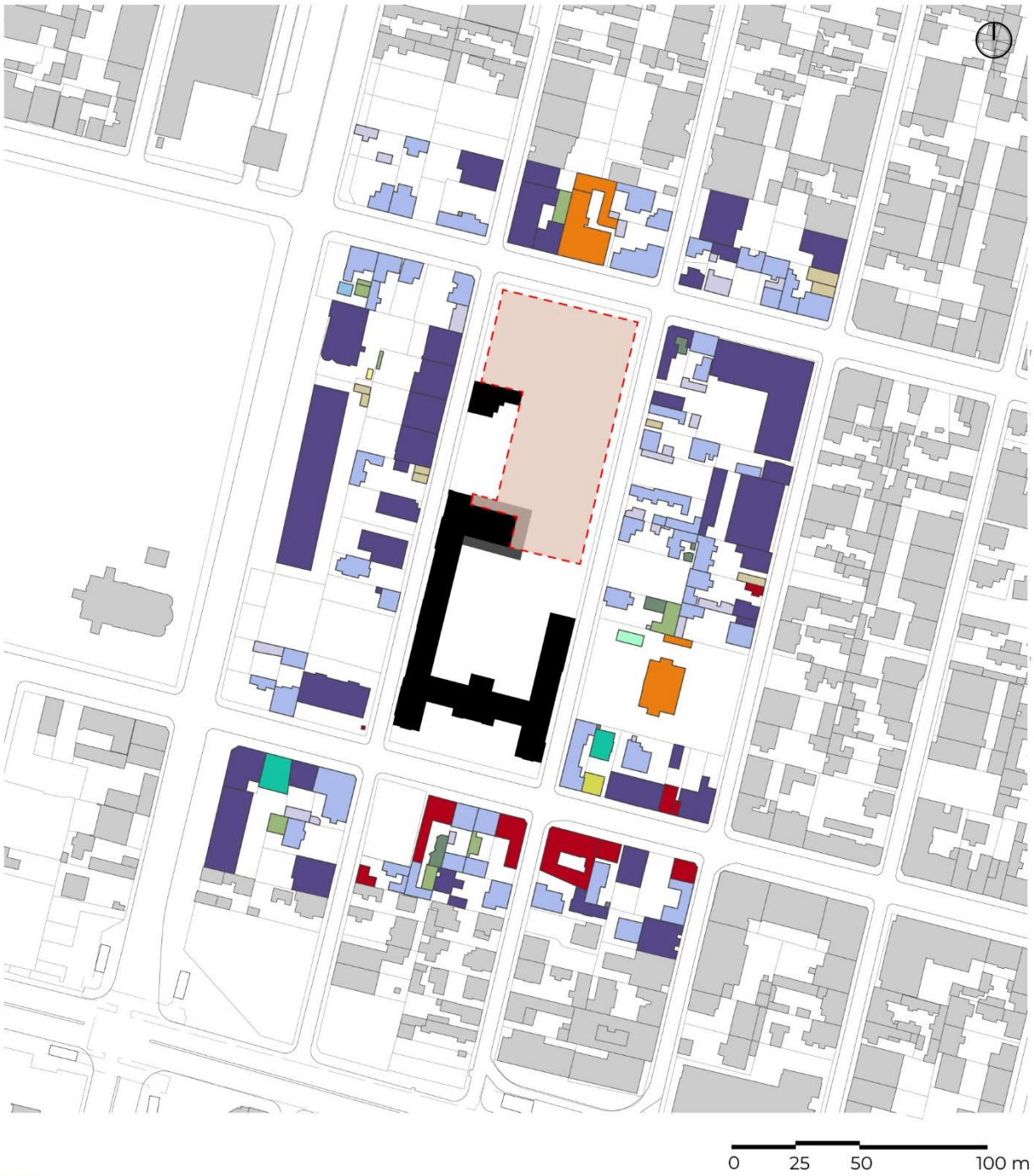
Surrounding Area

The urban environment around the school combines low- and mid-rise apartment buildings from different historical periods – from the end of the 19th century to the present day. This creates a distinctive urban character in which different architectural styles and scales intertwine. The buildings have narrow façades, and their ground floors are mainly used for retail and/or services. Residential buildings predominate in the area.

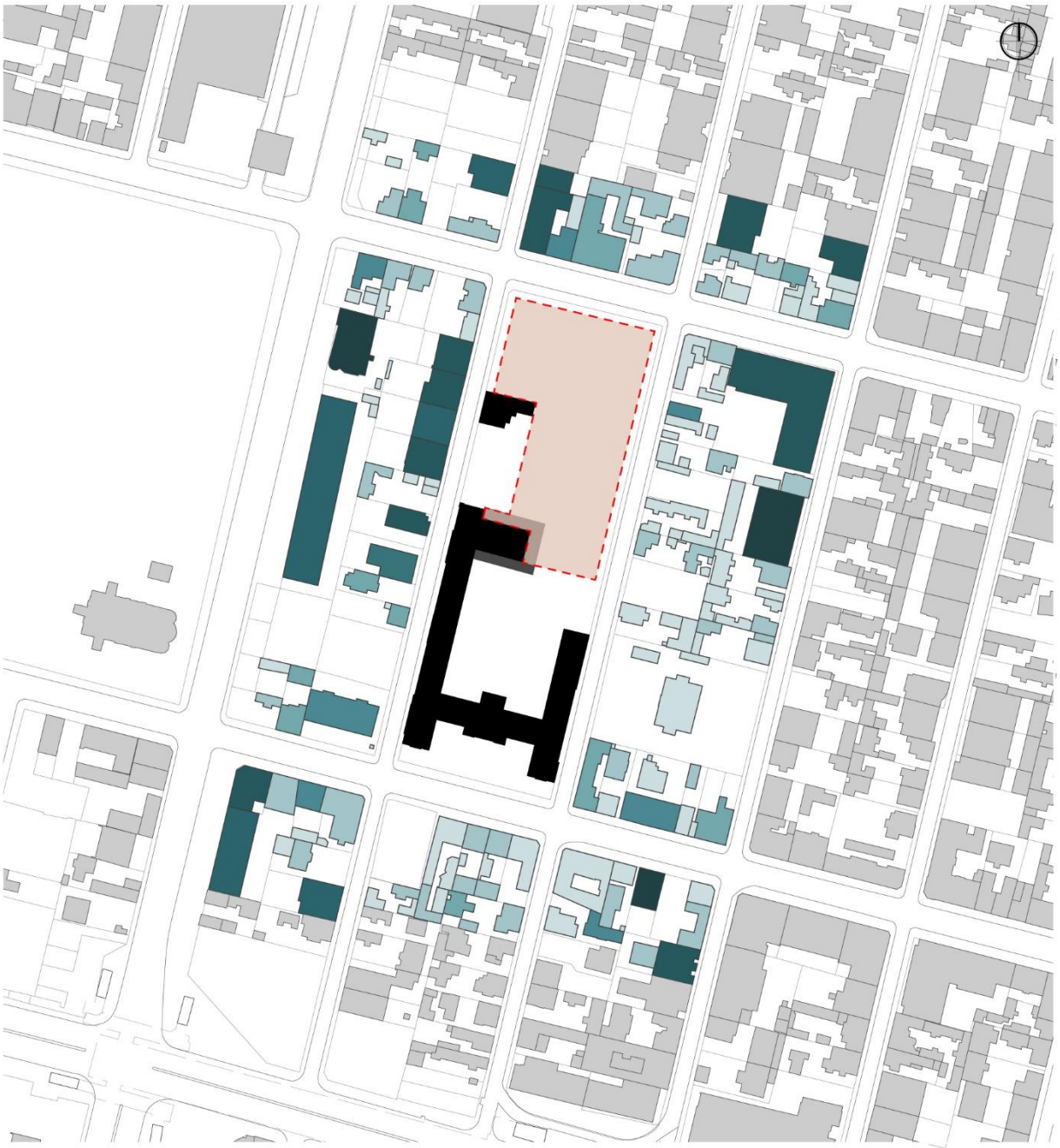
The garden around the Church of St Nicholas of Sofia plays an important role in the public life of the area. Because of its immediate proximity to the school and its nature as a natural meeting place, this public garden has a special presence in the students' free time.

This highly active neighbourhood context becomes a natural extension of the school environment and shapes the students' everyday experience.

Buildings by program type



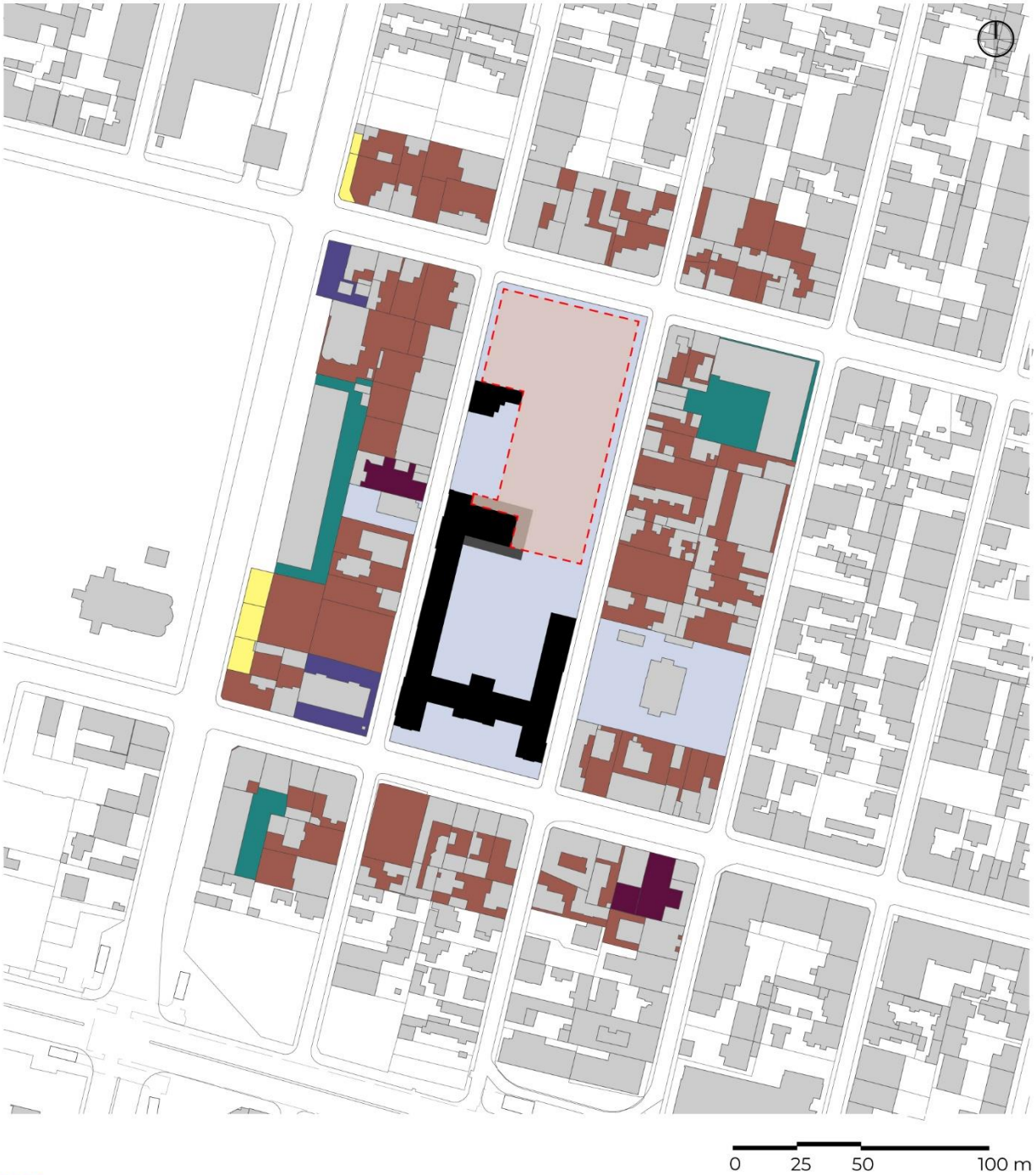
Buildings by number of floors



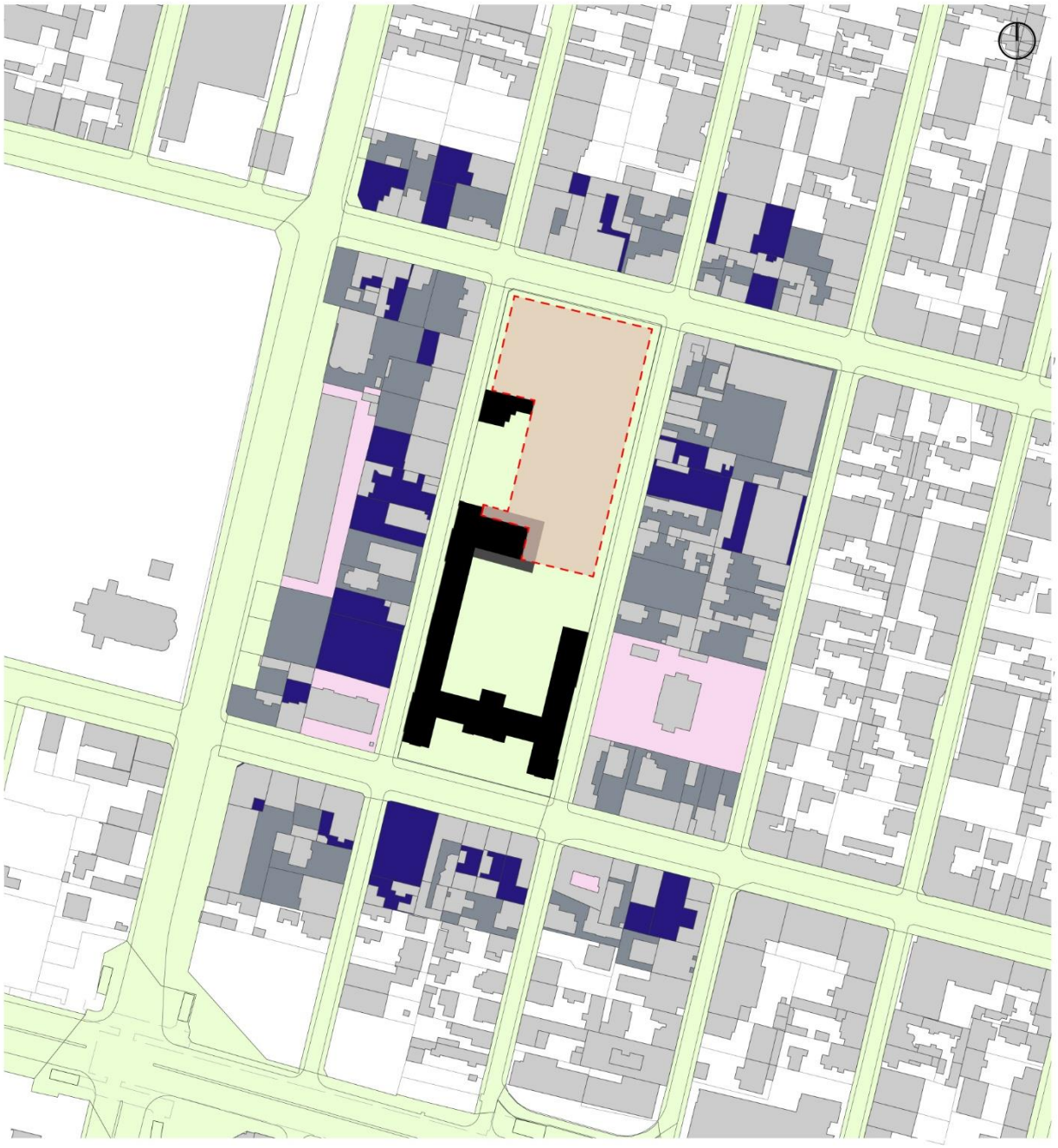
Buildings by type of ownership



Properties by type of permanent use



Properties by type of ownership



05. Design

The architectural competition seeks a design for a functional architectural solution for the construction of a new academic wing for 18. Comprehensive School “William Gladstone”.

The new building should respond to the need to expand the school’s facilities, provide contemporary learning conditions for approximately 900 students at primary level (grades 1 to 4) and lower-secondary level (grades 5 to 7), and support the development of the school as a modern, open and internationally oriented educational institution.

The main challenge is to create a clearly organised and efficiently functioning learning environment that brings together activities of diverse character – teaching, sport, swimming, dining, cultural events, student initiatives and informal interaction.

The functional organisation must provide logical connections between the individual zones, easy wayfinding within the building and the possibility of flexible use of spaces at different times of the day.

The new building will operate with its own entrance and a clearly organised access control system, while at the same time being fully integrated into the existing school complex.

The design may include an enclosed (conditioned) walkway between the new building, the existing school building and the Bulgarian-Japanese Cultural Center, ensuring convenient and safe movement of students and teachers without creating conflicts between the main circulation flows.

The competition seeks a solution in which the functional program is transformed into a coherent and inspiring learning environment. The new building must be logical, accessible and easy to use, while also creating opportunities for encounters, interaction, movement, creativity and shared experience – architecture that actively supports the educational process and opens the next chapter in the development of 18. Comprehensive School “William Gladstone”.

Design Tasks

01 Develop a functional and spatial solution for a new academic wing of 18. Comprehensive School that fulfils the provided functional program and meets the needs of students and teachers.

02 Organize access points and circulation for unobstructed and easy movement of students, teachers, parents and visitors – with a clear separation of spatial flows.

03 Propose a solution for improving and reconfiguring the schoolyard, taking into account that a part of the existing yard will be reduced as a result of the construction of the new building.

04 Provide sustainable and long-term design solutions in order to ensure the building's long-term operational efficiency such as a central HVAC system, energy efficiency, optimal orientation of the spaces and usage of sustainable materials,

05 "Universal design". The spaces should ensure accessibility and provide good conditions for use, regardless of the specific requirements of the users.

General Principles

The competition design should take into account the different modes of use of the building. The learning spaces will operate mainly within school hours, while the sports complex, swimming pool and multipurpose hall must also be accessible outside school hours.

The design solution must provide:

- a clear separation of the flows of students, teachers, parents, visitors, service staff and external users;
- independent and controlled access to the functional zones that will operate outside school hours;
- the possibility of temporarily separating and restricting access to certain parts of the building;
- safe, logical and intuitive circulation;
- clear spatial orientation;
- full accessibility for people with mobility, visual and hearing impairments;
- conditions for safe and rapid evacuation.

The competition design may include:

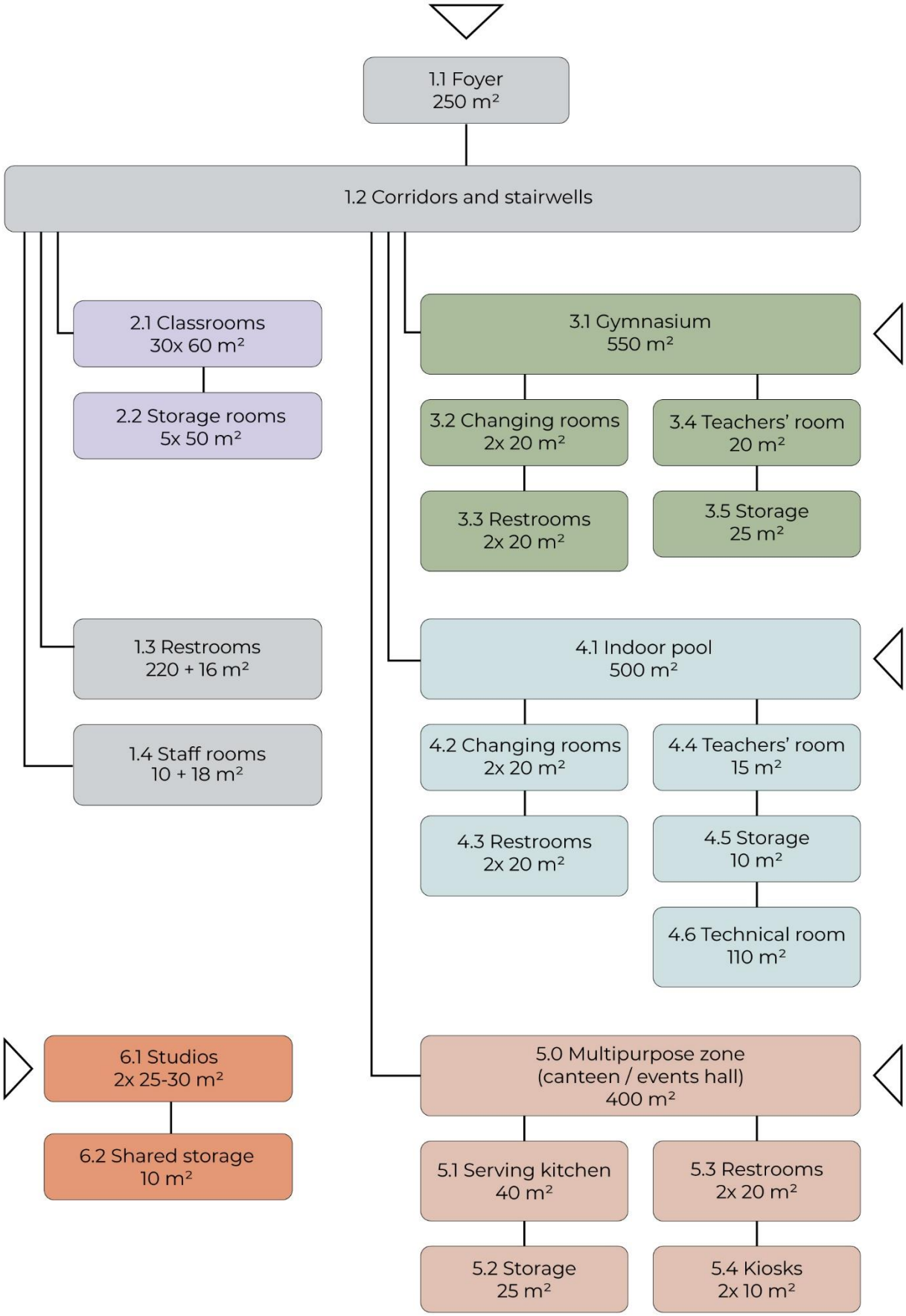
- a functional enclosed (conditioned) walkway between the new building, the existing school building and the Bulgarian-Japanese Cultural Center;
- solutions involving the Japanese garden and a vertical extension of the Bulgarian-Japanese Center, when it is well justified.

The number of classrooms in the existing school building and the Bulgarian-Japanese Cultural Center may not be reduced.

The functional program should be seen as the basis for developing a comprehensive architectural concept, not as a mechanical allocation of individual rooms. Participants are expected to propose an efficient, flexible and recognisable learning environment that encourages learning, interaction, movement and engagement between the different user groups.

Unless clearly stated otherwise, the areas in the program are indicative. Justified deviations are permitted when they lead to a better functional organisation and do not breach the regulatory requirements, the specified capacity or the minimum dimensions.

Functional Program



Functional Program

1.0 Common and Service Areas

1.1 Foyer

The new building should have its own separate street entrance.

The foyer is the main communal space and must serve representative, circulation and social functions at the same time, acting as a natural place for meeting, waiting, student initiatives and extracurricular activities.

The space must allow for:

- receiving and distributing the flow of arriving and departing students;
- access control to the building;
- waiting for parents and visitors;
- student initiatives and extracurricular activities;
- exhibitions and presentations;
- informal interaction, meetings and short breaks.

The entrance area should include:

- a security and access control point;
- a waiting area for parents and visitors;
- an information area;
- exhibition surfaces and/or notice boards;
- seating;
- clear visual and spatial orientation towards the main functional zones.

The foyer should provide direct visual orientation towards the main functional zones, unobstructed evacuation and accessibility for people with disabilities.

Area: approximately 250 m^2

1.2 Circulation Spaces (Corridors and Stairwells)

Circulation spaces include all corridors, all stairwells and lifts, and all connections between the different functional units.

Corridors should not be merely transit spaces but active common spaces. They must include seating areas with soft furniture that can be moved and reconfigured, providing space for informal meetings and for a flexible and adaptable learning environment. Corridors must be well lit, provide a connection to the yard and allow easy wayfinding within the building.

The common and circulation areas must include space for exhibitions, bulletin boards and digital screens.

Step-free access must be provided to all floors and functional zones, including through appropriately located lifts.

Corridors must provide:

- a clear and intuitive wayfinding system;
- daylight;
- a functional connection with the yard;
- places for short stays and rest;
- opportunities for individual and group work;
- opportunities for informal learning activities;
- spaces for informal meetings and interaction;
- surfaces for exhibitions, bulletin boards and digital screens.

Seating areas should be integrated into the circulation system without obstructing movement and escape routes.

In the common and circulation areas there must be provided space for individual lockers for personal belongings for approximately 900 students.

1.3 Restrooms

Restroom facilities for 900 students must be provided in the new building. There should be at least one restroom block on each floor.

The new restroom facilities may be organised on the principle of shared sanitary zones with:

- individual cubicles with full-height partitions and doors;
- a shared washbasin area;
- a separate urinal room;
- clear visibility from the common areas that does not compromise privacy;
- durable, easy-to-maintain and hygienic materials.

The design solution must ensure safety, privacy, easy supervision and efficient maintenance.

Total area: approximately 220 m²

At least one accessible toilet must be provided with each restroom block on every floor, with sufficient space for independent use and wheelchair manoeuvring.

Total area: approximately 16 m²

1.4 Staff Rooms

Staff rooms should be located so as to ensure efficient day-to-day maintenance of the building, without service flows unnecessarily crossing student circulation.

Cleaning staff room

A cleaning staff room with a restroom and shower facility and adequate storage space for cleaning materials and equipment should be provided.

Area: approximately 18 m²

Building maintenance staff room

A separate room should be provided for the staff responsible for the technical maintenance and operation of the building.

Area: approximately 10 m²

Note: *Service areas (corridors, stairs, restrooms, cloakrooms, school equipment storage, porter's lodge, technical rooms) must not exceed 40% of the gross floor area of the school (Ordinance No. RD-02-20-3 of 21 December 2015 on the design, construction and maintenance of public service buildings in the fields of education and science, healthcare, culture and the arts).*

2.0 Teaching Zone

2.1 Classrooms

The new building should accommodate 30 classrooms for primary and lower-secondary students (grades 1 to 7).

The design proposal must comply with the exact number of classrooms in the new building.

In accordance with the applicable Bulgarian regulations, desks face a main board, with daylight provided from the students' left-hand side.

The spaces should be flexible and allow different configurations for individual and group work, enabling a variety of learning activities and teaching beyond the traditional lecture format. The furniture must allow regrouping and reconfiguration.

It is recommended to seek an individual character for each space and a good layout of rooms to stimulate the learning process.

Particular attention must be paid to the selection of colors, materials, furniture, equipment and all classroom details, taking into account the age-specific needs of the students who will use the new building.

The following should be provided:

- daylighting appropriate to the arrangement of workplaces;
- a minimum clear room height of 3.00 m;
- conditions for good natural and mechanical ventilation;
- acoustic treatment of walls and ceilings;
- the possibility of integrating digital technologies;
- built-in storage for teaching materials;
- display and presentation surfaces.

Total area: approximately 1 800 m² (30 classrooms × 60 m²)

2.2 Storage rooms

Storage rooms for teaching aids and materials must be designed in the new building. One storage room is to be provided for every 6 classrooms, accessible to teachers only.

Depending on the functional solution, access may be:

- from the common circulation space;
- directly from an adjacent classroom;
- combined, when this improves the organisation of the educational process.

Total area: approximately 250 m² (5 storage rooms × 50 m²)

3.0 Sports Zone

The sports zone should be organised as a functionally distinct section that can be used both for teaching and for extracurricular and community activities.

Clear connections must be provided between the gymnasium, changing rooms, shower rooms, sports equipment store, PE teachers' room and the outdoor yard.

3.1 Gymnasium

The gymnasium should accommodate an indoor basketball court with minimum dimensions of 17×28 m and a minimum clear height of 7.00 m.

The space must provide:

- direct and convenient access to the yard and outdoor sports courts;
- appropriate sports flooring;
- acoustic treatment of the walls and ceiling;
- safety zones around the playing area;
- lighting suitable for teaching and competition use;
- telescopic seating;
- accessibility for people with disabilities.

Area: approximately 550 m^2

When not in use for sports activities, the gymnasium will be converted into an events hall.

The hall must be equipped with telescopic seating providing 200 seats.

It will host performances, events, assemblies and other school initiatives.

The hall should be reconfigurable using the telescopic seating, with sufficient space to set up a stage.

3.2 Changing Rooms

The changing rooms should be directly connected to the gymnasium.

Separate rooms for girls and boys are to be provided.

Each changing room must include:

- lockers;
- benches;
- a direct connection to the restrooms and showers.

Total area: approximately 40 m^2 (2 changing rooms × 20 m^2)

3.3 Restrooms and Showers

The restrooms and showers must be separate for girls and boys and directly connected to the changing rooms.

Each one must include:

- a minimum of three toilets;
- a minimum of two washbasins;
- a minimum of 4 shower cubicles.

Total area: approximately 40 m^2 (2 restrooms and showers × 20 m^2)

3.4 Teachers' Room

The room should be directly connected to the gymnasium and include a separate en-suite facility with a toilet, washbasin and shower.

Area: approximately 20 m^2

3.5 Sports Equipment Storage

The storage room must be directly accessible from the gymnasium and allow convenient storage and movement of sports equipment. The storage room will also be used for school events and performances.

Area: approximately 25 m^2

4.0 Swimming Complex

The swimming complex should be functionally connected to the teaching zone but able to operate independently outside school hours.

The following must be provided:

- a separate entrance for external users;
- the possibility of an enclosed connection to the learning spaces, while restricting access to the rest of the school;
- a clear organisation of circulation flows and of dry and wet zones;
- accessibility for people with disabilities;
- safe and hygienic operation.

The service spaces adjacent to the swimming pool may be organised on different levels, when convenient, safe and accessible functional connections are ensured.

4.1 Indoor Swimming Pool

A teaching swimming pool measuring 25×12.5 m with five lanes is to be built in the new building.

The pool will be used as part of the curriculum and will be open to the public outside school hours via a separate entrance.

The design solution should provide the necessary pool surrounds, safety, accessibility, acoustic comfort, appropriate natural and artificial lighting, and effective ventilation.

Area: approximately 500 m²

4.2 Changing Rooms

The changing rooms should be directly connected to the pool.

Separate rooms for girls and boys are to be provided.

Each changing room must include:

- lockers;
- benches;
- a direct connection to the restrooms and showers.

Total area: approximately 40 m² (2 changing rooms × 20 m²)

4.3 Restrooms and Showers

The restrooms and showers must be directly connected to the changing rooms, separately for girls and boys.

Each one must include:

- a minimum of three toilets;
- a minimum of two washbasins;
- 4 shower cubicles.

Total area: approximately 40 m² (2 restrooms and showers × 20 m²)

4.4 Teachers' Room

The room should be directly connected to the pool and include a separate en-suite facility with a toilet, washbasin and shower.

Area: approximately 15 m²

4.5 Equipment Storage

The storage room must be directly accessible from the pool and allow convenient storage and movement of equipment.

Area: approximately 10 m²

4.6 Technical Room

A technical room for the water treatment, circulation and maintenance equipment is to be provided.

The room should be functionally connected to the pool and have suitable service access that does not cross the flows of students and visitors.

Area: approximately 110 m²

5.0 Multipurpose Zone

The multipurpose zone should be designed as a flexible space that can adapt to different usage scenarios during and outside the school day.

The space will serve the following functions:

- student dining;
- school events and assemblies;
- smaller stage performances;
- various student initiatives;
- group and project work;
- exhibitions and presentations;
- informal meetings;

- recreation.

The layout must allow quick and easy transformation of the space.

Area: approximately 400 m²

Multipurpose zone – canteen

At lunchtime, the multipurpose zone will be used as a canteen where students will eat.

Meals will be supplied from the existing kitchen in the main school building and/or by external catering. Three meal sittings are planned, with a capacity of up to 300 students per sitting.

The following should be provided:

- capacity for up to 300 students per sitting;
- the possibility of organising meals in three consecutive sittings;
- a dedicated area for primary-level students;
- convenient and hygienic organisation of flows;
- easy cleaning and reconfiguration of the space between the different modes of use.

Multipurpose zone – events hall

When not in use as a canteen, the space will be converted into an events hall. It will host school performances, events, assemblies, student initiatives, exhibitions and presentations.

The space must be convertible into a performance space using folding tables and movable furniture. It must allow a stage to be set up.

Technical requirements: projector and projection screen, audio and video system, controllable lighting for different scenarios.

Multipurpose zone – recreation space

The multipurpose zone will also be used for various student activities outside lessons. It must allow the creation of distinct areas for socialising and social contact, as well as quiet zones for rest and retreat. Different types of furniture may be provided to give the space flexibility and adaptability.

Service rooms supporting the various functions must be provided for the multipurpose zone.

5.1 Serving kitchen

The serving kitchen should be designed as a kitchen for serving food delivered from outside and should be connected to the canteen.

Area: approximately 40 m²

5.2 Storage

The storage is intended for various equipment and furniture used for the events hall function.

Area: approximately 25 m²

5.3 Restrooms

The restrooms must serve the multipurpose zone and be suited to its specific functions. Separate restrooms must be provided for girls and for boys respectively.

Total area: approximately 40 m² (2 restrooms × 20 m²)

5.4 Kiosks for snacks and drinks

Two kiosks suited to the age group of the students should be provided. They may be located in any of the common areas or recreation spaces, including the multipurpose zone.

Total area: approximately 20 m² (2 kiosks × 10 m²)

6.0 Residential Unit

The school is frequently visited by guest teachers, and its program includes numerous projects related to foreign language teaching. Accommodation for temporary stays is to be provided in the new building.

The residential function should be clearly separated from the teaching and communal spaces and have its own controlled access. Each residential unit takes the form of a studio.

6.1 Studios

Two self-contained studios are to be provided, each with an area of between 25 and 30 m², located on an above-ground floor.

Each studio should include:

- a living and sleeping area;
- a kitchenette with adequate ventilation;
- a bathroom with toilet, washbasin and shower;
- storage space;
- direct daylight;
- a separate entrance, away from the main student flows.

Total area: approximately 60 m² (2 studios × 25–30 m²)

6.2 Shared Storage and Laundry Room

The two studios may be located next to each other and share a laundry and storage room.

Area: approximately 10 m²

Outdoor Space

The yard of 18. Comprehensive School “William Gladstone” is an active and intensively used part of the school complex. It serves circulation, sports, educational, social and recreational functions at the same time.

The construction of the new building will inevitably reduce part of the existing open yard area. The Contracting Authority therefore sets as a key priority the preservation of the maximum unbuilt area and the improvement of the quality and efficiency of the remaining outdoor spaces.

Competition proposals should treat the building and the yard as a single functional and spatial system.

The design solution must provide:

- a clear organisation of pedestrian movement;
- safe entrances and approaches;
- separation of student, service and vehicle flows;
- preservation of as much of the existing planting as possible;
- compensation for any vegetation removed;
- places for rest and informal interaction;
- shaded spaces;
- opportunities for outdoor learning and activities;
- sports courts;
- step-free accessibility;
- a favourable microclimate;
- sustainable drainage and use of rainwater, where applicable.

It is recommended to explore the potential for intensive and multifunctional use of outdoor spaces, including green roofs, roof terraces and sports areas on the new building, without compromising the safety, accessibility and comfort of the neighbouring residential buildings.

Sports Courts

As a minimum requirement, the yard must accommodate at least one of each of the three types of sports courts at the existing yard level, namely football, volleyball and basketball courts.

The mandatory minimum requirements for school sports courts are as follows:

- basketball court – 15×28 m, with overall dimensions including safety margins – 19 × 32 m;
- volleyball court – 9×18 m, with overall dimensions including safety margins – 19×34 m;
- small-sided football pitch – 15–25 m wide and 25–42 m long, with appropriate safety margins determined according to the chosen size and the position of fences and equipment.

Competition designs may propose combined or multi-use sports courts, provided they demonstrate that the solution allows full and safe use for the respective sports and for the classes required by the curriculum.

The design proposal should provide an active visual and functional connection between the interior spaces and the schoolyard.

It is recommended to provide:

- direct exits from the common and sports spaces to the yard;
- sheltered outdoor seating areas;
- places for outdoor learning and group work;
- opportunities to extend the activities of the foyer and the multipurpose zone into the outdoor space;
- visual connections between classrooms, circulation spaces and landscaped areas;
- smooth transitions between the indoor and outdoor environment.

Outdoor spaces should be designed as an integral part of the learning environment, not merely as residual unbuilt land. They must support diverse forms of learning, movement, play, rest and social interaction.

Interventions involving the garden of the Bulgarian-Japanese Cultural Center are permitted, provided they do not change its function nor compromise the vegetation.

Design Guidelines

01 Flexible learning environment. Adaptable rooms allowing different configurations: frontal, group, project-based and interdisciplinary learning. Rigidly fixed solutions should be avoided.

02 Learning beyond the classroom. Zones for informal learning and individual and group work. Circulation spaces should be treated as an active learning environment.

03 Technology integration. Flexible infrastructure ready for contemporary digital and educational technologies.

04 Sustainable and safe materials with low emissions of harmful substances, easy to maintain and suited to the functional and acoustic requirements of the rooms.

05 Naturally lit and ventilated rooms. Solutions for optimal use of daylight and effective solar shading. Good ventilation and microclimate, high indoor environmental quality.

06 Human scale and wayfinding. Design appropriate to the age of the students. Clear organisation of functions and easy navigation for all users.

07 Yard–building connection. Active visual and functional connection between indoor and outdoor spaces, with opportunities for outdoor learning.

08 Safety. Clearly organised entrances and controlled zones. Safe movement within the school complex.

09 Respect for the existing cultural and historical heritage.

Planning Constraints

The parameters in this section are grouped by type of requirement: regulatory indicators from the current detailed development plan (DDP), requirements of Ordinance No. RD-02-20-3 on the design of educational buildings, and parameters set by the Contracting Authority.

Boundaries

The competition area is bounded by the following streets: “Pirotska” Str., “Sredna Gora” Str., “Tsar Simeon” Str. and “Strandzha” Str. Its location in the central urban zone places specific requirements on the scale and architectural character of the new development.

Planning Indicators

The competition site is located in Zone “B-3”, “Tsentara” locality, in an area designated for public service uses (Oo), for a school, “Vazrazhdane” District. The table shows the applicable indicators and the remaining capacity for new construction.

Indicator	Value	Existing facilities	Permitted parameters	Remaining reserve
Site coverage	40%	3 232 m²	5 360 m²	+2 128 m²
Gross floor area (Floor-to-Area Ratio = 1.2)	FAR = 1.2	8 531 m²	16 078 m²	+7 547 m²
Minimum landscaped area	20%	3 408 m² (25%)	≥ 2 680 m²	Not planned
Maximum height	20 m	15.60 m	≤ 20 m	New building: ≤ 20 m

Parameters of the New Building

The Contracting Authority sets the following values for the future development, based on an approved massing study and the wish to preserve the maximum yard area.

These requirements are design targets, not statutory limits.

Parameter	Value
Approximate gross floor area (GFA) of the new building	6 000 m²
Approximate built-up area (footprint)	1 500 m²
Above-ground floors	up to 4
Underground floors	1

Architectural and Building Requirements

The general architectural and building requirements allow school buildings in built-up urban areas to have up to 4 storeys. The current detailed development plan allows a maximum height of up to 20 m.

The new building is planned to have up to 4 above-ground floors and 1 underground floor.

Based on the approved massing study and in accordance with the Contracting Authority's requirements, the attached functional program for the new academic wing provides for:

Approximate GFA: 6 000 m² — according to the functional program

Approximate footprint: 1 500 m² — in line with the Contracting Authority's wish to preserve as much of the schoolyard as possible

Service areas (corridors, stairs, restooms, cloakrooms, school equipment storage, porter's lodge, technical rooms) must not exceed 40% of the gross floor area of the school (Ordinance No. RD-02-20-3 of 21 December 2015 on the design, construction and maintenance of public service buildings in the fields of education and science, healthcare, culture and the arts).

Solutions involving a vertical extension of the Bulgarian-Japanese Center may be proposed, bearing in mind that it is not an immovable cultural heritage asset but is an important part of the complex.

Proposals involving the Japanese garden space and other connections with the existing building may be made when they are well justified. The Contracting Authority wishes to preserve the function of the Japanese garden. Its integrity must not be compromised.

Underground Development

The underground development may have a larger area than the above-ground development, provided that the requirements for daylighting and ventilation are met for the respective rooms.

Extensions to the Existing Gymnasium

The defined boundary of the competition site allows the ground-level rooms on the north and east sides of the existing gymnasium to be integrated into the volume of the new building. These are:

- two changing rooms, for boys and girls respectively
- a stage area adjoining the gymnasium
- storage

Existing Trees

The Contracting Authority's preference is to retain as many of the existing trees as possible. Older trees are particularly valuable. Participants may propose the removal of trees where well justified, but compensatory planting should be provided.

Where existing trees are retained, the following clearances shall be observed:

- tall trees (over 5 m) – 3 m clearance;
- medium-height trees (up to 5 m) – 1.5 m clearance;
- low trees (up to 2.5 m high) – 1 m clearance.

(Ordinance on the Construction, Maintenance and Protection of the Green System of Sofia Municipality, Annex 2)

Spatial Planning Requirements

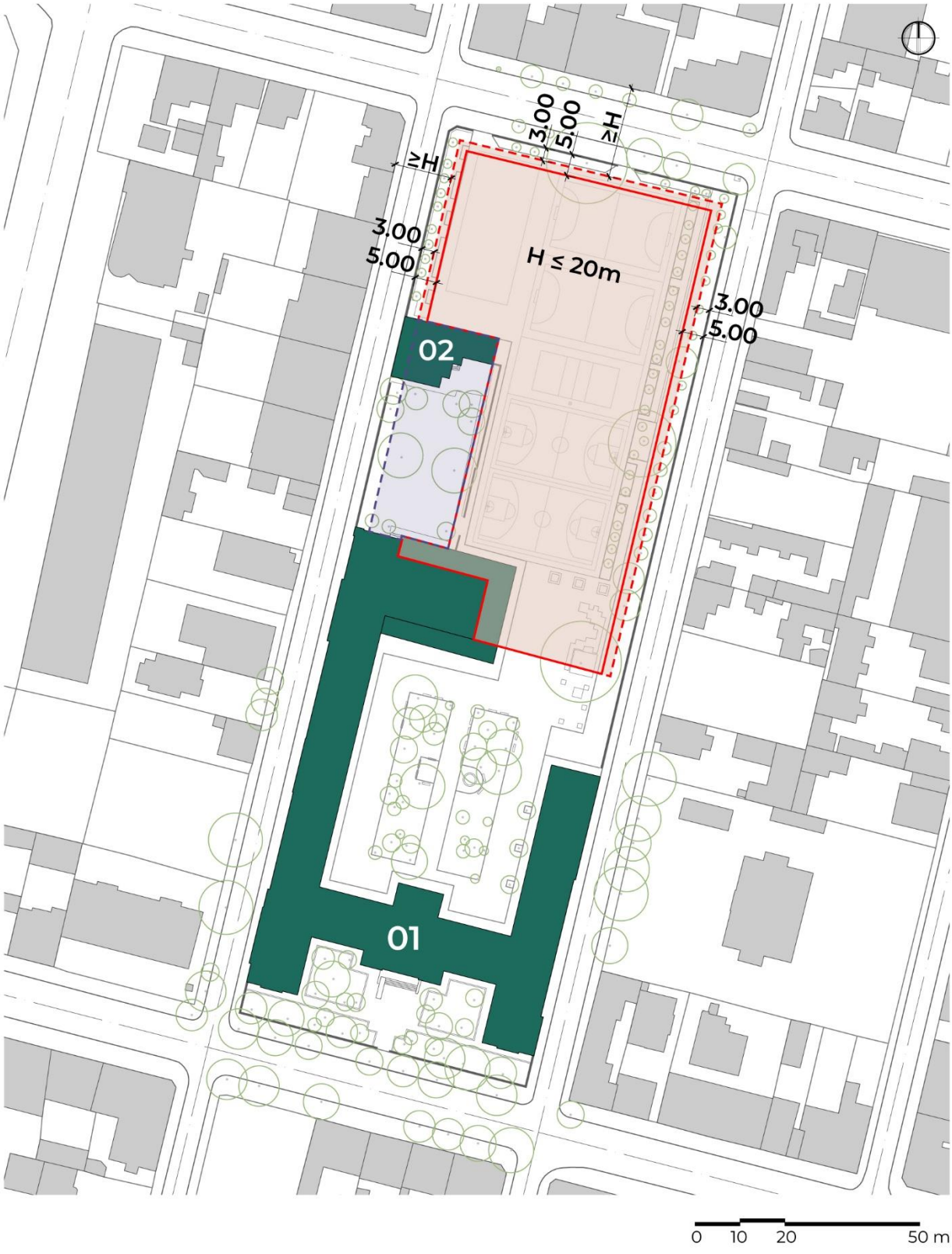
Ordinance No. RD-02-20-3 of 21 December 2015 on the design, construction and maintenance of public service buildings in the fields of education and science, healthcare, culture and the arts

Article 26. (3) Buildings for education and science shall be located in compliance with the following requirements: school, kindergarten and nursery buildings shall be designed at a distance from the street regulation line and adjacent land plots as follows:

a) more than 5 m – for the parts of school buildings containing teaching rooms, and for playrooms and sleeping rooms in kindergartens and nurseries;

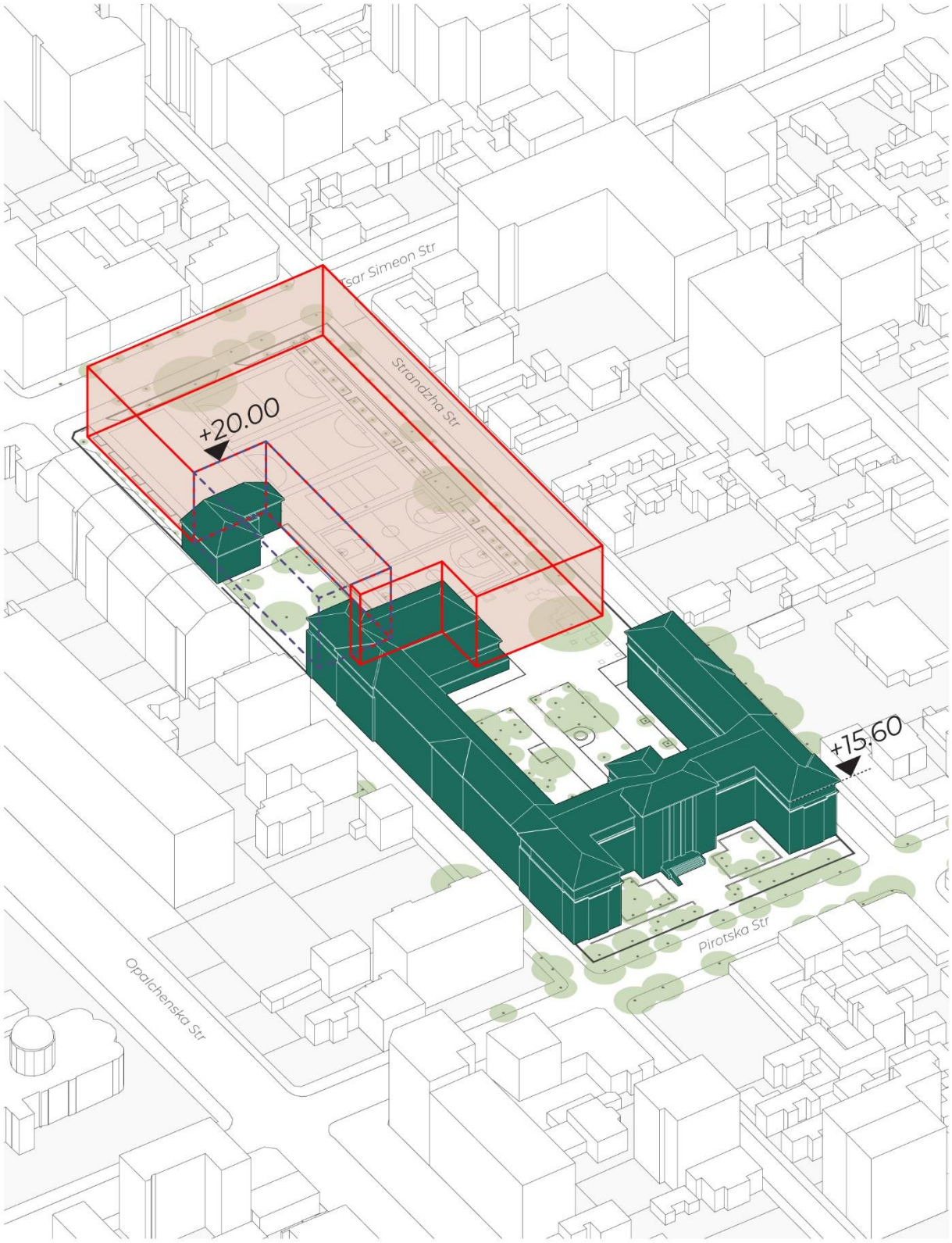
b) more than 3 m – for the parts of school buildings containing non-teaching rooms (e.g. sports areas, dining, etc.).

Building restrictions

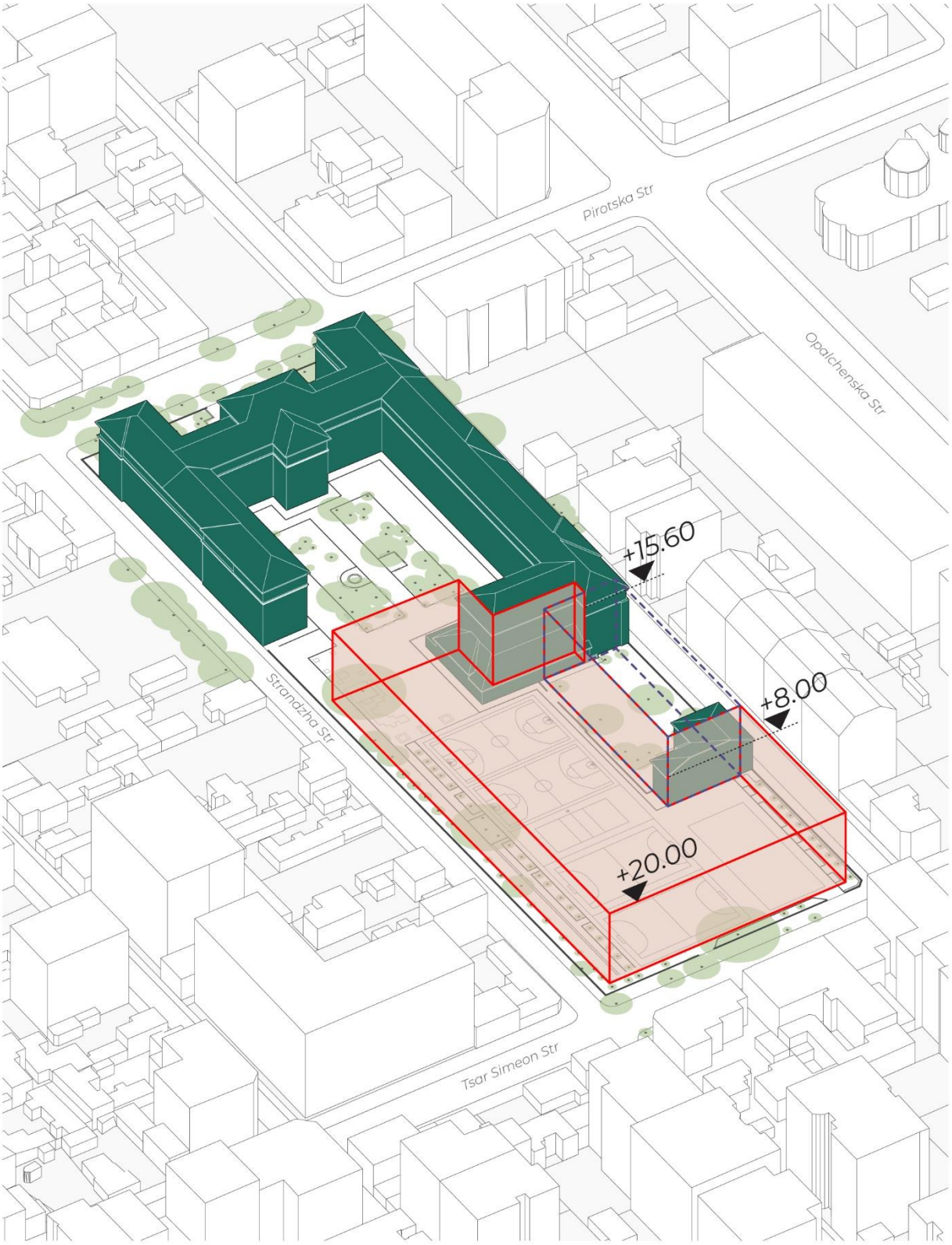


01 18. Comprehensive School
02 Bulgarian-Japanese Cultural Center
Building restriction line for non-educational premises
Building restriction line for educational premises
Japanese garden - zone for minor interventions

Axonometric diagram of competition territory



Axonometric diagram of competition territory



0 10 20 50 m

Competition territory

Japanese garden - zone for minor interventions

Functional Parameters for Schools

Ordinance No. RD-02-20-3 of 21 December 2015 on the design, construction and maintenance of public service buildings in the fields of education and science, healthcare, culture and the arts.

General Architectural and Building Requirements

Number of storeys (height) of school buildings in built-up urban areas	≤ 4 storeys
Special schools for the education and support of students with sensory impairments	≤ 1 – 2 storeys
Clear height of teaching rooms	> 3,0 m; < 3,3 m
Maximum classroom width ensuring the required illumination: a) with daylight from one side b) with daylight from two sides	 ≤ 7,2 m ≤ 9,0 m
Position of windows relative to a seated student	on the left-hand side
Height of window sills and parapets	0,90 m
Daylighting as a ratio of net (clear) glazed area to room floor area (a larger glazed area may be specified in the design brief)	1/4 (1/3)
Distance from the farthest doors of teaching rooms to stairwells in two- and three-storey buildings (escape routes)	< 30 m
Doors and their components (rounded handles) shall be designed so as not to endanger students and not to reduce the width of the escape route.	≤ 0,2 m
Width of doors to teaching rooms (classrooms, specialist rooms, laboratories, etc.)	≥ 1,0 m
Width of doors to administrative rooms	≥ 0,9 m
Width of doors to storage, sanitary and other types of rooms	≥ 0,8 m
Orientation by cardinal direction: a) of classrooms b) of specialist rooms (for informatics, information technology, computer modelling, fine arts, music, the subjects “home economics and technology”, “household technology and economics” and “technology” (“technology and entrepreneurship”), etc.) and of the library and information center	 east, south-east, south-west and west north-west, north and north-east

Input Data and Materials:

This part of the competition brief includes the results of a series of studies of the site.

The following methods, corresponding to the complex subject matter, were used in the individual parts and phases of the study:

- review of archival documents;
- digitisation, processing and transformation of spatial data;
- processing of databases and attributes;
- survey and mapping of spaces;
- analysis of statistical data;
- 3D scanning of the existing building.

The results are based on input data provided by 18. Comprehensive School and other competent institutions and specialised organisations.

Annexes:

1. DWG – competition base drawing
2. Point cloud of the existing building
3. 3D model of the existing building
4. Diagrams
5. Photographs
6. Additional Materials

Acknowledgements

The competition team would like to thank its institutional partners; all participants, partners and volunteers; the working group on the brief; all consultants on the project, mentioned and unmentioned; and the entire staff of 18. Comprehensive School, who made this competition possible, for their commitment, support and critical feedback.

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18. СУ

Уилям
Гладстон

OPTIMISTAS