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A. PURPOSE

This Cooperative Agreement outlines terms and the cooperative effort of the Department of the Navy, Navy Facilities Engineering Systems Command, Southwest (NAVFAC SW), on behalf of Marine Corps Base Camp Pendleton (MCBCP) and the US Fish and Wildlife Service (USFWS), to produce a Species Status Assessment (SSA) for the Pacific Pocket Mouse (*Perognathus longimembris pacificus*, PPM) under an independent third-party Cooperator. The SSA results in a scientific report distinct from policy application, which contributes to streamlined, transparent, and consistent decision-making by USFWS and allows for greater technical participation by experts outside of the USFWS.

B. LOCATION

The Pacific Pocket Mouse is a Southern California endemic, Federally Endangered subspecies and a California State Species of Special Concern. The species was rediscovered in 1993 when a population of 25 to 36 individuals was found at the Dana Point Headlands, Orange County, California, and the species was emergency-listed as Endangered by the U.S. Fish and Wildlife Service (USFWS). PPM was subsequently reported to have been captured in 1997 at three different locations on MCBCP: San Mateo North, San Mateo South, and the Santa Margarita River watershed. The San Mateo North population has since gone extinct, and the San Diego Zoo Wildlife Alliance (SDZWA) has a captive-bred population as well as an experimental introduced and augmented population in Laguna Hills. This leaves 4 populations in the wild (one introduced) and a captive population at SDZWA.

C. DESIGNATED REPRESENTATIVES

1. The Cooperative Agreement Administrator (CAA) is Kevin Magennis, Naval Facilities Engineering Systems Command Southwest, 750 Pacific Highway, San Diego, CA 92132-5190 telephone 619-705-5566, and email: kevin.e.magennis.civ@us.navy.mil

2. The Cooperative Agreement Technical Representative (CATR) is David McNaughton, Natural Resources Specialist, Naval Facilities Engineering Systems Command, Southwest, 750 Pacific Hwy, Floor 12, San Diego CA 92132; telephone (619) 705-5574 and email: david.k.mcnaughton2.civ@us.navy.mil.

The CATR is responsible for ensuring that all work is performed per the requirements and specifications outlined in this Cooperative Agreement, and that the work performed, including all written reports and professional services are of an acceptable technical quality. For this Cooperative Agreement, the CATR shall be the first and primary point of contact for the Cooperator and Installation Representative (including their respective representatives or staffs) regarding any inquiries, questions, concerns, and issues related to the implementation of the requirements and specifications of this Cooperative Agreement. The CATR has no authority to make any changes to this Cooperative Agreement, only the CAA may affect any change to this Cooperative Agreement.

3. The Base Technical Representative (BTR) is Kristin Thomas, Planning Branch Head,
4. For the purposes of this Cooperative Agreement, the term Recipient shall be **To Be Determined (TBD)**. The use of the term Recipient in this Cooperative Agreement includes TBD and all designated representative(s).

The Cooperator will designate at time of proposal submission the individual within their organization who is authorized to negotiate with the CAA. The designation will stipulate the individual’s authority to commit the Cooperator.

5. The USFWS shall name a point or points of contact from the Carlsbad Fish and Wildlife Office, 2177 Salk Avenue, Suite 250, Carlsbad, CA 92008. Details will be provided at the Kickoff Meeting.

The USFWS is responsible for guiding the format of the SSA, providing editorial review, and accepting the findings. The USFWS has no authority to make any changes to the Cooperative Agreement. Only the CAA may affect any change to this Cooperative Agreement. The USFWS has no authority to direct or change any work identified in this Cooperative Agreement, but may contact the Grants Officer through the CAA to make recommendations.

Any change in scope of work must be issued to the Cooperator, in writing, by the Grants Officer to be binding on the US Government. No US Government employee has authority to change this Cooperative Agreement by oral or written directives, instructions, commitments and/or acceptances or any other manner.

**D. PERIOD OF PERFORMANCE**

The period of performance will last from the start of the award to 30 June 2025. The end date is the anticipated date that the Final Report is accepted by the Government. However, the parties may extend the period of the Cooperative Agreement by written modification. The total duration of this Agreement, including any modifications, shall not exceed 60 months.

Base period: FY23 award to 30 June 2025.

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<tr>
<th>Item</th>
<th>Period of Performance</th>
<th>Anticipated Award Date</th>
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<td>Date of Award – 30 June 2025</td>
<td>August 18, 2023</td>
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A fifteen (15) day period, starting on date of award, will be used for the Cooperator to provide preliminary documents to the CAA and CATR. Documents include, but are not limited to, Insurance documents/certificates, Accident Prevention Plans/Site Health and Safety Plans, Draft Work Plans, etc. Cooperator may not begin performance until preliminary documents are submitted and accepted/approved as appropriate.

E. GENERAL REQUIREMENTS

1. The Cooperator or their sources shall provide all labor, management, supervision, tools, materials, equipment, transportation, meals, and lodging for him/herself and his/her personnel. All Cooperator equipment is subject to inspection and approval by the CATR and BTR.

2. Cooperator shall provide all equipment (unless otherwise stated) and analyses necessary to complete the work described within this Agreement. Equipment is defined as “tangible nonexpendable personal property including exempt property charged directly to the award having a useful life of more than one year.” Supplies are defined as “All personal property excluding equipment, intangible property, and debt instruments, and inventions of a contractor conceived or first actually reduced to practice in the performance of work under a funding agreement ("subject inventions"), as defined in 37 CFR part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts, and Cooperative Agreements.” (DoD Grant and Agreement Regulations, DoD 3210.6-R#)

3. The Cooperator shall visit the study/project area as often as necessary and within the time limits of the Agreement to accomplish the purposes of the Agreement as detailed further in this Scope of Work. Access may be limited by military training needs or security conditions, and the Cooperator should plan ahead accordingly. It is the Cooperator's responsibility to obtain security, entrance, and/or photographic clearances for himself/herself and his/her personnel onto the Installation. The Cooperator must comply with all security rules, regulations, requirements, and day-to-day operational changes thereto. Unannounced changes to day-to-day operational procedures may, at times, prohibit the Cooperator access to study/project sites. While on the installation, the Cooperator shall abide by all applicable rules and regulations issued by the Commanding Officer. The Cooperator may be subject to inspections for contraband while on Government property.

4. The Cooperator shall manage the total work effort and assure fully adequate and timely completion of services required under this Agreement. Included in this function shall be a full range of management duties including, but not limited to, planning, scheduling, inventory, analysis, quality control, and for meeting professional industry standards for conducting scoped activities of this Agreement.

5. Due to the complexity of work, the Cooperator shall provide a Principal Investigator and as many trained technicians as necessary to complete the work.

   Principal Investigator (PI): The Recipient shall designate a program manager to oversee the framework and structure of the agreement. This position shall serve as a liaison between Cooperator and the Grants Officer or CATR and shall serve as the main point of
contact for this agreement.

Any change to the Principal Investigator after award of Cooperative Agreement shall require approval of the CAA.

6. The Cooperator shall work closely with the CATR and BTR in planning and carrying out all activities. It is the Cooperator’s responsibility to ensure that all personnel who visit the Installation coordinate with the BTR regarding site access. The Cooperator shall provide a list of all personnel working on this project to the CATR and BTR.

7. All statistical and geographical analyses conducted, threats assessed, and status decisions and management recommendations developed during this Agreement shall be scientifically defensible and suitable for publication. Data should be analyzed using acceptable methods as determined in current scientific literature(s).

8. As a Species Status Assessment, the US Fish and Wildlife Service has the right to influence the contents and structure of the SSA, but the results and conclusions remain independent of the USFWS, the Marine Corps, and the Navy. Each agency can influence the content of the project through the planning period to include review of the Work Plan.

9. Work Control. The Cooperator shall implement all necessary work control procedures to ensure timely accomplishment of work requirements, as well as to permit tracking of work in progress. The Cooperator shall plan and schedule work to assure material, labor, and equipment are available to complete work with the quality standards established herein.

10. Work Schedule. The Cooperator shall schedule and arrange work as to cause the least inconvenience and interference with the normal occurrence of Government business and mission. All work shall be performed and completed in accordance with the time frames established in the Work Plan for each item of work. Changes to the schedule shall be submitted to the CATR and BTR for approval.

11. Throughout the term of this Agreement, the CATR and the BTR shall be afforded the opportunity by the Cooperator to periodically review data analyses, summaries, maps, figures, tables, etc.), or any record deemed appropriate by the CAA in establishing the Cooperator’s performance in fulfilling the requirements of this Agreement.

12. The Cooperator shall provide all transportation, meals, and lodging for himself/herself and his/her personnel and all equipment and analyses necessary to complete the work. All equipment used on the Base is subject to inspection by and approval of the Base safety program. It is the Cooperator’s responsibility to obtain security and entrance clearances and camera passes for himself/herself and his/her personnel.

13. The Cooperator shall conduct field investigations and interviews with experts and authorities as necessary to accomplish the work described in this Scope. They shall particularly attempt to contact and utilize information from local offices and personnel of the USFWS, USGS, and SDZWA, and other investigators who have conducted same or similar efforts in the past.
14. If necessary, the Cooperator and his/her field investigators will request training area access through the BTR. Training area requests shall be made at least two weeks prior to any scheduled fieldwork. The Cooperator and his/her field investigators will contact the BTR to ensure that the training area request has been authorized. The Government’s normal working hours are from 0800 to 1730 Mondays through Fridays except (1) Federal holidays and (2) other days specifically designated by the Contracting Officer. Federal Holidays: New Year’s Day, Birthday of Martin Luther King, Jr., Washington’s Birthday, Memorial Day, Juneteenth National Independence Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, and Christmas Day.

The Cooperator must comply with all MCBCP security rules, regulations, and day-to-day operational changes. Unannounced changes to day-to-day operational procedures may, at times, prohibit the Cooperator access to parts of MCBCP. It is the responsibility of the Cooperator to reschedule this work.

15. All field notes, field data forms, electronic storage of field data, photographs, etc. collected, produced, and delivered as part of this Agreement shall be accessible to the DoN. Legible copies of notes, data forms and other information related to work performed at MCBCP shall be provided to the CATR and BTR upon request.

16. Photography and videography is restricted on the Base. Clearance for photography will be obtained from appropriate Base personnel via the BTRs. When requested by the Base, all film must be submitted to appropriate personnel for processing and security inspection.

17. Other than those described in this SOW and the Work Plan, Cooperator and his/her field investigators are strictly prohibited from removing any wildlife (sick, dead, or alive) or their parts from the Base without prior written authorization from the BTR.

**F. SPECIFIC REQUIREMENTS**

The SSA process has three successive stages: 1) document the species life history and ecological relationships to provide the foundation for the assessment, 2) describe and hypothesize causes for the species current condition, and 3) forecast the species future condition. The future condition refers to the species ability to sustain populations in the wild under plausible future scenarios. The scenarios help explore the species response to future environmental stressors and to assess the potential for conservation to intervene to improve species status. The SSA process incorporates modeling and scenario planning for prediction of species risk of extinction and applies the conservation biology principles of representation, resiliency, and redundancy to evaluate the current and future condition of the species. The SSA results in a scientific report distinct from policy application, which contributes to streamlined, transparent, and consistent decision making and allows for greater technical participation by experts outside of the USFWS. The SSA builds upon the past threat-focused assessment by including systematic and explicit analyses of the species future response to stressors and conservation.
COOPERATOR INVOLVEMENT

To support the SSA process, the Cooperator will participate in kickoff and coordination calls as necessary and appropriate; work closely with MCBCP installation staff, NAVFAC staff, species experts, lead USFWS Field Office staff, and management on the development and revisions of the SSA; ensure the incorporation of recent information and best available science related to the biology and conservation of the species into the SSA; conduct analysis to estimate current and future conditions under the 3 R’s framework; provide GIS support for mapping and analysis; provide to the lead field office biologist and/or DoD representative all relevant communications (email, phone records, etc.) and materials used and developed for the SSA for the administrative records for the respective rule

Tasks for this Cooperative Agreement shall include:

1. Develop a Work Plan detailing how the Cooperator proposes accomplishment of all objectives under this Cooperative Agreement including methods, deliverables, schedules, data to be collected, and a list of personnel with roles and contact information;
2. Organize available data for the respective species;
3. Conduct analysis for current and future conditions; and
4. Draft the full SSA report.

BASE/BTR INVOLVEMENT

To support the SSA process, the BTR will participate in kickoff and coordination calls as necessary and appropriate; work closely with Cooperator staff, species experts, lead field office biologists, and management on the development and revisions of the SSA; ensure the incorporation of recent information and best available science related to the biology and conservation of the species into the SSA; provide GIS data for mapping and analysis; and provide published materials including reports, quantified data, survey data, Consultations, NEPA analyses, and any other published or released material necessary to perform the analysis.

MCBCP agrees to the following terms for this cooperative project:

1. MCBCP agrees to provide any relevant and accessible data and technical information housed with the Marine Corps upon request by the Cooperator.
2. MCBCP will provide access to Base for the purposes of this project.
3. The BTR as a Project Manager will actively participate in the project planning and review including the development of the work plan, the execution of that plan, and review of the products and deliverables.
4. The BTR will assist the Cooperator with obtaining any relevant published data from any of MCBCP’s contractors, cooperators, or partners working on PPM projects. Data awaiting publication may be withheld at the originator or Base’s request. The SSA will be performed with the most recent, published (preferably peer-reviewed) data available.
NAVY/CATR INVOLVEMENT

To support the SSA process, the CATR will participate in kickoff and coordination calls as necessary and appropriate; work closely with installation staff, Cooperator staff, species experts, lead field office biologists, and management on the development and revisions of the SSA; ensure the incorporation of recent information and best available science related to the biology and conservation of the species into the SSA; provide coordination with the CAA and Grants Officer; provide assistance and approval for invoices and financial information; and prepare administrative actions for CAA and Grants Officer execution.

NAVFAC SW agrees to the following terms for this cooperative project:

1. The NAVFAC SW CATR will be involved in the development of methodology, data gathering, and/or report writing and editing.

2. The NAVFACSW CATR as a Project Manager will actively participate in the project planning and review including the development of the work plan, the execution of that plan, and review of the products and deliverables.

3. The NAVFACSW CATR will incur in-kind or direct expenditures in carrying out the activities specified in this statement of work.

4. The NAVFACSW CATR will act to approve project invoices or explain disagreements between the Cooperator and the Government. The CATR will mediate between the Base and the Cooperator or NAVFAC and the Cooperator when necessary.

H. MEETINGS/COORDINATION

1. The Cooperator or his/her designee will attend a kick-off meeting with the CAA, CATR, and BTR to ensure coordination of activities. The CATR shall arrange the meeting. The meeting shall take place within 30 working days of the agreement award. The purpose of the kick-off meeting is to discuss proper invoicing, any questions the Cooperator may have regarding the agreement, and other pertinent information on the work to be performed. This meeting can either be face to face, held by telecom, or any mixture of these methods.

2. The Cooperator shall take notes during meetings and provide them to the Government for comment. This process improves communication proactively by demonstrating understanding and highlighting differences in perspective for all parties involved on the CA. Notes should be distributed within 15 days of the meeting.

3. The Cooperator shall be available throughout the Agreement period for consultation on the Agreement and subject matter. These meetings can be either face to face or via phone conference.
H. SUBMITTALS and SCHEDULES

Cooperator agrees to submit the following deliverables:

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<tr>
<td>Meeting Minutes</td>
<td>Draft due within 15 days of the meeting</td>
</tr>
<tr>
<td>Work Plan</td>
<td>Draft due within 30 days of the meeting</td>
</tr>
<tr>
<td>Status Reports</td>
<td>Submitted with each invoice</td>
</tr>
<tr>
<td>Draft SSA/Final Report</td>
<td>Submitted by 15 March 2025</td>
</tr>
<tr>
<td>Final SSA/Final Report</td>
<td>Submitted after addressing Government comments no later than 15 June 2025</td>
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Per Navy intent, deliverables and submissions may fulfill multiple agency and organization reporting requirements to minimize duplication of effort and maximize project financial impact. However, the Cooperator will have to deliver reports directly to the Navy and Marine Corps points of contact (electronically or hard copy as applicable), and Navy/Marine Corps comments must be addressed to the CATR and BTR’s satisfaction.

Status reports shall include a summary of work completed that is included on the invoice, work expected during the next reporting period, and any issues encountered. They must be submitted with or prior to the invoice submission. Invoicing is expected to be quarterly, but the Cooperator can propose a preferred schedule during the kickoff meeting.

Draft SSA and Final Report: Upon completion of the species analysis, the Cooperator will prepare the final Species Status Assessment in formatting approved by USFWS.

The SSA shall be a standalone document suitable for publication by USFWS on the appropriate species pages and wherever else USFWS typically distributes that information.

In addition to the SSA, a final report documenting the analyses and any additional findings that are not pertinent to the USFWS SSA format shall be delivered in a final report for the project under separate cover. This may include site/population specific findings, management recommendations, genetic assessments, and anything the Marine Corps may find individually helpful from the data and literature review.

The SSA and the report shall be free of grammatical, spelling, and typographic errors and of a quality acceptable for peer-reviewed scientific journal publication. The CATR may reject the draft if the quality of the report (i.e., writing and presentation) is not professional in content or appearance.

The final SSA and the final report shall contain all of the information in the draft. If the Government has requested modifications to which the Cooperator takes exception, a meeting or telephone conference will be held to settle these differences. If there are unresolved differences, the Cooperator will address these in a separate rebuttal document to the CAA.

Upon acceptance of the draft final SSA and draft final report, the Cooperator shall submit five
(5) hard copies and two (2) electronic copies of the report in Microsoft Word-compatible format no later than 30 June 2025.

Hard Copy Deliverables:
Up to five (5) professionally bound copies of the report with the report title, date, and author clearly printed on the spine of the binding, shall be submitted to the points of contact listed immediately below. All hard copies should also contain a CD-ROM with MS Word-compatible and Adobe Acrobat-compatible (.pdf) format and all GIS deliverables following current MCBCP recommended versioning.

Up to two (2) bound hard copies shall be sent to the BTR for distribution by MCBCP.

Up to two (2) bound hard copies shall be sent to the USFWS POC for distribution.

One (1) bound hard copy shall be sent to the CATR for the NAVFAC SW Natural Resources Library.

One (1) hard copy unbound shall be provided to NAVFAC records management per instructions contained in Environmental Work Instruction (EWI) EVR.4.

Electronic Data:
The Cooperator shall submit any new GIS data generated during the analysis following the guidelines in the SPECIFICATIONS FOR DIGITAL DATA (Appendix A) included in this Scope, along with draft reports. GIS data will be reviewed by the BTR and not considered finalized until all comments have been incorporated and data accepted by the Base Environmental Security Information Systems Branch in conjunction with the BTR.

Digital copies of all raw field data, including spreadsheets and GIS data, as well as all photographs taken, are to be submitted on a CD/DVD with the final report deliverable. All project-related photographs shall be named in the following format:

SpeciesCode_YYYYMMDD_Company/AgencyAbbreviation_NumberInSeries(001)
Eg: PPM_20191008_USGS_001

Photographs should include the following information imbedded in the metadata of each file:

i. Description: Subject/activity
ii. Location:
   1) General site location (eg. Camp Pendleton and training area)
   2) Specific site location (eg. project-specific survey area)
iii. Photographer (at the discretion of the Contractor/Cooperator whether this refers to Company/Agency name or individual person)
iv. Names of all personnel featured in photo (if applicable)

Electronic data will be submitted in a mechanism consistent with Federal computers and data
storage including electronic transfer by DoDSAFE or a similar large-data online transfer mechanism, CD/DVD, or pre-approved and Federally acceptable external hard drive.

I. DATA AND PUBLICATION

1. This Cooperative Agreement is subject to, and Cooperator shall comply with, 2 CFR 200.315 concerning “Intangible Property,” which includes use of research data. Any information or data protected by federal law will be identified by the Government prior to being provided to Cooperator and the Government will notify the Cooperator in advance of applicable limitations on such information. Except as to information so identified and limited, there are no restrictions on reporting or publishing reports based upon the fundamental research that is the subject of this Cooperative Agreement.

The Federal Government has the right to obtain, reproduce, publish or otherwise use the data first produced under this Agreement and authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes. The DoN acknowledges and agrees that the Cooperator’s fundamental consideration in performing the research under this Agreement shall be Cooperator’s right to publish the results of such research for academic and scientific purposes. The Cooperator shall submit, for review and comment, any proposed professional, scientific or non-scientific report, paper or note published or unpublished or be part of any technical or non-technical presentation or be provided to anyone not a party to this Agreement to the DoN thirty (30) days prior to the submission of the work mentioned above.

2. The acknowledgements for any publication, paper, or presentation resulting from this work shall include the following statement: “This research was funded in part by the Marine Corps Base Camp Pendleton.”

3. Any publications resulting from this work shall be provided at no cost to the Department of the Navy in quantities jointly determined by the Department of the Navy representative and the Cooperator at the time of publication.

4. The Cooperator shall be responsible for ensuring all personnel participating in activities under this Agreement have read and acknowledged the DATA AND PUBLICATION provisions of this Agreement.

J. SAFETY

The Recipient will be required to develop an Accident Prevention Plan (APP) following the format in Appendix A of the EM 385-1-1, US Army Corps of Engineers Safety & Health Requirements Manual, 30 November 2014 or latest edition. The government CATR will contact the SW EV Safety Office to check if the project may qualify for the Abbreviated APP, prior to directing the recipient to prepare an APP. Additional specific plan or plans is/are required if the project involves work that is potentially hazardous. List of specific plans is located at section (i) of Appendix A of the EM 385-1-1. Potentially hazardous activities include, but are not limited to:
• soil boring or digging test pits (excludes manual collection of de minimis surface soil samples)
• work on, in, or near bodies of water where there a danger from drowning
• use of heavy equipment, e.g. backhoes, excavators, bulldozers, etc.
• excavation, backfilling, and compaction
• use of man lifts, ladders, and other climbing apparatus
• use of weight handing equipment, e.g. crane, forklifts, and hoists
• well drilling and/or well pump repair or replacement
• construction, demolition, or repair of site improvements
• work within 10 ten feet of high voltage lines, or high pressure gas, steam, or water lines

A Site Safety and Health Plan (SSHP) is also required if the work involves potential exposure to hazardous, toxic or radioactive waste (HTRW). The minimum requirement for the SSHP is in Section 33 of the EM 385-1-1. Include an Activity Hazard Analysis (AHA) for all tasks reasonably anticipated to be performed as part of this scope of work. Format and instructions for the AHA is in section 1 of the EM 385-1-1. As a minimum, references used to develop the APP, SSHP and AHA are: EM 385-1-1 (or latest addition), and Local Activity safety plans and standard operating procedures. When developing the APP, SSHP and AHA, address all sections that are deemed appropriate for performing the work in this CA, while ensuring a safe work environment for all personnel involved. The draft APP, SSHP and AHA have to be reviewed by the Government Designated Authorities (SW EV Safety Office, CATR, ROICC/FEAD) prior to start of field work activities.

NOTE: AHA is an attachment required by the APP. SSHP is also an attachment required by the APP if a project includes potential exposure to HTRW. Government PM should verify with the SW EV Safety Office prior to directing the recipient to prepare a SSHP.

The APP, SSHP and AHA will provide a safe and healthful environment for all personnel involved as well as personnel working near the sites for the DoD. The Recipient shall certify to CATR that the final APP, SSHP and AHA have been reviewed with each Recipient employee working on this Cooperative Agreement prior to mobilization and start of fieldwork activities.

A Draft and Final APP, SSHP and AHA will be submitted concurrently with the Work Plan but shall be printed under a separate cover from the Work Plan. The final APP, SSHP and AHA shall be immediately accessible to the Site Safety and Health Officer (SSHO) and Project Manager at all times during the project, and a copy shall be available in every vehicle utilized for work under this Cooperative Agreement. The SSHO is required to have completed the 40-hours Safety Awareness Training.

Man-hour reporting is also required by the EM 385-1-1 and the Unified Facilities Guide Specifications (UFGS) -01 35 26, (November 2015) change 8, 08/19. The recipient will provide a Monthly Exposure Report (MER) and will attach this report to the quarterly (or other specified interval) billing request. The CATR will submit a copy of the MER to the SW EV Safety Office.

Site Assist Visit (SAV). While the recipient is performing the job on-site, a SW EV Safety representative may perform an SAV. The recipient is required to comply with the contents of the
final APP (with the AHA and/or SSHP, as applicable). Any modifications to the APP shall be approved first by the GDA prior to continuing work. Also the recipient has to comply with the requirements of the Section 1, Program Management, of the EM-385-1-1, while at the job site.

K. HOLD HARMLESS

1. The US Government shall not be responsible for the loss of or damage to property of the Cooperator and/or his/her representatives, or for personal injuries to the Cooperator and/or his/her representatives arising from or incident to the use of government facilities or equipment. Cooperator shall indemnify, hold harmless, defend and save Government harmless and shall pay all costs, expenses, and reasonable attorney’s fees for all trial and appellate levels and post-judgment proceedings in connection with any fines, suits, actions, damages, liability and causes of action of every nature whatsoever arising or growing out of, or in any manner connected with, the occupation or use of Government Premises by Cooperator, its employees, servants, agents, guests, invitees, and contractors. This includes, but is not limited to, any fines, claims, demands and causes of action of every nature whatsoever that may be made upon, sustained or incurred by the Government by reason of any breach, violation, omission or non-performance of any term, covenant or condition hereof on the part of the Cooperator, its employees, servants, agents, guests, invitees, or contractors. This indemnification also applies to claims arising out of the furnishings of any utilities or services by the Government or any interruption therein or failure thereof, occasioned by the negligence or lack of diligence of Cooperator or its respective officers, agents, servants or employees. However, this indemnity shall not extend to damages due to the sole fault of the Government or its employees, agents, servants, guests, invitees or contractors. This covenant shall survive the termination of this Cooperative Agreement.

2. In the event of damage, including damage by contamination, to any US Government property by the Cooperator, its officers, agents, servants, employees, or invitees, the Cooperator, at the election of the US Government, shall promptly repair, replace, or make monetary compensation for the repair or replacement of such property to the satisfaction of the US Government.

L. INSURANCE

1. At the commencement of this Cooperative Agreement, the Cooperator shall obtain, from a reputable insurance company or companies satisfactory to the US Government, comprehensive general liability insurance. The insurance shall provide an amount not less than a minimum combined single limit of $1,000,000.00 for any number of persons or claims arising from any one incident with respect to bodily injuries or death resulting therefrom, property damage or both, suffered or alleged to have been suffered by any person or persons resulting from or related to the presence or operations of the Cooperator, its employees, agents or contractors under this Cooperative Agreement. The Cooperator shall require the insurance company or companies to furnish the US Government with a certified copy of the policy or policies, or certificates of insurance evidencing the purchase of such insurance. Each policy of insurance required under this Paragraph shall contain an endorsement reading as follows:

“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.”
2. All insurance required of the Cooperator hereunder shall be in such form, for such periods of
time and with such insurers as the US Government may require or approve. All policies or
certificates issued by the respective insurers for public liability and property insurance shall
name the United States of America as an additional insured, and shall provide that no
cancellation, reduction in amount or any material change in coverage thereof shall be effective
until at least 30 calendar days after receipt by the US Government of written notice thereof,
regardless of any prior act or failure to act or negligence of the Cooperator or the US
Government or any other person concerning such amount or change in coverage.

3. The Cooperator at its sole cost and expense, may insure its activities in connection with this
Cooperative Agreement by maintaining a program of self-insurance that complies with the
requirements of this Section N, including coverages specified in Attachment B hereof.
Cooperator shall also provide a copy of the exempting statute cited in support of its claim of self-
insurance pursuant to Section 2 of Attachment A to this Cooperative Agreement. (The self-
insurance clause is applicable only to appropriate state and local governments and qualifying
institutions of higher education who provide evidence of a self-insurance program in accordance
with this Section and Attachment A, Section 2.)

4. During the entire period the Cooperative Agreement shall be in effect, the Cooperator shall
require its contractors or agents or any contractor performing work at the Cooperator’s or agent’s
request on the affected US Government Premises to carry and maintain the insurance required
below:

“Comprehensive general liability insurance in the amount of $1,000,000.00.”

5. The Cooperator and any of its contractors or agents shall deliver or cause to be delivered
promptly to the Cooperative Agreement Administrator, a certificate of insurance or a certified
copy of each renewal policy evidencing the insurance required by this Cooperative Agreement
and shall also deliver no later than thirty (30) calendar days prior to expiration of any such
policy, a certificate of insurance evidencing each renewal policy covering the same risks.

6. In the event that any item or part of the premises or facilities shall require repair, rebuilding,
or replacement resulting from loss or damage, the risk of which is assumed under this Section N,
the Cooperator shall promptly give notice thereof to the US Government and, to the extent of its
liability as provided in this Section N, shall, upon demand, either compensate the US
Government for such loss or damage, or rebuild, replace or repair the item or items of the
premises or facilities so lost or damaged, as the US Government may elect. If the cost of such
repair, rebuilding, or replacement exceeds the liability of the Cooperator for such loss or damage
under this Section N, the Cooperator shall effect such repair, rebuilding, or replacement if
required so to do by the US Government, and such excess of cost shall be reimbursed to the
Cooperator by the US Government. In the event the Cooperator shall have effected any repair,
rebuilding, or replacement which the Cooperator is required to effect pursuant to this Section N,
the US Government shall direct payment to the Cooperator of so much of the proceeds of any
insurance carried by the Cooperator and made available to the US Government on account of
loss of or damage to any item or part of the premises or facilities as may be necessary to enable
the Cooperator to effect such repair, rebuilding or replacement. In event the Cooperator shall not
have been required to effect such repair, rebuilding, or replacement, and the insurance proceeds allocable to the loss or damage which has created the need for such repair, rebuilding or replacement have been paid to the Cooperator, the Cooperator shall promptly refund to the US Government the amount of such proceeds.

M. PAYMENTS

1. Partial payments equal to the amount of work accomplished may be made quarterly during the field work portion; after submittal of the draft report; and after receipt of the final report.

2. The final payment of 20 percent of the Cooperative Agreement overall value shall be paid when the final report and all other submittals listed in Section I have been received and accepted by the CATR.

3. Any requirement for the payment or obligation of funds, under the terms of this 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 this Agreement shall be construed as implying that Congress will, at a later time, appropriate funds sufficient to meet deficiencies.

4. Payments will be made in accordance with Defense Federal Acquisition Regulation (DFAR) 252.232-7006 Wide Area Work Flow Payment Instruction. See Attachment WAWF Instructions for instructions on payment procedures.

N. EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT REPORTING

Section 2(d) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public, therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public.

Unless otherwise directed by the Contracting Officer, by the end of the month following the month of award of a first-tier subcontract with a value of $25,000 or more, (and any modifications to these subcontracts that change previously reported data), the Contractor shall report the following information at http://www.fsrs.gov for each first-tier subcontract:

- (a) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has one.
- (b) Name of the subcontractor.
- (c) Amount of the subcontract award.
- (d) Date of the subcontract award.
- (e) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.
- (f) Subcontract number (the subcontract number assigned by the Contractor).
• (g) Subcontractor’s physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district.
• (h) Subcontractor’s primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district.
• (i) The prime contract number, and order number if applicable.
• (j) Awarding agency name and code.
• (k) Funding agency name and code.
• (l) Government contracting office code.
• (m) Treasury account symbol (TAS) as reported in FPDS.
• (n) The applicable North American Industry Classification System (NAICS) code.

By the end of the month following the month of a contract award, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for the Contractor’s preceding completed fiscal year at http://www.ccr.gov, if –

• (a) In the Contractor’s preceding fiscal year, the Contractor received –

  (i) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

  (ii) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

• (b) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm).

Unless otherwise directed by the Contracting Officer, by the end of the month following the month of a first-tier subcontract with a value of $25,000 or more, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for each first-tier subcontractor for the subcontractor’s preceding completed fiscal year at http://www.fsrs.gov, if

• (a) In the Subcontractor’s preceding fiscal year, the Subcontractor received –

  (i) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

  (ii) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

• (b) The public does not have access to information about the compensation of the
executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm).

If the Contractor in the previous tax year had gross income, from all sources, under $300,000, the Contractor is exempt from the requirement to report subcontractor awards. Likewise, if a subcontractor in the previous tax year had gross income from all sources under $300,000, the Contractor does not need to report awards to that subcontractor.

O. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE OR EQUIPMENT (2 CFR § 200.216)

(a) Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

(1) Procure or obtain;

(2) Extend or renew a contract to procure or obtain; or

(3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

(i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

(ii) Telecommunications or video surveillance services provided by such entities or using such equipment.

(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

(b) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses,
institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

(c) See Public Law 115-232, section 889 for additional information.

(d) See also § 200.471.

END
ATTACHMENT A

SELF-INSURANCE REQUIREMENTS FORM

INSURANCE MUST CONFORM TO ALL THE REQUIREMENTS LISTED BELOW PRIOR TO RECIPIENT BEING PERMITTED TO USE OR OCCUPY GOVERNMENT PREMISES OR PROPERTY PURSUANT TO THE COOPERATIVE AGREEMENT

1. PUBLIC LIABILITY AND PROPERTY DAMAGE

a. Required minimum amounts of insurance listed below:
   $   N/A     Fire and Extended Coverage
   $  1,000,000 Third Party Property Damage
   $  1,000,000 Third Party Personal Injury Per Person
   $  1,000,000 Third Party Personal Injury Per Accident

2. SELF-INSURANCE REQUIREMENTS: If your organization is self-insured, please provide evidence of self-insurance which meets or exceeds the insurance liability amounts in Item # 1.

The following information, written on your organization’s letterhead, is also required:

- A brief description of your organization’s self-insurance program, with reference to statutory or regulatory authority establishing the self insurance program.
- The name and telephone number of your organization’s self-insurance program administrator.
- Reference the appropriate military facility and Cooperative Agreement number.

3. IF YOUR SELF-INSURANCE PROGRAM DOES NOT MEET THE ABOVE MINIMUM REQUIREMENTS:

- Provide evidence of Excess Liability Insurance in the amount necessary to meet or exceed the minimum requirements in Item #1 above.

- The following endorsements are required for Excess Liability insurance policies:

  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. "The Commanding Officer, Naval Facilities Engineering Command San Diego, CA shall be given thirty (30) days written notice prior to making any material change in or the cancellation of the self insurance program."

  c. "The United States of America (Department of the Navy) is added as an additional insured in operations of the policyholder at or from the premises licensed/leased from the United States".
d. "This insurance certificate is for use of facilities at Marine Corps Base Camp Pendleton under this Cooperative Agreement, No. N62473-23-2-0017."

4. NOTICE: "RIGHT TO USE" DOCUMENTS WILL NOT BE FULLY EXECUTED UNTIL CERTIFICATE IS RECEIVED WITH PROPER ENDORSEMENTS.
ATTACHMENT A
NON SELF-INSURED REQUIREMENTS FORM

INSURANCE MUST CONFORM TO ALL THE REQUIREMENTS LISTED BELOW PRIOR TO RECIPIENT BEING PERMITTED TO USE OR OCCUPY US GOVERNMENT PREMISES OR PROPERTY PURSUANT TO THE COOPERATIVE AGREEMENT

1. PUBLIC LIABILITY AND PROPERTY DAMAGE

   a. Required minimum amounts of insurance listed below:
      $   N/A     Fire and Extended Coverage
      $ 1,000,000 Third Party Property Damage
      $ 1,000,000 Third Party Personal Injury Per Person
      $ 1,000,000 Third Party Personal Injury Per Accident

2. THE CERTIFICATE OF INSURANCE MUST CONTAIN THE FOLLOWING ENDORSEMENTS:

   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. "The Commanding Officer, Naval Facilities Engineering Command, Facilities Engineering Command, 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 policyholder at or from the premises licensed/leased from the United States."

   d. "This insurance certificate is for use of facilities at Marine Corps Base Camp Pendleton under this Cooperative Agreement, No. N62473-23-2-0017."

   e. Loss, if any, under this policy shall be adjusted with Cooperator and the proceeds, at the direction of the US Government, shall be payable to Cooperator, and proceeds not paid to Cooperator shall be payable to the Treasurer of the United States of America."

3. NOTICE: "RIGHT TO USE" DOCUMENTS WILL NOT BE FULLY EXECUTED UNTIL CERTIFICATE IS RECEIVED WITH PROPER ENDORSEMENTS.
ATTACHMENT B
WAWF INSTRUCTIONS

252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (JUN 2012)

(a) Definitions. As used in this clause--

Department of Defense Activity Address Code (DoDAAC) is a six position code that uniquely identifies a unit, activity, or organization.

Document type means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

Local processing office (LPO) is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) Electronic invoicing. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall--

1. Have a designated electronic business point of contact in the Central Contractor Registration at https://www.acquisition.gov; and


(d) WAWF training. The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the “Web Based Training” link on the WAWF home page at https://wawf.eb.mil/.

(e) WAWF methods of document submission. Document submissions may be via Web entry, Electronic Data Interchange, or File Transfer Protocol.

(f) WAWF payment instructions. The Contractor must use the following information when submitting payment requests and receiving reports in WAWF for this contract/order: N62473-23-2-0017.

1. Document type. The Contractor shall use the following document type(s).
(2) Inspection/acceptance location. The Contractor shall select the following inspection/acceptance location(s) in WAWF, as specified by the contracting officer.

(3) Document routing. The Contractor shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*

<table>
<thead>
<tr>
<th>Field Name in WAWF</th>
<th>Data to be entered in WAWF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay Official DoDAAC</td>
<td>N68732</td>
</tr>
<tr>
<td>Issue By DoDAAC</td>
<td>N62473</td>
</tr>
<tr>
<td>Admin DoDAAC</td>
<td>N62473</td>
</tr>
<tr>
<td>Inspect By DoDAAC</td>
<td>N62473/ECOMP</td>
</tr>
<tr>
<td>Ship To Code</td>
<td>N/A</td>
</tr>
<tr>
<td>Ship From Code</td>
<td>N/A</td>
</tr>
<tr>
<td>Mark For Code</td>
<td>N/A</td>
</tr>
<tr>
<td>Service Approver (DoDAAC)</td>
<td>N/A</td>
</tr>
<tr>
<td>Service Acceptor (DoDAAC)</td>
<td>N62473/ECOMP</td>
</tr>
<tr>
<td>Accept at Other DoDAAC</td>
<td>N/A</td>
</tr>
<tr>
<td>LPO DoDAAC</td>
<td>N62473/ECOMP</td>
</tr>
<tr>
<td>DCAA Auditor DoDAAC</td>
<td>N/A</td>
</tr>
<tr>
<td>Other DoDAAC(s)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

(4) Payment request and supporting documentation. The Contractor shall ensure a payment request includes appropriate contract line item and subline item descriptions of the work performed or supplies delivered, unit price/cost per unit, fee (if applicable), and all relevant back-up documentation, as defined in DFARS Appendix F, (e.g. timesheets) in support of each payment request.

(5) WAWF email notifications. The Contractor shall enter the email addresses identified below in the “Send Additional Email Notifications” field of WAWF once a document is submitted in the system.

NAVFAC_SW_ECOMP_inspector@navy.mil
(g) WAWF point of contact. (1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact.

**NOT APPLICABLE**

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.

(End of clause)

252.204-0006 Line Item Specific: Proration. (SEP 2009)
The payment office shall make payment from each ACRN in the same proportion as the amount of funding currently unliquidated for each ACRN.
Attachment C

GIS AND ELECTRONIC DATA REQUIREMENTS

It is the responsibility of the Contractor to ensure that all electronic deliverables comply with current parameters implemented across the United States Marine Corps and at MCB Camp Pendleton. GIS deliverables shall follow current SDSFIE GEOFidelis data model parameters (https://www.sdsfieonline.org). The Contractor will request installation GIS data, current data dictionary, and template geodatabases from the Environmental Security Geographer.

SPECIFICATIONS FOR DIGITAL DATA

1. REFERENCES: Specifications for Digital Data shall conform to the most recent edition of the following standards; where standards provide conflicting information pertaining to an issue, the most stringent information shall apply.

   a. The United States National Computer Aided Drafting Standards (U.S. NCS)

   b. Computer Aided Design and Drafting / Geospatial Information System (CADD / GIS) Technology Center’s Architecture, Engineering and Construction CADD (AEC CADD) Standards Please refer to the following link: https://transportation.wes.army.mil.

   c. Naval Facilities Instruction (NAVFACINST) 4250.1, CH 7, “Electronic Bid Solicitation (EBS) Policy”


   e. Geodetic Reference System (GRS Spheroid) and the NAD / World Geodetic System (NAD/WGS)


   g. North American Vertical Datum 88 (NAVD88)

2. HARD COPY AND DIGITAL FORMAT: Any maps, drawings, figures, sketches, geospatial data, spreadsheets, or text files prepared for this contract shall be provided in both hard copy and digital form. The hard copy deliverables are defined in “Close Out Submittals”.

3. TEXT, SPREADSHEET, and DATABASE FILES: The Marine Corps standard computing software is Microsoft Office, typically in its latest stable release version.

   a. Final Reports and other text documents shall be provided in Microsoft Word-compatible format and Adobe-compatible portable document format (pdf).

   b. Spreadsheet files shall be provided in Microsoft Excel-compatible format.

   c. Databases shall be provided in Microsoft Access-compatible format, unless specified otherwise, as approved by the Government. Prior to database development, the Contractor shall provide the Government with a Technical Approach Document for approval, which describes the Contractor's technical approach to designing and developing the database.

   d. All text, spreadsheet, and database files shall be delivered on a Compact Disk Read-Only Memory (CD-ROM), Digital Versatile Disc Read-Only Memory (DVD-ROM) or through DoD SAFE (https://safe.apps.mil/).
c. When full sets of drawings are submitted in pdf format, the full set shall be compiled and bookmarked as one pdf.

4. MAPS, DRAWINGS, AND SKETCHES (Digital Geospatial Data):

a. **GEOSPATIAL DATA SOFTWARE FORMAT**: data shall be provided in a form that does not require translation, preprocessing, or post processing before being loaded to the Installation’s Authoritative Data Store (ADS). The Contractor shall validate any deviation from this specification in writing with the Government Environmental Security GIS Analyst, the representative of the Installation Geospatial Information and Services (IGI&S) Department via the Project Manager (PM). Digital geographic maps and the related data sets shall be delivered in the following software format:

(1) **GIS**: utilize Personal or file Geodatabase format compatible with ESRI’s mapping software (ArcGIS or ArcPro). The geodatabase shall be importable to a multi-user geodatabase using ESRI’s mapping software (ArcSDE or ArcPro). The delivered data layer(s) shall be provided with x, y domain precision of 1000.

(2) **NOTE**: ESRI’s mapping software ArcGIS and ArcSDE are geographic information system software produced by the ESRI of Redlands, California. AutoCAD is software produced by Autodesk, Inc.

b. **GEOSPATIAL DATA STRUCTURE**:

(1) **GIS DATA SETS**: When developing/delivering geospatial data, the Contractor shall develop the initial structure consistent with the most current version of the GEOFidelis Data Model. The GEOFidelis Data Model shall be followed for geospatial database table structure, nomenclature, and attributes. The Contractor shall consult with the Government concerning modifications or additions to the GEOFidelis Data Model. The Government may approve modifications to the GEOFidelis Data Model if it is determined that the GEOFidelis Data Model does not adequately address subject datasets. Copies of the GEOFidelis Data Model may be obtained by contacting the MCB Camp Pendleton Environmental Security GIS Office GIS Analyst via email at pndl_env_information_systems@usmc.mil or via phone at (760) 725-9724.

c. **GEOSPATIAL DATA PROJECTION**:

(1) Geographic data (regardless of format) shall be provided in U.S. Survey Feet and projected into the California State Plane, “Zone VI and FIPS 0406 Projection System.”

(2) The maps and data shall use the GRS 1980 Spheroid and the NAD83/WGS84. Epoch 1991.35 shall be used the vertical datum used is NAVD88. This projection requirement applies to all GIS data layer deliverables as well as all CADD drawings such as As-Designed and Record Drawing project plans. Each data set shall have a projection file if appropriate based on format.

d. **GEOSPATIAL DATA COLLECTION**:

(1) Survey grade Global Positioning System (GPS) data collection shall be performed when specified in the Statement of Work (SOW) or if the Subject Project is a MILCON and / or utility project.

(a) Survey grade GPS data collection shall at a minimum use the Geoid2003 Continental United States (CONUS) epoch 1991.35 and spatial accuracy requirements for survey grade are 95% of GPS points are within 6 cm accuracy.

(b) Every effort shall be made to capture feature locations without using offsets unless obstructions are present.
(2) All final GPS data collection activities shall be logged with MCB CPEN’S IGI&S Department prior to initiation (temporary benchmarks set up for site work does not need to be logged).

(a) GPS data collection shall tie into the MCB CPEN GPS Station.

(b) Checks shall be made to existing Survey Control Monuments around the area of work (control coordinates; maps and Monument Record Sheets are available at the GIS Office).

(c) All checks made to control points shall be recorded and discrepancies noted in the deliverables.

(d) Data collected but not verified via this method shall not be accepted for submittal.

e. **MAP PRODUCTS AND SUPPORT FILES:** Finished map products, regardless of final print size, shall be presented separately in both hard copy and digital formats. The hard copy deliverables are defined in “Close Out Submittals.” Final map products shall be delivered in the following digital formats:

(1) Pdf Format: Resolution of 300 dots per inch (dpi) with no image compression. All fonts shall be embedded. The Contractor shall only use fonts that are licensed and available for use by the Government.

(2) Joint Photographic Experts Group (JPEG) Format: Resolution of 96 dpi with 24-bit true color.

(3) ESRI Map Document (MXD) Format: All maps constructed shall have the associated MXD delivered to allow for future printing and modification, as necessary, by the Government. MXDs shall use the ‘relative paths’ option. The Table of Contents (TOC) within the MXD shall be orderly, and contain a logical naming structure.

(4) Media for Geospatial Data Deliverables: Geographic data shall be delivered to the Base Representative on two (2) copies of CD-ROMs or DVD-ROMs, separately from the deliverables containing the draft and final reports, raw data, and photographs. This media shall contain only the data as designated in the Task sections of the SOW. Do not include working files of the Contractor or original installation data used by the Contractor to develop deliverables.

f. **GEOGRAPHIC DATA DOCUMENTATION (Metadata):** For each digital file delivered containing geographic information (regardless of format), the Contractor shall provide documentation consistent with the GEOfidelis Metadata Guidelines, which follow Federal Geographic Data Committee (FGDC) Content Standards for Digital (CSD) Geospatial Metadata (CSDGM). Both ‘Mandatory’ and ‘Mandatory as Applicable’ fields shall be completed for each geographic data set, as well as selected ‘Optional’ fields. The documentation shall include, but not be limited to, the following:

(1) The name, description, abstract, and purpose of the data set / data layer.

(2) The source of the data and any related data quality information such as accuracy and time period of content.

(3) Descriptions of the receiver and other equipment used during collection and processing, base stations used for differential corrections, software used for performing differential corrections, estimated horizontal and vertical accuracies obtained, and conversion routines used to translate the data into final geographic data delivery format.

(4) Details of all checks made to existing control points and any discrepancies noted.

(5) Type of data layer (point, line, polygon, etc.).

(6) Field names of all attribute data and a description of each field name.
(7) Definition of all codes used in the data fields.

(8) Ranges of numeric fields and the meaning of these numeric ranges.

(9) The creation date of the map layer and the name of the person who created it.

(10) A POC shall be provided to answer technical questions.

(11) Metadata generation tools included in the ESRI’s mapping software (ArcGIS or ArcPro) suite of software (or equivalent technology) shall be used in the production of the required metadata in Extensible Markup Language (XML) format. Regardless of the tools used for metadata creation, the Contractor shall ensure that the metadata is delivered in XML format.

(12) NOTE: The metadata shall be formatted from the Installation database perspective, not the Contractor project perspective. Therefore, such items as POC shall be the Installation’s POC currently associated with the data and not the Contractor’s PM. The Contractor shall use language and format consistent with existing Installation metadata. Specific guidelines may be found within the GEOFidelis Metadata Authoring Guide. A copy of the guide may be obtained by contacting Environmental Security GIS, and the IGI&S Department.

g. **GEOGRAPHIC DATA REVIEW:** The digital geographic maps, related data, and text documents shall be included for review in the draft and final contract submittals. The data shall be analyzed for discrepancies in subject content, correct format in accordance with these specifications, and compatibility with the existing GIS system. The Contractor shall incorporate review comments to data and text prior to approval of the final submittal.

h. **OWNERSHIP:** All digital files, final hard copy products, source data acquired for this project, and related materials, including that furnished by the Government, shall become the property of MCB CPEN and shall not be issued, distributed, or published by the Contractor without the written consent of the Base Representative.

Contact Information:

For project inquiries, please contact the Project Manager. For geospatial questions contact:

Lesley Handa  
Geographer  
Environmental Security  
Building 22165  
Box 555008-5008  
Camp Pendleton, CA 92055-5008  
Lesley.m.Handa@usmc.mil  
pndl_env_information_systems@usmc.mil  
Tel: (760) 725-9724