



AMERICAN BATTLE
MONUMENTS COMMISSION

PERFORMANCE WORK STATEMENT

Quality Assurance (QA) Mission to the owner of the project ABMC

**Architect - Engineering (A/E) Services for the
project P01794 - studies and design for the
restoration of historic pools and ornamental
fountains at Florence and Luxembourg American
Cemeteries**

April 23, 2026

I. Introduction:

The American Battle Monuments Commission (ABMC) - guardian of America's overseas commemorative cemeteries and memorials - honors the service, achievements, and sacrifices of U.S. Armed Forces. ABMC is an independent US Government agency established by Congress on March 4th, 1923 which aims to build, operate and maintain the 26 American military cemeteries outside the territory of the United States, as well as 32 Federal memorial, monuments and markers located in 17 foreign countries.

II. Background:

Florence and Luxembourg American Cemeteries have pools and ornamental fountains, which are often shut down due to the obsolescence of the electro-hydraulic equipment, the deficiency of the water filtration and treatment system, as well as the premature deterioration of the waterproofing (tiles ruptures) of these ponds.

ABMC's aim is to preserve the water sources and plans to have carried out a sustainable restoration of the ornamental ponds in accordance with our objectives of water savings, ease of maintenance, reduction of operating costs and a lifespan greater than 25 years.

The goal of this contract is to provide full studies and design for the restoration of the historic pools and ornamental fountains at Florence and Luxembourg American Cemeteries (timeframe for studies: **36 weeks**).

The approach shall be holistic, across-the-board and shall include the ABMC's requirements in connection with the quality of its design.

III. Project sites:

Florence American Cemetery (FLAC): Via Cassia snc, 50023, Tavarnuzze, Impruneta, Florence, Italy

Luxembourg American Cemetery (LXAC): 50, Val du Scheid, L-2517, Luxembourg - Grand-Duché

IV. Contracting, –Technical, and Cemetery Point of contacts:

Contracting Officer: Ms. Rebecca Jessen - for Contract Questions/Issues
jessenr@abmc.gov

Contract Specialist: Mr. Sebastien Commercy - for Contract Questions
commercys@abmc.gov

Superintendent - FLAC : Ms. Eryth Zecher for On-site visits
zechere@abmc.gov

**Assistant Superintendent
- FLAC :** Ms. Isabella Rundini for On-site visits
rundinii@abmc.gov

Operations and Technical Manager - FLAC :	Mr. Oscar Tranchina tranchinao@abmc.gov	for On-site visits
Assistant Superintendent - LXAC	Mr. Nathan Jellen jellenn@abmc.gov	for On-site visits
Operations & Technical Manger - LXAC:	Mr. Xavier Nadé nadex@abmc.gov	for On-site visits

V. Available elements of study and information:

Florence American Cemetery - site area: approx. 70 acres; two historic pools and ornamental fountains: approx. 18 m³ (to be verified by the tenderer); Water source: deep wells

Luxembourg American Cemetery - site area: approx. 48.31 acres; four historic pools and ornamental fountains: 32 m³ (to be verified by the tenderer); Water source: city.

VI. Description of the contract requirements:

In order to ensure the proper execution of this contract, the A/E shall establish a multidisciplinary team with skills and references in the following areas: restoration of historic ponds and ornamental fountains; architect (with significant experience related to historic monuments: construction of technical structures); civil engineering / structural engineering (water storage facilities renovation; waterproofing / lining of ponds; pipes crossings through the walls of structures; construction of technical structures); hydraulic engineering / pumping / filtration / water treatment ; specialist in electro-fusion welding of HDPE pipes and arc welding of 316L stainless steel pipes; directional boring; electrical engineering; Health and Safety Coordinator [HSC].

All preliminary studies, design and supervision work shall be performed in accordance with applicable codes, accepted industry standards and by or under the direct supervision of a professional Architects/Engineers (A/E) licensed in restoration of historic ponds and ornamental fountains engineering (Principal in Charge). The A/E shall be qualified by education and experience to audit and design the type of work included in this assignment.

The selected A/E shall work closely with ABMC's Contracting Officer and Horticulture Directorate.

The A/E shall attend meetings, develop meeting minutes, submit recommendations, and inform the ABMC's Contracting Officer, Contracting Officer Representative (COR) and Horticulture Directorate of any issues or delays that may affect the completion of this contract.

The A/E shall be responsible for sharing information with various stakeholders, consensus on prioritizing the objectives, recommendations and shall coordinate the work between the different

themes during the preparation of this project.

The A/E shall be responsible for carrying out on-site visits at Florence and Luxembourg American Cemeteries to verify all the technical aspects required to successfully complete this assignment.

The A/E shall provide ABMC with background / data (topographical survey layouts, underground utility plans, old records for information purposes only which cannot be considered as accurate). Any additional information / survey required / related to the site shall be the A/E's responsibility and included in the offers.

The audit / diagnosis shall include all the requirements and constraints but is not limited to:

- provision of the water source assessment: city water / groundwater (available water quantities and compatibility with the site needs), water quality (wide-ranging physical and chemical water analysis {pH, conductivity, anions / cations; micronutrients: Zn, Cu, Total Iron, Dissolved Iron, Total Manganese, Dissolved Manganese; TDS, etc.} and bacteriological in order to check the compatibility with the ornamental ponds requirements for filtration and detect elements {sulfates, nitrates, chlorides, Manganese, Iron, etc. } likely to stain the marble of the headstones), water costs;
- inspections of the waterproofing and the pipes crossings through the walls of the ornamental ponds; expertise of the filling systems [connected regularly to the irrigation systems], overflow and evacuation of the ponds; control of the waterproofing of technical structures; performance and condition of the electrical and hydraulic equipment of the pools [non-exhaustive list: submersible pumps; water features / effects pumps; filtration systems {pumps, Skimmers, suction inlet, injector and drain, control and protection cabinets} and water treatment / softeners; water level control devices {filling rods, solenoid valves, level probes, electronic level control and dry running control cabinets}; decoders; relay cards, etc.] ; characteristics of electrical installations; analysis of the conformity of the equipment with regards to safety codes & standards (hydraulic and electrical);
- location of the water supply, irrigation, electricity, telephone networks and identification of existing trees, shrubbery, hedges, perennials, landscape / flower beds, fine lawns, headstones, furniture, lighting, fences, roads, alleys and boundaries;
- electrical audit of existing ponds installations, comprising incoming power supply mains, switchboards, circuits, distributions boards, wiring and accessories, transformer, supplementary / standby energy supply – generator; grounding and bonding, wiring methods, type of distribution system (power supply neutral to earth), extension cords suitability and safe condition, inspections of all switches and outlets; power quality analysis (electrical system diagram/s, connection of analyzer at particular location/s in the distribution end of the main circuit breaker that will regulate incident energy levels to a satisfactory range, evaluation of distribution system, collection of data from each distinctly derived system, studying the gathered data and conducting further analysis with appropriate diagnostic tool to measure voltage, amperage, frequency, sags, and swells in voltage values, power factor, harmonic currents, and more), etc.;

- identification of potential area(s) for new technical structure/s for recycling water / type and dimension of treatment / filtration / conveyance system, geotechnical and hydrological studies, analysis of the recycling water quality and compatibility with the ornamental ponds, consideration of the aesthetics of recycling water catchment (if above ground level) and the insertion of the new structures into the cemetery landscape; assessment of required authorizations / permits for new technical structure/s; evaluation of new technical structure/s coverage in order to prevent mosquito breeding and debris from getting into storage containers / reduce evaporation and keep the water cool;
- provision of written reports / findings on all audit operations with pictures (should also include but is not restricted to: installations overall description, observed deficiencies / dysfunctions description and recommended technical solutions). For each component of the existing installations, the required actions regarding maintenance or work shall be proposed for short, medium, or long term, in order to optimize the systems and remedy the encountered deficiencies.

This audit shall be completed in order to address the next phase of preliminary project studies with precise guidelines.

The diagnosis report/s shall be submitted to ABMC for review / approval along with a summary, in the form of an excel spreadsheet and gathering all studied parameters and a rough cost estimate. The draft reports and sketches shall be sent in electronic format only. The A/E shall integrate comments on all draft submissions as required. The final reports and layouts shall be delivered in electronic format.

The A/E shall perform a project analysis and a comprehensive sites inventory as part of the design process to ensure that the historic pools and ornamental fountains are designed to efficiently use water, which enables the effective management and protection of water sources.

The A/E shall complete a full and detailed administrative, technical, and financial feasibility study of the implementation of the project, in compliance with laws, regulations and sustainability standards currently in force. A/E shall verify compliance with the applicable local Codes [Heritage, Urban Planning, Environment, etc.] requirements (authorizations / building permits required), prepare the specific dossiers and follow the instruction of each application. All the feasibility study documents shall be delivered in electronic format for examination and approval by ABMC's Contracting Officer.

The waterproofing system of the historic pools shall be TRIFLEX® products.

The A/E shall conduct design work and technical studies (including [non-exhaustive list]: connection to the water source/s; water meters; hydraulic and electrical tie-ins to the existing installations; underground crossing of roads and alleys using horizontal directional drilling method including conduits; waterproofing / waterproof joints / coating of historic ponds and ornamental fountains [finishing layer shall respect the aesthetics and appearance of old stones], including stonework / repairs of cracks; pipes crossings through the walls; layout, position and diameters of hydraulic pipes; electrical wiring layout; location, dimension, definition of required materials and specifications relating to the construction of the technical structures for the historic pools and ornamental fountains, including the protection of electrical equipment against floods; description of the electrical and hydraulic equipment to be installed (pumps, water features / effects, manifolds, valves, solenoid valves, sensors / probes for detecting the water level, rods, filters, automatic management of the filling and overflow emptying of the ponds; control command and security cabinets, etc.) and other electrical and hydraulic equipment,

including connections to existing installations; information on the necessary flow and pressure; recommendations for the recycling water of fountains (including increasing the oxygen content of the water and eliminating eutrophication and algae blooms in summer by maintaining the biological balance of the water); recommendations concerning the water treatment system / filtration / demineralization and indication of the necessary equipment, etc. ; as well as all other equipment and services essential to the completion of the work and the proper functioning of the ponds' systems) by preparing all the drawings, installation diagrams and sketches of detail deemed necessary for a thorough understanding of the project.

The design project shall also include the construction phasing / implementation plan.

The A/E shall develop the technical scope of work and specifications providing any useful information on the nature, characteristics, and conditions of implementation of the different electrical and hydraulic equipment, materials and products required; testing procedures; training of the ABMC staff; operations prior to the acceptance, commissioning of the works and guarantees; technical requirements for the maintenance of the new ponds system/s with the annex equipment installed.

The A/E shall also establish the detailed report listing their recommended materials, the products files, the detailed description of the estimated overall prices and quantities / bills of quantities, the cost estimates (including any associated costs for contingency, taxes, bonds, permits, etc.), the schedule of the construction work, all the documents and special requirements, in the respect of the current regulations in force in Italy and in Luxembourg - Grand-Duché, needed for the submission of the Request For Proposals for the restoration of the historic pools and ornamental fountains at Florence and Luxembourg American Cemeteries.

The A/E shall submit to ABMC all the design project documents (AutoCad 2026 drawings and pdf plans, technical specifications, breakdown of the overall price / bills of quantities, cost estimates and all the required documents - Word, Excel, .dwg and PDF files) for examination and approval by the ABMC's Contracting Officer and any authority, which would allow for the restoration of the historic pools and ornamental fountains at Florence and Luxembourg American Cemeteries. All the draft documents mentioned above shall be delivered in electronic format only.

The A/E shall integrate comments on all draft submissions prior to printing final documents/deliverables.

The final design of the new specific project documents shall be submitted in electronic and hard copy format (one copy).

The A/E shall facilitate and document the ponds restoration design project presentation on-site meetings.

VII. Constraints:

All site visits shall be coordinated with the ABMC Superintendents and scheduled upon appointment only.

Upon request, ABMC employees on-site, under the supervision of the Superintendent, shall provide the A/E access to all locations required for the successful completion of this contract, shall show plans, as-

built drawings, surveys, reports, technical documentations, maintenance operations log, and archived works held on record at Florence and Luxembourg American Cemeteries of the existing installations for information purposes only which cannot be considered as accurate, as well as all data they would need.

During the on-site visits at Florence and Luxembourg American Cemeteries, the selected A/E shall respect the ABMC hierarchy; the Superintendent is the official ABMC representative on-site.

VIII. Deliverables:

The A/E shall submit to ABMC's Contracting Officer and the Horticulture Department the following documents (non-exhaustive list):

- Audit / Diagnosis reports and sketches
- Feasibility studies documents / Technical reports and plans / regulatory dossiers in accordance with the applicable local Codes requirements (authorizations / building permits)
- Design project dossier / tender package, gathering all written documents and drawings, in electronic and hard copy format (one copy)
- PowerPoint presentations of the design project
- Meeting minutes and findings of all on-site meetings.

The A/E shall provide all the reports, drawings and documents, in English.

The A/E shall integrate comments on all draft submissions prior to printing final documents / deliverables. The final documents shall be submitted in electronic format and one hard copy.

IX. Period of performance:

The Project Start (PS) date shall be within 1 days after the contract award. The period of performance is not to exceed nine (9) months after the contract award. The exact kickoff meeting date is to be determined after award on a day that works for both the A/E and the ABMC.

X. Quality Control:

The A/E is responsible for quality control which includes ensuring the technical accuracy, completeness, and correctness of all studies, design, cost estimate (plus life cycle costs) and all architectural and engineering aspects and details, including coordination of all disciplines with each other and with specifications. The A/E shall accomplish a Quality Control Review and shall make corrections prior to each submittal to the ABMC.

XI. Project Management:

The A/E shall assign a Project Manager (PM) with full authority to act on behalf of the A/E regarding all matters relating to this award, overseeing the award requirements and related performance. The PM shall be the primary point of contact between A/E staff and Government representatives, such as the Contracting Officer (CO) and the Contracting Officer Representative (COR).

XII. Travel and other costs:

This project requires travel to Florence and Luxembourg American Cemeteries.

All travel to ABMC sites and translators / interpreters' expenses incurred for this contract shall be included in the offers.

XIII. Ownership of products:

All original copies of documents and drawings produced under this contract are the property of the American Battle Monument Commission. The Commission's use of the materials shall not be restricted in any manner.

XIV. Insurance:

The A/E shall be insured for all his / her works and assumes professional responsibility, as it is defined by the laws and regulations in force.

A copy of his / her valid professional insurance (including the civil liability insurance certificate according to the Local Law) shall be provided to the ABMC Contracting Officer with the proposal submission.

XV. Advance understanding:

Proposals and/or cost estimates prepared and submitted in response to any request under this contract shall be at no cost to the ABMC.

XVI. Warranty:

The A/E shall ensure the accurate achievement of this contract.

