

STATEMENT OF WORK
STABILIZE GRASS SLOPE (SECTION S1)

HOUSTON NATIONAL CEMETERY
10410 VETERANS MEMORIAL DR., HOUSTON, TEXAS 77038

- A. The Contractor: Shall furnish all labor, material, equipment, and supervision necessary to install slope stabilization system for erosion protection adjacent to existing burial section S1, including new topsoil and turf sod installation at Houston National Cemetery in accordance with drawings, specifications, and per applicable standards and requirements.
- B. The Work: The Work shall include, but shall not be limited to the following (not necessarily in the order indicated):
1. The Contractor shall remove the turfgrass from the designated 1:2 slope area (831 linear feet, 11 feet wide, approximately 9,140 square feet), including up to four (4) inches of existing soil, a total of 5 inches depth. The turf shall be cut along clean and straight lines adjacent to areas not called out for removal. The Contractor shall ensure the headstones at the top of the slope are protected and not affected in any way. Excavated material shall be transported to the approved spoils area on the east side of the Cemetery using Aldine Western Road as the haul route to the maintenance access gate.
 2. Reshape and grade the slope subgrade to allow the ultimate finish grade (including slope stability system) to be horizontal 12 inches out from the back of the headstones. The finish grade shall tie back into the existing grades at the bottom of the slope.
 3. Some excavation will be within mature trees' driplines. As such, these areas shall be carefully dug under the direct supervision of a certified arborist. Roots which are approved to be severed shall be cut cleanly and treated with a root sealer compound and covered with earth as soon as possible. Cemetery staff will mark the approximate locations of utilities. Protect from damage existing irrigation valve boxes and crossing irrigation laterals and other utilities that will be encountered during construction; hand dig in these areas. Contractor shall install 4-foot high orange, plastic construction fencing from the back of the headstones for the protection of the public and staff.
 4. The Contractor shall be responsible for procuring, installing, and staking a high-density polyethylene (HDPE) interconnected cell slope stability system, "medium" size cell, 4 inches deep with intercell perforations (herein generally referred to as "geocell") such as the Presto GEOWEB® GW30V; Hanes Geo Components TerraCell®; or approved equal system along the slope.
 5. Due to the presence of the headstones and pre-placed underground crypts the Contractor will not be able to install the system using an anchor trench at the top of the slope and anchors shall not be within 12 inches of the top of the slope. Anchors shall utilize #4 rebar, 22" long and either J-hooks or the geocell's proprietary anchor system. Installation of the geocell shall follow all manufacturer specifications.
 6. Fill all cells with clean imported topsoil per specifications up to the top of the geocells. Install new certified [Bermuda TifGrand® turfgrass sod in the shaded area \(hatched on the site plan\)](#) and Bermuda TIF 419 turfgrass sod [in all other renovated areas](#) per

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specification, adhering to specification requirements for installation on slopes (such as staking the new sod). The Contractor shall be responsible for the turf during the establishment period (approximately 30 days), including mowing and additional irrigation until sod is 100% established. After the sod has been established the Contractor shall request a Final Inspection in writing to the Contracting Officer and COR.

7. The Contractor shall raise/lower, realign, reset, and backfill, the row of upright headstones nearest to the top of the slope in a manner that will meet or exceed the requirements to present a clean, neat, professional, and aesthetic appearance and in accordance with contract specifications. This includes but isn't limited to work consisting of extracting, resetting, aligning, backfilling, and compacting upright headstones that are already in place which have shifted out of vertical and/or horizontal alignment and plumb, as well as inventorying and ensuring accurate placement on each gravesite.

C. General Conditions:

1. Remove, cut, alter, replace, patch and repair existing work as necessary to install new work. Existing work to be altered or extended and that is found to be defective in any way, shall be reported to the COR before it is disturbed. Materials and workmanship used in restoring work shall conform in type and quality to that of original existing construction, except as otherwise shown or specified.
2. Thoroughly clean up the work area at the end of each day's work, and at completion of the project. Leave premises clean and free of waste, scrap, used equipment, or other material intentionally or incidentally delivered to the site by Contractor or Contractor's personnel. Haul away & dump debris and waste to an approved disposal site.
3. The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site not to be removed and do not unreasonably interfere with the work required under this contract. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.
4. The Contractor shall protect from damage all existing improvements and utilities at or near the work site and on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.
5. All utilities required for the continuous operation of all existing facilities shall be maintained in service at all times except when disruptions are needed. The Contractor

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shall inform the Cemetery Director and the Contracting Officer (CO) in writing for such disruptions and obtain approval from the CO in writing at least 2 weeks prior to such need. When option exists, implement options to minimize interruption of services to the facilities.

6. The Contractor shall coordinate with the Cemetery Director for parking, material storage, temporary portable restroom facilities, and any other needs for the work. Public access to the National Cemetery shall not be impaired.
7. The Contractor shall assume sole responsibility for safety of all persons on or about the construction site, in accordance with applicable laws and codes. Guard all materials in accordance with the safety provisions according to OSHA and Associated General Contractors of America (AGC). Prior to commencing work, general contractor shall provide proof that an OSHA certified "competent person" (CP) (29 CFR 1926.20(b)(2)) will maintain a presence at the work site whenever the general or subcontractors are present.

D. Standards of Employee Conduct:

1. The National Cemetery Administration honors veterans with a final resting place and lasting memorials that commemorate their service to our Nation. National Cemeteries are national shrines. The standards of work, appearance, and procedures performed by the contractor at this cemetery shall reflect this nations concern for those interred there. Due to the sensitive mission of the cemetery, contractor personnel must exercise and exhibit absolute decorum, composure, and stability at all times.
2. Contractor personnel shall be required to adhere to the following standards of dress and conduct, as briefly mentioned here, while performing work in the National Cemetery. These standards and regulations are enforceable under Title 38, U.S.C., Part I, Chapter 9, Section 5901.
3. Clothing shall be presentable and suitable to the work while maintaining proper appearance and decorum indicative for a National Shrine. Uniform shirts and hats are preferred. Clothing shall be clean and cleanliness and personal hygiene are imperative. T-shirts and/or tank tops as outer garments are prohibited. Protective/safety clothing and shoes shall meet or exceed OSHA and state requirements.
4. Behavior and language must be appropriate, reverent, and respectful at all times.
5. Eating and drinking (except water) is prohibited in the work areas and within sight of a committal shelter during a service.
6. Use of intoxicating beverages, any tobacco products, and illegal drugs on the Cemetery premises is strictly prohibited.
7. Contractor personnel shall not lean, sit, or stand on or against headstones or monuments. No tools, equipment or other items will be placed or leaned on headstones or monuments.

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8. The Contractor shall be responsible for maintaining satisfactory standards of personnel conduct and work performance and shall administer disciplinary action as required. The Contractor is expected to remove any employees from the Cemetery for cause, to include, but not limited to, safety violations, other misconduct in performance of duty under these specifications and/or conduct contrary to the best interests of the Government. If the Contractor fails to act in this regard, or the reason for a removal is immediately required to protect the interests of the Government, the COR may direct the removal of an employee from the premises. Contractor objections to any such action will be referred to the Contacting Officer (CO) for final resolution; however, the Contractor will first immediately comply with COR direction pending any CO final resolution at a later time or date. The Contractor will not be due any type of compensation for their costs incurred as a result of an employee being removed for cause; unless the removal is directed by the COR, and is later found invalid and/or unreasonable by the Contracting Officer.

- E. Time of Completion: The project shall be completed within 120 calendar days after Notice to Proceed. Work outside of the Cemetery's normal operating hours of 7 am to 4:30 pm CT, Monday through Friday, may be permitted only by prior approval of the COR. Requests shall be submitted at least three (3) working days in advance.

- F. Code Compliance: All work shall be performed in accordance with the specifications. It shall be the Contractor's responsibility to comply with all the applicable local, state and federal laws and regulations. The Contractor shall apply and obtain all applicable permits to comply with local, State and Federal regulations and requirements. The Contractor shall remove and dispose of all waste materials and construction debris and comply with all applicable local, State and Federal regulations and requirements. All waste materials and debris specified shall be removed from the Cemetery grounds by the Contractor at its own expenses, including all applicable permits and fees.

- G. Contractor Quality Control:
 1. The Contractor shall guarantee that all work done under this contract shall be free from defaults and no faulty materials or workmanship with one (1) year warranty. The Contractor hereby agrees to repair or replace deficiencies within the specified time frame by the direction of the CO at Contractor's own expense and shall be corrected to the satisfaction of the Government.

 2. A competent and experienced English-speaking Contractor Supervisor/Superintendent shall be provided by the Contractor whenever work is being performed, other than trash and debris pick-up. The Contractor Supervisor shall review and approve submittals, ensure all specifications are being met, inspect the quality of work performed, ensure contract work does not conflict with ceremonies and funerals, ensure employees are adequately supervised and proper conduct maintained, and certify the completed work for payment and other purposes.

- H. Submittals After Award: Submit manufacture's literature for the slope stabilization system. Submit certifications of sod and topsoil to the COR for review/approval.

- I. Project completion: The project site shall be protected and/or restored to a condition equal to

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that existing prior to the commencement of work. Upon completion of contract, deliver work complete and undamaged. Existing work disturbed or removed as a result of performing required new work, shall be patched, repaired, reinstalled, or replaced with new work, and refinished and left in as good condition as existed before commencing work.

END OF STATEMENT OF WORK

APPENDIX A, PICTURES
STABILIZE GRASS SLOPE (SECTION S1)



Figure 1: Start of slope section (near entrance)



Figure 2: Looking north



Figure 3: Looking south



Figure 4: Close up of slope crest and current headstone placement



Figure 5: Example of irrigation valve boxes within project limits



Figure 6: Example of trees' driplines within project limits