**REPUBLIC OF CROATIA**

**MINISTRY OF PHYSICAL PLANNING, CONSTRUCTION AND STATE ASSETS**

**EARTHQUAKE RECOVERY AND PUBLIC HEALTH PREPAREDNESS PROJECT**

**TERMS OF REFERENCE
for Supervision of Works Services for Construction of Student Dormitory Building in Petrinja**

Proc.ref.no.: MoPPCSA/ER&PHPP/C1.2.37/CS-CQS

# PROJECT BACKGROUND

About the Project: The Republic of Croatia (RoC) with financing form the International Bank for Reconstruction and Development (IBRD) through the Loan Agreement (Loan No. 9127-HR) is implementing the Earthquake Recovery and Public Health Preparedness Project (Project). Project Development Objective (PDO) is to assist Croatia with earthquakes reconstruction efforts in Zagreb and the surrounding areas, Sisak-Moslavina County and Karlovac County, improve institutional capacity for reconstruction, and strengthen national systems for public health preparedness. The project implementation period spans between 2020 and 2024. The Project comprises three components: (1) Earthquakes Recovery and Reconstruction; (2) Public Health Surveillance and Preparedness; and (3) Project Management. Part of the loan funds are intended to be used for reconstruction of buildings in health and educational sectors that are damaged in earthquake. The project is implemented by the Ministry of Physical Planning, Construction and State Assets (MoPPCSA) and the Ministry of Health (MoH), in coordination with other institutions. The Project Implementation Unit of the MoPPCSA (PIU 1) is responsible for Component 1, as well as civil works under Component 2.

The Student Dormitory Building is planned to be built on the cadastral parcel no. 3019/5, Trg Matice Hrvatske bb, Petrinja, on a part of the plot of the Dragutin Tadijanović Primary School, near the Faculty of Teacher Education in Petrinja. The cadastral parcel on which the building is planned will be subdivided as a separate parcel, in accordance with the subdivision proposal within Main Design. The area of the newly formed parcel will be 2.411 m². In December 2020, the development of the Main Design was completed, and a Building Permit was obtained.

The capacities of the future dormitory are primarily intended for the Faculty of Teacher Education, University of Zagreb - Petrinja Department, which houses about 500 students, of whom more than 70% live outside the Sisak-Moslavina County, and even over 90% outside Petrinja. The new dormitory will have a capacity of about 70 beds, and in addition to accommodation capacity, a student canteen is planned in the dormitory as well. Considering the large number of students who travel from outside of the city, the need for accommodation is great. So far (before the earthquake in December 2020), students were accommodated in private accommodation or were forced to travel from distant places. Currently, the number of accommodation units available for rent is significantly reduced or even completely absent because most of the buildings were damaged in the earthquake, and the rare accommodation units that are available and functional are mainly rented to construction workers participating in the reconstruction works throughout the city and are rented at significantly higher and for students unaffordable prices. Currently, almost all students who live outside Petrinja travel every day to attend classes.

The construction of a student dormitory will significantly improve the quality of studying. Also, the implementation of this project is the beginning of a better cooperation between the County and the University, and further cooperation and arrangement of the Scientific-Cultural-Educational Center in the County is expected, as bringing of new faculties and programs will be considered in addition to the existing Faculty of Metallurgy in Sisak and Faculty of Teacher Education in Petrinja.

The construction of the building is planned in 4 floors (ground level and three floors). The floor plan dimensions of the building are: 45,26 m x 14,30 m. Maximum (and total) height of the building is 13,20 m. The total gross area of the building is 1.825,48 m2.

The Main Design (**ANNEX 1**) was developed by Arhingtrade d.o.o., Zagreb, Gajeva 47 for the purpose of obtaining the Building Permit. The chief designer for the Main Design was Mate Žagar, MSc in Civil Engineering (dipl.ing.građ.), G508. Main Design includes:

* architectural design;
* structural design;
* electrotechnical design;
* mechanical design;
* mechanical design of plumbing installations and hydrant networks;
* vertical transport design;
* fire alarm system design;
* safety at work study;
* fire protection study;
* kitchen technology and laundry room study;
* geotechnical study.

The Building Permit was obtained in March 2021, with Confirmation of Validity dating April 3rd, 2021 (**ANNEX 2**). In next period Detail Design (including Bill of Quantities) will be developed.

The Consultant’s assignment (hereinafter the Assignment) is to provide supervision of works services for the construction of Student Dormitory Building in Petrinja. Successful completion of the Assignment will contribute to the PDO’s overall objective of the economic development of Sisak-Moslavina County and to the specific objective of enhancing the well-being of students and the population in general. New student dormitory will provide students with a better opportunity for education and work in the County. It will also improve Croatia’s educational system as well as contribute to Croatia’s scientific and economic development by improving educational results in a responsible and effective manner. Realization of the Assignment will have particularly extensive positive effects on educational system of Petrinja, which was badly damaged by the two earthquakes of December 2020.

# SERVICES OBJECTIVE

The objective of the services is supervision over the construction of new student dormitory building carried out in full compliance with this Contract and relevant legislation of the Republic of Croatia.

The works contract shall be implemented according to World Bank provided General Conditions of Contract[[1]](#footnote-1) and Particular Conditions of Contract (**ANNEX 3**) prepared by the Client. Prior to start of provision of services, the Client shall appoint the Project Manager – a person responsible for monitoring the execution of the Works and administering the Contract.

Supervision of works consists of professional construction supervision according to the Construction Act (OG 153/13, 20/17, 39/19, 125/19), Act on activities in Physical Planning and Civil Works (OG 78/15, 118/18, 110/19) and any relevant subsidiary legislation. Supervision of works also consists of ensuring the fulfilment of Contractor's contractual obligations to the Client.

According to the Construction Act, the Supervising Engineer is in the implementation of professional construction supervision obliged to:

* supervise the construction so that it is in accordance with the Building Permit, i.e., the Main Design, Construction Act, special regulations, and rules of the profession;
* determine whether the Contractor and the responsible person conducting the construction or works meets the conditions prescribed by a special act;
* determine whether the setting out of the building was performed by a person authorized to perform state survey and surveying activities according to a special act;
* determine the implementation of control tests of certain parts of the building for the purpose of verification, i.e. proof of compliance of basic requirements for construction and/or other requirements, i.e. conditions provided by the Main Design or report on performed design control and verification obligations regarding construction products;
* without delay inform the Client of all deficiencies or irregularities noticed in the Main Design and during construction, and the Client and the construction supervision of measures taken;
* compose a final report on the construction.

The scope of the supervision services under this contract and in addition to legal obligations includes the following:

* monitoring and controlling the spending of funds by purpose, dynamics, and amount (control of measurements, calculation of quantities, Interim Payment Certificates (IPC) certification, calculation of unforeseen and subsequent/additional works i.e. Variations);
* maintaining the agreed deadlines (monitoring the progress of works according to time plans and intervention in case of deviations, control of the qualification structure of the Contractor's personnel and appropriate equipment);
* monitoring and controlling quality of works (visual inspection, control, and review of documentation by which the Contractor proves quality in terms of test results and test frequency, presence when taking samples for testing, taking measures to eliminate defects);
* construction control according to Building Permit and Main and Detail Design (control of height and length elevations, setting out, use of materials in accordance with the project, interpretation of ambiguities in the project, solving individual details);
* other (control of data entry in the construction log, control and certification of construction book, proof of quantities, certification of Interim Payment Certificates (IPC’s), various reports and analyses, arranging documentation on the construction site for technical inspection, participation in Taking Over of the Works and other legal and other tasks if and when authorized by the Client).

Project Manager may also delegate to Consultant any task arising from the General and Particular Conditions of Contract, especially obligations and rights from the following clauses:

* 9. Personnel and Equipment;
* 13. Insurance;
* 16. The Works to Be Completed by the Intended Completion Date;
* 17. Approval by the Project Manager;
* 28. Program;
* 31. Delays Ordered by the Project Manager;
* 32. Management Meetings;
* 33. Early Warning;
* 34. Identifying Defects;
* 35. Tests;
* 36. Correction of Defects;
* 37. Uncorrected Defects;
* 40. Variations;
* 42. Payment Certificates;
* 44. Compensation Events;
* 57. Final Account.

Project Manager may also delegate any other task or obligation arising from any other clause of the General and Particular Conditions of Contract, not stated above.

# SCOPE OF SERVICES AND TASKS

## **III.I. PHASES OF THE ASSIGNMENT**

All tasks will be performed in compliance with the requirements of Croatian legislation and in accordance with the obligations of this Contract.

Prior to start of the Assignment, Consultant shall develop the Procedures Manual – a document which presents methodology of Consultant's work, containing form templates, elaborated procedures, reporting plan, quality control plan and any other obligation that arises during execution of works. When preparing the Procedures Manual, Consultant shall comply with relevant legislative framework as well as the obligations arising from this ToR and General and Particular Conditions of the works contract.

The Assignment consists of three phases:

### III.I.I. Preparation phase

Preparation phase implies the period between conclusion of this Contract and the Start Date (Commencement of Works).

During the Preparation phase Consultant shall:

* provide analysis and control of the design documentation (i.e. Detailed Design, including Bill of Quantities) and ensure completeness of Detailed Design, confirm compliance and accordance with Main Design (including Building Permit and Special Requirements) and confirm that Bill of Quantities corresponds to Detailed Design. The Consultant shall prepare the Report on Design Documentation Analysis and submit it to the Client for approval;
* establish a functional organization of experts in the supervision team and enable instant mobilization of staff to engage in the implementation of Contract which includes also official appointing Supervising Engineers by works disciplines;
* assess the conditions on the construction site and warn the Client of potential risks in the execution of works;
* support the Client in the process of giving the Contractor right of access to, and possession of, all parts of the construction site within the time period defined in the works contract (including production of As-Is Minutes/Report) and introduce the Contractor into works;
* assist the Client in reviewing and approving all necessary certificates, guarantees, insurance policies, etc. for the start of construction works;
* review Contractor’s Program (including any revision thereof) and determine initial time and financial plan provided by the Contractor;
* monitor and control the preparation of administrative deliverables of the Contractor.

### III.I.II. Execution phase

Execution phase implies the period between Start Date and issuing of the Certificate of Completion.

During the Execution phase Consultant shall:

* supervise the implementation of the Contractor's activities, and ensure their compliance with terms and conditions of the works contract, quality requirements and the general scope of the project, from the conclusion of the works contract, execution of works to the implementation of Tests, issuance of Certificate of Completion and Taking Over of the Works;
* supervise the preparation and timely delivery of Contractor’s deliverables;
* carry out professional supervision over all activities of the Contractor in accordance with the applicable regulations of the Republic of Croatia;
* carry out coordination and administration of the works contract;
* initiate, lead and coordinate on-site and monthly progress meetings and prepare and issue minutes of these meetings in a timely manner and ensure that all issues are resolved quickly;
* monitor the progress of works and timely inform the Client about all risks and issues that may arise and affect the achievement of project objectives;
* verify the construction log of the Contractor and certify the calculation of quantities submitted as executed by the Contractor;
* participate in implementation of tests and control the installation of significant materials and equipment;
* conduct daily inspections of construction site to check the quality of work and ensure the implementation of Safety at Work measures;
* approve materials nominated by the Contractor for installation;
* propose possible adaptations of the project (if needed in collaboration with the designer) and alternative technical solutions to the Client, which may become necessary or useful during or after the execution of works;
* advise the Client on possible ways to reduce project costs, reduce execution time or improve the quality of works, review any Variation proposed by the Contractor and advise the Client in the decision-making process for Variations (quantity review, quality suggestions, unit prices review, alignment with project documents etc);
* prepare reports as defined in ChapterIV.of this ToR, prepare all reports in accordance with the applicable legislation of the Republic of Croatia and prepare all prescribed reports for technical inspection and participate in the technical inspection procedure;
* supervise the execution of any works Variations i.e. unforeseen and subsequent works during construction;
* participate accordingly during Identifying defects;
* have at their disposal a person who will perform the duties of Safety at Work Coordinator in accordance with the Safety at Work Act (OG 71/14, 118/14, 154/14, 94/18, 96/18) and any relevant subsidiary legislation.

### III.I.III. Completion phase

Completion phase corresponds to the period from issuing Taking-Over Certificate for Works until approval of Final Payment Certificate. During this phase the Consultant is required to perform following sub-tasks:

* review and approve As-Built Design documentation;
* supervise completion of any work outstanding on the Date of Completion;
* supervise remediation of any identified defects;
* participate in any administrative activities regarding Defects after Taking-Over;
* review and approve Final Payment Certificate.

## **III.II. OBLIGATIONS OF SUPERVISING ENGINEERS**

Supervising Engineers are obliged to comply with the Regulation on the manner of conducting professional construction supervision, form, conditions and manner of keeping the construction log and the content of the final report of Supervising Engineer (OG 131/2021).

Also, the obligations of Supervising Engineers in the implementation of professional supervision under this Agreement are as follows:

* construction supervision in accordance with the Main Design and Building Permit;
* performing professional supervision in accordance with this ToR and performing tasks of coordinator of safety at work in the construction phase;
* performing supervision in line with relevant national environmental and social legislation and specific Environmental and Social Management Plan (ESMP) for the project, hence with World Bank Environmental and Social Policies, Environmental, Health and Safety Guidelines and Good International Industry Practice;
* monitor ESMP implementation and submit regular (monthly) E&S compliance reports to PIU 1 and Project Manager;
* continuous daily presence on the construction site and construction monitoring;
* receive and promptly communicate any concerns or grievances to PIU’s Project Grievance Redress Mechanism (GRM), coordinating direct communication between concerned parties and PIU GRM specialist, and supporting additional document/evidence collection as needed;
* control of material supply - certificates of conformity, certificates of constancy of performance, other certificates;
* monthly verification of calculation of quantities and certification of IPC’s;
* control and price evaluation for subsequent and unforeseen works;
* keeping minutes of coordination meetings;
* participation in the certification of the Final Payment Certificate, Taking Over of the Works, technical inspection and in the procedure of obtaining usage permits;
* organize and conduct photo documentation of construction progress.

# SUBMISSION AND TIME SCHEDULE FOR DELIVERABLES, CONTRACT DURATION, AND REPORTING REQUIREMENTS

After the conclusion of works contract, the Consultant shall review all existing relevant documentation and develop Inception Report with appropriate material discussing special problems, risks, and opportunities. Inception report shall include description of monitoring and controlling processes of the works execution, but also definition of monthly reports content.

Results of monitoring and controlling activities shall be included in Monthly Reports which shall be developed in accordance with the defined scope within Inception Report. Submitted reports will be reviewed by the Client and approved or returned for revision and/or resubmission. Monthly Reports shall be submitted through the e-mail in appropriate format (.docx, .xls, .pdf).

The Consultant also shall develop any other Specific Reports according to the Client’s requirements whose content will be determined and agreed between the Consultant and the Client, as well as submission deadline.

At the end of the consultancy service engagement the Consultant shall develop Final Report which shall include project summary, project execution analysis, cost analysis, list of verified as-built designs, verified results of Tests conducted, Reports on commissioning of various mechanical and electrical components of works and other as needed.

Reports shall be written in Croatian language and each report (Inception Report, Monthly Reports, Specific Reports, Final Report) shall have one page summary in English language. All reports shall be submitted through e-mail in appropriate format (.docx .xls, .pdf). Any other deliverable shall be written and submitted in Croatian.

During the Assignment, Consultant shall prepare and submit appropriate deliverables to the Client for approval. All deliverables shall be submitted through the e-mail in appropriate format (.docx, .xls, .pdf).

Time schedule for deliverables is as follows (days listed below are calendar days):

| **No.** | **Deliverable** | **Delivery deadline** | **Timeline for approval** |
| --- | --- | --- | --- |
|  | Report on Design Documentation Analysis | 14 days after receiving complete design documentation | 7 days after submission |
|  | Inception Report (including As-Is Minutes/ Report) | 14 days after conclusion of works contract | 7 days after submission |
|  | Procedures Manual | 14 days after conclusion of works contract | 7 days after submission |
|  | Monthly Report | 7 days after the end of the reporting period | 7 days after submission |
|  | Minutes of coordination meetings | The following day | The following day |
|  | Specific Report according to Client’s requirements | as agreed during implementation | 7 days after submission |
|  | Final Report | 14 days before the end of services | 14 days after submission |

Consultant shall ensure completion of services on time and without any delay. Also, all deliverables prepared in connection with the services shall immediately upon completion be submitted to the Client for its review and approval. The Client will review and approve or return deliverables for revision and/or resubmission within previously defined period in the table or any other period defined by the Client upon receiving each of the deliverables.

In the Contract, the Consultant shall assign all intellectual property rights of its work to the Client, including intellectual property rights of any deliverable which Client finds unacceptable and for which it refuses payment.

The estimated period for providing the services is fifteen (15) months after Commencement of Services (i.e., 3 months prior conclusion of works contract and 12 months after conclusion of works contract) but in any case, the Assignment ends one month after the completion of the works, i.e., issuing of Certificate on Completion. The start of services is expected in the 1st quarter of 2024.

# TEAM COMPOSITION, MINIMUM QUALIFICATION AND EXPERIENCES

The supervision of works service can be performed by a certified architect or a certified engineer independently in their own office, joint office or legal entity registered for that activity.

The Consultant (legal entity, certified architect or certified engineer’s own or joint office) shall prove the experience in implementing similar services. The experience that the Consultant shall have and is of relevance for the conduction of these services shall be experience in performing supervision of works service in the year in which this procurement is conducted and the previous seven (7) years:

* the Consultant shall have a minimum of three (3) project references related to the performance of similar tasks (supervision of works), with a single construction investment value of more than EUR 4 million (without VAT);
* experience in supervision over construction or reconstruction works of buildings with gross surface area exceeding 2,000 m2 is an advantage;
* experience in supervision over the construction or reconstruction works of residential buildings is an advantage;
* experience with FIDIC construction contracts or World Bank provided General Conditions of Contract for Works.

The Consultant’s team is required to include experts who have relevant skills, experience, and qualifications to perform previously defined tasks as follows:

1. Chief Supervising Engineer – a person responsible for integrity and mutual compliance of professional supervision of works and is respectively obligated to prepare a final report. Professional construction supervision in the capacity of a responsible person (Supervising Engineer and Chief Supervising Engineer) within the tasks of his profession may be performed by a certified architect or a certified engineer in accordance with a special law governing association in the chamber.

The expert proposed for the Chief Supervising Engineer position shall have following experience:

* minimum of three (3) references in the performing of supervision of works service with an investment value of more than EUR 4 million (without VAT); – relevant experience in each project shall include the implementation of works contract under FIDIC General and Particular Conditions or World Bank provided General Conditions of Contract for works;
* performing supervision of works service for at least three (3) building projects with an area larger than 2.000,00 m2.
1. The Consultant shall appoint the Construction Supervising Engineer. Professional construction supervision in the capacity of a responsible person (Supervising Engineer) within the tasks of his profession may be performed by a certified architect or a certified engineer in accordance with a special law governing association in the chamber.

The expert proposed for the Construction Supervising Engineer position shall have following experience:

* minimum of three (3) references in the performing of supervision of works service with an investment value of more than EUR 4 million (without VAT);
* performing supervision of works service for at least three (3) building projects with an area larger than 2.000,00 m2;
* experience in supervision over the reconstruction works of residential buildings is an advantage.
1. The Consultant’s experts shall have knowledge of relevant standards and procedures, Croatian legislation and norms in the construction, civil engineering, spatial planning, and environmental protection domains.
2. The Consultant shall have advanced computer skills of using Office applications, architectural/engineering/design programs, and communication software.

Beside the Chief Supervising Engineer and Construction Supervising Engineer, Consultant’s team shall have following additional experts at disposal: Mechanical Supervising Engineer, Electrical Supervising Engineer, Safety at Work Coordinator (HRV: *Koordinator zaštite na radu u fazi izvođenja radova*). Additional experts will not be evaluated, however, upon Commencement of services, the Consultant shall nominate the experts and obtain the Client’s approval before their engagement.

In addition to the minimal required project staff defined above, the Consultant shall assess and provide other supporting and administrative staff.

Consultant will be responsible for the execution of all tasks under this ToR.

Chief Supervising Engineer is required to be present in project implementation at least 60% of time. Presence in Contract implementation implies presence on construction sites, participation in meetings and remote work.

Chief Supervising Engineer is required to be present on construction sites at least two (2) times per week. Chief Supervising Engineer is also required to participate in all of the meetings during Contract implementation.

Construction Supervising Engineer is required to be present in project implementation at least 90% of time. Presence in Contract implementation implies presence on construction sites and participation in meetings. Construction Supervising Engineer is required to be present on the construction site daily.

# INPUT DOCUMENTS AND SUPPORT TO BE PROVIDED BY THE CLIENT

Input documents provided by the Client is Main Design for Student Dormitory Building in Petrinja (**ANNEX 1**), Building Permit for Student Dormitory Building in Petrinja (**ANNEX 2**) and Template of works contract (**ANNEX 3**).

The Consultant shall return to the Client all documents if any received from the Client following the completion of the services to be performed.

The Client shall be responsible for the coordination of all Contract activities. The Client shall appoint Contract Coordinator, who will have the overall responsibility for implementation of activities. The Consultant shall report to the Contract Coordinator.

# OFFICIAL LANGUAGE

The language for communication and for project deliverables shall be Croatian.

# LIST OF ANNEXES

All of the Annexes are due to their size attached to this ToR as separate files.

## **ANNEX 1 – Main Design for Student Dormitory Building in Petrinja**

## **ANNEX 2 – Building Permit for Student Dormitory Building in Petrinja**

## **ANNEX 3 – Template of contract for construction works**

* Available at: <https://pubdocs.worldbank.org/en/679291616012282325/SPD-RequestforBids-SMALLWORKS-OneEnvelope-March-2021.docx>
1. *Part 3 – Conditions of Contract and Contract Forms* of the Standard Bidding Documents – Procurement of Small Works, available at <https://pubdocs.worldbank.org/en/679291616012282325/SPD-RequestforBids-SMALLWORKS-OneEnvelope-March-2021.docx> [↑](#footnote-ref-1)