

STATEMENT OF WORK

**NEC- resurfacing the concrete slab around the
GSX**

PROPERTY OBO-10000

New Compound Embassy

U.S. EMBASSY KHARTOUM, SUDAN

2017

1. Description of Services:

The US Embassy, Khartoum has a requirement to resurface the concrete slab around the GSX in the New Embassy Compound (NEC), Khartoum. The works shall be executed as per drawings, scope of work, specifications and General contract conditions. This project requires an experienced contractor to design and execute the job.

The Contractor shall provide all labor, material tools, equipment, supervision and other related items required to complete the project as per scope of work, specifications and attached drawings.

Contractors are advised to visit the site, verify the existing site conditions to develop their proposal.

2. Submittals

The contractor shall submit the following

1. Concrete mix design certificates and testing reports.
2. Specifications, shop drawings for trench work
3. Specifications for interlocking tiles and curbstones

3. Scope of Work

1. The contractor shall be responsible to resurface the concrete area in the south and the north of the GSX building. The paved area shall be sloped toward the nearest storm water drainage manhole as approved by the COR.
2. The work shall include demolition of existing surface concrete (around 15cm with nominal reinforcement), excavation of topsoil, the refill works and mechanical compaction and all other works required to achieve the required surface.
3. The new reinforced concrete slab shall be
 - a. At least 20 cm thick with a single mesh layer of steel reinforcement 16 mm bars @ 20 cm intervals.
 - b. The area shall be around 300 sq. meters on the south side.
 - c. The area shall be around 20 sq. meters.
 - d. The details shall be as shown in the attached diagram.
 - e. Reinforcing Bars: ASTM A 615/A 615M, Grade 420 (Grade 60), deformed.
 - f. The concrete shall be ready mix concrete with the following specs:-
 - i. Maximum Slump: 125 mm.

- ii. Maximum Slump for Concrete Containing High-Range, Water-Reducing Admixture: 200 mm after admixture is added to concrete with 50 mm to 75 mm slump.
 - iii. Compressive Strength (28 Days): 30 MPa minimum.
 - iv. Maximum Water-Cementitious Materials Ratio: 0.54 for non-air-entrained concrete and 0.45 for air-entrained concrete.
 - v. On top of the subbase layer, the contractor shall place a vapor barrier beneath the slab. Vapor Retarder: Polyethylene sheet, ASTM D 4397, not less than 0.20 mm (8 mils) thick.
 - vi. The finished level shall be rough broom finish.
4. The contractor shall create expansion joints in slab-on-grade to form panels of patterns. Use saw cuts inserts 6 mm wide by one-fourth of slab depth; provide joints not exceeding 4.0 meters in either direction and located to be conform to bay spacing wherever possible.
5. The contractor shall furnish and install interlocking tiles to cover the side walk in the north side. The tiles shall be of high quality Turkish interlocking tiles. Samples shall be approved by the COR prior installation, with thickness not less than 6 cm. The shape and color shall be similar to the existing tiles. The tiles shall be laid on a mixed layer of sand and cement not more than 5 cm to the ratio of 10:1. The grouting shall be of cement mortar. The contractor shall follow the slope 10 mm: 1 m. The direction of the slope shall be towards the north side. The area of the interlocking tiles for unit is estimated around 64 square meters.
6. The job shall include placing curbstones pavers as a barrier from the interlocking tiles area and the gravel area on a base of concrete mix on the sides of the interlocking tiles. The curbstones shall of high quality, Nibco or equally approved, with size 45 X 25 X 12.5 cm. The grouting shall be of cement mortar. The curbstones shall be used also to protect the trees. The length of curbstones is around 43ML
7. On each side of each of the five maintenance shop, the contractor shall create curved concrete stop pumps. The pump shall be at least 10 cm high at center and diameter 20 cm. Each shall extend around two meters in the south side. The concrete shall be made of nominal reinforcement with half of it embedded in existing concrete and tied to slab existing reinforcement. The finish shall be broom finish.

8. The contractor shall furnish and install high quality retractable covers (awnings on the top of the doors). On the south side (6 meters), on the north side 3 meters wide on each door (count (5) and one over the garage workshop (6 meters))
 - a. Aluminum and/or steel frame.
 - b. Retractable with steel crank handle
 - c. Easy to project and retract awning system tested to be simple to use and durable to last.
 - d. Keeps this manual mechanism safe, easy to adjust, light and robust against structure stress with wind resistant.
 - e. High quality fabric: 280g/m² polyester +PU coating fabric is waterproof, resistant to sun fading, has 80UV+ solar protection and also tested for wind resistance.
 - f. The contractor shall supply and fabricate the frame required to support the awnings
 - g. All materials shall be approved by the COR before installation.
9. The contractor shall maintain existing utilities indicated to remain and protect them against damage during the project. Damages caused by works, shall be repaired by the contractor at no additional cost to the Government.
10. The contractor shall transport from site all debris, rubbish, and materials resulting from operations and dispose off site on a daily basis in accordance with local regulations.

4. Conditions of Contract

1. General

This is a firm fixed price turnkey job for the entire work and amount quoted shall include all work described in attached drawing, scope of work and general condition of contract. The lump sum price quoted shall be fixed and nothing extra will be entertained on any account.

Contractor's staff is subject to such restriction for entry and exit as are required by the Embassy's security requirement. Contractor's staff will be subject to security cleared as required by the Embassy.

Contractor shall restore all surfaces disturbed by construction to match with existing finish.

Any deviation from the original contract/scope of work shall be informed to COR before work begins. No additional work or changes will be carried out without a contract modification.

2. Responsibilities of Contractor

Contractor shall be responsible for procuring, supplying, transporting, and providing all labor, materials, tools and plant and equipment etc., required for completion of the work in all respects and as per the scope of the work.

All expenses towards mobilization at site and demobilization including bringing in equipment, workforce and materials, dismantling the equipment, clearing the site etc. shall be deemed to be included in the rates quoted by the contractor against various items of schedule of rates and no separate payment on such expenses shall be entertained.

Contractor shall employ and provide one full time engineer to supervise the project and has experienced of carrying out such type of work.

Contractor shall not proceed with next activity until previous activity will be checked and approved by COR. Contractor shall mentioned all inspection dates in the schedule chart

Contractor should keep the site clean and accessible to Embassy employee all time

3. Specifications

Work under this contract shall be carried out strictly in accordance with specifications attached and will meet US and Local codes.

4. Execution of Work

The Contractors are advised to review the material specifications and scope of work. The Contractor should visit and walk through the site to familiarize themselves with the site conditions to understand the exact quantum of work.

On award of the work, Contractor shall submit all items below via email:

- a. Bar chart within 3 days for approval by the Contracting Officer Representative (COR). All dates and time schedule agreed upon should be strictly adhered to. Contractor shall notify the COR in advance regarding anticipated problems through the project.
- b. Proposed start date
- c. Weekly schedule/activity plan for the duration of the project *prior to the start date*.

For dismantling/blocking or making connection to any existing services or any shut-down, contractor shall inform the COR at least three working days in advance and proceed with the work only after the permission from the COR.

The duration of the project shall be 30 working days.

5. Materials

All materials used on this work shall be new and conforming to the contract specifications as per US and local codes.

Materials shall conform to the latest US Standards specifications as amended to date and carry certification mark. Contractor shall submit material samples and catalog for pre-approval.

All materials used on the project shall be approved by the Contracting Officer Representative (COR) before use. Any changes/substitutes on material shall be approved by COR before proceeding.

6. Storage of Materials

All materials shall be stored in a proper manner protected from natural elements so as to avoid contamination and deterioration.

7. Site Clearance and Cleanup

The Contractor shall clear away all debris and excess materials accumulated at the site and dispose of it away from Embassy premises, maintaining a neat site condition.

On completion of project, Contractor shall remove all surplus materials and leave the site in a broom clean condition.

8. Workmanship

Workers working on the site shall be skilled in their job and have related job experience.

9. Working Hours

Working hours shall be 8:30 A.M. to 4:30P.M Sunday to Thursday. No work shall be done on Fridays, Saturdays and holidays without the prior approval of the Contracting Officer.

10. Security Clearance

The Contractor shall inform and provide in writing transportation details (vehicle registration number, drivers name, and date of delivery) to the COR at least 24 hours in advance for material deliveries.

Contractor shall give workers names at least 3 days in advance to get the security clearance. All the workers shall have an official photo ID or photo ID with the company name on it.

11. Safety

- Contractor is responsible and shall continue management and implementation of a safety and health program throughout construction.
- The Contracting Officer and the Post Occupational Safety and Health Officer [OSHO] reserve the right to suspend work when and where Contractor's safety and health program is considered to be operating in an inadequate or non-complying manner.
- Contractor shall provide all Personal Protective Equipment for the workers as per the requirement of the site. Work will be stopped in case the proper protection equipment is not found with the workers and the lapse of time shall be at the Contractor's expense.
- Contractor will not leave the work site in an unsafe condition or any other condition that might cause injury to personnel, damage to existing work, plants or equipment.
- Contractor will use all safety gadgets e.g. hard hats, cotton gloves and goggles as required on site to avoid the accident.
- Any equipment or work considered dangerous shall be immediately discontinued

- Contractors must demonstrate understanding of their responsibilities under Post Managed Construction Project safety program by addressing hazards in preplanning processes and meetings
- Prior to starting a project, each contractor is required to review the work site and identify hazards that may occur while performing the job.
- Prior to starting a project, the contractor shall contact contracting officer, to ensure they have received pertinent information for the project including requirements for permits, floor plans, utility information, asbestos, lead based paint, and other hazardous materials.
- Per 15 FAM 935, contractors must provide their employees with a safe and healthful condition of employment.
- Contractors are expected to provide a “competent person” to implement site health and safety plan and to oversee its compliance. A competent person is an individual who, by way of training and/or experience, is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation, is designated by the employer, and has authority to take appropriate actions.
- The contractor shall be responsible for the removal and/or disposal of hazardous waste generated from the project. Hazardous waste generated from the project must be removed and disposed of in accordance with the Department’s Hazardous Waste Management Policy as well as local rules and regulations.
- The contractor shall ensure proper safety, health and environmental requirements of EM 385-1-1 applicable to their project as followed.
- The contractor shall ensure individuals working at the site are trained and are aware of potential hazards. Contractors shall ensure that these individuals are provided with proper safety equipment to prevent accidental injury in accordance with the requirements of the contract
- Contractors will report accidents to Contracting officers, Contracting officer’s representative and POSHO.

12. Warranty

The contractor shall guarantee that all work performed will be free from all defects in workmanship and materials and that all installation will provide the capacities and characteristics specified. The contract further guarantees that if, during a period of three year from the date of the certificate of completion and acceptance of the work, any such defects will be repaired by the contractor at his expenses.