MAINTENANCE & REPAIR STATEMENT of WORK

Frankfurt, Germany

Renewal of the Heating System in the DPO Residence

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U.S. CONSULATE GERNERAL FRANKFURT, GERMANY
FACILITY MANAGEMENT

PART ONE – GENERAL

C.1.1 SUMMARY:

A. The U.S. Consulate General Frankfurt requires replacement of the existing heating system located at Am Leonhardsbrunn 18 in 60487 Frankfurt/M. The Contractor shall provide all necessary labor, materials, supervision, and equipment to complete the project. Work includes, but is not limited to:

1. Conduct energy survey to establish required size of new heating and hot water system
2. Supply and installation of a new, complete heating system including hot water preparation (boiler)
3. Installation of new condensation pipe in existing chimney
4. Dismantling, removal and proper disposal of the existing heating system and buffer tank
5. Supply and installation of new heating valves on all radiators
6. Hydraulic balancing to optimize heat distribution throughout the heating system
7. Commissioning of the new system to include all registration of changes with local authorities or utility suppliers, any required acceptance inspections, such as, by the chimney sweep, etc and final functional testing

C.1.2 SUBMITTALS:

A. Contractor's crew individual identification information for visitor access requests.
B. Submit list of all subcontractors with evidence of subcontractor's insurance coverage.
C. Project schedule showing work phasing and proposed daily progress.
D. Material manufacturers and accessory product data sheets in accordance with part two.
E. Shop Drawings and calculations. [Master craftsman's business for plumbing, heating and air conditioning]
F. Warranty: The Contractor shall provide a written [5 years] workmanship warranty after date of substantial completion to cover all elements of work to be free of defects. Manufacturer's standard material/equipment warranties are to be provided for all new items.

C.1.3 CONTRACT ADMINISTRTION

A. The Contractor shall not perform any work outside this Statement of Work unless authorized in writing by the Contracting Officer (CO).
B. The CO will issue a Notice to Proceed (NTP).
C. The Contracting Officer's Representative (COR) will oversee daily execution and ensure compliance.
D. Any proposed changes must be submitted in writing and approved before work proceeds.
E. The Contractor shall identify a Project Site Manager who shall be responsible for the overall management of the project and shall represent the Contractor on the site during construction. The Project Site Manager is required to be German and English-speaking and shall be approved by the COR.

C.1.4 QUALITY CONTROL:

A. The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all construction and other services furnished under this contract. The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in its construction and other services.
B. The Work shall be governed by the U.S. Consulate General Frankfurt, Germany. All work is to be in compliance with International Codes and standards, which includes the most recent published edition of the OBO Building code, National Fire Prevention Association (NFPA), International Fire Code (IFC), International Building Code (IBC) , International Mechanical Code (IMC), International Plumbing Code (IPC), National Electrical Installation Standards (NEiS), National Electrical Safety Code (NESC), Standard for

Electrical Safety in the Workplace (NFPA-70E) and National Electric Code (NFPA-70) as amended by OBO, also are applicable. Should there be a discrepancy between the US Government Specifications and the applicable Building Code, the more stringent of the two shall govern.

C.1.5 STORAGE OF MATERIALS:

A. The Contractor is responsible for safe and secure storage of materials.

B. On-site staging must be coordinated with the COR.

C. Temporary utilities must be connected and disconnected in coordination with Facility Management.

C.1.6 PROJECT SAFTEY:

A. Contractor is responsible for safety and shall comply with US Consulate General requirements, US Army Corp of Engineers (USACE) Safety Manual (EM 385-1-1), U.S. OSHA Regulations and all local labor laws, regulations, customs and practices pertaining to labor, safety and similar matters. Contractor shall prepare a Project Safety Plan to cover total project safety to be reviewed and approved by the Contracting Officer Representative (COR), and U.S. Consulate Post Occupational Safety and Health Officer (POSHO).

B. Contractor shall furnish Personal Protective Equipment (PPE) for each employee as required for the specific job type and in accordance with (IAW) relevant OSHA regulations.

C. All external personnel assigned to a project are required to participate in a mandatory online safety briefing conducted by the POSHO Safety Office. This safety training must be completed prior to the project start date and the commencement of any work activities.

1. Personnel joining the team after the project has commenced must also complete this training before undertaking any tasks.
2. Work conducted without prior safety training is strictly prohibited and will be immediately suspended upon discovery.
3. The safety briefing may be found at the following link; https://forms.office.com/g/shZ4sLh5Kn

D. Electrical Safety: All electrical work must always be conducted in a "de-energized" state whenever possible and secured using the Lockout/Tagout (LOTO) system/procedure. Energized work must be handled with special precautions as outlined below.

1. Locks and tags must be applied to the equipment's energy isolation points or control panels. The tags must prominently display a warning message, along with the company name and the technician's name. LOTO devices may only be removed by the individual who applied them.
2. Energized Work can only be performed if the supervisor requests an Energized Work Permit (EWP) at the Post Occupational Safety and Health Officer (POSHO) at least 24 hours prior to the scheduled start of work. The COR must assist the contractor in obtaining the necessary documents.

E. Fall Prevention: For fall heights, suitable protective measures must be taken to minimize the risk of accidents.

1. Elimination (Physically remove the hazard)
2. Substitution (Replace the hazard)
3. Engineering Controls (Isolate people from Hazard)
4. Administrative Controls (Change the way people work)
5. PPE (Protect the worker with Personal Protective Equipment)

C.1.10 PROJECT SECURITY:

A. Personnel Clearances: A Visit Authorization Request (VAR) will be required for all contractor personnel prior to entry. Contractors shall forward the following information

to the COR: full name, date and place of birth, Government Identification Card, name of employer, position/discipline.

B. Vehicle Clearances: Submit authorization requests, to include dates, vehicle type, license number, and driver name, for each motorized vehicular implement used on-site.

C. Access to Site: Contractor shall have limited access to or be admitted into the compound outside the areas designated for the project except with permission by the Consulate.

D. Procurement/Storage: Materials shall be procured by NON-SECURE or local means and stored NON-SECURE. All materials may be inspected prior to use on the project.

PART TWO - PRODUCTS

C.2.1 GENERAL

A. The Contractor shall provide all necessary labor, material, equipment, and components necessary to ensure the installation of complete and operable systems. No materials or labor will be supplied or furnished by the Consulate.

B. All materials and equipment incorporated into the project shall be new unless noted otherwise. The Contractor shall transport and safeguard all materials and equipment required for construction.

C. Systems, material and supplies must be in accordance with VOB/C, in particular DIN 18380, DIN EN 12831, GEG and VDI 2035.

D. All components must be supplied coordinated and assembled ready for operation.

C.2.2 PRODUCTS

A. Gas Condensing Boiler

1. Gas condensing boiler, e.g., Viessmann Vitodens 200-W (output range 3–40 kW, based on energy survey) or equivalent from a reputable, manufacturer (e.g., Buderus, Vaillant) including:
   a. Integrated high-efficiency pump (EEI ≤ 0.23)
   b. Weather-compensated control
   c. Safety group (safety valve, pressure gauge, air vent)
   d. Diaphragm expansion vessel (e.g., 35–50 liters, based on system volume)
   e. Condensation vent pipe

B. Hot water preparation

1. Hot water storage tank, e.g., Viessmann Vitocell 100-W (approx. 300 liters) or equivalent. Features:
   a. Enameled steel tank
   b. Magnesium sacrificial anode
   c. Thermal insulation compliant with GEG (German Building Energy Act)
   d. Safety group according to DIN 1988

C. Piping and system components

1. Material e.g., carbon steel / multilayer composite pipe
2. High-efficiency circulation pump, e.g., Wilo Yonos PARA or equivalent
3. Air and dirt separator (e.g., Spirotech)
4. Magnetite separator for system protection
5. Shut off and control valves
6. Condensation vent pipe
7. Pipe insulation for all pipes according to GEG (EnEV compliant)

D. Universal Water Radiators, e.g. HM Heizkörper GmbH, model Galant

1. Size, connection type and heat output as determined by the energy survey

2. Number of radiators to replace and locations to be determined during pre-bid site visit

E. Pre-adjustable thermostatic radiator valves
   1. Pre-adjustable thermostatic radiator valves, e.g.,Heimeier Eclipse thermostatic radiator valve or equivalent
   2. Thermostat heads: Danfoss or equivalent
   3. Replacement return fittings as required

PART THREE – EXECUTION

C.3.1 CONSTRUCTION REQUIREMENTS

A. No construction shall begin until approvals of the Pre-Construction Submittals are accepted by the COR.

B. The Contractor will be provided with a storage and staging area as determined by the COR. The Contractor shall be responsible for restoring the area to its original condition at the completion of the work. The Contractor shall be responsible for repair of any damage incurred to buildings or pavement as a result of storage activities. The Contractor is responsible for obtaining any additional off compound storage areas as required.

C. The Contractor shall always keep the work area free from accumulation of waste materials. Upon completion, the Contractor shall remove any temporary facilities and leave the project site in a clean and orderly condition acceptable to the COR.

D. The Contractor shall perform the work at the site during the U. S. Consulate's normal workday hours, (0800-16:30 Monday – Friday excluding holidays) unless alternate work hours are agreed upon with the COR.

E. Protections and Damage Plan: The Contractor shall be responsible to protect all U.S. Government property to include: all furniture, furnishings, and interior and exterior architectural finishes from damage. Any damage caused by the Contractor to architectural interior and exterior finishes will be returned to original condition by the Contractor at Contractor expense. In addition to the architectural finishes, the Contractor shall protect all non-included mechanical and electrical equipment and controls from damage throughout the duration of work. Prior to commencing the work, the Contractor along with Consulate representatives shall survey the site that will be impacted by the project work and document existing conditions. It shall be the Contractor's responsibility to document in writing all pre-existing damaged surfaces prior to the start of the project work and to provide a copy of the documentation to the COR prior to project start.

C.3.2 INSTALLATION

A. General
   1. Execution in accordance with VOB/C, in particular DIN 18380, DIN EN 12831, GEG and VDI 2035.

B. Dismantling and Disposal
   1. Dismantling of the existing heating system, including the heat generator and buffer tank
   2. Removal and disposal of all old components in accordance with legal regulations
   3. Dismantling of existing radiator valves

C. Installation of the gas condensing boiler in accordance with the manufacturer's instructions

D. Installation of the gas condensing boiler condensate vent pipe in accordance with the manufacturer's instructions

E. Installation of the hot water storage tank in accordance with the manufacturer's instructions

F. Installation of the piping, insulation and system components in accordance with the

manufacturer's instructions

G. Installation of the radiators & valves
   1. Replacement of radiators as determined by the energy survey and coordinated with the COR
   2. Replacement of radiator return fittings as required

H. Hydraulic balancing
   1. Performed according to method B (VdZ)
   2. Calculation based on DIN EN 12831
   3. Adjustment of flow rates at all radiators
   4. Documentation including setting values and verification

I. Commissioning
   1. Flushing of the system according to VDI 2035
   2. Filling with treated heating water
   3. Leakage and pressure testing
   4. Commissioning and fine-tuning of the control system

J. Handover:
   1. Operating instructions
   2. Test reports
   3. Hydraulic balancing

K. Additional services
   1. Site setup and safety measures
   2. Core drilling and minor adjustments (if required)
   3. Coordination with other trades

PART FOUR - SCHEDULE

C.4.1 PERIOD OF PERFORMANCE: Calendar days

A. The work shall be executed in a diligent manner in accordance with a negotiated firm fixed price and performance period as outlined below.

1. Solicitation & Award of Contract:		
a.	Award	Zero Day
2. Pre-Construction Submittals:		
a.	Insurance, Schedule, & Product Data:	20 days after Award
b.	Government Review:	10 days
3. Material Procurement:		
a.	Material Order	30 days
b.	Material Shipping	20 days
4. Mobilization & Construction:		
a.	Crew Information	5 days in advance
b.	Scope of Work	20 days on-site
TOTAL PERIOD of PERFORMACE:		**105 days**

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