



## Oficiul Național pentru Dezvoltarea Infrastructurii „Moldova-Proiect”

Proiecte pentru Oameni: Guvernul Republicii Moldova Investește în Infrastructură

### TERMS OF REFERENCE for Design Services - Lot No.3

This Terms of Reference establishes the technical, functional and administrative requirements for the preparation of design documentation and cost estimates for the implementation of this project, in accordance with the legislation in force.

#### 1. General Information:

##### a. Project Title:

- Reconstruction with functional reconfiguration of Public Institution “Stefan cel Mare” Theoretical Lyceum
- Reconstruction with functional reconfiguration of Public Institution “Mihai Viteazul” Gymnasium
- Reconstruction with functional reconfiguration of Public Institution “Alexandru Donici” Theoretical Lyceum

##### b. Location:

- Drochia town, 21, Alexandru cel Bun Street;
- Straseni town, 4/A Chișinău Street;
- Orhei Raion, Peresecina village, 25, Mihai Eminescu Street

c. **Beneficiary:** Ministry of Education and Research/ Final Beneficiary – Local Council.

d. **Contracting Authority:** Public Institution National Office for Infrastructure Development „Moldova-Proiect”.

e. **Funding:** The Republic of Moldova has received a loan from the Council of Europe Development Bank (CEB) in the amount equivalent to EUR 30 million to cover the costs of the “School Modernization” Project and intends to apply this loan to eligible payments under this contract, in accordance with the provisions of the Framework Loan Agreement, ratified by Law No. 163/2025.

f. **Basis for Design:** Model School Concept, approved by the Order of the Ministry of Education and Research No. 198, dated 26.02.2024<sup>1</sup> and the Application Guide, approved by Order No. 434 dated 29.03.2024<sup>2</sup>.

<sup>1</sup> [https://mecc.gov.md/sites/default/files/anexa\\_2\\_omec\\_198\\_din\\_2024\\_concept\\_scoala\\_model.pdf](https://mecc.gov.md/sites/default/files/anexa_2_omec_198_din_2024_concept_scoala_model.pdf)

<sup>2</sup> [https://mecc.gov.md/sites/default/files/anexa\\_1\\_omec\\_nr\\_434\\_din\\_29.03.2024\\_ghid\\_de\\_aplicare\\_si\\_implementare\\_a\\_conceptului\\_scolii\\_model.pdf](https://mecc.gov.md/sites/default/files/anexa_1_omec_nr_434_din_29.03.2024_ghid_de_aplicare_si_implementare_a_conceptului_scolii_model.pdf)



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- Structural Technical Expertise Report No. 41-03-2026 ET – the designer shall use the existing structural expertise and implement measures corresponding to the required seismic protection level.
- Energy Audit Report No. 15/MS – the solutions proposed in the energy audit are mandatory for integration into the project; the final objective is to achieve at least energy efficiency class B.
- Structural Technical Expertise Report No. 39-03-2026 ET – mandatory use and implementation of the prescribed seismic protection measures.
- Energy Audit Report No. 5/MS – the solutions proposed in the energy audit are mandatory for integration into the project; the final objective is to achieve at least energy efficiency class B.
- Structural Technical Expertise Report No. 40-03-2026 ET – the designer shall use the existing structural expertise and implement measures corresponding to the required seismic protection level.
- Energy Audit Report No. 6/MS – the solutions proposed in the energy audit are mandatory for integration into the project; the final objective is to achieve at least energy efficiency class B

**g. Type of Investment:** Reconstruction with functional reconfiguration of spaces, energy rehabilitation, rehabilitation of internal and external utility networks of publicly owned assets.

**h. Purpose:** Functional and energy modernization (in accordance with the Model School Concept/Implementation Guide) of the buildings in order to ensure a safe, efficient and modern learning environment.

**i. Description of the premises:**

| Public Institution „Ștefan cel Mare” Theoretical Lyceum, Drochia Town                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Location Coordinates:</b><br>Latitude - 48° 1' 58.8828" N<br>Longitude - 27° 49' 46.4628" E<br>Link: <a href="https://www.latlong.net/c/?lat=48.033023&amp;long=27.829573">https://www.latlong.net/c/?lat=48.033023&amp;long=27.829573</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Technical and Structural Characteristics of the Building</b><br>The load-bearing structure is of a flexible type, consisting of a reinforced concrete prefabricated structural frame (columns, beams, slabs). The foundations are made of prefabricated reinforced concrete elements and are in a satisfactory condition, with no visible major structural deterioration.<br>The floor slabs are made of prefabricated reinforced concrete panels, and the exterior and interior load-bearing walls consist of reinforced concrete panels with good load-bearing capacity, but with low thermal performance according to current standards.<br>The roof is a non-accessible flat roof, with a hot-applied bituminous membrane waterproofing, showing local wear and a risk of water infiltration in certain areas. |



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Floor finishes consist of wooden parquet in classrooms, mosaic flooring in corridors and circulation areas, and ceramic tiles in sanitary facilities. Most finishes are physically and morally worn and require rehabilitation.

Ceilings are finished with plaster and washable paint, without modern sound-absorbing systems.

Joinery is mixed: PVC windows with insulated glazing, partially replaced, and old wooden windows in certain areas of the building. Interior and exterior doors are largely worn and require replacement.

Engineering systems have been partially modernized.

Interior lighting is predominantly provided by fluorescent and LED luminaires, uniformly installed in classrooms, laboratories and offices. In some areas, old-type incandescent lamps are still used, with low efficiency and increased energy consumption.

The building's heating system is autonomous, provided by a boiler plant located in a separate technical building annexed to the main structure. The general technical condition of the technical installations is satisfactory, with systems operational and in continuous use.

Thermal energy distribution is carried out through steel pipelines and metal radiators without regulation capability; these are in an advanced state of wear and require modernization.

Domestic hot water preparation is mainly ensured by electric boilers and a plate heat exchanger. Water supply and sewerage systems are connected to centralized networks.

The building ventilation system was designed as a centralized forced mechanical ventilation system with heat recovery. Following the technical inspection carried out, it was found that the system is non-functional, the main causes being: missing equipment (fans), deterioration of the ventilation duct network over time, and blockage of supply and exhaust grilles within the rooms. Under current conditions, ventilation of the spaces is carried out exclusively through natural ventilation, by opening windows.

Fire safety and security systems are incomplete and require extension and modernization.

The area adjacent to the building includes a sports field and a recreation area that do not meet current educational requirements. Access roads and sidewalks show deterioration of paving and asphalt surfaces, and stormwater drainage is carried out naturally.

### ***Energy Performance of the Building***

The building of the Public Institution “Ștefan cel Mare” Theoretical Lyceum exhibits a low level of energy performance and is estimated to fall within energy performance class E.

The building envelope is not thermally insulated at the level of façades, plinths and floors above the basement, resulting in significant heat losses during the cold season. The flat roof, made of prefabricated reinforced concrete hollow-core slabs, lacks adequate thermal insulation, leading to heat losses through the upper floor slab.

The existing joinery, although partially replaced, does not ensure the overall airtightness of the building. Old exterior doors significantly contribute to heat losses.

The heating system is centralized, with worn internal installations and low energy efficiency. The designed mechanical ventilation system is non-functional, and ventilation of the spaces is carried out predominantly through natural means, by opening windows. This solution does not ensure the minimum fresh air flow required by regulatory standards and leads to additional heat losses during the cold season. Cleaning and rehabilitation of the ventilation ducts are recommended.



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Interior lighting is partially provided by old-type luminaires with high energy consumption; complete replacement of lighting fixtures is recommended, as well as the installation of presence sensors in auxiliary spaces (a lighting control system) to reduce electricity consumption.

Overall, the building records high energy consumption and an uneven level of thermal comfort. The implementation of integrated energy rehabilitation measures is therefore required, including thermal insulation of the envelope, roof rehabilitation, and modernization of heating, ventilation and lighting systems.

### Public Institution „Mihai Viteazul” Gymnasium, Strășeni Town

#### Location Coordinates:

Latitude - 47° 8' 34.5264 " N

Longitude - 28° 37' 40.5408" E

Link <https://www.latlong.net/c/?lat=47.142924&long=28.627928>

#### Technical and Structural Characteristics of the Building

The load-bearing structure is constructed as a reinforced concrete frame system with prefabricated panels, with foundations made of prefabricated reinforced concrete blocks of FS type. The floor slabs are made of prefabricated reinforced concrete panels (ЖБИ).

The exterior walls are made of prefabricated expanded clay concrete panels with a thickness of 300 mm, in accordance with series ИИС-04, while the interior load-bearing walls are constructed from similar panels. Partition walls are made of brick masonry and gypsum boards.

Following the visual inspection, no damage, destruction or inaccessible deformations of the load-bearing structures were identified. The load-bearing structures and enclosure elements are in a satisfactory technical condition.

The roof is partially flat, with waterproofing made of bituminous membranes, and partially pitched, with a timber structure and metal tile roofing.

Floor finishes consist of polished cyclopean concrete in corridors, sanded and painted wooden boards in classrooms, and ceramic tiles (terracotta) in sanitary blocks.

External joinery is mixed: wooden windows in staircases and sanitary blocks, and PVC windows in the remaining spaces. Doors are predominantly made of PVC. Ceilings are finished with plaster and paint.

Interior lighting of the building is mainly provided by fluorescent and LED luminaires installed in various types of spaces (classrooms, halls, corridors, offices, auxiliary areas). These were installed in different stages, without a unified lighting solution at the level of the entire building. The electrical network requires modernization.

The heating system is centralized and supplied from the network managed by the Strășeni Municipal Authority, having been commissioned at the time the building was put into operation. Heat distribution within the building is carried out through the internal heating network, corresponding to an operating regime specific to educational buildings. Following the visual inspection, the heating system was found to be functional; however, most radiators are of pipe-type with metal plates, which are inefficient. In some classrooms/rooms where renovation works were carried out, the radiators were replaced with new models.



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Domestic hot water preparation is decentralized, using five electric boilers. The water supply system is in a satisfactory condition; however, the sewerage network does not function properly and requires capital repairs.

The building is equipped with both mechanical and natural ventilation. Mechanical ventilation operates only in the kitchen, while the rest of the mechanical ventilation system is non-functional. Natural ventilation operates only in some classrooms, with low air flow rates, insufficient to ensure proper ventilation of interior spaces, indicating the need for renovation/restoration of ventilation ducts. Space conditioning is provided locally by two split-type air conditioning units, which are not integrated into a centralized air-conditioning system. The air-conditioning units operate independently, without coordination with the existing ventilation system and without controlled fresh air supply.

Security and fire protection systems are incomplete and require extension and modernization.

The institution is provided with sports fields (volleyball, football, basketball), which are relatively functional, as well as access roads paved with asphalt and vibropressed concrete slabs, currently in a degraded condition. Green spaces and pedestrian alleys are partially arranged. The building is located on a gently sloping site, without an organized stormwater drainage system, which requires rehabilitation of the stone paving and the organization of perimeter drainage.

### ***Energy Performance of the Building***

“Mihai Viteazul” Gymnasium exhibits a low level of energy performance and is estimated to fall within energy performance class E, which is typical for educational buildings constructed in the early 1990s that have not undergone comprehensive energy rehabilitation.

The lack of thermal insulation of exterior walls and floor slabs leads to significant thermal energy losses and reduced thermal comfort in classrooms. The prefabricated expanded clay concrete panels, although in a satisfactory structural condition, do not meet current energy efficiency requirements.

PVC joinery, although functional, does not ensure optimal energy efficiency in the absence of comprehensive rehabilitation of the building envelope.

The centralized heating system, together with worn internal networks, operates with low efficiency, resulting in high thermal energy consumption. The absence of automation and modern control systems further exacerbates system inefficiency.

Non-functional ventilation and the lack of a controlled mechanical ventilation system adversely affect indoor air quality and generate additional heat losses due to uncontrolled airing.

Interior lighting, partially provided by incandescent sources, results in high energy consumption relative to the achieved illumination levels.

In conclusion, the building requires urgent energy efficiency interventions, including full thermal insulation of the envelope, rehabilitation of the heating and ventilation systems, modernization of electrical and lighting installations, as well as rehabilitation of water supply and sewerage networks, in order to increase comfort, safety and reduce energy consumption.

### **Public Institution „Alexandru Donici” Theoretical Lyceum, Peresecinaillage**

#### **Location Coordinates:**

Latitude - 47° 14' 42.1260" N

Longitude - 28° 45' 39.8592" E



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Link: <https://www.latlong.net/c/?lat=47.245035&long=28.761072>

### ***Technical and Structural Characteristics of the Building***

The building structure is designed as a reinforced concrete frame system with suspended panels, a construction solution typical for educational institutions of the respective period. The foundations are made of prefabricated reinforced concrete FS-type blocks, and the floor slabs consist of prefabricated hollow-core panels. The exterior walls are constructed from prefabricated expanded clay concrete (keramzit concrete) panels.

The roof is of pitched type, with a timber structure and metal tile roofing. It was renovated in 2023 and is currently in good technical condition.

Floor finishes include wooden flooring, terrazzo concrete, and linoleum, depending on the functional use of the spaces. These finishes show advanced wear, particularly in classrooms and corridors.

The external joinery is made of PVC and was replaced in 2004. Ceilings are finished with plaster and washable paints, without modern soundproofing or acoustic insulation solutions. Suspended ceilings of the Armstrong type are partially installed (approximately 15%), along with gypsum board ceilings (approximately 5%).

Interior lighting is predominantly provided by LED luminaires, installed at different stages and without a unified lighting concept at the level of the entire building. The internal electrical network is in an unsatisfactory condition, characterized by multiple faults and an advanced degree of wear, and requires rehabilitation and modernization works.

The building is served by a local heating system, with heat generation provided by an independent boiler house located in a separate building. Thermal energy is produced by two gas-fired hot water boilers installed in 2002. Heat distribution is predominantly carried out through a single-pipe system, using old-type cast iron radiators without individual control, leading to poor thermal comfort regulation and uneven energy consumption. As a result of subsequent interventions, steel panel radiators have been installed in isolated areas.

Domestic hot water is prepared in a decentralized manner, using three electric boilers installed in the kitchen block, which represents the main point of consumption. The water supply and sewerage systems are connected to the centralized networks. The internal networks have been partially renovated but require full rehabilitation.

The ventilation system operates only partially, with reduced air flow rates insufficient to ensure adequate ventilation of interior spaces. Ventilation ducts are located beneath the metal tile roof. Local mechanical ventilation is provided in the sports hall and kitchen; however, it is not operational during regular use. Space cooling is provided locally through two split-type air conditioning units installed exclusively in offices, without integration into a centralized HVAC system.

The institution is equipped with 26 video surveillance cameras; however, it does not have an automatic fire detection and alarm system, only a local audible warning system installed at the boiler house level.

The adjacent site is partially landscaped (approximately 60%). Sports fields and green areas are poorly arranged, while access roads are partially paved—one being in satisfactory condition and the other in a degraded state. Stormwater drainage is provided naturally.

### ***Energy Performance of the Building***

The building of I.P. “Alexandru Donici” Theoretical Lyceum exhibits a low level of energy performance and is preliminarily classified within energy performance class E. This situation is caused by the lack of thermal insulation, degradation of the building envelope, and the unsatisfactory condition of the engineering systems.



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The exterior walls made of prefabricated expanded clay concrete panels are not thermally insulated, and the joints between panels are open, leading to major thermal energy losses and indoor discomfort. The floor slabs above the top floor and above the basement lack thermal protection, further contributing to heat losses.

Although the roof has been recently renovated, it does not provide adequate thermal insulation from an energy efficiency perspective. The PVC windows, while functional, do not ensure optimal energy efficiency in the absence of comprehensive rehabilitation of the building envelope.

The current condition of the heating system indicates the need for energy efficiency improvement measures, including modernization of heat generation equipment, enhancement of thermal insulation of distribution networks, and optimization of control and automation systems, in order to reduce energy consumption and ensure thermal comfort conditions appropriate for an educational institution.

The ventilation system is non-functional, with air exchange carried out exclusively through natural ventilation, resulting in additional energy losses and inadequate indoor air quality. Under these conditions, rehabilitation of the ventilation system is required, either through replacement or cleaning of ventilation ducts, as well as by extending exhaust outlets above roof level.

Furthermore, the implementation of an energy management system is recommended, enabling consumption monitoring, optimization of system operation, and overall improvement of the building's energy efficiency.

Under the current conditions, the building records high operational costs and a low level of thermal comfort, making the implementation of integrated energy rehabilitation measures necessary.

### 2. Design Assignment:

The development of the design and cost estimate documentation for the reconstruction, modernization and arrangement of the educational institution shall be carried out in strict compliance with the national regulatory framework in force, the Model School Concept of the Ministry of Education and Research and the Implementation Guide, as well as the relevant technical regulations (including Moldovan Construction Regulations A.07.02.2012)

The project shall ensure the transformation of the institution into a modern learning environment that supports independent and active student development by integrating the mental, social and physical environments, in line with the pedagogical principles of the Model School.

The Service Provider shall prepare a dismantling, handling and transportation plan for asbestos roofing materials in accordance with legislation on hazardous waste, subject to the approval by the Environmental Agency.

The design shall include a stormwater management system based on sustainable principles (permeable surfaces, infiltration channels, retention basins, reuse for irrigation), sized for rainfall events with a 10% exceedance probability.

The Service Provider shall verify the availability of connection capacities to existing utility networks (water, sewerage, electricity, gas, telecommunications) and propose solutions for upgrading or replacing internal risers and connection points, based on calculated demand.

The Service Provider shall identify and propose technically and financially optimal solutions.



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### 2.1 Fundamental technical requirements:

During the development of the technical documentation (drawings and explanatory report), due consideration shall be given to the Model School Concept and the Implementation Guide of the Ministry of Education and Research.

In designing the school space, it shall be taken into account that a modern learning environment—being a combination of mental, social, and physical environments—supports the development of students into independent and active learners. A well-designed school environment fosters a modern approach to learning. The implementation of innovative and experimental ideas is encouraged.

Ensuring the quality level of the design and compliance with the requirements set out in the applicable normative documents shall be the responsibility of the Service Provider. The proposed solutions shall aim at transforming the existing infrastructure into a sustainable, safe, and digitalised learning ecosystem.

In order to achieve construction works of appropriate quality, it is mandatory to comply with and maintain, throughout the entire service life of the building, the fundamental requirements set out in Article 335 of the Urban Planning and Construction Code No. 434/2023, as follows:

1. Structural integrity of buildings;
2. Fire safety of buildings;
3. Protection of workers and building users against adverse effects on hygiene and health conditions caused by construction works;
4. Protection of workers and building users against physical injuries caused by construction works;
5. Sound insulation and acoustic performance of buildings;
6. Energy efficiency and thermal performance of buildings;
7. Prevention of hazardous emissions into the environment caused by construction works;
8. Sustainable use of natural resources incorporated in construction works.

The architectural concept, the design brief, as well as each section of the design documentation shall be submitted for prior review and approval by the Contracting Authority, including the Beneficiary, before verification by certified verifiers.

The Service Provider shall be obliged to integrate all comments and requests raised by the Contracting Authority during the prior review process, up to the final approval. The integration of the Contracting Authority's comments is included within the scope of the present public procurement procedure and shall not be subject to additional remuneration.

Within the timeframe established by the Contracting Authority, the Service Provider shall be obliged to correct, at no additional cost:

- errors;
- omissions;



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- inconsistencies;
- inconsistencies between written documentation and drawings, the cost estimates documentation, or the actual site conditions.

Monitoring of the progress of the design services shall take place on a weekly/monthly basis through joint meetings between the Parties, held online or in person, subject to prior coordination between the Parties, in accordance with the service delivery schedule.

The Service Provider shall submit Progress Reports on the execution of the service contract once every two weeks.

### 2.2 General Requirements and Regulatory Compliance

During the preparation of the design phases, the commercial offer, and the development of the environmental protection and accessibility components, the Service Provider shall be guided by the following regulatory acts (the list is not exhaustive):

- Urban Planning and Construction Code No. 423/2023;
- Law No. 139/2018 on Energy Efficiency;
- Law No. 10/2016 on the Promotion of the Use of Energy from Renewable Sources;
- Law No. 128/2014 on the Energy Performance of Buildings;
- Government Decision No. 361/1996 on Quality Assurance in Construction;
- Government Decision No. 896 of 21.07.2016 approving the Regulation on the Procedure for Certification of the Energy Performance of Buildings and Building Units;
- Sanitary Regulations for Primary, Lower and Upper Secondary, and Vocational Education Institutions.

When preparing the technical design documentation and the cost estimates, the applicable Construction Norms and Standards in force shall be observed.

| Reference Code   | Title                                                                                                                       |
|------------------|-----------------------------------------------------------------------------------------------------------------------------|
| NCM A.07.02.2012 | Procedure for the preparation, review, approval and framework content of design documentation for construction works        |
| NCM C.01.03:2017 | Design of buildings for general education                                                                                   |
| NCM C.01.12:2018 | Public buildings and structures                                                                                             |
| NCM C.01.06-2014 | General safety requirements for construction objects used by and accessible to persons with disabilities                    |
| NCM M.01.03:2016 | Energy efficiency of social and cultural buildings                                                                          |
| NCM M.01.01:2025 | Minimum energy performance requirements for buildings                                                                       |
| NCM M.01.02:2025 | Methodology for calculating the energy performance of buildings                                                             |
| NCM M.01.04:2016 | Methodology for calculating cost-optimal levels of minimum energy performance requirements for buildings and their elements |
| NCM E.04.01:2017 | Protection against environmental actions. Thermal protection of buildings                                                   |



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|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCM G.01.02:2015 | Design and installation of electrical installations in residential and social buildings                                                                                                                                               |
| NCM A.09.02:2005 | Technical maintenance, repair and reconstruction of residential, communal and social-cultural buildings                                                                                                                               |
| NCM B.01.05:2019 | Urban planning. Systematization and development of urban and rural settlements                                                                                                                                                        |
| NCM C.01.04:2005 | Administrative buildings. Design standards                                                                                                                                                                                            |
| NCM C.04.02:2017 | Natural and artificial lighting                                                                                                                                                                                                       |
| NCM E.03.01:2005 | Fire protection of buildings and installations. Terminology                                                                                                                                                                           |
| NCM L.02.06:2012 | Cost estimation standards for the execution of construction and installation works during cold weather conditions                                                                                                                     |
| NCM E.02.02:2016 | Reliability of structural elements and foundation soils. Basic principles                                                                                                                                                             |
| NCM E.03.02:2014 | Fire protection of buildings and installations                                                                                                                                                                                        |
| NCM E.03.05:2004 | Automatic fire extinguishing and fire alarm systems. Design standard                                                                                                                                                                  |
| NCM G.03.03:2015 | Internal water supply and sewerage installations                                                                                                                                                                                      |
| NCM G.03.02:2015 | External sewerage networks and installations                                                                                                                                                                                          |
| NCM G.04.10:2015 | Boiler plants                                                                                                                                                                                                                         |
| NCM G.04.07:2014 | District heating networks. Heating, ventilation and air-conditioning installations                                                                                                                                                    |
| NCM G.04.05:2016 | Heating, ventilation and air-conditioning installations. Autonomous heat supply sources                                                                                                                                               |
| NCM A.07.06:2016 | Structure and content of the “Environmental Protection” section in design documentation                                                                                                                                               |
| NCM E.01.02:2019 | Actions on structures. Regulation on establishing importance categories of buildings                                                                                                                                                  |
| NCM A.06.01:2006 | Technical protection of territories, buildings and structures against hazardous geological processes. General data                                                                                                                    |
| NCM B.01.02:2016 | Territorial and settlement planning. Instructions on the content, methodological principles for preparation, review and approval of urban planning and territorial development documentation                                          |
| NCM E.01.03:2005 | Instructions for identifying settlements affected by hazardous geological processes                                                                                                                                                   |
| NCM G.02.01:2017 | Electrical, automation, signalization and telecommunications installations. Electronic communications networks, automation and signalization installations for buildings and structures. Basic provisions for design and installation |
| NCM E.03.03:2018 | Fire safety. Fire detection and alarm systems                                                                                                                                                                                         |
| NCM G.01.03:2016 | Electrical installations. Electrotechnical devices                                                                                                                                                                                    |
| NCM G.03.01:2017 | Water supply and sewerage installations and networks. Small-capacity municipal wastewater treatment plants                                                                                                                            |
| NCM B.01.06:2019 | Standards regarding the framework structure of the “Environmental Protection” section within urban planning documentation                                                                                                             |

When preparing the technical project documentation and the cost estimates, the following Construction Codes of Practice in force will be taken into account:

| Reference Code  | Title                                                                                                                |
|-----------------|----------------------------------------------------------------------------------------------------------------------|
| CP C.01.11:2018 | Public buildings and structures accessible to persons with disabilities. Design rules                                |
| CP C.04.04:2012 | Design of emergency lighting systems in buildings and structures                                                     |
| CP C.01.09:2017 | Open-plan structures for physical culture and sports                                                                 |
| CP L.01.01:2012 | Instructions for the preparation of cost estimates for construction and installation works using the resource method |
| CP L.01.02:2012 | Instructions for determining estimated costs related to wages in construction                                        |
| CP L.01.03:2012 | Instructions on the calculation of overhead costs when determining the value of construction projects                |
| CP L.01.04:2012 | Instructions for determining estimated costs for the operation of construction equipment                             |
| CP L.01.05:2012 | Instructions for determining the estimated profit when forming prices for construction output                        |



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|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CP L.01.13:2015 | Methodological guide on monitoring and calculating average prices of construction materials                                                                                                                                                                                                                                                    |
| CP G.03.08:2020 | Design and construction of external potable water supply systems with a capacity below 200 m <sup>3</sup> /day, serving up to 3,000 inhabitants                                                                                                                                                                                                |
| CP E.04.05:2017 | Protection against environmental actions. Design of thermal protection of buildings                                                                                                                                                                                                                                                            |
| CP G.04.01:2002 | Energy performance certificate of the building                                                                                                                                                                                                                                                                                                 |
| CP M.01.02:2025 | Thermal protection of civil and public buildings. Energy performance indicators                                                                                                                                                                                                                                                                |
| CP E.01.04:2019 | Assessment of the level of seismic protection of existing buildings                                                                                                                                                                                                                                                                            |
| CP E.03.01:2019 | Fire safety. Ensuring the fire resistance of structures                                                                                                                                                                                                                                                                                        |
| CP E.03.02:2018 | Fire safety. Methodology for preparing the design section “Measures to ensure fire safety and to carry out the technical expertise (fire safety audit) of the protected object”                                                                                                                                                                |
| CP G.03.07:2016 | Natural biological treatment systems for municipal wastewater using planted macrofite filters (phytoremediation filters)                                                                                                                                                                                                                       |
| CP C.01.02:2018 | Civil buildings. Buildings and structures. General design provisions ensuring accessibility for persons with disabilities                                                                                                                                                                                                                      |
| CP C.01.10:2018 | Civil buildings. Living environment with systematised elements accessible to persons with disabilities. Design rules                                                                                                                                                                                                                           |
| CP C.01.13:2018 | Civil buildings. Urban environment. Design rules accessible to persons with disabilities                                                                                                                                                                                                                                                       |
| CP G.04.11:2013 | Heating, ventilation and air-conditioning installations. “Methodology for calculating heat losses, unrecorded volumes of domestic hot water and hot water losses in municipal domestic hot water supply systems” – Part 1: “Calculation of losses and unrecorded volumes of domestic hot water in municipal domestic hot water supply systems” |

### 2.3. Interior Space Planning

The design of interior spaces shall focus on flexibility, inclusiveness and modern pedagogy, in accordance with the Model School Implementation Guide.

#### *Classrooms:*

Replanning of teaching spaces in compliance with the standards set out in the Model School Concept; standards shall be applied by education level (primary, lower secondary and upper secondary), in accordance with Chapters 3 and 4 of the Guide.

The maximum number of students per classroom shall be determined according to the intended use, applying the standards by education level (primary, lower secondary and upper secondary), in accordance with Chapters 3 and 4 of the Guide.

Modular and flexible furniture allowing for various layouts (individual, group work, circle).

Mandatory natural lighting for all spaces used on a daily basis.

Provision of technology (data points, interactive board, audio system).

#### *Specialized Spaces:* (Chapter 4 of the Guide)

Design of rooms for: technological education, inclusion, music (with stage and instrument storage), art, choreography, robotics, makerspaces (3D printers, tools), and digital laboratories.

Science laboratories (physics, chemistry, biology) equipped in accordance with safety standards and fitted for practical experiments (sinks, dedicated ventilation, power outlets).

A modern library transformed into a resource center (individual and group study areas, access to technology).

#### *Common and Social Spaces:* (Chapter 4 of the Guide)



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Assembly hall / multifunctional hall: equipped with modular furniture, mobile stage, Wi-Fi network, audio-video system and appropriate acoustic treatment.

Corridors and halls: arranged as rest areas, informal learning, reading and socializing zones, with comfortable furniture.

Canteen: treated as an additional learning space, with good connectivity and varied furniture.

Teachers' room: rest and working space, divided into zones (reception, work, relaxation with kitchenette), digitally equipped and accessible.

Student Council room: well connected to the common area, separate from the administration.

### *Sanitary Facilities:*

Modernization of all sanitary blocks (WC, washbasins, showers) and changing rooms.

Adapted for users of different ages and heights, including persons with reduced mobility.

Provision of menstrual hygiene cabins and hygienic showers (in proximity to upper secondary classrooms).

Accessible to persons with disabilities (no thresholds, WC fixtures installed at a height of 0.45–0.60 m, adequate maneuvering space).

### *Universal Accessibility:*

Step-free entrances, ramps, lifts (where applicable), and accessible sanitary facilities in accordance with CP C.01.11:2018.

## 2.4. Energy Efficiency Technologies

The Service Provider is obliged to implement the energy efficiency measures established on the basis of the Energy Audit Report prepared for the existing building.

The technical solutions identified in the audit shall be mandatorily incorporated into the design documentation; the building shall achieve at least energy efficiency class B.

### *Building Envelope:*

Thermal insulation of façades using insulation materials (thickness determined based on thermal calculations and the energy audit).

Thermal insulation of the floor slab above the basement and of the attic/roof.

Replacement of external joinery (aluminum doors with thermal break, high-performance windows – minimum triple glazing or equivalent).

### *HVAC Systems (Heating, Ventilation, Air Conditioning):*

Rehabilitation or replacement of the heating system to ensure maximum efficiency (high-efficiency boilers, heat pumps, etc., in accordance with the audit).

Installation of mechanical ventilation systems with heat recovery in classrooms and crowded spaces.

Installation of heating emitters equipped with thermostats and control valves.

### *Lighting:*

Interior and exterior LED lighting systems.



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Use of motion and presence sensors in common and outdoor areas.

### *Renewable Energy:*

Installation of photovoltaic panels on the roof (where structurally feasible and in accordance with the audit) for on-site electricity generation.

Use of renewable energy sources for domestic hot water preparation (solar thermal panels), where applicable.

### *Automation:*

Automation and control systems for optimizing energy consumption (climate control, lighting).

## 2.5. Development of the Adjacent Areas

The development of the adjacent areas shall be designed as an extension of the learning space, forming a coherent formal and conceptual whole with the building, in accordance with the provisions of the Model School Concept Application Guide.

### *Sports Areas:*

Open-type multifunctional sports center (in accordance with CP C.01.09:2017), football field with running tracks, basketball/volleyball courts, and fitness (work-out) areas.

Ancillary facilities for changing rooms and sanitary units in proximity to sports fields.

Sports field lighting in two phases (security and sports activity).

### *Green and Recreational Areas:*

Green spaces (minimum 50% of the site area, in accordance with sanitary standards), walkways, benches, gazebos (capacity 25–30 persons) for outdoor classes.

Differentiated recreation areas (primary, lower secondary, upper secondary, teachers).

Open-air theatre (reconstruction/modernization of an existing facility or new construction).

### *Outdoor Learning:*

Environmental research stations (digital greenhouse, composters, weather station, garden beds).

Digital greenhouse for biology lessons (connected to utilities, with storage and working spaces).

Paths and movement zones (balance, turning).

### *Access and Circulation:*

Safe access routes for pedestrians and bicycles (covered bicycle/scooter parking near the entrance).

Car parking planned so as not to intersect key pedestrian routes and designed to be discreet (visually screened).

Universal (barrier-free) access within the site and buildings.

### *Fencing:*

No solid or massive fencing shall be designed. Where necessary, the existing fence shall be repaired or green fencing shall be provided (minimum height 1.2 m–1.5 m).



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Ceremonial square at the main entrance (with flagpoles).

### *Outdoor Lighting:*

LED street lighting network with photovoltaic elements and motion sensors for the perimeter.  
Lighting simulation software to be used for the selection of lighting poles and luminaires.

### 3. Structure of the Design Documentation

The **framework of the design and cost estimate documentation** shall be submitted complete, in accordance with the national legal framework, and shall be divided into separate sections, buildings and site areas (prepared in the Romanian language).

Thus, each section, building and site area shall include:

Explanatory Report, including the *Environmental Protection section and Accessibility for persons with special needs*;

Master Plan (MP) (*including vertical planning and the stormwater collection and drainage system*);

Construction Works Organization (CWO);

Drainage Network (DN) / Stormwater Sewerage;

Landscape Design;

Architectural Solutions (AS);

Interior Design (ID);

Reinforced Concrete Structures (RCS);

Metal Structures (MS);

Demolition and Dismantling Works (DW);

Building Elements (BE);

Anti-corrosion Protection of Structures (ACPS);

Thermo-mechanical Solutions (TMS);

Heating, Ventilation and Air Conditioning (HVAC);

Internal Water Supply and Sewerage Networks (IWSS);

External Water Supply and Sewerage Networks (EWSS);

Heating Networks (internal and external) (HN), including the Individual Heating Substation (IHS);

Thermal Insulation (TI);

Automation (A), including:

- Automation of Technological Processes (ATP);
- Automation of Heating, Ventilation and Air Conditioning (AHVAC), including Smoke Control Systems (SCS);
- Automation of Internal Water Supply and Sewerage Networks (AIWSS);
- Automation of Air Supply (AAS);
- Automation of Heat Supply (AHS);



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- Electrical Automation (EA);
- Automation of Electricity Supply (AES);
- Automation of Electronic Communications Networks (AECN);

Outdoor Electric Lighting (EEL);

Interior Electric Lighting (IEL);

Power Electrical Equipment (PEE);

Electricity Supply (ES);

Electricity Supply. Electrical Substations (ESS);

Lightning Protection (LP);

Telephone and Signalling Communications (TSC);

External Telephone and Signalling Communications (ETSC);

Automated Control Systems (ACS);

Fire and Security Alarm Systems (FSAS);

Fire Alarm Systems (FAS);

Automatic Intrusion Alarm Systems (AIAS);

Fire Safety Assurance Measures (FSAM);

External Automation Networks (EAN);

External Electricity Supply Networks (EESN);

Internal Electricity Supply Networks (IESN);

Electronic Communications Networks (ECN) (wired internet, Wi-Fi, bell and central radio system, video surveillance, interior and exterior electric lighting);

Equipment Specifications (ESp);

Technological / functional processes for the canteen, sports hall, laboratories and other specialized spaces;

### *Cost Estimates:*

General and local cost estimates; Forms 1, 3, 5, 7, including the detailed form (1d);

Separate cost estimates for energy efficiency measures;

Verification Report / Verification Approval of the execution design, by separate sections;

Verification Report / Verification Approval of the cost estimate documentation.

*Approvals and Permits:* Environmental, public health, fire and rescue services, public utility networks (electricity, telecommunications, water supply, sewerage, gas, etc.), Police Inspectorate (where applicable).

The Service Provider shall be responsible for obtaining all required approvals on behalf of and based on the mandate issued by the Beneficiary.

*The Service Provider shall ensure the preparation of the design documentation (including the following components: power transmission cable lines (RCE); overhead power transmission lines (LEA); electricity supply; electrical substations (AEES)), coordination with the competent*



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authorities, and the obtaining of all necessary permits and approvals for the relocation of the electrical transformer substation from the premises of Public Institution “Ștefan cel Mare” Theoretical Lyceum and Public Institution “Alexandru Donici” Theoretical Lyceum.

**Upon finalization of the Design Brief, the specific sections of the design documentation required for execution shall be determined and approved. At the same time, the maximum admissible budget for the cost estimates of construction works shall be established.**

#### 4. Deliverables shall be structured as follows:

| No. | Deliverables Structure                                                                                                                                                                                                             | Financial Share of the Offer (%) | Implementation Deadline |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------|
| 1   | Architectural concept of the project approved by the Ministry of Education and Research (including 3D visualizations)                                                                                                              | 10                               |                         |
| 2   | Technical approvals / Permits / Urban Planning Certificate for design                                                                                                                                                              | 5                                |                         |
| 3   | Project concept presentation sessions for final beneficiaries (students, teachers, local administration, Ministry of Education and Research) and integration of feedback into the concept (minimum 2 sessions per school)          | 5                                |                         |
| 4   | As-built survey plans                                                                                                                                                                                                              | 5                                |                         |
| 5   | Topographical and geodetic surveys<br>Technical and geological investigations                                                                                                                                                      | 5                                |                         |
| 6   | Design Brief approved by ONDIMP and the Ministry of Education and Research                                                                                                                                                         | 10                               |                         |
| 7   | Master Plan approved by the Ministry of Education and Research                                                                                                                                                                     | 5                                |                         |
| 8   | Technical design documentation completed at 100% (internal verification)                                                                                                                                                           | 10                               |                         |
| 9   | Environmental protection documentation, including construction waste management and separate management of hazardous waste                                                                                                         | 5                                |                         |
| 10  | Technical design documentation verified by certified project verifiers and coordinated with the competent authorities                                                                                                              | 25                               |                         |
| 11  | Cost estimates verified by certified verifiers                                                                                                                                                                                     | 10                               |                         |
| 12  | Technical assistance during the public procurement process for construction works (clarifications for bidders, additional information regarding the design documentation, and other activities related to the procurement process) | 5                                |                         |

The financial proposal will reflect the cost of services per deliverable

The execution schedule will reflect the execution time per deliverable.

#### 5. The documentation referred to above shall be submitted in the following format:

- Hard copy: 3 original copies, 2 duplicate copies; + Digital format: DWG, PDF, Excel, Word, as applicable (with the exception of approvals obtained from public authorities).
- Handover–acceptance certificate for each deliverable, within the timeframe stipulated in



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the Technical Offer

- c. The documentation prepared shall become the property of the Contracting Authority, including all related copyright and intellectual property rights.

**Implementation period: 7–10 months** from the date of registration of the contract with the State Treasury.

**Director a.i.**

**Iunona LUNGUL**