



Expression of Interest (EOI) For

Pre-qualification of Companies for the Rehabilitation Design for a school in the old city of Mosul with a Participatory Approach within the “Revive the sprite of Mosul Flagship initiative” Ninawa Governorate, Iraq

Ref: EOI-IRQ002/2020-UNDP IRAQ

Date: 02 July 2020

Project Background:

United Nations Development Programme (UNDP) Iraq on behalf of United Nations Educational, Scientific and Cultural Organization (UNESCO) Iraq invites interested legal firms (companies) to apply for an Expression of Interest to pre-qualify companies for the Reconstruction of a school in the old city of Mosul - Ninawa Governorate, Iraq

Objectives:

The objective of the project is to fully reconstruct the school building in the old Mosul city through identifying potential firms/companies having experience in the field of Construction/ Rehabilitation/ Renovation school buildings. The interested firm having similar experience in the Reconstruction of school buildings will be further approached along with detailed BOQ and Drawings in later stage.

Scope:

UNESCO has undertaken a large-scale initiative to Redesign and Reconstruct a school in the old city of Mosul that is child-focused. A better environment contributing to violence reduction and increased academic achievement. This Pre-qualification process is related to the Reconstruction works for the school and therefore, the Scope will be focused on the following areas:

- a) Architectural Works
- b) Structural Works
- c) Mechanical Works
- d) Electrical Works

Prequalification Application Process

1. This Pre-qualification process is aimed to short-list potential Companies/Firms for its participation in the upcoming bidding process (ITB) for the Reconstruction of a school in the old city of Mosul, Iraq. Hence, interested international/local Companies and/or Associations/Joint Ventures with required experience and qualifications are requested to complete the UNDP Pre-Qualification Application and submit relevant documentation/information as to demonstrate that they are eligible and qualified to perform such large scale Construction/Renovation/Rehabilitation works specially related to the Schools.
2. Please note that this procurement process is being conducted through the online tendering system of UNDP. Bidders who wish to submit an information must be registered in the system. Visit this page for system user guides and videos in different languages: <https://www.undp.org/content/undp/en/home/operations/procurement/business/procurem>

ent notices/resources/ If already registered, go to <https://etendering.partneragencies.org> and sign in using your username and password. Use "Forgotten password" link if you do not remember your password. Do not create a new profile.

If you have never registered in the system before, you can register by visiting the above link, sign in with username below, and follow the instructions in the user guide:

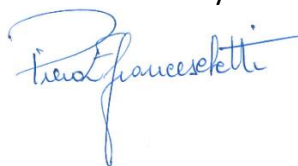
Username: event.guest

Password: why2change

If you are interested to participate in this pre-qualification process it is strongly recommended that you log in and subscribe to the event using "Accept Invitation" feature so you can keep updated with Event amendments including deadline. Note that in case of inconsistencies between information in e-Tendering system and other places/documents, the information in e-Tendering system prevails. Responses received after the above deadline will not be considered.

3. Potential Companies/Firms are requested to submit EOI application with all required documents as stated in the Data Sheet (DS) through e-tendering platform no later than **7:00 am EDT time on Tuesday 04 August 2020**. Applications received after the above deadline will not be considered. Documents sent by hand will not be accepted. Please ensure to submit through e-tendering platform mention EOI Reference number **[EOI-IRQ002 /2020]**. PREQ received not through e-tendering platform will not be considered and result in the rejection of submission.
4. At any time prior to the deadline for submission of Prequalification Document, UNDP may, for any reason, whether at its own initiative or in response to a clarification requested by Applicants, modify the Prequalification Application and its attachments by amendment, including through provision of supplementary information.
5. If you need to request additional information, please write to: dlr.mohamad@undp.oeg cc: piero.emanuele.franceschetti@undp.org. The team will provide necessary information within due date. However, any delay in providing such information will not be considered a reason for extending the submission date of EOI. Deadline for submitting requests for clarifications of questions/queries about the contents of the Prequalification application is **Monday, 27 July 2020**. No phone calls will be accepted. Answers to questions/inquiries will be posted on e-tendering platform, UNDP web pages, and other web pages, on which this EOI is posted.
6. Completion of the Prequalification Application and submission of relevant documentation is compulsory as indicated in the Data Sheet. Applications with incomplete submissions shall be disregarded.
7. All applicants (Overseas and Iraqi) are required to comply with Local Government Regulations.

Yours Sincerely



Piero Emanuele Franceschetti
Head of Service Centre
Senior Operations Manager
UNDP Iraq

A. General

Scope of Application: UNDP IRAQ on behalf of UNESCO Procuring entity (The Employer) issues this EOI for the purpose of short-listing potential international/local Companies for its participation in the upcoming bidding process for the Rehabilitation Design for a school in the old city Mosul in Iraq.

1. Eligible Applicants:

- a) An applicant shall be a legally established or Joint Venture (JV) firm(s)/companies. Maximum allowable Joint Venture partners shall not exceed more than two partners. Natural/Physical persons are not eligible to apply in their individual capacities.
- b) Construction Companies from Iraq that intend to participate in this Expression of Interest must be registered with the Ministry of Trade, Directorate of Registration of Companies in Iraq. The bidders that are not registered with the Ministry of Trade in Iraq, shall be required to obtain the permission to conduct construction activities in Iraq if they are awarded the contract.

2. Contents of the EOI: The documentations for the EOI consist of the annexes indicated below and should be read in conjunction with any Addendum that may be issued by the UNDP later on.

- Annex 1 - Application Submission Form;
- Annex 2 – Joint Venture Declaration;
- Annex 3 – Equipment Details
- Annex 4 - General Construction Experience;
- Annex 5- Specific Construction Experience;
- Annex 6 – Litigation History
- Annex 7 – Proposed Key Personnel
- Annex 8 – Evaluation Criteria
- Annex 9 – Brief Scope of Work

3. Amendment of the EOI:

- a) At any time prior to the deadline for submission of applications, the UNDP may amend the Pre-qualification by issuing an addendum.
- b) Any addendum issued shall be part of the EOI and shall be communicated in writing by posting the addendum to the web page(s) on which the Pre-Qualification Application is posted.
- c) To give prospective applicants reasonable time to take an addendum into account in preparing their applications, UNDP may, at its discretion, extend the deadline for the submission of applications.

A. Preparation of Applications

- a) **Cost of Applications:** The Applicant shall bear all costs associated with the preparation and submission of its application. UNDP will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the prequalification process.

- b) Language of Application:** The application prepared by the Applicant and all correspondence and documents relating to the application exchanged by the Applicant and UNDP shall be in the **English** language. In case of other language, the firms/companies should provide the English translation version along with the documents.

Late submission beyond the deadline shall be rejected.

B. Procedures of Seeking Clarifications and Evaluation of Applications

Clarifications of Applications

- a) To assist in the evaluation of applications, UNDP may, at its discretion, request in writing any applicant for a clarification of its application which shall be submitted within a given reasonable period of time.
- b) If an applicant does not provide clarifications of the information requested by the date and time set in UNDP's request for clarification, its application will not be considered for further evaluation.

C. Evaluation of Applications

- a) UNDP shall use the factors, methods, criteria, and requirements defined in the Evaluation Criteria attached at Annex-8 to evaluate the qualification of the Applicants.
- b) Pre-qualification will be based on the Applicant's General Experience, Personnel Capabilities, Equipment Capabilities and Financial Position as demonstrated by the Applicant's responses in the forms attached to this Pre-Qualification document.**

c) Solicitation Process for Prequalified Construction Companies:

- a) After the notification of the results of the EOI to successful bidders, UNDP shall send the ITB documents to Pre-Qualified Companies only that have been found suitable after a very careful and thorough review of all EOI Submissions.
- b) Bidders may be required to provide a Bid Security and Bank Guarantee acceptable to the UNDP in the form according to the requirement of the upcoming ITB document and the successful Bidder shall also be required to provide a Performance Security as specified in the upcoming ITB Documents.

D. Confidentiality of information

The pre-qualification applications submitted by Contractors are not public records and are not open to public inspection. All information provided will be kept confidential to the extent permitted by law, although contents may be disclosed to third parties for the purpose of verification or investigation of substantial allegations.

E. Other

- a) UNDP may carry out the verification of accuracy, correctness and authenticity of the information provided by the bidder on the documents submitted;
- b) Inquiry and reference checking with Government entities with jurisdiction on the bidder, or any other entity that may have done business with the bidder; if required.
- c) Inquiry and reference checking with other previous clients on the quality of performance on ongoing or previous contracts completed; if required.
- d) UNDP reserves the right to check other sources available to verify information submitted in the pre-qualification applications. If an Applicant knowingly makes a misrepresentation, or an omission of a material fact, in submitting information to UNDP, such misrepresentation or omission may be sufficient ground for denying prequalification to that Applicant, rescinding the Applicant's prequalification, rejecting an Applicant.
- e) This EOI does not constitute a solicitation. UNDP reserves the right to change or cancel this procurement process or any of its requirements at any time during the process; such actions by UNDP will either be posted publicly or directly communicated to all participants, as appropriate. Invitations to participate in ITB will be called for later on and any subsequent contract will be issued in accordance with the rules and procedures of UNDP.
- f) In responding to this EOI, UNDP requires all interested Companies to conduct themselves in a professional, objective and impartial manner, and they must at all times hold UNDP's interests' paramount. Potential Companies must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Any Company found to have a conflict of interest shall be disqualified.

Instruction to Companies/Firms:

The Applicants must submit all required documentations as indicated in the below Data Sheet:

Required Documents as indicated in the right column must be Submitted by the potential Companies to Establish Qualification and meet the evaluation criteria as mentioned under Annex-8.	<ul style="list-style-type: none"><input checked="" type="checkbox"/> Company Profile, which should <u>not</u> exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods/services being procured;<input checked="" type="checkbox"/> Certificate of Registration of the business, Taxpayer Certificate and D & B Report:<input checked="" type="checkbox"/> Potential Companies must complete Annexe-1 to Annex-7 below as necessary and submit with the EOI application including any other required documentations.
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ANNEX - 1

Application Submission Form

(to be printed on company letterhead, signed, dated and stamped)

Date: [insert day, month, year]

To: UNDP Iraq

We, the undersigned, apply to be prequalified for the referenced PREQ and declare that:

(a) We have examined and have no reservations to the Prequalification Application, including any Addendum (or Addenda to same effect), issued by the procuring UNDP entity in accordance with Instructions to Applicants.

(b) We understand that you may cancel the prequalification process at any time and that you are neither bound to accept any application that you may receive nor to invite the prequalified applicants to bid for the contract subject of this prequalification, without incurring any liability to the Applicants.

(c) We are not associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by UNDP to provide consulting services for the preparation of the design, BOQs, specifications, and other documents to be used for the renovation/rehabilitation services to be procured.

(d) *All the information and statements made in this EOI are true and we accept that any misrepresentation contained in it may lead to our disqualification;*

(e) We are currently not on the removed or suspended vendor list of the UN or other such lists of other UN agencies, nor are we associated with, any company or individual appearing on the 1267/1989 list of the UN Security Council;

(f) We have no outstanding bankruptcy or pending litigation or any legal action that could impair our operation as a going concern; and we do not employ, nor anticipate employing, any person who is or was recently employed by the UN or UNDP.

(d) The following information shall be used by UNDP to notify us:

Name
Title
Address:
Tel:
Fax:
E mail:

Best regards,

Signed *[insert signature(s) of an authorized representative(s) of the Applicant]*

Name *[insert full name of person signing the application]*

In the Capacity of *[insert capacity of person signing the application]*

Duly authorized to sign the application for and on behalf of: Applicant's Name *[insert full name of Applicant]*

Address *[insert street number/town or city/country address]*

Dated on *[insert day*

umber] day of *[insert month]*, *[insert year]*

ANNEX - 2

JOINT VENTURE DECLARATION (If Any)

We have entered into a private joint venture in order to submit joint application for the Pre-qualification by **United Nations Development Programme (UNDP) Iraq**. If we are prequalified and awarded the contract in the future, the joint venture agreement shall be notarized and submitted to the Contracting Entity before the contract is concluded. Lead partner of our joint venture shall be *[Indicate name of the lead partner]* until the completion of work.

If we are awarded the contract as a result of the joint tender that we submit, we hereby declare, accept and guarantee that the contract shall be signed by all partners and our partner indicated as the lead partner shall have the full power to act for and on behalf of our joint venture in respect of all issues concerning the contract. Please note that the maximum JV partners shall not exceed more than two.

No	Name of the Partner in the JV	Percentage Share ¹
1		%
2		%

	Lead Partner	Partner
Name		
Date		
Signature		
Stamp		

Particular Experience Record of Lead Partner: (Reconstruction, Renovation & Rehabilitation)

S.No.	Description of Projects	Lead partner	Amount	Year

Particular Experience Record of Partner: (Reconstruction, Renovation & Rehabilitation)

S.No.	Description of Projects	Lead partner	Amount	Year

To prequalify, each partner in JV shall be required to pass the specified Minimum Qualifying Criteria applicable to this form, as set out in this document. The partner having less qualification/resources will not be considered.

Signed *[insert signature(s) of an authorized representative(s) of the Applicant]*

Name *[insert full name of person signing the application]*

In the Capacity of *[insert capacity of person signing the application]*

Duly authorized to sign the application for and on behalf of: Applicant's Name *[insert full name of Applicant]* Address *[insert street number/town or city/country address]*

Dated on *[insert day number]* day of *[insert month]*, *[insert year]*

Note for Joint Venture: If any potential Overseas/Iraqi Construction company intends to make a joint venture with each other, the lead Firm must have all contractual obligations and bindings to implement the Contract with UNDP.

ANNEX -3

List of Equipment Owned/Rented by the Company

Name of Applicant or Partner of a Joint Venture(if any)

The Applicant shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for all items of equipment listed in this Annex – 3.

Note: Please fill out this Form for all Equipment the bidders have owned/rented as indicated below:

S.No.	Description of Equipment	On Company's strength	Model/Power/Year of manufacture	Current Location	Current Status
i)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented
ii)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented
iii)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented
iv)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented
v)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented
vi)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented
vii)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented
viii)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented
ix)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented
(x)					<input type="checkbox"/> Owned <input type="checkbox"/> Rented

Annex-4

General Construction/Rehabilitation Experience

Shall be filled in for the Bidder and partner of a Joint Venture (if any)

General Construction Experience				
Starting Month/ Year	Ending Month/ Year	Years	<ul style="list-style-type: none">- Contract Identification and Name- Name and Address of Employer- Brief Description of the Works Executed by the Bidder	Amount

Annex-5

Specific Experience

(For the Construction/Rehabilitation of Schools)

Shall be filled in for the Bidder and partner of a Joint Venture

Contract of Similar Size and Nature			
Contract No of	Contract Identification		
Award Date		Completion Date	
Role in Contract	Contractor	Management Contractor	Subcontractor
Total Contract Amount	USD		
If partner in the JV or subcontractor, specify participation of total contract amount	Percent of Total	Amount	
Employer's Name Address Telephone/Fax Number E-mail			
Description of the similarity in accordance with Criteria of specific experience mentioned above.			

ANNEX - 6
LITIGATION HISTORY

Name of Applicant or Partner of a Joint Venture

Applicants, including the partners of a joint venture, should provide information on any history of litigation or arbitration resulting from contracts executed in the last three years or currently under execution. A separate sheet should be used for each partner of joint venture.

A. Litigation History

Year	Award FOR or AGAINST Applicant	Name of client, cause of litigation, and matter in dispute	Disputed amount (current value US\$ or equivalent)	Blacklist status (if any)

B. Pending litigation: (All pending litigation shall in total not be more than 10% of the average annual turnover and shall be treated as resolved against the Applicant)

Year	Name of Company/Organization	Disputed value in US\$	Current Status,	Remarks

C. History of Non-Performing Contracts (Non-performance on a contract did not occur in the last 10 years)

Year	Name of Company/Organization	Amount of the Contract	Duration of the Contract (From-To)	Status

This is to certify that our firm is neither in the Consolidated list of Individuals and Entities with Association to Terrorist Organizations nor in the List of Vendors Suspended or Removed from the UN Secretariat Procurement Division Vendor Roster

Signed *[insert signature(s) of an authorized representative(s) of the Applicant]*

Name *[insert full name of person signing the application]*

In the Capacity of *[insert capacity of person signing the application]*

Duly authorized to sign the application for and on behalf of: Applicant's Name *[insert full name of Applicant]* Address *[insert street number/town or city/country address]*

Dated on *[insert day number]* day of *[insert month]*, *[insert year]*

Annex-7
Proposed Personnel

The Bidder should provide the names of suitably qualified personnel to meet the specified requirements. The data on their qualification and experience should be supplied in the CVs.

1.	Qualified Contracts Manager:
	Name
2.	Qualified Site Manager:
	Name
3.	Qualified Site Engineer :
	Name
4.	Qualified Site foreman :
	Name
5.	Qualified Quantity Surveyor :
	Name

Note: CVs of all required personnel should be provided with the application

Annex – 8

Evaluation Criteria for the Pre-Qualification Process of Companies for the Rehabilitation Design for a school in the old city of Mosul.

Criteria	Requirements		Required Documents	Score
Conflict of Interest	The Bidder must submit a disclosure that it has no conflict of interest with this Project related issues.		A signed disclosure must be submitted by the authorized official of the company.	Pass/Fail
Historical Contract Non-Performance	History of non-performing contracts: Non-performance of a contract did not occur within the last (10) years prior to the deadline for application submission, based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract, and where all appeal instances available to the bidder have been exhausted.	<ul style="list-style-type: none"> - Must meet requirements. - In case of JV, each partner of the existing or intended JV must meet requirement by itself or as a partner to past or existing JV. 	Annex-6 must be completed and signed with stamp.	Pass/Fail
	Pending Litigation: All pending litigation shall in total not represent more than (10%) of the Bidder's net worth and shall be treated as resolved against the Bidder.	<ul style="list-style-type: none"> - Must meet requirements. - In case of JV, each partner of the existing or intended JV must meet requirement by itself or as a partner to past or existing JV. 	Annex-6 must be completed and signed with stamp.	Pass/Fail
Financial Situation	Historical Financial Performance: Submission of audited balance sheets or other Audited Financial Statements acceptable to the Employer, for the Last Five (5) years to demonstrate the current soundness of the bidder's financial position and its prospective long-term profitability.	<ul style="list-style-type: none"> - Must meet requirements - In case of JV, each partner of the existing or intended JV must meet requirement. 	Last five years Audited Financial Statement (Income Statement and Balance Sheet) including Auditor's Report for the past five years (2015, 2016, 2017, 2018 & 2019).	Pass/Fail

Criteria	Requirements		Required Documents	Score
	Minimum annual turnover of US\$2,000,000 in any single year for the last five (5) years.	<ul style="list-style-type: none"> - Must meet requirements - In case of JV, The Lead Firm must meet the requirement. 	Required documents must be submitted.	Pass/Fail
D & B Report	Submission of most recent D&B Report that represents sound financial standing of the Company /JV Partner	<ul style="list-style-type: none"> - Must meet requirements 	D & B Report must be submitted.	Pass/Fail
Experience	<p>General Experience:</p> <p>Minimum of 10 years of overall experience in the field of Construction/Rehabilitation/ Renovation. Company Profile must be submitted.</p>	<ul style="list-style-type: none"> - Must meet the requirements. - In case of JV the lead partner must have 10 years of overall experience in innovative constructions Rehabilitation/ Renovation works. 	Annex-4 must be completed & submitted for the General Experience.	Pass/Fail
	<p>Specific Experience:</p> <p>Minimum of 2 similar contracts for rehabilitation/renovation/construction over the last 7 years.</p> <p>Minimum one of above indicated contracts equals or above US\$2,000,000 successfully implemented during the last 7 years.</p>	<ul style="list-style-type: none"> - Must meet the requirement by the company/Lead Firm in case of JV. 	Annex-5 must be completed & submitted for the Specific Experience.	Pass/Fail
	<p>Satisfactory performance:</p> <p>Statement of Satisfactory Performance from the Top two (2) Clients on similar works - rehabilitation/renovation/construction completed during the last 7 years.</p>	<ul style="list-style-type: none"> - Must meet the requirement by the company/Lead Firm in case of JV. 	Must meet the requirement	Pass/Fail

Criteria	Requirements	Required Documents	Score
Personnel	<p>1.1- Company Structural Organization (organogram)</p> <p>1.2- Project Key Staff:</p> <p>1.2.1- One Qualified Contracts Manager, A minimum of (10) years previous experience on similar scale construction of school projects. Should have B.SC relevant engineering or building surveying degree.</p> <p>1.2.2- One Qualified Site Manager, A minimum of (6) years previous experience on similar scale construction school projects. Should have B.SC relevant engineering or building surveying degree.</p> <p>1.2.3- One Qualified Site Engineer, A minimum of (5) years previous experience on similar scale construction school projects. Should have B.SC relevant engineering or building surveying degree.</p> <p>1.2.4- One Qualified Site foreman, (10) years' onsite experience on similar scale construction school projects. Should have a minimum of a High School diploma. Preferable to have a first aid certification.</p> <p>1.2.5- One Qualified Quantity Surveyor, A minimum of (5) years previous experience on similar scale construction school projects. Should have B.SC relevant building surveying degree.</p>	<p>Must meet the requirement. CVs highlighting each key personnel's relevant experience in the construction /renovation of schools with Letter of Commitment for each key personnel required.</p> <p>Annex-7 must be completed and submitted.</p>	Pass/Fail
Equipment	The Bidder must demonstrate that it has the key equipment proposed for executing and completion of works.	<ul style="list-style-type: none"> - Must meet the requirement - Annex- 3 must be completed and submitted. 	Pass/Fail
Documents Arrangement	Registration Certificate: A Potential Company must have valid Registration & Trade License as an entity issued by its own Government. Any Overseas Company willing to participate in the Pre-Qualification process must submit a Letter of Confirmation	<ul style="list-style-type: none"> - Must meet the requirement - The Bidders must submit a Letter of confirmation. 	Pass/Fail

Criteria	Requirements	Required Documents	Score
	that it has the ability to obtain necessary registration certificate/work-permit to operate inside Iraq.		
Implementation timetable (work plan)	Implementation timetable as per the requirement for 52 weeks. (bidder to indicate all stages/phases starting from contract signature to the project completion and handover, work plan to show a detailed list of tasks, duration and allocated resources per task).	- Bidder should submit the detailed project implementation timetable as a Gantt Chart	Pass/Fail
Health & Safety record	Provide explanation on how the bidder deal with Corona virus (COVID-19) situation, describe health and safety measures that your company put in place.	- Required documents must be submitted.	

Annex-9

Brief Scope for the Rehabilitation of school design in Old City Mosul

A. Architectural Scope of work

1.1 TERRITORIAL AND SITE ANALISYS

The project area is located in the city of Mosul, in the governorate of Ninive, in Iraq.

In particular, the site is part of the municipality of The Old City within Block B34. Located less than about 400m from the Tigris River, the school building is immersed in the urban fabric of the ancient city, characterized by high constructive density, narrow streets defined by mid-rise buildings and introverted courtyards. These peculiar features, together with the irregular network of the street system, were exploited during the design process since the very first conceptual sketches. In fact, the local urban conformation provides natural shading from the solar radiation not only in the streets, but also in the open spaces within the building, thanks to the use of enclosed courtyards and patios by vernacular architecture.

The school site is located between two streets on the northern and on the southern sides: the first one is private and is shared with other school facilities within the same property, the second one is one of the secondary streets that departs from Nabi Jorjis Street. This configuration allows access to the area from two sides and the very possibility to cross the site was implemented in the project. The project area adjoins with other buildings on the eastern and western sides.

The existing buildings on the project site are all to be demolished and the area is to be cleaned before the beginning of the construction phase.

THE PROJECT

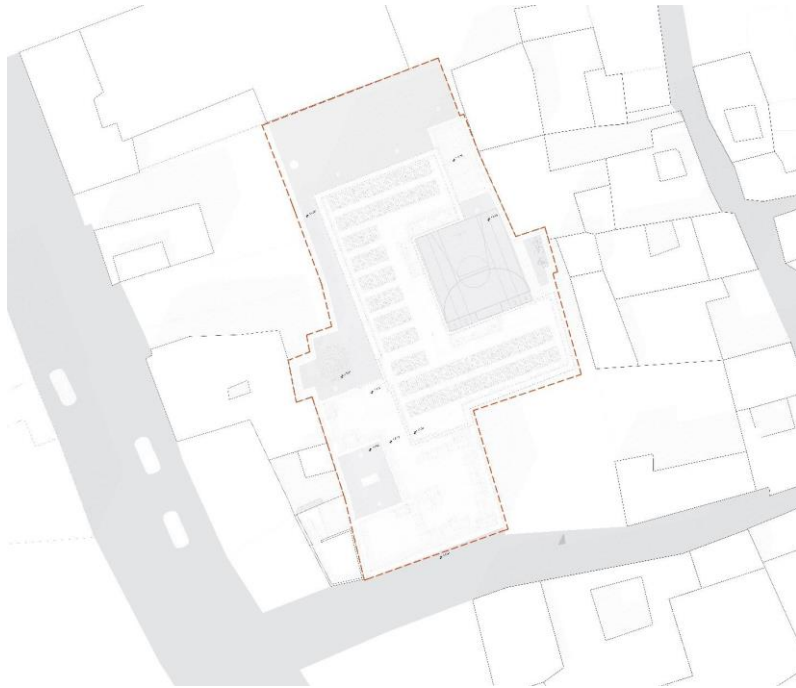
The project consists of the reconstruction of the Al Ekhlāas school area. The new complex is accessible from two entrances:

- the main gate located on the southern side of the project area;
- a secondary/back gate on the northern side, connected to the existing school that is part of the same property

The project consists of two functional blocks:

- the administrative block is organized on two floors with an accessible roof top for educational and maintenance activities;
- the educational block is organized on three floors with a not accessible roof, where external units of the mechanical systems and the photovoltaic system are located. The access to this roof is allowed only for the maintenance technicians.

All the interior spaces overlook the courtyards. The horizontal distribution system is based on outdoor covered passageways on the ground floor and external balconies overlooking the playground on the ground floor. The vertical distribution is achieved through open staircases.



FUNCTIONAL PROGRAM

The administrative volume consists of:

- 2 offices, 2 manager offices, 2 teacher rooms with related toilets on the ground floor;
- 1 library, 2 laboratories (IT laboratory and science laboratory) on the first floor.

The educational volume consist of:

- 1 guardroom, 4 classrooms, 2 students toilets, 1 accessible toilet and 2 technical rooms on the ground floor;
- 4 classrooms, 2 students toilets, 1 accessible toilet and 1 technical room on the first floor;

- 4 classrooms, 2 students toilets, 1 accessible toilet and 1 technical room on the second floor.

B. Structural Scope of Work

GENERAL DESCRIPTION OF THE STRUCTURES

The new Al-Ekhlaas school is designed according to Eurocodes, with particular reference to Eurocode 2 (EN 1992-1-1) and Eurocode 8 (EN 1998-1). The school is characterized by a cast-in-place reinforced concrete frame structure. The frames are bidirectional, designed according to the capacity design procedures, in order to provide the required seismic resistance.

The school complex is divided into five blocks through seismic joints 100 mm wide. Each block has a compact shape and it is regular in plan and elevation, in order to optimize the seismic performance:

- one minor block is just a single-story building;
- two blocks are two-story buildings;
- two blocks are three-story buildings.

The foundations are shallow and consist in reverse T-shaped beams. No seismic joints are placed at foundation level, to avoid differential settlements. On the perimeter of the five buildings, the frame beams are 250 mm wide and 500 mm deep.

The internal frame beams are 400 mm wide and 400 mm deep.

The columns are characterized by rectangular, L or T shapes, 250 mm thick, 650 to 1500 mm wide. The shapes and dimensions of columns are designed to minimize the eccentricity between centers of mass and stiffness and to avoid a torsional flexible response: for this latter reason, the wider and less compact columns (L- and T-shaped) are placed along the perimeter of each block, while compact-shaped columns are placed close to the center of stiffness.

The external corridors and balconies are mainly supported by cantilever beams, 250 mm wide and 400 mm deep.

The slabs consist of cast-in-place reinforced concrete shells, 200 mm thick.

The slabs of the interiors are bidirectional, while the slabs of the external corridors and balconies are unidirectional, warped parallel to the facades, in order to allow the thermal cut between indoor and outdoor structures.

One of the two three-storey blocks houses a r.c. box made of shear walls where the elevator is located. Wide L- and T-shaped columns are placed at the opposite side of the block to reduce the stiffness eccentricity.

C. Mechanical Scope of Works

GENERAL FRAMEWORK AND CONTEXT

The project, whom this report is a significant document, include the execution of some interventions finalized to the new construction of the plant system for the reconstruction of the Al Ekhlas Primary School, based in the west side of the Old City of Mosul, Iraq.

The school has been completely destroyed in 2016 during war actions. The new building structure is made of reinforced concrete and bricks.

The present Report is finalized to give the proper information for the mechanical equipment, to provide heating and cooling, the distribution of sanitary water, the wastewater collection system and the rain water collection and distribution system.

The connections to main systems, as tap water from the municipality piping system; the sewage collection at municipal level and the excess of rainwater, to the collection system, are also included.

The heating and cooling service are given by a split air-conditioner equipment, where external units are placed on the roof of the building.

The building is composed by several locals for different uses, distributed in three levels, in elevation:

- Ground floor: includes some offices and teacher's rooms, classrooms and bathrooms;
- First floor: includes laboratories, classrooms and bathrooms;
- Second floor: includes classrooms and bathrooms.

The net surface of the building is about 890 m², for a heated volume of about 2.830 m³.

The thermal system designed is composed by one or two split air-conditioner for each local, according to the estimated power request. There is no hydronic system. Conditioners produce hot and cold air with a direct expansion circuit between the indoor and the outdoor units (placed on the roof).

All the components are new installations. As requested by the Client, bathrooms and warehouses have not climatization.

Bathrooms have a mechanical extraction for assuring the proper air change.

Mechanical and other installations related to other rooms or not expressly specified in the plans attached to the project, and not mentioned in this technical report, are excluded.

All the information regarding the building, the surroundings and the connections to existing systems (supply and collection of water) and the slope of the ground are derived from discussions with the client. No official information's have been supplied inherently this field of the design process.

Information's, existing norms and rules, position of the main collectors and their underground level, typology of the collected water (sewage, rainwater) have to be carefully checked before and during the execution of the construction work. The design team cannot be considered responsible due to the lack of information that has been provided.

D. Electrical Scope of Works

INTRODUCTION

This project is related to the construction of the electrical and IT system to serve the school premises located near Mosul - IRAQ.

The building has three floors above ground, with the following main uses of the premises:

- classrooms;
- offices;
- anti-bathrooms and bathrooms;
- technical rooms;
- computer room and laboratories;

The present project foresees the realization of the above with reference to:

- electric cabinets;
- electric conductors;
- ordinary lighting system
- security lighting system;
- power system and service sockets;
- telephony system and IT network;
- grounding system.