

Securing professional services for the Detailed Design, transfer of use, and tender documents for new School in Sur Baher - Jerusalem



Scope Of Works

August, 29, 2020



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2. TERMINOLOGY

- **RFP** Request for Proposal
- UNDP United Nations Development Programme
- **SOW** Scope of Works
- **DQP** Design Quality Plan
- **BOQ** Bill of Quantities
- CS Contractor Supervisor
- **CE** Chief Engineer
- WS Superintendent of Works
- SV Supervisor
- **PM** Project Manager
- CA Contract Administrator

3. LOCATION

The works shall be carried out in the two buildings in Zeqaq st. 2 Al Mashahed , Sur Baher – Jerusalem





4. OVERVIEW

The Site consists of 2 buildings that are originally built for residential purposes, the UNDP aims to change the function into a public school following the standard procedures and gain the TOFES 4. The school will have 9 classrooms, all the school services, playgrounds, laboratories, music and art classrooms, and school management rooms.

The main architectural and aesthetic potential of this project lies on the main façade of the multistory building, where it will have Alucobond panels cnc cut and textures to serve as an aesthetic element, play with the natural lighting penetration and ventilation, as well as cut down the amount of window steel bars.

Both buildings have a total area of around 950 square meters without counting the areas of the playgrounds and balconies.

The multistory building is currently a skeletal building with stone cladding.

The smaller building is fully finished inside and outside so minimal demolishing and finishing works will be applied to it.

Sur Baher is in need of more classrooms and a capacity to accommodate more students. This school will have more than 250 students, and will also add a new element to the town of Sur Baher.

Over the years, cracks have developed on the building from several weathering factors through foundations settlement and deteriorating of construction materials, etc.

The United Nations Development Programme (UNDP) intends to engage the services of a qualified contractor for the successful completion execution of building structure, and to upgrade and enhance the serviceability of the building for the daily procedures and occupancy purposes and succeed in gaining the TOFES 4.

This SOW is aimed to implement the execution and implementation works described on this document and on the attached drawings, bill of quantities, and technical specifications. The Remodeling works will be completed in year 2020.



5. PROJECT INTENT

Works planned by the project to be carried out in both buildings regarding the following conservation engineering issues:

- 1. Fencing works of the site including an entrance gate.
- 2. Demolition works for the interior walls and marked parapets of the balconies.
- 3. Demolition of marked exterior walls in order to expand particular areas into the balconies.
- 4. Demolition works and removal windows and doors, according to the demolition plans.
- 5. Removal of sanitary and electrical equipment in the smaller building.
- 6. Demolition works for the concrete block parapets on the roof and terraces.
- 7. Cutting and excavating the slab on grade where its marked on the plans and reaching the foundations.
- 8. Cutting and demolishing the slabs where marked on the plans
- 9. Asphalt paving
- 10. Concrete screen pouring for the site
- 11. Installing first fix for sanitary piping
- 12. Formwork installation for the concrete casting
- 13. Concrete casting for the wall foundations if the excavated ones are not enough
- 14. Concrete casting for the reinforced walls and slabs
- 15. Building of the exterior staircase
- 16. Building of the Exterior walls
- 17. Building of the Steel structure of the Alucobond façade (step 1 of 3)
- 18. Installation of roofs and first floor terrace asphalt rolls
- 19. Installation of E-Tong blocks for first floor terrace
- 20. Pouring of sloping screed for roofs and first floor terrace.
- 21. Building of concrete block walls
- 22. Building of concrete block walls for the Site boundaries
- 23. Casting of door lintels and door frames where needed
- 24. Installing electrical distribution boards and conduits in walls



- 25. Install mechanical piping and cleanout needed under tiling for water supply system and drainage
- 26. First fix for HVAC
- 27. Install Firefighting pipes
- 28. Plastering works (colored plaster for exterior walls and regular multilayered plaster for interior walls and partitions)
- 29. Tiling works including Outdoor stone tiling and window and door sills.
- 30. Installation of Aluminum and steel works (windows and doors)
- 31. Installation of the balcony, roof and staircases' Handrails, and installation of Site railings.
- 32. Installation of aluminum Grid profiles for the Alucobond façade (step 2 of 3)
- 33. Canopy installation (columns and fabric) optional works
- 34. second fix for electrical and sanitary works
- 35. Painting works
- 36. Second Fix for HVAC
- 37. Install False ceiling
- 38. Installing light fixtures and Cameras and other electrical final fixes.
- **39.** Installation of the Alucobond Panels for the alucobond façade. (step 3 of 3)
- 40. Wood works (doors)
- 41. Installation of safety and health signs, cabinet signs, door signs etc.
- 42. Cleaning of the building and removal of the fencing around the construction site.



6. DESCRIPTION OF WORKS

6.1. General Notes:

- **a.** The preambles and notes are applicable to all divisions of the project.
- b. All works covered, wherever relevant, are subjected to the General Specifications for Building Works, also known as DEKEL - Building Cost Data Manual or "Blue Book" (www.dekel.co.il/dekel-english), including methods of measurements, unless stated otherwise under specific items or under the technical specifications.
- **C.** All works covered, and materials, wherever relevant, are subjected to the international standards, including methods of measurements, unless stated otherwise under specific items.
- **d.** The Contractor shall, when pricing the rates of the bills, take into consideration including and allow for the costs or expenses of all requirements stipulated in the notes, drawings, technical specifications and scope of works of the contract.
- **e.** Contractor shall provide sample of materials, systems, finishes for approval prior to execution of any works.
- f. Contractor shall provide shop drawings for approval prior to execution of any work.
- g. All samples and shop drawings should be submitted to the Project Engineer through adopted written submittals form.
- **h.** All works listed below shall be implemented in conjunction with the requirements listed on the technical specifications and shall be dealt with as the minimum standard for the requirements.
- 1. The Contractor should daily submit a daily-log book showing the executed works and detailing the used resources.
- **J.** Prices shall include of building works at all heights as per drawings, including installation and removal of any required scaffold.
- **k**. The Contractor shall be responsible for the protection of the existing buildings and the surroundings, any damage shall be at the Contractor's cost.
- 1. The Contractor at his expenses shall create alternative routes or proper protections to the entrances or pathways during the execution of works for the protection of personnel and properties.



6.2. SITE ESTABLISHMENT

Note 1. Construction site installation works shall include all the items listed as per item 6.3 on this SOW.

Note 2. Removal of debris shall be made using regular size skips.

The work shall be implemented as follow:

- **a.** Construction site installation, including all the elements necessary for the execution of the rehabilitation provided by the project. In particular:
 - Barriers in order to fully define the areas involved by the interventions, supplied with signs according to national laws.
 - Transport, installation and removal of crane and/or lifting systems appropriate to the works planned;
 - Setting up alternative ways for the settlement of the areas affected by the actions;
 - Clearing and clean-up of the working site and removal of all improper elements that occupy the spaces and that can be an impediment to proper execution of work
 - Safety and security
 - Movement, protection and cleaning in the premises affected by the interventions;
 - Cleaning and restoration after work ending;
 - Provision of electricity and water for execution of works. It must be permanently maintained.
 - Regular cleaning of site and areas;
 - Toilets, service rooms and locker rooms for workers;
 - Office for meetings with work superintendent and client;
 - Also, all preliminary activities planned by the project are included (as samples; tests; investigations; protections; check and survey of underground utilities, plants, systems; moves, changes, restoration of existing systems and plants needed for execution of works; etc.). Including everything necessary for the proper and effective conduct of the work.
- **b.** Transport and dumping of waste materials from demolitions and removals to authorized disposal sites, including all charges, transportation, taxes, fee, contributions. For construction waste.



6.3. Sequence of works and other notes

Project description

One of the main goals for this project is to reinforce the building which after making the necessary tests was found to be weak to lateral and seismic loads and require shear walls in different ways to add strength and anti-seismic ability for the building

An extra staircase connecting all the floors is a major component of this project as it is viable for strengthening the building as well as it is a strong architectural feature for the communication between all the floors and also be used an escape egress in case of emergency.

Once this building is under renovation, we will make our target to keep this building suitable for people with special needs, following the safety code and all other relevant regulations in respect.

This project will include the demolition works, structural works along with the primary mechanical works, asphalt paving, stone cladding and roof insulation works, will also include the plastering, tiling, concrete block partitioning, electrical and mechanical first fixes, the remaining finishing works: wood, steel, aluminum & glass works, painting works, electrical and mechanical second fixes. After the completion of this phase, TOFES 4 is to be acquired with the Jerusalem municipality and the building will be ready for use.

It is worth mentioning that at the start of the works, the contractor shall give his methodology for his works. (even if different subcontractors are working), together with this a safety plan and a time chart for the works.

Before every item is executed the contractor has to present to the supervising engineer a shop drawing before proceeding, no works will be accepted without the suitable shop drawings approved.

Contractor will submit deliverables for approval, making sure that any submittal will have enough time margin for approval and delivery time.

The works:

- Before any start of the works, the safety plan must be implemented especially putting suitable barriers to prevent third parties from entering the construction site.
- Before any start of the works, an insurance policy covering third parties should be active.
- The contractor is responsible for all the scaffolding works.
- Cleaning shall be systematic.

Sequence of works

0 Primary works

• Fencing works

1 Demolitions

- See Demolition works sheets for the works
- Removing all marked windows and frames with all components.
- Removing all bathrooms with all their components.
- Removing roof aggregates and making the surface ready for new application of asphalt insulation.
- Demolition of marked exterior walls and interior walls building 1
- Demolition of roof and balcony parapets
- Demolition of all interior walls in smaller building (building 2)
- Demolition of walls related to windows, changing location or size.



- Saw cutting and excavating of the slab of grade where its marked on the plans until reaching the foundations.
- Saw cutting and demolishing the slabs where marked on the plans. The concrete slabs will be cut with a saw at the edges taking all safety measures in the site, it will be advised to have a suitable carton or other material mattress on the newly casted slab on grade to prevent any damages
- Detailed plan of the works and the methodology of demolition and support works will be presented for approval prior to the works, necessary support and jacking will be executed for all beams and slabs before demolition.
- All reinforced walls will be built with the necessary connections, vertical and horizontal as per structural plans and details.

2 Asphalt paving

- Excavate areas where asphalt is to be set.
- Compact the excavated areas
- Install the outdoor sanitary piping.
- Install a layer of base coarse and do the necessary compacting according to paving regulations, this layer is to be of thickness 15-20 cm, making sure that the level of the asphalt at the bottom of the ramp the same as the ground floor level.
- Apply a layer of binding course, of thickness 6cm.
- Followed by a layer of surface asphalt of thickness 4cm.

3 Concrete casting

- Formwork installations.
- Spreading suitable aggregate base coarse and compacting as per regulations and adding the suitable water proofing insulation as per structural plans and details.
- Installing the steel layout according to the structural plans, making sure to leave all steel roots needed for the future reinforced walls to be built in place.
- Installing the sanitary pipes.
- Casting concrete for the slab on grade.
- The contractor is responsible for providing concrete tests for the cast concrete performed by an approved lab to be submitted and approved by the Project Engineer.
- Prior to demolition of exterior walls, suitable support of beams and slabs should be implemented, even knowing that those walls are not bearing walls.
- Implementing the structural plans, ensuring the reinforcement in place matches the drawings, shop drawings to be submitted and approved by supervising engineer.
- Building the reinforced concrete shear walls in the reinforced rooms in all levels.\
- Building the Formwork for Concrete Stairs, the angle of flight, dimensions of thread and riser are to be properly checked. Usually while constructing a stairs attached to wall, the line of flight, thread and risers are marked on the wall for proper fixing of shuttering or formwork.



- Pouring of concrete into the formworks is started from the below part to above. It is recommended to use a concrete vibrator while pouring the concrete to completely fill the gaps of the stairs and to avoid the honeycomb formation.
- Removal of the formwork, after 21 days of concrete casting, curing of the concrete to be done systematically during the 21 days.
- Installing E-tong Blocks and fine aggregates for the first floor terrace.
- Sloping screed to be casted after scratching and roughing the slab on grade of the site using light weight concrete, sloping screed to be casted for the first floor terrace and roofs

4 Implementing the steel structure and steel staircase

- Install the Steel column square bases
- Install the steel columns for the staircase
- Install the steel columns and beams for the aluminum façade, with the necessary attachments to the concrete slabs as shown in the details.
- Install the bracings for the steel staircase structure, along with the i-section for the staircase flights.
- Weld and bolt the steel supports for the treads and landings.
- Install the landings
- Install the staircase handrails

5 Installing roof asphalt rolls

- Installing asphalt rolls on the roof after making sure that the surface is smooth and clean,
- It is important to make sure that all angles have been chamfered to avoid any break of membrane
- The work of the asphalt rolls includes chamfering at the corners between the parapet and the slab, See Details for the slabs and edges
- Do the same for the first floor terrace before the E-tong blocks are installed.

6 Concrete block walls

- Installing 2 cm rockwool insulation on the inside of the exterior concrete walls according to details in the drawings and specifications in the BOQ.
- Building of all concrete block walls
- Casting of door lintels where needed
- Installation of false door frames where needed

7 Mechanical and electrical

- Install electrical distribution boards
- Install electrical conduits in block walls
- Install mechanical piping and cleanout needed under tiling for water supply system and drainage.



- Install first fix for HVAC
- Install 2" and 3" galvanized fire fighting pipes

8 Plastering works

- Plastering of the concrete walls
- Plastering of the block walls
- Colour plaster to be installed for the exterior side of the newly installed concrete block walls.
- Note that wherever there is tile cladding, there will be no need for a final layer of plastering to receive tiles with adhesive mixture. e.g. interior walls of the bathrooms

9 Tiling works

- Tiling of the major areas in the two floors
- Tiling of the bathroom walls and floor
- Tiling of the kitchen floor
- Installation of window sills and door sills
- Tiling of the staircase
- Skirting of all the walls

10 aluminum and steel works

- Installation of the aluminum windows.
- Installation of the aluminum doors.
- Installation of Steel doors.
- Installation of structure for the canopies on the roof (optional works)
- Installation of the trespa partitions in the bathrooms
- Installation of handrails and wall rails of the staircase.
- Installation of the aluminum grid profile for the Alucobond façade.

11 Second fix

- Second phase of electricity
- Second and Final works of sanitary, firefighting equipment and cabinet

12 Painting works

- Painting walls including putty
- Exclude the final layer of paint for later

13 Installing second fix for HVAC

14 Install the false ceiling

15 Painting last layer

- 16 Installation of all the remaining sanitary works (2nd fix)
- 17 Installing light fixtures.

18 Installations of the Alucobond Panels for the Façade.

- **19 Wood works**
 - Installing of wooden doors

20 Cleaning of the building and removal of the barriers around the construction site.



Other interior / exterior renovation works:

- a. The costs for aluminum works include enameling in natural color, 15-20 microns thick, or powder paint.
- b. All exterior glass works shall include insulating glass 6+8+6mm thick (shutter proof).
- c. The Contractor should submit all the required shop drawings and details for the installation of the aluminum works prior to execution for Project Engineer approval.
- d. The Contractor should be responsible for the structural design and certification and stiffness of the structure and shall be responsible to rectify any deficiency like elements vibration.
- e. The Contractor shall be responsible for the protection of the existing buildings and the surroundings.
- f. Supply and paint top quality local manufactured acrylic paint on the plastered walls like "supercryl 2000" or equivalent. The work shall consist of one prime coat, two putty coats for the entire painted areas and two finishing coats with white color in accordance to technical specifications
- g. Supply and paint top quality lime-based paint for walls and ceilings, of one prime coat and two finishing coats, including preparation works and all needed as per technical specifications
- h. Supply and installation of sealing material consist of 2 layers of SBS polymer modified elastomeric bitumen membranes, 4 mm thick, with polyester felt reinforcement and a top sand layer. The sheets on the bottom layer are soldered to the infrastructure and the sheets on the top layer are soldered to the bottom layer sheets, including a bitumen primer, at rate of 300gr/m2
- i. Fixing of bitumen sealing strips to the parapets in the area of roof finishes using a standard aluminum profile, including filling the top gap between the roof and the parapet with an elastomeric polyurethane sealant.
- j. Treatment and waterproofing of drainage gutters inner pipes. The work shall include cleaning of pipe, waterproofing using heavy duty acrylic material and proper finishing around the edges and around the connection between the inner pipe and the cast iron gutters. All works complete as per Project Engineer instructions. The price shall include testing of each inlet.



7. CONDITIONS OF WORKS

- 7.1. The Contractor will carry out all inspections and subsequent work in a timely and professional manner, ensuring the surroundings as little disruption and inconvenience as possible with relation to the time of day.
- 7.2. All work, materials and supplies provided during the execution of this Contract will be in full compliance with the provision of local Laws and regulation. All works will be executed in accordance with the relevant international standards and Codes of Practices and with good practice.
- 7.3. All work in progress will be under the general supervision of the UNDP Project Engineer (or their delegate) of the planner and their on-site project manager. Each visit and the work instructions will be noted in a work log by the engineer or their representative.
- 7.4. All works require pre-proven knowledge by the Contractor and the staff on treatment of historic and ancient buildings. Conservation work will not interfere with the use of the building's spaces.
- 7.5. After selecting a Contractor, the Contractor will be taken on an extensive tour in which all the work to be carried out as explained, and in the case of questions or suggestions, answers will be provided in writing.
- 7.6. A detailed schedule and set work order will be drawn up and concluded with the Contractor. This schedule will not change, except with the consent of both the client and the planning team. The order of the work is determined in respect to the complexity of projects and ongoing use of other parts of the building.
- 7.7. All work on scaffolding and supports will be carried out according to guidelines of the local Ministry of Labor and the general specification can only be given out by the project's engineer.
- 7.8. The use any mechanical tools & vehicles will only be approved after they are presented to the engineer and approved for work.



7.9. Construction and Supervision

- **a.** Before work begins samples of all types of engineering intervention will be presented
- **b.** A temporary support system must be erected before any action is carried out and must in turn be approved by the UNDP project manager or delegated person.

7.10. The Various Tests

Tests should be performed, especially relating to testing of mortars in the walls [manual laboratory testing] and stone type. Cost of those tests shall be incorporated within the cost of the contract items.

7.11. Responsibility on works and Temporary protection

The Contractor is responsible for executing any specification of engineering and conservation engineering of the work samples, at least in the working period that will take place between application of work samples and the start of implementation of the project. The Contractor is responsible for no less than one year.

The responsibility is on the implementation of the specs, their existence, their wholeness, and on the materials of which they are composed, but without responsibility for unforeseen mechanical damage.

In case of failure of the specifications resulting from the poor execution or failure due to poor management, the Contractor shall re execute the entire specification at their own expense.

In case of any harm caused to elements to be conserved during dismantling, conservation, protection, transport or storage - the value of the damage will be assessed by the engineers and conservation architect on behalf of the client. Responsibility for damage and / or repair will be determined by the planning engineers only. In the case of proof that the contactor is responsible for damages, they must repair the damage or provide financial compensation valued at the amount of conservation/ restoration of the damaged part including the period in which the structure will not be in use due to work.

- 7.12. The Contractor shall be responsible for safety and health, according to the Department of Labor guidelines for building. Any injury to persons or property is the sole responsibility of the Contractor. Please refer to chapter 18 requirements.
- 7.13. The Contractor is also obliged to deploy to the site, full time and for the total duration of the contract, a site supervisor/representative adequately mandated and authorized to discuss/decide with the UNDP representative in site, work details and implementation.



7.14. Work establishment

Before commencement of the work, organization will be carried out in accordance with the agreement signed between the Client and the Contractor as follows:

- **a.** It should be emphasized that the Contractor must arrange, in agreement with the UNDP, the following: work space, lockable storage area, office space, ablutions, water infrastructure, electrical infrastructure providing three-phase and ordinary electric outlets.
- **b.** The Contractor shall be responsible for water, electricity and related services. However, based on an agreement by UNDP metered connections maybe provided for cost recovery as part of site establishment.
- **C.** The Contractor must organize a suitable and accessible storage area to ensure proper storage of the elements for conservation as outlined in the specifications.
- **d**. All warning and safety signs, information signs, signs showing Contractor and foreman details will be placed on site at the expense of the Contractor. A sign on the nature of the work of the project, the project initiators and Clients' information and all any related issues will be produced at the expense of the Contractor but approved by UNDP Project Engineer.
- 7.15. A set of work drawings must be available at the site, showing construction and installation details, main, sub- distribution routes and components physical locations and daily updated both to be used as reference and facilitate any needed consultation.
- 7.16. A set of final "As-Built" drawings is to be prepared and submitted with all other pertaining documents at the time of the project completion and handover.
- 7.17. UNDP may, at its own discretion, terminate this contract in whole or in part, for Organization's convenience or because of the failure of the Contractor to fulfill the contract obligations. The Chief Procurement Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the nature, extension, and effective date of the termination. Upon receipt of the notice, the Contractor shall immediately suspend all services affected (unles;s the notice directs otherwise); and deliver to the Chief Engineer all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process.
- 7.18. If the termination is for the convenience of UNDP, the Contractor may submit a request for an equitable adjustment of the contract price for the performance rendered up to the termination date. The Consultant shall review the request and, if supported, shall make an



equitable adjustment to the contract price but shall not allow for anticipated profit on unperformed services.

- 7.19. The UNDP representative or the Consultant may at any time, by written order, make changes within the general scope of this contract in the services to be performed.
- 7.20. If any such change causes an increase or decrease in the cost, or the time required for performance of any part of the work under this contract, whether changed by the order or not, the Chief Procurement Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.
- 7.21. The Contractor must assert its right to an adjustment under this clause within 7 calendar days from the date of receipt of the written amendment. However, if the Chief Procurement Officer decides that the facts justify it, the Chief Procurement Officer may prorogate the stated term to any given time deemed acceptable.
- 7.22. No services for which an additional cost or fee will be charged by the Contractor shall be furnished without the prior written authorization of the consultant and the UNDP representative.
- **7.23.** The Contractor is responsible for the periodical quantity verification process, and he should be committed to the implementation of the contract quantities. In case the actual quantity will exceed the contract quantity, the Contractor shall notify the Project Engineer and ask for guidance. No additional quantities will be approved without a written confirmation by supervising engineer and the UNDP representatives.

7.24. Payment

The method of payment for this Contract will be based on progressive completion of the works. The bidders shall indicate their preferred progressive payment plan that should be related to the bidder's project schedule. The progressive payment plan should meet the below conditions:

- a. Maximum of one (1) payment over a period of 1 calendar month.
- b. Each payment should not be less than twenty percent (20%) of the total contract amount.



8. TECHNICAL DOCUMENTS AND DRAWINGS

8.1. Technical documents:

1 Scope of Works (SOW) – this document must be integrated by UNTSO for bid.

- 2 Bill of Quantities (BOQ)
- 3 Drawings
- 4 Checklist

8.2. List of drawings

Drawings attached to this document are listed below. It is Contractor's responsibility verify the content of all survey drawings and eventually update them, providing shop drawings to UNDP Project Engineer.

Drawing	Description
#	
Ι	ANNEX C - CONSTRUCTION DRAWINGS
	COVER
II	GENERAL SITE PLAN (survey plan)

A203	BUILDING 1 PROPOSED SECOND FLOOR PLAN	ARCHI	FECTURAL DRAWINGS	A503	BUILDING 1 FURNISHED SECOND FLOOR PLAN
A204	BUILDING 1 PROPOSED THIRD FLOOR PLAN	G01	COVER PAGE	A504	BUILDING 1 FURNISHED THIRD FLOOR PLAN
A205	BUILDING 1 PROPOSED ROOF PLAN	G02	INDEX TO DRAWINGS	A505	BUILDING 2 FURNISHED GROUND FLOOR PLAN
A206	BUILDING 2 PROPOSED GROUND FLOOR PLAN	G03	SYMBOLS	A601	BUILDING 1 WEST ELEVATION
A207	BUILDING 2 PROPOSED ROOF FLOOR PLAN	A000	Site Plan	A602	BUILDING 1 NORTH ELEVATION
A300	Site Tiling/flooring plan	A001	BUILDING 1 EXISTING GROUND FLOOR PLAN	A603	BUILDING 1 SOUTH ELEVATION
A301	BUILDING 1 GROUND FLOOR TILING PLAN	A002	BUILDING 1 EXISTING FIRST FLOOR PLAN	A604	BUILDING 1 EAST FLEVATION
A302	BUILDING 1 FIRST FLOOR TILING PLAN	A003	BUILDING 1 EXISTING SECOND FLOOR PLAN	A605	BUILDING 2 SECTION A-A
A303	BUILDING 1 SECOND FLOOR TILING PLAN	A004	BUILDING 1 EXISTING THIRD FLOOR PLAN	A606	BUILDING 1 SECTION B-B
A304	BUILDING 1 THIRD FLOOR TILING PLAN	A005	BUILDING 1 EXISTING ROOF PLAN	A607	BUILDING 1 RAILINGS AND FENCING DETAILS
A305	BUILDING 1 PROPOSED ROOF TILING PLAN	A006	BUILDING 2 EXISTING GROUND FLOOR PLAN	A608	BUILDING 1 ALUMINUM FACADE DETAILS
A306	BUILDING 2 GROUND ELOOR THING PLAN	A100	SITE PLAN DEMOLITION WORKS	A609	BUILDING 1 ALUMINUM FACADE 3D
A307	BUILDING 2 ROOF FLOOR TILING PLAN	A101 g	BUILDING 1 ROUND FLOOR DEMOLITION PLAN	Δ701	BUILDING 1 GROUND FLOOR DOORS & WINDOWS PLAN
A308	BUILDING 1 GROUND FLOOR FALSE CEILING PLAN	A102	BUILDING 1 FIRST FLOOR DEMOLITION PLAN	A702	BUILDING 1 FIRST FLOOR DOORS & WINDOWS PLAN
A401	BUILDING 1	A103	BUILDING 1 SECOND FLOOR DEMOLITION PLAN	A703	BUILDING 1 SECOND FLOOR DOORS & WINDOWS PLAN
A402	BUILDING 1 SECOND FLOOR FALSE CEILING PLAN	A104	BUILDING 1 THIRD FLOOR DEMOLITION PLAN	A704	BUILDING 1 THIRD FLOOR DOORS & WINDOWS PLAN
A403	BUILDING 1 THIRD FLOOR FALSE CEILING PLAN	A105	BUILDING 1 ROOF DEMOLITION PLAN	A705	BUILDING 2 GROUND FLOOR DOORS & WINDOWS PLAN
A404	BUILDING 1 PROPOSED ROOF CEILING PLAN	A106	BUILDING 2 GROUND FLOOR DEMOLITION PLAN	A706	DOORS SCHEDULE
A405		A200-1	Proposed Site Plan (optional)	A707	WINDOWS SCHEDULE - 1 -
A406	BUILDING 2 RODE FLOOR CEILING PLAN	A200-2	Proposed Site Plan with dimensions(optional)	A708	WINDOWS SCHEDULE - 2 -
A501	BUILDING 1 FURNISHED GROUND FLOOR PLAN	A201	BUILDING 1 PROPOSED GROUND FLOOR PLAN	A709	WINDOWS SCHEDULE - 3 -
A502	BUILDING 1 FURNISHED FIRST FLOOR PLAN	A202	BUILDING 1 PROPOSED FIRST FLOOR PLAN	A710	EXTERIOR STEEL STAIRCASE DETAILS



ST	STRUCTURAL DRAWINGS			
S000	COVER PAGE			
S001	INDEX TO DRAWINGS			
S101	Shear Wall foundation Details			
S102	Walls Connections Details			
S103	Ground Floor walls layout			
S104	First Floor walls layout			
S105	Second Floor walls layout			
S106	Third Floor walls layout			
S107	Retaining Wall Sections			
S108	Site clif elevation and Retaining wall section schedule			

		10 12	
ELECTRICAL DRAWINGS		E119	BUILDING 1 PROPOSED GROUND FLOOR AC SYSTEM PLAN
G01	COVER PAGE	E120	BUILDING 1 PROPOSED FIRST FLOOR AC SYSTEM PLAN
G02	INDEX TO DRAWINGS	E121	BUILDING 1 PROPOSED SECOND FLOOR AC SYSTEM PLAN
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E113	BUILDING 1 Low Voltges Layout GROUND FLOOR PLAN	E135	DB DETAILS -3-
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E144 RISER DIAGRAM -5-



Drwing No.	Description
м-000	List Of Drawings & Legend
M-100	Mechanical Site Plan
M-101	Sanitary System Ground Roor Plan-Building 01
M-102	Sanitary System First Floor Plan-Building 01
M-103	Sanitary System Second Floor Plan-Building 01
M-104	Sanitary System Third Floor Plan-Building 01
M-105	Sanitary System Roof Floor Plan-Building 01
M-106	Sanitary System Ground Roor Plan-Building 02
M-107	Sanitary System Roof Floor Plan-Building 02
M-201	Water Supply System Ground Floor Plan-Building 01
M-202	Water Supply System First Floor Plan-Building 01
M-203	Water Supply System Second Floor Plan-Building 01
M-204	Water Supply System Third Floor Plan-Building 01
M-205	Water Supply System Roof Floor Plan-Building 01
M-206	Water Supply System Ground Floor Plan-Building 02
M-301	Fire Fighting System Ground Floor Plan-Building 01
м-302	Fire Fighting System First Floor Plan-Building 01
M-303	Fire Fighting System Second Floor Plan-Building 01
M-304	Fire Fighting System Third Floor Plan-Building 01
M-305	Fire Fighting & LPG Gas Systems Ground Floor Plan -Building 02
м-306	Fire Fighting System Roof Floor Plan-Building 02
M-401	Ventilation System Ground Floor Plan-Building 01
M-402	Ventilation System First Floor Plan-Building 01
M-403	Ventilation System Second Floor Plan-Building 01
M-404	Ventilation System Third Floor Plan-Building 01

Drwing No.	Description
M-405	Ventilation System Ground Floor Plan-Building 02
M-501	AC System Ground Floor Plan-Building 01
M-502	AC System First Floor Plan-Building 01
M-503	AC System Second Floor Plan-Building 01
M-504	AC System Third Floor Plan-Building 01
M-505	AC System Ground Flaor Plan-Building 02
M-601	Refrigerant Pipes System Ground Flaor Plan-Building 01
M-602	Refrigerant Pipes System First Floor Plan-Building 01
M-603	Refrigerant Pipes System Second Floor Plan-Building 01
M-604	Refrigerant Pipes System Third Floor Plan-Building 01
M-605	Refrigerant Pipes System Roof Floor Plan-Building 01
M-606	Refrigerant Pipes System Ground Floor Plan-Building 02
M-607	Refrigerant Pipes System Roof Floor Plan-Building 02
M-701	Mechanical Schedules -1-
M-702	Mechanical Schedules -2-
M-801	Mechanical Details —1—
M-802	Mechanical Details -2-
M-803	Mechanical Details —3—
M-804	Mechanical Details -4-
M-805	Mechanical Details -5-

6		
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G01	COVER PAGE	
G02	INDEX TO DRAWINGS	
G03	SYMBOLS	
A000	Site Plan	
A001	BUILDING 1 EXISTING GROUND FLOOR PLAN	
A002	BUILDING 1 EXISTING FIRST FLOOR PLAN	
A003	BUILDING 1 EXISTING SECOND FLOOR PLAN	
A004	BUILDING 1 EXISTING THIRD FLOOR PLAN	
A005	BUILDING 1 EXISTING ROOF PLAN	
A006	BUILDING 2 EXISTING GROUND FLOOR PLAN	
A100	SITE PLAN DEMOLITION WORKS	
A101 c	BUILDING 1 ROUND FLOOR DEMOLITION PLAN	
A102	BUILDING 1 FIRST FLOOR DEMOLITION PLAN	
A103	BUILDING 1 SECOND FLOOR DEMOLITION PLAN	
A104	BUILDING 1 THIRD FLOOR DEMOLITION PLAN	
A105	BUILDING 1 ROOF DEMOLITION PLAN	
A106	BUILDING 2 GROUND FLOOR DEMOLITION PLAN	
200-1	Proposed Site Plan (optional)	
200-2	Proposed Site Plan with dimensions(optional)	
A201	BUILDING 1 PROPOSED GROUND FLOOR PLAN	
A202	BUILDING 1 PROPOSED FIRST FLOOR PLAN	



9. TIMELINE

- **9.1.** Time for execution of the works: the duration for this project is estimated not to exceed 8 months. The Contractor must submit appropriate time schedule showing all the needed resources.
- 9.2. The bidder shall prepare and submit a comprehensive program implementation schedule covering all works provided by the project, as follows:
 - a. Mobilization periods required.
 - **b.** Shop drawings and construction schedule the project.
 - C. Sampling phase and getting approval on the samples.
 - **d**. Renovation works as per the guidelines and instructions set in this document.
 - e. Demobilization, cleaning and handing over.
- 9.3. The program must take into account the conditions described in the next paragraphs and this recommendation:
 - **a.** The time plan shall be submitted as a GANTT Chart type, showing the critical path and resource allocation, planning and assignment.
 - **b.** The timeline should consider all climatic conditions, importation, official local holidays.



10.SAMPLING

10.1. General explanation of the stages of working samples:

Since some works are exterior, they will continue for a period and will influence the daily use of the building. It has therefore been decided that as part of the bid a preliminary stage of work samples will be conducted in which working models of most of the engineering specs and conservation specifications will be implemented.

10.2. Location and Types of works to be Carried out as Work Samples

The location of the work sample will be chosen together with UNDP Project Engineer. A large part of the space will include engineering application specification and will also include, if possible, most temporary protection methods.

Execution points will be marked on site of the application of various specifications.

10.3. Work samples will include:

- a. Cutting in existing concrete
- b. Connection with existing concrete
- C. Pitching of walls
- d. Compacted base coarse
- e. Tiling, all kinds
- f. Full pointing works.
- g. Installation of window.
- h. Installation of door
- 1. Others as instructed by Project Engineer for works under the contract scope.

10.4. Scaffolding and Support for Work samples

The Contractor shall erect standardized scaffolding across the entire height of the building structure including height that will allow execution of work on and around the roof area.

- a. The scaffolding must leave adequate space for pedestrians.
- **b.** The scaffolding must be solid and be accessible at every situation and weather condition.



- **C.** The temporary supports required on the job will be erected at the expense of the Contractor.
- **d.** A sign showing the standard requirements of the Ministry of Labor as well as a sign explaining the work samples specifications is to be placed on the scaffolding at the expense of the Contractor.

10.5. Schedule

Work samples will start immediately after signing the contract. The schedule is to be determined by the specs.

There must be 1 week waiting period between the end of each work sample and the start of the project for purposes of review, analysis and evaluation by consultant's project team.



11.REPORTING

11.1. Daily log

A construction log or daily construction log is a necessary tool that compiles information from each day that there is work done at every job site.

The construction log shall be filled by foreman/ Site Engineer and shall have the following information:

- **a.** Site conditions and information on weather situation.
- **b.** Personnel including number of Subcontractors, workers, professional staff and any other personnel at the job site.
- C. Activities by the Prime Contractor.
- d. Activities by Subcontractors.
- **e.** Remarks, this section will include any visitors, accidents, changed or unsafe conditions, issues for scheduling or delays, major deliveries, sequencing, and unsuccessful attempts to contact people. This is also where any extras can be documented, as not every extra has a written contract and documentation needs to be found somewhere.
- f. Tests and Inspections.
- g. Memos of Meetings and Discussions, meetings and discussions are a major part of every day on construction job sites and what is discussed in each one needs to be documented.
- h. Material and equipment delivered.
- **1.** Drawings and photos.
- J. Others as ordering materials and equipment, maintenance logs and any other relevant topic.

11.2. Material Submittal

The Contractor should submit material datasheet or catalogue as per the required specification and shall not deliver or consume material without a written approval from UNDP Project Engineer.



11.3. Site/ office meetings

There will be a mandatory bi-weekly meeting to be held on site where joint inspection will be done, and minutes taken. In the report to be generated, the following will be registered;

- **a.** Issues at hand by the contactor.
- b. Progress status/Hindrances.
- C. Contractual issues if any.
- d. Whether there are activities behind schedule, consequences and mitigation measures.

11.4. Shop drawings

The Contractor should submit shop drawings as per the required specification and shall implement works without a written approval from UNDP Project Engineer.

11.5. Inspection logs

The Contractor should submit an inspection report for each task for approval before continuing to the next step. The Contractor should be guided by the Project Engineer on how to divide the reporting steps based on the activities.

11.6. Confirmation on verbal instructions on site

In case the UNDP Project Engineer, project manager gave instructions on site, the Contractor should write and document this requirement and should be signed by both and kept on the records.

11.7. As built drawings

At the completion of the project or project phase, the Contractor should submit as built drawings to reflect any change made through the contract duration.

As built drawings should have written explanations to describe modifications being made, and written dates in the corner of all as-built drawing sheets

11.8. Documentation report

The Contractor shall submit bi-weekly reports, giving, giving details for works accomplished, daily reports summery, and projection for the upcoming works, together with a set of all shop drawings approved.

The contractor will include in his report the list of samples approved as well.



12.METHOD OF MEASUREMENTS

Unit of measurement will be as provided in the Bills of Quantities, or unless otherwise approved by UNDP.

12.1. Work by measuring

- **a.** Work paid "by measuring" will be settled according to the provisions in the BOQ, i.e.geometrical measurements, or number, or weight, as measured by the Project Engineer jointly with the Contractor during the execution of the work.
- **b.** The works measured will be paid according to the measures previewed by the project even if the control of the measures will identify thicknesses, lengths, widths, surfaces and space requirements higher than the measures coming from the project. Only if the Project Engineer has ordered in writing these bigger dimensions, these will be considered in the accounting.
- **C.** In all cases in which the Contactor, even if authorized by the Project Engineer to use profiles, sections or elements of larger and/or better performance than those previewed in project, in order to supply procurement problems and/or to speed up the delivery, the accounting will still be made based on the size and features expected in the project.
- **d**. We also point out that all the test of sampling, acceptance and qualification of materials, control of processes, assistance during the final testing and typically any verification aimed to prove the quality of workmanship, will be conducted and paid by the Contractor, under the control of the Project Engineer; Therefore, the Contractor will have to take into account in its proposal these charges.
- **C.** If not explicitly provided in the Price List, the curved surfaces (e.g. vaults), tilted (e.g. pitches roof) and ribbed (e.g. The presence of decorations, ribs, etc.) will be computed as their projection in plan (for elements that are prevalently horizontal) and / or in their vertical projection (for masonry walls, elevations etc.) deducting the holes and openings surfaces. If not specifically noted will be counted the actual amount emplaced without counting samples, overlap, turn up etc.

12.2. Lump sum works

- **a.** The Project Engineer jointly with the Contractor will inspect works paid at lump sum, during the construction. They will check geometric measurements, weights, numbers.
- **b.** Those measurements will be compared with the quantities written in the drawings that form an integral and an annexed to the Contract Agreement.



- **C.** For the preparation of the States of Work Progress and for the issuance of the advance rates, the amount to be credited is the percentage of the total price, counted as a lump sum. From that amount will be deducted the withheld prescribed by law and any negative findings (deductions) resulting from the checks made by the Final Testing Commission.
- **d**. We also point out, for completeness and clarification, that all the samplings, the verification of the mechanical properties of soils, the acceptance and qualification of materials, the control of processes, the load tests, the assistance during the testing and typically any verification needed to prove the quality of workmanship, will be paid by the Contractor, controlled by the Project Director. Therefore, the Company will have to take into account in its proposal these charges.

12.3. Tiling works:

- **a.** The measurement shall be made by square meters for dismantled and retiled treated and approved area.
- **b.** Measurement shall be made according to the design specifications; the rate of side clearance is deemed to be included in the rate of excavation work for which no extra will be paid. All excavation works shall be in cubic meters, and excavation quantities will be calculated based on dimension of excavations not quantity of excavated materials.
- **C.** Any staircase re-tiling works made for steps shall be calculated as linear meter of tiling.
- d. All other floor and wall tiling works shall be measured as square meter.



13.TECHNICAL SPECIFICATIONS

13.1 paint

13.1.1. Interior painting works with lime-based materials

Purpose

Rehabilitation of existing masonry walls in any shape, nature and thickness to restore the original paint coat.

13.1.2.

Implementation works

- Remove of loose paint and plaster layers where needed to receive well surface.
- Apply one lime-based filler coat up the required thickness in order to have a proper finish, including sanding works.
- Apply one under coat.
- Apply two coats of lime-based paint type and works should conform to the highest Standards and as approved by the Project Engineer.

13.1.3. Painting wooden elements and wooden doors

Purpose

Wooden doors and elements including ironmongery parts and accessories and apply exterior/ interior paint with color to match the existing on site.

• <u>Apply paint.</u>

Apply one prime coat and two paint coats on the wood using semi-gloss paint.

- Installation of all ironmongery.
- Paint a section at a time, and mini roller shall be used for flat areas.
- All painting works shall be applied to the door frame also.
- Additional instructions shall be applied based on the paint manufacturer instructions.

13.1.4. Type of paint:

A proper type of paint shall be used to match the existing on site. In addition to that, the type of paint shall be suitable for exterior use where we have exterior elements.

Paint color shall be existing on site and shall match the existing in color. The paint shall be high quality.



13.2. Concrete supplier.

The contractor, shall comply with all requirements stipulated in the special specifications, preambles, drawings and general specifications of the contract, and whatever necessary to complete the work according to engineer's requirements and specifications.

The contractor shall also provide the certificate of the steel with all quantities supplied to the site

- Supply ready mix concrete from a local approved concrete factory.
- The contractor shall provide the supervising engineer with the concrete mix with all the specifications and lab test results (provided by the factory)
- During the concrete casting there will be implementation of concrete tests by a licensed and approved lab.
- 24 hours prior to the concrete casting, the contractor shall present to the supervising engineer a request for casting and needs a written approval.
- All steel work will be subject to checking by supervising engineer, and written remarks for corrections will be given if needed
- Once approved, the contractor shall make proof of ordering the concrete lab test for the following day
- On the day of concrete casting, there will be on site two tested concrete vibrators, one of which will be a standby
- The pouring and vibration needed for the work
- The formwork and scaffolding will be at the responsibility of the contractor, though the supervising engineer will check and make remarks if needed

13.4 VRF/V suppliers

Supply, install and commission outdoor Variable Refrigerant Flow (VRF) heat pump air conditioning inverter set , based on refrigerant R410, including the control system, galvanized steel bases, supplying and installing insulated gas pipes network and control cables from outdoor units till the locations of indoor units passing through shaft using galvanized supports and fasteners, in addition to branch fittings like Y-joints, Tee joints,...., centralized intelligent control panel (monitoring and controlling) to be installed in each floor and all accessories needed to complete the job. this also include electrical wirings and connection to isolators. The specifications which is based on 22 oC indoor condition summer condition, are as follows:

- 52 kW Cooling Capacity & 41 kW Heating Capacity
- 58 kW Cooling Capacity & 47 kW Heating Capacity

Supply, install, test and commission Four-Way concealed VRV cassette indoor units of 60X60cm, concealed ducted type, complete condensing pump, drain connection, builders work, connections with drain and refrigerant gas pipes, electrical wirings including connections to sockets, all according to drawings, and approval of supervisor engineer. The selection of the units shall be based on medium fan speed and on the temperature conditions mentioned above. The specifications of the units are as described in the BoQ



13.5 Tiles suppliers

The contractor, shall comply with all requirements stipulated in the special specifications, preambles, drawings and general specifications of the contract, and whatever necessary to accomplish the work according to engineer's requirement and specifications.

The contractor shall bring to the site samples of all the tiles to be used in the project, including industrial tiles of all kinds, colors and dimensions as specified in BoQ, as well as natural marble. Lab test may be requested by supervising engineer, if not available in specification form. The supervising engineer may do on site test to check the quality of the tile edges, straightness from all sides including the XY level

- Supply and store the tiles, cement, sand, aggregates and whatever needed in a clean dry place.
- The mortar under the tiles with thickness not less than 5 cm. cement and sand mortar [1:3]
- Supply and install water resistant Mapei grout between the tiles
- plastic unified separators will be used during the tiling
- Aluminium angles wherever needed.
- Samples shall be provided for engineer to choose and approve

13.5.1 Natural stone tiling:

• 3 cm thick stone internal sills of different widths, of excellent quality from TAFFOH or an approved equivalent free from cracks. bedded in or backed with white cement and sand mortar [1:3] .The price shall include grouting with a water resistant grout like Mapei and sand-cement fill under tiles as per engineer instructions (internal edges should be rounded)

• Supply and install first choice local marble polished and rounded 3 cm thick for steps of staircase. The price includes supplying and installing first choice marble polushed and rounded 2 cm thick for risers. All according to drawings and instructions given by the engineer.

• Supply and install first choice local marble polished and rounded 3 cm thick for steps of staircase. The price includes supplying and installing first choice marble polushed and rounded 2 cm thick for risers. All according to drawings and instructions given by the engineer.

• Industrial stone topping for the kitchen

Supply and install kitchen countertop from Caesar 2cm thick and 60cm wide with the color chosen by the engineer. The job includes the openings for the sinks. The price also includes the skirting for it. This includes all necessary to fix the top to the counter cabinet. All according to drawings and instructions given by the engineer.



13.6 Gypsum wall and ceiling supplier

Supply & install 102 mm thick gypsum partition from Tambour or equivalent consisting of two boards from each side with horizontal studs on floors and ceilings and vertical ones every 400mm ,the gypsum boards are 12mm white boards, the gap between the gypsum boards to be filled with wool rock 50mm thick and 36kg/m3 density. All according to specifications and to engineer's instructions.

- Ditto, but one side is 12mm water resistance green gypsum boardand 12mm white gypsum board, and the other side is two12mm white gypsum board.
- Ditto, but both sides are 12mm water resistance green gypsum board and 12mm white gypsum board
- Supply & install 600x 600mm Ecophone Focus Frost square edge board ceiling tiles with all required hangers, supports and connected with T24 main runners and cross T and L and Z edges, works include supply and install Fire resistant gypsum board MR, for false ceilings edges with studs at every 400mm in both directions including decorations, forms, trims with all connections supports, fixing, putty sealer, wire mesh and special angles for edge of boards and all necessary accessories needed for the best completion of works. The price shall include for all opening of air condition grills, light fixture and the like, price shall include also the painting works for the gypsum board margins by applying two coats of putty followed by three coats of Tambour Supercryl 2000 (Color to be determined by owner).
- Supply & install galvanized perforated metal strip 30cm wide, panels to be installed on a metal structure which includes L & Z on the parameter wall made of painted aluminum .works include supply and install Moisture resistant gypsum board MR, for false ceilings edges with studs at every 400mm in both directions including decorations, forms, trims with all connections supports, fixing, putty sealer, wire mesh and special angles for edge of boards and all necessary accessories needed for the best completion of works. The price shall include for all opening of air condition grills, light fixture and the like, price shall include also the painting works for the gypsum board margins by applying two coats of putty followed by three coats of Tambour Supercryl 2000 (Color to be determined by owner).



14. MANDATORY REQUIREMENTS

- 14.1. Bidder(s)has attended the mandatory pre-bid site visit and confirms its familiarity with the site condition and the overall requirements of the project. (Note to Bidder(s): make sure to sign-off on the site visit's attendance sheet.)
- 14.2. All Submissions shall be in English. Exceptions only made for licenses, certificates and reference letters (Preferably attached certified English translated copies).
- 14.3. Bidder(s) shall submit relevant certified copies of license/ certificate as a registered Contractor on the field of construction works.
- 14.4. Bidder(s)have accepted the terms of warranty/defects liability as stipulated in the General Requirements through execution of the Acceptance of Warranty/Defects Liability Statement as per Appendix C.

15.GENERAL REQUIREMENTS

- 15.1. Contractors' participation to any announced site visits in addition to the "mandatory site visit" by UNDP is to be considered mandatory.
- 15.2. The Contractor will visit the site as stated above and get familiar with all relevant details before submitting the bid. The Contractor will have inspected and examined the site and the surrounding areas ensuring that all relevant information (i.e. nature of the ground; conditions of the buildings; extent and nature of the site; form and nature of the work; materials and goods required to complete works; means of communication; access to the site and accommodations he might require) has been collected before submitting his bid. In general terms, the Contractor will have obtained all necessary information as to the risk contingencies and all other circumstances influencing and affecting his bid. Any information about documentation given or forwarded by UNDP to the Contractor will not relieve the Contractor of his obligations under the provisions of this clause.



- 15.3. The work shall consist but not limited to the provision of all necessary tools, materials, equipment, skilled manpower, transportation, machineries, accessories and, engineering services and supervision to fulfill all his contractual obligations as described below:
 - a. Mobilization and demobilization
 - b. Temporary facilities including temporary power and water supplies, enclosures to the working premises, temporary barracks and storage, etc.
 - C. Bond and insurance such as Performance Bond and all risks insurance
 - $d. \quad Site \ supervision \ / \ management.$
 - **e.** Other preliminary items such as standard construction safety and security gadgets, day marking, signage, protection of existing utilities and adjacent properties that may be affected, submission of samples, reports, quality tests, shop drawings and as-built plans, disposal and clean-up, operating manuals and orientations, etc.
- 15.4. An Organizational Chart of the Project Team will be provided with the bid submittal, and to be updated at the time of contract signature; the Contractor will also provide all the necessary contact details, such as telephone and fax numbers. A detailed list of personnel will be forwarded to UNDP Project Engineer upon contract signature.
- 15.5. The UNDP Representative will have the right to determine, without appeal of such decision, whether the proposed staff or personnel has enough technical and language capabilities and the Contractor shall immediately replace any individual not accepted by the UNDP Representative.
- **15.6.** All work, materials and supplies provided during the execution of this Contract will be in full compliance with the provision of local Laws and regulation. All works will be executed in accordance with the relevant international standards and Codes of Practices and with good engineering practice.

15.7. Applicable Codes, Rules, and Regulations

The Bidder(s) shall design and provide facilities, materials/items in compliance with international codes, rules, regulations, ordinances standards, including, but not limited to the following:

- a. EUROCODE
- b. ASTM
- C. BSEN
- d. Iso
- e. Or any other local government equivalent.
 - P.O. Box 54740 17 Ål Asfahani St. Jerusalem Telefax 02 6288036 Mob. 052 2604411 e-mail info@koubas.net



In the Technical Proposal the Bidder(s) shall indicate the applied standards used either for the design and selected materials.

15.8. It shall be the Contractor's responsibility to guarantee that all resources are provided towards protecting workers' safety and health. The Contractor shall take full responsibility for the accuracy, stability and safety of all operations and methods of construction. Every precaution shall be taken for the safety of workmen while they are employed on the works.

15.9. Materials quality and data sheets

The Bidder(s) should submit a detailed material data / technical specification sheet of the needed materials, and not limited to the following major 6 materials:

- a. Concrete supplier.
- **b.** VRF/V suppliers
- C. Tiles suppliers
- d. Gypsum wall and ceiling supplier
- **e.** Interior paint material.

15.10. Experience in related projects

The Contractor should submit his experience in previous related projects, the minimum required information shall include: Project name, location, name of client, client contact details (including mobile phone number, UNDP may contact the references for verification), contract value including variations, project dates, project manager, site supervisors and other key personnel, role of firm, project description, points of similarity with this proposed project, litigation and arbitration history and personnel safety history. Follow the format as per Appendix A.

15.11. The Contractor should submit a comprehensive quality control plan meeting the standards of international construction industry practice or equivalent acceptable standard. All conducted works shall be performed using a proper inspection methodology for each activity as per local codes "Blue Book" and UNDP approval.



- 15.12. In the case of any inconsistencies among the documents constituting this bid, the provisions of this agreement shall have precedence and thereafter its annexes in the order below:
 - a. sow
 - **b.** Annex B BOQ
 - C. Annex C Drawings
 - d. United Nations General Conditions for Services.
 - e. FIDIC Conditions of contract for construction.

15.13. Acceptance of warranty / defects liability

- **a.** The Contractor shall guarantee the workmanship for all the executed works, installations, components and materials.
- **b.** The Contractor shall guarantee that all construction works are free from any defective workmanship.
- **C.** The Workmanship Warranty validity period shall be for one(1) year in accordance with the Contract Terms and Conditions and the pertinent local and international laws, rules and regulations.

The Contractor shall agree to repair/rectify any defect noticed during the warranty period, including providing related transportation, workforce, tools and equipment at their own cost to remedy all defects.



16.SPECIAL REQUIREMENTS

- 16.1. Work is to be carried out in a fenced area around the site. Therefore, the Bidder(s) must propose procedures (for example on working hours, fencing, signage, safety, etc.) to make minimal disturbance during the execution of works to the meighbors. Special instructions must be issued for the use of tools in terms of noise and dust.
- 16.2. These instructions must take account of the following requirements:
 - **a.** Strict adherence to all safety requirements shall be observed with all works to be carried out.
 - **b.** The site shall be progressively cleaned of works debris daily with final clean prior to handover. The Contractor shall provide adequate protection for all adjoining and adjacent building elements. All damage sustained as a result of UNDP the Contractor or their Sub-Contractor work shall be repaired/replaced to the UNDP satisfaction without cost to the Client and shall be completed within the Contract period.
 - **C.** A pre-handover joint inspection will be done to assist the condition of the building and the Contractor shall take responsibility and accountability to any damage resulting from the works or activities.
- 16.3. The location of the work sample will be chosen together with UNDP Project Engineer:
 - **a.** The location of the work samples will be chosen by UNDP Project Engineer.
 - **b.** Execution points will be marked on site of the application of various specifications.
- 16.4. The Contractor is responsible for executing any specification of the works, at least in the monitoring period that will take place between application of work samples and the start of implementation of the project. The Contractor is responsible for no less than one year. The responsibility is on the implementation of the specs, their existence, their wholeness, and on the materials of which they are composed, but without responsibility for unforeseen mechanical damage.
- 16.5. In case of failure of the specifications resulting from the poor execution or failure due to poor management, the Contractor shall re-execute the work at their own expense.
- 16.6. In case of any harm caused to elements to be conserved during dismantling, conservation, protection, transport or storage the value of the damage will be assessed by the engineers



and conservation architect on behalf of the Client. Responsibility for damage and / or repair will be determined by the quality control engineer only. In the case of proof that the contactor is responsible for damages, they must repair the damage or provide financial compensation valued at the amount of conservation/ restoration of the damaged part including the period in which the structure will not be in use due to work.

- 16.7. A final report is to be presented at the end of the project. The report shall include all preparation work, applications, changes and conclusions. It will show the amount of days spent on site. It will need to include a chapter of conclusions and a chapter with recommendations for further work.
- 16.8. Work samples, deliverables and submittals will start immediately after signing the contract. The schedule is to be determined by the Contractor. A maximum one week waiting period between the end of each work sample and the start of the project for purposes of review, analysis and evaluation and approval by the UNTSO.



17.CONTRACTOR QUALIFICATIONS AND REQUIREMENTS

- 17.1. Where applicable, the Contractor is obliged, free of charge, to provide UNDP selected personnel with an on-site custom designed technical course covering all the aspects of the systems installed equipment, operation and maintenance; installation familiarization, to functional operations and programming, monitoring, basic troubleshooting and routine checks, both as an integrated system down to each of its individual components.
- 17.2. All the works to be performed by the Contractor shall be carried out in a competent and professional manner by skilled, licensed and experienced professionals and other required resources performing under the supervision of the site project supervisor, officially nominated by the Contractor. The Contractor shall put in place, practice and maintain the necessary safety measures required by law and shall keep the work site cleaned daily.

17.3. Contractor staff requirements:

Besides any requirements by the authorities (responsibility of the contractor) the following personnel should be met by the contractor

- **a.** Minimum one visit per week a Project Manager with minimum experience of 10 years in managing projects within the same scope.
- b. Full time Site Engineer with minimum experience of 10 years in related field of works.
- **C.** Part time mechanical engineer (60%) with minimum experience of 7 years in related field of works.
- d. Part time electrical engineer (60%) with minimum experience of 7 years in related field of works
- e. Part time licensed safety manager (work manager) with minimum experience of 5 years in related field of works.
- f. Full time construction labors with minimum 2years of related experience.
- g. Same requirements apply to Subcontractors' personnel for the other related works.
- **h**. In case the staff do not speak English, the Contractor will provide an English-speaking technical staff (site manager) or a translator with technical knowledge, who will be on site and provide daily progress reports throughout the implementation of the works. The English-speaking person will be on site for at least 3 hours per week (2 visits) and on call from Monday through Friday, for four (4) additional hours per week for the entire duration of the project.

17.4. Staffing requirements:



The Contractor should submit manpower schedule indicating the number, category and its distribution as per submitted project/work schedule.

17.5. Plant and equipment:

The Contractor should provide schedule of tools and equipment to be used including period of engagement.

18.SAFETY REQUIREMENTS

- 18.1. The Contractor should submit a comprehensive occupational health and safety plan meeting the standards of international health and safety practices or equivalent acceptable standard. The Contractor will be responsible to ensure that all staff are adequately trained for the required works, particularly in relation to working at height and scaffolding.
- 18.2. The Contractor shall be responsible for safety and health, according to the Department of Labor guidelines for building. Any injury to persons or property is the sole responsibility of the Contractor, as well as any other losses related with or inflicted by equipment handling and/or any other operation necessary to carry in order to deliver the project. UNDP shall not be liable for any accidents/incidents occurred during project implementation, including direct, indirect or consequential losses or injuries resulting from any negligence, misconduct or non-compliance with the approved occupational health and safety plan.
- 18.3. The Contractor/Subcontractor shall provide and maintain all the necessary insurance, including medical coverage for its personnel, equipment during the period of the Contract. All workers shall be adequately covered by health, accident, life, disability insurance and insurance against third-party liability as required by, and in accordance with applicable local lawsor practice. The Contractor shall submit the date and proof of valid insurance coverage to UNDP five (5) days in advance of the contract commencement.
- 18.4. Personal protective equipment must be provided by the Contractor, who will ensure it is used by all site personnel as well as visitors. Site personnel must wear hi-vis vests, hard hats, safety shoes, protective gloves, protective eye glasses and other necessary equipment to guarantee safety at all times.
- 18.5. Construction site shall have suitable barrier or fencing to prevent entry of unauthorized personnel. The fencing shall be made with special material like heavy duty plastic mesh or equivalent.
- 18.6. All work on scaffolding and supports will be carried out according to guidelines of the Ministry of Labor and the general specification can only be given out by the project's engineer. The use any mechanical tools will only be approved after they are presented to the engineer and approved for work.



- 18.7. The Contractor shall erect standardized scaffolding across the entire height of the building structure including height that will allow execution of work on and around the roof area.
 - **a.** The scaffolding must leave adequate space for pedestrians, and the width of the scaffolding must be at least 80cm.
 - **b.** The scaffolding must be solid and be accessible at every situation and weather condition.
 - **C.** The temporary supports required on the job will be erected at the expense of the Contractor.
 - **d**. The scaffolding must be validated and certified by a licensed scaffolding builder, for each segment that will be built and attached to the stone facades.
 - **e.** Signs showing the standard requirements of the Ministry of Labor as well as a sign explaining the work samples specifications is to be placed on the scaffolding at the expense of the Contractor.
 - **f**. It is the job for the Contractor site manager to check the scaffolding daily and make sure that all parts are attached well and it is safe to work on.
- 18.8. All the debris must be disposed of at an authorized dumping site, and copies of authorization documents/ agreements shall be submitted to UNDP.
- 18.9. Damages to UNDP properties during works by equipment, vehicles and personnel will be under the responsibility of the Contractor.
- 18.10. Site area shall be cleaned daily and leftover material and tools shall be stored safely.All required equipment and tools shall be in a very good condition and checked frequently.
- 18.11. Safety and construction signs shall be installed at the site as per Project Engineer instruction with no additional cost.

