

AGREEMENT SUMMARY
 STD 215 (NEW 02/98)

AGREEMENT NUMBER	AMENDMENT NUMBER
07-083	1

CHECK HERE IF ADDITIONAL PAGES ARE ATTACHED

1. CONTRACTOR'S NAME
 U.S. Dept. of Commerce, Nat'l Oceanic & Atmospheric Admin., National Ocean Service

2. FEDERAL I.D. NUMBER
 06-1834875

3. AGENCY TRANSMITTING AGREEMENT
 State Coastal Conservancy

4. DIVISION, BUREAU, OR OTHER UNIT
 Ocean Program

5. AGENCY BILLING CODE
 13090

6. NAME AND TELEPHONE NUMBER OF CONTRACT ANALYST FOR QUESTIONS REGARDING THIS AGREEMENT
 Erlinda Corpuz, Contracts Manager 510-286-4159

7. HAS YOUR AGENCY CONTRACTED FOR THESE SERVICES BEFORE?
 NO YES (If YES, enter prior contractor name and Agreement Number)

8. BRIEF DESCRIPTION OF SERVICES - LIMIT 72 CHARACTERS INCLUDING PUNCTUATION AND SPACES
 Geospatial Surveying Services Seafloor mapping

9. AGREEMENT OUTLINE (Include reason for Agreement: Identify specific problem, administrative requirement, program need or other circumstances making the Agreement necessary; include special or unusual terms and conditions.)
 The initial agreement (umbrella agreement), which was unfunded, authorized the future acquisition by the Conservancy, in connection with collaborative and cooperative projects with the U.S., of highly specialized geospatial surveying services, including seafloor mapping, from the National Ocean Service (NOS), utilizing the highest qualified contractors selected by NOS through the competitive process required by the Federal Acquisition Regulations (FAR) Part 36.6, Architect-Engineer Contracts (which can be viewed at <http://www.arnet.gov/far/current/html/FARTOCP36.html>). The umbrella agreement also set out the terms of and process for future amendments that would authorize the funding and provision of specific geospatial surveying services.
 Accurate statewide mapping of seafloor substrates, marine habitat types, and bathymetry of California's coastal and nearshore waters is a crucial component necessary to guide multiple ocean management decisions. The CA Ocean Protection Council, for which the Conservancy serves as staff, has made it a priority to complete seafloor mapping in the territorial sea, primarily in support of the Marine Life Protection Act initiative. Amendment 1 to the umbrella agreement provides for the Conservancy to advance to NOS the sum of \$5,000,000 (to be matched NOS's contribution of \$1,300,000) for hydrographic surveying and bathymetry (underwater topography mapping) of California's coastal and nearshore waters to delineate marine habitat types for a total of approximately 1068 square nautical miles.

10. PAYMENT TERMS (More than one may apply.)
 MONTHLY FLAT RATE QUARTERLY ONE -TIME PAYMENT PROGRESS PAYMENT
 ITEMIZED INVOICE WITHHOLD _____ % ADVANCED PAYMENT NOT TO EXCEED
 REIMBURSEMENT/REVENUE \$ 5,000,000 or _____ %
 OTHER (Explain)

11. PROJECTED EXPENDITURES	FUND TITLE	ITEM	F.Y.	CHAPTER	STATUTE	PROJECTED EXPENDITURES
	CA Ocean Protection Trust Fund of 2007	3760-301-6076(1)	07/08	171	2007	\$5,000,000.00
						\$
						\$

OBJECT CODE California coast- 10m to 3nm

AGREEMENT TOTAL \$ 5,000,000.00

OPTIONAL USE

AMOUNT ENCUMBERED BY THIS DOCUMENT \$ 5,000,000.00

PRIOR AMOUNT ENCUMBERED FOR THIS AGREEMENT \$ -0-

TOTAL AMOUNT ENCUMBERED TO DATE \$ 5,000,000.00

ACCOUNTING OFFICER'S SIGNATURE *Kong Luong* DATE SIGNED 07/23/08

12. AGREEMENT	From	Through	TOTAL COST OF THIS TRANSACTION	BID, SOLE SOURCE, EXEMPT
Original	5/9/2008	1/30/2013	\$ 0	Exempt
Amendment No. 1	5/9/2008	1/30/2013	\$ 5,000,000 .00	Exempt
Amendment No. 2			\$	
Amendment No. 3			\$	
TOTAL			\$ 5,000,000.00	

(Continue)

AGREEMENT SUMMARY

STD. 215 (NEW 02/98)

13. BIDDING METHOD USED:

- REQUEST FOR PROPOSAL (RFP) INVITATION FOR BID (IFB) USE OF MASTER SERVICE AGREEMENT
(Attach justification if secondary method is used)
- SOLE SOURCE CONTRACT EXEMPT FROM BIDDING OTHER *(Explain)*
(Attach STD. 821) *(Give authority for exempt status)* PCC Sections 10335(a) and 10335.5(b); See SCM 5.80

NOTE: *Proof of advertisement in the State Contracts Register or an approved form STD. 821, Contract Advertising Exemption Request, must be attached*

14. SUMMARY OF BIDS *(List of bidders, bid amount and small business status) (If an amendment, sole source, or exempt, leave blank)*

N/A

15. IF AWARD OF AGREEMENT IS TO OTHER THAN THE LOWER BIDDER, PLEASE EXPLAIN REASON(S) *(If an amendment, sole source, or exempt, leave blank)*

N/A

16. WHAT IS THE BASIS FOR DETERMINING THAT THE PRICE OR RATE IS REASONABLE?

N/A

17. JUSTIFICATION FOR CONTRACTING OUT *(Check one)*

- Contracting out is based on cost savings per Government Code 19130(a). The State Personnel Board has been so notified. Contracting out is justified based on Government Code 19130(b). Justification for the Agreement is described below.

Justification:

The specialized skills, knowledge, experience, and ability needed for the surveying of the coastal and nearshore ocean floor are not readily available within civil service. NOS has been working with highly experienced contractors, with unique skills and specialized equipment, who are selected through a competitive process, to undertake geospatial surveying services, including seafloor mapping, in other areas of the country. In the cooperative project reflected by this Amendment 1, NOS will use its contractor, who has past highly relevant experience in the project area, to achieve the objectives of the CA Seafloor Mapping Program. These services are urgently needed in order to keep pace with data collection efforts being collected through other sources, including USGS (via a contract with the Conservancy)

18. FOR AGREEMENTS IN EXCESS OF \$5,000, HAS THE LETTING OF THE AGREEMENT BEEN REPORTED TO THE DEPARTMENT OF FAIR EMPLOYMENT AND HOUSING?

- NO YES N/A

19. HAVE PCC§ 10410 AND 10411 DEALING WITH CONFLICT OF INTEREST BEEN COMPLIED WITH?

- NO YES N/A

20. FOR CONSULTING AGREEMENTS, DID YOU REVIEW ANY CONTRACTOR EVALUATIONS ON FILE WITH THE DGS LEGAL OFFICE?

- NO YES NONE ON FILE N/A

21. IS A SIGNED COPY OF THE FOLLOWING ON FILE AT YOUR AGENCY FOR THIS CONTRACTOR?

- A. CONTRACTOR CERTIFICATION CLAUSES NO YES N/A
 B. STD. 204, VENDOR DATA RECORD NO YES N/A

22. REQUIRED RESOLUTIONS ARE ATTACHED

- NO YES N/A

23. ARE DISABLED VETERANS BUSINESS ENTERPRISE GOALS REQUIRED? *(If an amendment, explain changes, if any)*

- NO *(Explain below)* YES *(If YES complete the following)*

DISABLED VETERAN BUSINESS ENTERPRISES: _____ % OF AGREEMENT

- Good faith effort documentation attached if 3% goal is not reached.

- We have determined that the contractor has made a sincere good faith effort to meet the goal.

Explain:

Intergovernmental agreement.

24. IS THIS A SMALL BUSINESS CERTIFIED BY OSBCR?

- NO YES *(Indicate Industry Group)*

SMALL BUSINESS REFERENCE NUMBER

25. IS THIS AGREEMENT (WITH AMENDMENTS) FOR A PERIOD OF TIME LONGER THAN ONE YEAR? *(If YES, provide justification)*

- NO YES

This agreement provides for the needed time for NOS to undertake the surveying and complete the work products. Funds will be advanced upon DGS/OLS approval of this agreement and its Amendment 1.

I certify that all copies of the referenced Agreement will conform to the original Agreement sent to the Department of General Services.

CONTRACTS MANAGER'S SIGNATURE

Sean Williamson for Erlinda Corpuz

DATE SIGNED

7-24-08

STANDARD AGREEMENT AMENDMENT

STD. 213 A (Rev 6/03)

CHECK HERE IF ADDITIONAL PAGES ARE ATTACHED XX Pages

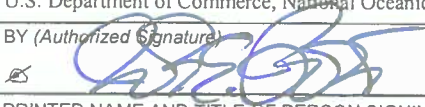


AGREEMENT NUMBER 07-083	AMENDMENT NUMBER 1
REGISTRATION NUMBER	

- This Agreement is entered into between the State Agency and Contractor named below:
STATE AGENCY'S NAME
State Coastal Conservancy
CONTRACTOR'S NAME
U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service
- The term of this Agreement is May 9, 2008 through January 30, 2013
- The maximum amount of this Agreement is \$5,000,000
 Agreement after this amendment is: Five million dollars
- The parties mutually agree to this amendment as follows. All actions noted below are by this reference made a part of the Agreement and incorporated herein:

Under the existing Umbrella Agreement between the parties (State Coastal Conservancy Agreement # 07-083, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service [NOS] MOA-2008-031) the Conservancy agrees to advance the sum of \$5,000,000 (five million dollars) to NOS to provide geospatial ocean floor surveying services as specified in Annex 1, including all attachments and Exhibits 1, 2 and 3, which are attached and incorporated by this reference.

All other terms and conditions shall remain the same.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

CONTRACTOR		CALIFORNIA Department of General Services Use Only	
CONTRACTOR'S NAME (If other than an individual, state whether a corporation, partnership, etc.) U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service		<div style="border: 2px solid blue; padding: 10px; text-align: center;"> <p>APPROVED</p> <p>AUG - 4 2008</p> <p>DEPT OF GENERAL SERVICES</p> </div>	
BY (Authorized Signature) 	DATE SIGNED (Do not type) <u>7/22/08</u>		
PRINTED NAME AND TITLE OF PERSON SIGNING <u>John H. Dunnigan, Assistant Administrator, NOAA National Ocean Service</u>			
ADDRESS <u>1305 East West Highway, SSMC4 Silver Springs, MD 20910</u>			
STATE OF CALIFORNIA		<input type="checkbox"/> Exempt per: 	
AGENCY NAME <u>State Coastal Conservancy</u>			
BY (Authorized Signature) 	DATE SIGNED (Do not type) <u>7/24/08</u>		
PRINTED NAME AND TITLE OF PERSON SIGNING <u>Samuel Schuchat, Executive Officer</u>			
ADDRESS <u>1330 Broadway, Suite 1300, Oakland, CA 94612</u>			

ANNEX 001

TO MOA-2008-031

A REIMBURSABLE AGREEMENT

BETWEEN THE

CALIFORNIA STATE COASTAL CONSERVANCY

AND THE

**U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COASTAL SERVICES CENTER**

NOS Agreement Code: MOA—2008-031 (Annex 001)/7707

I. PARTIES AND PURPOSE

- A. This is Annex 001 to the underlying umbrella Agreement, NOAA MOA-2008-031/7648, between the U.S. Department of Commerce, National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service (NOS) and the California State Coastal Conservancy (SCC), a public entity created by California state law (Division 21 of the California Public Resources Code, sections 31000 *et seq.*).
- B. The purpose of this Annex is to provide NOAA and SCC with modern, accurate hydrographic survey data as detailed in the attached Statement of Work (SOW). This data will be used to update nautical charts, and to create habitat and geology maps to meet the purposes of the California Ocean Protection Council.

II. AUTHORITIES

- A. The legal authority for NOS to enter into this Annex is the Coast and Geodetic Survey Act (CGSA), 33 U.S.C. § 883e, which authorizes NOAA through the Secretary of Commerce to enter into cooperative agreements, or any other agreements, with, and to receive and expend funds made available by any State or subdivision thereof, any Federal agency, or any public or private organization, or individual, for surveys or investigations authorized herein, or for performing related surveying and mapping activities, including special-purpose maps, and for the preparation and publication of the results thereof.
- B. The State's statutory authority for SCC to enter into this Annex is as specified in paragraph III.B of the Umbrella Agreement between the parties: SCC Agreement No. 07-083, NOAA MOA-2008-031/7648 - between SCC and NOAA.
- C. The programmatic authorities for NOS to enter into this Annex are:
 - 1. The Coast and Geodetic Survey Act, 33 U.S.C. § 883a *et seq.*, which authorizes the Secretary of Commerce to conduct hydrographic and topographic surveys; tide and current observations; geodetic-control surveys; field surveys; for aeronautical charts; and geomagnetic, seismological, gravity, and related geophysical measurements to provide charts and other information for safe marine and air navigation and to provide basic data for engineering and scientific purposes.
 - 2. The Coastal Zone Management Act, 16 U.S.C. § 1456c, which authorizes NOAA to conduct technical assistance and management oriented research necessary to support the development and implementation of state coastal program amendments and appropriate to the furtherance of international cooperative efforts and technical assistance in coastal zone management.

III. TERMS AND CONDITIONS OF THE ANNEX

- A. This Annex 1 incorporates the umbrella agreement (“Umbrella Agreement”) between the parties: SCC Agreement No. 07-083, NOAA MOA-2008-031/7648, by reference.
- B. The attached “Statement of Work Multibeam Sonar Services” (“SOW”) describes the scope of services to be developed cooperatively between the NOS and SCC.
- C. NOS will provide SCC, through a Task Order to Fugro Pelagos, a company retained by NOS (“FUGRO”), with geospatial surveying services (the “Geospatial Surveying Services”) and provide the electronic data collected and produced through the surveying in accordance with the purpose, terms, and conditions of the Umbrella Agreement and with the specifications, schedule and other requirements set forth in Annex 1, which includes Exhibit 1 (Statement of Work), Exhibit 2 (terms and conditions of Annex 1) and Exhibit 3 (Government Cost Estimate), all of which are incorporated by this reference.

IV. TRANSFER OF FUNDS

- A. The SCC will provide \$5,000,000 (five million) in funds to CSC for the deliverables identified in Section 6 of the SOW. See Exhibit 3.
- B. NOAA shall return all funds issued through this Annex to the SCC, if it is unable to provide the deliverables identified in Section 6 of the SOW. NOAA shall also return all unused funds if the deliverables listed in Section 6 of the SOW are less than the budget estimate.
- C. Accounting and Fiscal Data
 - 1. SCC
Employer Identification Number: 94-3164968
DUNS Number: 808322408
 - 2. CSC
Employer Identification Number: 52-0821608
DUNS Number: 78-4769085
Appropriation Code (for collection): 13x1450
CBS ACCS¹: 14-2008-1BK3BNF-P00-~~27~~-01-01-02-~~009~~-10-15-0000-00-00-00-00-2512 06 000

¹ Commerce Business System (CBS) Accounting Classification Code Structure (ACCS)

V. CONTACTS

A. The Points of Contact (POCs) for coordinating activities under this Annex are:

1. CSC
Dennis Hall
Coastal Geospatial Services Contract COR
NOAA Coastal Services Center
2234 South Hobson Avenue
Charleston, South Carolina 29405-2413
Phone number: (843) 740-1323
Fax number: (843) 740-1289
E-mail: Dennis.Hall@noaa.gov
2. SCC
 - a. Technical/Contractual
Sheila Semans
SCC Project Manager
17351 Franklin Road
Fort Bragg, CA 94537
Phone and fax number: (707) 964-0176
E-mail: ssemans@scc.ca.gov
 - b. Contractual
Erlinda Corpuz
1330 Broadway, Suite 1300
Oakland, CA 94612
Phone number: (510) 286-4157
Fax number: (510) 286-1883
Email: ecorpuz@scc.ca.gov
 - c. Financial
May-Ling Lin
1330 Broadway, Suite 1300
Oakland, CA 94612
Phone number: (510) 286-4160
Fax number: (510) 286-0470
Email: mayling@scc.ca.gov

- B. The Parties agree that if there is a change regarding the information in this section, the Party making the change will notify the other Party in writing of such change.

VI. DURATION OF AGREEMENT, AMENDMENTS, OR TERMINATION

- A. This Annex will become effective when the STD 213A, incorporating this Annex, is signed by all Parties and approved by the California Department of General Services. The Annex will remain in effect through September 30, 2009.
- B. This Annex may be amended within the scope of this instrument or extended at any time before the expiration through mutual written consent of the Parties.
- C. This Annex may be terminated by (1) mutual written consent; (2) 30 days advance written notice by either Party, or (3) completion of operation/terms of this Annex.

VII. RESOLUTION OF DISAGREEMENTS

Should disagreement arise on the interpretation of the provisions of this Agreement, or amendments and/or revisions thereto that cannot be resolved at the operating level, the area(s) of disagreement shall be stated in writing by each Party and presented to the other Party for consideration. If agreement on interpretation is not reached within 30 days, the Parties shall forward the written presentation of the disagreement to respective higher officials for appropriate resolution.

VIII. APPROVALS

The signatures of the Parties on the STD 213A, incorporating this Annex, acknowledge that the parties accept and approve this Annex.

NOS Agreement Code: MOA-2008-031 (Annex 001)/7707

Exhibit 1

STATEMENT OF WORK

MULTIBEAM SONAR SERVICES

M-L906-KR-08

A COOPERATIVE PROJECT BETWEEN THE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

&

THE CALIFORNIA STATE COASTAL CONSERVANCY

JUNE 5, 2008

1 GENERAL INFORMATION

1.1 Background

The National Ocean Service (NOS) is responsible for NOAA's nautical charting program and provides nautical charts and related products for the coastal and adjacent ocean areas of the United States (including possessions and territories), the Great Lakes, and other inland navigable waters. Accurate and reliable charts are essential to the safety of those who go to sea for commerce, defense, or recreation.

1.2 Purpose

This contract has two purposes: to provide NOAA with modern, accurate hydrographic survey data to update the nautical charts of the assigned area and to provide California State Coastal Conservancy (SCC) as required for the California Seafloor Mapping Program (CSMP) modern, accurate hydrographic survey data and bathymetry (underwater topography) of California's coastal and near shore waters to delineate marine habitat types. The work defined in this Statement of Work (SOW) meets the data requirements for the California Seafloor Mapping Program and SCC for the purposes of the Ocean Protection Council.

1.3 Statement of Work

This SOW contains requirements specific to the contracted services and the areas of performance. The SOW has 11 Attachments.

1.4 Technical Specifications

Attachment 1 to this SOW contains a website link to the "Hydrographic Surveys, Specifications and Deliverables" (dated April, 2007), which are to govern the work under this SOW. All references in this SOW to Attachment 1 is intended to refer to the "Hydrographic Surveys, Specifications and Deliverables" and will be in the form "TS Section , " or "TS Paragraph, to indicate the particular, applicable section or paragraph of the "Hydrographic Surveys, Specifications and Deliverables".

1.5 Area

The Government can issue work orders for surveying within the territorial waters of the United States. The survey limits for this project are listed in Attachment 2, Map 1 to this SOW. Data acquisition under this SOW will cover approximately 8400 square kilometers.

2 SCOPE OF WORK

2.1 General

Work under this contract will consist of fixed price work orders. The Government can assign two types of work orders: (1) basic work orders, and (2) special investigation work orders.

2.2 Basic Work Orders

Under a basic work order, the Contractor shall provide [will change to refer to CA specs under Attachment 5] survey coverage as specified in Attachment 5 [Q: This attachment will change??] for the area(s) identified in Attachment 2. The price of each basic work order includes, but is not limited to:

- all surveying
- rerunning any sounding or side scan lines which fail to meet specifications
- mobilizing, demobilizing, and moving between survey areas
- establishing geodetic control
- installing, monitoring, and maintaining tide gauges
- investigating all fixed and floating aids to navigation
- processing the data
- preparing reports, plots, and other deliverables.
- determining the least depth on wrecks and obstructions from the data acquired during the task order
- all equipment maintenance and calibrations
- cost of field office
- docking fees and other costs associated with vessel operation
- downtime due to weather or for other reasons not attributable to the Government

If the vessel is operating overnight, the fixed price shall include meals and accommodations provided by the Contractor to the Contracting Officer's Technical Representative (COTR) or Government Observer.

2.3 Special Investigation Work Orders

At the Government's option, work orders will be issued to authorize additional field work to:

- provide multibeam sonar coverage in addition to the coverage in the basic task order
- provide side scan sonar coverage in addition to the coverage in the basic task order
- perform other investigations

The price associated with conducting these bottom feature developments, processing the data from the developments and assimilating the data with the basic work will be covered in the work order.

2.4 Contractor Responsibilities

2.4.1 General

The Contractor shall provide all labor, material, and equipment necessary to supply the Government with hydrographic data acquired in accordance with the requirements and technical specifications stated herein. The Contractor shall be responsible for the following tasks, although this list is not to be deemed as all inclusive.

- acquiring all data in accordance with this SOW
- supplying all equipment, spares, and supplies necessary for the conduct of survey operations
- all measurements
- all necessary calibrations of equipment needed to conduct the survey work
- determining that the static transducer draft, and the settlement and squat of the vessel has been measured and remains properly accounted for throughout the survey
- conducting accuracy testing and accounting for sensor alignment and biases
- determining, processing and applying necessary data corrections

- all required output products
- notifying the U.S. Coast Guard, pilots associations, commercial fishing groups, etc., about the project and planned activities
- adhering to requirements detailed in DOC Clause 1352.239-73 (see IT Security Requirements in Attachment 11).

2.4.2 Personnel

The Contractor shall be responsible for providing personnel experienced in the collection of hydrographic data and operation/calibration of automated hydrographic data acquisition systems. During the execution of the work, the Contractor shall provide professional supervision and quality control adequate to assure the accuracy, quality, completeness, and progression of the work.

2.4.2.1 Lead Hydrographer and Senior Hydrographer

The Contractor shall designate a Lead Hydrographer and a Senior Hydrographer who shall both be on location at all times during the conduct of survey operations. The Lead Hydrographer and the Senior Hydrographer shall each have at least three years of experience in the conduct of hydrographic surveying, and at least one year of experience using shallow water multibeam systems and side scan sonar systems. This experience shall include processing and interpreting the survey data.

2.4.3 Vessel

The Contractor is responsible for providing and operating a seaworthy vessel(s) that complies with regulations as shown in the table below:

Applicable Regulations for Contractor Vessel Operations	
Vessels greater than 500 GRT	International SOLAS certificate requirements
Vessels less than 500 GRT and greater than/equal to 300 GRT	46 CFR Subchapter U (Oceanographic Research Vessels)
Vessels less than 300 GRT	46 CFR Subchapter C (Uninspected Vessels)
	46 CFR Subchapter T (Small Passenger Vessels) for Lifesaving and Fire Extinguishing Equipment
	46 CFR Subchapter U - Accommodations (Subpart 190.20)
ALL VESSELS	40 CFR 110 -Federal Water Pollution Control Act.
	Comply with Vessel Sanitation Program Operations Manual, Chapter IV, Guidelines A through H (USHHS, PHS, CDC) ¹

¹ Available from Vessel Sanitation Program, 1015 North American Way, Room 107, Miami, Florida 33132, Telephone 1-800-323-2132.

2.4.3.1 Vessel Operation

The Contractor is responsible for arranging dockage, fueling, and supplying of vessel(s). The Contractor is responsible for the safety of the crew and passengers and for operating the vessel in a safe and prudent manner. Assignment of survey tasks by the Government does not relieve the Contractor from operating the vessel in a safe and prudent manner. The Contractor is responsible for notifying the COTR if work cannot be completed safely.

2.4.3.2 License Requirements

A survey vessel over 50-feet or over 100 gross tons shall be operated by a licensed mate. If the vessel is underway for more than 12 hours, it shall have 2 licensed mates aboard.

2.4.3.3 Nautical Charts

The vessel shall have on board the largest scale charts of the survey area and any area in which the vessel is operating. These charts shall be fully corrected through the latest weekly Notice to Mariners and the U.S. Coast Guard Local Notice to Mariners.

2.4.4 Equipment and Instrumentation

The Contractor is responsible for maintaining and calibrating all equipment necessary to comply with this Statement of Work. The Contractor shall calibrate equipment requiring annual calibration such as sound speed profilers, Conductivity-Temperature-Depth (CTD) probes, water level measurement systems, and other related instruments and instrumentation systems, no earlier than six months prior to the commencement of survey operations. These instruments shall be re-calibrated at intervals no greater than twelve months until survey completion. The Contractor must re-calibrate the instruments when the survey is complete if the completion date is later than six months from the date of last re-calibration. Copies of the sound speed profiler calibration data shall be included in Separate II of the Descriptive Report. See TS Section 8.1.3.

2.4.5 Clearances

The Contractor shall be responsible for obtaining personnel access clearances; permission to enter onto private and public property; all applicable licenses for operation of electronic navigation devices; and all radio-frequency clearances. In addition, the Contractor shall ensure compliance with all laws, regulations, and ordinances associated with the installation of electronic navigation devices. The Contractor shall be responsible for staffing and maintaining shore-based installations as required.

2.4.6 Keeping the Government Informed

2.4.6.1 Vessel Movement

The Contractor shall be required to inform the COTR of survey vessel schedules at least 48 hours in advance.

2.4.6.2 Dangers to Navigation

As soon as practicable after discovery, the Contractor shall notify the COTR and the Pacific Hydrographic Branch about any uncharted or incorrectly charted danger to navigation using the form shown in Attachment 7, to include visual depictions when available and are to include an

indication of scale. The Contractor shall include a copy of each Danger to Navigation Report in Appendix I of the Descriptive Report. See TS Section 8.1.2 and TS Section 8.1.3.

2.4.6.3 Identification of Potential Field Examinations

The Contractor shall make recommendations to the COTR for additional field examinations which are deemed necessary to establish survey completion.

2.4.7 Accommodations for Government Observer

2.4.7.1 Berthing and Messing

The Contractor shall provide berthing and messing for one Government Observer aboard the Contractor's vessel. Berthing facilities and meals for the Government Observer will be commensurate with the berthing and meals provided to licensed mates and engineers on the survey. While the Government Observer is aboard, interior survey work spaces and the berthing and mess areas of the Contractor's vessel shall be smoke free.

2.4.7.2 Communications

The Contractor shall provide the Government Observer access to shipboard radio and cellular phone communications facilities to conduct Government business. The Contractor shall bill the Government Observer directly for the air time, connect fees, long distance fees, and associated charges incurred.

2.4.7.3 Photocopier

The Contractor shall provide the Government Observer access to the shipboard photocopier (if one is aboard) as needed for the conduct of Government business.

2.4.7.4 At Sea Rendezvous

When requested by the COTR or Government Observer, and subject to the approval of the vessel's commanding officer, the Contractor shall temporarily suspend operations between survey lines to allow for COTR arrivals, departures, or transfer via another vessel. Arrangements for this other vessel will be made by the COTR or Government Observer.

2.4.8 Release of Data

The Contractor shall obtain approval from the COTR before any survey data are released to parties outside NOAA's Hydrographic Surveys Division or SCC. If any preliminary data are released, they shall be annotated with a disclaimer as provided by the COTR.

2.4.9 Insurance and Liability

Refer to Section H of this contract.

2.4.10 Regulatory Compliance

The Contractor shall comply with all applicable Federal, State, and local regulations.

2.4.11 Software

The Contractor shall retain a copy of all software versions and survey data for two years after completion of the task order.

2.5 Government Responsibilities

2.5.1 Government Observer

In the event that the Government chooses to utilize an on-board observer at any time during this contract, the Government will be responsible for assuring that the observer meets and boards the Contractor's vessel during either a scheduled in-port period or at a mutually agreeable place and time.

2.5.2 Survey Registry Numbers and Titles

The Government will provide the survey registry number and title for each survey as work orders are assigned. See Attachment 3 to this SOW.

3 SURVEY REQUIREMENTS

3.1 Types of Data

The Contractor shall acquire a hybrid of complete and object detection multibeam coverage as detailed in T.S. 5.1.2. The hydrographer shall maintain and operate the multibeam sonar system, from data acquisition to processing, such that it detects shoals that measure 2 meters x 2 meters horizontally and 1 meter vertically in depths of 40 meters or less. For depths greater than 40 meters, the minimum size of detectable targets shall be 10 percent of the depth for horizontal dimensions and 5 percent of the depth for vertical dimensions. Depths shall be determined and recorded with a vertical resolution no coarser than 1 centimeter. See Attachment 5 for coverage requirements.

100% of the survey area will be ensonified. The survey will be planned such that at least 1 sounding falls within every 2-meter square bin on a flat sea floor at 80 meters water depth. In depths shallower than 80 meters the data density will increase linearly; there will be 1 sounding in every 1 meter bin at 40 meters depth. In depths deeper than 80 meters the data density will decrease linearly.

The importance of maintaining and documenting data flow integrity cannot be over-stressed. A description of the data processing routines for converting from raw imagery data to the processed imagery shall be included in Section B of the Data Acquisition and Processing Report (DAPR). See TS Section 8.1.4.1.

Digital raw data files, as well as final digital corrected files are required. The digital format is specified in TS Section 8.5.

3.2 Sonar Data

The contractor shall provide the raw unedited sonar data required by TS Section 8.5 in such a manner, so that when it is read in CARIS with a "zeroed" CARIS HIPS Vessel File (HVF) it is fully corrected for sensor offsets, vessel draft, biases, dynamic attitude, sound velocity, and vertical datum reducers, or the contractor may submit the data as a complete CARIS project.

The (DAPR) shall indicate how the data was acquired including whether or not the SSS data and subsequent contacts were corrected for cable out. The data shall be corrected for layback according to TS 8.5.4.

3.2.1 Data Format

See TS Section 8.5.4.

3.3 Single Beam Echo Sounder Data

Not required for this SOW.

3.3.1 Data Format

Not required for this SOW.

3.4 Quality Control

The Contractor shall make available to the COTR, the same quality control/quality assurance tools and products used by the Lead and Senior Hydrographers.

3.4.1 Multibeam Confidence Checks

See TS Sections 5.4.1 and 5.5.1.

3.4.2 Positioning System Confidence Checks

See TS Section 5.5.2.

3.4.3 Speed of Sound Confidence Checks

See TS Section 5.4.3.

3.4.4 Side Scan Sonar Confidence Checks

See TS Section 6.3.1.

3.4.5 Water Level Systems Checks and Verification

See TS Section 4.5.

4 TIDE AND WATER LEVEL DATA

TS Section 4 provides guidance when a work order requires the contractor to install and maintain gauges. See Attachment 6 of this SOW for specific requirements for each work order.

5 OTHER DATA

5.1 Bottom Sediment Samples

Bottom samples are not required for this project.

5.2 Aids to Navigation

The Contractor shall verify all landmarks and fixed and floating aids to navigation that are located within the survey limits. See TS Section 7.2.

5.3 AWOIS Items

There are no AWOIS items assigned for this project.

5.4 Drilling Structures

The Contractor shall determine the geographic positions of all drilling structures, production platforms, and well heads within the survey limits and report the positions and descriptions in Section D.2 of the Descriptive Report. See TS Section 8.1.3.

5.5 Digital Data

[This section will be re-written and will include an attachment – flow chart – and will revise 1.3 (#'s of attachments)] Digital data shall be submitted on USB hard drives. The hard drive should include a directory structure that organizes the data in a reasonable manner. The hydrographer shall include a detailed listing of the directories explaining the data types located in each. Other formats may be allowed, if authorized in advance by the COTR. Each registered survey shall be submitted on its own USB hard drive. The hydrographer shall work with NOS to ensure no data compatibility problems exist after data submission. See TS Section 8.5.

Due to the considerable data volumes for this project, incremental submissions will be made of the raw data directly to the National Geophysical Data Center (NGDC) as detailed above. NGDC will notify the contractor once data has been successfully archived.

6 DELIVERABLES

6.1 Descriptive Report

The Contractor shall write the Descriptive Report in accordance with TS Section 8.1.3, except as noted in Attachment 5.

6.1.1 Descriptive Report Approval Sheet

The Contractor shall prepare and include an approval sheet for each Descriptive Report in accordance with TS Section 8.1.3 - E. See Attachment 10 for an example.

6.2 Digital Data Files

All survey data shall be supplied in digital format and comply with TS Section 8.5. Supplementary correspondence shall be submitted as .txt files. All survey data and resultant products and reports shall be submitted to NOAA and to the California Seafloor Mapping Program is requested.

The final depth information from the survey will be composed of a collection of grids or Navigation Surfaces. The hydrographer must take steps to ensure that all data has been correctly processed and that appropriate designated soundings have been selected (see TS section 5.2.3). The collection of grids representing the final reviewed results of the hydrographic survey shall be submitted as CARIS BASE or BAG surfaces. The DR shall discuss the uncertainty and total propagated error (TPE) of the data and describe what portions of the swath (if any) meet IHO Order 1 specifications.

6.2.1 Side Scan Sonar Data

The hydrographer shall submit digital side scan sonar data in a format readable by the most current version of CARIS HIPS/SIPS. See TS Section 8.5.3 and 8.5.4.

6.2.2 S-57 Feature File

All features that that may be compiled to the nautical chart shall be included in the S-57 feature file. See TS Section 8.2. Features may include wrecks, obstructions, bottom samples, oil platforms, or other objects. In addition, single beam soundings will be included in the S-57 feature file portrayed at survey scale.

6.3 Interim Deliverables

Interim deliverables are data analysis tools utilized by the COTR to evaluate and monitor the Contractor's field work and processing. These tools may include image files or graphics showing preliminary soundings, swath contours, multibeam and side scan coverage, and/or preliminary contacts. The Contractor shall make these products available to the COTR on a bi-weekly basis. The Contractor is encouraged to present alternate means of quality assurance and quality control products in lieu of what is presented here.

6.4 Monthly Progress Sketch

The Contractor shall submit a Monthly Progress Sketch no later than 5 calendar days from the end of the reported month. Forward the sketch via email to progress.sketches@noaa.gov, ssemans@scc.cca.gov and the COTR. The progress sketch shall be prepared in accordance with TS Section 8.1.1. See Attachment 8 of this SOW for an example.

6.5 Survey Outlines

Provide a survey outline region in MapInfo compatible format, Latitude/Longitude coordinate system, NAD 83 that shows the extent of hydrography for each registered survey when field work is completed. Forward outlines via email to survey.outlines@noaa.gov, ssemans@scc.ca.gov and the COTR. See TS Section 8.1.1.

7 DELIVERY INSTRUCTIONS

7.1 Packaging Instructions

All shipments shall include a letter of transmittal detailing all elements of the shipment. All deliveries shall be packaged and marked for shipment in accordance with the best commercial practice.

7.2 Delivery Address

The Contractor shall ship all data and reports for each completed survey to the Pacific Hydrographic Branch. The descriptive report shall be emailed to the Sheila Semans of the California Seafloor Mapping Program - ssemans@scc.cca.gov. The Contractor shall retain a copy of all data pertaining to a survey for two years after completion of the task order. All data must be sent by registered mail or overnight express to:

Chief, Pacific Hydrographic Branch, N/CS34
National Ocean Service, NOAA
7600 Sand Point Way, NE
Building 3, BIN C15700
Seattle, Washington 98115-0070
206-526-6835

8 REFERENCES

Attachment	Title	Date
<u>1</u>	NOS Hydrographic Surveys, Specifications and Deliverables	June 5, 2008
<u>2</u>	Survey Limits	June 5, 2008
<u>3</u>	Survey Titles	June 5, 2008
<u>4</u>	Effectuated Nautical Charts	June 5, 2008
<u>5</u>	Task Order Requirements	June 5, 2008
<u>6</u>	Predicted Tidal Zoning	June 5, 2008
<u>7</u>	Example - Danger to Navigation Report	June 5, 2008
<u>8</u>	Example - Progress Sketch	June 5, 2008
<u>9</u>	Example - Item Investigation Report	June 5, 2008
<u>10</u>	Example - Approval Sheet for the Descriptive Report	June 5, 2008
<u>11</u>	IT Security Requirements	June 5, 2008

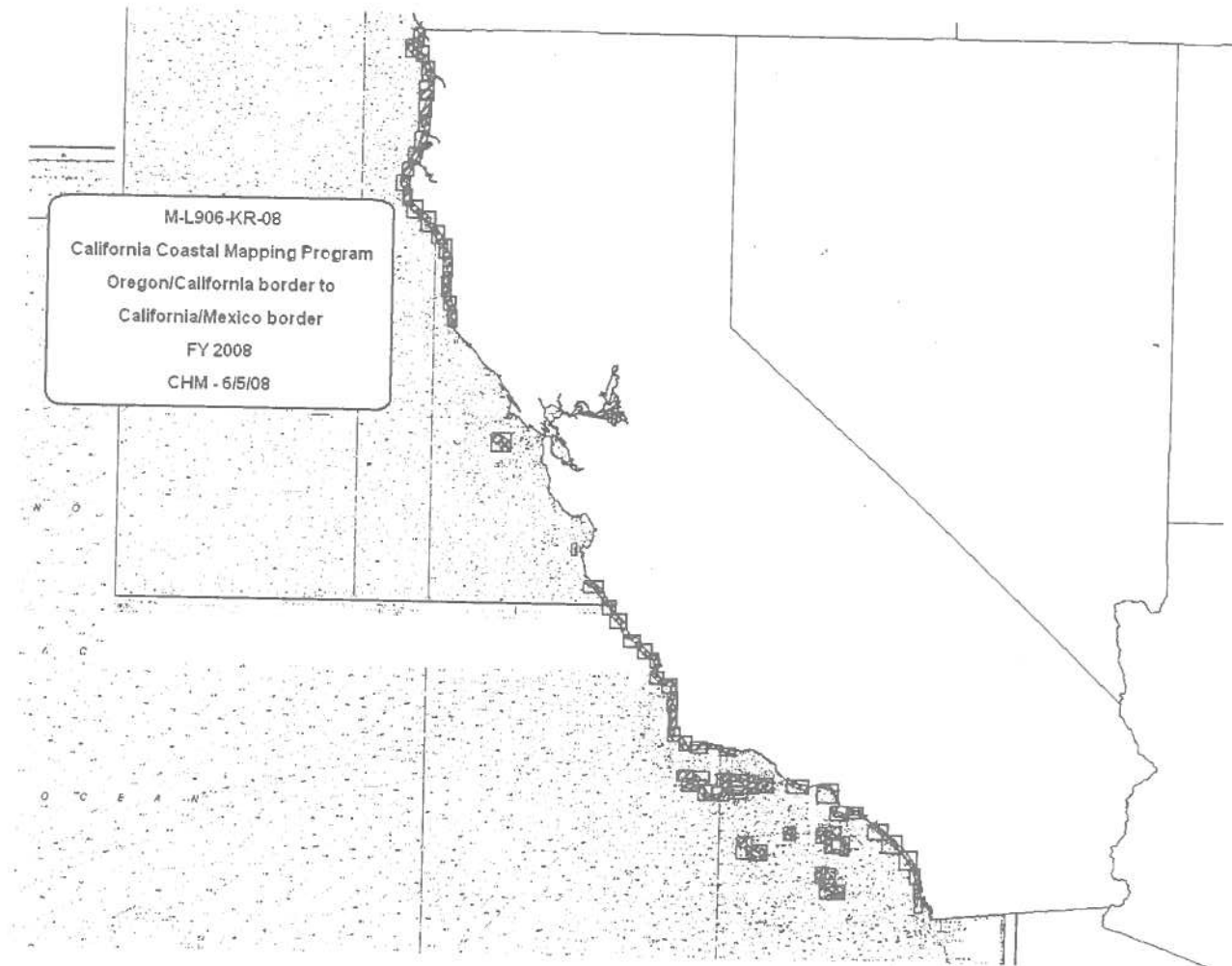
Attachment 1

NOS Hydrographic Surveys, Specifications and Deliverables

Work on this task order will be conducted per the NOS Hydrographic Surveys, Specifications and Deliverables dated April, 2007. This document may be viewed at:
<http://chartmaker.ned.noaa.gov/hsd/specs/Specs2007.pdf>

Attachment 2

Survey Limits



Attachment 3

Survey Titles

Sixty six survey sheets will be assigned between the Oregon/California state line to the north and the Mexico/California state line to the south. H numbers, geographic names and survey titles will be provided upon mobilization for this project.

Attachment 4

Effected Nautical Charts

During the course of data acquisition compare the present survey data from this project with the largest scale chart or charts covering each survey. Explain any discrepancies in Section D.1 of the Descriptive Report. Use the latest editions, corrected through the latest Notice to Mariners, of the following charts for comparison during this project.

Dates of Latest Editions are available at the following URL:
<http://chartmaker.ncd.noaa.gov/mcd/DOLE.htm>

Attachment 5

Task Order Requirements

SOW Reference	Description	Specific Requirement for Task Order
3.1	Areas with greater than 40 meters water depth	Complete MB per T.S. 5.1.2
3.1	Areas between 10 and 40 meters water depth	Object Detection MB per T.S. 5.1.2
	Sounding Units	Sounding data shall be acquired and recorded in meters with centimeter precision.
6.1	Descriptive Report	A Descriptive report is required for each assigned H survey.

Attachment 6

Predicted Tidal Zoning

1.0. TIDES AND WATER LEVELS

1.1. Specifications

Tidal data acquisition, data processing, tidal datum computation and final tidal zoning shall be performed utilizing sound engineering and oceanographic practices as specified in National Ocean Service (NOS) Hydrographic Surveys Specifications and Deliverables (April 2007).

1.2. Vertical Datums

The tidal datums for this project are Chart Datum, Mean Lower Low Water (MLLW) and Mean High Water (MHW). Soundings are referenced to MLLW and heights of overhead obstructions (bridges and cables) are referenced to MHW.

1.2.1. The operating National Water Level Observation Network (NWLON) stations at Crescent City, CA (9419750), North Spit, CA (9418767), Arena Cove, CA (9416841), Point Reyes, CA (9415020), Monterey, CA (9413450), Port San Luis, CA (9412110), Santa Barbara, CA (9411340), Santa Monica, CA (9410840), Los Angeles, CA (9410660), and San Diego, CA (9410170) will serve as datum control for this project. Therefore, it is critical that this station remain in operation during all periods of hydrography.

The contractor and the Center for Operational Oceanographic Products and Services (CO-OPS) are jointly responsible for ensuring that valid water level data are collected during periods of hydrography. The contractor is required to monitor the pertinent water level data via the CO-OPS Web site at <http://tidesandcurrents.noaa.gov/hydro.shtml> or through regular communications with the COTR or the COTR's CO-OPS authorized representative (Manoj Samant at 301-713-2897 x190 or via e-mail: Manoj.Samant@noaa.gov) before and during operations. The COTR or the COTR's CO-OPS authorized representative (Manoj Samant) will serve as liaison between the contractor and NOS/CO-OPS (CO-OPS) to confirm operation of these stations and to ensure the acquisition of valid water level data during periods of hydrography. Problems or concerns regarding the acquisition of valid water level data identified by the contractor shall be communicated with the COTR or the COTR's CO-OPS authorized representative (Manoj Samant) to coordinate the appropriate course of action to be taken such as gauge repair and/or developing contingency plans for hydrographic survey operations.

1.3. Tide Reducer Stations

1.3.1. The operating water level stations at Crescent City, CA (9419750), North Spit, CA (9418767), Arena Cove, CA (9416841), Point Reyes, CA (9415020), Monterey, CA (9413450), Port San Luis, CA (9412110), Santa Barbara, CA (9411340), Santa Monica, CA (9410840), Los Angeles, CA (9410660), and San Diego, CA (9410170) must be in operation during all periods of hydrography. See Section 1.2.1. for responsibilities.

No subordinate water level stations are required for this project, however, supplemental and/or back-up water level stations may be necessary depending on the complexity of the hydrodynamics and/or the severity of the environmental conditions of the project area. The installation and continuous operation of water level measurement systems (tide gauges) at subordinate station locations is left to the discretion of the contractor, subject to the approval of the COTR. If the contractor decides to install additional water level stations, then a 30-day minimum of continuous data acquisition is required. For all subordinate stations, data must be collected throughout the entire survey period for which they are applicable, and not less than 30 continuous days. This is necessary to facilitate the computation of an accurate datum reference as per NOS standards.

1.3.2 Tidal Records: If subordinate water level stations are installed, submit water level data, such as leveling records, field reports, and any other relevant data/reports, including the data downloaded onto diskette/CD within 1 week after the end of each month or the end of hydrography to CO-OPS/RDD. Refer to Section 1.1.

1.3.2.1. Tidal records should be forwarded to the following address:

NOAA/National Ocean Service/CO-OPS
Chief, Requirements and Development Division
N/OPS1 - SSMC4, Station 6531
1305 East-West Highway
Silver Spring, MD 20910

1.3.3. If subordinate water level stations are installed, recover all historical bench marks at each subordinate water level station. If any bench marks are destroyed or not found, install new bench marks to replace them. In the event of a new station with no historical marks, installation of a minimum of five bench marks will be required. Third-order levels from the tide staff or sensor to a minimum of five bench marks (including the primary bench mark) are required at the beginning and end of the survey period. See Section 1.1. for clarification of requirements.

1.4. Zoning

1.4.1. The water level stations at Crescent City, CA (9419750), North Spit, CA (9418767), Arena Cove, CA (9416841), Point Reyes, CA (9415020), Monterey, CA (9413450), Port San Luis, CA (9412110), Santa Barbara, CA (9411340), Santa Monica, CA (9410840), Los Angeles, CA (9410660), and San Diego, CA (9410170) are the reference station for predicted tides for hydrography along the California Coast. The time and height correctors listed below for applicable zones should be applied to the predicted tides at the station indicated during the acquisition and preliminary processing phases of this project. Predictions may be retrieved in one month increments over the Internet from the CO-OPS Home Page at <http://tidesandcurrents.noaa.gov/olddata> and then clicking on "Predicted Water Level". The contractor must notify the COTR or the COTR's authorized representative immediately of any problems concerning the predicted tides. Predictions are six-minute time series data relative to MLLW in metric units on Greenwich Mean Time. For the time corrections, a negative (-) time correction indicates that the time of tide in that zone is earlier than (before) the predicted tides at the reference station. A positive (+) time correction indicates that the time of tide in that zone is later than (after) the predicted tides at the reference station. For height corrections, the water level heights **relative to MLLW** at the reference station are multiplied by the range ratio to estimate the water level heights relative to MLLW in the applicable zone.

<u>Zone</u>	<u>Time Corrector(mins)</u>	<u>Range Ratio</u>	<u>Predicted Reference Station</u>
-------------	---------------------------------	------------------------	--

PAC2	0	x0.91	9410170
PAC3	0	x0.86	9410170
PAC7	+6	x0.87	9410660
PAC8	+6	x0.92	9410660
PAC9	+6	x0.97	9410660
PAC9A	0	x1.00	9410660
PAC10	0	x1.00	9410840
PAC11	-6	x1.01	9411340
PAC12	-6	x0.96	9411340
PAC13	+18	x0.87	9410660
PAC16	+6	x0.9	9411340
PAC17	+6	x0.96	9411340
PAC18	0	x1.00	9411340
PAC19	-6	x0.98	9412110
PAC20	-6	x0.92	9412110
PAC24	+6	x0.98	9412110
PAC24A	+42	x0.99	9411340
PAC25	-12	x0.99	9413450
PAC149	+6	x0.99	9413450
PAC150	+6	x1.05	9413450
PAC150A	+6	x1.00	9413450
PAC164	+6	x1.00	9415020
PAC165	0	x0.98	9415020
PAC166	0	x1.00	9416841
PAC167	+12	x1.01	9416841
PAC178	+18	x1.06	9416841
PAC179	-30	x0.91	9418767
PAC180	-12	x0.92	9418767
PAC189	-12	x0.96	9418767
PAC190	0	x0.98	9419750
PAC198	+6	x1.02	9419750
PAC198A	0	x1.01	9419750

1.4.2. Polygon nodes and water level corrections referencing Crescent City, CA (9419750), North Spit, CA (9418767), Arena Cove, CA (9416841), Point Reyes, CA (9415020), Monterey, CA (9413450), Port San Luis, CA (9412110), Santa Barbara, CA (9411340), Santa Monica, CA (9410840), Los Angeles, CA (9410660), and San Diego, CA (9410170) are provided. Zoning diagrams, created in MapInfo, are provided digitally to assist with the zoning. Longitude and latitude coordinates are in decimal degrees. Negative (-) longitude is a MapInfo representation of West longitude.

“Preliminary” data for the control water level stations, Crescent City, CA (9419750), North Spit, CA (9418767), Arena Cove, CA (9416841), Point Reyes, CA (9415020), Monterey, CA (9413450), Port San Luis, CA (9412110), Santa Barbara, CA (9411340), Santa Monica, CA (9410840), Los Angeles, CA (9410660), and San Diego, CA (9410170) , are available in near real-time and verified data will be available on a weekly basis for the previous week. These water level data may be obtained from the CO-OPS web site at <http://tidesandcurrents.noaa.gov/olddata>. From this site, click on “Water Level Observations” to obtain preliminary or verified/historical water level data.

Please contact the Office of Coast Survey COTR **before** survey operations begin and **once survey operations are completed** so that the appropriate CO-OPS NWLON (National Water Level Observation

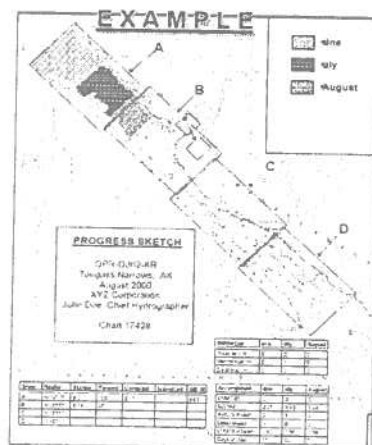
-Attachment 9

Example Progress Sketch

Provide a digital progress sketch in MapInfo[®] format (workspace and tables), or as an Adobe Acrobat .pdf. E-mail to progress.sketches@noaa.gov and to the COTR within 5 calendar days after the end of the month.

The statistics block contains monthly columns showing, in rows, the following items, if applicable:

- Lineal nautical miles of sounding lines with separate statistics for the ship vice launches; if multiple sensors are used (SSS/single beam or SSS/MB) the miles should be reported separately along with indication of the sensors used. NOTE: Lineal nautical miles of shoreline/nearshore buffer lines (with or without sonar) should be included with the statistics for single beam.
- Square nautical miles of each survey sheet completely surveyed (the sum of all the monthly progress sketches for the survey should approximately equal the final total area surveyed at the end of the project).
- Number of bottom samples collected
- Number of items investigated including those from the Automated Wreck and Obstruction Information System (AWOIS) and newly discovered items that require additional field work.
- Number of tide gauges installed/removed
- Number of days of down time due to weather
- Number of days of down time due to equipment
- Number of days of down time for other reasons
- Number of days field unit was on site working on project (for instance, the field unit may have departed on the 15th, meaning the monthly progress sketch only reflects 15 days of work)



Attachment 10

Example Item Investigation Report

Item Description (as charted):

Source:

Charted Position:

Charts Affected:

Investigation

Date(s)/Day Number(s):

Survey Vessel Name:

Position Numbers/ Time:

Investigation Method:

Surveyed Position (NAD83):

Position Determined By:

Investigation Summary:

Charting Recommendation

Recommended Least Depth:

Office Use:

Attachment 11

Example Approval Sheet for the Descriptive Report

LETTER OF APPROVAL

REGISTRY NO. H-12345¹

This report and the accompanying data are respectfully submitted.

Field operations contributing to the accomplishment of survey H-12345² were conducted under my direct supervision with frequent personal checks of progress and adequacy. This report and associated data have been closely reviewed and are considered complete and adequate as per the Statement of Work.

<Name>³
Hydrographer
<Firm>⁴
Date

-
- 1 Use the registry number assigned to the survey.
 - 2 Use the registry number assigned to the survey.
 - 3 Enter name of the Hydrographer.
 - 4 Enter name of the Contractor's firm.

Attachment 12

IT Security Requirements

The Contractor is required to meet the DOC IT Security Program Policy & Minimum Implementation Standards (<http://www.osec.doc.gov/cio/ITSIT/DOC-IT-Security-Program-Policy.htm>).

The Contractor is required to meet Department of Commerce's *IT Security Program Policy & Minimum Implementation Standards* IT Security requirements for certification and accreditation (C&A) of the contractor system (for more information, see DOC ITSPP section 6.2.1 at http://www.osec.doc.gov/cio/ITSIT/DOC-IT-Security-Program-Policy.htm#P919_108188, and Appendix H at http://www.osec.doc.gov/cio/ITSIT/DOC-IT-Security-Program-Policy.htm#P4608_441377) as well as their responsibilities for participating in the development of a System Accreditation Package (SAP) (for more information, see DOC ITSPP section 6.5.2 at http://www.osec.doc.gov/cio/ITSIT/DOC-IT-Security-Program-Policy.htm#P1167_151660).

The COTR and the Contractor must determine the security impact level of the IT system as High, Moderate, or Low (for more information, see DOC ITSPP section 3.4.1, online at http://www.osec.doc.gov/cio/ITSIT/DOC-IT-Security-Program-Policy.htm#P537_59784) as outlined in NIST FIPS-199 (<http://csrc.nist.gov/publications/fips/fips199/FIPS-PUB-199-final.pdf>).

The COTR and the Contractor must ensure that a federal program official is appointed to formally authorize operation of the system in accordance with DOC ITSPP section 6.2.5 (online at http://www.osec.doc.gov/cio/ITSIT/DOC-IT-Security-Program-Policy.htm#P1039_123891).

The Contractor must provide timely submission of deliverables, compliance with personnel screening requirements (if applicable), maintenance of secure system configurations and participation in annual IT security assessments to ensure compliance with SAP, and appropriate termination activity as appropriate. Annual assessments are required by DOC ITSPP section 5.5.2 (online at http://www.osec.doc.gov/cio/ITSIT/DOC-IT-Security-Program-Policy.htm#P855_98182).

The Contractor must consider IT Security controls throughout the lifecycle of this contract as outlined in NIST Special Publication 800-64 (<http://csrc.nist.gov/publications/nistpubs/800-64/NIST-SP800-64.pdf>).

Exhibit 2 to Annex 1 (MOA-2008-031/7648)
Terms and Conditions of Annex 1

1. Annex 1 shall become effective when STD 213A, incorporating Annex 1, is signed by both parties and approved by the California Department of General Services.
2. Annex 1 is in furtherance of the cooperative efforts of the State of California and the United States to complete comprehensive California coastal ocean surveying. Annex 1 covers coastal ocean surveying work that serves both the purposes and objectives of the SCC (for the Ocean Protection Council Seafloor Mapping Program) and those of NOS (for updating nautical charts) and identifies the specifications that are relevant to each of the parties' purposes and objectives. To the extent that work under Annex 1 is to serve the purposes and objectives of NOS, NOS will provide to FUGRO funding for that work, in the total amount of up to \$3,000,000 (the "NOS additional funding").
3. FUGRO was selected as a qualified Federal contractor for the type of surveying services being provided under this amendment, based on its experience and qualifications, under the competitive selection process described in paragraph I.C. of Exhibit A (Scope of Work) of the Umbrella Agreement.
4. The Geospatial Surveying Services will be provided to the SCC by NOS for the fixed price of \$8,000,000. The fixed price is based on the Government Cost Estimate (Exhibit 3) and incorporated by this reference. The Government Cost Estimate has been determined from the 2008 costs of services submitted to NOS by FUGRO, in connection with its retention as a qualified Federal surveying contractor. The Government Cost Estimate identifies the respective funding to be provided by the SCC (\$5,000,000) and by NOS (\$3,000,000).
5. On or after the effective date of STD 213A, and upon the submission by NOS of a written invoice requesting payment under this agreement and Annex 1, the SCC shall make an advance payment to NOS of \$5,000,000. NOS shall state on the invoice its name and address, the number of this agreement and a reference to "Annex 1", the date of the submission, and the amount of the funds to be advanced. The invoice shall be signed by an authorized representative of NOS.
6. Following the disbursement of the advanced funds, the SCC shall not be obligated to make any further disbursements to NOS under this agreement, except as authorized and agreed by the parties through a subsequent amendment .
7. The advanced funds shall be separately accounted for by NOS and shall be used by NOS, along with the NOS additional funding, solely to provide the Geospatial Surveying Services.
8. Within 90 days of completion of the Geospatial Surveying Services work under Annex 1, NOS shall submit a final accounting to the SCC of costs incurred for all work for which

the advanced funds were disbursed to FUGRO. The Executive Officer of the SCC shall review and approve the final accounting provided by the NOS.

9. The data that is collected or produced through the Geospatial Surveying Services under Annex 1 will be provided to NOS by FUGRO through the submission of the data to the National Geophysical Data Center (NGDC). Subsequently, NGDC (or any successor approved by NOS and the SCC) will store, maintain and make available to the general public the digital data on behalf of NOS. NOS shall ensure that NGDC uses appropriate technology and procedures to store, secure, back-up, maintain and protect the data. Throughout that time period, NOS shall provide, or cause NGDC or its successor to provide, the SCC, or any entity or person designated by the SCC, access to the digital data or any portion of it, upon request of the SCC and without cost to the SCC. The SCC may request that a copy of the data or access to the data be provided through any reasonable means or in any reasonable format.
10. The scope of the Geospatial Surveying Services work under this amendment is based on the level of funding that the SCC is currently authorized to expend for this aspect of the Ocean Protection Council Seafloor Mapping Program and for the surveying services to be provided under this agreement. If additional funding is authorized, the parties anticipate that the term of the agreement will be extended and the scope of coastal ocean surveying work will be revised by subsequent amendment to Annex 1 [NOAA will confirm this is approach].

Exhibit 3 to Annex 1 (MOA-2008-031/7648)

**Government Cost Estimate
Fugro Pelagos
M-L906-KR-08
Contract DG133C-08-CQ-0002 – Task Order 2**

M-L906-KR-08 is a cooperative project between NOAA's Office of Coast Survey (OCS) and the California State Coastal Conservancy (SCC). The project is primarily funded through a Memorandum of Agreement (SCC Agreement # 07-083; NOAA MOA-2008-031/7648) between NOAA and SCC. Under this agreement, SCC will initially provide \$ 5,000,000 (current Annex 1) and, subject to authorization of the California Ocean Protection Council (OPC) and appropriation of funding to the OPC in state Fiscal Year 2008-09, SCC will subsequently provide an additional \$6,500,000 in funding for hydrographic surveying in the state waters of California. The resultant data will be used by SCC and other agencies to create habitat maps and seamless models of the shore and sea interface. These data will also be used to update nautical charts that fall within the survey area of this project.

NOAA will provide \$3,000,000 to fund additional efforts necessary to bring the survey and resulting products to nautical charting standards. This includes mobilization/demobilization costs and the additional costs needed to conduct cross lines and provide specific methods of processing and navigational data products.

Under Annex 1, Task Order 2 (which is the mechanism between FUGRO and NOAA to undertake work) consists of sixty-six survey sheets located in the state waters of California (from the 10-meter isobath seaward to the three nautical mile state line) between the Oregon border to the north and the Mexican border to the south. The total survey area is estimated to be 2457 square nautical miles (SNM). Approximately 1068 SNM (44%) will be assigned under the current Annex 1 and this Task Order with the remaining 1389 SNM (56%) to be added via a modification upon receipt of the balance of SCC funds (see Table, page 3).

SCC will provide the \$11,500,000 in two payments: \$5,000,000 on or about June 30, 2008 and \$6,500,000 in state FY 2008-09 if funds are appropriated to SCC by the state legislature and subject to OPC authorization. Upon receipt of the additional \$6,500,000, Task Order 2 will be modified to add these funds and the remaining survey area (approximately 1389 SNM).

Based on historical NOAA hydrographic services contracting rates for the complexity of the survey to be conducted, the estimated price per SNM is \$5900. It is estimated that \$1220 of this amount can be attributed to bringing the data

and the resultant products to nautical charting standards. Therefore, the estimated cost of Task Order 2 is \$6,300,000 (1068 square nautical miles x \$5900 per SNM) of which \$5,000,000M is the estimated cost to SCC.

Summary of Estimated Rates/Costs

Task Order 2

	<u>Rate</u>	<u>Survey Area</u>	<u>Cost</u>
CSSC	\$4680/SNM	1068 SNM	\$ 5.0M
NOAA	\$1220/SNM	1068 SNM	\$ 1.3M
Total	\$5900/SNM	1068 SNM	\$ 6.3M

Task Order 2 (Mod)

	<u>Rate</u>	<u>Additional Survey Area</u>	<u>Cost</u>
CSSC	\$4680/SNM	1389 SNM	\$ 6.5M
NOAA	\$1220/SNM	1389 SNM	\$ 1.7M
Total	\$5900/SNM	1389 SNM	\$ 8.2M

Total	\$5900/SNM	2457 SNM	\$11.5M (CSSC) \$ 3.0M (NOAA)
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The following is the estimated budget for the SCC initial funding of \$5,000,000:

Direct Labor	\$1,551,790
Direct Expenses	<u>\$3,448,210</u>
Total Costs	\$5,000,000

Rate and cost variations from one Task Order to another can be due to many factors, such as complexity and location of survey area, expected vessel traffic which disrupts survey operations, time of year which may increase weather downtime, amount of mobilization required, and depth of water which affects line spacing, among others. The survey area for this Task Order is within the state waters of California which are relatively steep and deep. This requires wide line spacing to achieve the coverage required in the Statement of Work (SOW) and therefore a significant decrease to the overall cost when compared to survey areas which are relatively flat with the same depths throughout.