

**INSTALLATION OF CATHODIC PROTECTION FOR
SEVENTEEN (17) ELEVATED WATER TANKS
ON EGLIN AIR FORCE BASE, FLORIDA**



BID #: MIL 01-13

BIDS DUE: MAY 30, 2013 @ 3:05 P.M.

NOTICE TO BIDDERS

Notice is hereby given that the Board of County Commissioners of Okaloosa County, FL, will accept sealed bids until **3:05 p.m.** (local time) **May 30, 2013, for seventeen (17) elevated water tanks on Eglin Air Force Base, Florida.** Pursuant to copies of bid provisions, bid forms, and specifications may be obtained from the Okaloosa County Purchasing Department, 602-C North Pearl Street, Crestview, FL 32536; 850-689-5960 or they may be downloaded from our website at www.co.okaloosa.fl.us (Departments, Purchasing, Vendor Registration & Opportunities).

At **3:05 p.m.** (local time), **May 30, 2013**, the bids will be opened and read aloud. All bids must be in sealed envelopes reflecting on the outside thereof the bidder's name and **"Bid on installation of Cathodic Protection for seventeen (17) elevated Water Tanks on Eglin Air Force Base, Florida to be opened at 3:05 p.m., May 30, 2013"**. The Board of County Commissioners will consider all bids properly submitted at its scheduled Bid Opening in the Conference & Training Room #305 located at 302 N. Wilson St, Crestview, FL 32536. Bids may be submitted in the Conference & Training Room #305, prior to Bid Opening or delivered to the Clerk of Circuit Court, 302 N. Wilson St., #203, Crestview, FL 32536.

A mandatory pre-bid meeting will be held on Wednesday, May 22, 2013 from 9:00 – 11:00 a.m. in the Main Conference Room @ Bldg 634, Eglin Air Force base (See map – part of Bid package).

Bidders can contact **June M. Crockett @ 850-882-0288, E-mail: June.Crockett@eglin.af.mil or Michael.Hoover.11@us.af.mil (850-882-9379).**

There is no obligation on the part of the County to award the bid to the lowest bidder, and the County reserves the right to award the bid to the bidder submitting a responsive bid with a resulting negotiated agreement which is most advantageous and in the best interest of Okaloosa County, and to waive any irregularity or technicality in bids received. Okaloosa County shall be the sole judge of the bid and the resulting negotiating agreement that is in its best interest and its decision shall be final.

Any bidder failing to mark outside of envelope as set forth herein may not be entitled to have their bid considered.

All bids should be addressed as follows:

Clerk of Circuit Court
Attn: Gary Stanford
Newman C. Brackin Bldg.
302 N. Wilson St. #203
Crestview FL 32536

Richard L Brannon
Purchasing Director

Date

BOARD OF COUNTY COMMISSIONERS
OKALOOSA COUNTY

Don Amunds
Chairman

**U. S. AIR FORCE
EGLIN AIR FORCE BASE, FLORIDA**

STATEMENT OF WORK

FTFA 09-1093

**INSTALLATION OF CATHODIC PROTECTION FOR
SEVENTEEN (17) ELEVATED WATER TANKS ON
EGLIN AIR FORCE BASE, FL**

GENERAL

PERFORMANCE TIME – The performance time for this project shall be 180 calendar day maximum.

INTERRUPTIONS – It may become necessary from time to time for the Government to stop the contractor from working due to high priority or sensitive missions. The contractor will cease the work as directed by Contracting Officer only. For each calendar day and/or portion of a calendar day the contractor is removed from the job site, the contract schedule will be adjusted accordingly.

RESTROOMS – Contractor is responsible for supplying restroom facilities for their staff. Contractor shall not have access to facility restrooms.

POINTS OF CONTACT – The following personnel shall be coordinated with:

- | | |
|---------------------------------|--------------------------------|
| ✦ Project Engineer/Manager: | James Mitchell, 850-883-1314 |
| ✦ Project Inspector: | Mike Hamilton, 850-893-4163 |
| ✦ Water Utility Operator: | Barry Skipp, 850-882-3783 |
| ✦ Confined Space Program: | Elizabeth Martin, 850-882-7350 |
| ✦ Cathodic Protection Engineer: | James Mardis, 850-883-4809 |

PROJECT REPORT TO INSPECTOR – The contractor shall submit weekly Progress Reports to the Government Inspector on AF Form 3065 beginning the week of the Notice to Proceed.

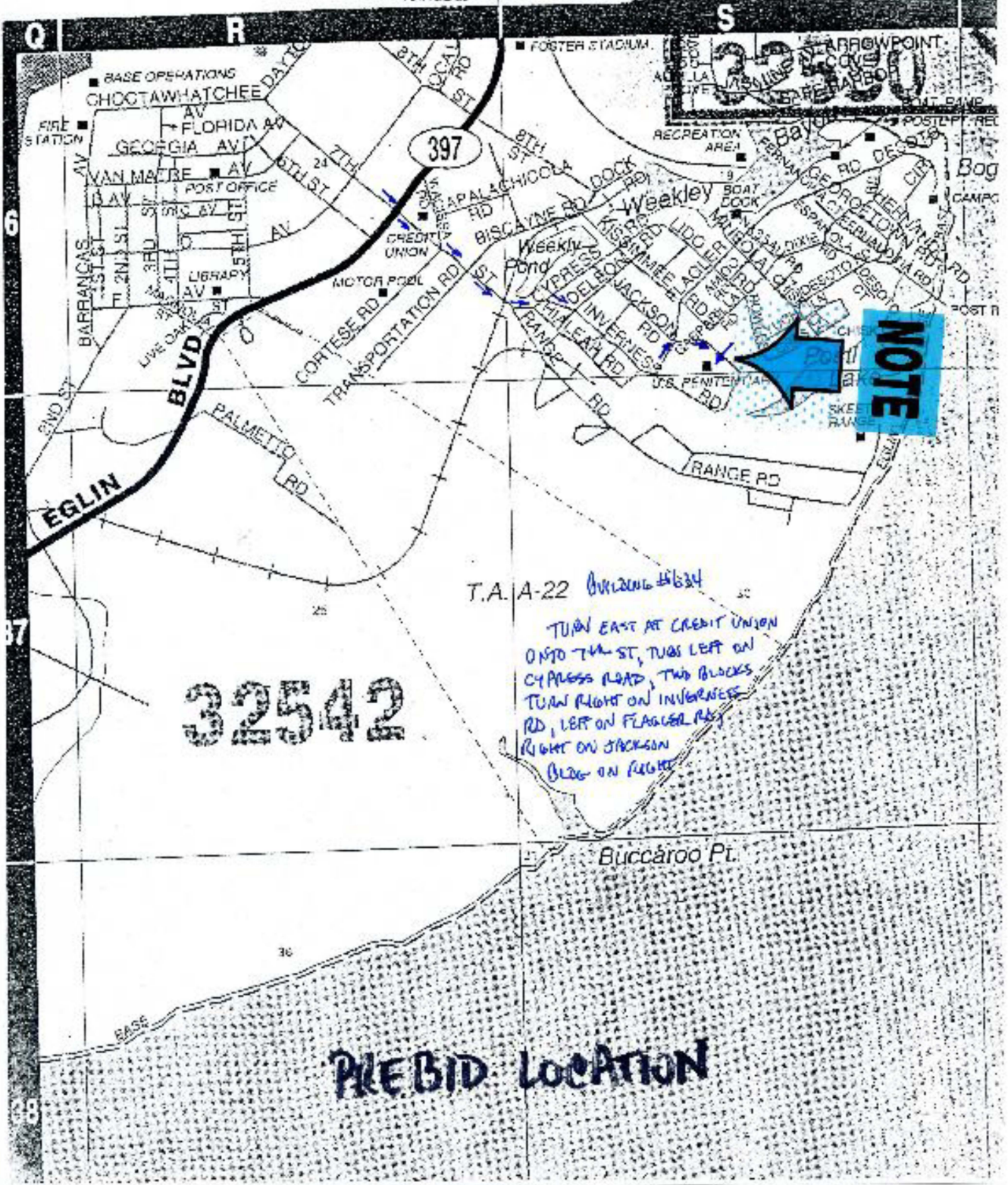
SUPERINTENDENT – Upon notification of award, the Prime Contractor must identify a superintendent and alternate for this contract and job site and provide to the Government Inspector. The Prime Contractor's superintendent and/or alternate shall be accountable for all individuals allowed onto the installation. The privilege of a potential employee being allowed access should be considered in all hiring and subcontracting decisions. The U. S. Air Force will not be responsible or liable for any costs or delays that a contractor incurs due to a contractor's employee being denied access to Eglin AFB. The Superintendent and/or alternate shall be responsible for collecting badges/PVC cards from all employees upon completion of the project/contract or termination of service. Prior to final payment, the Superintendent must provide proof to the Okaloosa County and the Government of collection/turn-in of all badges for employees granted base access in support of this project/job.

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EGLIN EAST GATE
VALPARAISO/NICEVILLE

EGLIN

RANGE 22 W | RANGE 22 W

SEC MAP 36



32542

NOTE

T.A. A-22 Building #1634
TURN EAST AT CREDIT UNION
ONTO 24th ST, TURN LEFT ON
CYPRESS ROAD, TWO BLOCKS
TURN RIGHT ON INVERNESS
RD, LEFT ON JACKSON
RIGHT ON JACKSON
BLOG ON RIGHT

PRE BID LOCATION

ATTACHMENT 1

PERFORMANCE CONDITIONS

1. **SPECIAL PROCEDURES FOR PAYMENT OF UTILITY SERVICES** – When the Government elects to receive in-kind consideration in the form of payment for utility services that are provided by a third party, as authorized by the Enabling Statute, the Government shall have the right to direct the Trustee to disburse funds from the IKC account directly to the third party utility provider in payment for such services, with notice of such disbursement to the County.
2. **ASSIGNMENT & SUBCONTRACTING**
 - 2.1.1 All contracts shall specifically require the contractor to comply with all the terms and conditions of this agreement and conditions set forth in the Performance Conditions and/or Statement of Work and any conditions set forth in the Counties contract vehicles, for the benefit of the Government.
 - 2.1.2 All federal, state and local laws, rules, regulations, ordinances, codes, orders and other enforceable governmental standards and requirements, applicable to the county, the services of the Scope of Work (SOW) and “**Applicable Laws.**” Applicable laws include, without limitation, Government & Installation rules, regulations, policies and procedures pertaining to access and security, health, safety, environmental protection, and cultural and natural resources protection.
 - 2.1.3 All principles, practices and standards of due care, skill and diligence normally practiced by recognized firms in performing services or providing products of a similar nature to those required under this agreement.
 - 2.1.4 The contractor shall use reasonable care to avoid damaging existing buildings, equipment, and vegetation on the installation. If the contractor’s failure to use reasonable care causes damage to any of this property, the contractor shall replace or repair the damage at no expense to the Government as the Government directs. If the contractor fails or refuses to make such repair or replacement, the contractor shall be liable for the cost, which may be deducted from the site work agreement price.
 - 2.1.5 The contractor shall attend project site visits, planning meetings, preconstruction conferences, inspections or other meetings as reasonably required by the government.
- 2.2 **CHANGE DIRECTIVE**
 - 2.2.1 The Government may issue a **Change Directive** ordering changes to this SWA event if such changes may impact the price. A change directive shall include the Government’s proposed methods for adjusting the Schedule and Price.
 - 2.2.2 If contractor agrees with the proposed adjustment in the Task Schedule and Task Price, the contractor shall carry out a Change Directive in the time frame specified in the request.

2.3 CHANGE ORDER

- 2.3.1 Either party may request changes in a SWA by submitting to the other party a proposed **Change Order** in a form approved by the Government. The other party shall have ten (10) calendar days from receipt of the proposed change order either to accept or reject the proposed Change Order in writing; provided, however, that any proposed change order now expressly accepted in writing within ten (10) days of receipt shall be deemed rejected.
- 2.3.2 Whether submitting or responding to a proposed change order, the contractor shall provide a proposed adjustment in the Task Price and shall state the impact in terms of calendar days of the proposed change order on the Task Schedule.

3. CONTRACTOR'S QUALITY CONTROL

- 3.1 The contractor is responsible for quality control and shall establish and maintain an effective quality control system. The quality control system shall consist of plans, procedures, and organization necessary to manage all SWA's to product end products which comply with the Standards. The system shall cover all construction operations, both on-site and off-site, and shall be keyed to the proposed construction sequence.

4. ACCESS

- 4.1 The government and its representatives, agents, and employees shall have access to the project site during performance of the services for purposes of monitoring, observing, making inquiries, taking samples of materials for testing, as well as such other matters as the government deems to be reasonably necessary for the government to determine compliance with standards.
- 4.2 The parties expressly understand and agree that: (1) any inspection activity by the government shall not relieve the contractor of his responsibility for completing the project in accordance with the standards; (ii) failure of the government to make any on-site inspections or conduct any testing shall not limit, or be construed to limit, any of the government's rights under this agreement; and (iii) no action by the government shall be deemed to be confirmation that any improvements shown in design plans approved by the government comply with the standards.

5. PERFORMANCE SECURITY

- 5.1 The contractor must show evidence to the government that payment and performance bonds are in place with respect to construction work to be undertaken. Each of the bonds must: (i) be issued by a qualified surety (as defined below); (ii) be in a form satisfactory to the government and run in favor of the government; (iii) be in the amount of the task price; (iv) guarantee the performance of the contract for the construction of improvements in accordance with the standards; and (v) provide that the government is an obligee on such bonds.
- 5.2 A "**Qualified Surety**" is a corporate surety or insurer authorized to do business, and to issue bonds for construction payment and performance, in the state of Florida

and possessing a long term unsecured debt rating acceptable to the government in its reasonable discretion.

- 5.3 **Warranty** – In addition to any other warranties in this agreement, the contractor warrants that work performed under this agreement confirms to the Standards and is free of any defect in equipment, material, or design furnished, or workmanship performed by the contractor or any contractor or supplier at any tier. Warranties shall continue for a period of one (1) year (unless a time otherwise agreed upon between both parties is established) from the date of final acceptance of the work. If the government takes possession of any part of the work before final acceptance, the warranty shall continue for a period of one (1) year from the date the government takes possession.

6. HAZARDOUS MATERIALS (IF APPLICABLE)

- 6.1 **“Hazardous Substances”** means any substance:
- 6.1.1 the presence of which requires reporting, investigation, removal and remediation under any applicable laws;
 - 6.1.2 that is defined as a pollutant, contaminant, dangerous substance, toxic substance, hazardous or toxic chemical, hazardous waste or hazardous substance under any applicable laws;
 - 6.1.3 that is toxic, explosive, corrosive, flammable, ignitable, infectious, carcinogenic or otherwise hazardous and is regulated by or forms the basis of liability under any applicable laws;
 - 6.1.4 the presence of which on the site of adjacent property causes or threatens to cause a nuisance upon the site or adjacent property or poses or threatens to pose a hazard to health or safety of persons on or about the site of adjacent property;
 - 6.1.5 that contains gasoline, diesel fuel or other petroleum hydrocarbons, including crude oil and fractions thereof, natural gas, synthetic gas and any mixtures thereof;
 - 6.1.6 that contains asbestos and/or asbestos-containing materials;
 - 6.1.7 that contains polychlorinated biphenyls (PCBs), or PCB-containing materials or fluids, or
 - 6.1.8 that is waste generated by the contractor in the performance of the services, such as equipment/machine oils, fuels, oily debris, shop rags, paints, paint residue, solvents and any containers in which substances described in this section were or are stored.
- 6.2 **PRE-EXISTING HAZARDOUS SUBSTANCES** – Contractor shall not be required to perform any services relating to hazardous substances uncovered or revealed at the project site and (i) not brought to the site by the contractor or its subcontractors and (ii) now shown or indicated in any drawings or specifications or identified in a WOA to be within the scope of the services. The government

shall not be responsible for any Hazardous Substances Services. The government shall not be responsible for any hazardous substances brought to the site by the contractor, its contractors or anyone else for whom the contractor is responsible.

6.3 **REMEDICATION WITHIN SCOPE OF SERVICES** – If the remediation of any hazardous substances is included in the scope of the services for a project, the contractor shall perform such services in strict compliance with the standards.

6.4 **HAZARDOUS SUBSTANCES USED OR GENERATED BY CONTRACTOR**

6.4.1 With the written consent of the government, the contractor shall promptly and at the contractor's sole expense take any and all necessary remedial actions in response to the presence, storage, use, disposal, transportation or discharge of any hazardous substances used or generated by the contractor or its subcontractors or other persons subject to its control on, under or about the site.

6.4.2 The government's prior written consent shall not be necessary in the event that the presence of hazardous substances on, under or about the site either (i) poses an immediate threat to the health, safety or welfare of any individual or (ii) is of such a nature that an immediate remedial response is necessary and it is not possible to obtain the government's written consent prior to undertaking such action.

6.4.3 Contractor shall promptly notify the government of any event or occurrence known to the contractor, whether occurring on the site or nearby lands, which causes or poses a risk of contamination to the site or of the air or water on, under or near the site with any hazardous substances as a result of the activities of the contractor or its subcontractors.

6.4.4 In the event that contractor undertakes any remedial action with respect to any hazardous substances on, under or about the site, the contractor shall immediately notify the government of such remedial action, and shall conduct and complete all remedial actions in accordance with the standards.

7. TERMINATION FOR CONVENIENCE OF GOVERNMENT

7.1 The government may terminate a WOA, in whole or in part, at any time and for any reason upon giving contractor not less than thirty (30) days notice of its intention to do so under this section.

7.2 Upon receipt of a termination notice, the contractor shall:

7.2.1 Immediately cease performance of the services in accordance with, but only to the extent specified in, the termination notice;

7.2.2 Immediately take all possible action to ensure the safety of all personnel and the project of the project;

- 7.2.3 Immediately take all possible action to mitigate any liabilities incurred by it as a result of such termination, and
- 7.2.4 Take any other action reasonably required by the government in relation to the termination.
- 7.3 On the date of termination specified in the termination notice, the contractor shall:
 - 7.3.1 Provide the government with a detailed report in such form as the government may require in relation to the services performed up to and including the date of receipt of the termination notice;
 - 7.3.2 Return to the government any government-furnished information;
 - 7.3.3 Offer the government the option to purchase any of the contractor's equipment used on site exclusively for the project, to be purchased by the government at its depreciated value or such other value as agreed by the parties; and
 - 7.3.4 Take any other action relating to the termination of the WOA as the government may reasonably require.
- 7.4 Following termination of a project by the government pursuant to this section, upon submission of a payment application and invoice pursuant to section 17 or these performance conditions, "payment for services", contractor shall be entitled to reimbursement from the IKC account for all services supplied prior to termination, all reasonable out-of-pocket expenses which contractor has incurred or will incur solely as a result of the termination and which it is unable to otherwise recover or mitigate.
- 7.5 The amounts outlined above represent the only amount or liabilities recoverable by contractor following termination of a Task Order by the government in accordance with this section.
- 7.6 If the government terminates the WOA, the contractor shall at its cost:
 - 7.6.1 Cease performance of the services;
 - 7.6.2 Continue to ensure the safety of all personnel and the protection of all property;
 - 7.6.3 Immediately take all possible action to mitigate any liabilities incurred by it as a result of such termination;
 - 7.6.4 Provide the government with a detailed report in such form as the government may require in relation to the services performed up to and including the WOA termination date;
 - 7.6.5 Return to the government any government-furnished information and government furnished property issued to the contractor during the performance of the services;

- 7.6.6 If directed by the government to do so, assign in favor of the government's nominee any subcontracts or rights under any subcontracts entered into or obtained by the contractor in connection with the carrying out of the services; and terminate any other outstanding subcontracts and recover from the subcontractors any items issued to the subcontractor by the contractor or the government during the performance of the services;
- 7.6.7 Provide the government with any deliverables, designs and other documentation prepared by or on behalf of the contractor; and
- 7.6.8 Take any other action reasonably required by the government in relation to the termination.

MANDATORY CLAUSES

CONTRACT WORK HOURS & SAFETY STANDARDS ACT – OVERTIME COMPENSATION

- (a) **APPLICABILITY** – This clause shall apply only in the case of projects undertaken by the contractor for the construction of a public building or public work to be delivered by the contractor to the government as in-kind consideration as set forth in the lease. “Public building or public work” means a building or work the construction of which is carried on directly or indirectly by authority of, or with funds of, a federal agency to serve the interest of the general public regardless of whether title thereof is in a federal agency.
- (b) **OVERTIME REQUIREMENTS** – No contractor or subcontractor contracting for any part of the applicable work which may require or involve the employment of laborers or mechanics shall require or permit any such laborers or mechanics in any work week in which the individual is employed on such work to work in excess of 40 hours in such work week unless such laborer or mechanic receives compensation at a rate not less than 1 ½ times the basic rate of pay for all hours worked in excess of 40 hours in such work week.
- (c) **VIOLATION; LIABILITY FOR UNPAID WAGES; LIQUIDATED DAMAGES** – In the event of any violation of the provisions set forth in paragraph (b) of this clause, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under lease for the District of Columbia or a territory, to such district or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions set forth in paragraph (b) of this clause in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by provisions set forth in paragraph (b) of this clause.
- (d) **WITHHOLDING FOR UNPAID WAGES & LIQUIDATED DAMAGES** – The government shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of applicable work performed by the contractor or subcontractor under this agreement or any other federal contract with the same contractor, or any other federally-assisted contract subject to the Contract Work Hours & Safety Standards Act which is held by the same contractor, such sums as may be determined to be necessary to satisfy any

liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions set forth in paragraph (c) of this clause.

(e) **PAYROLLS & BASIC RECORDS**

(1) The contractor or subcontractor shall maintain payrolls and basic payroll records during the course of accomplishing the applicable "in kind" work and shall preserve them for a period of 3 years from the completion of the construction for all laborers and mechanics working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classification, hourly rates or wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Nothing in this paragraph shall require the duplication of records required to be maintained for construction work by Department of Labor regulations at 29 CFR 5.5 (a)(3) implementing the Davis-Bacon Act.

(2) The records to be maintained under paragraph (e)(1) of this clause shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Government Representative or the Department of Labor. The contractor or subcontractor shall permit such representatives to interview employees during working hours on the job.

(f) **SUBCONTRACTS** – The contractor or subcontractor shall insert in any applicable subcontract exceeding \$100,000 the provisions set forth in paragraphs (b) through (f) of this clause and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts. The contractor shall be responsible for compliance by lower tier subcontractor with the provisions set forth in paragraphs (b) through (f) of this clause.

SECTION 1.01 DAVIS-BACON ACT

The Davis-Bacon Act shall apply only in the case of projects undertaken by the contractor or subcontractor, for the construction of a public building or public work to be delivered by the contractor to the government as in-kind consideration as set forth in the lease agreement. "Public building or public work" means a building or work the construction of which is carried on directly or indirectly by authority of, or with funds of, a Federal agency to serve the interest of the general public regardless of whether title thereof is in a Federal agency. The government's involvement in the oversight of the Davis-Bacon Act requirement will be limited to monitoring the contractor's responsibilities only during the applicable construction period(s). This oversight involves validating the contractor ensures that the wage rates paid to all classes of laborers or mechanics employed or working on the site are in compliance with the Davis-Bacon wage classifications and standards.

SECTION 1.02 WITHHOLDING OF FUNDS

(a) **APPLICABILITY** – This clause shall apply only in the case of projects undertaken by the contractor for the construction of a public building or public work to be delivered by the contractor to the government as in-kinds consideration as set forth in the lease. "Public building or public work" means a building or work the construction of which is carried on directly or indirectly by authority of, or with funds of, a federal agency to serve the interest of the general public regardless of whether title thereof is in a federal agency.

- (b) The government shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this lease or any other Federal contract with the same contractor, or any other Federally assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanics, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the government, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

SECTION 1.03 PAYROLL & BASIC RECORDS

- (a) **APPLICABILITY** – This clause shall apply only in the case of projects undertaken by the contractor for the construction of a public building or public work to be delivered by the contractor to the government as in-kind consideration as set forth in the lease. “Public building or public work” means a building or work the construction of which is carried on directly or indirectly by authority of, or with funds of, a federal agency to serve the interest of the general public regardless of whether title thereof is in a federal agency.
- (b) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the applicable “in kind” construction work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such workers, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1 (b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found that the wages of any laborer or mechanic(s) include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in action 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. The contractor agrees that it and subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration or apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (c) (1) The contractor shall submit weekly for each week in which any lease work is performed a copy of all payrolls to the government. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Option form WH-347 (Federal Stock #029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC

20402. The contractor is responsible for the submission of copies of payrolls by all subcontractors.

- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance" signed by the contractor or his or her agent who pays or supervises the payment of the persons employed under the lease and shall certify –
 - (i) That the payroll or the payroll period contains the information required to be maintained under paragraph (b) of this clause and that such information is correct and complete:
 - (ii) That each laborer or mechanic (including each helper), apprentice, and trainee) employed on the lease during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29, CFR Part 3; and
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.
- (4) The falsification of any of the certifications in this clause may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 or Title 18 and Section 3729 of Title 31 of the United States Code.
- (5) The contractor or subcontractor shall make the records required under paragraph (b) of this clause available for inspection, copying, or transcription by the government of the Department of Labor. The contractor or subcontractor shall permit the government or the Department of Labor to interview employees during working hours on the job. If the contractor or subcontractor fails to submit required records or to make them available, the government may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available, may be grounds for debarment action pursuant to 29 CFR 5.12.

SECTION 1.04 APPRENTICES & TRAINEES

- (a) **APPLICABILITY** – This clause shall apply only in the case of projects undertaken by the contractor for the construction of a public building or public work to be delivered by the contractor to the government as in-kind consideration as set forth in the lease. "Public building or public work" means a building or work the construction of which is carried on directly or indirectly by authority of, or with funds of, a federal agency to serve the interest of the general public regardless of whether title thereof is in a federal agency.

- (b) **APPRENTICES** – Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U. S. Department of Labor, Employment & Training Administration, Bureau of Apprenticeship & Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days or probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship & Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship & Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (c) **TRAINEES** – Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U. S. Department of Labor, Employment & Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment & Training Administration. Every Trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage & Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment & Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In

addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment & Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (d) **EQUAL EMPLOYMENT OPPORTUNITY** – The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

SECTION 1.05 COMPLIANCE WITH COPELAND ACT REQUIREMENTS

In the case of projects undertaken for the construction of a public building or public work to be delivered by the contractor to the government as in-kind consideration as set forth in the Lease Agreement, the contractor or subcontractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this agreement.

SECTION 1.06 SUBCONTRACTS (LABOR STANDARDS)

- (a) **APPLICABILITY** – This clause shall apply only in the case of projects undertaken by the contractor for the construction of a public building or public work to be delivered by the contractor to the government as in-kind consideration as set forth in the lease. “Public building or public work” means a building or work the construction of which is carried on directly or indirectly by authority of, or with funds of, a federal agency to serve the interest of the general public regardless of whether title thereof is in a federal agency.
- (b) The contractor or subcontractor shall insert in any subcontracts the clauses herein entitled Davis-Bacon Act, Contract Work Hours & Safety Standards Act – Overtime Compensation, Apprentices & Trainees, Payrolls & Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination – Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the government, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower tier subcontracts. The contractor shall be responsible for compliance by any lower tier subcontractor with the entire lease clauses cited in this paragraph.
- (c) (1) Within 14 days after award of the lease, the contractor shall deliver to the Government Representative a completed Statement & Acknowledgement Form (SF 1413) for each subcontract, including the subcontractor’s signed and dated acknowledgement that the clauses set forth in paragraph (b) of this clause have been included in the subcontract.

SECTION 1.07 COMPLIANCE WITH DAVIS-BACON & RELATED ACT REGULATIONS

All rulings and interpretations of the Davis-Bacon & Related Acts contained in 29 CFR Parts 1, 3 & 5 are hereby incorporated by reference in this lease. Such rulings and interpretations shall apply only in the case of projects undertaken by the contractor or subcontractor for the construction of a public building or public work to be delivered by

the contractor to the government as in-kind consideration as set forth in the Lease Agreement.

SECTION 1.08 DISPUTES CONCERNING LABOR STANDARDS

The United States Department of Labor has set forth in 29 CFR Parts 5, 6 & 7 procedures for resolving disputes concerning labor standards requirements. Such disputes, to the extent they relate to projects undertaken by the contractor or subcontractor for the construction of a public building or public work to be delivered by the contractor to the government as in-kind consideration as set forth in the Lease Agreement, shall be resolved in accordance with those procedures. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U. S. Department of Labor, or the employees or their representatives.

SECTION 1.09 CERTIFICATION OF ELGIBILITY

- (a) By entering into this agreement, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm, is a person or firm ineligible to be awarded government contracts by virtue of section 3 (a) of the David-Bacon Act or 29 CFR 5.12(2)(1).
- (b) No part of this project undertaken by the contractor for the construction of a public building or public work to be delivered by the contractor to the government as in-kind consideration as set forth in the Lease Agreement shall be subcontracted to any person or firm ineligible for award of a government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (c) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.

SECTION 1.10 BUY AMERICAN ACT – CONSTRUCTION MATERIALS

- (a) The requirements of this clause shall apply only in the case of projects undertaken by the contractor or subcontractor for the construction of a public building or public work to be delivered by the contractor to the government as in-kind consideration as set forth in the Lease Agreement. "Public building or public work" means a building or work, the construction of which is carried on directly or indirectly by authority of, or with funds of, a Federal agency to serve the interest of the general public regardless of whether title thereof is in a Federal agency.
- (b) The Buy American Act (41 U.S.C. 10a – 10d) provides that the government give preference to domestic construction material, as defined below. Components, as used in this clause, means those articles, materials, and supplies incorporated directly into construction materials.

CONSTRUCTION MATERIAL – As used in this clause, means an article, material, or supply brought to the construction site for incorporation into the building or work. Construction material also includes an item brought to the site pre-assembled from articles, materials or supplies.

Free Trade Agreement country means Canada, Chili, Mexico or Singapore. Designated country means any of the following: Aruba, Austria, Bangladesh, Belgium, Benin, Bhutan, Botswana, Burina Faso, Burundi, Canada, Cape Verde, Central African Republic, Chad, Comoros, and Denmark. Djibouti, Equatorial, Guinea, Finland, France, Gambia, Germany, Greece, Guinea, Guinea-Bissau, Haiti, Hong Kong, Iceland, Ireland, Israel, Italy, Japan, Kiribati, Korea-Republic of, Lesotho, Liechtenstein, Luxembourg, Malawi, Maldives, Mali, Mozambique, Nepal, Netherlands, Niger, Norway, Portugal, Rwanda, Sao Tome and Principe, Sierra Leone, Singapore, Somalia, Spain, Sweden, Switzerland, Tanzania U.R., Togo, Tuvalu, Uganda, United Kingdom, Vanuatu, Western Samoa, Yemen.

DOMESTIC CONSTRUCTION MATERIAL as used in this clause, means (1) an unmanufactured construction material mined or produced in the United States, or (2) a construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States, exceeds 50 percent of the cost of all its components.

- (c) Construction materials. Construction materials that re from a designated country, a Free Trade Agreement country, or domestic construction material are allowable. Construction material originating from countries other than these and are of the same class, kind, and quality, may be approved for use by the government, when requested, if the available construction materials are determined to be not timely available in sufficient quality or quantity, or to be unreasonable in cost.
- (d) Notwithstanding any other language in this clause or elsewhere in this agreement, the contractor or subcontractor shall not acquire or use any materials, supplies, or services originating from, located in, or transported from or through, any country or source prohibited from lawful importation into the United States by applicable statute, Executive Order, or regulation.
- (e) The contractor agrees that only allowable construction material will be used by the contractor, subcontractors, material men, and suppliers in the performance of applicable work, except for foreign construction materials, if any listed in this lease.

SPECIAL PROVISIONS

NEW CONSTRUCTION/RENOVATION

SP(C/R)-1 GOVERNMENT RIGHTS

SP(C/R)-1.1 Rights to Drawings, Designs, Specifications: The Government shall have unlimited rights, to all drawings, designs, specifications, notes and other work developed in the performance of this contract, including the right to use the same in any other Government design of construction. The contractor hereby grants to the Government a paid-up license throughout the world to all such works to which he may assert or establish any claim under design patent or copyright laws. The contractor for a period of three (3) years after completion of the project agrees to furnish the original or copies of all such works to the Government.

SP(C/R)-1.2 Rights in Shop Drawings: The Government may duplicate, use, and disclose, in any manner and for any purpose, shop drawings, delivered under this contract. These conditions shall be included in all subcontracts hereunder at any tier. Shop drawings for construction means drawings, submitted to the Government by the Construction Contractor, subcontractor or any lower-tier subcontractor pursuant to a construction contract showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit, and attachment details) of materials or equipment.

SP(C/R)-1.3 Drawings & Other Data to Become Property of Government: All designs, drawings, specifications, notes and other works developed in the performance of this contract shall become the sole property of the Government and may be used on any other design or construction without additional compensation to the contractor. The Government shall be considered the "person for whom the work was prepared" for the purpose of authorship in any copyrightable work under 17 U.S.C. 201(b). With respect thereto, the contractor agrees not to assert or authorize others to assert any rights nor establish any claim under the design patent or copyright laws. The contractor for a period of three (3) years after completion of the project agrees to furnish all retained works to the Government. Unless otherwise provided in this contract, the contractor shall have the right to retain copies of all works beyond such period.

SP(C/R)-2 ACCESS TO BASE

SP(C/R)-2.1 Contractor's Access to Base – The contractor shall obtain base identification and vehicle passes for all contractor personnel who make frequent visits to or perform work on the Air Force installation(s) cited in the contract. Contractor personnel are required to wear or prominently display installation identification badges or contractor-furnished, contractor identification badges while visiting or performing work on the installation. The contractor shall submit a written request on company letterhead to the Government's contracting office listing the following: contract number, location of work site, start and stop dates, and names of employees and subcontractor employees needing access to the base. The letter is required regardless of the length of visit and will also specify the individual(s) authorized to sign for a request for base identification credentials or vehicle passes. The Government contracting office will endorse the request and forward for processing into the Security Forces data base. Contractors

requiring base access for meetings or site visits must complete the Eglin CAB (Contractor Access Badge) Affidavit. Contractors requiring access to work on base will need to complete the Eglin CAB Affidavit and a Form I-9 (Employment Eligibility Verification). These documents must be delivered to the Eglin AFB East Gate Pass & ID Office in a sealed envelope with a point of contact (POC) and phone number on the front of the envelope. You may also mail of FedEx the documents to: 96 Security Forces Squadron, Bldg, 272, 302 West D Ave, Eglin AFB FL 32542; Attention Pass & Registration. Anticipate a three-day lead time for Security Forces to process the documents and conduct the required background check. Once the background check is complete, a copy will be returned to the POC listed on the envelope. The prime contractor can provide paperwork for their subcontractor(s) and submit as many documents per envelope as necessary. When reporting to the registration office, the authorized contractor individual(s) should provide a valid driver's license, current vehicle registration, valid vehicle insurance certificate and social security card to obtain a vehicle pass. All deliveries to contractor work sites on Eglin AFB main base must go through the North Gate, located off SR-85 South. Trucks trying to enter the East, West or the ACC gate will be turned around and told to use the North Gate. Contractors' work trucks carrying equipment and tools are also required to use the North Gate. During Performance of the contract, the contractor shall be responsible for obtaining required identification for newly assigned personnel and for prompt return of credentials and vehicle passes for any employee who no longer requires access to the work site. Upon completion or termination of the contract or expiration of the identification passes, the prime contractor shall ensure that all base identification passes issued to employees and subcontractor employees are returned to the issuing office. Failure to comply with these requirements may result in withholding of final payment.

SP(C/R)-2.2 ON BASE PERFORMANCE – Work on this project shall be accomplished during normal hours, which are 7:00 a.m. to 3:30 p.m., Monday through Friday, except legal holidays. Any work desired to be accomplished during other than the normal hours will require prior approval by the Government. The contractor must submit a written request to the Government. The contractor's performance may be interrupted from time to time because of high priority mission schedules. The contractor's performance may be interrupted from time to time because of high priority mission schedules. For each calendar day and/or portion of a calendar day that the contractor is removed from the job site, the contract schedule will be adjusted by one (1) calendar day.

SP(C/R)-2.3 SUPERINTENDENT – Upon notification of award, the Prime Contractor must identify a superintendent and alternate for this contract and job site and provide to the Government. The Prime Contractor's superintendent and/or alternate shall be accountable for all individuals allowed onto the installation. The privilege of a potential employee being allowed access should be considered in all hiring and subcontracting decisions. The U.S. Air Force will not be responsible or liable for any costs or delays that a contractor incurs due to a contractor's employee being denied access to Eglin AFB. The Superintendent and/or alternate shall be responsible for collecting badges/PVC cards from all employees upon completion of the project/contract or termination of service. Prior to final payment the Superintendent must provide proof to the Government of collection/turn-in of all badges for employees granted base access in support of this project/job.

SP(C/R)-3 CONTROLS OF MATERIALS

SP(C/R)-3.1 MATERIALS APPROVAL SUBMITTALS - The contractor shall submit all submittals under this contract with (5) "complete" copies of each material submittal shall

be submitted to the Government. An AF Form 3000 shall be attached to each of the submittals. Submittals with a few exceptions are due ten (10) calendar days after receipt of Notice to Proceed. Upon approval/disapproval, two (2) copies will be returned to your office, the project engineer and inspector shall keep a copy, and one will be retained by the Government contracting office.

SP(C/R)-4 CONTROL OF WORK

SP(C/R)-4.1 INSPECTION OF CONSTRUCTION – The contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The contractor shall maintain complete inspection records and make them available to Okaloosa County and the Government. All work shall be conducted under the general direction of the Government and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract. Government inspections and tests are for the sole benefit of the Government and do not – (1) Relieve the Contractor or responsibility for providing adequate quality control measures; (2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance; (3) Constitute or imply acceptance; or (4) Affect the continuing rights of the Government after acceptance of the completed work. The presence or absence of a Government does not relieve the contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without Okaloosa County's written authorization. The contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size and performance tests shall be performed as described in the contract. The contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The contractor shall promptly segregate and remove rejected material from the premises. If the contractor does not promptly replace or correct rejected work, Okaloosa County may – (1) By contract or otherwise, replace or correct the work and charge the cost to the contractor; or (2) Terminate the contractor's right to proceed. If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the contractor, on request by Okaloosa County, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the contractor or its subcontractors. The contractor shall defray the expenses of the examination and of satisfactory reconstruction. Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

SP(C/R)4.2 INSPECTION & SURVEILLANCE – Civil Engineering, Eglin Air Force Base, Florida is designated as the representative of the Government for the purpose of surveillance and inspection of performance of work under this contract. This designation does not include authority to direct or authorize the contractor to make changes in the scope or terms of the contract without the written authority of Okaloosa County. The contractor shall notify the requiring activity, Okaloosa County and the Government at least 24 hours in advance of the date work will

commence under this contract; the contractor shall also notify the Government at the earliest possible time of anticipated absence(s) from the job site.

SP(C/R)4.3 PROGRESS REPORT TO INSPECTOR – The contractor shall submit weekly Progress Reports to the Government on AF Form 3065 beginning the week of the Notice to Proceed.

SP(C/R)4.4 PERMITS & RESPONSIBILITIES – The contractor shall obtain a construction permit for any construction work on Eglin Air Force Base. An AF Form 103 "Base Civil Engineering Work Clearance Request" must be submitted with all required signatures, to the Government prior to beginning of performance on the job site. No work shall begin until approval of the AF Form 103 has been granted. The contractor shall without additional expense under this contract, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The contractor shall also be responsible for all damages to persons or property that occurs as a result of the contractor's fault or negligence. The contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

SP(C/R)-4.5 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS – The contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work-site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Government. The contractor shall protect from damage all existing improvements and utilities (1) at or near the work site, and (2) on adjacent property of a third party, the locations of which are made know to or should be known by the contractor. The contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the contractor fails or refuses to repair the damage promptly, Okaloosa County may have the necessary work performed and charge the cost to the contractor.

SP(C/R)-4.6 SCHEDULES FOR CONSTRUCTION CONTRACTS – For a contract with a Period of Performance greater than 60 days and/or \$25,000 or greater, the contractor shall, within five days after the work commences or another period of time if agreed upon by all parties, prepare and submit to Okaloosa County and the Government for approval three (3) copies of a practicable schedule showing the order in which the contractor proposes to perform the work, and the dates on which the contractor contemplates starting and completing the salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be submitted on an AF Form 3064 to indicate appropriately the percentage of work scheduled for completion by any given date during the period. The contractor shall enter the actual progress on the chart.

SP(C/R)-4.7 SPECIFICATIONS & DRAWINGS FOR CONSTRUCTION – The contractor shall keep on the work site a copy of drawings and specifications and shall at all times give the Government access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In the case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Government, who shall promptly make a determination in writing. Any adjustment by the contractor without such a determination shall be at its own risk and expense. Shop drawings means drawings, submitted to the Government by the contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (i.e., fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The government may duplicate, use and disclose in any manner and for any purpose shop drawings delivered under this contract. This contract requires shop drawings; the contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Government without evidence of the contractor's approval may be returned for resubmission. The Government shall indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the reasons. Any work done before such approval shall be at the contractor's risk. Approval shall not relieve the contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved. If shop drawings show variations from the contract requirements, the contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Government approves any such variation, Okaloosa County shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued. The contractor shall submit to the Government for approval three copies (unless otherwise indicated) of all shop drawings as call for under the various headings of these specifications. When record shop drawings are required and reproducible shop drawings are needed upon completing the work under this contract, the contractor shall furnish a complete set of all shop drawings as finally approved in the format(s) and number of copies specified in the Statement of Work. These drawings shall show all changes and revisions made up to the time the equipment is completed and accepted.

SP(C/R)-4.8 SUSPENSION OF WORK – Okaloosa County may order the contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Government determines appropriate for the convenience of the Government. If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Government an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in

writing accordingly. However, no adjustment shall be made for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted (1) by an act of the Government an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. A claim shall not be allowed – (1) For any costs incurred more than 20 days before the contractor shall have notified Okaloosa County in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order); and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

SP(C/R)-5 STORAGE AREAS

SP(C/R)-5.1 – OPERATIONS & STORAGE AREAS — The contractor shall confine all operations (including storage of materials) on Government premises to areas approved by the Government. Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the contractor only with the approval of the Government and shall be built with labor and materials furnished by the contractor without additional expense under this contract. The temporary buildings and utilities shall remain the property of the contractor and shall be removed by the contractor at its expense upon completion of the work. The contractor shall use only established roadways, or use temporary roadways constructed by the contractor when and as authorized. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the contractor shall protect them from damage. The contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

SP(C/R)-5.2 – CLEANING UP – The contractor shall, at all times, keep the work area including storage areas free from accumulations of waste materials. Before completing the work, the contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the contractor shall leave the work area in a clean, neat, and orderly condition.

SP(C/R)-6 UTILITIES

SP (C/R)-6.1 - UTILITIES – All reasonable required amounts of water and electric power may be made available to the contractor by the Government without cost to the contractor. Contractor shall notify the Government in writing two weeks prior to any utility outage anticipated during the performance of this contract. Once utility lines are flagged or spotted by the proper approving utilities authority, it is the contractor's responsibility to verify the utility location and

depth. The contractor shall be responsible for repairing, at its own expense, any damages to utilities that might occur during the digging process.

SP(C/R)-7 INSURANCE

SP(C/R)-7.1 – WORK ON A GOVERNMENT INSTALLATION – The contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required by commercial practice. Before commencing work under this contract, the contractor shall notify Okaloosa County in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting this contract shall not be effective – (1) For such period as the laws of the State in which this contract is to be performed prescribe; or (2) until 30 days after the insurer or the contractor gives written notice to Okaloosa County whichever period is longer. The contractor shall insert the substance of this terms and conditions in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance. The contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to Okaloosa County upon request.

SP(C/R)-8 WEATHER

SP(C/R)-8.1 – WEATHER DELAYS – The Anticipated Normal Weather Delay Schedule shown below is developed by month for this geographic location using National Oceanic and Atmospheric Administration (NOAA) and similar Weather Averaging System data for the project's general location. The Government has included additional time in the allowed performance period using this data. (The basic performance period allows seven calendar days for every five-day working days assuming based on working Monday through Friday. The contractor's progress schedule must take these anticipated adverse weather delays into account in all weather-dependent activities to ensure timely completion of the job.

**MONTHLY ANTICIPATED ADVERSE WEATHER DELAY
WORK DAYS BASED ON A 5-DAY WORKWEEK**

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
5	5	5	3	3	5	8	6	5	3	4	5

Upon acknowledgement of Notice to Proceed (NTP) and continuing throughout the contract, the contractor will record, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for fifty percent or more of the contractor's scheduled workday and must cause a delay in the work activities critical to contract completion. In order to obtain relief from contract schedule requirements, the contractor will have to demonstrate not only that the anticipated amount of weather delay was exceeded by actual weather interruption, but also that reasonable efforts were made to compensate for such excess interruptions through changes in work hours, changes in the planned sequence of work, increased concurrent activities, or other available measures. Contemporaneous documentation of such efforts and prompt coordination there with the Government is

encouraged (see below). In the event that all reasonable effort to complete the required performance on schedule fail and it is determined that excessive inclement weather was the cause of that failure, the contractor may request extension of the project performance period for any weather delays suffered because of adverse weather beyond the number day indicated on the chart. The number of workdays of delay added to the schedule shall be converted to calendar days by adding the appropriate number of weekend days associated with that number of workdays. (1) Adverse weather days will not be granted for other than normal workdays that the contractor requested to work solely for the contractor's convenience to meet the contract performance period. (2) Any extensions to the contract because of change orders will have the normal adverse weather days figured into the extension period. (3) If the contract dictates an alternate performance period other than a normal Monday through Friday five-day workweek, an extension will be considered based on the contract requirement for a workday. Upon the request of the contractor made within one workweek after the relevant events, the Government will review the contractor's documentation of weather delays and circumstances relevant to the availability of work-arounds and Okaloosa County will promptly confirm or dispute the contractor's conclusions in writing to the contractor. If the contractor requests an adjustment to the contract schedule based on the review, the contractor shall notify Okaloosa County in writing and provide relevant information and recommendations regarding the request. A determination will be made on whether the request should be promptly granted, deferred pending determination of cumulative weather effects during the contract performance period, denied, or some combination thereof. The reason for any deferral or denial will be simultaneously communicated to the contractor in writing by Okaloosa County. Upon any extension, the contractor shall immediately submit to Okaloosa County and the Government a revised progress schedule to meet the revised performance period.

SP(C/R)-8.2 – HURRICANE SEASON – Hurricane season for the state of Florida is normally the period from 01 June through 30 November. During the actual hurricane, tropical storm or tropical depression condition, you may be contacted by the Government and requested to secure equipment, clean up your work area and properly protect stored materials. In accordance with the contract terms and conditions, "Protection of Existing Vegetation, Structures, Equipment, Utilities and Improvements" and "Cleaning Up," you should keep this in mind and maintain your work area free from debris and in a safe and secure condition at the completion of each work day. A duty is imposed on the contractor to monitor local weather conditions, weather bulletins and base closure information in the local media.

SP(C/R)-9 SITE CONDITIONS

SP(C/R)-9.1 SITE INVESTIGATION & CONDITIONS AFFECTING THE WORK – The contractor acknowledges that is has taken steps reasonably necessary to ascertain the nature and location of the work, and that I has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the

Government, as well as from the drawings and specifications made a part of this contract. Any failure of the contractor to take the actions described and acknowledged in this paragraph will not relieve the contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government. Okaloosa County and the Government assume no responsibility for any conclusions or interpretations made by the contractor based on the information made available by the Government. Nor does the government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

SP(C/R)-9.2 – DIFFERING SITE CONDITIONS – The contractor shall promptly, and before the conditions are disturbed, given a written notice to the Government and Okaloosa County of – Subsurface or latent physical conditions at the site which differ materially from those indicated in this contract; or unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract. The Government shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made and the contract modified in writing accordingly. No request by the contractor for any equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

SP(C/R)-10 HAZARDOUS MATERIALS (IF APPLICABLE)

SP(C/R)-10.1 HAZARDOUS SUBSTANCES: "HAZARDOUS SUBSTANCES" means any substance: (1) the presence of which requires reporting, investigation, removal and remediation under any Applicable Laws; (2) that is defined as a pollutant, contaminant, dangerous substance, toxic substance, hazardous or toxic chemical, hazardous waste or hazardous substance under any Applicable Laws; (3) that is toxic, explosive, corrosive, flammable, ignitable, infectious, carcinogenic or otherwise hazardous and is regulated by or forms the basis of liability under any Applicable Laws; (4) the presence of which on the site or adjacent property causes or threatens to cause a nuisance upon the site or adjacent property or poses or threatens to pose a hazard to health or safety of persons on or about the site or adjacent property; (5) that contains gasoline, diesel fuel or other petroleum hydrocarbons, including crude oil and fractions thereof, natural gas, synthetic gas and any mixtures thereof; (6) that contains asbestos and/or asbestos-containing materials; (7) that contains polychlorinated biphenyls (PCBs), or PCB-containing materials or fluids; or (8) that is waste generated by the contractor in the performance of the services, such as equipment/machine oils, fuels, oily debris, shop rags, paints, paint residue, solvents and any containers in which substances described in this Section were or are stored.

SP(C/R)-10.2 PRE-EXISTING HAZARDOUS SUBSTANCES – The contractor shall not be required to perform any services relating to Hazardous Substances uncovered or revealed at the project site and (i) not brought to the site by the contractor or its subcontractors and (ii) not shown or indicated in any drawings or specifications or identified in a State of Work to be within the scope of the services. The Government shall

not be responsible for any Hazardous Substances brought to the site by the contractor, its subcontractors or anyone else for whom the contractor is responsible.

SP(C/R)-10.3 REMEDIATION WITHIN SCOPE OF SERVICES – If the remediation of any Hazardous Substances is included in the scope of the services for a project, the contractor shall perform such services in strict compliance with the standards.

SP(C/R)-10.4 HAZARDOUS SUBSTANCES USED OR GENERATED BY THE CONTRACTOR – With the written consent of the Government, the contractor shall promptly and at the contractor's sole expense take any and all necessary remedial actions in response to the presence, storage, use, disposal, transportation or discharge of any Hazardous Substances used or generated by the contractor or its subcontractors or other persons subject to its control on, under or about the site.

The Government's prior written consent shall not be necessary in the event that the presence of Hazardous Substances on, under or about the site either; (i) poses an immediate threat to the health, safety or welfare of any individual or; (ii) is of such a nature that an immediate remedial response is necessary and it is not possible to obtain the Government's written consent prior to undertaking such action.

The contractor shall promptly notify the Government of any event or occurrence known to the contractor, whether occurring on the site or nearby lands, which causes or poses a risk of contamination to the site or of the air or water on, under or near the site with any Hazardous Substances as a result of the activities of the contractor or its subcontractors.

In the event the contractor undertakes any remedial action with respect to any Hazardous Substances on, under or about the site, the contractor shall immediately notify the Government of such remedial action, and shall conduct and complete all remedial actions in accordance with the standards.

SP(C/R)-11 WARRANTY

SP(C/R)-11.1 IMPLEMENTATION OF WARRANTY-CONSTRUCTION – Any manufacturer's warranties which extend beyond or in addition to the normal one year warranty required shall be furnished to the Government in their entirety, including the names of vendors responsible for servicing these warranties. Prior to final acceptance of the work covered by this contract, the contractor shall furnish in writing to the Government a list of all items of equipment furnished. This list will be accompanied by the applicable warranty documentation. This list shall include; Nomenclature of the item, type and serial number where applicable, and name and address of the manufacturer, cost, period of warranty, name, address and telephone number of the servicing agency that will be responsible for the warrant service.

SP(C/R)-11.2 WARRANTY OF CONSTRUCTION – In addition to any other warranties in this contract, the contractor warrants, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the contractor or any subcontractor or supplier at any tier. This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession. The contractor shall remedy at the contractor's expense any failure to conform, or any defect. In addition, the contractor shall remedy

at the contractor's expense any damage to government-owned or controlled real or personal property, when that damage is the result of – (1) the contractor's failure to conform to contract requirements; or any defect of equipment, material, workmanship, or design furnished. The contractor shall restore any work damaged in fulfilling the terms and conditions of this contract. The contractor's warranty with respect to work repaired or replaced will run from 1 year from the date of repair or replacement. The Government shall notify the contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. If the contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, Okaloosa County shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the contractor's expense. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the contractor shall – (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed; and (3) Enforce all warranties for the benefit of the Government. In the event the contractor's warranty has expired, the Government may bring suit at its expense to enforce a subcontractor's manufacturers, or supplier's warranty. Unless a defect is caused by the negligence of the contractor or subcontractor or supplier at any tier, the contractor shall not be liable for the repair of any defects of material or design, furnished by the Government nor for the repair of any damage that result from any defect in Government-furnished material or design. This warranty shall not limit the Government's rights under contract with respect to latent defects, gross mistakes, or fraud.

SPECIAL CONDITIONS

1. **Project Description** - Work included under this contract shall include all labor, permits, and materials required for performing all work necessary to complete the **Installation of Cathodic Protection for seventeen (17) elevated water tanks.**
2. **Pre-Bid Activity** – The contractor acknowledges and declares that it has visited and examined the site, examined all physical, legal, and other conditions affecting the work and is fully familiar with all of such conditions. In connection therewith, contractor specifically represents and warrants to Owner in this document, shall be Eglin Air Force Base, that it has, be careful examination, satisfied itself as to: (1) the nature, location, and character of the project and the site, including, without limitation, the surface and subsurface conditions of the site and all structures and obstructions thereon and thereunder, both natural and man-made, and all surface and subsurface conditions of the site and the surrounding area; (2) the nature, location, and character of the general area in which the project is located, including without limitation, its climatic conditions, available labor supply and labor costs, and available equipment supply and equipment costs; and (3) the quality and quantity of all materials, supplies, tools, equipment, labor, and professional services necessary to complete the work in the manner and within the cost and time frame required by the contract documents.
3. **Applicable Laws and Regulations** - The bidders attention is directed to the fact that all applicable state laws, county municipal ordinances, orders, rules and regulations of all authorities having jurisdiction over project shall apply to the bid throughout, and they will be deemed to be included in the contract the same as though they are written out in full herein.
4. **Indemnification & Hold Harmless** - To the fullest extent permitted by law, Contractor shall indemnify and hold harmless COUNTY and Eglin Air Force Base, its officers and employees from liabilities, damages, losses, and costs including but not limited to reasonable attorney fees, to the extent caused by the negligence, recklessness, or intentional wrongful conduct of the Contractor and other persons employed or utilized by the Contractor in the performance of this contract.

Note: For bidder's convenience, this certification form is enclosed and is made a part of the bid package.
5. **Conflict of Interest** - The award hereunder is subject to the provisions of Chapter 112, Florida Statutes. All respondents must disclose with their proposal the name of any officer, director, or agent who is also a public officer or an employee of the Okaloosa Board of County Commissioners, or any of its' agencies.

Furthermore, all respondents must disclose the name of any County officer or employee who owns, directly or indirectly, an interest of five percent (5%) or more in the firm or any of its branches.

Furthermore, the official, prior to or at the time of submission of the proposal, must file a statement with the Clerk of Circuit Court of Okaloosa County if he is an officer or employee of the County, disclosing his or spouses or child's interest and the nature of the intended business.

Note: For bidder's convenience, this certification form is enclosed and is made a part of the bid package.

6. **Public Entity Crime Information** - A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

7. **Investigation of Bidder** The County or Eglin AFB may make such investigations, as it deems necessary to determine the stability of the contractor to perform the work and that there is no conflict of interest as it relates to the project. The contractor shall furnish to the Owner any additional information and financial data for this purpose as the County may request.

8. **Bonding Requirements**

A. **Performance & Payment Bond** – The bidder to whom the contract is awarded shall furnish to the Owner, without extra compensation, and shall maintain in effect throughout the life of the contract, and for the duration of the period described in the bond, acceptable Performance & Payment bonds in sums at least equal to the full amount of the contract, conditioned to indemnify and same harmless the County & Eglin AFB from and against any loss, damage, or expense ensuing from failure on the part of the contractor to faithfully and properly perform the contract or to promptly pay all its subcontractors, suppliers, material, men or laborers for work completed on the project. The required forms for the performance and payments bonds are included in these instructions.

If within ten (10) calendar days after the acceptance of the bid, the successful bidder shall refuse or neglect to execute the contract and to furnish the required performance and payment bonds properly signed by the bidder and the surety or sureties satisfactorily to the Owner, the bidder shall be deemed to be in default and the Owner will retain the bid security as liquidated damages, but not as a penalty. The Owner reserves the option to accept the bid of any of the other bidders within ten (10) calendar days from default, in which case such acceptance shall have the same affect on such bidder as though he were the original, successful bidder.

9. **The Contract Documents** – The contract documents consist of the bid documents, technical specifications, the plans, the contractor's bid proposal and bonds; addenda issued prior to execution of the agreement, other documents specifically incorporated by reference in the contract documents, modifications, issued after execution of the agreement. A modification is:

1. A written amendment to the contract signed by both parties.
2. A change order;

3. A construction change directive.

10. **Hierarchy of Contract Documents** – In the event conflicts, inconsistencies, discrepancies, or ambiguities between the contract documents arise, unless otherwise provided, the controlling instrument shall be determined by the descending order of the contract documents as follows:
- a. Modifications issued after the execution of the agreement.
 - b. Addenda issued after the bid specifications were advertised to potential bidders.
 - c. Special provisions.
 - d. Technical special provisions.
 - e. Plans.
 - f. Special Bid Conditions.
 - g. Standard Specifications.
 - h. General Standard Conditions of Construction Contract.
11. **The Work of this Contract** – The term “work” means the construction and services, whether complete or partially completed, required by the contract documents and includes all other labor, materials, equipment and services provided or to be provided by the contractor to fulfill the contractor's obligations. The work constitutes as part of the project.
12. **Bid Price** – The bid price shall include all equipment, labor, materials, permit(s), freight, taxes, required insurance, Public Liability, Property Damage and workers' Compensation, etc. to cover the finished work called for.
13. **Protection of Work Area** - The successful contractor will be required to protect all work areas in a manner necessary to prevent accidents and ensure safe working conditions for employees and work related personnel. The contractor will be responsible for any damages to existing utilities, concrete, asphalt, buildings or grounds, etc. and shall repair or replace any damage at his own expense.
14. **Date of Commencement & Project Completion** – The Date of Commencement shall be the date on which the Owner issues the Notice to Proceed or such date prior on which the contractor is allowed by the County to begin work. Regardless of the contractor's date of actual commencement of work, contract time will be charged from the Date of Commencement until Final Completion of the work. The contractor shall have seventy-five (75) calendar days to achieve Final Completion.
15. **Liquidated Damages**
- A. In case of failure on the part of the Contractor to complete the work within the time(s) specified in the contract, or within such additional time(s) as may be granted by Okaloosa County, the County will suffer damage, the amount of which is difficult,

if not impossible, to ascertain. Therefore, the Contractor shall pay to the County, as liquidated damages, the amount established in the schedule below for each calendar day of delay that actual completion extends beyond the time limit specified until such reasonable time as may be required for final completion of the work. In no way shall costs for liquidated damages be construed as penalty on the contractor.

<u>Original Contract Amount</u>	<u>Daily Charge Per Calendar Day</u>
\$50,000 and under	\$311
Over \$50,000 but less than \$250,000	\$972
\$250,000 but less than \$500,000	\$1,584
\$500,000 but less than \$2,500,000	\$1,924
\$2,500,000 but less than \$5,000,000	\$2,694
\$5,000,000 but less than \$10,000,000	\$3,902
\$10,000,000 but less than \$15,000,000	\$6,102
\$15,000,000 but less than \$20,000,000	\$7,022
\$20,000,000 and over	\$7,022 plus 0.2% for any amount over \$20 million

Determination of Number of Days of Default – For all contracts, regardless of whether the contract time is stipulated in calendar days or working days, the default days shall be counted in calendar days.

Conditions under which Liquidated Damages are Imposed – Should the contractor or, in case of his default, the Surety, fail to complete the work within the time stipulated in the contract, or within such extra time as may have been granted by the County, the Contractor or, in case of his default, the Surety, shall pay to the County, not as a penalty, but as liquidated damages, the amount so due as determined by the Code requirements, as provided above.

Right of Collection - The County shall have the right to apply as payment on such liquidated damages any money which is due to the Contractor by the County.

Permitting Contractor to Finish Work – Permitting the contractor to continue and to finish the work, or any part of it, after the expiration of the contract time allowed, including extensions of time granted to the contractor, shall in no way act as a waiver on the part of the County the liquidated damages due under the contract.

Completion of Work by Owner – In case of default of the contract and the completion of the work by the County, the contractor and his surety shall be liable for the liquidated damages under the contract, but no liquidated damages shall be chargeable for any delay in the final completion of the work by the County due to any unreasonable action or delay on the part of the County.

16. **Contractor's Closeout Submittals to County** – Contractor's Advertisement of Completion – The contractor immediately after being notified by the Engineer that all other requirements of this contract have been completed shall give notice of said completion by an advertisement for a period of four (4) successive weeks in the newspaper with the

widest circulation published within the County or counties where the work is performed. (i) Proof of publication of said notice shall be made by the contractor to the County, by affidavit of the publisher and a printed copy of the published notice. If no newspaper is published in any county where the work is done, the notice may be given by posting at the courthouse for thirty (30) days and proof of same shall be made by the Probate Judge or Sheriff and the contractor. (ii) A release of liens, (iii) Certification from surety that payment bond and performance bond shall remain in effect during the one year warranty period, and (iv) consent of the surety for final payment, final payment on account of this agreement shall be made within sixty (60) days after completion by the contractor of all work covered by this agreement and acceptance of such work by the Owner.

17. **Interpretation of Estimate Quantities** – For those items constructed within authorized plan limits or dimensions; use the quantities show in the plans and in the proposal form as the basis of the bid. The Engineer will also use these quantities for final payment as limited by the provisions of the individual items. For those items having variable final pay quantities show that are dependent on actual field conditions, use and measurement, the quantities shown in the plans and in the proposal form are approximate and provide only a basis for calculating the bid upon which the County will award the contract. Where items are listed for payment as lump sum units and the plans show estimates of component quantities, the Engineer is responsible for the accuracy of those quantities limited to the provisions of 9-3.3 of the Florida Department of Transportations Standard Specifications for Road & Bridge Construction. Where items are listed for payment as lump sum units and the plans do not show estimates of component quantities, the contractor is solely responsible for his own estimates of such quantities. The Engineer may increase, decrease or omit the estimated quantities of work to be done or materials to be furnished.

18. **Examination of Plans, Specifications, Special Provisions & Site of Work** – The contractor shall examine carefully the contract documents and the site of the proposed work before submitting a proposal for the work contemplated. He shall investigate the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished and as to the requirements of all contract documents.

The bidder's submission of a proposal is prime facie evidence that the bidder has made an examination as described in this section.

19. **Permits** – The contractor shall be responsible for securing and displaying all permits during construction. The contractor is responsible for all required and licenses related to or necessary for construction of the project, and he shall pay all charges and fees and give all notices necessary and incidental to the due and lawful prosecution of the work. Copies of all permits and authorizations obtained by the contractor shall be filed with the Owner for information and record.

20. **Utilities** – **All work must be coordinated through the appropriate Eglin AFB Offices.** The contractor while operating in the vicinity of overhead or underground utilities shall exercise extreme care and diligence. The contractor shall make restitution for any loss due to damage by the contractor's forces or equipment. The contractor shall contact the appropriate company or organization for the location and protection of all utilities prior to commencement of construction.

Where utility work must be coordinated with highway construction operations, the portion of the anticipated relocation period covering such concurrent work may or may not be complete on the day highway construction commences and may or may not be consecutive days. The anticipated scheduling of adjustments and relocation work will be established at the preconstruction conference.

21. **Miscellaneous Provisions** – The agreement was executed and delivered in the State of Florida and all disputes arising hereunder shall be governed by and interpreted in accordance with the laws of the State of Florida. Venue for all purposes shall be exclusively in Okaloosa County, Florida. The bidder's attention is directed to the fact that all applicable laws, County and municipal ordinances, orders, rules and regulation of all authorities have jurisdiction over the project shall apply to the bid throughout, and they will be deemed to be included in the contract the same as though they were written out in full herein.

The parties hereto shall execute and deliver, or cause to be executed and delivered, such additional instruments (including deeds, releases and disclaimers) as any party may reasonably request for the purpose of carrying out this agreement and the related contract documents.

This agreement and the related contract documents may be modified or amended only by written instrument. In the event any term or provision of this agreement or the related contract documents shall to any extent be held to be illegal, invalid, unenforceable, or non-operative as a matter of law, the remaining terms and provisions of this agreement shall not be affected thereby, but each such term and provision shall be valid and shall remain in full force and effect.

This agreement and the related contract documents shall not be construed in favor or against any part on the basis that the party did or did not author this agreement and the related contract documents. Any party shall have the right to specifically enforce the provisions of this agreement and the related contract documents. All exhibits attached hereto are incorporated in this agreement and the related contract documents and made a part hereof by reference. This agreement and the related contract documents shall become effective only when all parties execute this agreement and all related contract documents thereto. No party has agreed to or promises to do any act or thing not contained in this agreement and the related contract documents.

22. **Warranty- (THE WARRANTY WILL BE IN THE NAME OF EGLIN AFB)**

(a) Warranty work specified herein is for a minimum of one (1) year from substantial completion against defects in materials and in labor and workmanship.

23. **Conditional & Incomplete Bids** – The Board of County Commissioners specifically reserves the right to reject any conditional bid and will normally reject those that make it impossible to determine the true amount of the bid.

24. **Clean Up** – All sites will be left clean and properly returned to their original condition. Care will be taken to disturb as little as possible in all work areas.

25. **Inspection** – The Owner reserves the right to periodically spot check work and to stop work, if necessary, to confirm proper installation.

26. **Final Acceptance** - Payment for any/all work will not be made until the Owner determines that the scope of work is complete and satisfactory.
27. **Contract Price** – Owner shall pay contractor for completion of the work in accordance with the contract documents, an amount in current funds equal to the sum of the amounts determined by the Owner and the contract.
- (a) For all work, at the prices stated in contractor's bid, attached hereto.
28. **Payment Procedures**
- (a) **Submittal & Processing Payments** – Contractor shall submit applications for payment in accordance with the General Conditions to the Eglin AFB Representative/Project Manager. Applications for payment will be processed by Engineer as provided in the General Conditions. Actual payment will be made through Okaloosa County.
- (b) **Progress Payments: Retainage** – Progress payments may be arranged in a preconstruction meeting held by Eglin AFB. Eglin AFB will coordinate the preconstruction meeting.
29. Upon holding the pre-construction meeting at a location on Eglin to be determined. All coordination of the project should be directed to the Eglin Point of Contact.
30. **PRE-BID MEETING**
- A. **A mandatory pre-bid meeting will be held on Wednesday, May 22, 2013 from 9:00 – 11:00 a.m. in the Main Conference Room @ Bldg 634, Eglin Air Force base (See map – part of Bid package).**
- Bidders can contact June M. Crockett @ 850-882-0288; **E-mail: June.crockett@eglin.af.mil** or James T. Mitchell @ 850-883-1314; **E-mail: james.mitchell@eglin.af.mil** to arrange base access.
- B. Access to Eglin AFB must be requested a minimum of 5 days in advance (**see attached required forms**).

COMPANY LETTERHEAD (IF AVAILABLE)

DATE:

MEMORANDUM FOR: 96 SFS/S-5B through AFTC/PZIO

FROM: COMPANY'S NAME/ADDRESS

SUBJECT: Request for Badge/Pass

1. The following individuals require access to Eglin AFB to perform official duties at various buildings at: **(A) Eglin main base; (B) Duke Field; (C) Ranger Camp; (D) 7th SFG; and (E) NAV School**. Their duties will include site visit contract FTFA 09-1093. The site will be held on (date) _____ during the hour of _____.
2. The individuals listed have been briefed that while on the installation they must comply with all local laws and policies. The failure to comply will result in loss of base access. Each individual understands that they must go to the Security Forces Pass and Registration Office (East Gate Visitor's Center) to receive their contractor identification badge/pass. They further understand they must have a valid driver's license/Identification card, proof of current registration and insurance while driving on the installation.
3. When first arriving to the installation the following individuals will need **No escort** before being allowed access to the installation.
4. I understand it is the contractor's responsibility to collect the badges of terminated employees and to collect the badges at the conclusion of the work that was to be accomplished. Further, I understand that the contractor is responsible to turn the badges/passes in to the Security Forces Pass and registration office as soon as all work is complete.

<u>Name of Individual</u>	<u>Days/hrs of access</u>	<u>SSN/Date of Birth/Drivers License#/State</u>
*John Q Doe Jr	24/7	999-991111//05 May 83/1235897 (AL)
*Mary T Lincoln	M-F: 0600-2100	999-99-2222/05 May 83/1234567 (FL)
*George B Shaw	M-Sa: 0500-2200	999-99-3333/05 May 83/1235897 (AL)
*Sally Smith	Tue, Th: 1700-2100	999-99-4444/05 May 83/1235897 (AL)

Contractor's Printed Name

Contractor Signature

Date Signed

MEMORANDUM FOR: 96 SFS/S-5B

FROM: AAC/PKO

The contracting office hereby verifies that the above contractor has an active contract and requires access to the base installations.

AFTC/PZIO

AAC/PKO/Contracting Office Representative Signature

Authority: 10 U.S.C. 8013, Secretary of the Air Force

Purpose: Used by the Security Forces for issuing ID media. Some organizations may routinely keep copies of the above documentation in order to maintain control over persons authorized entry into certain areas. Accountability documents are used to insure proper control over the various forms utilized in these functions.

Routine Use: In addition to those disclosures generally permitted under 5 U.S.C. 552(b) of the Privacy Act, these records or information contained therein may specifically be disclosed outside the DoD as a routine use pursuant to 5 U.S.C.552a(b)(3) as follows:

Please answer each of the following questions by circling the correct answer. The information you provide will be verified through state and federal criminal history record checks.

Can U.S. Citizenship, immigration status, or Social Security Account Number be verified?	YES	NO
Have you ever been barred from entry/access to any Federal/military installation of facility?	YES	NO
Are you wanted by federal or civil law enforcement authorities, regardless of offense/violation (i.e., an "order to arrest" has been issued by a judge)?	YES	NO
Have you been incarcerated for 12 months or longer within the past ten years, regardless of offense/violation, unless released on proof of innocence?	YES	NO
Have you ever been convicted of espionage, sabotage, treason, terrorism or murder?	YES	NO
Does your name appear on any federal agency's "watch list" or "hit list" for criminal behavior or terrorist activity?	YES	NO
Are you unable to obtain a favorable National Agency Check w Inquiries (NACI)?	YES	NO
Have you been convicted of firearms or explosives violation within the past ten years?	YES	NO
Have you been convicted of sexual assault, armed assault/robbery, rape, child molestation, drug possession with intent to sell, drug distribution, or trafficking in humans?	YES	NO
Are you a registered sex offender?	YES	NO
Have you been convicted of 10 or more habitual felonies within the past ten years?	YES	NO
Are you an undocumented, non-U.S. citizen (Foreign National)?	YES	NO
Have you ever conspired or attempted to commit any of the criminal acts listed above?	YES	NO

NOTE TO APPLICANT: ATTESTATION

I understand that by signing this application, the information I have provided on this application is true, complete, and correct to the best of my knowledge and belief and is provided in good faith. I understand that a knowing and willful false statement on this application can be punished by barment from the installation, a fine, imprisonment or both (18 U.S.C. Section 1001).

Further, I understand that under the authority of 50 U.S.C. Section 797 and DoDD 5200.8, the installation commander has imposed a continuing obligation for me to disclose to Eglin Air Force Base, within 24 hours, if I am convicted or found not guilty by reason of insanity of any of the above criminal offenses that occurs while I have unescorted access authority within Eglin Air Force Base.

I understand if my access privileges are denied I have the right to appeal the decision. Contact Supervisor, Pass and Registration at (850) 882-9903 for guidance.

Applicant Name _____
(Print legibly)

Applicant Signature _____

Date _____

Company Name _____

Company Representative: _____
Printed Name
Signature

EGLIN AIR FORCE BASE ACCESS AFFIDAVIT

AUTHORITY: Section 3101, Title 44, United States Code, AFI 33-332, 5 USC 552A

PRINCIPAL PURPOSE(S): Used for requesting personal information to assist security personnel in developing records to document contractor employee suitability for access to Eglin Air Force Base, Florida to work under Air Force contracts. The Social Security Number (SSN) and Date of Birth (DOB) are necessary to identify the person and records. This information may be used to determine suitability of persons desiring access to Eglin Air Force Base as well as for other lawful purposes including law enforcement and litigation.

INTENDED USE: All contractors, subcontractors, unit's or sponsoring activities who have employees not authorized a Common Access Card or security clearance and requires access to Eglin Air Force Base in performance of their official duties, and/or whose contract expires in less than one year.

DISCLOSURE: Disclosure of requested information is voluntary. Failure to provide information could result in access privileges being refused or withdrawn. The Privacy Act Statement will apply throughout the duration of the Air Force contract while serving in the capacity of prime contractor or subcontractor/supplier employee.

1	COMPANY NAME/PHONE NUMBER:
	WORK SITE LOCATION:
	TYPE OF WORK (EMPLOYEE):
	DAYS OF THE WEEK & HOURS REQUESTING AUTHORIZATION TO ENTER EGLIN AFB FOR BUSINESS PURPOSES ONLY: (CIRCLE ALL THAT APPLY) Mon Tues Wed Thurs Fri Sat Sun Earliest entry hour: Latest entry hour:
2	LAST NAME (ADD SUFFIX (SR., JR.))
3	FIRST NAME: ----- MIDDLE NAME: -----
4	OTHER NAMES ALSO USED (IF NONE, WRITE "NONE") SOCIAL SECURITY NO: -----
5	DATE OF BIRTH (MONTH) ----- (DAY) ----- (YEAR) -----
6	DRIVER LICENSE NO.:----- STATE: -----
7	STREET ADDRESS (NO P. O. BOXES):----- HOME PHONE: -----
8	CITY -----
9	STATE: ----- ZIP: -----
10	COUNTRY OF CITIZENSHIP: -----
11	RESIDENT ALIEN NO. OR IMMIGRATION DOCUMENTS NO. AND DESCRIPTION:
13	BIRTHPLACE (CITY/STATE/COUNTRY); -----
14	MALE: ----- FEMALE: -----
15	HAIR COLOR: ----- EYE COLOR: ----- HEIGHT: ----- WEIGHT: -----
16	PHYSICAL BODY CHANGES OR TATTOOS: -----

The information on this form is being collected in accordance with, federal law permitting the installation commander to limit access to the installation for security reasons (50 U.S.C. Section 797 and DoD Directive 5200.8). This data will be used to screen individuals who have or are seeking access to Eglin Air Force Base, Florida. Failure to provide truthful, complete and accurate responses may be used as a basis to deny entry to Eglin Air Force Base and is also punishable as a criminal offense.

INSURANCE REQUIREMENTS

Contractor's Insurance

- A. The **CONTRACTOR** shall not commence any work in connection with this Agreement until he has obtained all required insurance and such insurance has been approved by the Okaloosa County Risk Management Director.
- B. All insurance policies shall be with insurers licensed to do business in the State of Florida, and any insuring company is required to have a minimum rating of A, Class X in the Best Key Rating Guide published A. M. Best & Co., Inc.
- C. All insurance shall include the interest of all entities names in and its respective agents, consultants, servants and employees of each and all other interests as may be reasonably required by Okaloosa County as Additional Insured. The coverage afforded the Additional Insured under this policy shall be primary insurance. If the Additional Insured have other insurance that is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the company's liability under this policy shall not be reduced by the existence of such other insurance.
- D. The County of Okaloosa shall be listed as Additional Insured by policy endorsement on all insurance contracts applicable to this Agreement except Workers' Compensation and Professional Liability.
- E. The County of Okaloosa shall be furnished proof of coverage by certificates of insurance (COI) and endorsements for every applicable insurance contract required by this Agreement. The COI's and policy endorsements must be delivered to the County Representative not less than ten (10) days prior to the commencement of any and all contractual agreements between the County of Okaloosa and the **CONTRACTOR**.
- F. The County shall retain the right to reject all insurance contracts that do not meet the requirement of this Agreement. Further, the County reserves the right to change these insurance requirements with 60-day notice to the **CONTRACTOR**.
- G. The insurance definition of Insured or Additional Insured shall include Subcontractor, Sub-subcontractor, and any associated or subsidiary companies of the **CONTRACTOR**, which are involved, and which is a part of the contract.
- H. The County reserves the right at any time to require the **CONTRACTOR** to provide certified copies of any insurance policies to document the insurance coverage specified in this Agreement.
- I. The designation of **CONTRACTOR** shall include any associated or subsidiary company which is involved and is a part of the contract and such, if any associated or subsidiary company involved in the project must be named in the Workers' Compensation coverage.
- J. All policies shall be written so that the County will be notified of cancellation or restrictive amendments at least thirty (30) days prior to the effective date of such

cancellation or amendment. Such notice shall be given directly to the County Representative.

Workers' Compensation Insurance

1. The **CONTRACTOR** shall secure and maintain during the life of this agreement Workers' Compensation insurance for all of his employees employed for the project or any site connected with the work, including supervision, administration or management, of this project and in case any work is sublet, with the approval of the County of Okaloosa, the **CONTRACTOR** shall require the Subcontractor similarly to provide Workers' Compensation insurance for all employees employed at the site of the project, and such evidence of insurance shall be furnished the County of Okaloosa not less than ten (10) days prior to the commencement of any and all sub-contractual agreements which have been approved by the County of Okaloosa.
- B. Such insurance shall comply with the Florida Workers' Compensation Law.
- C. Coverage shall include a waiver or subrogation clause in favor of Okaloosa County. Also, this endorsement must be indicated on all Certificates of Insurance.

Business Automobile and Commercial General Liability Insurance

- A. The **CONTRACTOR** shall maintain Business Automobile Liability insurance coverage throughout the life of this Agreement. The insurance shall include Owned, Non-Owned & Hired motor vehicle coverage.
- B. The **CONTRACTOR** shall carry other Commercial General Liability insurance against all other Bodily Injury, Property Damage and Personal and Advertising Injury exposures.
- C. In addition to the required coverage in B. above, Commercial General Liability coverage shall include the following:
 - 1.) On and Off Premises Operation Liability
 - 2.) Personal Injury Liability Insurance
 - 3.) Independent Contractor Liability
 - 4.) Completed Operations and Products Liability
- D. The **CONTRACTOR** shall agree to maintain in force Commercial General Liability Insurance including Completed Operations and Products Liability coverage for at least two (2) years following acceptance of the project by the COUNTY.
- E. All liability insurance (other than Professional Liability) shall be written on an occurrence basis and shall not be written on a claim-made basis. If the insurance is issued with an aggregate limit of liability, the aggregate limit of liability shall apply only to the locations included in this Agreement. If, as the result of any claims or other reasons, the available limits of insurance reduce to less than those stated in the LIMITS OF LIABILITY, the **CONTRACTOR** shall notify the County representative in writing. The **CONTRACTOR** shall purchase additional liability insurance to maintain the requirements established in this Agreement. Umbrella

or Excess Liability insurance can be purchased to meet the Limits of Liability specified in this Agreement.

Limits of Liability

The insurance required shall be written for not less than the following limits unless law requires higher amounts:

<u>COVERAGE</u>	<u>LIMIT</u>
A. Workers Compensation 1.) State 2.) Employers Liability	Statutory \$1 million each accident
B. Business Automobile	\$1 million each occurrence (Combined Single Limit)
C. Commercial General Insurance	\$1 million each occurrence (Combined Single Limit)

Notice of Claims or Litigation

The **CONTRACTOR** agrees to report any incident or claim that results from performance of this Agreement. The County representative shall receive written notice in the form of a detailed written report describing the incident or claim within ten (10) days of the **CONTRACTOR's** knowledge. In the event such incident or claim involves injury and/or property damage to a third party, verbal notification shall be given the same day the **CONTRACTOR** becomes aware of the incident or claim followed by a written detailed report within ten (10) days of verbal notification.

Indemnification and Hold Harmless

To the fullest extent permitted by law, **CONTRACTOR** shall indemnify and hold harmless **COUNTY**, its officers and employees from liabilities, damages, losses, and costs including but not limited to reasonable attorney fees, to the extent caused by the negligence, recklessness, or intentional wrongful conduct of the **CONTRACTOR** and other persons employed or utilized by the **CONTRACTOR** in the performance of this Agreement.

Certificate of Insurance

A. Certificates of insurance, in duplicate, indicating the job site and evidencing all required coverage must be submitted to and approved by Okaloosa County prior to the commencement of any of the work. The certificate holder(s) shall be as follows:

Okaloosa County	AND	Eglin Air Force Base
602-C North Pearl Street		308 West "D" Ave, Bldg. #260
Crestview FL 32536		Eglin AFB, FL 32542

B. All policies shall expressly require 30 days written notice to Okaloosa County at the address set out above, or the cancellations of material alterations of such policies, and the Certificates of Insurance, shall so provide.

- C. All certificates shall be subject to Okaloosa County's approval of adequacy of protection and the satisfactory character of the Insurer.
- D. The Certificates of Insurance shall disclose any and all deductibles or self-insured retentions (SIRs). County requests that all deductibles or SIRs be no greater than \$10,000. However, **CONTRACTORS** having insurance with higher deductibles may submit a bid without penalty reflecting the pricing for their deductible provided that **CONTRACTOR** also submits a brief company financial statement.
- E. In no way will the entities listed as Additional Insured be responsible for, pay for, be damaged by, or limited to coverage required by this schedule due to the existence of a deductible or SIR. Specific written approval from Okaloosa County will only be provided upon demonstration that the **CONTRACTOR** has the financial capability and funds necessary to cover the responsibilities incurred as a result of the deductible or SIR.
- F. In the event of failure of the **CONTRACTOR** to furnish and maintain said insurance and to furnish satisfactory evidence thereof, Okaloosa County shall have the right (but not the obligation) to take out and maintain insurance on the project. All costs for the coverage will be paid by **CONTRACTOR** upon presentation of a bill.

General Terms

Any type of insurance or increase of limits of liability not described above which the **CONTRACTOR** required for its own protection or on account of statute shall be its own responsibility and at its own expense.

The carrying of the insurance described shall in no way be interpreted as relieving the **CONTRACTOR** of any responsibility under this contract.

Should the **CONTRACTOR** engage a subcontractor or sub-subcontractor, the same conditions will apply under this Agreement to each subcontractor and sub-subcontractor.

The **CONTRACTOR** hereby waives all rights of subrogation against Okaloosa County and its consultants and other indemnities of the **CONTRACTOR** under all the foregoing policies of insurance.

Umbrella Insurance

The **CONTRACTOR** shall have the right to meet the liability insurance requirements with the purchase of an umbrella insurance policy. In all instances, the combination of primary and umbrella liability coverage must equal or exceed the minimum liability insurance limits stated in this Agreement.

COMPANY DATA

Physical Address & Phone #:

Proposer's Company Name:

Physical Address:

Contact Person (Typed-Printed):

Phone #:

Cell #:

Federal ID or SS #:

Proposer's License #:

Fax #:

Emergency #'s After Hours,
Weekends & Holidays:

DRUG-FREE WORKPLACE CERTIFICATION

THE BELOW SIGNED BIDDER CERTIFIES that it has implemented a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under quote a copy of the statement specified in subsection 1.
4. In the statement specified in subsection 1, notify the employees that, as a condition of working on the commodities or contractual services that are under quote, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in, drug abuse assistance or rehabilitation program if such is available in employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign this statement, I certify that this firm complies fully with the above requirements.

DATE: _____

SIGNATURE: _____

COMPANY: _____

NAME: _____
(Typed or Printed)

ADDRESS: _____

TITLE: _____

E-MAIL: _____

PHONE NO.: _____

.

“NO CONTACT CLAUSE”

The Okaloosa County Board of County Commissioners have established a solicitation silence policy (**No Contact Clause**) that prohibits oral and written communication regarding all formal solicitations for goods and services (formal bids, Request for Proposals, Requests for Qualifications) issued by the Board through the County Purchasing Department.

The period commences when the procurement document is received and terminates when the Board of County Commissioners approves an award.

When the solicitation silence period is in effect, no oral or written communication is allowed regarding the solicitation between prospective bidders/proposers and members of the Board of County Commissioners, the County Administrator or members of the Board Approved Review Committee. All questions or requests for information regarding the solicitation **must** be directed to the designated Purchasing Representative listed in the solicitation.

Any information thought to affect the committee or staff recommendation submitted after bids are due, should be directed to the Purchasing Director or his appointed representative. It shall be the Purchasing Director's decision whether to consider this information in the decision process.

Any attempt by a vendor/proposer to influence a member or members of the aforementioned shall be grounds to disqualify the proposer from consideration during the selection process.

All proposers must agree to comply with this policy by signing the following statement and including it with their submittal.

I _____ representing _____
Signature **Company Name**

Hereby agree to abide by the County's “**No Contact Clause**” and understand violation of this policy shall result in disqualification of my proposal/submittal.

CONFLICT OF INTEREST DISCLOSURE FORM

For purposes of determining any possible conflict of interest, all bidders/proposers, must disclose if any Okaloosa Board of County Commissioner, employee(s), elected officials(s), of if any of its agencies is also an owner, corporate officer, agency, employee, etc., of their business.

Indicate either "yes" (a county employee, elected official, or agency is also associated with your business), or "no". If yes, give person(s) name(s) and position(s) with your business.

YES _____

NO _____

NAME(S)

POSITION(S)

FIRM NAME: _____

BY (PRINTED): _____

BY (SIGNATURE): _____

DATE: _____

TITLE: _____

ADDRESS: _____

PHONE NO. _____

INDEMNIFICATION AND HOLD HARMLESS

To the fullest extent permitted by law, CONTRACTOR shall indemnify and hold harmless COUNTY & Eglin Air Force Base, its officers and employees from liabilities, damages, losses, and costs including but not limited to reasonable attorney fees, to the extent caused by the negligence, recklessness, or intentional wrongful conduct of the CONTRACTOR and other persons employed or utilized by the CONTRACTOR in the performance of this Agreement.

Bidder's Company Name

Authorized Signature – Manual

Physical Address

Authorized Signature – Typed

Mailing Address

Title

Phone Number

FAX Number

Cellular Number

After-Hours Number(s)

Date

LIST OF SUBCONTRACTORS

The BIDDER expressly agrees that:

1. If awarded the contract as a result of the proposal, the subcontractors used in the prosecution of the work will be those listed below.
2. The following list includes all subcontractors who will perform work on this project.
3. The subcontractors listed below are financially responsible and are qualified to do the work required.
4. Use of any of the subcontractors is subject to the approval of the County and Engineer.

CATEGORY	NAME OF SUBCONTRACTOR	ADDRESS

CONTRACTOR'S NAME

AUTHORIZED SIGNATURE

TITLE

RECYCLED CONTENT FORM

RECYCLED CONTENT INFORMATION

1. Is the material in the above: Virgin_____ or Recycled_____ (Check the applicable blank). If recycled, what percentage _____%.

Product Description: _____

2. Is your product packaged and/or shipped in material containing recycled content?

Yes_____ No_____

Specify: _____

3. Is your product recyclable after it has reached its intended end use?

Yes_____ No_____

Specify: _____

The above is not applicable if there is only a personal service involved with no product involvement.

Name of Bidder: _____

LOCAL PREFERENCE DATA SHEET

Refer to Special Bid Condition

Does the state, county, municipality or political subdivision in which your firm is located offer a preference to their local bidders? (If your firm is located in Okaloosa County, you will check "NO.") If "YES," list below the extent of such preference.

YES _____

Bidder's Company Name

NO _____

Authorized Signature – Manual

Authorized Signature – Typed

Date

LIST OF REPRESENTATIVES

OWNER'S REPRESENTATIVE:

JUNE M. CROCKETT, CONTRACT SPECIALIST
308 WEST "D" AVENUE
BUILDING 260, #130
EGLIN AFB, FL 32542
850-882-0288
June.crockett@eglin.af.mil

CONTRACTOR ADMINISTRATOR:

JACK ALLEN, MANAGER PURCHASING SERVICES
OKALOOSA COUNTY PURCHASING
602-N PEARL ST.
CRESTVIEW FL 32536
850-689-5960 / 850-689-5970 (F)
jallen@co.okaloosa.fl.us

ENGINEER:

JAMES T. MITCHELL, DIVIL/STRUCTURAL ENGINEER
96 CEG/CEPDR
501 DELEON ST, BLDG 634
EGLIN AFB, FL 32542
850-883-1314
James.mitchell@eglin.af.mil

BID SHEET

BID #: MIL 01-13

BID ITEM: INSTALLATION OF CATHODIC PROTECTION ON SEVENTEEN (17) ELEVATED WATER TANKS ON EGLIN AIR FORCE BASE, FL

PRICE PER TANK:

UNIT PRICING

SITE 857	_____
SITE 379	_____
SITE 225	_____
SITE 12511	_____
SITE 8782	_____
SITE 2100	_____
SITE 1027	_____
SITE 3100	_____
SITE 5100	_____
SITE 6100	_____
SITE 1205	_____
SITE 1322	_____
SITE 10351	_____
SITE 10940	_____
SITE 2828	_____
SITE 2756	_____
SITE 2589	_____

TOTAL BID PRICE TO INSTALL \$ _____

MAXIMUM DELIVERY/INSTALLATION TIME \$ _____ DAYS

ANTI-COLLUSION STATEMENT: The below signed bidder has not divulged to, discussed or compared his bid with other bidders and has not colluded with any other bidder or parties to bid whatever. (Note: No premiums, rebates, or gratuities permitted either with, prior to, or after any delivery of materials. Any such violation will result in the cancellation and/or return of material (as applicable) and the removal from bid list(s).

Bidder's Company Name

Authorized Signature – Manual

Authorized Signature – Typed

Address

Date

Title

Phone #

Fax #

Federal ID # or SS #

E-mail address

PART VI - SPECIFICATIONS

A. ELECTRICAL SPECIFICATIONS

- | | |
|----------------------------------|---|
| 1. Section 01 11 00 | Statement of Work |
| 2. Section 26 20 00 | Interior Distribution System |
| 3. Section 26 42 15.00 10 | Cathodic Protection System (Steel Water Tanks) |

SECTION 01 1100

STATEMENT OF WORK

PART 1 GENERAL

- 1.1 **GENERAL INTENTION:** It is the declared and acknowledged intention and meaning to furnish and install a complete and functional Impressed Current Cathodic Protection System for each of seventeen (17) elevated water storage tanks located on Eglin Air Force Base, Florida.
- 1.2 **GENERAL DESCRIPTION:** The project shall include the removal of existing cathodic protection components from each identified elevated tank and provide new rectifiers, anodes, conductors, conduits, as detailed on the drawings and as required by the specifications. In addition, new panelboards, breakers, transient voltage surge suppressors, and disconnects shall be provided as detailed on the drawings and as required by the specifications. The project shall include all elements necessary for a complete and functioning cathodic protection system for each of the designated water tanks.
- 1.3 **LOCATION:** The work is located at Eglin Air Force Base, Florida. Ten (10) elevated tanks requiring cathodic protection are located on the Eglin Main Base with another seven (7) elevated tanks located on various outlying Auxiliary Fields. The exact location of each facility will be indicated by the Contracting Officer.
- 1.4 **SITE INSPECTION:** Prospective bidders are expected to visit the areas of work and verify all conditions and dimensions.

PART 2 PRODUCTS

- 2.1 **ANSI / NSF-61 CERTIFICATION:** All materials in contact with the water or exposed to the interior of the tank shall be classified in accordance with ANSI/NSF 61 "Drinking Water System Components". This requirement shall be met under testing conducted by a product certification organization accredited for this purpose by the American National Standards Institute. Contractor shall submit copy of company registration and materials certificate to the project engineer verifying ANSI/NSF 61 system components classification.

PART 3 EXECUTION

- 3.1.1 All cathodic protection work shall be performed by under the supervision of NACE certified technicians with experience in the installation and maintenance of cathodic protection systems on water tanks. All work associated with the project shall be in conformance with the project specifications and NACE recommended practices. All engineering services, materials, equipment, labor & supervision will be in conformance with NACE recommended practices. All tank-to-water potentials will be set in accordance with the criteria of protection of steel, as established by NACE. Upon completion of the project, a trained representative shall provide maintenance and operating instructions to the Owner's designated employees to ensure proper operation and monitoring is achieved.

END OF SECTION
SECTION 01 1100 Page1

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DIVISION 26 - ELECTRICAL

SECTION 26 20 00

INTERIOR DISTRIBUTION SYSTEM

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- 1.2 DEFINITIONS
- 1.3 SUBMITTALS QUALITY
- 1.4 ASSURANCE
 - 1, 4.1 Regulatory Requirements
 - 4.2 Standard Products
 - 1.4.2.1 Alternative Qualifications
 - 1.4.2.2 Material and Equipment Manufacturing Date
- 1.5 WARRANTY

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 - 2.2 CONDUIT AND FITTINGS
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 - 2.2.1.1 Rigid, Threaded Zinc-Coated Steel Conduit
 - 2.2.2 Nonmetallic Conduit (Direct burial Only)
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 - 2.3.1.1 Equipment Manufacturer Requirements
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-- End of Section Table of Contents --

SECTION 26 20 00 INTERIOR
DISTRIBUTION SYSTEM

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

- ASTM B1 (2001; R 2007) Standard Specification for Hard-Drawn Copper Wire
- ASTM B8 (2011) Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft
- ASTM D 709 (2001; R 2007) Laminated Thermosetting Materials

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

- IEEE 100 (2000; Archived) The Authoritative Dictionary of IEEE Standards Terms
- IEEE C2 (2007; Errata 06-1; TIA 07-1; TIA 07-2; TIA 07-3; Errata 07-2; TIA 08-4; TIA 08-5; TIA 08-6; TIA 08-7; TIA 08-8; TIA 08-9; TIA 08-10; TIA 08-11; TIA 09-12; TIA 09-13; TIA 09-14; Errata 09-3; TIA 09-15; TIA 09-16; TIA 10-17) National Electrical Safety Code

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

- ANSI C80.1 (2005) American National Standard for Electrical Rigid Steel Conduit (ERSC)
- NEMA 250 (2008) Enclosures for Electrical Equipment (1000 Volts Maximum)
- NEMA ICS 6 (1993; R 2006) Enclosures
- NEMA KS 1 (2001; R 2006) Enclosed and Miscellaneous Distribution Equipment Switches (600 V Maximum)
- NEMA TC 3 (2004) Standard for Polyvinyl Chloride (PVC) Fittings for Use With Rigid PVC Conduit and Tubing
- NEMA Z535.4 (2007; Errata 2007) American National

Standard for Product Safety Signs and Labels

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (2011/ TIA 11-1; Errata 2011) National Electrical Code

NFPA 70E (2009; Errata 09-1) Standard for Electrical Safety in the Workplace

UNDERWRITERS LABORATORIES (UL)

UL 1449 (2006; Reprint Feb 2011) Surge Protective Devices

UL 360 (2009; Reprint Jun 2009) Liquid-Tight Flexible Steel Conduit

UL 44 (2010) Thermoset-Insulated Wires and Cables

UL 486A-486B (2003; Reprint Feb 2010) Wire Connectors

UL 486C (2004; Reprint Feb 2010) Splicing Wire Connectors

UL 489 (2009) Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures

UL 50 (2007) Enclosures for Electrical Equipment, Non-environmental Considerations

UL 510 (2005; Reprint Apr 2008) Polyvinyl Chloride, Polyethylene and Rubber Insulating Tape

UL 514B (2004; Reprint Nov 2009) Conduit, Tubing and Cable Fittings

UL 6 UL (2007; reprint Nov 2010) Electrical Rigid Metal Conduit-Steel

651 (2005; Reprint Mar 2010) Standard for Schedule 40 and 80 Rigid PVC Conduit and Fittings

UL 67 UL (2009; Reprint Sep 2010) Standard for Panelboards

83 UL (2008) Thermoplastic-Insulated Wires and Cables

869A (2006) Reference Standard for Service Equipment

1.2 DEFINITIONS Unless otherwise specified or indicated, electrical and electronics terms

used in these specifications, and on the drawings, shall be as defined in IEEE 100.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Panelboards; G

SD-03 Product Data

Circuit breakers; G

Surge Protection Devices,- G

1.4 QUALITY ASSURANCE

1.4.1 Regulatory Requirements

In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, "shall" had been substituted for "should" wherever it appears. Interpret references in these publications to the "authority having jurisdiction," or words of similar meaning, to mean the Contracting Officer. Equipment, materials, installation, and workmanship shall be in accordance with the mandatory and advisory provisions of NFPA 70 unless more stringent requirements are specified or indicated.

1.4.2 Standard Products

Provide materials and equipment that are products of manufacturers regularly engaged in the production of such products which are of equal material, design and workmanship. Products shall have been in satisfactory commercial or industrial use for 2 years prior to bid opening. The 2-year period shall include applications of equipment and materials under similar circumstances and of similar size. The product shall have been on sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the 2-year period. Where two or more items of the same class of equipment are required, these items shall be products of a single manufacturer; however, the component parts of the item need not be the products of the same manufacturer unless stated in this section.

1.4.2.1 Alternative Qualifications

Products having less than a 2-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 6000 hours, exclusive of the manufacturers' factory or laboratory tests, is furnished.

1.4.2.2 • Material and Equipment Manufacturing Date

Products manufactured more than 3 years prior to date of delivery to site shall not be used, unless specified otherwise.

1.5 WARRANTY

The equipment items shall be supported by service organizations which are reasonably convenient to the equipment installation in order to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.

PART 2 PRODUCTS

2.1 MATERIALS AND EQUIPMENT

Materials, equipment, and devices shall, as a minimum, meet requirements of UL, where UL standards are established for those items, and requirements of NFPA 70.

2.2 CONDUIT AND FITTINGS

Shall conform to the following:

2.2.1 Rigid Metallic Conduit

2.2.1.1 Rigid, Threaded Zinc-Coated Steel Conduit

ANSI C80.1, UL 6.

2.2.2 Nonmetallic Conduit (Direct Burial Only)

PVC Type 40, in accordance with NEMA TC 6 & 8 Type DB, UL 651.

2.2.3 Flexible Metal Conduit

2.2.3.1 Liquid-Tight Flexible Metal Conduit, Steel UL

360.

2.2.4 Fittings for Rigid Metal Conduit

Threaded-type. Split couplings unacceptable.

2.2.5 Fittings for Nonmetallic Conduit

NEMA TC 3 for PVC, and UL 514B.

2.3 WIRES AND CABLES

Wires and cables shall meet applicable requirements of NFPA 70 and UL for type of insulation, jacket, and conductor specified or indicated. Wires and cables manufactured more than 12 months prior to date of delivery to site shall not be used.

2.3.1 Conductors

Conductors No. 8 AWG and larger diameter shall be stranded. Conductors No. 10 AWG and smaller diameter shall be solid, except that conductors for remote control, alarm, and signal circuits, classes 1, 2, and 3, shall be stranded unless specifically indicated otherwise. Conductor sizes and capacities shown are based on copper, unless indicated otherwise. All conductors shall be copper.

2.3.1.1 Equipment Manufacturer Requirements

When manufacturer's equipment requires copper conductors at the terminations or requires copper conductors to be provided between components of equipment, provide copper conductors or splices, splice boxes, and other work required to satisfy manufacturer's requirements.

2.3.1.2 Minimum Conductor Sizes

Minimum size for branch circuits shall be No. 12 AWG; for Class 1 remote-control and signal circuits, No. 14 AWG; for Class 2 low-energy, remote-control and signal circuits, No. 16 AWG; and for Class 3 low-energy, remote-control, alarm and signal circuits, No. 22 AWG.

2.3.2 Color Coding

Provide for service, feeder, branch, control, and signaling circuit conductors. Color shall be green for grounding conductors and white for neutrals; except where neutrals of more than one system are installed in same raceway or box, other neutrals shall be white with a different colored (not green) stripe for each. Color of ungrounded conductors in different voltage systems shall be as follows:

- a. 208/120 volt, three-phase
 - (1) Phase A - black
 - (2) Phase B - red
 - (3) Phase C - blue
- c. 120/240 volt, single phase: Black and red

2.3.3 Insulation

Unless specified or indicated otherwise or required by NFPA 70, power and lighting wires shall be 600-volt, Type THWN/THHN conforming to UL 83 conforming to UL 44, except that grounding wire may be type TW conforming to UL 83; remote-control and signal circuits shall be Type TW or TF, conforming to UL 83.

2.3.4 Bonding Conductors

ASTM B1, solid bare copper wire for sizes No. 8 AWG and smaller diameter; ASTM B8, Class B, stranded bare copper wire for sizes No. 6 AWG and larger diameter.

2.4 SPLICES AND TERMINATION COMPONENTS

UL 486A-486B for wire connectors and UL 510 for insulating tapes. Connectors for No. 10 AWG and smaller diameter wires shall be insulated, pressure-type in accordance with UL 486A-486B or UL 486C (twist-on splicing connector). Provide solderless terminal lugs on stranded conductors.

2.5 Disconnect Switches

NEMA KS 1. Provide heavy duty-type switches where indicated, where switches are rated higher than 240 volts, and for double-throw switches. Provide switches in NEMA 4X, enclosure per NEMA ICS 6.

2.6 PANELBOARDS

UL 67 and UL 50 having a short-circuit current rating of 10,000 amperes symmetrical minimum. Panelboards for use as service disconnecting means shall additionally conform to UL 869A. Panelboards shall be circuit breaker-equipped. Design shall be such that individual breakers can be removed without disturbing adjacent units or without loosening or removing supplemental insulation supplied as means of obtaining clearances as required by UL. "Specific breaker placement" is required in panelboards to match the breaker placement indicated in the panelboard schedule on the drawings. Use of "Subfeed Breakers" is not acceptable unless specifically indicated otherwise. Main breaker shall be "separately" mounted "above" branch breakers. Where "space only" is indicated, make provisions for future installation of breakers. Directories shall indicate load served by each circuit in panelboard. Directories shall also indicate source of service to panelboard (e.g., Panel PA served from Panel MDP). Provide new directories for existing panels modified by this project as indicated. Type directories and mount in holder behind transparent protective covering.

Panelboards shall be listed and labeled for their intended use. Panelboard shall have nameplates in accordance with paragraph FIELD FABRICATED NAMEPLATES.

2.6.1 Enclosure

Enclosures shall meet the requirements of UL 50. All cabinets shall be fabricated from sheet steel of not less than No. 10 gauge if flush-mounted or mounted outdoors, and not less than No. 12 gauge if surface-mounted indoors, with full seam-welded box ends. Cabinets mounted outdoors or flush-mounted shall be hot-dipped galvanized after fabrication. Cabinets shall be painted in accordance with paragraph PAINTING. Outdoor cabinets shall be of NEMA 4X stainless steel raintight with conduit hubs welded to the cabinet. Front edges of cabinets shall be form-flanged or fitted with structural shapes welded or riveted to the sheet steel, for supporting the panelboard front. All cabinets shall be so fabricated that no part of any surface on the finished cabinet shall deviate from a true plane by more than 1/8 inch. Holes shall be provided in the back of indoor surface-mounted cabinets, with outside spacers and inside stiffeners, for mounting the cabinets with a 1/2 inch clear space between the back of the cabinet and the wall surface. Flush doors shall be mounted on hinges that expose only the hinge roll to view when the door is closed. Each door shall be fitted with a combined catch and lock, except that doors over 24 inches long shall be provided with a three-point latch having a knob with a T-handle, and a cylinder lock. Two keys shall be provided with each lock, and all locks shall be keyed alike. Finished-head cap screws shall be provided for mounting the panelboard fronts on the cabinets.

2.6.2 Panelboard Buses

Support bus bars on bases independent of circuit breakers. Main buses and back pans shall be designed so that breakers may be changed without machining, drilling, or tapping. Provide isolated neutral bus in each panel for connection of circuit neutral conductors. Provide separate ground bus identified as equipment grounding bus per UL 67 for connecting grounding conductors; bond to steel cabinet.

2.6.3 Circuit Breakers

UL 489, thermal magnetic-type having a minimum short-circuit current rating

equal to the short-circuit current rating of the panelboard in which the circuit breaker shall be mounted. Breaker terminals shall be UL listed as suitable for type of conductor provided. Series rated circuit breakers and plug-in circuit breakers are unacceptable.

2.7 SURGE PROTECTIVE DEVICES

Provide parallel type surge protective devices which comply with UL 1449 at the panelboards and disconnects as indicated on drawings. Provide surge protectors in a NEMA 4X enclosure per NEMA ICS 6. Provide the following modes of protection:

FOR SINGLE PHASE CONNECTED
SYSTEMS-Each phase to neutral (L-N)
Neutral to ground (N-G)
Phase to ground { L-G }

Surge protective devices shall have a minimum surge current rating of 40,000 amperes per mode minimum. The maximum line to neutral (L-N) Voltage Protection Rating (VPR) shall be:

700V for 120V, single phase system
700V for 120/240V, single phase system

The minimum MCOV (Maximum Continuous Operating Voltage) rating shall be:

150V for 120V, single phase system
300/150V for 120/240V, single phase system

2.8 MANUFACTURER'S NAMEPLATE

Each item of equipment shall have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable.

2.9 FIELD FABRICATED NAMEPLATES

ASTM D 709. Provide laminated plastic nameplates for each equipment enclosure, relay, switch, and device; as specified or as indicated on the drawings. Each nameplate inscription shall identify the function and, when applicable, the position. Nameplates shall be melamine plastic, 0.125 inch thick, white with black center core. Surface shall be matte finish. Corners shall be square. Accurately align lettering and engrave into the core. Minimum size of nameplates shall be one by 2.5 inches. Lettering shall be a minimum of 0.25 inch high normal block style.

2.10 WARNING SIGNS

Provide warning signs for flash protection in accordance with NFPA 70E and NEMA Z535.4 for switchboards, panelboards, industrial control panels, and motor control centers that are in other than dwelling occupancies and are likely to require examination, adjustment, servicing, or maintenance while energized. Provide field installed signs to warn qualified persons of potential electric arc flash hazards when warning signs are not provided by the manufacturer. The marking shall be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment.

2.11 FACTORY APPLIED FINISH

Electrical equipment shall have factory-applied painting systems which shall, as a minimum, meet the requirements of NEMA 250 corrosion-resistance test and the additional requirements as specified herein. Interior and exterior steel surfaces of equipment enclosures shall be thoroughly cleaned and then receive a rust-inhibitive phosphatizing or equivalent treatment prior to painting. Exterior surfaces shall be free from holes, seams, dents, weld marks, loose scale or other imperfections. Interior surfaces shall receive not less than one coat of corrosion-resisting paint in accordance with the manufacturer's standard practice. Exterior surfaces shall be primed, filled where necessary, and given not less than two coats baked enamel with semigloss finish. Equipment located indoors shall be ANSI Light Gray, and equipment located outdoors shall be ANSI Light Gray. Provide manufacturer's coatings for touch-up work and as specified in paragraph FIELD APPLIED PAINTING.

PART 3 EXECUTION

3.1 INSTALLATION

Electrical installations, including weatherproof and hazardous locations and ducts, plenums and other air-handling spaces, shall conform to requirements of NFPA 70 and IEEE C2 and to requirements specified herein.

3.1.1 Wiring Methods

Provide insulated conductors installed in rigid steel conduit (aboveground) and nonmetallic conduit (below ground), except where specifically indicated or specified otherwise or required by NFPA 70 to be installed otherwise. Grounding conductor shall be separate from electrical system neutral conductor. Provide insulated green equipment grounding conductor for circuit(s) installed in conduit and raceways. Minimum conduit size shall be 1/2 inch in diameter for low voltage lighting and power circuits.

3.1.2 Conduit Installation

Keep conduit minimum 6 inches away from parallel runs of flues and steam or hot water pipes. Install conduit parallel with or at right angles to ceilings, walls, and structural members where conduit will be visible after completion of project.

3.1.2.1 Restrictions Applicable to Nonmetallic Conduit

a. PVC Schedule 40 and PVC Schedule 80

- (1) Do not use in areas where subject to severe physical damage.
- (2) Do not use above grade.

3.1.2.2 Restrictions Applicable to Flexible Conduit

Use only as specified in paragraph FLEXIBLE CONNECTIONS.

3.1.2.3 Underground Conduit Other Than Service Entrance

PVC, Type EPC-40. Convert nonmetallic conduit, other than PVC Schedule 40 to steel conduit before rising.

3.1.2.4 Conduit Support

Support conduit by pipe straps, wall brackets, hangers, or ceiling trapeze. Fasten by wood screws to wood; by toggle bolts on hollow masonry units; by concrete inserts or expansion bolts on concrete or brick; and by machine screws, welded threaded studs, or spring-tension clamps on steel work. Threaded C-clamps may be used on rigid steel conduit only. Do not weld conduits or pipe straps to steel structures. Load applied to fasteners shall not exceed one-fourth proof test load. Fasteners attached to concrete ceiling shall be vibration resistant and shock-resistant. Holes cut to depth of more than 1 1/2 inches in reinforced concrete beams or to depth of more than 3/4 inch in concrete joints shall not cut main reinforcing bars. Fill unused holes. In partitions of light steel construction, use sheet metal screws. Supporting means shall not be shared between electrical raceways and mechanical piping. Where conduit crosses building expansion joints, provide suitable watertight expansion fitting that maintains conduit electrical continuity by bonding jumpers or other means.

3.1.2.5 Directional Changes in Conduit Runs

Make changes in direction of runs with symmetrical bends or cast-metal fittings. Make field-made bends and offsets with hickey or conduit-bending machine. Do not install crushed or deformed conduits. Avoid trapped conduits. Prevent plaster, dirt, or trash from lodging in conduits, boxes, fittings, and equipment during construction. Free clogged conduits of obstructions.

3.1.2.6 Locknuts and Bushings

Fasten conduits to sheet metal boxes and cabinets with two locknuts where required by NFPA 70, where insulated bushings are used, and where bushings cannot be brought into firm contact with the box; otherwise, use at least minimum single locknut and bushing. Locknuts shall have sharp edges for digging into wall of metal enclosures. Install bushings on ends of conduits, and provide insulating type where required by NFPA 70.

3.1.2.7 Flexible Connections

Provide flexible steel conduit between 3 and 6 feet in length; for equipment subject to vibration, noise transmission, or movement;. Install flexible conduit to allow 20 percent slack. Minimum flexible steel conduit size shall be 1/2 inch diameter. Provide liquidtight flexible nonmetallic conduit in wet and damp locations for equipment subject to vibration, noise transmission, movement or motors. Provide separate ground conductor across flexible connections.

3.1.3 Boxes, Outlets, and Supports

Provide boxes in wiring and raceway systems wherever required for pulling of wires, making connections, and mounting of devices or fixtures. Boxes for metallic raceways shall be cast-metal, hub-type when located in wet locations, when surface mounted on outside of exterior surfaces, and when specifically indicated. Each box shall have volume required by NFPA 70 for number of conductors enclosed in box. Provide gaskets for cast-metal boxes installed in wet locations and boxes installed flush with outside of exterior surfaces. Fasten boxes and supports with wood screws on wood, with bolts and expansion shields on concrete or brick, with toggle bolts on hollow masonry units, and with machine screws or welded studs on steel.

Threaded studs driven in by pov/der charge and provided with lockwashers and nuts or nail-type nylon anchors may be used in lieu of wood screws, expansion shields, or machine screws.

3.1.3.1 Boxes

Boxes for use with raceway systems shall be minimum 1 1/2 inches deep, except where shallower boxes required by structural conditions are approved.

3.1.4 Mounting Heights

Mount panelboards, and disconnecting switches so height of operating handle at its highest position is maximum 78 inches above floor. Mount other devices as indicated.

3.1.5 Conductor Identification

Provide conductor identification within each enclosure where tap, splice, or termination is made. For conductors No. 6 AWG and smaller diameter, color coding shall be by factory-applied, color-impregnated insulation. For conductors No. 4 AWG and larger diameter, color coding shall be by plastic-coated, self-sticking markers; colored nylon cable ties and plates; or heat shrink-type sleeves.

3.1.6 Splices

Make splices in accessible locations. Make splices in conductors No. 10 AWG and smaller diameter with insulated, pressure-type connector. Make splices in conductors No. 8 AWG and larger diameter with solderless connector, and cover with insulation material equivalent to conductor insulation.

3.1.7 Covers and Device Plates

Install with edges in continuous contact with finished wall surfaces without use of mats or similar devices. Plaster fillings are not permitted. Install plates with alignment tolerance of 1/16 inch. Use of sectional-type device plates are not permitted. Provide gasket for plates installed in wet locations.

3.1.8 Grounding and Bonding

Provide In accordance with NFPA 70. Ground exposed, non-current-carrying metallic parts of electrical equipment, metallic raceway systems, grounding conductor in metallic and nonmetallic raceways, and neutral conductor of wiring systems. Interconnect all grounding media in or on the structure to provide a common ground potential.

3.1.9 Equipment Connections

Provide power wiring for the connection of motors and control equipment under this section of the specification. Except as otherwise specifically noted or specified, automatic control wiring, control devices, and protective devices within the control circuitry are not included in this section of the specifications but shall be provided under the section specifying the associated equipment.

3.1.10 Repair of Existing Work

Repair of existing work, demolition, and modification of existing electrical distribution systems shall be performed as follows:

3.1.10.1 Workmanship

Lay out work in advance. Exercise care where cutting, channeling, chasing, or drilling of floors, walls, partitions, ceilings, or other surfaces is necessary for proper installation, support, or anchorage of conduit, raceways, or other electrical work. Repair damage to buildings, piping, and equipment using skilled craftsmen of trades involved.

3.1.10.2 Existing Concealed Wiring to be Removed'

Existing concealed wiring to be removed shall be disconnected from its source. Remove conductors; cut conduit flush with floor, underside of floor, and through walls; and seal openings.

3.1.10.3 Removal of Existing Electrical Distribution System

Removal of existing electrical distribution system equipment shall include equipment's associated wiring, including conductors, cables, exposed conduit, surface metal raceways, boxes, and fittings, back to equipment's power source as indicated.

3.1.10.4 Continuation of Service

Maintain continuity of existing circuits of equipment to remain. Existing circuits of equipment shall remain energized. Circuits which are to remain but were disturbed during demolition shall have circuits wiring and power restored back to original condition.

3.2 FIELD FABRICATED NAMEPLATE MOUNTING

Provide number, location, and letter designation of- nameplates as indicated. Fasten nameplates to the device with a minimum of two sheet-metal screws or two rivets.

3.3 WARNING SIGN MOUNTING

Provide the number of signs required to be readable from each accessible side. Space the signs in accordance with NFPA 70E.

3.4 FIELD QUALITY CONTROL

Furnish test equipment and personnel and submit written copies of test results. Give Contracting Officer 5 working days notice prior to tests.

3.4.1 Devices Subject to Manual Operation

Each device subject to manual operation shall be operated at least five times, demonstrating satisfactory operation each time.

-- End of Section --

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CATHODIC PROTECTION SYSTEM (STEEL WATER TANKS)

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ASTM INTERNATIONAL (ASTM)

ASTM D 1248(2005) Standard Specification for Polyethylene Plastics Extrusion Materials for Wire and Cable

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C135.30(1988) Zinc-Coated Ferrous Ground Rods for Overhead or Underground Line Construction

IEEE Std 81(1983) Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System (Part 1)Normal Measurements

NACE INTERNATIONAL (NACE)

NACE SP0388(2007) Impressed Current Cathodic Protection of Internal Submerged Surfaces of Carbon Steel Water Tanks

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NATIONAL SANITATION FOUNDATION (NSF) - NSF/ANSI Standard 61 - Drinking Water System Components

NEMA FU 1(2002/ R 2007) Low Voltage Cartridge Fuses

NEMA TC 2(2003) Standard for Electrical Polyvinyl Chloride (PVC) Tubing and Conduit

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70(2008; AMD 1 2008) National Electrical Code - 2008 Edition

UNDERWRITERS LABORATORIES (UL)

UL 4 67(2007) Standard for Grounding and Bonding Equipment

UL 506(2000/ Rev thru May 2006) Standard for Specialty Transformers

UL 510(2005; Rev thru Aug 2005) Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape

UL 514A(2004; Rev thru Aug 2007) Standard for Metallic Outlet Boxes

UL 6(2007) Standard for Electrical Rigid Metal Conduit-Steel

1.2 SYSTEM DESCRIPTION

Provide and install a complete automatic cathodic protection system, to prevent corrosion on the interior submerged surface of the water tank(s). Install all equipment wiring, and. wiring devices, necessary to produce a continuous flow of direct current from electrodes in the electrolyte to the metal tank surfaces. The installation shall meet the criteria and protection outlined in paragraph CRITERIA OF PROTECTION for a 20 year life. Place the cathodic protection system in operable status.

a. The purpose of the system is to adequately and efficiently protect the surfaces of the metal against corrosion where the surfaces are in contact with water; this is in addition to the protective coating on the tank. The contract drawings indicate the location and size of the tank(s). The system design shall be based on an impressed current type system.

b. Use this impressed current system, as described, with anodes as found necessary in calculation and submitted data to meet this specification. Install anodes in sufficient number and of the required type, size and spacing to obtain a uniform current distribution of 0.5 milliamperes per 1 square foot to all submerged surfaces in the tank when filled with water to the over-flow level. The anodes shall

be suspended from the roof steel with hangers or supporting cables that are electrically isolated from both the metal roof and the water electrolyte. Place the anodes with the roof door midway between two adjacent anodes and hung clear of contact with such items as ladders, heater pipes, and stay rods.

c. Contractor's Modifications. The Contractor may modify the cathodic protection system after review of the project, site verification and analysis if the proposed modifications include impressed current anodes and rectifiers and will provide equal or better overall system performance. This modification shall be fully described and submitted for approval to the Contracting Officer. Modifications or additional anodes shall be at no additional cost to the Government and incorporate all requirements of this specification.

d. The proposed system shall achieve a minimum "Instant Off" potential of minus 850 millivolts with reference to a saturated copper-copper sulfate reference cell on the tank components. Take measurements and adjust the current and voltage of the rectifier as required to produce the required "Instant Off" potential between the structure being tested and the reference cell. This potential shall be obtained over 95 percent of the metallic area without the "Instant Off" potential exceeding 1100 millivolts. The tank-to-water potentials as described above shall be free of "IR" drop error.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for-information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Detail Drawings (GJ)

Six copies of detail drawings, within 45 days after the date of award of the contract, before commencement of any work and in accordance with SPECIAL CLAUSES, consisting of a complete list of equipment and materials including

manufacturer's descriptive and technical literature, catalog cuts, and installation instructions.

Contractor's Modifications[G]

Six copies of detail drawings, showing proposed changes in location and scope or performance, indicating any variations from, additions to, or clarifications of contract drawings. The drawings shall show proposed changes in anode arrangement, anode size and number, anode materials and layout details, conduit size, wire size, mounting details, wiring diagram, method for electrically isolating each pipe, and any other pertinent information to the proper installation and performance of the system.

SD-03 Product Data

Miscellaneous Materials[GJ]

Equipment[G]

Within 45 days after receipt of notice to proceed, a submittal with information on all equipment and materials including item number, quantity, and manufacturer of each item shall be presented for review. Installation of materials and equipment shall not commence until this submittal is approved.

Spare Parts

Spare parts data shall be provided for those parts deemed as typical replacement items.

SD-06 Test Reports

Testing, Adjusting, and Placing in Service

Test reports tabulating all field tests and measurements performed, upon completion and testing of the installed system and including potential survey and final system test verifying protection. Each test report shall indicate the final position of controls,

Contractor's Modifications[G)

Final report including measurements throughout the tank area, indicating that the addition of anodes corrected the conditions which made the additional anodes necessary. The

following are required: Installation and testing procedures, anode number, life, and parameters to achieve protective potential.

SD-07 Certificates

Cathodic Protection System

Proof that the materials and equipment furnished under this section conform to the specified requirements contained in the referenced standards or publications. A certificate of conformance shall be provided with the O&M's stating that the installed system meets the project specifications.

Services of "Corrosion Expert"[G]

Evidence of qualifications of the "corrosion expert". Name and qualifications shall be certified in writing to the Contracting Officer prior to the start of construction. Submit the certification giving the name of the firm, the number of years of experience, and a list of not less than five of the firm's installations three or more years old that have been tested and found satisfactory. A NACE certified Cathodic Protection Specialist shall be responsible for review of all submitted design documents as well as all test result reports. The project manager shall be a NACE certified Cathodic Protection Technician with CP-2 credentials and the installation crew foreman shall be a NACE certified Cathodic Protection Tester with CP-1 credentials.

SD-10 Operation and Maintenance Data

Cathodic Protection System

Six copies of operating manual outlining the step-by-step procedures required for system startup, operation, adjustment of current flow, and shutdown. The manuals shall include the manufacturer's name, model number, service manual, parts list, and brief description of all equipment and their basic operating features. Six copies of maintenance manual listing routine maintenance procedures, recommendation for maintenance testing, possible breakdowns and repairs, and troubleshooting guides. The manuals shall include single line diagrams for the system as installed, instructions in making tank-to-reference cell potential measurements, and describe the frequency of monitoring.

The instructions shall include precautions to ensure safe conditions during repair of system.

Training

The proposed Training Course Curriculum indicating that all of the items contained in the operating and maintenance instructions, as well as demonstrations of routine maintenance operations, including testing procedures included in the maintenance instructions, are to be covered.

1.4 QUALITY ASSURANCE

1.4.1 Services of "Corrosion Expert"

Obtain the services of a "corrosion expert" to supervise and inspect the installation and performance of the cathodic protection system. "Corrosion expert" refers to a person, who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by professional education and related practical experience, is qualified to engage in the practice of corrosion control on steel water tanks. Such a person must be accredited or certified by the National Association of Corrosion Engineers (NACE) as a NACE Accredited Corrosion Specialist or a NACE certified Cathodic Protection (CP) Specialist or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on steel water tanks, if such certification or licensing includes 5 years experience in corrosion control on steel water tanks of the type under this contract. The "corrosion expert" shall ensure that the cathodic protection system is installed, tested, and placed into service in accordance with the requirements specified; and shall also design, make calculations, and assure quality control as required. The NACE certified Cathodic Protection Specialist shall be responsible for review of all submitted design documents as well as all test result reports. The "corrosion expert" shall also ensure that the project manager is a NACE certified Cathodic Protection Technician with CP-2 credentials and that the installation crew foreman is a NACE certified Cathodic Protection Tester with CP-1 credentials.

1.4.2 Detail Drawings

Provide on the drawings tank dimensions, anode arrangement for both elevated and sectional views of the tank, anode size and number, anode material, anode-suspension details, conduit size, wire size, rectifier size and location, handhole details, wiring diagram, and any other pertinent information considered necessary for the proper installation and performance of the system. Shop drawings shall also contain complete wiring and schematic diagrams and any other details required to demonstrate that the system has been coordinated and will function as a unit. The list of materials and equipment shall include catalog cuts diagrams, and other descriptive data required by the Contracting Officer for the following list of material. Partial lists submitted from time to time will not be allowed.

- a. Water resistivity (estimated)
- b. Conductors.
- c. Anodes.
- d. Reference Electrodes
- e. Coating material for areas requiring touch-up.
- f. Layout of anodes in tanks, conduit & rectifier.
- g. Special details.
- h. Certified experience data of installing firm.
- i. Rectifier Unit.
- j. Calculations for system current requirements & anode design life
- k. ANSI / NSF-61 classification documents for all system components within the tank.

Submit all detail drawings at one time, as a single submittal, in order to demonstrate that the items have been properly coordinated and will function properly as a unit. A notation shall be made on each shop drawing submitted as to the item's specific use, either by a particular type number referenced on the drawings, or in the specifications,

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or by a description of its specific location.

1.5 EXTRA MATERIALS

Submit spare parts data for each different item specified as a typical replacement part within the project O&M manuals. The data shall include a complete list of parts, special tools, and supplies with source of supply.

PART 2 PRODUCTS

2.1 ANSI / NSF-61 CERTIFICATION

All materials in contact with the water or exposed to the interior of the tank shall be classified in accordance with ANSI/NSF 61 "Drinking Water System Components". This requirement shall be met under testing conducted by a product certification organization accredited for this purpose by the American National Standards Institute. Contractor shall submit copy of company registration and materials certificate to the project engineer verifying ANSI/NSF 61 system components classification.

2.2 IMPRESSED CURRENT ANODES

2.2.1 Mixed Metal Oxide Anodes

Mixed metal oxide anodes shall be of the size indicated on the design drawings and shall conform to the following requirements.

2.2.1.1 Conductive Material

The electrically conductive coating shall contain a mixture consisting primarily of iridium, tantalum, and titanium oxides. The anode must be inert and the electrically conductive ceramic coating dimensionally stable. The mixed metal oxide coating shall be applied to the wire anode by a firm that is regularly engaged in and has a minimum 5 years experience in manufacturing and applying mixed metal oxide coating to titanium anode substrates. The mixed metal oxide shall be sintered to the titanium surface to remain tightly bound to the surface when bent 180 degrees onto itself.

2.2.1.2 Anode Connecting Cables

The bowl anode lead wire connection between the anode wire and the lead wire shall be eliminated by using a continuous length anode wire spliced directly to the anode header wire above the high water line. This connection shall be made using a solid crimp connector with a half-lapped rubber tape and vinyl tape overlay. The submerged anode-to-lead wire connection for riser anodes shall be made utilizing a solid crimp connector encapsulated within an epoxy splice kit designed for submerged use.

2.3 RECTIFIERS AND ASSOCIATED EQUIPMENT

2.3.1 Rectifier Unit

Rectifier unit shall consist of a transformer, rectifying elements, transformer tap adjuster, terminal block, one dc output voltmeter, one dc output ammeter, one potential meter, fuse holders with fuses for each dc circuit, variable resistor for any secondary circuits, an ac power-supply circuit breaker, lightning arresters for both input and output; all wired and assembled in a weatherproof cabinet. The overall efficiency of the rectifier shall be not less than 65 percent when operated at nameplate rating and shall be capable of supplying continuous full rated output at an ambient temperature of 44 degrees C 112 degrees F in full sunlight with expected life of 20 years.

2.3.1.1 Transformer Transformer

shall conform to UL 506.

2.3.1.2 Rectifying Elements

Rectifying elements shall be silicon diodes connected to provide full-wave rectification. Silicon diodes shall be protected by selenium surge cells or varistors against over-voltage surges and by current limiting devices against over-current surges.

2.3.1.3 Meters

Meters shall be accurate to within plus or minus 2 percent of full scale at 27 degrees C 80 degrees F, and shall possess temperature stability above and below 27 degrees C 80 degrees F of at least 1 percent per 5 degrees C 10

degrees F. Separate meters shall be 63.5 mm 2 inch nominal size or larger.

2.3.1.4 Circuit Breaker

A single-pole, flush-mounted, fully magnetic, properly rated non-terminal type circuit breaker shall be installed in the primary circuit of the rectifier supply transformer.

2.3.1.5 Fuses

Cartridge-type fuses conforming to NEMA FU 1 with suitable fuse holders shall be provided in each leg of the dc circuit.

2.3.1.6 Automatic Cathodic Protection Control

Provide a system capable of maintaining a tank-to-water potential criterion of protection within plus or minus 25 millivolts regardless of changes in water chemistry, temperature, or water level in the tank. Provision shall be made for readily changing the range and limits of the criterion. The controller shall be either housed integrally with the rectifier or in a separate weatherproof cabinet with provisions for locking. The automatic controller shall be a completely solid-state design, and shall be capable of automatically maintaining the tank-to-water potential at minus 900 millivolts with respect to a copper-copper sulfate reference electrode within an accuracy of 25 millivolts. The tank-to-water potential measured and maintained by the controller shall be free of "IR" drop error.

2.3.1.7 Tank-to-Water Potential Meter

The controller shall be equipped with a calibrated voltmeter having an internal impedance exceeding 1 megohm which shall be so connected to read, from the system reference cell, the tank-to-water potential being maintained by the cathodic protection system. . This voltage reading shall be free of "IR" drop error.

2.3.2 Cabinet

Construct cabinet of stainless steel, and provided with a

full door. The enclosure shall have oil-resistant gasket and a NEMA 4X rating. The door shall be hinged and have a hasp that will permit the use of a padlock. The cabinet shall be sized properly in order to provide for adequate cooling.

2.3.2.1 Wiring Diagram

A complete wiring diagram of the power unit showing both the ac supply and the 6c connections to anodes shall be included within the submittal documents for the system.

2.3.2.2 Grounding

Grounding provisions shall comply with NFPA 70 and UL 467 including a ground terminal in the cabinet. The grounding conductor from the terminal to the earth grounding system shall be solid or stranded copper not smaller than No. 6 AWG. The earth grounding system shall consist of one or more rods. Ground rods shall be copper-clad steel conforming to UL 4 67 not less than 5/8 inch in diameter by 8 feet in length. Rods shall be driven full length into the earth. Sectional type rods may be used.

2.3.2.3 Resistance to Ground

Measure the resistance to ground using the fall-of-potential method described in IEEE Std 81. The maximum resistance of driven ground shall not exceed 25 ohms under normally dry conditions. If this resistance cannot be obtained with a single rod, additional rods not less than 6 feet on centers, or if sectional type rods are used, additional sections may be coupled and driven with the first rod. In high-ground-resistance, UL listed chemically charged ground rods may be used. If the resultant resistance exceeds 25 ohms measured not less than 48 hours after rainfall, the Contracting Officer shall be notified immediately. Connections below grade shall be fusion welded. Connections above grade shall be fusion welded or shall use UL 467 approved connectors.

2.3.2.4 Cabinet Paint System

The cabinet shall be constructed of stainless steel and shall not be painted.

2.3.3 Wiring

Wiring shall be installed in accordance with NFPA 70 utilizing type TW or RHW or polyethylene insulation. Fittings for conduit and cable work shall conform to UL 514A. Outlets shall be of the threaded hub type with gasketed covers. Conduit shall be securely fastened at 8 foot intervals or less. Splices shall be made in outlet fittings only. Conductors shall be color coded for identification. Cable for anode header and distribution shall be No. 10 AWG stranded copper wire with type RHW insulation.

2.4 MISCELLANEOUS MATERIALS

2.4.1 Reference Electrodes

The electrodes shall be copper-copper sulphate type provided with micro-pore diffusion window for water contact. A minimum of two reference electrodes shall be part of this system. Electrodes shall be designed for a 20 year life.

2.4.2 Electrical Wire and Associated Materials

2.4.2.1 Anode Connecting Wire

Bowl anode connecting wires shall be eliminated from this project through the use of full length anode wires. Riser anode connecting wires shall be #10 AWG stranded copper wire with type RHW insulation, 600-volt rating.

2.4.2.2 Anode Header Cable

Cable for anode header and distribution shall be #10 AWG stranded copper wire with type RHW insulation, 600-volt rating. Cable-to-anode contact resistance shall be 0.003 ohms maximum.

2.4.2.3 Reference Electrode Wire

Reference electrode wire shall be #14 stranded copper wire with NFPA 70 type RHW-USE or polyethylene insulation.

2.4.3 Conduit

Rigid galvanized steel conduit and accessories shall conform to UL 6. Nonmetallic conduit shall conform to NEMA

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full door. The enclosure shall have oil-resistant gasket and a NEMA 4X rating. The door shall be hinged and have a hasp that will permit the use of a padlock. The cabinet shall be sized properly in order to provide for adequate cooling.

2.3.2.1 Wiring Diagram

A complete wiring diagram of the power unit showing both the ac supply and the 6c connections to anodes shall be included within the submittal documents for the system.

2.3.2.2 Grounding

Grounding provisions shall comply with NFPA 70 and UL 467 including a ground terminal in the cabinet. The grounding conductor from the terminal to the earth grounding system shall be solid or stranded copper not smaller than No. 6 AWG. The earth grounding system shall consist of one or more rods. Ground rods shall be copper-clad steel conforming to UL 467 not less than 5/8 inch in diameter by 8 feet in length. Rods shall be driven full length into the earth. Sectional type rods may be used.

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2.4.3 Conduit

Rigid galvanized steel conduit and accessories shall conform to UL 6. Nonmetallic conduit shall conform to NEMA

TC 2.

2.4.A Test Boxes and Junction Boxes

Boxes shall be outdoor type conforming to UL 514A.

2.4.5 Polyethylene Insulation

Polyethylene insulation shall comply with the requirements of ASTM 0 1248 and of the following types, classes, and grades:

2.4.5.1 High Molecular Weight Polyethylene

High molecular weight polyethylene shall be Type I, Class C, Grade E5.

2.4.5.2 High Density Polyethylene

High density polyethylene shall be Type III, Class C, Grade E3.

2.4.6 Pressure-Sensitive Vinyl Tape

Tape shall conform to UL 510.

PART 3 EXECUTION

3.1 EXAMINATION

Coordinate and properly relate this work to the work of all trades. The general locations of the structures to receive protection are shown. Visit the premises and after becoming familiar with all details of the work and working conditions, verify existing conditions in the field, determine the exact locations of structures to be protected, and advise the Contracting Officer of any discrepancy before performing any work. Obtain a water analysis for the purpose of determining the water resistivity and provide this data within the system design calculations.

3.2 CRITERIA OF PROTECTION

Acceptance criteria for determining the adequacy of protection on the internal submerged surfaces of steel water tanks shall be in accordance with NACE SP0388 and as

specified below.

3.2.1 Minimum

The criterion of protection is a negative voltage of at least minus 850 millivolts as measured between the tank and a saturated copper-copper-sulphate reference electrode. Determination of this voltage shall be made with the cathodic protection system in operation. Voltage drops shall be considered for valid interpretation of this voltage measurement. A minimum of minus 850 millivolts "instant off" potential between the tank surface being tested and the reference cell shall be achieved over 95 percent of the area of the structure. Obtain adequate number of measurements over the entire tank surface to verify and record achievement of minus 850 millivolts "instant off". This potential shall be obtained over 95 percent of the total metallic area without the "instant off" potential exceeding the maximum limit indicated below. The tank-to-water potentials as described above shall be free of "IR" drop error.

3.2.2 Maximum

In order to mitigate disbonding of the interior coating in the tank, potential between a copper-copper-sulphate reference electrode and the tank at any point shall not be more negative than minus 1.100 volt measured with the electrode located between 1/4 inch and 1/2 inch and away from the steel surface but not touching it. The tank-to-water potentials as described above shall be free of "IR" drop error.

3.3 ANODES

3.3.1 Anode Installation

Suspend anodes to prevent icing damage to anodes and suspending cables. Anodes shall be suspended from roof plate by means of a porcelain insulator. Anodes shall be suspended preventing contact with tank surfaces and shall be hung clear of man-access roof hatches and such items as ladders, heater pipes, and stay rods. Anode hangers shall electrically insulate the anode suspending wire from the tank steel. A handhole having a minimum diameter of 5 inches shall be provided in the tank roof for each anode string to permit replacement or inspection of anodes.

Certify that the method chosen has been used successfully for similar applications.

3.3.2 Anode Connections

Anodes shall be electrically connected to the positive dc header cable with compression connectors or split bolts. A minimum of two split bolts shall be used for each connection if split bolts are used. Header cable shall be installed on the underside of the roof with electrically insulating hangers and shall enter the tank near the roof line from an externally mounted conduit or junction box. External wiring shall be in conduit. All under-roof electric wire splices shall be made above the high water line and sealed water tight using a minimum of two 1/2-lap layers of butyl rubber tape followed by two 1/2-lap layers of plastic tape.

3.4 RECTIFIERS

3.4.1 Rectifier and Control Installation Mounting shall be of the wall mounted type as shown.

3.4.2 Rectifier Grounding

The grounding system for grounding rectifier cabinets shall have a resistance to earth of not more than 25 ohms as determined by an approved method.

3.5 PERMANENT REFERENCE ELECTRODES

3.5.1 Calibration

Calibrate permanent reference electrodes against a standard electrode before installation. Perform calibration in a test tank containing water with the same composition as the tank to be protected. The permanent electrodes shall measure reference voltage agreeing with that measured by the standard electrode within plus or minus 0.005 volt when the sensing windows of the two electrodes being compared are not more than 1 inch apart but not touching.

3.5.2 Installation

Reference electrodes shall be operable under the same icing conditions as the anode system. Installation of permanent

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reference electrodes shall be made at points in the tank which will monitor minimum and maximum tank-to-water potentials and as otherwise needed for automatic control system. Sensing windows of reference electrodes shall be located to prevent contact with steel. Reference electrodes shall be installed with ease of replacement in mind & shall be accessible from the roof manway hatch or access handhole.

3.6 TRAINING

Conduct a training course for the operating staff as designated by the Contracting Officer. The training period shall consist of a total of 1/2 hour of normal working time and shall start after the system is functionally complete but prior to final acceptance tests. The field instructions shall cover all of the items contained in the operating and maintenance instructions, as well as demonstrations of routine maintenance operations. Notify the Contracting Officer at least 14 days prior to date of proposed start of the training course.

3.7 TESTING, ADJUSTING, AND PLACING IN SERVICE

3.7.1 Electrode Potential Measurements

Upon completion of the installation, fill the tank to maximum working level and with the entire cathodic protection system in operation; electrode potential measurements shall be made using a copper-copper sulphate reference electrode and a potentiometer-voltmeter, or a direct current voltmeter having an input impedance of not less than 10 megohms per volt and a full scale of 10 volts. The locations of these measurements shall be identical to the locations used for baseline potentials. The values obtained and the date, time, and locations of measurements shall be recorded.

3.7.1.1 Tank-to-Water Potential Measurements

The following series of tank-to-water potential measurements with a portable reference electrode placed not more than 1/2 inch away from but not touching the tank wall shall be performed:

- a. On a vertical line midway between two anode strings beginning at a point 1 foot below water level and continuing at points 3 feet apart until the bottom of the tank is reached.
- b. On a second vertical line midway between two anode strings on the opposite side of the tank from the first vertical line beginning at a point 1 foot below water level and continuing at points 3 feet apart until the bottom of the tank is reached.
- c. Across the bottom of the tank in a line between the two vertical lines at 3 foot intervals.
- d. In at least four places which are closest to anodes.

3.7.1.2 Reference Electrode Calibration

The portable reference electrode used for the test shall be calibrated against the standard electrode specified in paragraph PERMANENT REFERENCE ELECTRODES.

3.7.1.3 Test Measurement Recording

All test measurements and their locations, as well as measurements made with the permanent electrodes simultaneously with the test measurements, shall be recorded.

3.7.2 Adjusting

Final adjustment of the rectifier output current shall be made so that repeated voltage readings taken as specified for testing meet the criteria in paragraph CRITERIA OF PROTECTION.

3.8 PLACING IN SERVICE

After final adjustment, place the cathodic protection system in service and record the condition of the system as left by the Contractor indicating transformer tap settings; voltage readings from reference electrode to tank, readings both horizontal and vertical; automatic control differential setting; ac supply voltage; adjusted dc output voltage; and total protective current.

3.9 WARRANTY

3.9.1 All workmanship, equipment, and materials furnished by the cathodic protection Constructor shall be guaranteed for one (1) year.

3.9.2 At the conclusion of the warranty period, the cathodic protection constructor shall furnish a service agreement to the owner for the type of system installed. The agreement shall include the annual service rate and a complete description of the scope of work proposed. The agreement for annual inspection and potential testing shall include as a minimum:

1. One (1) annual job site visit.
2. Tank-to-water potential measurements conducted at representative locations within the tank. A minimum of five (5) locations shall be measured.
3. Measurements shall be conducted with a portable high impedance voltmeter and a calibrated copper-copper sulfate reference electrode.
4. Adjustments for optimum corrosion control shall be in accordance with criteria for protection.
5. Data recorded shall provide sufficient information to evaluate the performance for the system relating to criteria for protection.
6. In the event additional work is required, the constructor shall submit a report with recommendations for optimizing corrosion control,

--END OF SECTION--

PARTVII-DRAWINGS

SHEET #	DESCRIPTION
G1.1	COVER AND INDEX
E1.1	ELECTRICAL LEGEND, NOTES AND ABBREVIATIONS
E3.1	ELECTRICAL SITE & DEMOLITION PLANS
E3.2	ELECTRICAL SITE & DEMOLITION PLANS
E3.3	ELECTRICAL SITE & DEMOLITION PLANS
E5.1	ELECTRICAL SINGLE LINE DIAGRAMS
E5.2	ELECTRICAL SINGLE LINE DIAGRAMS
E5.3	ELECTRICAL SINGLE LINE DIAGRAMS
CP3.1	CATHODIC PROTECTION PLANS
CP3.2	CATHODIC PROTECTION PLANS
CP3.3	CATHODIC PROTECTION PLANS
CP7.1	CATHODIC PROTECTION DETAILS
CP7.2	CATHODIC PROTECTION DETAILS
CP7.3	CATHODIC PROTECTION DETAILS

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CP3.3	CATHODIC PROTECTION PLANS
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CP7.2	CATHODIC PROTECTION DETAILS
CP7.3	CATHODIC PROTECTION DETAILS

Note: An electronic copy of the drawings may be obtained by contracting Polyengineering, 102 Sunset Lane, Shalimar, FL 32579; 850-609-1100

Okaloosa Department of Growth Management

Contractor License Registration/ Renewal Application

A. Contractor Information – Please Print MARK HERE IF ADDRESS CHANGE

Contractor Name			DOB	DL# - State
Business Name				
Mailing Address		City	State	Zip Code
Email Address				
Cell #	Work #	Home #	Fax #	

B. Type of License – Mark all that apply

- | | | |
|--|---|---|
| <input type="checkbox"/> Alarm | <input type="checkbox"/> Landscape Structures | <input type="checkbox"/> Residential Contractor |
| <input type="checkbox"/> Building Contractor | <input type="checkbox"/> Low Voltage | <input type="checkbox"/> Roofing |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> LP Gas | <input type="checkbox"/> Sheet Metal |
| <input type="checkbox"/> Electrical/Electrical Sign | <input type="checkbox"/> Marine | <input type="checkbox"/> Sign Non-Electrical |
| <input type="checkbox"/> Exterior Applications | <input type="checkbox"/> Master Gas Fitter | <input type="checkbox"/> Solar Contractor |
| <input type="checkbox"/> Fire Sprinkler/Extinguisher | <input type="checkbox"/> Mechanical/ Class A/ Class B | <input type="checkbox"/> Specialty Structures |
| <input type="checkbox"/> General Contractor | <input type="checkbox"/> Mobile Home Installer | <input type="checkbox"/> Swimming Pool |
| <input type="checkbox"/> House Moving | <input type="checkbox"/> Plumbing | <input type="checkbox"/> Swimming Pool Servicing |
| <input type="checkbox"/> Irrigation & Sprinkler | <input type="checkbox"/> Pollutant Storage | <input type="checkbox"/> Underground Utilities & Excavation |

C. Status – Mark all that Apply

- Active
 Retired
 Change of Status
 Certified
 Registered
 Local Specialty

D. Applicant Certification

MAIL TO: 812 E. James Lee Blvd, Crestview, FL 32539

I certify that all the information provided in this application is true and accurate, to the best of my knowledge and belief. I further acknowledge and understand that all information in this application and in my file are public record and subject to Florida Status 119.07.

I also certify that the Articles of Incorporation and/or Fictitious Name Filing as registered with the Florida Division of Corporations are active and in good standing.

Signature of license holder/agent _____ Date _____

E. OFFICE USE ONLY

Year expiring	_____ / _____ / 2013	\$ _____	Customer Number: _____
Year expiring	_____ / _____ / 2014	\$ _____	Total Paid \$ _____
Year expiring	_____ / _____ / 2015	\$ _____	Staff Initial _____

Permit Number(s) _____ Receipt Number(s) _____

Comments: _____

Date Application Received: _____