

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES 1 42	
2. MODIFICATION NO.: 0001		3. EFFECTIVE DATE 13 Aug 2003	4. REQUISITION/PURCHASE REQ. NO. W81W3G-3113-8489	PROJECT NO. (If applicable)	
6. ISSUED BY CONTRACTING DIVISION 3700 N. CAPITOL ST NW 1 ST FLOOR SHERMAN BUILDING WASHINGTON, DC 20317		CODE	7. ADMINISTERED BY:		CODE
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)			(x)	9A. AMENDMENT OF SOLICITATION NO. DACW31-03-R-0025	
			X	9B. DATED (SEE ITEM 11) 22 JUL 2003	
				10A. MODIFICATION OF CONTRACT/ ORDER NO.	
				10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers X is extended is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or © By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER No. ITEM 10A
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR43.103(b)
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF Section headings, including solicitation/contract subject matter where feasible.)
WHEATLEY ELEMENTARY SCHOOL, WASHINGTON, DC

- Delete Section 01060 in its entirety and replace with the attached Section 01060, retain the Site Security Log Form.
- Delete Section 01200 in its entirety and replace with the attached Section 01200.
- Delete Section 01451 in its entirety and replace with the attached Section 01451.
- Delete Section 01460 in its entirety and replace with the attached Section 01460.
- Delete Section 01510 in its entirety and replace with the attached Section 01510, retain the attachments Project Sign and Safety Sign.
- Delete Section 01520 in its entirety and replace with the attached Section 01520.
- Delete Section 01720 in its entirety and replace with the attached Section 01720.
- The proposal due date is hereby extended until 04 September 2003 @ 4:00PM local time.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
<u> </u> (signature of person authorized to sign)		BY <u> </u> (Signature of Contracting Officer)	

SECTION 01060

SAFETY
01/02

PART 1 GENERAL

1.1 APPLICABLE PUBLICATION

The publications listed below form a part of this specification and are referred to in the text by the basic designation only. All interim changes (changes made between publications of new editions) to the U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, will be posted on the Headquarters Website. The date that it is posted shall become the official effective date of the change and contracts awarded after this date shall require to comply accordingly. The website location where these changes can be found is under the button entitled "Changes to EM", located at: "http://www.hq.usace.army.mil/soh/hqusace_soh.htm".

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI C2 National Electrical Safety Code

U.S. ARMY CORPS OF ENGINEERS:

EM 385-1-1 (3 Sep 1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1904 Recording and Reporting Occupational Injuries and Illness

29 CFR 1910 Occupational Safety and Health Standards

29 CFR 1926 Safety and Health Regulations for Constructions

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (1993) National Electrical Code

1.2 DESCRIPTION OF WORK

This specification section applies to all site work performed under this contract. All construction activities must be addressed in the Site Safety and Health Plan (SSHP). Requirements delineated in this section are in addition to or an amplification of procedures and requirements of the referenced regulations and documents.

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. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Safety Supervisor; G AR.

A safety supervisor shall be responsible for overall supervision of accident prevention activities.

Activity Phase Hazard Analysis Plan; G AR.

The addressing of the activity phase hazard analysis plan for each activity performed in a phase of work.

Site Safety and Health Plan; G AR

The SSHP shall be submitted for review within 21 days of Notice of Award.

Qualifications; G AR

Names and qualifications as specified for the Safety and Health Manager, Site Safety and Health Officer, alternates and technicians.

SD-02 Shop Drawings

Work Layout Drawings; G AR

Drawings shall include open construction work zone boundaries and access routes within the site.

SD-07 Certificates

Language Certification

It is the Contractors responsibility to ensure that all employees understand the basic english language.

SD-09 Reports

Activity Hazard Analyses in accordance with EM 385-1-1, paragraph 01.A.09; G AR

Activity Hazard Analyses shall be submitted prior to the beginning of each major phase of work.

Outline Report

A report for each past activities review.

OSHA Log

A log shall be reported monthly for injuries.

Site Control Log; G AR

Record of each entry and exit into the site, as specified.

1.4 GENERAL

The U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, and all subsequent revisions referred to in the Contract Clause ACCIDENT PREVENTION of this contract, are hereby supplemented as follows:

a. The Contractor shall designate an employee responsible for overall supervision of accident prevention activities. Such duties shall include: (1) assuring applicable safety requirements are (a) communicated to the workers in a language they understand (reference EM 385-1-1, September 1996, 01.A.04). It is the Contractor's responsibility to ascertain if there are workers on the job who do not speak and/or understand the English language, if such workers are employed by the prime contractor or subcontractors, at any tier, it is the prime contractor's responsibility to insure that all safety programs, signs, and tool box meetings are communicated to the workers in a language they understand, and that a bilingual employee is on site at all time. If the contractor contends that interpreters and/or bilingual signs are not required, language certification must be provided which verifies that all workers (whose native tongue is other than English) have a command of the English language sufficient to understand all direction, training and safety requirements, whether written or oral, and (b) incorporated in work methods, and (2) inspecting the work to ensure that safety measures and instructions are actually applied.

The proposed safety supervisor name and qualifications shall be submitted in writing for approval to the Contracting Officer's Representative. This individual must have prior experience as a safety engineer or be able to demonstrate his/her familiarity and understanding of the safety requirements over a prescribed trial period. The safety engineer shall have the authority to act on behalf of the Contractor's general management to take whatever action is necessary to assure compliance with safety requirements. The safety supervisor is required to be on the site when work is being performed.

b. Prior to commencement of any work at a job site, a preconstruction safety meeting shall be held between the Contractor and the Corps of Engineers Area/Resident Engineer to discuss the Contractor's safety program and in particular to review the following submittals:

(1) Contracts Accident Prevention Plan: An acceptable accident prevention plan, written by the prime Contractor for the specific work and implementing in detail the pertinent requirements of EM 385-1-1, shall be submitted for Government approval.

(2) Activity Phase Hazard Analysis Plan: Prior to beginning each major phase of work, an activity hazard analysis (phase plan) shall be prepared by the Contractor for that phase of work and submitted to the Contracting Officer's Representative for approval. A phase is defined as an operation involving a type of work presenting hazards not experienced in previous operations or where a new subcontractor or work crew is to perform work. The analysis shall address the hazards for each activity performed in the phase and shall present the procedures and safeguards necessary to eliminate the hazards or reduce the risk to an acceptable level.

c. Subsequent jobsite safety meetings shall be held as follows:

(1) A safety meeting shall be held at least once a month for all supervisors on the project to review past activities, to plan ahead for new or changed operations and to establish safe working procedures to anticipated hazards. An outline report of each monthly meeting shall be submitted to the Contracting Officer's Representative.

(2) At least one safety meeting shall be conducted weekly, or whenever new crews begin work, by the appropriate field supervisors or foremen for all workers. An outline report of the meeting giving date, time, attendance, subjects discussed and who conducted it shall be maintained and copies furnished the designated authority on request.

1.5 ACCIDENTS

Chargeable accidents are to be investigated by both Contractor personnel and the Contracting Officer.

1.5.1 Accident Reporting, ENG FORM 3394

Section 1, Paragraph 01.D, OF EM 385-1-1 and the Contract Clause entitled ACCIDENT PREVENTION are amended as follows: The prime Contractor shall report on Eng Form 3394, supplied by the Contracting Officer, all injuries to his employees or subcontractors that result in lost time and all damage to property and/or equipment in excess of \$2,000 per incident. Verbal notification of such accident shall be made to the Contracting Officer within 24 hours. A written report on the above noted form shall be submitted to the Contracting Officer within 72 hours following such accidents. The written report shall include the following:

- a. A description of the circumstances leading up to the accident, the cause of the accident, and corrective measures taken to prevent recurrence.
- b. A description of the injury and name and location of the medical facility giving examination and treatment.
- c. A statement as to whether or not the employee was permitted to return to work after examination and treatment by the doctor, and if not, an estimate or statement of the number of days lost from work. If there have been days lost from work, state whether or not the employee has been re-examined and declared fit to resume work as of the date of the report.

1.5.2 OSHA Requirements

1.5.2.1 OSHA Log

A copy of the Contractor's OSHA Log of Injuries shall be forwarded monthly to the Contracting Officer.

1.5.2.2 OSHA Inspections

Contractors shall immediately notify the Contracting Officer when an OSHA Compliance official (Federal or State representative) presents his/her credentials and informs the

Contractor that the workplace will be inspected for OSHA compliance. Contractors shall also notify the Contracting Officer upon determination that an exit interview will take place upon completion of the OSHA inspection. (NABSA OCT 05, 1976)

1.6 GOVERNMENT APPROVAL

Submittals shall be in accordance with Section 01330 SUBMITTAL PROCEDURES. All required submittals of items specified in this section shall be for information only, except for those items including, but not limited to, the following which shall be submitted for Government approval:

- a. Written designation of safety representative.
- b. Written project specific accident prevention plan.
- c. Written activity phase hazard analysis plan.

PART 2 PRODUCT

2.1 SAFETY AND HEALTH PROGRAM

OSHA standards require employers to develop and implement a written Safety and Health Program for their employees. This specification section integrates the site-specific program requirements of the OSHA standard into the Site Safety and Health Plan (SSHP). The SSHP shall interface with the employer's overall Safety and Health Program. Any portions of the overall Safety and Health Program that are referenced in the SSHP shall be included as appendices to the SSHP.

2.2 SITE SAFETY AND HEALTH PLAN (SSHP)

2.2.1 General Requirements for Preparation and Implementation

A Site Safety and Health Plan (SSHP) shall be prepared covering all on-site work to be performed by the Contractor and all subcontractors under this contract. The Safety and Health Manager shall be responsible for the development, implementation and oversight of the SSHP. The SSHP shall establish, in detail, the protocols necessary for the anticipation, recognition, evaluation, and control of all hazards associated with each task performed under this contract. The SSHP shall address site specific safety and health requirements and procedures based upon site-specific conditions. The level of detail provided in the SSHP shall be tailored to the type of work, complexity of operations to be performed, and hazards anticipated. Details about some activities may not be available when the initial SSHP is prepared and submitted. Therefore, the SSHP shall address, in as much detail as possible, all anticipated tasks, their related hazards and anticipated control measures. Additional details shall be included in the activity hazard analyses as described in paragraph: ACTIVITY HAZARD ANALYSES.

2.2.2 Acceptance and Modifications

Prior to submittal, the SSHP shall be signed and dated by the Safety and Health Manager and the Site Superintendent. USACE's designated representative will review the SSHP to determine if it meets the intent of the safety and health requirements specified herein. Deficiencies in the SSHP will be discussed at the pre-construction safety conference, and the SSHP shall be revised to correct the deficiencies and resubmitted for acceptance. On-site work shall not begin until this plan has been accepted. A copy of the written SSHP shall be maintained on-site. As work proceeds, the SSHP shall be adapted to new situations and new conditions. Changes and modifications to the accepted SSHP shall be made with the knowledge and concurrence of the Safety and Health Manager, the Site Superintendent, and the approval of USACE's designated representative. Should any unforeseen hazard become evident during the performance of the work, the Site Safety and Health Officer (SSHO) shall bring such hazard to the attention of the Safety and Health Manager, the Site Superintendent, and the USACE's designated representative, both verbally and in writing, for resolution as soon as possible. In the interim, necessary action shall be taken to reestablish and maintain safe working conditions in order to safeguard on-site personnel, visitors, the public, and the environment. Any disregard for the provisions of these Safety and Health specifications or the accepted SSHP shall be deemed just and sufficient cause for ordering the stopping of work until the matter has been rectified.

2.3 SITE DESCRIPTION

The SSHP shall include a site description and contamination characterization section that addresses the following elements, as a minimum:

- a. Description of site location, topography, size of site, past uses of site.
- b. A list of contaminants which may present occupational health and safety hazards.

2.4 HAZARD/RISK ANALYSIS

The SSHP shall include a safety and health hazard/risk analysis for each site task and operation to be performed. The purpose of the hazard/risk analysis is to provide information necessary for determining safety and health procedures, equipment, and training to protect on-site personnel, the environment, and the public. Available site information shall be reviewed when preparing the "Hazard/Risk Analysis" section of the SSHP. The following elements, as a minimum, shall be addressed:

2.4.1 Site Tasks and Operations (Workplan)

The SSHP shall include a comprehensive section that addresses the tasks and objectives of the site operations and the logistics and resources required to reach those tasks and objectives. Based on the type of remediation required by this contract, the following is a list of anticipated major site tasks and operations to be performed. This is not a complete list of site tasks and operations, therefore, its the Contractors responsibility to expanded and/or revise during preparation of the SSHP.

- a. Site Mobilization /Demobilization
- b. Clear and Grub

2.4.2 Hazards

The following subparagraphs list potential hazards that may be encountered during site work. These are not intended to be complete lists, therefore, they shall be expanded and/or revised during preparation of the SSHP.

2.4.2.1 Hazards

Include the potential for personal injury to the head/eyes, feet or hands, trip and fall hazards, hazards of work with and around heavy machinery, excavation, underground utilities, explosive atmospheres, inclement weather, and ergonomic hazards such as lifting, pulling, repetitive motions, etc. The SSHP shall also address employee exposure to hazardous substances brought on-site for the purpose of executing this contract and shall comply with the requirements of 29 CFR 1910.1200 and 29 CFR 1926.59, Hazard Communication.

2.4.2.2 Physical Agents

Physical agents that pose a threat to safety and health onsite include noise, electricity, radiant heat and ultraviolet rays from the sun.

2.4.2.3 Biological Hazards

Potential biological hazards include poisonous plants, insects, animals, and disease causing organisms. Of particular concern in this region of the country are the pathogens that cause Lyme disease which are carried by a common deer tick, Ixodes dammini. Bloodborne pathogens that cause HIV and Hepatitis B infections could pose a threat in an emergency situation where first aid or medical attention is necessary to stop bleeding. Site personnel responsible for rendering first aid assistance shall be trained in topics as outlined in 29 CFR 1910.1030, Bloodborne Pathogens. Procedures for handling situations where exposure to blood or body fluids may occur shall be included in the SSHP.

2.4.3 Action Levels

2.4.3.1 Confined Space Entry

Entry into and work in a confined space is not allowed when oxygen readings are less than 19.5% or greater than 23.5% or if the Lower Flammable Limit (LFL) reading is greater than 10%, unless these conditions are adequately addressed in the confined space entry program. In addition, action levels for toxic atmospheres shall be determined

2.5 ACTIVITY HAZARD ANALYSIS

Prior to beginning each major phase of work, an Activity Hazard Analysis shall be prepared. A major phase of work is defined as an operation involving a type of work presenting hazards not experienced in previous operations or where a new subcontractor or work crew is to perform. The analysis shall define ALL activities to be performed and identify the sequence of work, the specific hazards anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level. Work shall not proceed on that phase until the activity hazard analysis has been accepted and a preparatory meeting has been conducted to discuss its contents with all engaged in the activities, and government on-site representatives. The activity hazard analyses shall be continuously reviewed and when appropriate modified to address changing site conditions/operations, with the concurrence of the Safety and Health Manager, the Site Superintendent, and the USACE's designated representative. All activity hazard analyses shall be attached to and become a part of the SSHP.

2.6 STAFF ORGANIZATION, QUALIFICATION, AND RESPONSIBILITIES

An organizational structure shall be developed that sets forth lines of authority (chain of command), responsibilities, and communication procedures concerning site safety, health, and emergency response. This organizational structure shall cover management, supervisors, employees, and all subcontractors. It shall include the means for coordinating and controlling work activities of subcontractors and suppliers. The SSHP shall include a description of this organizational structure as well as qualifications and responsibilities of each of the following individuals.

2.6.1 Site Superintendent

A Site Superintendent, who has responsibility to implement the SSHP, the authority to direct work performed under this contract and verify compliance, shall be designated and be on the site full time.

2.6.2 Safety and Health Manager

2.6.2.1 Qualifications

The services of an Industrial Hygienist certified by the American Board of Industrial Hygiene shall be utilized. The name, qualifications (education summary and documentation, ABIH certificate), and work experience summary shall be submitted in accordance with paragraph: SUBMITTALS. The Safety and Health Manager shall have the following additional qualifications:

- a. A minimum of three years experience in developing and implementing safety and health programs.
- b. Documented experience in supervising professional and technician level personnel.
- c. Documented experience in developing worker exposure assessment programs and air monitoring programs and techniques.
- d. Documented experience in the development of personal protective equipment programs including programs for working in and around potentially toxic, flammable and combustible atmospheres and confined spaces.
- e. Working knowledge of State and Federal occupational safety and health regulations.

2.6.2.2 Responsibilities

The Safety and Health Manager shall:

- a. Be responsible for the development, implementation, oversight, and enforcement of the SSHP,
- b. Sign and date the SSHP prior to submittal,
- c. Conduct initial site-specific training,

- d. Be present on-site during the first three days activities and at the startup of each new major phase,
- e. Visit the site as needed and at least once per week for the duration of activities to audit the effectiveness of the SSHP,
- f. Be available for emergencies,
- g. Provide on-site consultation as needed to ensure the SSHP is fully implemented,
- h. Coordinate any modifications to the SSHP with the Site Superintendent, the SSHO, and the USACE's designated representative,
- i. Be responsible for evaluating air monitoring results and recommending changes to engineering controls and work practices,
- j. Review accident reports and results of daily inspections,
- k. Serve as a member of the quality control staff.

2.6.3 Person(s) Certified in First Aid and CPR

At least two persons who are currently certified in first aid and CPR by the American Red Cross or other approved agency shall be on-site at all times during site operations. They shall be trained in universal precautions and the use of PPE as described in the bloodborne pathogens standard, 29 CFR 1910.1030. These persons may perform other duties but must be immediately available to render first aid when needed.

2.7 TRAINING

All personnel shall receive training in accordance with the written safety and health training program and applicable regulations, especially OSHA standards 29 CFR 1910.120, 29 CFR 1926.65, and 29 CFR 1926.21. A copy of a Certificate of Worker/Visitor Acknowledgment shall be completed for each employee in the same format and containing the same information as the example certificate appended to this section.

2.7.1 Site-specific Training

All site-specific training sessions shall be documented including the date, attendance, subjects discussed, and names of individual(s) who conducted the meetings. Documentation shall be maintained and copies furnished to the designated authority upon request.

2.7.1.1 Initial Session

Prior to commencement of on-site field activities, all site employees shall attend a site-specific safety and health training session. This session shall be conducted by the Safety and Health Manager and the Site Safety and Health Officer to ensure that all personnel are familiar with requirements and responsibilities for maintaining a safe and healthful work environment. All procedures and contents of the accepted SSHP shall be thoroughly discussed. The USACE's designated representative shall be notified at least five days prior to the initial site-specific training session so government personnel involved in the project may attend.

2.7.1.2 Periodic Sessions

Periodic on-site training shall be conducted by the SSHO at least daily for all personnel assigned to work at the site during the following day. The training shall address safety and health procedures, work practices, any changes in the SSHP, activity hazard analyses, work-tasks, schedule changes, review of safety discrepancies noted, or accidents occurring, during the previous day, etc. Should an operational change affecting on-site field work be made, a meeting prior to implementation of the change shall be convened to explain safety and health procedures. Site-specific training sessions for new personnel, visitors, and suppliers shall be conducted by the SSHO using the training curriculum outlines developed by the Safety and Health Manager

2.8 HEAT/COLD STRESS MONITORING

The Safety and Health Manager shall develop a heat stress/cold stress monitoring program for on-site activities. Details of the monitoring program, including work/rest schedules

and physiological monitoring requirements, shall be described in the SSHP. All personnel shall be trained to recognize the symptoms of heat and cold stress. The SSO and an alternate person shall be designated, in writing, to be responsible for the heat/cold stress monitoring program.

2.8.1 Heat Stress

Physiological monitoring shall commence when the ambient temperature is above, 70 degrees F. Monitoring frequency shall increase as the ambient temperature increases or as slow recovery rates are observed. An adequate supply of cool drinking water shall be provided for the workers. NIOSH Pub No. 85-115 may be consulted for guidance in determining protocols for prevention of heat stress.

2.8.2 Cold Stress

To guard against cold injury appropriate clothing and warm shelter for rest periods shall be provided. Procedures to monitor and avoid cold stress shall be followed in accordance with the current TLVs for Cold Stress as recommended by the ACGIH in [ACGIH-02](#)

2.9 STANDARD OPERATING SAFETY PROCEDURES, ENGINEERING CONTROLS AND WORK PRACTICES

The SSHP shall describe the standard operating safety procedures, engineering controls and safe work practices to be implemented for the work covered by these specifications. These shall include, but not be limited to, the following:

- a. General Site Rules/Prohibitions
- b. Work Permit Requirements
- c. Material Handling Procedures (Solids, Liquids, Radioactive Materials)
- d. Confined Space Entry Procedures: Personnel shall not be permitted to enter confined spaces as a part of this project at any time, until the provisions of 29 CFR 1910.146 are satisfied.
- e. Ignition Sources
- f. Fire Protection/Prevention
- g. Electrical Safety (ground-fault protection, overhead power line avoidance, etc.):
If temporary electrical power is used for this project, it shall conform to NFPA 70 and ANSI C2. Air monitoring and sampling equipment shall be rated intrinsically safe for Class I, Division 1, Groups A, B, C, and D areas. All portable electrical equipment shall be protected by Ground Fault Circuit Interrupters (GFCI). Clearances to adjacent overhead transmission and distribution electrical lines shall be sufficient for the movement of vehicles and operation of construction equipment. The requirements stated in 29 CFR 1926 and NFPA 70 shall be followed.
- h. Excavation and Trench Safety: All excavating work shall be conducted in strict conformance with, 29 CFR 1926 sections .650 through .653, including requirements for shoring or continuously sloping excavations in which employees are exposed to danger from moving ground. Prior to opening an excavation, underground installations (e.g., sewer, telephone, water, fuel, electric lines) shall be located and protected from damage or displacement. Utility companies and other responsible authorities shall be contacted to locate and mark the locations and, if they so desire, direct or assist with protecting the underground installations.
- i. Guarding of Machinery and Equipment
- j. Lockout/Tagout
- k. Fall Protection
- l. Hazard Communication
- m. Illumination
- n. Sanitation

- o. Engineering Controls
- p. Signs and Labels
- q. Waste Disposal

2.10 SITE CONTROL MEASURES

In order to control the flow of personnel, vehicles, and materials into and out of work areas, site control measures shall be established and described in the SSHP. This section shall describe the methodology to be used by the Safety and Health Manager and SSHO in determining work zone designations and their modifications, and procedures to limit the spread of contamination. Further, the SSHP shall include procedures for the implementation and enforcement of safety and health rules for all persons on the site, including employers, employees, outside contractors, government representatives, and visitors.

2.10.1 Site Control and Security

2.10.1.1 Site Security

The SSHP shall reference the Site Security Plan submitted in accordance with SECTION 01460 SECURITY.

2.10.1.2 Site Security Log

A log of all personnel visiting, entering, or working on the site shall be maintained. The log shall include the following: date, name, agency or company, time entering and exiting site, and personal protective equipment utilized. Before visitors are allowed to enter the site, they shall fill out the Certificate of Worker/Visitor Acknowledgment. This information, including dates, shall be recorded in the site control log. A safety checklist will be prepared by the Contractor which is indicative and a current representative of the known hazards at any time during the project. This checklist will be discussed with and provided to each individual visiting the site. The Contractor shall control the site and protect the site from unscheduled and unauthorized visitors. (See attached Form)

2.10.1.3 Signs

where appropriate in the predominant language of workers unable to read English. Signs shall be visible from all points where entry might occur and at such distances from the restricted area that employees may read the signs and take necessary protective steps before entering

2.10.2 Communication

An employee alarm system that has adequate means of on- and off-site communication shall be provided and installed in accordance with 29 CFR 1910.165. The means of communication must be able to be perceived above ambient noise or light levels by all employees in the affected portions of the workplace. The signals shall be distinctive and recognizable as messages to evacuate or to perform critical operations.

2.11 EMERGENCY EQUIPMENT AND FIRST AID REQUIREMENTS

The SSHP shall describe the emergency and first aid equipment to be available on-site. The following items, as a minimum, shall be maintained on-site and available for immediate use:

- a. First aid equipment and supplies approved by the consulting
- b. Fire extinguishers with a minimum rating of 20-A:120- B:C shall be provided at site facilities and in all vehicles and at any other site locations where flammable or combustible materials represent a fire risk.

2.12 EMERGENCY RESPONSE AND CONTINGENCY PROCEDURES

An Emergency Response Plan, meeting the requirements of 29 CFR 1910.120(1) and 29 CFR 1926.65(1), shall be developed and implemented as a section of the SSHP. In the event of

any emergency associated with remedial action, the SSHO and/or the Site Superintendent shall, without delay, alert all on site employees that there is an emergency situation; take diligent action to remove or otherwise minimize the cause of the emergency; alert the Corps or designated representative; and institute whatever measures might be necessary to prevent repetition of the conditions or actions leading to, or resulting in, the emergency. All employees who are required to respond to hazardous emergency situations shall be trained to respond to such emergencies. The plan shall be rehearsed regularly as part of the overall training program for site operations. The plan shall be reviewed periodically and revised as necessary to reflect new or changing site conditions or information. The following elements, as a minimum, shall be addressed in the plan:

- a. Pre-emergency planning: The local emergency response agencies shall be contacted and met with during preparation of the Emergency Response Plan. Agencies to be contacted include local fire/police/rescue authorities with jurisdiction and nearby medical facilities that may be utilized for emergency treatment of injured personnel. The purpose of these contacts is to notify them of upcoming site activities and potential emergency situations, to ascertain their response capabilities, and to obtain a response commitment. The Emergency Response Plan shall be compatible and integrated with the disaster, fire and/or emergency response plans of local, state, and federal agencies.
- b. Personnel roles, lines of authority, communications for emergencies.
- c. Emergency recognition and prevention.
- d. Site topography, layout, and prevailing weather conditions.
- e. Criteria and procedures for site evacuation (emergency alerting procedures/employee alarm system, emergency PPE and equipment, safe distances, places of refuge, evacuation routes, site security and control).
- f. Specific procedures for decontamination and medical treatment of injured personnel.
- g. Route maps to nearest pre-notified medical facility. All site-support vehicles shall be equipped with maps. All drivers of the support vehicles shall become familiar with the emergency route and the travel time required at the beginning of project operations.
- h. Emergency alerting and response procedures including posted instructions and a list of names and telephone numbers of emergency contacts (physician, nearby medical facility, fire and police departments, ambulance service, federal/state/local agencies; as well as Safety and Health Manager, the Site Superintendent, the Corps or designated representative and/or their alternates).
- i. Criteria for initiating community alert program, contacts, and responsibilities.
- j. Procedures for reporting incidents to appropriate government agencies. In the event that an incident such as an explosion or fire, or a spill or release of toxic materials occurs during the course of the project, the appropriate government agencies shall be immediately notified. In addition, the Corps or designated representative shall be verbally notified immediately and receive a written notification within 24 hours. The report shall include the following items:

2.13 INSPECTIONS/AUDITS

The SSHM shall perform daily inspections of the jobsite and the work in progress to ensure compliance with the Safety and Health Program, the SSHP and other occupational health and safety requirements of the contract. The inspections shall also be conducted to determine the effectiveness of the SSHP. Procedures for correcting deficiencies shall be described in the SSHP. Daily safety inspection logs shall be used to document the inspections, noting safety and health deficiencies, deficiencies in the effectiveness of the SSHP, and corrective actions taken. They shall be submitted as part of the Daily Quality Control reports. Each entry shall include the following: date, work area checked, employees present in work area, work equipment being used in each area, special safety and health issues and notes, and signature of preparer.

2.14 ACCIDENT REPORTING AND RECORDKEEPING

In the event of an accident, the Corps shall be verbally notified immediately and in writing within one (1) working day. Any accident involving a fatal injury, five or more persons admitted to a hospital, or property damage in the amount designated by the Corps or designated representative shall be reported immediately. Accidents shall be investigated in depth to identify all causes and to recommend hazard control measures. All first aid treatments not otherwise reportable shall be maintained on prescribed forms and furnished to the Corps or designated representative. The Occupational Safety and Health Administration shall be notified when one or more employees are seriously injured. The following recordkeeping requirements shall also be met:

- a. Maintain records of all accident experience incidental to the work. The records shall include as a minimum exposure work-hours and a log of occupational injuries and illnesses- OSHA form 200 or equivalent as prescribed by 29 CFR 1904.
- b. Maintain records of employee exposure to toxic materials and harmful physical agents. The EPA or designated representative and employees shall be notified immediately of any excessive exposure experience and the hazard control measures that will be taken to control the exposure.
- c. Maintain access to the project's Workers Compensation Claims Report which details the compensable accidents experienced on the project.

2.15 SAFETY AND HEALTH PHASE-OUT REPORT

The following minimum information shall be included:

- a. Summary of the overall performance of safety and health (accidents/incidents including near misses, unusual events, lessons learned, etc.).
- b. Final decontamination documentation including procedures and techniques used to decontaminate equipment, vehicles, and on-site facilities.
- c. Summary of exposure monitoring/air sampling accomplished during the project.
- d. Signatures of Safety and Health Manager and SSHO.

PART 3 EXECUTION NOT APPLICABLE

ATTACHMENT

SITE SECURITY LOG FORM

-- End of Section --

SECTION 01200

WARRANTY REQUIREMENT

08/01

PART 1 GENERAL

1.1 WARRANTY OF CONSTRUCTION

The Contractor shall warranty all materials and workmanship in accordance with Contract Clause (FAR 52.246-21), "WARRANTY OF CONSTRUCTION". In addition and due to this project being a multi-phase contract, the contractor shall warrant the condition of the work performed until this work is accepted by the follow on modernization contractor. This period shall be in effect until either the follow on modernization contractor assumes possession of the previous work through written acceptance or modification/building upon the existing structure.

1.2 MANUFACTURER'S WARRANTY:

The Contractor shall provide manufacturer's warranties, when available, on all equipment for one year starting from the day of facility acceptance by the DCPS. Any warranty offered by the manufacturer for periods greater than one year or required by other sections of the specifications shall also be provided.

1.3 WARRANTY PAYMENT

Warranty work is a subsidiary portion of the contract work, and has a value to the Government of \$50,000. The Contractor will assign a value of that amount in the breakdown for progress payments mentioned in the Contract Clause (FAR 52.232-5) "Payments Under Fixed-Price Construction". If the Contractor fails to respond to warranty items as provided in paragraph CONTRACTOR'S RESPONSE TO WARRANTY SERVICE REQUIREMENTS below, the Government may elect to acquire warranty repairs through other sources and, if so, shall backcharge the Contractor for the cost of such repairs. Such backcharges shall be accomplished under the Contract Clause (FAR 52.243-4) "CHANGES" of the contract through a credit modification(s).

1.4 PERFORMANCE BOND:

The Contractor's Performance Bond will remain effective throughout the construction warranty period and warranty extensions described above. The contractor will be responsible for any differing site conditions discovered through review of the current site conditions and those depicted on the as-built drawings. The contractor shall be responsible for the correction of the current site conditions and the as-built drawings to insure an accurate depiction is presented to the follow on modernization contractor at no additional cost to the Government. In addition to the performance bond being attached to this portion of these requirements, the timeliness and coordination of this work shall be taken into account when determining the contractor's award fee.

1.4.1 Failure to Commence

In the event the Contractor or his designated representative(s) fail to commence and diligently pursue any work required under this clause, and in a manner pursuant to the requirements thereof, the Contracting Officer shall have the right to demand that said work be performed under the Performance Bond by making written notice on the surety. If the surety fails or refuses to perform the obligation it assumed under the Performance Bond, the Contracting Officer shall have the work performed by others, and after completion of the work, may demand reimbursement of any or all expenses incurred by the Government while performing the work, including, but not limited to administrative expenses.

1.5 PRE-WARRANTY CONFERENCE:

Prior to contract completion and at a time designated by the Contracting Officer, the Contractor shall meet with the Contracting Officer to develop a mutual understanding with respect to the requirements of this specification. Communication procedures for Contractor notification of warranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the Contracting Officer for the execution of the construction warranty shall

be reviewed at this meeting. The Contractor shall provide names, addresses, and telephone numbers of all subcontractors, equipment suppliers, or manufacturers with specific designation of their area of responsibilities if they are to be contacted directly on warranty corrections. This point of contact will be located within the local service area of the warranted construction, will be continuously available, and will be responsive to Government inquiry on warranty work action and status. Minutes of the meeting will be prepared by the Government and signed by both, the Contractor and the Contracting Officer. The minutes shall become part of the contract file.

1.6 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. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-04 Samples

Sample Tags.

To identify the warranty for all Contractor and Government furnished equipment which the Contractor installs.

1.7 ADDITIONAL REQUIREMENTS

1.7.1 Roof Survey

The Contractor shall during the ninth (9) month of the warranty period conduct an infrared roof survey on any project involving a membrane roofing system. This survey will be conducted in accordance with ASTM C1153-90, "Standard Practice for the Location of Wet Insulation in Roofing Systems Using Infrared Imaging". Contractor shall be required to replace all damaged materials and to locate and repair sources of moisture penetration.

1.7.2 Equipment Warranty Identification Tags:

The Contractor shall provide warranty identification tags on all Contractor and Government furnished equipment which he has installed.

1.7.2.1 Format and Size for Tags

The tags shall be similar in format and size to the exhibits provided by this specification, they shall be suitable for interior and exterior locations, resistant to solvents, abrasion, and to fading caused by sunlight, precipitation. etc. . These tags shall have a permanent pressure-sensitive adhesive back, and they shall be installed in a position that is easily (or most easily) noticeable. Contractor furnished equipment that has differing warranties on its components will have each component tagged.

1.7.2.2 Sample Tags

Sample tags shall be filled out representative of how the Contractor will complete all other tags. These tags shall be submitted to the Government.

1.7.2.3 Tags for Warranted Equipment:

The tag for this equipment shall be similar to the following. Exact format and size will be as approved.

EQUIPMENT WARRANTY CONTRACTOR FURNISHED EQUIPMENT	
MFG: _____	MODEL NO.: _____
SERIAL NO.: _____	CONTRACT NO.: _____
CONTRACTORS NAME: _____	
CONTRACTOR WARRANTY EXPIRES: _____	
MFG WARRANTY (IES) EXPIRE: _____	

EQUIPMENT WARRANTY GOVERNMENT FURNISHED EQUIPMENT	
MFG: _____	MODEL NO.: _____
SERIAL NO.: _____	CONTRACT NO.: _____
DATE EQUIPMENT PLACED IN SERVICE: _____	
MFG WARRANTY (IES) EXPIRES: _____	

1.7.2.4 Execution

The Contractor will complete the required information on each tag and install these tags on the equipment by the time of and as a condition of final acceptance of the equipment. All tags shall be mechanically attached to the equipment as directed by the Contracting Officer.

1.7.2.5 Equipment Warranty Tag Replacement.

The contractor shall provide new tags on repaired or replaced equipment during the warranty period. The tag shall be identical to the original tag, except that the Contractor's warranty expiration date shall be updated to show the correct warranty expiration date.

1.8 CONTRACTOR'S RESPONSE TO WARRANTY SERVICE REQUIREMENTS.

1.8.1 Notification to Warranty Service Requirements

Following oral or written notification by authorized representative of the installation designated in writing by the Contracting Officer, the Contractor shall respond to warranty service requirements in accordance with the "Warranty Service Priority List" and the three categories of priorities listed below.

1.8.1.1 Categories of Priorities

- a. First Priority Code 1: Perform on site inspection to evaluate situation, determine course of action, initiate work within 24 hours and work continuously to completion or relief.
- b. Second Priority Code 2: Perform on site inspection to evaluate situation, determine course of action, initiate work within 48 hours and work continuously to completion or relief.
- c. Third Priority Code 3: All other work to be initiated within 5 work days end work continuously to completion or relief.

1.8.1.2 Warranty Service Priority List

AIR TRAFFIC CONTROL AND AIR NAVIGATION SYSTEMS AND EQUIPMENT.

Code 1

AIR CONDITIONING SYSTEM:

Code 1:

- a. Hospital.
- b. Buildings with computer equipment.
- c. Commissary and Main PX.
- d. Clubs.
- e. Barracks, mess halls, BOQ/BEQ (entire building down).
- f. Troop medical and dental.

Code 2:

- a. Recreational support.
- b. Air conditioning leak in part of building, if causing damage.
- c. Admin buildings with ADP equipment not on priority list.

DOORS:

Code 1:

- a. Overhead doors not operational

ELECTRICAL:

Code 1:

- a. Power failure (entire area or any building operational after 1600 hours).
- b. Traffic control devices.
- c. Security lights.

Code 2:

- a. Power failure (no Power to a room or part of building),
- b. Receptacle and lights.
- c. Fire alarm systems.

GAS

Code 1

- a. Leaks and breaks.
- b. No gas to family housing unit or cantonment area.

HEAT

Code 1

- a. Hospital/Medical facilities
- b. Commissary and Main PX.
- c. Clubs.
- d. Area power failure affecting heat.

Code 2

- a. Medical storage.
- b. Barracks.

INTRUSION DETECTION SYSTEMS

Code 1

- a. Finance, PX and Commissary, and high security areas.

Code 2

- a. Systems other than those listed under Code 1.

KITCHEN EQUIPMENT

Code 1

- a. Dishwasher.
- b. All other equipment hampering preparation of a meal.

Code 2

- a. All other equipment not listed under Code 1.

PLUMBING

Code 2

- a. Flush valves.
- b. Fixture drain, supply line commode, or water pipe leaking.
- c. Commode leaking at base.

REFRIGERATION

Code 1

- a. Commissary.
- b. Mess Hall.
- c. Cold Storage.
- d. Hospital.
- e. Medical storage.

Code 2

- a. Mess hall - other than walk-in refrigerators and freezers.

ROOF LEAKS

Code 1

- a. Temporary repairs will be made where major damage to property is occurring.

Code 2

- a. Where major damage to property is not occurring, check for location of leak during rain and complete repairs on a Code 2 basis.

SWIMMING POOLS

Code 1

- a. Chlorine leaks or broken pumps.

TANK WASH RACKS (Bird Baths)

Code 1

- a. All systems which prevent tank wash.

WATER (Exterior)

Code 1

- a. Normal operation of water pump station.

Code 2

- No water to facility.

WATER, HOT (and STEAM)

Code 1

- a. Hospitals.
- b. Mess Halls.
- c. BOQ. BEQ. barracks (entire building).
- d. Medical and dental.

Code 2

- a. No hot water in portion of building listed under Code 1 (items a through c).

SPRINKLER SYSTEM

Code 1

- a. All sprinkler systems, valves, manholes, deluge systems, and air systems to sprinkler

1.8.2 Availability of Required Parts

Should parts be required to complete the work and the parts are not immediately available the Contractor shall have a maximum of 12 hours after arrival at the job site to provide authorized representative of the installation with firm written plan for emergency alternatives and temporary repairs for Government participation with the Contractor to provide emergency relief until the required parts are available on site for the Contractor to perform permanent warranty repair. The Contractors plan shall include a firm date and time that the required parts shall be available on site to complete the permanent warranty repair.

PART 2 PRODUCTS - NOT APPLICABLE

PART 3 EXECUTION - NOT APPLICABLE

-- End of Section --

SECTION 01451

CONTRACTOR QUALITY CONTROL
01/02

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 basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740 (1999b) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

ASTM E 329 (1998a) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

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. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

CQC Plan; G AR.

Identifies personnel, procedures, control, instructions, test, records, and forms to be used.

Phase Notification

The Government shall be notified in a specified amount of time in advance of beginning the preparatory control phase.

Request; G AR.

The requesting of specialized individuals in specific disciplines to perform quality control.

CQC Mgr Qualification; G AR.

The evaluation of the project to determine the level of CQC System Manager required.

SD-05 Design Data

Notification of Changes

Any changes made by the Contractor.

Punchlist

Near the completion of all work, the CQC System Manager shall prepare a list of items which do not conform to the approved drawings and specifications.

Minutes

Prepared by the Government and signed by both the Contractor and the Contracting Officer and shall become a part of the contract file.

SD-06 Test Reports

Tests

Specified or required tests shall be done by the Contractor to verify that control measures are adequate.

Documentation

Results of tests taken.

Tests Performed

An information copy provided directly to the Contracting Officer.

QC Records; G AR.

Provide factual evidence that required quality control activities and/or tests have been performed.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with

the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

3.2 CQC PLAN

3.2.1 General

The Contractor shall furnish for review by the Government, not later than 30 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 60 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.2 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES.

- e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. The Contractor shall include a copy of his proposed laboratory's latest Corps of Engineers inspection report in the Quality Control Plan. The inspection report details the tests that the lab has been validated to perform under Corps of Engineers contracts. (Laboratory facilities will be approved by the Contracting Officer.)
- f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.
- h. Reporting procedures, including proposed reporting formats.
- i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.4 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 14 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and

control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure safety and contract compliance. The Safety and Health Manager shall receive direction and authority from the CQC System Manager and shall serve as a member of the CQC staff. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, show drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a graduate with a minimum of 5 years construction experience on construction similar to this contract. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel, not to exceed two, to assist the CQC System Manager in all aspects of professional, technical expertise. These individuals should have a combination of expertise in electrical, mechanical, civil, structural, environmental, and architectural disciplines. These individuals shall be responsible to the CQC System Manager, be physically present at the construction site, and have no other duties than quality control.

3.4.4 Additional Requirement

In addition to the above experience and/or education requirements the CQC System Manager shall have completed the course entitled "Construction Quality Management for Contractors" within 45 calendar days after NTP is a mandatory requirement for the position of the Quality Control Systems Manager. Certification is good for five (5) years at which time re-training is required. The Contractor's QC Systems Manager may be appointed and serve fully in that capacity pending certification. If the CQC Systems Manager fails to successfully complete the training, the Contractor should promptly appoint a new CQSM who shall then attend the next available course. The course is nine (9) hours long (1 day). The Construction Quality Management Course (CQMC) will be taught at least nine (9) times per year by the Baltimore District Corps of Engineers, at various locations around Baltimore and Washington, DC, or at another site if conditions warrant. The CQMC cost will be borne by the Contractor and is one hundred and twenty-five dollars (\$125.00) per course, per person. Payment shall be made by check payable to either sponsors of the course: Associated Builders and Contractors, Inc, (ABC) 14120 Park Long Court, Suite 111, Chantilly, Virginia 20151 (Phone: 703-968-6205), or to The Associated General Contractors of America (AGC), Maryland Chapter, 1301 York Road, Heaver Plaza, Suite 202, Lutherville, Maryland 21093 (Phone: 410-321-7870) prior to the start of the course. Reservations to attend the course should be made directly to the organization sponsoring the course they attend. The Contractor has forty-five (45) calendar days to attend the course after the issuance of the NTP. The contractor shall contact the Contracting Officer upon award of the contract for arrangements for the course.

3.4.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 SUBMITTALS

Submittals, if needed, shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.
- k. The Government shall be notified at least 72 hours in advance of beginning the preparatory **control phase**. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.

- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 72 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if the quality of on-going work is unacceptable, if there are changes in the applicable CQC staff, onsite production supervision or work crew, if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

3.7 TESTS

3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.

- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

3.7.2 Testing Laboratories

3.7.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

3.7.2.2 Laboratory Approval

The Contractor shall use a testing laboratory that has been previously approved by the Corps of Engineers or obtain approval for a laboratory established at the project site. Approved laboratories are listed at the following web site: <http://www.wes.army.mil/SL/MTC/ValStatesTbl.htm> If the Contractor elects to set up an on-site laboratory at the project site, the Contractor will be assessed \$4500.00 for the cost of inspection of this lab by the Corps of Engineers.

3.7.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

3.7.4 Furnishing or Transportation of Samples for Testing

Furnishing or Transportation of Samples for Testing: Costs incidental to the transportation of samples or materials will be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the following address:

Field Exploration Unit

or
Soils Laboratory Unit
(indicate which on shipping or mailing forms)
Fort McHenry Yard
Baltimore, Maryland 21230"
or
(name of address if geotech firm employed by AE)

3.8 COMPLETION INSPECTION

3.8.1 Punch-Out Inspection

Near the completion of all work or any increment thereof established by a completion time stated in the Special Clause in Section 00800 of the Solicitation entitled "Commencement, Prosecution, and Completion of Work," or stated elsewhere in the specifications, the CQC System Manager shall conduct an inspection of the work and develop a **punchlist** of items which do not conform to the approved drawings and specifications. Such a list of deficiencies shall be included in the CQC documentation, as required by paragraph DOCUMENTATION below, and shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

3.8.2 Pre-Final Inspection

The Government will perform pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional

inspection cost in accordance with the contract clause titled "Inspection of Construction".

3.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Off-site surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.10 SAMPLE FORMS

Sample forms enclosed at the end of this section.

3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --

PRIMARY SECURITY PLAN

SECTION 01460

SECURITY
01-02

Part 1- GENERAL

1.1 SCOPE

This section describes site security measures to be implemented during construction.

1.2 PERSONNEL

The contractor shall provide photo identification cards to onsite personnel and visitors authorized to enter the project site. These cards shall include the following:

a. Name of the individual

b. Occupation

c. Name of Employer

d. Expiration Date: not to exceed 3 years

The contractor shall maintain a current list of authorized persons and submit copies of the updated list to the Contracting Officer on request, for information only. This list will be maintained at the Access Control Point by security personnel. It will be the foundation for controlling access.

1.3 SITE ACCESS

The contractor shall be responsible for the control of all persons and vehicles entering and leaving the project site. Security personnel shall:

- a. Require display of proper photo identification by each person. The contractor shall remove from the site personnel not properly identified.
- b. Require personnel to sign Access Control Log upon entering the site and to sign out when leaving.
- c. Maintain a log of all vehicles by; Vehicle description and License tag number, and equipment entering and leaving the site.
- d. Maintain Access Control Log of all visitors.
- e. Require visitors to read the current hazard associated with on-going work as outlined in the Contractor's Site Specific Safety Plan and to sign the master copy of the plan. The signature acknowledges that the visitor understands the potential hazards associated with site entry.

1.4 SUBMITTALS

Government approval is required for submittals for 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. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Site Security Plan; G AR.

The contractor shall submit a Security Plan to the Contracting Officer for approval not later than 5 working days prior to the Pre-Work Conference. On site mobilization that may not begin prior to receipt of written approval of the Security Plan. This plan shall address:

- a. Number of security personnel.
- b. Duties of security personnel. (General & Special Orders for the Post)
- c. Name and qualifications of security personnel.
- d. Description of daily security operation.
- e. Provisions for conducting security checks, including method and frequency.
- f. Description of how the following breaches of security will be handled:
unauthorized personnel on the site, penetration of site boundary (e.g., broken fence), unauthorized persons attempting to gain access to the site, theft of U.S.

Gov't or contractor property. Any incident involving U.S. Gov't or Contractor personnel that became victims of a persons crime.

1.5 SITE SECURITY PLAN

The contractor shall be responsible for maintaining uninterrupted day and night (24-hour) security within the project area throughout the contract, including weekends and holidays. An armed security guard will be required on-site during working hours. A licensed, unarmed security guard will be required during non-working hours, or vehicle patrol activity maybe substituted. Hourly vehicle patrols and dismounted site inspections maybe substituted for weeknights, weekends, and holidays (non-duty hours M-Fri 1830 to 0630 hrs.)

The contractor shall erect a Security Fence around the construction site. Fencing will be chain linked 9-gauge 6' feet height with openings not larger than 2" inches, and have twisted barbed selvages at top and bottom within 2" inches of the ground. Top guard will be installed, at a 45-degree angle facing out. The top guard will be at least 18" inches in length and consist of (3) three strands of barbwire spaced 6" inches apart. Top and bottom tension wires maybe used in lieu of fence rails.

When possible the number of gates will be kept to a minimum. Vehicle and personnel points must be designed so that the guard force can maintain full control. Gate security construction will be equal to or greater than that of the fence. A guard house/post will be positioned to facilitate total personnel/vehicle access control to the site.

1.5.1 Signs

The contractor shall post signs in the Hazardous Work Areas at conspicuous intervals:
" WARNING, HAZARDOUS WORK AREA, DO NOT ENTER UNLESS AUTHORIZED."

1.5.2 Enforcement

The contractor shall provide sufficient security personnel to implement and enforce the requirements of the SITE ACCESS paragraph, as well as to periodically inspect site facilities. The contractor shall be responsible for ensuring that security personnel also comply with the requirements of SECTION: 01060 SAFETY, as specified.

1.5.3 Security Logs

The contractor shall be responsible for maintaining an incident log of all security incidents. This log shall be furnished to the Contracting Officer upon request, or monthly.

1.5.4 Personnel

The Contracting officer will have the right of approval and rejection of any and all security personnel of the Contractor during the period of this project.

1.5.5 Emergencies

The Contractor shall contact law enforcement officials, emergency medical care units, local fire departments, and utility emergency teams to ascertain the type of response required to any emergency situation and to coordinate the responses of the various units. A standard operating procedure describing security force response to foreseeable emergencies shall be developed. The Contractor shall also prepare a list of emergency points of contact, telephone numbers, radio frequencies, and call signs so that dependable responses can be executed.

1.5.6 Security Post

The Contractor shall maintain a security post or office located near the main entrance to the site. This office shall have two (2) forms of communication links to all supporting agencies as mentioned above.

1.5.7 On/Off Duty

The Contractor shall minimize personnel on-site. Off-duty personnel shall leave the site as soon as possible.

Part 2- PRODUCT (NOT APPLICABLE)

Part 3- PRODUCT (NOT APPLICABLE)

SECTION 01510

TEMPORARY CONSTRUCTION ITEMS
01/02

PART 1 GENERAL

1.1 General

The work covered by this section consists of furnishing all labor, materials, equipment, and services and performing all work required for or incidental to the items herein specified. No separate payment will be made for the construction and services required by this section, and all costs in connection therewith shall be included in the overall cost of the work unless specifically stated otherwise.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The website location where the publication can be found is under the button entitled "Changes to EM", located at: "http://www.hq.usace.army.mil/soh/hqusace_soh.htm".

U.S. ARMY CORPS OF ENGINEERS PUBLICATIONS

EP 310-1-6 U.S. Army Corps of Engineers Sign Standards Manual

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. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Temporary Electrical Work; G AR.

The Contractor shall submit a temporary power distribution sketch prior to the installation of any temporary power.

1.4 PROJECT SIGN: (AUG 1974)

A project sign shall be provided and erected at a location designated by the Contracting Officer. The sign shall conform to the requirements as shown on Attachment No. 1, a copy of which is attached hereto. The sign shall be erected as soon as possible and within 15 days after the date of receipt of notice to proceed. Upon completion of the project, the sign shall be removed and disposed of by the Contractor. (CENAB)

1.5 SAFETY SIGN (AUG 1974)

A safety sign shall be provided and erected at a location designated by the Contracting Officer. The sign shall conform to the requirements as shown on Attachment No. 2, a copy of which is attached hereto. The sign shall be erected as soon as possible and within 15 days after the date of receipt of notice to proceed. The data required by the sign shall be corrected daily, with light colored metallic or non-metallic numerals. Numerals, including mounting hardware, shall be subject to the approval of the Contracting Officer. Upon completion of the project, the sign shall be removed and disposed of by the Contractor. (CENAB)

1.6 TEMPORARY UTILITIES

1.6.1 Telephone Service

1.6.1.1 General

The Contractor shall arrange with the local telephone service company to provide at the construction site the minimum number of direct line service as specified in this section.

1.6.1.2 Removal

Contractor shall be responsible for arranging the removal of all telephone service at the completion of the site work.

1.6.1.3 Costs

The Contractor shall pay all costs of installation, maintenance, and removal, and service charges for all calls.

1.6.2 Temporary Sanitary Facilities

All sanitary facilities shall be of the chemical toilet type supplied by the Contractor, unless otherwise approved by the Contracting Officer. A hand washing facility will also be provided by the contractor. All sanitary wastes will be collected and removed from the site in an appropriate manner. Sanitary facilities shall comply with EM 385-1-1 and OSHA Standard 29 CFR 1910.120. Contractor shall be responsible for arranging for removal of the temporary sanitation facility at the completion of the site work. The Contractor shall pay all costs of associated with the sanitary facility

1.6.3 Temporary Power

1.6.3.1 General

The Contractor shall arrange with the local electrical utility (PEPCO) to provide minimum power service required to operate all field offices, including the Government's field office. The contractor shall be responsible to determine all anticipated temporary power requirements and use of electricity on the site. This temporary service shall remain the responsibility of the contractor who shall satisfactorily maintain the service until the completion of the project at which time the contractor shall remove and restore the site to its pre-construction conditions

1.6.3.2 Temporary Electrical Work

Temporary electrical work shall be in accordance with Sections 7 and 11 of EM 385-1-1 U.S. Army Corps of Engineers Safety and Health Requirements Manual. The Contractor shall submit for approval a temporary power distribution sketch prior to the installation of any temporary power components, prepared and signed off by a certified electrician. The sketch shall include location, voltages, and means of protection for all temporary distribution system wiring and components to include lighting, receptacles, grounding, disconnecting means, and GFCIs. The Contractor shall test the temporary power system and devices for polarity, ground continuity, and ground resistance prior to the initial use and before use after any modification. The Contractor shall verify to the satisfaction of the Contracting Officer or his representative by a calibrated light meter that the minimum illumination required by Table 7-1 of the EM 385-1-1 is being provided. (CENAB-EN-DT)

1.6.3.3 Removal

Contractor shall be responsible for arranging for removal of the temporary power service at the completion of the project.

1.6.3.4 Costs

The Contractor shall pay all costs of installation, maintenance, and removal, and service charges for the temporary power for the duration of the construction project.

1.6.4 Temporary Potable/Non Potable Water

The Contractor shall supply all potable / non potable water necessary for the Project Office and personnel and any other need for the duration of the project. Contractor shall be responsible for arranging for temporary water supply for the project. The Contractor shall pay all costs of associated with supplying the water supply, both potable and non potable. Should any water lines be installed for this purpose, the Contractor will be responsible for all costs associated with the maintenance, protection and removal of such lines.

The Contractor shall furnish a temporary office facility and equipment for the COR at the COR approved location. All equipment, material, systems and furniture shall be installed and made fully operational by the Contractor.

1.7.1 Accommodations

The Contractor shall furnish one (1) trailer type mobile offices (approximately 720 SF) securely anchored. It shall be located where directed and shall be reserved for Government personnel only. The Contractor shall provide a weekly cleaning service for the trailer. The Contractor shall provide janitor service, fuel for the heating facilities, and utilities as specified above, all at no cost to the Government. The entire facility, including furniture, will remain the property of the Contractor and shall be removed from the site after completion of the work unless otherwise directed by the COR.

1.7.1.1 Utilities

The offices shall have drinking water, adequate lighting, air conditioning, and heating equipment.

1.7.1.2 Lavatory

A partition enclosed flush-type toilet with hookup to an exterior tank and lavatory shall be furnished and maintained in the trailer by the Contractor. In the lavatory, provide a sink with hot and cold running water. All waste water shall be collected and managed by the Contractor as required.

1.7.1.3 Equipment

The following equipment shall be furnished and maintained by the Contractor.

- a. One (1) drafting table with two (2) stools.
- b. One (1) plan rack.
- c. Four (4) new four-drawer lockable file cabinets.
- d. Two (2) non-inclusive desks.
- e. One (1) conference table or combination of tables suitable for ten personnel
- f. Two (2) wheeled desk chairs.
- g. Six (6) folding chairs.
- h. Two (2) telephones

1.7.1.4 Copy Machine

A copy machine with accessories to include reduction and enlargement capabilities, automatic duplex, automatic feed, auto sorter, and 30 copies/minute capability shall be provided, supplied and maintained by the Contractor. Copy paper size "letter (8 1/2" x 11") and legal (11" x 17").

1.7.1.5 Telephone Service

The Contractor shall supply four separate direct lines, two telephone lines and two telefax/computer modem line. These lines are for the exclusive use of the COR. The Contractor shall supply voice mail connected to the primary direct telephone line. Phones shall have speaker phone capability. Project-related cost of the telephone service, including toll charges incurred by the Government or COR, are the responsibility of the Contractor.

1.7.1.6 Telefax Machine

The Contractor shall provide a single sheet telefax machine and accessories. The telefax shall be installed in the COR's trailer and reserved for his exclusive use. Project-related costs of the telefax service, including all telephone service are the responsibility of the Contractor.

1.7.1.7 Automated Information Items

The following items are to be provided for use by the Government. These items will remain the property of the Contractor and will be returned at final completion and acceptance of the project. For the purpose of this paragraph, completion is defined as when all final punchlist items are complete and project is fiscally complete.

- a. Two Desktop computer (PC) - Pentium 4, 1.2 mhz processor, 256 MB memory with modem with Windows 2000 Pro-operating sytem.
- b. PC Monitor - 20 inch screen.
- c. PC Modem - 56 kps or greater.
- d. PC Storage - 20 gb hard drive.
- e. PC-CD-Rom Writer.
- f. PC Software - Microsoft Office, AutoCAD LT or other AutoCAD viewer/printer.
- g. Personal Digital Assistant (PDA) Pocket PC or Palm Pilot with email, spreadsheet, word processing software and voice recognition. PDA capable to connect with the PC.
- h. Printer - Color laser printer with wide carriage printing capable of printing 11" x 17" sheets.
- i. Digital Camera - 1280 x 960 resolution.

1.7.1.8 Security

Each entrance door shall be equipped with two substantial locks, subject to COR approval, and in accordance with Section 01460 SECURITY. Windows shall have security bars.

1.7.2 Trailer-Type Mobile Office (Contractor's Option)

In lieu of constructing, maintaining and, at end of construction period, removing a temporary type field office, the Contractor may, at his option, furnish and maintain a trailer-type mobile office acceptable to the Contracting Officer and providing as a minimum the facilities specified above. The trailer shall be securely anchored to the ground at all four corners to guard against movement during high winds.

1.8 TEMPORARY PAVING PATCH

The Contractor shall place a temporary patch of cold mixed asphalt of adequate size and thickness immediately after utility trenches or other road or paved area openings are backfilled and compacted as specified in DIVISION II. The temporary patch shall be maintained by the Contractor until he permanently repairs the opening as delineated in DIVISION II. (SUGG NO. 75-183)

1.9 BARRICADES

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazardous areas during both day and night. The Contractor shall also erect an 8-foot chain link security fence with three (3) strands of standard barbed wire on the top of the fence. The security fence is to continue around the perimeter of the construction site and shall be equipped with two (2) entry gates. Posts for the fence shall be in the ground and the fabric shall extend to the ground and have a bottom rail to prevent crawl space for unauthorized entry.

1.10 NOISE

The school conducts testing during the first week of April and the third week of September. The noise level inside the building is limited to maximum of 40 dB. Critical learning period is between 9 AM and noon each day. The noise level inside the building is

limited to maximum of 60 dB. Establish a noise management plan and submit to the Contracting Officer prior to beginning work. Plan shall include a method of recording and documenting noise level at a minimum of four points inside the building.

1.11 TRUCK ENTRANCE AND EXITS

The Contractor shall provide a properly sized truck entrance and exit with a rumble area or alternate provision to remove loose dirt and/or debris from the trucks. Any additional means must be taken to prevent construction dirt and/or debris from being deposited on the streets.

PART 2 PRODUCT NOT APPLICABLE

PART 3 EXECUTION NOT APPLICABLE

ATTACHMENTS:

Attachment 1 Project Sign

Attachment 2 Safety Sign

-- End of Section --

PHOTOGRAPHIC DOCUMENTATION
02/02PART 1 GENERAL**1.1 GENERAL REQUIREMENTS**

The Contractor shall provide: color prints with original negatives, electronic copies of color prints using suitable photographic software and storage requirements and videotape footage (as needed and directed by the COR) during the project performance period

1.2 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. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Prints with Original Negatives

Electronic Format; G AR

Electronic Photo Display/Transfer/Storage Format

Videotape Recordings

Documenting the project operations.

1.3 VIEW REQUIRED

1.3.1 Areas and Activities

The following work tasks and areas are to be documented.

- a. Pre-construction conditions of the site before work begins.
- b. Intrusive excavations/installation of building foundations.
- c. Intrusive excavations/installation of utility systems.
- d. Installation of erosion and sediment controls.
- e. Structural Steel erection
- f. Concrete/Masonry Wall construction

1.3.2 Progress

The Contractor shall photograph from various locations to illustrate condition of work and state of progress. As a minimum, photographs shall be taken twice a month with a minimum of 10 photographs taken each time the photographer is at the site. Sufficient coordination with the on-site representative of the Contracting Officer shall be provided.

1.3.3 Successive Views

At successive periods of photography, the Contractor shall take at least one photograph from the same overall view as previously used.

1.3.4 Additional Views

The Contractor shall coordinate with the Contracting Officer at each period of photography for instructions concerning additional views required.

1.4 PRINTS

The Contractor shall provide the following print information for each photo documented.

1.4.1 Color

- a. Paper: Medium weight.
- b. Finish: Glossy, smooth finish.
- c. Size: 5" x 7".

1.4.2 Identification

Identify each print on back listing the following:

- a. Name of project.
- b. Contract Number.
- c. Orientation of view.
- d. Date and time of exposure.
- e. Name and address of photographer.
- f. Brief description of activity.
- g. Photographer's numbered identification of exposure.

1.4.3 Original Negatives

Shall be in protective sleeves.

1.5 ELECTRONIC FORMAT

The Contractor shall propose a stand alone electronic format for the transfer, display, reproduction and storage of all photos taken during the project. This format will be submitted for review and approval by the Government. At a minimum, the resolution of the photo format shall be 1024 x 840 and shall be stored upon compact disc technology with the ability to conduct unlimited transfer, displays and reproduction of the photos. Each electronic photo shall be provided with the same identifying information as outlined in paragraph IDENTIFICATION above. The contractor shall submit the electronic formatted photos in conjunction with the progress photo submission outlined in paragraph PROGRESS above.

1.6 DELIVERY OF PRINTS, SLIDES AND VIDEOTAPES

The Contractor shall deliver the color prints with original negatives, electronic photos to the contracting officer by the 15th of each month of the performance period. Timely submission of this documentation shall be reviewed during the processing of each periodic payment made to the contractor.

PART 2 PRODUCTS

NOT APPLICABLE

PART 3 EXECUTION

NOT APPLICABLE

-- End of Section --

SECTION 01720

AS-BUILT DRAWINGS - CADD
01/01

PART 1 GENERAL

1.1 Preparation

This Section covers the preparation of as-built drawings complete, as a requirement of this contract. The terms "drawings," "contract drawings," "drawing files," and "final as-built drawings" refer to a set of computer-aided design and drafting (CADD) contract drawings in electronic file format which are to be used for as-built drawings.

1.2 PROGRESS MARKED UP AS-BUILT PRINTS

The Contractor shall revise one set of paper prints to show the as-built conditions during the prosecution of the project. These as-built marked prints shall be kept current and available on the jobsite at all times. All changes from the contract plans which are made in the work or additional information which might be uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes. The as-built marked prints will be jointly reviewed for accuracy and completeness by the Contracting Officer and a responsible representative of the construction Contractor prior to submission of each monthly pay estimate. If the Contractor fails to maintain the as-built drawings as specified herein, the Contracting Officer will deduct from the monthly progress payment an amount representing the estimated cost of maintaining the as-built drawings and will continue the monthly deduction of the 10% retainage even after 50% completion of the contract. This monthly deduction will continue until an agreement can be reached between the Contracting Officer and a representative of the Contractor regarding the accuracy and completeness of updated drawings. The prints shall show the following information, but not be limited thereto:

1.2.1 Location and Description

The location and description of any utility lines or other installations of any kind or description known to exist within the construction area. The location includes dimensions to permanent features.

1.2.2 Location and Dimensions

The location and dimensions of any changes within the building or structure.

1.2.3 Corrections

Correct grade, cross Section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.

Correct elevations if changes were made in site grading.

1.2.4 Changes

Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor; including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.

The topography, invert elevations and grades of all drainage installed or affected as a part of the project construction.

All changes or modifications which result from the final inspection.

1.2.5 Options

Where contract drawings or specifications present options, only the option selected for construction shall be shown on the as-built prints.

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. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-11 Closeout Submittals

Progress Prints; G AR.

Preparation of two copies of as-builts from the Contractor to the Contracting Officer for review and approval.

Final Requirements; G AR.

CADD Files.

Shall consist of two sets of completed as-built contract drawings on separate media consisting of both CADD files (compatible with the Using Agency/Sponsor's system on electronic storage media identical to that supplied by the Government) and a CALS Type 1, Group 4, Raster Image File of each contract drawing.

Receipt by the Contractor of the approved marked as-built prints.

1.4 PRELIMINARY SUBMITTAL

At the time of final inspection, the Contractor shall prepare two copies of the progress as-built prints and these shall be delivered to the Contracting Officer for review and approval. These as-built marked prints shall be neat, legible and accurate. The review by Government personnel will be expedited to the maximum extent possible. Upon approval, one copy of the as-built marked prints will be to the A/e for use in preparation of final as-built drawings. If upon review, the as-built marked prints are found to contain errors and/or omissions, they shall be returned to the Contractor for corrections. The Contractor shall complete the corrections and return the as-built marked prints to the Contracting Officer within ten (10) calendar days.

1.5 DRAWING PREPARATION

1.5.1 As-Built Drawings Approval

Upon approval of the as-built prints submitted, the A/E will be furnished by the Government one set of contract drawings, with all amendments incorporated, to be used for as-built drawings. These contract drawings will be furnished on CD-ROM. These drawings shall be scanned by the A/E for use on the CD-ROM to include any CADD drawings not requiring revision. These drawings are part of the permanent records of this project and the Contractor shall be responsible for the protection and safety thereof until returned to the Contracting Officer. Any drawings damaged or lost by the A/E shall be satisfactorily replaced by the A/E at no expense to the Government.

1.5.2 Proficient Personnel

Only personnel proficient in the preparation of engineering CADD drawings to standards satisfactory and acceptable to the Government shall be employed to modify the contract drawings or prepare additional new drawings. All additions and corrections to the contract drawings shall be equal in quality to that of the originals. Line work, line weights, lettering, layering conventions, and symbols shall be the same as the original line work, line weights, lettering, layering conventions, and symbols. If additional drawings are required, they shall be prepared using the specified electronic file format applying the same guidance specified for original drawings. The title block and drawing border to be used for any new as-built drawings shall be identical to that used on the contract drawings. All additions and corrections to the contract drawings shall be accomplished by scanning and incorporated into the final complete set of as-builts to include any unchanged CADD drawings. These contract drawings will already be compatible with the Using Agency/Sponsor's system when received by the Contractor. The Using Agency/Sponsor uses AutoCAD Release 14 or greater CADD software system. The media files will be supplied on ISO 9660 Format CD-ROM. The Contractor is responsible for providing all program files and hardware necessary to prepare as-built drawings. The Contracting

Officer will review all as-built drawings for accuracy and the Contractor shall make all required corrections, changes, additions, and deletions.

1.5.3 Final Revisions

When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the General Contractor in letters at least 3/16 inch high. All other contract drawings shall be marked either "As-Built" drawing denoting no revisions on the sheet or "Revised As-Built" denoting one or more revisions. All original contract drawings shall be dated in the revision block (SEE ATTACHMENT 1) located at the end of this Section

1.6 FINAL REQUIREMENTS

After receipt by the A/E of the approved marked as-built prints and the original contract drawing files the A/E will, within 30 days for contracts less than \$5 million or 60 days for contracts \$5 million and above, make the final as-built submittal. The submittal shall consist of the following:

a) Two sets of the as-built contract drawings on separate CD's (ISO 9660 Format CD-ROM) consisting of the updated CADD files and scanned red-line drawings and a CALS Type 1 Group 4 Raster Image File of each contract drawing plate. The CALS files shall be exact duplicates of the full sized plots of the completed as-built contract drawings at a resolution of 400 dpi and may be either plotted to CALS files directly from the CADD files, or scanned to file from the prints.

b) Two sets of full size paper prints (plots) of the completed as-built contract drawings.

c) The return of the approved marked as-built prints.

They shall be complete in all details and identical in form and function to the contract drawing files supplied by the Government. Any translations or adjustments necessary to accomplish this is the responsibility of the A/E. The Government reserves the right to reject any drawing files it deems incompatible with its CADD system. All paper prints, drawing files and storage media submitted will become the property of the Government upon final approval. Failure to submit as-built drawing files and marked prints as required herein shall be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final as-built drawings shall be accomplished before final payment is made to the Contractor.

1.7 PAYMENT

No separate payment will be made for the as-built drawings required under this contract, and all costs in connection therewith shall be considered a subsidiary obligation of the Contractor.

PART 2 PRODUCT NOT APPLICABLE

PART 3 EXECUTION NOT APPLICABLE

-- End of Section --