

DEPARTMENT OF PUBLIC WORKS

APPROVED

JAN 9, 2018

FLOOD CONTROL & WATER

CONSERVATION DISTRICT **BOARD OF SUPERVISORS**

Raul M. Rojas DIRECTOR

Administration

PO Box 4186

January 9, 2018

Board of Supervisors

Marin County Flood Control and Water Conservation Distriptrin COUNTY

3501 Civic Center Drive San Rafael, CA 94913-4186 San Rafael, CA 94903

415 473 6528 T 415 473 3799 F SUBJECT: Professional Services Agreement with A3GEO in the Amount of

415 473 3232 TTY

CRS Dial 711

www.marincounty.org/pw

Accounting

RECOMMENDATIONS: Authorize President to execute the agreement.

SUMMARY: On May 16, 2017, your Board agreed to execute the grant disbursement agreement with the Department of Water Resources (DWR) to accept \$1,624,286 in grant funds for both the US Army Corps of Engineers Corte Madera Creek Flood Control Project and the Lower Corte Madera Creek Levee Evaluation Project. The Lower Corte Madera Creek Levee Evaluation Project includes an engineering evaluation of Lower Corte Madera Creek's levee and earthen channel system from the end of the concrete channel in Kentfield to San Pablo Bay and an assessment of preliminary improvement alternatives which would satisfy Federal Emergency Management Agency (FEMA) requirements for future levee accreditation.

in Flood Control Zone 9, Supervisorial Districts 2 and 4

\$313,292 for Evaluation of Lower Corte Madera Creek Levee System

The alternatives assessment will include options to improve the system with a possible combination of measures that could include dredging, levees, and interior drainage improvements to reduce flood risk in the near term, as well as against future sea-level rise. Additional evaluation goals are to meet operation and maintenance requirements in agreement with the U.S. Army Corps of Engineers' Rehabilitation and Inspection Program (RIP). Corte Madera Creek's levee system has been subject to the RIP since the project was constructed by the Corps in the 1960s and transferred to the District for operation and maintenance.

This winter, staff solicited a Request for Proposals to secure professional services for completing the levee evaluation scope of work. Three proposals were received and each firm was interviewed by staff. After a thorough review and evaluation of the proposals and interviews, staff recommends that A3GEO, Inc. (A3GEO) of Berkeley, California, be selected to furnish professional services for the evaluation.

Dear Board Members:

Building Maintenance

Capital Projects

Airport

Certified Unified Program Agency (CUPA)

Communications Maintenance

County Garage

Disability Access

Engineering & Survey

Flood Control & Water Resources

Land Development

Purchasing

Real Estate

Reprographic Services

Road Maintenance

Stormwater Program

Transportation & Traffic Operations

Waste Management

Board of Supervisors Marin County Flood Control and Water Conservation District January 9, 2018 Page 2 of 2

A3GEO's team is comprised of experts in the fields of geology and geotechnical, hydraulic, and civil engineering and has proven experience with and an understanding of FEMA requirements for levee accreditation and the U.S. Army Corps of Engineers' Rehabilitation and Inspection Program.

A3GEO will be performing the following tasks as part of the evaluation:

- Bathymetric and Land Surveying
- Hydrologic and Hydraulic Analysis
- Geotechnical Investigation and Analysis
- Alternatives Assessment

The cost for these professional services is \$313,292, with \$172,310 of the costs being recoverable through the grant award and the remaining \$140,982 from Flood Control Zone 9 funds.

It is estimated that the evaluation will be completed by fall 2019, with intermediate results and products to be presented through the technical work group, the watershed web site, Flood Control Zone 9 Advisory Board, and community meetings. Additionally, project status and reports will be posted on the Ross Valley Watershed Program's website at www.rossvalleywatersheds.org.

FISCAL IMPACT: The total cost for this agreement is not to exceed \$313,292. This amount is available in the Zone 9 budget under Professional Services (Object 522510) account for award of this contract. The Zone 9 Advisory Board recommended proceeding with professional services to support this project at their June 12, 2017, meeting. There are no other impacts by this action.

REVIEWED BY:	[X] [X] []	County Administrator Department of Finance County Counsel Human Resources	[] [X]	N/A N/A N/A N/A

Respectfully submitted,

Anthony Williams, P.E. Principal Civil Engineer

Contract Number: 31800984

Attachment: Professional Services Agreement with A3GEO, Inc.

p:\bos\2018\010918 a3geo fole contract\010918_bos_fetter_a3geo_agreement cmc lole_final.docx

4 Elk

CAO Contract Log #	MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
	PROFESSIONAL SERVICES CONTRACT
	2015 - Edition 1

THIS CONTRACT is made and entered into this 9th day of January 20/8, by and between the MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, hereinafter referred to as "District" and A3GEO, Inc., hereinafter referred to as "Contractor."

RECITALS:

WHEREAS, District desires to retain a person or firm to provide the following service: evaluation of the Corte Madera Creek levee system and development and analysis of potential levee improvements; and

WHEREAS, Contractor warrants that it is qualified and competent to render the aforesaid services;

NOW, THEREFORE, for and in consideration of the Contract made, and the payments to be made by District, the parties agree to the following:

1. SCOPE OF SERVICES:

Contractor agrees to provide all of the services described in Exhibit A attached hereto and by this reference made a part hereof.

2. FURNISHED SERVICES:

The District agrees to:

- A. Guarantee access to and make provisions for the Contractor to enter upon public and private lands as required to perform their work.
- B. Make available all pertinent data and records for review.
- C. Provide general bid and Contract forms and special provisions format when needed.

3. FEES AND PAYMENT SCHEDULE:

The fees and payment schedule for furnishing services under this Contract shall be based on the rate schedule which is attached hereto as **Exhibit B** and by this reference incorporated herein. Said fees shall remain in effect for the entire term of the Contract. Contractor shall provide District with his/her/its Federal Tax I.D. number prior to submitting the first invoice.

4. MAXIMUM COST TO DISTRICT:

In no event will the cost to District for the services to be provided herein exceed the maximum sum of \$313,292 including direct non-salary expenses. As set forth in section 14 of this Contract, should the funding source for this Contract be reduced, Contractor agrees that this maximum cost to District may be amended by written notice from District to reflect that reduction.

5. TIME OF CONTRACT:

This Contract shall commence on January 9, 2018, and shall terminate on December 31, 2019. Certificate(s) of Insurance must be current on day Contract commences and if scheduled to lapse prior to termination date, must be automatically updated before final payment may be made to Contractor. The final invoice must be submitted within 30 days of completion of the stated scope of services.

6. INSURANCE:

Commercial General Liability:

The Contractor shall maintain a commercial general liability insurance policy in the amount of \$1,000,000 (\$2,000,000 aggregate). The District and the County of Marin shall be named as an additional insured on the commercial general liability policy.

Commercial Automobile Liability:

Where the services to be provided under this Contract involve or require the use of any type of vehicle by Contractor, Contractor shall provide comprehensive business or commercial automobile liability coverage, including non-owned and hired automobile liability, in the amount of \$1,000,000.00.

Rev.20110922
[169] a/18

Page 1 of 22

Workers' Compensation:

The Contractor acknowledges the State of California requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code. If Contractor has employees, a copy of the certificate evidencing such insurance, a letter of self-insurance, or a copy of the Certificate of Consent to Self-Insure shall be provided to District prior to commencement of work.

Errors and Omissions, Professional Liability or Malpractice Insurance.

Contractor may be required to carry errors and omissions, professional liability or malpractice insurance.

All policies shall remain in force through the life of this Contract and shall be payable on a "per occurrence" basis unless District specifically consents to a "claims made" basis. The insurer shall supply District adequate proof of insurance and/or a certificate of insurance evidencing coverages and limits prior to commencement of work. Should any of the required insurance policies in this Contract be cancelled or non-renewed, it is the Contractor's duty to notify the District immediately upon receipt of the notice of cancellation or non-renewal.

If Contractor does not carry a required insurance coverage and/or does not meet the required limits, the coverage limits and deductibles shall be set forth on a waiver, **Exhibit C**, attached hereto.

Failure to provide and maintain the insurance required by this Contract will constitute a material breach of this Contract. In addition to any other available remedies, District may suspend payment to the Contractor for any services provided during any time that insurance was not in effect and until such time as the Contractor provides adequate evidence that Contractor has obtained the required coverage.

7. ANTI DISCRIMINATION AND ANTI HARASSMENT:

Contractor and/or any subcontractor shall not unlawfully discriminate against or harass any individual including, but not limited to, any employee or volunteer of the District and the County of Marin based on race, color, religion, nationality, sex, sexual orientation, age or condition of disability. Contractor and/or any subcontractor understands and agrees that Contractor and/or any subcontractor is bound by and will comply with the anti discrimination and anti harassment mandates of all Federal, State and local statutes, regulations and ordinances including, but not limited to, County of Marin Personnel Management Regulation (PMR) 21.

8. SUBCONTRACTING:

The Contractor shall not subcontract nor assign any portion of the work required by this Contract without prior written approval of the District except for any subcontract work identified herein. If Contractor hires a subcontractor under this Contract, Contractor shall require subcontractor to provide and maintain insurance coverage(s) identical to what is required of Contractor under this Contract and shall require subcontractor to name Contractor, District, and County of Marin as an additional insured under this Contract for general liability. It shall be Contractor's responsibility to collect and maintain current evidence of insurance provided by its subcontractors and shall forward to the District evidence of same.

ASSIGNMENT:

The rights, responsibilities and duties under this Contract are personal to the Contractor and may not be transferred or assigned without the express prior written consent of the District.

10. LICENSING AND PERMITS:

The Contractor shall maintain the appropriate licenses throughout the life of this Contract. Contractor shall also obtain any and all permits which might be required by the work to be performed herein.

11. BOOKS OF RECORD AND AUDIT PROVISION:

Contractor shall maintain on a current basis complete books and records relating to this Contract. Such records shall include, but not be limited to, documents supporting all bids, all income and all expenditures. The books and records shall be original entry books with a general ledger itemizing all debits and credits for the work on this Contract. In addition, Contractor shall maintain detailed payroll records including all subsistence, travel and field expenses, and canceled checks, receipts and invoices for all items. These documents and records shall be retained for at least five years from the completion of this Contract. Contractor will permit District to audit all books, accounts or records relating to this Contract or all books, accounts or records of any business entities controlled by Contractor who participated in this Contract in any way. Any audit may be

Page 2 of 22 Rev.20110922

conducted on Contractor's premises or, at District's option, Contractor shall provide all books and records within a maximum of fifteen (15) days upon receipt of written notice from District. Contractor shall refund any monies erroneously charged.

12. WORK PRODUCT/PRE-EXISTING WORK PRODUCT OF CONTRACTOR:

Any and all work product resulting from this Contract is commissioned by the District as a work for hire. The District shall be considered, for all purposes, the author of the work product and shall have all rights of authorship to the work, including, but not limited to, the exclusive right to use, publish, reproduce, copy and make derivative use of, the work product or otherwise grant others limited rights to use the work product.

To the extent Contractor incorporates into the work product any pre-existing work product owned by Contractor, Contractor hereby acknowledges and agrees that ownership of such work product shall be transferred to the District.

13. TERMINATION:

- A. If the Contractor fails to provide in any manner the services required under this Contract or otherwise fails to comply with the terms of this Contract or violates any ordinance, regulation or other law which applies to its performance herein, the District may terminate this Contract by giving five (5) calendar days written notice to the party involved.
- B. The Contractor shall be excused for failure to perform services herein if such services are prevented by acts of God, strikes, labor disputes or other forces over which the Contractor has no control.
- C. Either party hereto may terminate this Contract for any reason by giving thirty (30) calendar days written notice to the other parties. Notice of termination shall be by written notice to the other parties and be sent by registered mail
- D. In the event of termination not the fault of the Contractor, the Contractor shall be paid for services performed to the date of termination in accordance with the terms of this Contract so long as proof of required insurance is provided for the periods covered in the Contract or Amendment(s).

14. APPROPRIATIONS:

The District's performance and obligation to pay under this Contract is contingent upon an annual appropriation by the Marin County Board of Supervisors, the State of California or other third party. Should the funds not be appropriated District may terminate this Contract with respect to those payments for which such funds are not appropriated. District will give Contractor thirty (30) days' written notice of such termination. All obligations of District to make payments after the termination date will cease.

Where the funding source for this Contract is contingent upon an annual appropriation or grant from the Marin County Board of Supervisors, the State of California or other third party, District's performance and obligation to pay under this Contract is limited by the availability of those funds. Should the funding source for this Contract be eliminated or reduced, upon written notice to Contractor, District may reduce the Maximum Cost to District identified in section 4 to reflect that elimination or reduction.

15. RELATIONSHIP BETWEEN THE PARTIES:

It is expressly understood that in the performance of the services herein, the Contractor, and the agents and employees thereof, shall act in an independent capacity and as an independent Contractor and not as officers, employees or agents of the District. Contractor shall be solely responsible to pay all required taxes, including but not limited to, all withholding social security, and workers' compensation.

16. AMENDMENT:

This Contract may be amended or modified only by written Contract of all parties.

17. ASSIGNMENT OF PERSONNEL:

The Contractor shall not substitute any personnel for those specifically named in its proposal unless personnel with substantially equal or better qualifications and experience are provided, acceptable to District, as is evidenced in writing.

Page 3 of 22 Rev.20110922

18. JURISDICTION AND VENUE:

This Contract shall be construed in accordance with the laws of the State of California and the parties hereto agree that venue shall be in the County of Marin, California.

19. INDEMNIFICATION:

Contractor agrees to indemnify, defend, and hold District, its employees, officers, and agents, harmless from any and all liabilities including, but not limited to, litigation costs and attorney's fees arising from any and all claims and losses to anyone who may be injured or damaged by reason of Contractor's negligence, recklessness or willful misconduct in the performance of this Contract.

20. COMPLIANCE WITH APPLICABLE LAWS:

The Contractor shall comply with any and all Federal, State and local laws and resolutions: including, but not limited to the County of Marin Nuclear Free Zone, Living Wage Ordinance, and Board of Supervisors Resolution #2005-97 prohibiting the off-shoring of professional services involving employee/retiree medical and financial data affecting services covered by this Contract. Copies of any of the above-referenced local laws and resolutions may be secured from the Contract Manager referenced in section 21. In addition, the following NOTICES may apply:

- 1. Pursuant to California Franchise Tax Board regulations, District will automatically withhold 7% from all payments made to vendors who are non-residents of California.
- 2. Contractor agrees to meet all applicable program access and physical accessibility requirements under State and Federal laws as may apply to services, programs or activities for the benefit of the public.
- 3. For Contracts involving any State or Federal grant funds, Exhibit D must be attached. Exhibit D shall consist of the printout results obtained by search of the System for Award Management at www.sam.gov.

Exhibit D - Debarment Certification

By signing and submitting this Contract, the Contractor is agreeing to abide by the debarment requirements as set out below.

- The certification in this clause is a material representation of fact relied upon by District.
- The Contractor shall provide immediate written notice to District if at any time the Contractor learns that its certification was erroneous or has become erroneous by reason of changed circumstances.
- Contractor certifies that none of its principals, affiliates, agents, representatives or contractors are excluded, disqualified or ineligible for the award of contracts by any Federal agency and Contractor further certifies to the best of its knowledge and belief, that it and its principals:
 - Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal Department or Agency;
 - Have not been convicted within the preceding three-years of any of the offenses listed in 2 CFR 180.800(a) or had a civil judgment rendered against it for one of those offenses within that time period;
 - Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or Local) with commission of any of the offenses listed in 2 CFR 180.800(a);
 - Have not had one or more public transactions (Federal, State, or Local) terminated within the preceding three-years for cause or default.
- The Contractor agrees by signing this Contract that it will not knowingly enter into any subcontract or covered transaction with a person who is proposed for debarment, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction.
- Any subcontractor will provide a debarment certification that includes the debarment clause as noted in preceding bullets above, without modification.

Page 4 of 22 Rev.20110922

21. NOTICES:

			e Department Contract Manager named below. All is shall be given to District at the following location:
	Contract Manager:	Associate Civil Engineer	
	Dept./Location:	Department of Public Works P. O. Box 4186 San Rafael, CA 94913-4186	
	Telephone No.:	415-473-4232	
Notices shall be give	en to Contractor at	the following address:	
	Contractor:	A3GEO, Inc. 1331 Seventh Street, Unit E	
	Address:	Berkeley, CA 94710	
	Telephone No.:	415-425-0247	
22. ACKNOWLED	GEMENT OF EXH	BITS	
	Check appl	icable Exhibits	CONTRACTOR'S INITIALS
EXHIBIT A.	Scope of Se	rvices	Dien
EXHIBIT B.		yment	DV
EXHIBIT C.		eduction/Waiver w/a	DK
EXHIBIT D.	⊠ Contractor's	Debarment Certification	DKM
EXHIBIT E.	⊠ Subcontract	or's Debarment Certification	DIEM
IN WITNESS WHER	REOF, the parties h	nave executed this Contract on the da	ate first above written.
CONTRACTOR:	- Ilan		FLOOD CONTROL NSERVATION DISTRICT:
Title: Preside	ent	By: President Dam	non Connolly
		APPROVAL (required if template co	
District Counsel: _		Date:	Collination collection

All

EXHIBIT "A" SCOPE OF SERVICES

Services to be provided by Contractor include the following:

The Corte Madera Creek Levee Evaluation (Evaluation) takes place in the unincorporated community of Greenbrae and city of Larkspur along Corte Madera Creek from the downstream end of the concrete channel in Kentfield to the bay. In support of the Evaluation the contractor, A3GEO, shall perform:

- 1. A comprehensive and detailed assessment of the hydrologic, hydraulic and geotechnical conditions within the project area.
- 2. An evaluation of the performance and condition of the existing levees and underlying foundation soils per FEMA regulation 44CFR 65.10.
- 3. A set of improvement alternatives which will address the following requirements:
 - a. U.S. Army Corps of Engineers inspection requirements,
 - b. FEMA accreditation requirements, and
 - c. Sea-level Rise.
 - d. Feasible projects that will provide significant flood risk reduction benefits, that will be competitive to receive funding under the DWR Local Levee Assistance Program and other funding sources and be constructible within the next five to ten years

USACE requirements shall be considered to include, but not be limited to, regulations, standards, and guidelines:

- o As stipulated in the original operation and maintenance manual for the project
- As applicable to goals of levee certification
- o As necessary for maintaining active status in the Rehabilitation and Inspection Program (RIP)

The following Scope of Work (SOW) outlines the approach to satisfying the objectives above.

TASK 1 – SURVEYING AND TOPOGRAPHIC DATA

Detailed micro-topographic and bathymetric data will be collected throughout the study reach. The survey reach is approximately 2.5 nautical miles in length and bathymetric data will be collected along the longitudinal channel centerline (CL) as well two offset longitudinal transects. At least 22 cross sections will be reoccupied and surveyed. Project team will determine locations of cross sections and may survey additional cross sections or point locations where needed. HEC-RAS cross sections will be surveyed at all bridges. Two days has been assumed for bathymetric surveying. All outfall pipes will be surveyed (invert and soffit) between the Bon Air Bridge and the concrete channel. Additional outfall pipes may be included downstream of Bon Air Bridge. Ground surveying will be performed where needed for the Evaluation in areas that may include Larkspur Plaza Drive, 2 Bon Air Road, Kentfield Gardens and College Court to supplement topographic data available from the County, FEMA, and other sources. Three days for land surveying has been assumed.

CLE will establish a survey control network (NAVD88) that will be composed of numerous control points Page 6 of 22

located throughout the survey reach to facilitate survey tie-in shots. Static GPS will be utilized to tie-into previous project control points as well as local National Geodetic Survey control points.

Outfall structures and topographic data will be surveyed utilizing topographic survey equipment (RTK-GPS). Traditional optical-based survey equipment (total station) might be needed in areas of dense vegetation. CLE will ensure that some areas of the topographic survey will overlap with the bathymetric survey to ensure a match between the two datasets.

CLE will use a custom 17 foot vessel outfitted with state-of-the-art single beam sonar hardware and software to collect sonar-based bathymetric data throughout the transects and cross sections. All bathymetric survey data collection efforts will be conducted by an American Congress on Surveying and Mapping Certified Hydrographer. Cross section locations will be programmed into the survey computer to ensure that the survey vessel will line up with the topographic-based portion of each section. The singlebeam survey vessel will be outfitted with an Odom Hydrotrac (model CVM) fathometer coupled with a 3º, 200 KHz depth transducer. Depth transducer output will be calibrated using an Omni Digi-Bar Pro speed of sound probe and standard barcheck calibration techniques. The CVM can save the entire sonargram – in which the software digitizes the return from each surface encountered by the sonar ping – including returns from sub-aquatic vegetation (SAV). This enables the Hydrographer to digitize the actual channel bottom, eliminating the possibility that a return from the SAV surface will be digitally "chosen" by the fathometer, resulting in a false depth reading.

Depth data will be corrected (in real time) for vessel heave, pitch and roll using a TSS digital motion sensor. Position data will be collected using a Leica System 1200 Real Time Kinematic (RTK) GPS unit which provides horizontal coordinates with ± 0.10 foot accuracy.

Survey planning and data acquisition will be managed using Hypack hydrographic survey software (version 2011) running on an Intel / Windows XP platform. Hydrographic survey procedures will conform to industry standards meeting or exceeding those in the Corps of Engineers, Hydrographic Manual (EM-1110-2-1003), and other recognized technical manuals.

Deliverables:

- a) Survey work plan
- b) Existing bathymetric survey and topographic data converted from NGVD29 to NAVD88.
- c) ASCII point file of new and existing data containing Point ID, Northings, Eastings, Elevations and Codes (State Plane Z3 NAD83 and NAVD88).
- d) AutoCAD and ArcGIS format Digital Elevation Model (DEM).
- e) Plans in AutoCAD showing plan, profile and all sections comparing the 2004, 2010, 2014 and data obtained for this project.
- f) Field and Bathymetric Survey data in AutoCAD and GIS format (per County Guidelines).
- g) Field data collection report outlining methods, procedures, closure results and technical specification on equipment used.

TASK 2 - IHYDROLOGIC AND HYDRAULIC ANALYSIS

2.1 Model Review and Site Reconnaissance

Stetson will review the existing HEC-HMS hydrologic model and the existing HEC-RAS 1D/2D unsteady-flow hydraulic model and update/modify the models as necessary to meet the needs for this specific study. It is expected that the following updates/modifications will be needed:

- Update the HEC-RAS model geometry using the updated earthen channel bathymetry and levee heights surveyed as part of Task 1.
- Refine the HEC-RAS model 2D grid size from 20 feet by 20 feet to a smaller size, potentially 10 feet by 10 feet or possibly even smaller.
- Modify the locations of flow inputs into the HEC-RAS model to match locations where new or
 modified features, such as levees, are to be evaluated for this project. These may include, but not
 necessarily be limited to, Wolfgrade Creek, which is located along the west side of Creekside Marsh
 and where the berm is to be evaluated.
- Modify the HEC-HMS model so that it can provide flow inputs needed for new flow input locations added to the HEC-RAS model.

Recalibrate the HEC-RAS model along the earthen channel using (a) the updated earthen channel bathymetry surveyed earlier in this project and (b) water level data collected by water level recorders installed by Stetson near the Bon Air Bridge during the 2016-17 wet season.

Stetson will perform a field inspection focusing on noted potential flooding areas. During the field inspection Stetson will have on-hand LiDAR-based topographical maps and storm drain maps and will examine levee conditions, storm drainage systems, localized topography, and interior drainage patterns. Collected information will be used in the hydraulic analysis and alternatives development.

2.2 Current Conditions Assessment

Using the results of the bathymetric survey, Stetson will compare longitudinal profiles and cross sections to assess the change in channel bed of the earthen channel between the last 2010 survey and the new survey. As required in the RFP, Stetson will also calculate the volume of sedimentation since 2010 and estimate the annual rate of sedimentation in terms of both depth and volume. The District will provide the 2014 bathymetric survey data and TIN surface, if available, to Stetson. Stetson will update the sediment accumulation graph presented in the 2011 CIP Study report (Figure 7, Tech Memo No. 4) and provide an opinion as to the status of equilibrium in the earthen channel.

Stetson will use the updated HEC-RAS model (updated as described above) to perform hydraulic analysis of existing conditions for the 1%-annual-chance riverine flood (with MHHW tide as the downstream boundary condition) and prepare floodplain mapping. Stetson will evaluate whether improvements are needed to provide 1%-annual-chance riverine flood protection, if any, given the current channel bathymetry.

Stetson will also use the updated HEC-RAS model to perform hydraulic analysis of existing conditions for the 1%- annual-chance coastal flood (with 100-year tide as the downstream boundary condition) combined with a reasonable riverine flood event (e.g., 5-year flood). The "reasonable" flood event to accompany the 1%-annual-chance coastal flood will be determined in consultation with the District. Stetson will evaluate where raising is needed to provide1%- annual-chance coastal flood protection, if any.

Stetson will compare the water surface elevations of the 1%-annual-chance riverine flooding to those of the 1%- annual-chance coastal flooding and identify which flood elevations are the "controlling" elevations. Stetson will prepare a map showing the controlling 1%-annual-chance flood elevations.

The Contractor will assess whether a sediment and scour analysis may be beneficial to the project goals and will prepare a generalized scope and budget level cost estimate for such analysis.

2.3 Freeboard Assessment

Using the results of the hydraulic analysis for existing conditions and the following FEMA's applicable freeboard requirements, Stetson will prepare a map showing the alignments of levees and the locations of segments where FEMA requirements for riverine flooding freeboard and coastal flooding freeboard control, where freeboard deficiencies occur and the amount of each freeboard deficiency. Per FEMA CFS65.10, the following requirements will be applied:

- A minimum freeboard of three feet above the water-surface level of the base flood;
- An additional one foot above the minimum is required within 100 feet upstream and downstream of structures (such as bridges) riverward of the levee or wherever the flow is constricted;
- An additional one-half foot above the minimum at the upstream end of the levee is also required, tapering to not less than the minimum at the downstream end of the levee;
- For coastal levees, the freeboard must be established at one foot above the height of the 1percent wave or maximum wave runnup (whichever is greater) associated with the 1%-annualchance stillwater surge elevation at the site.

For coastal levees, Stetson will perform the freeboard assessment using data obtained from the recent FEMA's Central San Francisco Bay Coastal Flood Hazard Study. Stetson peer-reviewed this study in 2012 and, during this process, obtained all the data from FEMA – the data are kept in Stetson's data files.

2.4 Interior Drainage Study

Stetson will conduct a preliminary interior drainage study. As indicated in the RFP, the study will cover areas identified in later tasks as requiring flood barriers and may include Kentfield Gardens and Larkspur Isle College Court, and 2 Bon Air Road.

The purpose of the interior drainage study will be, in part, to provide information that can be used to ultimately satisfy the requirements of FEMA levee certification; that is, identify sources of interior flooding, hydrologic analysis of flooding sources to estimate runoff, delineate extent and map flooded areas, and estimate BFEs. It is Stetson's opinion that a more detailed interior drainage study beyond the funding level of this levee evaluation would ultimately be needed for FEMA certification. However, this interior drainage study will help provide basic data and finding that will help frame and focus a later, more detailed study. It will also provide useful information for preparing future grant applications.

Stetson will use information generated from the field inspection described above. Stetson will modify the existing HEC-HMS model or apply another appropriate method to compute stormwater runoff to interior areas. Since tail waters that are external to the interior drainage areas will be controlled by tidal flooding,

Stetson will map the areas of potential ponding by conservatively assuming that all computed stormwater runoff within the drainage area will be ponded (retained) without any discharge to the external area. This approach, albeit conservative, is reasonable given the high level nature and purpose of this preliminary interior drainage study, and will avoid the need for a labor- intensive (and costly) joint probability analysis of interior and exterior (coastal) flooding. Using the computed runoff, Stetson will delineate and map the extent of flooded areas and determine depths and BFEs. Stetson will develop preliminary measures to prevent interior flooding, including improvements to the storm drain system, installation of tidal gates and pump stations.

Stetson will prepare a report documenting the preliminary interior drainage study, data, methods, findings and recommendations for storm drain system improvements. The report will also include a scope of work and budget estimate for further work to complete a more detailed interior drainage study needed for FEMA certification.

Deliverables:

- a) Hydrologic and Hydraulic Analysis Work Plan
- b) Draft Hydrologic and Hydraulic Analysis Technical Memorandum
- c) Final Hydrologic and Hydraulic Analysis Technical Memorandum
- d) Updated 1D-2D HEC-RAS hydraulic and HEC-HMS models on a CD, DVD or hard drive
- e) Generalized scope of work and budget cost for sediment analysis, if determined beneficial to the project goals

TASK 3 – GEOTECHNICAL INVESTIGATION

3.1 Site Reconnaissance and Data Review

Contractor will perform a detailed site reconnaissance of the levee system as part of the project's geotechnical investigations. The site reconnaissance shall include observations of obvious issues or areas requiring specific analysis; confirmation of as-built/record drawings; observations and assessment of current conditions; evaluation of maintenance and operation conditions and an assessment of USACE inspection findings compared to existing conditions. Site conditions will also be evaluated relative to the Subsurface Exploration Work Plan including potential access constraints and utility conflicts. Contractor shall prepare an Existing Conditions Technical Memorandum to summarize the findings from the site inspection and data review.

Available documentation of the levee system shall be reviewed by the Contractor in detail as part of this task, including but not limited to the following list:

- Reports and records of levee performance during high water events (instances of erosion, sloughing, seepage, overtopping, etc.)
- As-built drawings for the original levee and/or repairs
- Levee design reports or memorandum and design computations
- Levee construction reports, data, specifications
- Current survey information and available surveyed cross-sections of the river channel and levee

- Records and data regarding existing utility crossings
- Recent USACE Annual and Periodic Inspection reports
- Regional and site-specific geology reports, aerial imagery, test boring logs and other geologic or geotechnical data along or adjacent to the levee, soil testing data, foundation material characteristics, and inferred stratigraphy
- Information on any repairs or upgrades made to the levee system and records of permits for any
 alterations made to the levee since its construction (such as changes to the levee cross-section,
 construction or abandonment of utilities, and bridges over the levee)
- Current interim USACE operations and maintenance manual
- Operation and maintenance records
- Hydraulics and Hydrology (H&H) studies by USACE, FEMA, Stetson, Noble and others
- Levee and ground subsidence data

All existing investigation logs (i.e., test pits, boring logs), key features of interest, and documented historical performance issues shall be compiled and input into a Geographic Information System (GIS) database for use during future projects and analyses. The GIS database shall be developed in accordance with District guidelines as described in "Geographic Data Contract Deliverables Guidelines, County of Marin, Department of Public Works, Flood Control." The attribute data will be included as part of the ArcGIS feature attribute table. It is assumed that a Microsoft Access file will not be required. The geotechnical GIS database created in this task will not include any survey and/or topographic data developed during Task 1. The level of detail which will be included in the geotechnical database will be assessed once all of the data has been collected. It is assumed that this task will take no longer than 16 hours for a GIS Specialist to complete.

3.2 Subsurface Exploration

Following review of existing information and field reconnaissance, the Contractor will reevaluate the preliminary proposed exploration locations as shown in the RFP and will develop a final exploration plan based on identified data gaps and potential improvement locations. New explorations will be performed where data is not sufficient for either: 1) the analysis and evaluation of the current levee conditions, and/or 2) the development of conceptual remedial alternatives..

The Contractor will prepare a Subsurface Exploration Plan which will include the Existing Conditions
Technical Memorandum that summarizes the relevant findings from the site inspection—and document
review task as an Appendix; layout the proposed exploration locations, depths, types of samples and
exploration—methods; and outline the plan for laboratory testing of collected samples.

Before mobilizing to the site for the subsurface exploration program, A3GEO will procure the necessary permits, coordinate with our drilling/CPT subcontractor, arrange for borehole locations to be pre-cleared by a private utility locator, pre-mark borehole locations and notify Underground Service Alert of our intent to drill, and prepare a site-specific Health and Safety Plan for the proposed work. Contractor shall obtain necessary drilling permits to perform the investigations. At the written request of Contractor, District will obtain any required environmental permits, cultural permits/clearances, encroachment or access permits prior to the initiation of the field investigation program. Exploratory holes will be drilled in accordance with USACE geotechnical investigation

guidelines. In accordance with USACE geotechnical investigation guidelines, no fluid will be discharged into the levee during drilling. Only hollow-stem auger drilling shall be used while drilling through the levee embankment, which shall transition to rotary-wash for investigating the levee foundation if borehole stabilization becomes an issue. Prior to transitioning to rotary-wash drilling, a conductor casing shall be installed through the levee to prevent fluid discharge. All soil classification, sampling, and logging shall be performed in accordance with ASTM 2488 under responsible charge of a Professional Engineer (PE) or Professional Geologist (PG) licensed in the State of California. For budgeting purposes, the Contractor has preliminarily assumed three days of CPTs (up to 9 holes) using either a 30-ton rig or a track-mounted rig and two days of test borings (2 to 6 holes depending on locations and depths) using either a track-mounted, hollow-stem auger rig or portable equipment. The actual scope and equipment type will be determined following field reconnaissance and data review and details will be included in the Draft Subsurface Exploration Plan. An A3GEO Professional Geologist (PG) will observe and direct field operations, prepare logs of the subsurface conditions encountered, obtain samples from the test and transport samples to our Berkeley laboratory for subsequent review. All soil classification, sampling and logging will be performed in accordance with ASTM 2488. Following boring advancement, boreholes will be grouted in accordance with permit and USACE requirements. Drill cuttings will be containerized in 55-gallon drums and temporarily stored at a location agreed upon by the District, pending profiling and offsite disposal by the Contractor. All soil cuttings will be classified as non-hazardous materials for disposal at a local landfill. If the results of the testing indicate that the cuttings are hazardous, the Contractor shall prepare a change order scope for hazardous soil disposal options.

Following completion of the drilling program, an A3GEO engineer will review the samples in our laboratory and select samples suitable for geotechnical laboratory testing. For preliminary purposes, we have assumed that the geotechnical laboratory testing program will at a minimum include evaluations of moisture content, density, grain size, consolidation and strength. The quantities and types of tests will depend on the number of boreholes and material types encountered during our subsurface exploration and will be submitted for review by the District prior to testing. The Geotechnical laboratory tests will be performed at both A3GEO's Berkeley laboratory and at Cooper Testing Laboratory of Palo Alto, California. Upon completion of the laboratory testing, we will augment the boring logs with the appropriate data, check soil classifications, and prepare final boring logs.

Data collected during the subsurface exploration and laboratory testing program will be summarized in a Geotechnical Data Report (GDR). The GDR will include historic and recent exploration logs from borings and CPTs, laboratory test results, figures showing the locations of historic and recent explorations, and other relevant collected information. A draft GDR will be submitted to the District for review, and a final GDR, signed by a Professional Geotechnical Engineer (GE) licensed in the state of California, will be submitted once the District's comments on the draft GDR have been addressed.

Deliverables:

- a) Existing Conditions Technical Memorandum
- b) GIS Database;
- c) Draft Subsurface Exploration Plan (with summary of relevant findings from Task 3.1);
- d) Final Subsurface Exploration Plan;
- e) Copies of all required drilling permits and USA tickets,
- f) Draft Geotechnical Data Report (GDR);

TASK 4 – GEOTECHNICAL ANALYSIS

4.1 Site Characterization

This task will begin with A3GEO adding new geotechnical laboratory data collected under Task 3 to the GIS database of subsurface data. A3GEO will then partition the levee system into analytical reaches that can be represented with a single representative cross section for use in analysis. In keeping with the assumptions of the grant scope of work, it is assumed that three representative cross sections will be developed but the location, type, or quantity of analytical cross-sections shall be subject to revision based on completion of Tasks 2 and 3, and preapproval by the District. Following cross section selection and development, A3GEO and Geosyntec will use available subsurface data to select soil properties for use in the geotechnical analyses.

4.2 Levee Evaluation

Contractor shall perform engineering analyses for the evaluation of:

- The current condition of the existing levees, which shall include seepage evaluation, slope stability analysis under various loading conditions, and preliminary assessment of liquefaction potential and resulting deformation, and other geotechnical engineering analyses considered necessary
- The feasibility of raising the height or modifying the existing levees by constructing floodwalls, adding compacted fill, or constructing an earth retaining system on top of the existing levees (to be evaluated as part of Task 5).

4.2.1 Embankment Protection Analysis

Consistent with 44 CFR 65.10 (b) (3), A3GEO will perform an embankment protection analysis to evaluate performance of the levee against potential erosion caused by the Base Flood as a result of either currents or waves. Inputs for this analysis will be taken from Stetson's model, developed and calibrated under Task 2.

4.2.2 Embankment and Foundation Stability Analyses

Consistent with 44 CFR 65.10 (b) (4), A3GEO and Geosyntec will perform an engineering analysis of levee embankment stability by evaluating expected seepage during loading conditions associated with the base flood. Analyses will be performed at each of the cross sections developed at the beginning of this task. Seepage analyses will be performed in general accordance with the procedures outlined in USACE documents EM 1110-2-1913: Design and Construction of Levees, EM-1110-2-1904: Seepage, and ETL-1110- 2-569: Design Guidance for Levee Underseepage.

Analyses will be performed using the software program SEEP/W, part of the GeoStudio suite, or an alternative pre-approved by the District.

Additionally, A3GEO will perform slope stability analyses focusing on steady-state, rapid-drawdown loading cases, in general accordance with the procedures outlined in EM-1100-2-1902: *Slope Stability*. Analyses will be performed using the software program SLOPE/W, part of

the GeoStudio suite or an alternative pre-approved by the District. In addition, preliminary analysis will be performed to assess potential liquefaction and lateral spreading at the site.

4.2.3 Settlement Analyses

Consistent with 44 CFR 65.10 (b) (5), A3GEO will perform an analysis to assess the potential and magnitude of future losses of freeboard as a result of settlement. Analyses will be performed at each of the cross sections developed at the beginning of this task. The actual method of analysis will be determined after award, however it is preliminarily anticipated that this analysis would be accomplished using the computer software program Settle3D, by Rocscience.

Following completion of the geotechnical analyses, A3GEO will prepare a Geotechnical Evaluation Report (GER) which will include interpretations of subsurface data previously included in the GDR, a summary of soil properties—used for analysis, results of embankment protection, seepage, slope stability and settlement analyses, summary—tables, and a discussion of analysis results. A draft GER will be submitted to the District for review, and a final GER,—signed by a GE licensed in the state of California, will be submitted once the District's comments on the draft—GER have been addressed. The Contractor will also prepare a map of the project site showing contours of base of Young Bay Mud or highly-compressible layers based on previous data and data from Task 3.

Deliverables:

- a) Updated GIS database of subsurface data including new geotechnical laboratory test data;
- b) Geotechnical Analysis Work Plan;
- c) Draft Geotechnical Evaluation Report (GER) including a Bay Mud Contour Map
- d) Final Geotechnical Evaluation Report (GER).

TASK 5 – ALTERNATIVES ASSESSMENT

Following completion of H&H and geotechnical analyses, a remedial alternatives analysis will be performed by the team (A3GEO, Stetson and Geosyntec). The alternatives analysis will identify conceptual level remedial measures that can bring levees of the Corte Madera Creek levee system into compliance with various levels of requirements, specifically:

- 1) Enabling levees to meet current USACE inspection requirements by addressing issues with the levee system identified during recent USACE inspections, such that the levee system can continue to receive acceptable ratings during future USACE inspections;
- 2) Enabling levees to meet both current USACE inspection requirements and FEMA accreditation requirements; and
- 3) Enabling levees to meet current USACE inspection requirements, FEMA accreditation requirements, and to consider the impacts of sea level rise in the years 2050 and 2100.

The alternatives analysis will also identify potential remedial measures that could increase flood protection, but may not necessarily meet all of the regulations outlined above but would still provide significant flood risk reduction benefits and be competitive to receive future funding sources.

Alternatives may include, but not limited to:
Raising levees with earthen fill,
Raising levees with floodwalls and/or other engineered structures,
Modification of the current channel alignment,
Modification to sediment management practices,
Tidal gates/ barriers, and
Land repurposing, including real estate acquisition

As part of this task, A3GEO and the project team will prepare conceptual-level figures showing the geometry of proposed remedial alternatives. These figures will be used to prepare conceptual-level cost evaluations. As part of this task, Stetson will evaluate possible pump station sizes and develop conceptual pump station costs.

In order to evaluate the size and extent of conceptual remedial alternatives, the geotechnical models shall be updated by the Contractor to include relevant components of the proposed remediation and reanalyzed using the load conditions agreed in conjunction with the District. Relevant components shall be added to the models based on generalized configurations appropriate for conceptual remedial alternative selection, such as general or representative dimensions (i.e. length, width, and height) and typical material types (i.e. embankment fill, drainage material, concrete, etc.). Additional preliminary geotechnical analyses will be performed relevant to remedial alternatives that include bearing capacity and settlement of floodwall foundations, earth pressures and lateral load resistance capacity for floodwalls and retaining walls, and evaluation of fill materials and the placement and compaction of fill. Detailed designs shall not be required for this project. Contractor shall prepare conceptual designs for this project, which allow for comparison of alternatives and selection of preferred alternatives. The Contractor shall also develop quantities for the preferred remedial alternatives, and preparation of initial Class 4 cost estimates as defined by the Association of the Advancement of Cost Engineering (AACE) as suitable for feasibility studies and evaluations. Class 4 cost estimates are commonly associated with a project development level from 1% to 15%.

Remedial alternatives shall be established for each levee reach where one or more deficiencies were assessed in Task 4. All remedial alternatives shall be assessed for viability with respect to land use, environmental, and construction constraints. Factors such as cost, schedule, property impacts, environmental impacts, impacts on existing infrastructure, geotechnical considerations, hydraulic considerations, permitting issues, temporary construction impacts, and operational and maintenance considerations shall be evaluated when selecting potential alternatives. All remedial alternatives shall also be assessed as to whether a USACE Minor or Major 408 permit would likely be required for implementation. The suite of remedial alternatives shall be compared in an evaluation matrix. In addition, the hydraulic modeling shall be performed to evaluate the impact of proposed remediation alternatives on flow characteristics of the channel. The assessment of alternatives shall be performed in a sequence of load conditions agreed upon by the Contractor and the District.

Findings from the remedial alternatives assessment for each levee reach or area will be evaluated and summarized in a Remedial Alternatives Report (RAR). A draft RAR will be submitted to the District for review, and a final RAR, signed by a GE licensed in the state of California, will be submitted once the District's comments have been addressed.

Deliverables:

- a) Draft Remedial Alternatives and Cost Estimating Report (RAR);
- b) Final Remedial Alternatives and Cost Estimating Report (RAR).

PROJECT MANAGEMENT

The Contractor shall provide project management for the duration of the project in order to ensure completion of deliverables as defined in this scope of work, general adherence to the budget and schedule included with the contract agreement, and project presentations at two (2) public meetings.

Deliverables:

- Monthly Progress Reports
- Bi-weekly Project Status updates
- Project presentations at two (2) public meetings

QUALITY CONTROL

The Consultant shall demonstrate their Quality Control measures or procedures for the scope of services described herein to ensure deliverables are compliant and meet applicable standards. Submission or description of a Quality Control Plan or Program that outlines the general guidelines associated with ensuring a quality work product or design is encouraged. This plan or program should document the interdisciplinary parties responsible for the work product(s), technical submittals, or design and the quality of the work product(s), technical submittals, or design. Quality controls from each discipline, including any sub-consultants, shall be incorporated into every phase of the design to ensure quality and contract compliance. Formal tracking and final resolution of review comments and subsequent actions is highly desirable.

At a minimum, the Consultant shall complete the District's A-E CONTRACTOR STATEMENT OF TECHNICAL REVIEW (Form QC-1, following) in conjunction with a major deliverables for both draft and final versions.

A-E CONTRACTOR STATEMENT OF TECHNICAL REVIEW

The District's A-E Contracto	Γ	(insert company name)
has completed the		(insert deliverable/type of
product) of		(project name and location). Notice is
hereby given that a technical	review, that is appropriate	te to the level of risk and complexity
inherent in the project, has be	en conducted as defined	in the District's Quality Management
Guidelines. During the techn	ical review, compliance v	with the A-E Contractor's scope of
services, established policy p	rinciples and procedures.	utilizing justified and valid assumptions,
was verified. This included re	eview of: assumptions; m	ethods, procedures, and material used in
analyses; alternatives evaluat	ed; the appropriateness o	f data used and level obtained; and
		oduct meets the District's needs consistent
with law and existing County	of Marin and District po	licy.
The technical review was acc	complished by	(insert name of
technical reviewer). All com-	ments resulting from revi	ew have been resolved.
(Signature)	(Date)	
Technical Reviewer		
(Signature)	(Date)	
Project Manager	, ,	

Marin County Flood Control & Water Conservation District Form QC-1

EXHIBIT "B" FEES AND PAYMENT SCHEDULE

Contractor shall be paid up to the maximum sum indicated in Section 4 of this contract.

Progress payments are shown below and shall be paid on a time and materials basis, subject to the discretion of Marin County Flood Control & Water Conservation District's project manager to withhold payment of money with respect to any given task to the extent that, in his or her judgment, the time and materials bill submitted is disproportionate to the percentage of work that has been completed on the task for which the bill is submitted. The amount invoiced for each task may differ from the subtotals shown below, with prior approval by the District, but the total invoiced amount shall not exceed the project total shown below

Payment shall be made to the Contractor within 30 days of receipt and approval of monthly invoices and, with respect to money withheld pursuant to the project manager's discretion, upon completion of the task for which it was billed, but subject to the limitations set forth below.

No task shall be paid more than 80%, at the discretion of the District's contract manager, without a draft or final deliverable approved by the District.

TASK	DESCRIPTION	TASK SUBTOTALS
1	Survey and Topographic Data	\$24,859
2	Hydrologic and Hydraulic Analyses	\$71,340
3	Geotechnical Investigation	\$96,243
4	Geotechnical Analysis	\$55,230
5	Alternatives Assessment	\$65,620
	PROJECT TOTAL	\$313,292

EXHIBIT "C"

INSURANCE REDUCTION/WAIVER (if applicable)

	Check Where Applicable	Requested Limit Amount	CAO Use Only
General Liability Insurance		\$	
Automobile Liability Insurance		\$	
Workers' Compensation Insurance			
Professional Liability Deductible		\$	
Contract Manager Signature:			
Date:			
Date:			
Date:			

CONTRACTOR:

A3GEO, inc.

EXHIBIT D

DEBARMENT CERTIFICATION FOR CONTRACTORS

Search Term: a3geo* Record Status: Active

ENTITY A3GEO, INC.

Status:Active

DUNS: 054772409

+4.

CAGE Code: 69WD9 DoDAAC:

Expiration Date: Mar 10, 2018 Has Active Exclusion?: No

Debt Subject to Offset?: No

Address: 1331 7TH ST STE E

City: BERKELEY ZIP Code: 94710-1454 State/Province: CALIFORNIA Country: UNITED STATES

EXHIBIT E

DEBARMENT CERTIFICATION FOR SUBCONTRACTORS (Attach SAM Printout)

Search Term : cle* engineering* Record Status: Active

ENTITY CLE ENGINEERING, INC.

Status:Active

DUNS: 602665036

+4:

CAGE Code: 1BNA0

DoDAAC:

Expiration Date: Feb 9, 2018

Has Active Exclusion?: No

Debt Subject to Offset?: No

Address: 15 CRK RD STE 101

City: MARION

State/Province: MASSACHUSETTS

ZIP Code: 02738-1300

Country: UNITED STATES

Search Term: stetson* engineers* Record Status: Active

STETSON ENGINEERS, INC ENTITY

Status:Active

DUNS: 147460141

+4:

CAGE Code: 1S2S2

DoDAAC:

Expiration Date: Apr 13, 2018 Has Active Exclusion?: No

Debt Subject to Offset?: No

Address: 2171 FRANCISCO BLVD E K

City: SAN RAFAEL

State/Province: CALIFORNIA Country: UNITED STATES

ZIP Code: 94901-5536

Search Term: geosyntec* consultants* **Record Status: Active**

GEOSYNTEC CONSULTANTS, INC. ENTITY

Status: Active

DUNS: 079162336

+4:

CAGE Code: 70MF0

DoDAAC:

Expiration Date: Jan 23, 2018 Has Active Exclusion?: No

Debt Subject to Offset?: No

Address: 5670 Greenwood Plz Blvd Ste 540

City: Greenwood Village ZIP Code: 80111-2471

State/Province: COLORADO Country: UNITED STATES

Geosyntec Consultants, Inc.

Status: Active

DUNS: 624180787

+4:

CAGE Code: 7ALM5

DoDAAC:

Expiration Date: Jan 23, 2018 Has Active Exclusion?: No

Debt Subject to Offset?: No

Address: 1108 3rd Ave Ste 600

City: Huntington

ZIP Code: 25701-1568

State/Province: WEST VIRGINIA

Country: UNITED STATES

ENTITY

ENTITY

GEOSYNTEC CONSULTANTS INC

Status: Active

DUNS: 555441591

+4:

CAGE Code: 1PD03

DoDAAC:

Expiration Date: Jan 23, 2018 Has Active Exclusion?: No

Debt Subject to Offset?: No

Address: 1255 ROBERTS BLVD NW

City: KENNESAW ZIP Code: 30144-7077 State/Province: GEORGIA Country: UNITED STATES

ENTITY

GEOSYNTEC CONSULTANTS, INC.

Status: Active

DUNS: 831315911

+4:

CAGE Code: 5PVP4

Expiration Date: Jan 23, 2018 Has Active Exclusion?: No

Debt Subject to Offset?: No

DoDAAC:

Address: 605 RUSSELL PKWY STE A

City: WARNER ROBINS ZIP Code: 31088-7639

State/Province: GEORGIA

Country: UNITED STATES

ENTITY GEOSYNTEC CONSULTANTS, INC. Status: Active

DUNS: 132517066 +4: CAGE Code: 61B67 DoDAAC:

Expiration Date: Jan 11, 2018 Has Active Exclusion?: No Debt Subject to Offset?: No

Address: 621 SW MORRISON ST STE 600

City: PORTLAND State/Province: OREGON ZIP Code: 97205-3827 Country: UNITED STATES

ENTITY GEOSYNTEC CONSULTANTS, INC.

Status:Active

DUNS: 122492390 +4: CAGE Code: 0YYW2 DoDAAC:

Expiration Date: Jan 11, 2018 Has Active Exclusion?: No Debt Subject to Offset?: No

Address: 900 BROKEN SOUND PKWY NW FL

2

City: BOCA RATON State/Province: FLORIDA ZIP Code: 33487-3513 Country: UNITED STATES

ENTITY GEOSYNTEC CONSULTANTS, INC.

Status:Active

DUNS: 032054798 +4: CAGE Code: 49SG9 DoDAAC:

Expiration Date: Jan 23, 2018 Has Active Exclusion?: No Debt Subject to Offset?: No

Address: 289 GREAT RD STE 202

City: ACTON State/Province: MASSACHUSETTS

ZIP Code: 01720-4769 Country: UNITED STATES

ENTITY GEOSYNTEC CONSULTANTS, INC.

Status: Active

DUNS: 078409512 +4: CAGE Code: 6PT03 DoDAAC:

Expiration Date: Jan 23, 2018 Has Active Exclusion?: No Debt Subject to Offset?: No

Address: 1 MCBRIDE AND SON CENTER DR

STE 202

City: CHESTERFIELD State/Province: MISSOURI ZIP Code: 63005-1407 Country: UNITED STATES

Client#: 18426

ACORD.

CERTIFICATE OF LIABILITY INSURANCE

12/05/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

	CONTACT Alison Muller	
Dealey, Renton & Associates		510 452-2193
	E-MAIL ADDRESS: amuller@dealeyrenton.com	
	INSURER(S) AFFORDING COVERAGE	NAIC#
510 465-3090	INSURER A: Transportation Insurance Compan	20494
The state of the s	INSURER B : Continental Insurance Company	35289
	INSURER C: Valley Forge Insurance Company	20508
PRODUCER Dealey, Renton & Associates P. O. Box 12675 Oakland, CA 94604-2675 510 465-3090 INSURED A3GEO, Inc. 1331 Seventh Street, Unit E Berkeley, CA 94710	INSURER D :	
	INSURER E :	
	INSURER F:	

CC	VER	AGES CER	TIFIC	ATE	NUMBER:			REVISION NUMBER:	
Т	HIS I	S TO CERTIFY THAT THE POLICIES	OF	INSUF	RANCE LISTED BELOW HAVE BEE	NISSUED TO	THE INSURED	NAMED ABOVE FOR THE	POLICY PERIOD
11	NDIC/	TED. NOTWITHSTANDING ANY RE	QUIR	EMEN	T, TERM OR CONDITION OF ANY	CONTRACT O	R OTHER DO	CUMENT WITH RESPECT	TO WHICH THIS
C	ERTI	FICATE MAY BE ISSUED OR MAY F	PERTA	AIN, T	HE INSURANCE AFFORDED BY T	THE POLICIES	DESCRIBED I	HEREIN IS SUBJECT TO	ALL THE TERMS
E	XCLL	ISIONS AND CONDITIONS OF SUCH	POL	ICIES.	LIMITS SHOWN MAY HAVE BEE	N REDUCED	BY PAID CLAI	MS.	
NSF TR	2	TYPE OF INSURANCE		SUBR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	rs
A	X	COMMERCIAL GENERAL LIABILITY	Y	Y	6019994619	10/08/2017	10/08/2018	EACH OCCURRENCE	\$1,000,000
		CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$300,000
								MED EXP (Any one person)	\$10,000
								PERSONAL & ADV INJURY	\$1,000,000
	GEI	I'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$2,000,000

	GENT AGGREGATE LIMIT APPLIES PER						GENERAL AGGREGATE	\$2,000,000							
	POLICY X PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$2,000,000							
	OTHER:							\$							
В	AUTOMOBILE LIABILITY	Y	Y	6020082530	09/24/2017	09/24/2018	COMBINED SINGLE LIMIT (Ea accident)	s1,000,000							
	X ANY AUTO						BODILY INJURY (Per person)	\$							
	ALL OWNED SCHEDULED AUTOS						BODILY INJURY (Per accident)	\$							
	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	\$							
								\$							
A	X UMBRELLA LIAB X OCCUR			6020082415	10/08/2017	10/08/2018	EACH OCCURRENCE	\$ \$1,000,000							
	EXCESS LIAB CLAIMS-MADE					AGGREGATE	\$1,000,000								
	DED X RETENTION \$10,000							\$							
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		Y	6043156455	10/27/2017	10/27/2018	X PER STATUTE ER								
	ANY PROPRIETOR/PARTNER/EXECUTIVE	N/A	1		1									E.L. EACH ACCIDENT \$	\$ \$1,000,000 \$ \$ \$1,000,000 \$1,000,000 \$ \$1,000,000 \$ \$1,000,000 \$ \$1,000,000
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A					E.L. DISEASE - EA EMPLOYE	\$1,000,000							
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT								

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Project: Corte Madera Creek Levee Evaluation

Marin County Flood Control and Water Conservation District are named as Additional Insured as respects General and Auto Liability as required per written contract or agreement.

CERTIFICATE HOLDER	CANCELLATION

County of Marin Attn: Hugh Davis 3501 Civic Center Drive, Room 304 San Rafael, CA 94903 SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2014 ACORD CORPORATION. All rights reserved.



IMPORTANT: THIS ENDORSEMENT CONTAINS DUTIES THAT APPLY TO THE ADDITIONAL INSURED IN THE EVENT OF OCCURRENCE, OFFENSE, CLAIM OR SUIT. SEE PARAGRAPH C., OF THIS ENDORSEMENT FOR THESE DUTIES.

BLANKET ADDITIONAL INSURED ENDORSEMENT WITH PRODUCTS-COMPLETED OPERATIONS COVERAGE **BLANKET WAIVER OF SUBROGATION**

Architects, Engineers and Surveyors

This endorsement modifies insurance provided under the following:

BUSINESSOWNERS LIABILITY COVERAGE FORM BUSINESSOWNERS COMMON POLICY CONDITIONS

- A. Who Is An Insured is amended to include as an insured any person or organization whom you are required to add as an additional insured on this policy under a written contract or written agreement; but the written contract or written agreement must be:
 - 1. Currently in effect or becoming effective during the term of this policy; and
 - 2. Executed prior to the:
 - a. "Bodily injury" or "property damage"; or
 - Offense that caused the "personal and advertising injury";

for which the additional insured seeks coverage

- B. The insurance provided to the additional insured is limited as follows:
 - 1. The person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused in whole or in part by:
 - a. Your acts or omissions; or
 - **b.** The acts or omissions of those acting on your behalf,

in the performance of your ongoing operations specified in the written contract or written agreement; or

- c. "Your work" that is specified in the written contract or written agreement, but only for "bodily injury" or "property damage" included in the "products-completed operations hazard", and only if:
 - (1) The written contract or written agreement requires you to provide the additional insured such coverage; and
 - (2) This Coverage Part provides such coverage.
- 2. The Limits of Insurance applicable to the additional insured are those specified in the written contract or written agreement or in the Declarations of this policy, whichever is less. These Limits of Insurance are inclusive of, and not in addition to, the Limits of Insurance shown in the Declarations.
- 3. The insurance provided to the additional insured does not apply to "bodily injury", "property damage" or "personal and advertising injury" ansing out of an architect's, engineer's, or surveyor's rendering of or failure to render any professional services including:
 - The preparing, approving, or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications by any architect, engineer or surveyor performing services on a project of which you serve as construction manager; or
 - b. Inspection, supervision, quality control, engineering or architectural services done by you on a project of which you serve as construction manager.



20020009460212038944980



- 4. The insurance provided to the additional insured does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of construction or demolition work while you are acting as a construction or demolition contractor.
- C. Under Businessowners Liability Conditions, the condition entitled Duties In The Event of Occurrence, Offense, Claim or Suit is amended to add the following:

An additional insured under this endorsement will as soon as practicable:

- 1. Give written notice of an occurrence or an offense to us which may result in a claim or "suit" under this insurance;
- 2. Tender the defense and indemnity of any claim or "suit" to us for a loss we cover under this Coverage Part;
- 3. Except as provided for in paragraph D.2. below:
 - a. Tender the defense and indemnity of any claim or "suit" to any other insurer which also has insurance for a loss we cover under this Coverage Part; and
 - b. Agree to make available any other insurance which the additional insured has for a loss we cover under this Coverage Part.

We have no duty to defend or indemnify an additional insured under this endorsement until we receive written notice of a claim or "suit" from the additional insured.

- D. With respect only to the insurance provided by this endorsement, the condition entitled Other Insurance of the BUSINESSOWNERS COMMON POLICY CONDITIONS is amended to delete paragraphs 2. and 3. and replace them with the following:
 - 2. This insurance is excess over any other insurance available to the additional insured, whether primary, excess, contingent or on any other basis, But if required by the written contract or written agreement, this insurance will be primary and noncontributory relative to insurance on which the additional insured is a Named Insured.
 - 3. When this insurance is excess, we will have no duty under **Business Liability** insurance to defend the additional insured against any "suit" if any other insurer has a duty to defend the additional insured against that "suit" If no other insurer defends, we will undertake to do so, but we will be entitled to the additional insured's rights against all those other insurers.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

- (a) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and
- (b) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

- E. The condition entitled Transfer of Rights of Recovery Against Others to Us of the BUSINESSOWNERS COMMON POLICY CONDITIONS is amended to deleted paragraph 2. and replace it with the following:
 - 2. We waive any right of recovery we may have against any person or organization with whom you have agreed to waive such right of recovery in a written contract or agreement because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included within the "products-completed operations hazard."

All other terms and conditions of the Policy remain unchanged.

Insured:

A3GEO, Inc.

Policy Number:

6043156455

Effective Date:

10/27/2017

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT - CALIFORNIA

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be otherwise due on such remuneration.

% of the California workers' compensation premium

SCHEDULE

Person or Organization

Job Description

County of Marin Attn: Hugh Davis

3501 Civic Center Drive, Room 304

San Rafael, CA 94903

Countersigned by Milel C

Authorized Representative

Form WC 04 03 06 Process Date: (1) Printed in U.S.A.

Policy Expiration Date:

SKAPOLIS

ACORD

CERTIFICATE OF LIABILITY INSURANCE

12/06/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		CONTACT NAME:				
Rogers & Gray Insurance Agency, Inc. 34 Rte 134 South Dennis, MA 02660	PHONE (A/C, No, Ext): FAX (A/C, No): (877)					
	E-MAIL ADDRESS: mail@rogersgray.com					
		INSURER(S) AFFORDING COVERAGE				
	INSURER A : American Casualty Company of Reading, Pennsylvania					
INSURED		INSURER B : Safety Insurance Company 39454				
CLE Engine	CLE Engineering Inc 10 Commercial Boulevard, Suite 100	INSURER C: Transportation Insurance Company 204				
CLE Engineering Inc 10 Commercial Boulevard, Suite 100	INSURER D : National Fire Insurance Company of Hartford	20478				
Novato, CA	94949	INSURER E: Lexington Insurance Company	19437			
		INSURER F: Lloyd's of London Group				

		Novato, CA 94949			INSURER E : Lexington Insurance Company				19437
					INSURER F : Lloyd's	of London	Group		
CO	VER	RAGES CER	TIFICATI	E NUMBER:			REVISION NUMBER:		
IN	HIS IDIC/ ERTI	IS TO CERTIFY THAT THE POLICIE ATED. NOTWITHSTANDING ANY R IFICATE MAY BE ISSUED OR MAY JSIONS AND CONDITIONS OF SUCH	PERTAIN POLICIES	ENT, TERM OR CONDITION, THE INSURANCE AFFOR LIMITS SHOWN MAY HAVE	N OF ANY CONTRA	CT OR OTHER	R DOCUMENT WITH RESPE BED HEREIN IS SUBJECT T	ECT TO	WHICH THIS
INSR		TYPE OF INSURANCE	ADDL SUBF	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	S	
A	X	COMMERCIAL GENERAL LIABILITY					EACH OCCURRENCE	s	2,000,000
		CLAIMS-MADE X OCCUR		B2097347030	03/15/2017	03/15/2018	DAMAGE TO RENTED PREMISES (Ea occurrence)	s	300,000
							MED EXP (Any one person)	s	10,000
							PERSONAL & ADV INJURY	s	2,000,000
	GEI	N'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	s	4,000,000
		POLICY PRO-					PRODUCTS - COMP/OP AGG	s	4,000,00
		OTHER:					EBL AGGREGATE	s	4,000,000
В	AU	TOMOBILE LIABILITY					COMBINED SINGLE LIMIT (Ea accident)	s	1,000,000
		ANY AUTO		COM2436154	03/02/2017	03/02/2017 03/02/2018	BODILY INJURY (Per person)	s	
		OWNED X SCHEDULED AUTOS					BODILY (NJURY (Per accident)	s	
	X	HIRED ONLY X NON-OWNED AUTOS ONLY					PROPERTY DAMAGE (Per accident)	s	
		AUTOS GIVET						s	
C	X	UMBRELLA LIAB X OCCUR					EACH OCCURRENCE	s	10,000,000
		EXCESS LIAB CLAIMS-MADE		B2097347075	03/15/2017	03/15/2018	AGGREGATE	s	10,000,000
		DED X RETENTION\$ 0						5	
D	WO	RKERS COMPENSATION EMPLOYERS' LIABILITY					X PER STATUTE OTH-		
				WC294646473	NC294646473 09/01/2017	1/2017 09/01/2018	E.L. EACH ACCIDENT	\$	1,000,000
	OFF (Mar	PROPRIETOR/PARTNER/EXECUTIVE ICER/MEMBER EXCLUDED?	N/A				E.L. DISEASE - EA EMPLOYEE	s	1,000,000
	If ye	s, describe under CRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	\$	1,000,000
E		fessional		031710982	05/14/2017	05/14/2018	\$50,000 Ded/Claim		5,000,000
F	Mai	ritime Employers		17L1255C2178	01/19/2017	01/19/2018	MEL		1,000,000
DES	CRIPT	rion of operations / Locations / vehicl Additional Insured, Waiver of Subro	LES (ACOR	D 101, Additional Remarks Sched	ule, may be attached if mo	re space is requi	red)	indica	ated when
requ	ired	by written contract between insure	ed and Ce	rtificate Holder(s) per End	orsement #SB300176	B-B20.	rovision are provided as	muica	ited when
	0	- Madeus I come Evaluation							
Ke:	Con	e Madera Levee Evaluation							
A3G	EO,	Inc. and Marin County Flood Contro	ol and Wa	ter Conservation District a	are listed as addition	al insured wh	nen required by written co	ntrac	Ł

A3GEO, Inc. 1331 Seventh STreet, Unit E Berkeley, CA 94710	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
berkeley, GA 34710	AUTHORIZED REPRESENTATIVE

CANCELLATION

CERTIFICATE HOLDER



This insurance is excess over any other insurance available to such a joint venture, whether primary, excess, contingent, or on any other basis.

B. The last paragraph of Section C. Who is An Insured is deleted and replaced by the following:

Except as provided in **5.** above, no person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

8. Blanket Additional Insured with Products-Completed Operations Coverage and Blanket Waiver of Subrogation

The following is added to Section C., - Who is an Insured:

- A. The Businessowners Liability Coverage form is amended to include as an insured, any person or organization whom you are required to add as an additional insured on this policy under a written contract or written agreement, but the written contract or written agreement must be:
 - 1. Currently in effect or becoming effective during the term of this policy; and
 - 2. Executed prior to the "bodily injury," "property damage," or "personal and advertising injury."
- B. The insurance provided to the additional insured is limited as follows:
 - That person or organization is an additional insured solely for liability due to your negligence specifically resulting from "your work" for the additional insured which is the subject of the written contract or written agreement. No coverage applies to liability resulting from the sole negligence of the additional insured.
 - The Limits of Insurance applicable to the additional insured are those specified in the written contract or written agreement or in the Declarations of this policy, whichever is less. These limits of Insurance are inclusive of, and not in addition to, the Limits of Insurance shown in the Declarations.
 - 3. The coverage provided to the additional insured within this endorsement and section titled Liability and Medical Expenses Definitions /"Insured Contract" (Section F., item 9.), within the Businessowners Liability Coverage Form, does not apply to "bodily injury" or "property damage" arising out of the "products-completed operations hazard" unless required by the written contract or written agreement.
 - 4. The insurance provided to the additional insured does not apply to "bodily injury," "property damage," "personal and advertising injury" arising out of an architect's, engineer's, or surveyor's rendering of or failure to render any professional services, including:
 - a. The preparing, approving, or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications by any architect, engineer or surveyor performing services on a project of which you serve as a construction manager; or
 - **b.** Inspection, supervision, quality control, engineering or architectural services done by you on a project of which you serve as construction manager.
 - 5. This insurance does not apply to "bodily injury," "property damage," or "personal and advertising injury" arising out of:
 - a. The construction or demolition work while you are acting as a construction or demolition contractor. This exclusion does not apply to work done for or by you at your premises.
- C. Businessowners General Liability Conditions Dutles in the Event of Occurrence, Offense, Claim or Suit (Section E.2.) of the Businessowners Liability Coverage Form is amended to add the following:

An additional insured under this endorsement will as soon as practicable:

- Give written notice of an occurrence or an offense to us which may result in a claim or "suit" under this
 insurance;
- Tender the defense and indemnity of any claim or "suit" to us for a loss we cover under this Coverage Part:
- 3. Tender the defense and indemnity of any claim or "suit" to any other insurer which also has insurance for a loss we cover under this Coverage Part; and



Agree to make available any other insurance which the additional insured has for a loss we cover under this coverage part.

We have no duty to defend or indemnify an additional insured under this endorsement until we receive written notice of a claim or "suit" from the additional insured.

- D. Other Insurance (Section H.2. and H.3.) of the Businessowners Common Policy Conditions are deleted and replaced with the following:
 - 2. This insurance is excess over any other insurance naming the additional insured as an insured whether primary, excess, contingent or on any other basis unless a written contract or written agreement specifically requires that this insurance be either primary or primary and noncontributing to the additional insured's own coverage. This insurance is excess over any other insurance to which the additional insured has been added as an additional insured by endorsement.
 - 3. When this insurance is excess, we will have no duty under Coverages A or B to defend the additional insured against any "suit" if any other insurer has a duty to defend the additional insured against that "suit" if no other insurer defends, we will undertake to do so, but we will be entitled to the additional insured's rights against all those other insurers.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

- (a) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and
- (b) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

- E. Transfer of Rights of Recovery Against Others To Us (Section K.2.) of the Businessowners Common Policy Conditions is deleted and replaced with the following:
 - 2. We walve any right of recovery we may have against any person or organization against whom you have agreed to waive such right of recovery in a written contract or agreement because of payments we make for Injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included within the "products-completed operations hazard."
- 9. Amendment-Aggregate Limits of Insurance (Per Project)
 - A. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Coverage A.1., and for all medical expenses caused by accidents under Coverage A.2., which can be attributed only to ongoing operations at a single construction project:
 - A separate Construction Project General Aggregate limit applies to each construction project. The Construction Project General Aggregate limit is equal to the amount of the General Aggregate limit shown in the Declarations.
 - 2. The Construction Project General Aggregate limit is the most we will pay for the sum of all damages payable under Coverage A.1., except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard," and for medical expenses payable under Coverage A.2. regardless of the number of:
 - a. Insureds:
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits."
 - 3. Any payments made under Coverage A.1. for damages or under Coverage A.2. for medical expenses shall reduce the Construction Project General Aggregate limit for the applicable construction project. Such payments shall not reduce the General Aggregate limit shown in the Declarations nor shall they reduce any Construction Project General Aggregate limit applicable to other construction projects.

ACORD.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/11/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT Carly Underwood	CONTACT Carly Underwood				
Greyling Ins. Brokerage/EPIC		6.550.4082				
3780 Mansell Road, Suite 370	E-MAIL ADDRESS: carly.underwood@greyling.com					
Alpharetta, GA 30022	INSURER(S) AFFORDING COVERAGE	NAIC#				
	INSURER A : National Union Fire Ins. Co.	19445				
Geosyntec Consultants, Inc. 900 Broken Sound Parkway NW, Suite 200 Boca Raton, FL 33487	INSURER B : New Hampshire Ins. Co.	23841				
	INSURER C : Allianz Underwriters Insurance	36420				
	INSURER D:					
	INSURER E :					
	INSURER F:					

CO	AEI/AGE3	HILIONIE	HOMPLIX. 17-10			CETIOION NOMBEIL.	
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.							
INSR LTR	TYPE OF INSURANCE	ADDL SUBR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	S
A	X COMMERCIAL GENERAL LIABILITY		5268179	04/01/2017	04/01/2018	EACH OCCURRENCE	\$1,000,000
	CLAIMS-MADE X OCCUR					DAMAGE TO RENTED PREMISES (Ea occurrence)	\$500,000
						MED EXP (Any one person)	\$25,000
-						PERSONAL & ADV INJURY	\$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	\$2,000,000
	POLICY X PRO- X LOC					PRODUCTS - COMP/OP AGG	\$2,000,000
	OTHER:						\$
A	AUTOMOBILE LIABILITY		4489673 (AOS)	04/01/2017	04/01/2018	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
A	A X ANY AUTO ALL OWNED SCHEDULED AUTOS NON-OWNED HIRED AUTOS AUTOS		4489674 (MA)	04/01/2017	04/01/2018	BODILY INJURY (Per person)	\$
						BODILY INJURY (Per accident)	\$
						PROPERTY DAMAGE (Per accident)	\$
							\$
	UMBRELLA LIAB OCCUR					EACH OCCURRENCE	\$
	EXCESS LIAB CLAIMS-MADE					AGGREGATE	\$
	DED RETENTION\$						\$
В	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		015893709 (AOS)	04/01/2017	04/01/2018	X PER OTH-	
A	ANY PROPRIETOR/PARTNER/EXECUTIVE		015893710 (CA)			E.L. EACH ACCIDENT	\$1,000,000
B (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	(Mandatory in NH)	N/A	015893711 (ME)			E.L. DISEASE - EA EMPLOYEE	\$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	\$1,000,000
С	Professional Liab		EIL2008657	04/01/2017	04/01/2018	Per Claim \$2,000,00	0
/Contractors						Aggregate \$2,000,00	00
	Pollution Liab						
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)							

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

A3GEO, Inc. and Marin County Flood Control and Water Conservation District are named as Additional Insureds with respects to General Liability where required by written contract.

CERTIFICATE HOLDER	CANCELLATION		
A3GEO, Inc. 1331 Seventh Street Unit E	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.		
Berkeley, CA 94710	AUTHORIZED REPRESENTATIVE		
	Walnus		

© 1988-2014 ACORD CORPORATION. All rights reserved.

This page has been left blank intentionally.

THIS ENDORSEMENT CHANGES THE POLICY, PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
ANY PERSON OR ORGANIZATION WHOM YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO.	PER THE CONTRACT OR AGREEMENT.

• Insurance Services Office, Inc., 2012

- A. Section II Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:
 - 1. Your acts or omissions; or
 - 2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

- 1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
- 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than

- that which you are required by the contract or agreement to provide for such additional insured.
- B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- 1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
- 2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

- C. With respect to the insurance afforded to these additional insureds, the following is added to Section III - Limits Of Insurance:
 - If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of Insurance:
 - 1. Required by the contract or agreement; or
- 2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/30/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	408-241-0014	CONTACT Inspro Agents&Brokers Ins Serv			
InsPro-Jim Lohmann x105-(A&E) Insurance Services		PHONE (A/C, No, Ext): 408-241-0014	FAX (A/C, No): 408-241-0037		
4020 Moorpark Avenue, #104		E-MAIL ADDRESS:			
San Jose, CA 95117 Rhonda Buck		INSURER(S) AFFORDING COVERAGE			
Kilolida Buck		INSURER A : Nat'l Fire Ins Co of Hartford			
INSURED Stetson Engineers, Inc.		INSURER B : Valley Forge Ins Co.			
2171 E. Francisco Blvd, Ste. K San Rafael, CA 94901	INSURER C: Continental Casualty Co.				
Sail Raidel, CA 34301		INSURER D: Hartford Ins Co of Midwest			
		INSURER E : U.S. Specialty Insurance Co.			
		INSURER F:			

COVERAGES	CERTIFICATE NUMBER:	REVISION NOWBER.
		AVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PER
INDICATED. NOTWITHS	STANDING ANY REQUIREMENT, TERM OR CONDITION	OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH T

HIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

NSR TR	TYPE OF INSURANCE	ADDL S	SUBR POLICY NUMBER	POLICY EFF	POLICY EXP (MM/DD/YYYY)	LIMIT	S	
A	X COMMERCIAL GENERAL LIABILITY	11130	110	(Man Dort 1717)	(MINICOLITY III)	EACH OCCURRENCE	\$	1,000,000
	CLAIMS-MADE X OCCUR		B2099943204	07/01/2017	07/01/2018	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	300,000
						MED EXP (Any one person)	\$	10,000
						PERSONAL & ADV INJURY	\$	1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	\$	2,000,000
	POLICY PRO- LOC					PRODUCTS - COMP/OP AGG	\$	2,000,000
	OTHER:			1000 1000			\$	
В	AUTOMOBILE LIABILITY					COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
	X ANY AUTO		B2099943218	07/01/2017	07/01/2018	BODILY INJURY (Per person)	\$	
	OWNED SCHEDULED AUTOS					BODILY INJURY (Per accident)	\$	
	X HIRED ONLY X NON-OWNED					PROPERTY DAMAGE (Per accident)	\$	
							\$	
C	UMBRELLA LIAB X OCCUR					EACH OCCURRENCE	\$	3,000,000
	X EXCESS LIAB CLAIMS-MADE		B2099445066	07/01/2017	07/01/2018	AGGREGATE	\$	3,000,000
	DED X RETENTION\$ 0						\$	
D	WORKERS COMPENSATION AND EMPLOYERS LIABILITY					X PER OTH-		
	ANY PROPRIETOR/PARTNER/EXECUTIVE		57WECZX9384	07/01/2017	07/01/2018	E.L. EACH ACCIDENT	\$	1,000,000
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	NIA				E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	\$	1,000,000
E	Professional Liab.		USS1727802	07/01/2017	07/01/2018	ea. claim		2,000,000
	deductible \$75,000				7 1	aggregate		2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

A3GEO Inc and Marin County Flood Control and Water Conservation District are additional insured as required by written contract with respect to operations of the named insured per form SB300176C and CA20481013 attached. Waiver of subrogation per attached WC990303B.

CERTIFICATE HOLDER		CANCELLATION
A3GEO, Inc. 1331 Seventh St. Unit E	A3GEO-1	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
Berkeley, CA 94710		AUTHORIZED REPRESENTATIVE

POLICY NUMBER: B2099943218

COMMERCIAL AUTO

VALLEY FORGE INSURANCE COMPANY

CA 20 48 10 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM AUTO DEALERS COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the WHO IS AN INSURED Provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: Stetson Engineers Inc.

Policy Term: July 1, 2017 to July 1, 2018

SCHEDULE OF PERSON(S) or ORGANIZATION(S): Any Person or Organization as required by written contract.

(if no entry appears above, information required to complete this endorsement will be shown in the declarations as applicable to the endorsement.)

Each person or organization shown in the schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured Provision contained in Paragraph A.1. of Section II — Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph D.2. of Section I Covered Autos Coverages of the Auto Dealers Coverage Form.

CA 20 48 10 13

Copyright, Insurance Services Office, Inc. 2011

Page 1 of 1

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

8. BLANKET ADDITIONAL INSURED ENDORSEMENT WITH PRODUCTS COMPLETED OPERATIONS COVERAGE & BLANKET WAIVER OF SUBROGATION

The following is added to Section C. WHO IS AN INSURED:

- A. The Businessowners Liability Coverage Form is amended to include as an insured any person or organization whom you are required to add as additional insured on this policy under a written contract or written agreement; but the written contract or written agreement must be: 1) Currently in effect or becoming effective during the term of this policy; and 2) Executed prior to the "bodily injury", "property damage" or "personal and advertising injury".
- B. The insurance provided to the additional insured is limited as follows: 1. That person or organization is an additional insured solely for liability due to your negligence specifically resulting from "your work" for the additional insured which is the subject of the written contract or written agreement. No coverage applies to liability resulting from the sole negligence of the additional insured. 2. The Limits of Insurance applicable to the additional insured are those specified in the written contract or written agreement or in the Declarations of this policy, whichever is less. These Limits of Insurance are inclusive of, and not in addition to the limits of insurance shown in the declarations. 3. The coverage provided to the additional insured within this endorsement and section titled LIABILITY AND MEDICAL EXPENSE DEFINITIONS - Insured Contract (Section F 9) within the Businessowners Liability Coverage Form, does not apply to "bodily injury" or "property damage" arising out of the "products-completed operations hazard" unless required by written contract or written agreement. 4. The insurance provided to the additional insured does not apply to "bodily injury," "Property damage" "personal and advertising injury" arising out of an architects, engineers, or surveyors rendering of or failure to render any professional services including: a) The preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications by any architect, engineer or surveyor performing services on a project of which you serve as construction manager or; b) Inspection, supervision, quality control, engineering or architectural services done by you on a project of which you serve as construction manager. 5. This insurance does not apply to "bodily injury" "property damage" or "personal and advertising injury" arising out of: a) The construction or demolition work while you are acting as a construction or demolition contractor. This exclusion does not apply to work done for or by you at your premises.
- C. BUSINESSOWNERS GENERAL LIABILITY CONDITIONS Duties In The Event of Occurrence, Offense, Claim or Suit (Section E2.) of the Businessowners Liability Coverage Form is amended to add the following: An Additional Insured under this endorsement will as soon as practicable: 1. Give written notice of an occurrence or an offense to us which may result in a claim or "suit" under this insurance. 2. Tender the defense and indemnity of any claim or "suit" to us for a loss we cover under this coverage part. 3. Tender the defense and indemnity of any claim or "suit" to any other insurer which also has insurance for a loss we cover under this coverage part and 4.

Agree to make available any other insurance which the additional insured has for a loss we cover under this coverage part. We have no duty to defend or indemnify an additional insured under this endorsement until we receive written notice of a claim or "suit" from the additional insured.

- D. OTHER INSURANCE (Section H. 2 & 3) of the Businessowners Common Policy Conditions are deleted and replaced with the following: 2. This insurance is excess over any other insurance naming the additional insured as an insured whether primary excess, contingent or on any other basis unless a written contract or written agreement specifically requires that this insurance be either primary or primary and noncontributing to the additional insured's own coverage. This insurance is excess over any other insurance to which the additional insured has been added as an additional insured by endorsement. 3. When this insurance is excess, we will have no duty under Coverage A or B to defend the additional insured against any "Suit" if any other insurer has a duty to defend the additional insured against that "Suit" if not other insurer defends, we will undertake to do so, but we will be entitled to the additional insured's rights against all those other insurers. When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of: (A) The total amount that all such other insurance would pay for the loss in the absence of this insurance and (B) The total of all deductible and self-insured amounts under all that other insurance. We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance Provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.
- E. TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (Section K.2) of the Businessowners Common Policy Conditions is deleted and replaced with the following: 2. We waive any right or recovery we may have against any person or organization against whom you have agreed to waive such right of recovery in a written contract or written agreement because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included within the "products completed operations hazard."

Insurance Company: National Fire Ins. Co. of Hartford

Named Insured: STETSON ENGINEERS INC.

Policy Number: B2099943204 Policy Term: July 1, 2017 to July 1, 2018

SB-300176-C (Ed. 04/14) This is a portion of form SB300176C 04/14. The entire 12 page form is available upon request.

All Other Terms and Conditions Remain Unchanged.



THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WORKERS' COMPENSATION BROAD FORM ENDORSEMENT EXTENDED OPTIONS

Policy Number: 57 WEC ZX9384 Endorsement Number:

Effective Date: 07/01/17 Effective hour is the same as stated on the Information Page of the policy.

Named Insured and Address: STETSON ENGINEERS INC

2171 E FRANCISCO BLVD SUITE K

SAN RAFAEL, CA 94901

Section I of this endorsement expands coverage provided under WC 00 00 00.

Section II of this endorsement provides additional coverage usually only provided by endorsement. Section III of this endorsement is a Schedule of Covered States.

You may use the Index to locate these coverage features quickly:

	IND	EX	
SUBJECT	PAGE	SUBJECT	PAGE
SECTION I	2	B. Part One Does Not Apply	3
PARTS ONE and TWO	2	C. Application of Coverage	3
01 We Will Also Pay	2	D. Additional Exclusions	3
PART - THREE	2	E. West Virginia	3
02 How This Insurance Works	2	EXTENDED OPTIONS	4
PART - SIX	2	01 Employers' Liability Insurance	4
03 Transfer of Your Rights and Duties	2	02 Unintentional Failure to Disclose	4
04 Liberalization	2	Hazards	
SECTION II	2	03 Waiver of Our Right to Recover from	4
VOLUNTARY COMPENSATION INSURANCE	2	Others	
05 Voluntary Compensation Insurance		04 Foreign Voluntary Compensation	4
A. How This Insurance Applies	2	A. How This Reimbursement Applies	4
B. We Will Pay	2	B. We Will Reimburse	4
C. Exclusions	3	C. Exclusions	4
D. Before We Pay	3	D. Before We Pay	5
E. Rocovery From Others	3	E. Recovery From Others	5
F. Employers' Liability Insurance	3	 F. Reimbursement For Actual Loss 	5
EMPLOYERS' LIABILITY STOP GAP	3	Sustained	
ENDORSEMENT	3	G. Repatriation	5
06 Employers' Liability Stop Gap		H. Endemic Disease	5
Coverage	3	05 Longshore and Harbor Workers'	5
A. Stop Gap Coverage Limited to		Compensation Act Coverage	
Montana, North Dakota, Ohio,	3	Endorsement	
Washington, West Virginia and		SECTION III	6
Wyoming		01 Schedule of Covered States	6

 Form WC 99 03 03 B
 Printed in U.S.A. (Ed. 8/00)
 Page 1 of 6

 Process Date: 05/13/17
 Policy Expiration Date: 07/01/18

SECTION 1

PARTS ONE and TWO

1. WE WILL ALSO PAY

- D. We WIII Also Pay of Part One (WORKERS' COMPENSATION INSURANCE); and
- E. We Will Also Pay of Part Two (EMPLOYERS' LIABILITY INSURANCE) is replaced by the following:

We Will Also Pay

We will also pay these costs, in addition to other amounts payable under this insurance, as part of any claim, proceeding, or suit we defend:

- reasonable expenses incurred at our request, INCLUDING loss of earnings;
- premiums for bonds to release attachments and for appeal bonds in bond amounts up to the limit of our liability under this insurance;
- 3. litigation costs taxed against you;
- interest on a judgment as required by law until we offer the amount due under this law; and
- 5. expenses we incur.

PART THREE

2. How This Insurance Applies

Paragraph 4. of A. How This insurance Applies of Part 3 (Other States Insurance) is replaced by the following:

If you have work on the effective date of this
policy in any state not listed in Item 3.A. of the
Information Page, coverage will not be
afforded for that state unless we are notified
within sixty days.

PART SIX

3. Transfer Of Your Rights and Duties

C. Transfer Of Your Rights and Dutles of Part 6 (Conditions) is replaced by the following:

Your rights or duties under this policy may not be transferred without our written consent.

If you die and we receive notice within **slxty** days after your death, we will cover your legal representative as insured.

4. Liberalization

If we adopt a change in this form that would broaden the coverage of this form without extra charge, the broader coverage will apply to this policy. It will apply when the change becomes effective in your state.

SECTION II

VOLUNTARY COMPENSATION AND EMPLOYERS' LIABILITY COVERAGE

5. Voluntary Compensation Insurance

A. How This Insurance Applies

This insurance applies to bodily injury by accident or bodily injury by disease. Bodily injury includes resulting death.

- The bodily injury must be sustained by any officer or employee not subject to the workers' compensation law of any state shown in Item 3.A. of the Information Page.
- The bodily injury must arise out of and in the course of employment or incidental to work in a state shown in Item 3.A. of the Information Page.

- The bodily injury must occur in the United States of America, its territories or possessions, or Canada, and may occur elsewhere if the employee is a United States or Canadian citizen, or otherwise legal resident, and legally employed, in the United States or Canada and temporarily away from those places.
- Bodily injury by accident must occur during the policy period.
- Bodily injury by disease must be caused or aggravated by the conditions of the

officer's or employee's employment. The officer's or employee's last day of last exposure to the conditions causing or aggravating such bodily injury by disease must occur during the policy period.

B. We Will Pay

We will pay an amount equal to the benefits that would be required of you as if you and your employees were subject to the workers' compensation law of any state shown in Item 3.A. of the Information Page. We will pay those amounts to the persons who would be entitled to them under the law.

C. Exclusion

This insurance does not cover:

- any obligation imposed by workers' compensation or occupational disease law or any similar law.
- bodily injury intentionally caused or aggravated by you.
- officers or employees who have elected not to be subject to the state workers' compensation law.
- partners or sole proprietors not covered under the Standard Sole Proprietors, Partners, Officers and Others Coverage Endorsement.

D. Before We Pay

Before we pay benefits to the persons entitled to them, they must:

- Release you and us, in writing, of all responsibility for the injury or death.
- Transfer to us their right to recover from others who may be responsible for the injury or death.
- Cooperate with us and do everything necessary to enable us to enforce the right to recover from others.

If the persons entitled to the benefits of this insurance fail to do those things, our duty to pay ends at once. If they claim damages from you or from us for the injury or death, our duty to pay ends at once.

E. Recovery From Others

If we make a recovery from others, we will keep an amount equal to our expenses of recovery and the benefits we paid. We will pay the balance to the persons entitled to it. If the persons entitled to the benefits of this insurance make a recovery from others, they must reimburse us for the benefits we paid them.

F. Employers' Liability Insurance

Part Two (Employers' Liability Insurance) applies to bodily injury covered by this endorsement as though the State of Employment was shown in Item 3.A. of the Information Page.

This provision 5, does not apply in New Jersey or Wisconsin.

EMPLOYERS' LIABILITY STOP GAP COVERAGE

6. Employers' Liability Stop Gap Coverage

- A. This coverage only applies in Montana, North Dakota, Ohio, Washington, West Virginia and Wyoming.
- Part One (Workers' Compensation Insurance) does not apply to work in states shown in Paragraph A above.
- C. Part Two (Employers' Liability Insurance) applies in the states, shown in Paragraph A., as though they were shown in Item 3.A. of the Information Page.
- Part Two, Section C. Exclusions is changed by adding these exclusions.

This insurance does not cover,

- 5. bodily injury intentionally caused or aggravated by you or in Ohio bodily injury resulting from an act which is determined by an Ohio court of law to have been committed by you with the belief than an injury is substantially certain to occur. However, the cost of defending such claims or suits in Ohio is covered.
- bodily injury sustained by any member of the flying crew of any aircraft.
- 14. any claim for bodily injury with respect to which you are deprived of any defense or defenses or are otherwise subject to penalty because of default in premium under the provisions of the workers' compensation law or laws of a state shown in Paragraph A.
- E. This insurance applies to damages for which you are liable under West Virginia Code Annot. S 23-4-2.

EXTENDED OPTIONS

1. Employers' Liability Insurance

Item 3.B. of the **Information Page** is replaced by the following:

B. Employers' Liability Insurance:

 Part Two of the policy applies to work in each state listed in Item 3.A.

The Limits of Liability under Part Two are the higher of:

Bodily injury by Accident	\$500,000	Each Accident
Bodily injury by Disease	\$500,000	Policy Limit
Bodily Injury by Disease	\$500,000	Each Employee

OR

The amount shown in the Information Page.

This provision 1 of EXTENDED OPTIONS does not apply in New York because the Limits Of Our Liability are unlimited.

In this provision the limits are changed from \$500,000 to \$1,000,000 in California.

2. Unintentional Failure to Disclose Hazards

If you unintentionally should fail to disclose all existing hazards at the inception date of your policy, we shall not deny coverage under this policy because of such failure.

3. Walver of Our Right To Recover From Others

- A. We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against any person or organization for whom you perform work under a written contract that requires you to obtain this agreement from us. This agreement shall not operate directly or
 - This agreement shall not operate directly or indirectly to benefit anyone not named in the agreement.
- B. This provision 3. does not apply in the states of Pennsylvania and Utah.

4. Foreign Voluntary Compensation and Employers' Liability Reimbursement

A. How This Reimbursement Applies

This reimbursement provision applies to bodily injury by accident or bodily injury by disease. Bodily injury includes resulting death.

- The bodily injury must be sustained by an officer or employee.
- The bodily injury must occur in the course of employment necessary or incidental to work in a country not listed in Exclusion C.1. of this provision.
- Bodily injury by accident must occur during the policy period.
- Bodily injury by disease must be caused or aggravated by the conditions of your employment. The officer or employee's last exposure to those conditions of your employment must occur during the policy period.

B. We Will Reimburse

We will reimburse you for all amounts paid by you whether such amounts are:

- voluntary payments for the benefits that would be required of you if you and your officers or employees were subject to any workers' compensation law of the state of hire of the individual employee.
- sums to which Part Two (Employers' Liability Insurance) would apply if the Country of Employment were shown in Item 3.A. of the Information Page.

C. Exclusions

This insurance does not cover.

- any occurrences in the United States, Canada, and any country or jurisdiction which is the subject of trade or economic sanctions imposed by the laws or regulations of the United States of America in effect as of the inception date of this policy.
- any obligation imposed by a workers' compensation or occupational disease law, or similar law.
- bodily injury intentionally caused or aggravated by you.

4. liability for any consequence, whether direct or indirect, of war, invasion, act of Foreign enemy, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection or military or usurped power. No endorsement now or subsequently attached to this policy shall be construed as overriding or waiving this limitation unless specific reference is made thereto.

D. Before We Pay

Before we reimburse you for the benefits to the persons entitled to them, you must have them:

- release you and us, in writing, of all responsibility for the injury or death,
- transfer to us their right to recover from others who may be responsible for their injury or death,
- cooperate with us and do everything necessary to enable us to enforce the right to recover from others.

If the persons entitled to the benefits paid fail to do these things, our duty to reimburse ends at once. If they claim damages from us for the injury or death, our duty to reimburse ends at once.

E. Recovery From Others

If we make a recovery from others, we will keep an amount equal to our expenses of recovery and the benefits we reimbursed. We will pay the balance to the persons entitled to it. If persons entitled to the benefits make a recovery from others, they must repay us for the amounts that we have reimbursed you.

F. Reimbursement for Actual Loss Sustained

This endorsement provides only for reimbursement for the loss you actually sustain. In order for you to recover loss or expenses under this reimbursement you must:

- actually sustain and pay the loss or expense in money after trial, or
- secure our consent for the payment of the loss or expense.

G. Repatriation

Our reimbursement includes the additional expenses of repatriation to the United States

of America necessarily incurred as a direct result of bodily injury.

Our reimbursement shall be limited as follows:

- to the amount by which such expenses exceed the normal cost of returning the officer or employee if in good health, or
- in the event of death, to the amount by which such expenses exceed the normal cost of returning the officer or employee if alive and in good health.

In no event shall our reimbursement exceed the bodily injury by accident limit shown in Item 3.B. of the Information Page as respects any one such officer or employee whether dead or alive.

H. Endemic Disease

The word "disease" includes any endemic diseases.

The coverage applies as if endemic diseases were included in the provisions of the workers' compensation law.

5. Longshore and Harbor Workers' Compensation Act Coverage

General Section C. Workers' Compensation Law is replaced by the following:

C. Workers' Compensation Law

Workers' Compensation Law means the workers or workers' compensation law and occupational disease law of each state or territory named in Item 3.A. of the Information Page and the Longshore and Harbor Workers' Compensation Act (33 USC Sections 901-950). It includes any amendments to those laws that are in effect during the policy period. It does not include any other federal workers or workers' compensation law, other federal occupational disease law or the provisions of any law that provide nonoccupational disability benefits.

Part Two (Employers' Liability Insurance), C. Exclusions, exclusion 8, does not apply to work subject to the Longshore and Harbor Workers' Compensation Act

This coverage does not apply to work subject to the Defense Base Act, the Outer Continental Shelf Lands Act, or the Nonappropriated Fund Instrumentalities Act.

SECTION III

- 1. SCHEDULE OF COVERED STATES
 - A. This endorsement only applies in the states listed in this Schedule of Covered States.
 - C. Schedule of Covered States:

CA CO

B. If a state, shown in Item 3.A. of the Information Page, approves this endorsement after the effective date of this policy, this endorsement will apply to this policy. The coverage will apply in the new state on the effective date of the state approval.

Countersioned by

Authorized Representative

TERRA INSURANCE COMPANY Terra Insurance Company (A Risk Retention Group) Two Fifer Avenue, Suite 100 Corte Madera, CA 94925



DATE 12/05/17

CERTIFICATE OF INSURANCE

CERTIFICATE HOLDER

County of Marin Attn: Hugh Davis

3501 Civic Center Drive, Room 304

San Rafael, CA 94903

This certifies that the "claims made" insurance policy (described below by policy number) written on forms in use by the Company has been issued. This certificate is not a policy or a binder of insurance and is issued as a matter of information only, and confers no rights upon the certificate holder. This certificate does not alter, amend or extend the coverage afforded by this policy.

The policy of insurance listed below has been issued to the insured named above for the policy period indicated. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policy described herein is subject to all the terms, exclusions and conditions of such policy. Aggregate limits shown may have been reduced by paid claims.

TYPE OF INSURANCE	Professional Liability	
POLICY NUMBER	EFFECTIVE DATE	EXPIRATION DATE
218206	01/01/18	12/31/18
LIMITS OF LIABILITY	\$1,000,000 EACH CLAIM	
	\$1,000,000 ANNUAL AGGREGATE	

PROJECT DESCRIPTION

Corte Madera Creek Levee Evaluation

CANCELLATION: If the described policy is cancelled by the Company before its expiration date, the Company will mail written notice to the certificate holder thirty (30) days in advance, or ten (10) days in advance for non-payment of premium. If the described policy is cancelled by the insured before its expiration date, the Company will mail written notice to the certificate holder within thirty (30) days of the notice to the Company from the insured.

NAME AND ADDRESS OF INSURED

A3GEO, Inc. 1331 Seventh Street, Unit E Berkeley, CA 94710 **ISSUING COMPANY:**

TERRA INSURANCE COMPANY

(A Risk Retention Group)

President