

**SCOPE OF WORK
NAVAL FACILITIES ENGINEERING COMMAND WASHINGTON**

COOPERATIVE AGREEMENT

FOR

**Design and Construction of Shoreline Stabilization at Muses Beach, Westmoreland
County, Virginia**

November 2014

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A. BACKGROUND

1. **Background.** The U.S. Navy Communications Site project area (hereinafter referred to as "Range Station 21") is operated by Naval Surface Warfare Center, Dahlgren Division (NSWCDD) and located on Muses Beach along the Potomac River in Westmoreland County, Virginia. Shoreline stabilization measures are necessary to arrest shoreline erosion that is threatening to undercut the access road to Range Station 21. The proposed project area is approximately 130 linear feet of Muses Beach in Westmoreland County, Virginia. Range Station 21 is located on private land and leased by the Navy in support of military operations at Naval Support Facility (NSF) Dahlgren; however, the proposed project area is outside the area leased by the Navy and will require the successful cooperator to negotiate a right of entry (ROE) or real estate interest with the property owner.

In 2010, Navy awarded a cooperative agreement to Tidewater RC&D for the design and construction of shoreline erosion control structures for approximately 300 feet of Muses Beach in order to protect and maintain access to Range Station 21 in Westmoreland County, Virginia. The construction of the shoreline erosion control designs (revetment) under the 2010 cooperative agreement was completed in late 2011. Shoreline erosion continues to occur upriver of the revetment constructed under the 2010 cooperative agreement. Consequently, implementation of shoreline erosion control measures is sought to minimize ongoing erosion of the shoreline in this area, which affects water quality in the Potomac River and Chesapeake Bay and threatens the access road to Range Station 21.

2. **Objective.** The primary purpose of this Cooperative Agreement is to provide services to design and construct a shoreline erosion control structure on private property to further protect the access road to Range Station 21.

The intent of these efforts is to mitigate shoreline erosion, which threatens the access road and thus the accessibility to the existing Navy range monitoring station. No land reclamation is intended in this effort. The shoreline stabilization will support military operational requirements at NSF Dahlgren and benefit efforts to improve water quality of the Potomac River and Chesapeake Bay.

The Cooperator shall use Cooperative Agreement funds provided by the Navy, in compliance with this Scope of Work and attached Terms and Conditions, to carry out the project described herein. Maintaining the erosion control structures once construction is complete is expressly beyond the scope of this Cooperative Agreement. The Navy is only providing funds/assistance for the negotiation of the ROE or real estate interest, design and construction of the erosion control structure project described herein.

This Cooperative Agreement and Scope of Work are contingent upon the successful conclusion of a ROE or other real estate agreement (Task 1) between the Cooperator and Property Owner. The Navy and Cooperator agree that no funds for assessment and design (Task 2) will be disbursed or advanced pursuant to the Payments clause of this Cooperative Agreement absent the successful execution of an ROE agreement or real estate interest between the Cooperator and Property Owner. Should the Cooperator and Property Owner fail to reach a mutually acceptable real estate agreement within two months of execution of this Cooperative Agreement, this Cooperative Agreement will terminate at no cost to either Party.

beyond those funds agreed upon for Task 1 with no further action necessary from either Party. Further, the Navy and Cooperator agree that the provision of funding for the construction phase (Task 3) is contingent on the Cooperator obtaining the Navy and Property Owner's written concurrence with a final design and the necessary permits. Each Party agrees to hold harmless the other Party for any losses resulting from the termination of this Agreement.

3. **Environmental Setting.** The project area is situated on a low bluff near the confluence of the Potomac River and Popes Creek at Muses Beach, approximately four miles downriver from Colonial Beach in the Northern Coastal Plain Physiographic Province in Westmoreland County, Virginia. Soils encountered at this site belong to the Lumbee-Leaf-Lenoir association, which consist of poorly drained and somewhat poorly drained, level to nearly level, loamy soils that occur on low marine terraces. The primary soil on site at the mouth of Popes Creek is Bohicket silty clay loam, which forms the beach area. According to information from the prior erosion control efforts, the historic erosion rate for the Range Station 21 area averages 3.5 feet per year. A shell midden is present along the beach edge in the project area. Any remaining intact shell midden is a potentially National Register of Historic Places eligible cultural resource that will require consultation with the Virginia State Historic Preservation Office (SHPO) to avoid an adverse effect.

*****IF REQUESTED, A PRE-PROPOSAL SITE VISIT MAY BE ARRANGED*****

B. DURATION

The period covered by this scope of work (including real estate negotiations, design and construction, submittal of final invoice, final invoice payment, etc.) is eighteen (18) months from date of award of this Agreement.

C. GENERAL REQUIREMENTS

1. The Cooperator shall manage the total work effort and assure fully adequate and timely completion of services required under this Scope of Work. Included in this function shall be a full range of management duties including, but not limited to, negotiating the necessary ROE or real estate interest with the Property Owner, planning, scheduling, inventory, analysis, and quality control.
2. The Cooperator shall provide all equipment (unless otherwise stated) and analyses necessary to complete the work described within this Scope of Work. All data (raw and associated electronic files including data summaries and analyses), photographs, maps, figures, tables, slides, etc. produced under of the Agreement, and equipment $\geq$ \$100 in value purchased with Agreement funds (including computer software) are the property of the U.S. Navy. The completed erosion control structure and all materials incorporated into the construction of the shoreline erosion control measures at the project site are the property and responsibility of the Property Owner once construction has been completed and accepted by the Navy and the Property Owner.
3. Permits must be obtained prior to the initiation of any fieldwork that requires permitting. A copy of the final permits shall be submitted to

the Owner and to the Navy Contracting Officer via the Navy Technical Representative (NTR) prior to the start of the fieldwork.

4. The Cooperator shall comply with all applicable laws and regulations pertaining to the provision of safe and respectful workplace and to provide a work environment free of harassment and intimidation for such party's own employees and third parties.
5. As applicable to the work, the Cooperator shall conduct literature reviews, field investigations and interviews with experts and authorities as necessary to accomplish the work described within this Scope of Work. The Cooperator shall, in particular, attempt to contact and utilize information from the local US Navy offices and other professionals who are experienced in shoreline stabilization.
6. The Cooperator shall comply with all applicable environmental laws including laws specifically applicable to federal actions such as the Coastal Zone Management Act, National Historic Preservation Act and Endangered Species Act.
7. The Cooperator shall ensure that the data obtained under the Agreement be scientifically defensible and suitable for publication. Methods of data collection and/or analyses shall be provided in the Cooperator's required Final Report under Section D (5) (a) of the Agreement. The US Navy, at its discretion, may subject work plans, draft reports or draft manuscripts to external peer review.
8. The Cooperator shall inform, in writing (via e-mail) the NTR of any unusual activity observed while conducting surveys in the field (e.g. trespassers or person in unauthorized areas). Information should include location, date, time and detailed facts regarding the activity. In addition, information regarding trespassers should be reported to the Property Owner as soon as possible.
9. The Cooperator shall incorporate into the terms of the ROE or other real estate agreement a provision to allow, throughout the term of the Cooperative Agreement, the Navy the opportunity to periodically observe the Cooperator's field activities, to review computer or paper files of raw data, prepared data (such as data analyses, summaries, maps, figures, tables, etc.), or any record deemed appropriate by the Contracting Officer in establishing the Cooperator's performance in fulfilling the requirements of the Cooperative Agreement.
10. The Contracting Officer, via the NTR, may request updated data (presented on maps, figures and/or tables) whenever the US Navy's need to obtain this information is before the next Monthly Report required under Section D(5) (b) of this Scope of Work. The Cooperator shall forward the requested data electronically within ten (10) days from the date of request. If the requested data cannot be provided within this time frame, the Cooperator shall forward electronically the most updated raw data to the Contracting officer, via the NTR. The Cooperator shall document the amount of man hours incurred by the Cooperator to complete the request for updated data and forward this information electronically to the Contracting Officer (via NTR).

11. The Government will not be responsible for the loss of or damage to property of the Cooperator, or for personal injuries to the Cooperator arising from or incident to the use of Government facilities or equipment.
12. The Cooperator shall indemnify and save harmless the Government, its officers, agents, servants and employees from all liability under the Federal Tort Claims Act (28 U.S.C. Sec 2671 et seq.) or otherwise, for death or injury to all persons, or loss or damage to the property of all persons resulting from the use of the premises by the Cooperator. This covenant shall survive the termination of the Cooperative Agreement.
13. In the event of damage, including damage by contamination, to any Government-leased property by the Recipient, its officers, agents, servants, employees, or invitees, the Recipient, at the election of the Government, shall promptly repair, replace, or make monetary compensation for the repair or replacement of such property to the satisfaction of the Government.
14. The Cooperator will be required to obtain insurance. All insurance required by the Cooperative Agreement shall be in such form, for such periods of time, and with such insurers as the Contracting Officer may require or approve. A certificate of insurance or a certified copy of each policy of insurance taken out hereunder shall be provided to the Contracting Officer's local representative prior to use of the premises and facilities. The Cooperator agrees that not less than thirty (30) days prior to the expiration of any insurance required by the Cooperative Agreement, it will deliver to the Contracting Officer's local representative a certificate of insurance or a certified copy of each renewal policy to cover the same risks. Cooperator shall furnish the insurance specified as follows and each policy of insurance covering bodily injuries and third party property damage shall contain an endorsement reading substantially as follows:
 - a. The insurer waives any right of subrogation against the United States of America which might arise by reason of any payment made under this policy
 - b. NAVFAC Washington shall be given thirty (30) days written notice prior to making any material change in or the cancellation of the policy.
 - c. The United States of America (Dept. of the Navy) is added as an additional insured in operations of the policy holder at or from premises designated under the Cooperative Agreement and owned by the United States.
 - d. This insurance certificate is for use of property under the Cooperative Agreement.
 - e. Loss, if any, under this policy shall be adjusted with the Cooperator and the proceeds, at the direction of the Government, shall be payable to the Cooperator, and proceeds not paid to the Cooperator shall be payable to the Treasurer of the United States of America.
15. The Cooperator shall provide a meeting location as needed throughout the term of this Cooperative Agreement. The meeting location shall be neutral to both the Property Owner and the Navy. Should the Cooperator have a need to access U.S. Government property in an automobile, a valid driver's

license, vehicle registration, and proof of insurance are required. Additional information (e.g., vetting form, visitor request, etc.), may be required up to 10 days in advance of visit. Copies of these documents shall be provided to the Installation Security Office via the Installation Environmental Office or Public Works Facilities Engineering and Acquisition Division (FEAD) point of contact.

16. The Cooperator shall notify the NTR by telephone and/or email as to the area(s) where and when work will be accomplished. The Cooperator shall also coordinate the schedule and the work to be accomplished with the Property Owner. In addition, the Cooperator ensures all staff or personnel working under the Cooperative Agreement shall not violate the Archeological Resources Protection Act, National Historic Protection Act, or the Endangered Species Act while completing work required under the Cooperative Agreement.
17. There is a remote potential for unexploded ordnance to be encountered while conducting fieldwork. Cooperator shall not touch or attempt to pick-up any suspected ordnance. Cooperator shall place flagging in the general area of the ordnance and notify the NTR of the exact location of the ordnance as soon as possible.
18. Photography is restricted on the Navy-leased land. The Cooperator is required to obtain permission from the US Navy prior to taking any photographs on or of facilities/equipment/or other improvements on the leased land. Only photographs of Cooperative Agreement-related activities will be permitted.

D. SPECIFIC REQUIREMENTS

Work Area. Shoreline stabilization is required at Muses Beach, Westmoreland County, Virginia at the confluence of Popes Creek and the Potomac River.

1. Task 1 – Access Agreement and Interim Measures.

- a. **Right of Entry Agreement or other real estate interest.** In order for personnel to access the private property on which shoreline erosion control measures will be constructed, the Cooperator shall negotiate its own right-of-entry (ROE) agreement or other real estate interest with the Property Owner in order to conduct any surveys and assessments to support the design phase under Task 2 and the construction services under Task 3. The ROE or other real estate interest shall include terms allowing Navy personnel to periodically accompany the Cooperator to visit the site throughout the term of the Cooperative Agreement. Navy approval to proceed to Task 2 is contingent on successful real estate negotiations. Neither the Navy nor the Cooperator will use eminent domain or the threat of eminent domain to acquire any real estate interests under this Cooperative Agreement.

2. Task 2 – Assessment and Design.

- a. **Assessment.** Conduct an engineering evaluation to determine a cost-effective design solution and associated costs of the shoreline stabilization work required to reduce shoreline erosion at Muses Beach and protect the access road to Range Station 21. The preliminary engineering assessment would involve the reassessment of existing documents, a site visit, and the production of a letter report

detailing the scope of the recommended design solution(s) (to be included with draft design submission). The Cooperator shall arrange their site visits with the Property Owner. Also, the Cooperator will continue to coordinate with the Property Owner to ensure that owner will be satisfied with the work that will take place on property. The report shall be prepared and delivered detailing all recommendations and associated budgetary cost estimates. An acceptable design solution shall be able to withstand a 50 year storm and include aspects that render the adjoining range station site accessible, and the project site stable and usable for its intended purpose for a period of 25 years without requiring more than routine maintenance and repairs to sustain. The cost proposal shall include an allowance of 8 hours of engineering time to provide consultation to the Navy pertaining to scope alternatives.

- b. **Design.** The Cooperator shall develop draft and final designs, specifications, permit applications (as applicable) and a cost estimate for the shoreline erosion control project. The Cooperator shall be responsible for confirming site topography, utility location, and the presence of other constraints within the site area that may affect design and construction. Designs shall be geo-referenced to Virginia North State Plane NAD_FIPS_4501_feet, North American Datum 1983.

The Cooperator shall submit the draft design to the NTR and Property Owner for review and comment prior to finalization.

The design shall incorporate the following restrictions:

- i. The design shall include any protective measures agreed upon with the Virginia SHPO for the shell midden located within the project area. These protective measures will be negotiated between the Navy and the Virginia SHPO.
- ii. The design shall not exceed the threshold between a regional/nationwide permit and an individual permit for any in-water work. Every effort will be concentrated on keeping the designed solution above the Mean Low Water (MLW) mark to the greatest extent possible.
- iii. No design will be considered that involves the intrusion into properties regulated by the state of Maryland or that includes adverse impacts to wetlands.

Once comments are received on the draft design, the Cooperator shall address the comments as appropriate and generate the final design. The Cooperator must obtain written acceptance of the final design from the Property Owner. The Cooperator's services will include the preparation of permit packages and acquisition of all relevant permits for the approved final design. Navy approval to proceed to Task 3 is contingent on the Property Owner's written acceptance of the design and successful obtainment of the applicable permits.

3. **Task 3 - Construction.**

- a. Construction of the final accepted design for the shoreline erosion control measures generated as a result of the successful completion of Task 2. Construction services include the obtaining the appropriate

bonding/insurance, and oversight and construction of the approved final permitted design. Deliverables include safety plans, work plans, as-builts, etc., as discussed below.

- b. The Cooperator will be responsible for removal of all debris generated during and restoration of any staging areas or damage to the access road related to the project.

4. **Meetings.**

- a. **Kick-off Meeting.** A Kick-off Meeting between the Cooperator and the Navy should be arranged by the Cooperator within seven (7) days (or earlier) from the date of award of this Cooperative Agreement. The kick-off meeting shall primarily discuss the requirements of this Cooperative Agreement.
- b. **Site Visits.** Site visits shall be arranged by the Cooperator as needed to complete the tasks under this Cooperative Agreement, or as requested by the NTR.
- c. **Progress Meetings.** The Cooperator shall be available throughout the Cooperative Agreement period to the NTR in matters regarding the tasks to be completed under this Cooperative Agreement. Meetings between the Cooperator, Property Owner and Navy to discuss draft and final designs under task 2 will be required. Additionally, a pre-construction kick-off meeting will also be held after approval to proceed with Task 3 is given by the Navy and prior to construction mobilization.

5. **Schedule and Submittals.**

- a. **Final Right-of-Entry or real estate interest (Task 1).** The Cooperator shall submit an electronic copy of the final agreed upon real estate document to the NTR within one week of its successful execution by both the Cooperator and Property Owner.
- b. **Monthly Reports (Tasks 1, 2 and 3).** Two (2) electronic copies of a monthly progress report are due by the seventh (7th) of the following month or the next workday if the 7th falls on a weekend, for work performed the previous month, for the duration of the Cooperative Agreement. Electronic copies of these reports shall be submitted to the NTR via e-mail. The progress report shall include, at a minimum, Cooperative Agreement number, report date, report period, project name, names of investigators, meeting minutes (minutes shall be taken by the Cooperator and shall include the date/time/location the meeting was held, attendees, relevant discussion notes, etc.), work performed during reporting period, including areas surveyed, problems encountered and recommendations to resolve issues, work anticipated for the next reporting periods and project status. Small maps (8.5 x 11) may be used to show locations.
 - i. Meeting minutes - Please note Cooperator shall submit draft meeting minutes electronically only to the NTR within two (2) weeks of the meeting occurrence. The NTR will provide comment within two (2) weeks of receipt of draft minutes. Final meeting minutes may be included in the next monthly progress report submittal.

- c. **Draft Design.** The Cooperator shall prepare 2 hard copies and 2 electronic copies (via CDs) of a draft shoreline repair design that is clear and concise, including engineering assessment, text, tables, figures, and color photos (as appropriate) within 4 months (or earlier) from the date of award of the Cooperative Agreement to both the Property Owner and the NTR simultaneously. The Government review of this submittal will focus on ensuring that the design meets Navy requirements. It is assumed that this submittal will be professionally edited and that all information presented is done in a manner that is understandable to an audience of professionals with varying backgrounds in project development, implementation, review and regulatory compliance. Once the Property Owner and NTR have reviewed and commented on this submission, the Cooperator shall make the changes and provide the Property Owner and NTR a proof copy for approval before printing and releasing the next submittal. The Cooperator **MUST** obtain written acceptance of the design from the Property Owner before generating final documents and obtaining any relevant permits. The Cooperator will provide a copy of the executed written acceptance to the NTR within one week of execution.
- d. **Final Design.** Two (2) hardcopies and two (2) electronic copies (via CDs) of the Final Design, including as appropriate text, tables, figures, construction sequence, cost estimate, specifications, permits (as appropriate), and color photos (as appropriate), in a format readable by Microsoft Word, each to the Property Owner and NTR within 8 months (or earlier) from the date of award of the Cooperative Agreement. All electronic source files for tables and figures shall be labeled and submitted. All digital photographs shall be labeled with at least the following information: (1) subject/activity, (2) location (specific place), (3) date, and (4) name of photographer.
- e. **Daily Field Reports (Task 3).** The Cooperator will generate daily field reports during Task 3. At a minimum, the daily field report will include: site and project identification information, date, time, weather conditions, identify personnel onsite (including visitors), equipment on site, work accomplished, and notes on site conditions, observations and project relevant discussions held. Daily field reports may be submitted in batches spanning several days as opposed to individually. One hard copy and one electronic copy of the daily field reports will be submitted no less than once bi-weekly to the NTR.
- f. **Safety Plan (Tasks 2 and 3).** The Cooperator shall develop and submit a safety plan appropriate to the activities being provided under this Cooperative Agreement. The Safety Plan must be approved by the NSF Dahlgren Safety Office prior to the start of any fieldwork. A final approved safety plan will be provided by the Cooperator prior to the start of field activities under the relevant task. The NTR will provide the Cooperator with specific information on the required format and content of the Safety Plan; this may include an EM-385-1-1 compliant Safety Plan. However, the Safety Plan may include personal protective equipment (PPE) requirements, installation or Property Owner emergency POC and any conditions that would require an immediate work stoppage and a site evaluation by installation safety personnel.
- g. **Work Plan/Schedules (Task 3).** The Cooperator shall submit a draft work plan (via e-mail) to the Property Owner and NTR within 30 days or less of the successful completion of the preceding task and approval to

proceed. Following comment and acceptance of the work plan/schedule by the Property Owner and the Navy, the Cooperator will provide a final work plan within thirty (30) days. In addition, schedules shall be updated and submitted by the Cooperator electronically (via e-mail) to the Property Owner and NTR monthly (submission to the NTR as part of the monthly progress report is permitted) or on request from the NTR.

- h. **Schedule Summary.** Project tasks shall be completed in accordance with the following schedule:

Submittal	Due Date
Task 1: Right of Entry	
Cooperative Agreement Award (CAA)	CAA
Kick-off Meeting	CAA +7 calendar days
Negotiation of Right of Entry	CAA +1 months (or sooner)
Task 2: Design (contingent on successful completion of Task 1)	
Approval to Proceed w/Design	CAA +2 months (or sooner)
Preliminary Engineering Evaluation/Assessment	CAA +2 months (or sooner)
Draft Design	CAA +3 months (or sooner)
Final Design and Permits	CAA +6 months (or sooner)
Task 3: Construction (contingent on successful completion of Task 2)	
Kick-Off Meeting	CAA +6 months (or sooner)
Draft Work Plan	CAA +7 months (or sooner)
Construction	CAA +8 months (or sooner)
Final As-builts and Acceptance	CAA +9 months (or sooner)

- i. Data. All databases containing raw data and all associated electronic data summary and analytical files shall be formatted in Excel, Word, Dbase IV, or any compatible Microsoft database software and submitted to the NTR (via CD-ROM). Microsoft ACCESS files shall include all queries, reports, tables, etc.

6. **GEOGRAPHIC INFORMATION SYSTEM (GIS) DELIVERABLES**

a. **Mapping requirements.**

- i. **IF GIS IS PART OF SCOPE DELIVERABLES** - All GIS data generated as part of this scope of work must adhere to the standards in Appendix 1 and the requirements listed herein.
- ii. Construction drawing deliverables shall be reviewed for accuracy and completeness by a NFWASH GIS POC before acceptance.
- iii. Where possible, the Cooperator will utilize source GIS data provided by NAVFAC Washington.

a) A completed NAVFAC Washington GIS data release form is required.

- b) The Cooperator shall be provided a copy of any GIS data required meeting mapping deliverables in ESRI format (TBD shapefile or Personal Geodatabase). That data shall be structured according to the current version of the Spatial Data Standards (SDSFIE) in use by NAVFAC (version 3.01 as of April 2014), and all data shall be returned in this format and structure.
 - c) The GIS data provided shall be extracted from the Navy's GIS data Maintenance and Analysis (M&A) environment. This copy of the data will include existing populated layers, and non-populated layers. The non-populated layers are provided to ensure the data is returned in the required NAVFAC Washington GIS data model structure.
 - iv. The Cooperator shall consult with the government GIS POC before populating the attribute tables to ensure the population matches the current NDW interpretation of the SDSFIE. Layer-level metadata updates are required for all updated or new layer deliverables and the Cooperator shall consult with the government GIS POC to identify the specific metadata content requirements.
- a. GIS Deliverable Requirements:
 - i. Format is to be determined by the government project manager and the Cooperator project manager.
 - a) The GIS deliverable shall be delivered on disc (CD-ROM or DVD) to the government for Quality Assurance (QA), and the government will have two (2) weeks to QA the data and then the Cooperator will have two (2) weeks to make any corrections and produce the final deliverable.
 - or:
 - b) The Cooperator will be required to deliver a copy of all data into the appropriate geodatabase schema within the NDW GeoRepository, located in the Maintenance and Analysis environment (accessible via web access and Citrix). All data will be placed into a geodatabase editing version for government review, before acceptance and publishing. All completed and published data will be recorded in the NDW tracking table located in the M&A environment.
 - ii. Reporting: The Cooperator shall provide a document (Microsoft Word format) that lists all layers developed or updated for the task.
 - iii. Maps: In addition to any hardcopy or softcopy maps delivered, all source map files (ESRI ArcGIS (mxd)) for these maps shall be provided to the government.
- b. Maps. All maps created under this Cooperative Agreement shall be incorporated in the draft and final versions of the Final Report. All maps shall be printed on 8.5 by 11-inch paper or 11 by 17-inch paper folded to match the size of the report(s). Unless otherwise indicated, all maps shall be printed at an acceptable scale using a Virginia State Plane projection, Zone 4501, North American Datum 1983. Electronic copies of all maps shall also be provided. All maps created for this Cooperative Agreement shall contain the following information: (1) title, (2) scale

bar, (3) legend, (4) date, (5) north arrow, and (6) a listing of who prepared the map.

E. GOVERNMENT FURNISHED INFORMATION AND MATERIALS

1. The Government will provide the following supporting materials in order to assist the Cooperator with the tasks associated with this Cooperative Agreement:
 - a. Files and reports that may apply, such as the as-builts for the previously completed shoreline stabilization efforts;
 - b. Information, strategies, or protocols that may apply;
 - c. GIS data and maps, if available;
 - d. Aerial photographs, if available; and
 - e. Topographical maps, if available.
2. The Government will provide a map or information indicating areas of special concern, i.e. areas that may contain protected cultural resources.
3. The Government will provide real estate maps and facility information needed to complete the tasks.

F. COOPERATOR FURNISHED ITEMS

1. The Cooperator shall provide all equipment (unless otherwise stated) and analyses necessary to complete the work described within this Cooperative Agreement. All data (raw and associated electronic files including data summaries and analyses), photographs, maps, figures, tables, slides, etc. produced under of the Cooperative Agreement, and equipment $\geq$ \$100 in value purchased with Cooperative Agreement funds (including computer software) are the property of the U.S. Navy. All materials incorporated into the construction of the shoreline erosion control measures at the project site are the property and responsibility of the Property Owner once construction has been completed.

G. DATA AND PUBLICATIONS

1. The Cooperator acknowledges that information and data gathered or received pursuant to this Cooperative Agreement may have regulatory and national security significance and that the unauthorized dissemination or use of this information might prejudice the interests of the US Navy and Department of Defense. Therefore, the Cooperator agrees not to disclose or use any information or data directly or indirectly acquired through activities associated with this Cooperative Agreement to any person, organization or entity who is not a party to this Cooperative Agreement, and to prohibit disclosure or use of the same by the Cooperator's personnel, representatives, agents or associates unless disclosure is compelled by process of law, or the Navy authorizes disclosure or use in accordance with this Section of this Cooperative Agreement. The terms "data", "information," "use" and "disclose" (and its forms and derivatives) will be interpreted very broadly. Limitations

on disclosure encompass all forms of dissemination including the spoken word, written word, and electronic media. "Use" includes, but is not limited to, inclusion in academic papers, professional presentations and incorporation in other research not associated with this Cooperative Agreement. All products, reports, field notes, field data forms, photographs or other information or other records or documents, including slide presentations produced using any information obtained under this Cooperative Agreement are the property of the Department of the Navy. The Cooperator may disclose or use data and information with the prior written approval of the US Navy (via the Contracting Officer) and per the terms of that approval. The Cooperator will submit a written request to disclose or use information or data to the Contracting Officer (cc provided to the NTR) explaining what information is to be disclosed or used, the reason for the disclosure or purpose for which the information or data will be used and to whom the information will be disclosed. Within thirty (30) days from receipt of the request, the NTR will issue a written recommendation for Contracting Officer approval. If no action is taken within thirty (30) days from receipt of the request, the request will be forwarded to the higher management levels of the NAVFACENGCOM Washington for resolution.

2. The US Navy recognizes that the Cooperator may want to use information and data acquired through this Cooperative Agreement in professional and academic manuscripts, publications and presentations and that such use may benefit not only those with an academic or professional interest in the information or data, but the general public as well. If authorization by the Property Owner and Navy is given for such use, the Property Owner and Navy retain the right to review any manuscripts, publication or presentation in advance of publication or presentation for the purpose of ensuring the accuracy and releasability of the information or data presented. The Cooperator agrees that any manuscript, publication or presentation will include a statement as to the origin of the information or data obtained through this Cooperative Agreement. Authorization for the use of information or data in one context is not to be construed as authorization for subsequent uses or purposes. The Cooperator shall submit at least two (2) hard copies of published manuscripts, and at least one electronic copy of slides, and/or slide or poster presentations to the Navy, at no extra cost to the Navy.
3. Recognizing the significant technical contributions of the Cooperator and US Navy NTR in the development of this Cooperative Agreement's scope of work, its goals, objectives, experimental sampling design, data interpretation, review of technical reports, etc., US Navy NTR shall be accorded, if appropriate, joint-authorship credit for any publication of manuscript and technical presentation that is based upon the full use or partial use of the technical information, data, or interpretation of data produced under this Cooperative Agreement. Appropriate joint-authorship credit means credit commensurate with the amount of work and technical contributions provided by the US Navy NTR, and fair with reference to credit given by the primary author (Cooperator) to other joint authors of the manuscript and technical presentation. Appropriateness of joint authorship is to be determined by reference to applicable authority, for example, the code of ethics, rules, regulations, or guidance set forth by institutions or other recognized venues on the publication of manuscripts and technical presentations.
4. The Cooperator shall be responsible for ensuring all personnel, representatives, agents and associates participating in activities under this Cooperative Agreement have read and acknowledged the provisions of this Section of this Cooperative Agreement.

H. RELEASE OF PUBLIC INFORMATION

The Cooperator shall not respond to any third party inquiries concerning this Cooperative Agreement or concerning data and information obtained under this Cooperative Agreement. All third party inquiries received by the Cooperator shall be directed to the Contracting Officer (via the NTR) for response in accordance with applicable law and regulations.

I. PAYMENTS

1. The Cooperator shall request reimbursement on a monthly basis. No payments or advances will be approved for funds related to tasks for which authorization to proceed has not been granted.
2. Advance payments may be requested by the Cooperator for approved tasks under this scope of work. Requests for advance payment shall be submitted on SF-280, "Request for Advance or Reimbursement." The form can be downloaded from the internet at <http://www.whitehouse.gov/omb/grants/sf280.pdf>.
3. The Cooperator shall maintain advances of Federal funds in an interest bearing account. The Cooperator shall remit, at least quarterly, to the Navy interest earned on advances. The Cooperator may keep interest amounts up to \$100 per year for administrative expenses. The Cooperator shall submit a SF-272 "Federal Cash Transactions Report" along with interest earned. The form can be downloaded from the internet at <http://www.whitehouse.gov/omb/grants/sf272.pdf>.
4. Partial payments equal to the amount of work accomplished may be made monthly from date of award. An amount not to exceed ten (10) percent of the total Cooperative Agreement funds will be withheld until the final report, electronic data, and photographic information have been received (via the NTR) and approved by the Contracting Officer.
5. Any requirement for the payment or obligation of funds, under the terms of the Cooperative Agreement, shall be subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 USC §1341 et seq. Nothing in the Cooperative Agreement shall be construed, as implying that Congress will, at a later time, appropriate funds sufficient to meet deficiencies.
6. The provisions of this Cooperative Agreement, including the requirement to remit interest earned on advances, shall be applied to subrecipients/ subgrantees performing substantive work under the Cooperative Agreement. Subrecipients and subgrantees are defined below.
7. A Subrecipient is the legal entity to which a subaward is made and which is accountable to the recipient for the use of the funds provided.
8. A Subgrantee is the government or other legal entity to which a subgrant is awarded and which is accountable to the grantee for the use of the funds provided.

9. A subaward is an award of financial assistance in the form of money, or property in lieu of money, made under an award by a recipient to an eligible subrecipient or by a subrecipient to a lower tier subrecipient. The term includes financial assistance when provided by any legal agreement, even if the agreement is called a contract. It should be noted that subawards are for the performance of substantive work under awards, and are distinct from contracts for procuring goods and services.
10. A subgrant is an award of financial assistance in the form of money, or property in lieu of money, made under a grant by a grantee to an eligible subgrantee. The term includes financial assistance when provided by any legal agreement, even if the agreement is called a contract. It should be noted that subgrants are for the performance of substantive work under awards, and are distinct from contracts for procuring goods and services