

SECTION TABLE OF CONTENTS

GENERAL REQUIREMENTS

SECTION 01090

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL  
1.1 REFERENCES . . . . . SECTION 01090 PAGE 1

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Table of Contents --

## SECTION 01090

## SOURCES FOR REFERENCE PUBLICATIONS

## PART 1 GENERAL

## 1.1 REFERENCES

Reference publications are cited in other sections of the specifications along with identification of their sponsoring organizations. The addresses of the sponsoring organizations are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided.

AGRICULTURAL MARKETING SERVICE (AMS)  
Seed Regulatory and Testing Branch  
USDA, AMS, LS Div.  
Bldg. 506, BARC-East  
Soil Conservation Rd.  
Beltsville, MD 20705  
Ph: 301-504-9430

ALUMINUM ASSOCIATION (AA)  
Pubs Department  
P.O. Box 753  
Waldorf, MD 20601  
Ph: 301-645-0756  
Fax: 301-843-0159

AMERICAN ASSOCIATION OF NURSERYMEN (AAN)  
1250 I St., NW, Suite 500  
Washington, DC 20005  
Ph: 202-789-2900  
FAX: 202-789-1893

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS  
(AASHTO)  
444 N. Capital St., NW, Suite 249  
Washington, DC 20001  
Ph: 202-624-5800  
Fax: 202-624-5806

AMERICAN CONCRETE INSTITUTE (ACI)  
P.O. Box 19150  
Detroit, MI 48219-0150  
Ph: 313-532-2600  
Fax: 313-538-0655

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)  
11 West 42nd St  
New York, NY 10036  
Ph: 212-642-4900  
Fax: 212-302-1286

AMERICAN PLYWOOD ASSOCIATION (APA)  
P.O. Box 11700  
Tacoma, WA 98411-0700  
Ph: 206-565-6600  
Fax: 206-565-7265

AMERICAN RAILWAY ENGINEERING ASSOCIATION (AREA)  
50 F St., NW, Suite 7702  
Washington, DC 20001  
Ph: 202-639-2190  
Fax: 202-639-2183

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)  
1916 Race St.  
Philadelphia, PA 19103  
Ph: 215-299-5585  
Fax: 215-977-9679

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)  
United Engineering Center  
345 East 47th St.  
New York, NY 10017  
Ph: 212-705-7946  
Fax: 212-980-4681

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)  
22 Law Dr., Box 2300  
Fairfield, NJ 07007-2300  
Ph: 800-843-2763  
Fax: 201-882-1717

AMERICAN WATER WORKS ASSOCIATION (AWWA)  
6666 West Quincy  
Denver, CO 80235  
Ph: 800-926-7337  
Fax: 303-795-1989

AMERICAN WELDING SOCIETY (AWS)  
P.O. Box 351040  
Miami, FL 33135

Ph: 800-443-9353  
Fax: 305-443-7559

COMMERCIAL ITEM DESCRIPTIONS (CID)  
Order from:  
Standardization Documents Order Desk  
Bldg 4D  
700 Robbins Av  
Philadelphia, PA 19111-5094  
Ph: 215-697-2179  
Fax: 215-697-2978

CORPS OF ENGINEERS (COE)  
Order from:  
U.S. Army Engineer Waterways Experiment Station  
ATTN: Technical Report Distribution Section, Services  
Branch, TIC  
3909 Halls Ferry Rd.  
Vicksburg, MS 39180-6199  
Ph: 601-634-2355  
Fax: 601-634-2506

ENGINEERING MANUALS (EM)  
USACE Publications Depot  
Attn: CEIM-SP-D  
2803 52nd Avenue  
Hyattsville, MD 20781-1102  
Ph: 301-436-2063

ENVIRONMENTAL PROTECTION AGENCY (EPA)  
Public Information Center  
401 M St., SW  
Washington, DC 20460  
Ph: 202-260-2080

FEDERAL HIGHWAY ADMINISTRATION (FHWA)  
Office of Highway Safety (HHS-31)  
400 Seventh St., SW  
Washington, DC 20590-0001  
Ph: 202-366-0411  
Fax: 202-366-2249  
Order from:  
Government Printing Office  
Superintendent of Documents  
Washington, DC 20402  
Ph: 202-783-3238

FEDERAL SPECIFICATIONS (FS)

Order from:  
Standardization Documents Order Desk  
Bldg 4D  
700 Robbins Av  
Philadelphia, PA 19111-5094  
Ph: 215-697-2179  
Fax: 215-697-2978

FEDERAL STANDARDS (FED-STD)

Order from:  
Standardization Documents Order Desk  
Bldg 4D  
700 Robbins Av  
Philadelphia, PA 19111-5094  
Ph: 215-697-2179  
Fax: 215-697-2978

FEDERAL TEST METHOD STANDARDS (FTM-STD)

Order from:  
Standardization Documents Order Desk  
Bldg 4D  
700 Robbins Av  
Philadelphia, PA 19111-5094  
Ph: 215-697-2179  
Fax: 215-697-2978

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

445 Hoes Ln.  
Piscataway, NJ 08855-1331  
Ph: 800-678-4333  
Fax: 908-981-9667

MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS  
INDUSTRY (MSS)

127 Park St., NE  
Vienna, VA 22180  
Ph: 203-281-6613

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM)

11 So. LaSalle St., Suite 1400  
Chicago, IL 60603  
Ph: 312-201-0101  
FAX: 312-201-0214

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

2101 L St., NW, Suite 300

Washington, DC 20037-1526  
Ph: 202-457-8474  
Fax: 202-457-8473

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)  
Publications and Programs Inquiries  
Room E128, Administration Building  
Gaithersburg, MD 20899  
Ph: 301-975-3058  
Order From:  
Superintendent of Documents  
U.S. Government Printing Office  
Washington, DC 20402  
Ph: 202-783-3238

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

SECTION TABLE OF CONTENTS

GENERAL REQUIREMENTS

SECTION 01200

1. REFERENCES . . . . . SECTION 01200 PAGE 1

2. PROJECT FACILITIES . . . . . SECTION 01200 PAGE 1

3. CONSTRUCTION SIGNS . . . . . SECTION 01200 PAGE 2

4. MAINTENANCE OF PROJECT FACILITIES . . . . . SECTION 01200 PAGE 2

5. SCRAP MATERIAL . . . . . SECTION 01200 PAGE 3

6. SALVAGE MATERIALS . . . . . SECTION 01200 PAGE 3

7. ARCHAEOLOGICAL FINDINGS DURING CONSTRUCTION . . . . . SECTION 01200 PAGE 3

8. PUBLIC UTILITIES, NOTICES, AND RESTRICTIONS . . . . . SECTION 01200 PAGE 3

9. PUBLIC SAFETY . . . . . SECTION 01200 PAGE 12

10. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) STANDARDS . . . SECTION 01200 PAGE 13

11. PERMITS . . . . . SECTION 01200 PAGE 13

12. REQUIRED INSURANCE . . . . . SECTION 01200 PAGE 13

13. GRAFFITI REMOVAL . . . . . SECTION 01200 PAGE 14

14. AS-BUILT DRAWINGS . . . . . SECTION 01200 PAGE 14

15. NOTICE OF PARTNERSHIP . . . . . SECTION 01200 PAGE 16

16. TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER . . . . . SECTION 01200 PAGE 16

FIGURE 1, PROJECT SIGN . . . . . SECTION 01200 PAGE 18

FIGURE 2, SIGN DETAILS . . . . . SECTION 01200 PAGE 19

FIGURE 3, HARD HAT SIGN . . . . . SECTION 01200 PAGE 20

FIGURE 4, SAFETY SIGN . . . . . SECTION 01200 PAGE 21

-- End Table of Contents --

## SECTION 01200

## GENERAL REQUIREMENTS

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

## 1.1 Federal Specifications (FS).

FS FF-B-575	(Rev C) Bolts, Hexagon and Square
FS FF-N-105	(Rev B; Int Am 4) Nails, Brads, Staples and Spikes: Wire, Cut and Wrought
FS FF-N-836	(Rev D; Am 2) Nut, Square, Hexagon, Cap, Slotted, Castle, Knurled, Welding and Single Ball Seat
FS MM-L-751	(Rev H) Lumber; Softwood
FS TT-E-529	(Rev G) Enamel, Alkyd, Semi-Gloss
FS TT-P-25	(Rev E; Am 2) Primer Coating, Exterior (Undercoat for Wood, Ready-Mixed, White and Tints)

## 1.2 National Institute of Standards and Technology (NIST).

NIST PS 1	(1983) Construction and Industrial Plywood
-----------	--

2. PROJECT FACILITIES. The Contractor shall construct and/or erect the following project facilities:

2.1 Construction Signs. The signs shall be erected as soon as possible and within 15 days after commencement of work under this contract.

2.1.1 Five Project Signs at locations designated by the Contracting Officer.

2.1.2 Warning Signs facing approaching traffic on all roads crossing under overhead power transmission lines.

2.1.3 Six hard hat signs at locations directed.

2.2 Project Engineer's Office. No new facility required. The Contractor shall provide furnishings and maintenance of the existing facilities (48' x 60' and 24'x 60' office trailers) as specified hereinafter.

2.3 Bulletin Board at the Contractor's office. Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy

of the wage decision contained in the contract, Wage Rate Information poster, and other information approved by the Contracting Officer. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Legible copies of the aforementioned data shall be displayed until work is completed. Upon completion of work the bulletin board shall be removed by and remain the property of the Contractor.

2.4 Sanitary Facilities. The Contractor shall provide and maintain within the construction area minimum field-type sanitary facilities approved by the Contracting Officer.

### 3. CONSTRUCTION SIGNS.

#### 3.1 Materials.

3.1.1 Lumber shall conform to FS MM-L-751, and shall be seasoned Douglas Fir, S4S, Grade D or better except that posts, braces and spacers shall be construction Grade (WCLB).

3.1.2 Plywood shall conform to NIST PS 1, grade A-C, Group 1, exterior type.

3.1.3 Bolts, Nuts and Nails. Bolts shall conform to FS FF-B-575, nuts shall conform to FS FF-N-836, and nails shall conform to FS FF-N-105.

3.1.4 Paints and Oils. Paints shall conform to FS TT-P-25 for primer and FS TT-E-529 for finish paint and lettering.

#### 3.2 Construction.

3.2.1 Project and hard hat signs shall be constructed as detailed on Figures 1, 2 and 3 attached at the end of this section. Decals and safety signs will be furnished by the Contracting Officer.

3.2.2 Warning Signs shall be constructed of plywood not less than ½ inch thick and shall be securely bolted to the supports with the bottom of the sign face 3 feet above the ground. The sign face shall be 2 x 4 feet, all letters shall be 4 inches in height, and the wording shall be: "WARNING: OVERHEAD TRANSMISSION LINES."

3.3 Painting. All exposed surfaces and edges of plywood shall be given one coat of linseed oil and be wiped prior to applying primer. All exposed surfaces of signs and supports shall be given one coat of primer and 2 finish coats of white paint. Except as otherwise indicated, lettering on all signs shall be black and sized as indicated.

### 4. MAINTENANCE OF PROJECT FACILITIES.

4.1 General. The Contractor shall maintain the project facilities in good condition throughout the life of the project. Upon completion of work under this contract, the contractor-furnished facilities covered under this section will remain the property of the Government.

4.2 Utilities and Furnishings. An adequate supply of cooked drinking water shall be supplied and maintained. Sewer, permanent water supply, telephone, and electrical service shall be provided and maintained. The cost for sewer, water, and electricity

usage will be the responsibility of the Contractor. The cost for the telephone usage will be the responsibility of the Government. The Contractor shall provide commercial grade furniture for the project engineer's office, consisting of two each four drawer filing cabinets, two book shelves, three telephone lines (one main number with two roll-over lines), one fax line, six modem lines, and appurtenant items. Items shall be maintained by the Contractor. In addition, the existing fax machine and copy machine at the project office shall be serviced by the Contractor. At the conclusion of the performance period of this contract, the Contractor's responsibilities for maintenance of the facilities as described above will cease. The Contractor-furnished temporary fencing and temporary power equipment, including poles, covered in this section will remain the property of the Government.

4.3 Cleaning and Janitorial Services. The Contractor shall provide cleaning and janitorial services for the existing trailers located in the South Imperial Yard (two offices, approximately 48' by 60' and 24'x 60') for the duration of the contract. Service shall be provided three times a week and all cleaning and janitorial materials (including paper towels, toilet paper and hand soap) shall be provided by the Contractor. Services shall include window cleaning once a month and carpet shampooing once every four months. Trash service shall also be provided (3 cy trash dumpster with weekly pickups). The Contractor shall remove and dispose of all broken test cylinders from the testing laboratory once a month.

5. SCRAP MATERIAL. Materials indicated to be removed and not indicated to be salvaged, stored or reinstalled are designated as scrap and shall become the property of the Contractor and be removed from the site of work. The Contractor by signing this contract hereby acknowledges that he made due allowance for value, if any, of such scrap in the contract price.

6. SALVAGE MATERIALS. All materials removed and indicated to be either stored or reinstalled are designated as salvaged materials. Any salvaged materials which are excess upon completion of the work and are not indicated to be stored shall become the property of the Contractor.

7. ARCHAEOLOGICAL FINDINGS DURING CONSTRUCTION. Should the Contractor or any of his employees in the performance of this contract find or uncover any archaeological remains, he shall notify the Project Engineer immediately. Such notifications will be a brief statement in writing giving the location and nature of the findings. Should the discovery site require archaeological studies resulting in delays and/or additional work, the Contractor will be compensated by an equitable adjustment under the CONTRACT CLAUSES of the contract.

8. PUBLIC UTILITIES, NOTICES, AND RESTRICTIONS.

8.1 General. The approximate location of all railroads, pipe lines, power and communication lines, and other utilities known to exist within the limits of the work are indicated on the drawings. The sizes, locations, and names of owners of such utilities are given from available information, but their accuracy is not guaranteed. Except as otherwise indicated on the drawings, all existing utilities will be left in place and the Contractor shall conduct his operations in such a manner that the utilities will be protected from damage at all times, or arrangements shall be made by the Contractor for their relocation at the Contractor's own expense. The Contractor shall be responsible for any damage to utilities known to exist and shall reimburse the owner for such damage caused by his operations.

8.2 Relocation or Removal. Utilities to be relocated or removed not as part of this contract are designated "To be Relocated by Others" or "To be Removed by Others," respectively. Utilities shown on the plans and not so designated will be left in place and be subject to the clause of the contract: PROTECTION OF EXISTING VEGETATION, STRUCTURES, UTILITIES, AND IMPROVEMENTS of the CONTRACT CLAUSES. The Contractor may make arrangements with the owner for the temporary relocation and restoration of utilities not designated to be relocated, or for additional work in excess of the work needed to relocate utilities designated for relocation at no additional cost to the Government.

8.3 Utilities Not Shown. If the Contractor encounters, within the construction limits of the entire project, utilities not shown on the plans and not visible as of the date of this contract and if such utilities will interfere with construction operations, he shall immediately notify the Contracting Officer in writing to enable a determination by the Contracting Officer as to the necessity for removal or relocation. If such utilities are left in place, removed or relocated, as directed by the Contracting Officer, the Contractor shall be entitled to an equitable adjustment for any additional work or delay.

8.4 Coordination. The Contractor shall consult and cooperate with the owner of utilities that are to be relocated or removed by others to establish a mutual performance schedule and to enable coordination of such work with the construction work. These consultations shall be held as soon as possible after award of the contract or sufficiently in advance of anticipated interference with construction operations to provide required time for the removal or relocation of affected utilities.

8.5 Notices.

8.5.1 Utilities To be Relocated or Protected. Unless otherwise specified, the Contractor shall notify the Contracting Officer, in writing, 30 calendar days prior to starting work on any utility to be protected. On each protection, notification shall include dates on which the Contractor plans excavation, and construction work, as applicable. The Contractor shall also notify and make positive contact with the following representatives of utility owners not less than 14 days, unless otherwise specified, prior to start of work in the vicinity of their respective utilities:

ARCO Products Co.(Refinery)  
Mr. Robert Streed  
5900 Cherry Avenue  
Long Beach, CA 90805  
(562) 728-2483

Central Basin Municipal Water District  
Mr. David Ruhl  
Senior Water Resources Engineer  
17140 Avalon Boulevard, Suite 210  
Carson, CA 90746-1296  
(310) 217-2222-ph  
(310) 217-2414-fax

Chevron Pipeline Co.  
Mr. Gerald McClellan

16301 Trojan Way  
La Mirada, CA90638-1530  
(714) 228-1504  
Mr. Steve Conley  
(805) 632-1060

City of Compton Water Department  
Mr. Reggie Taber  
205 S. Willow Brook Avenue  
Compton, CA 90220  
(310) 605-5585-fax  
(310) 631-0332

Department of Water and Power  
Utility Coordinating Section  
Mr. Louie Ferrer  
Rm. 813, GOB 111 North Hope Street  
Los Angeles, CA 90012-2694  
(213) 367-2659

General Telephone Company  
Mr. Ernie Ebara  
Supervising Engineer  
200 West Ocean Boulevard, 8th Floor  
Long Beach, CA 90802  
(562) 903-7910  
(562) 921-7510-fax  
Mr. Stephen Deck  
(714) 375-6706

Liberty Cable T.V.  
Mr. Eduardo Morales  
Plant Manager  
3125 Firestone Boulevard  
South Gate, CA 90280  
(213) 567-2437

Lomita Gasoline Company  
Mr. Mike Cherpeski  
(562) 424-1693

Los Angeles County Department of Public Works, Construction Division  
Mr. Ali Zadeh  
P.O. Box 1460  
Alhambra, CA 91802-1460  
(815) 458-3129

Los Angeles County Sanitation District  
Mr. Calvin Jin  
(310) 638-1161

Metropolitan Water District - Civil Engineering Substructure Section  
Angela Hall

P.O. Box 54153  
Los Angeles, CA 90054  
(213) 217-7259

Metropolitan Water District - Operations Maintenance Branch  
(Field Inspection Personnel)  
Mr. Benny Yee  
(213) 217-7723

Mobil Oil Corporation  
Teri Shinde  
R/W & Claims Specialist  
3700 W. 190th Street  
Torrance, CA 90509-2929  
(310) 212-4586

Pacific Bell  
Mr. Rick Rodriguez  
3939 E. Coronado  
Anaheim, CA 92807  
(626) 578-3697

Pacific Bell Telephone Company  
Engineering Office  
Pat Haupenthal, Project Engineer  
Richard Hayes, Project Engineer  
100 West Alondra Boulevard, Building A  
Room 202  
Gardena, CA 90248  
(310) 515-4358  
(310) 324-3950

Pacific Bell Telephone Company  
Mr. Lorey Lavery  
Public Works Coordinator  
14709 Vanowen Street, Room 218  
Van Nuys, CA 91405

Park Water Company  
Reclaimed Water  
Mr. Mike Williams  
9750 Washburn Road  
Downey, CA 90241-7002  
(562) 923-0250

South Gate Water Department  
Mr. John Chambers  
Superintendent  
4244 Santa Ana Street  
South Gate, CA 90280  
(213) 563-5795

Southern California Edison Company (Distribution)

Mr. Mark Meizner  
500 N. State College, Suite 750  
Orange, CA 92668  
(714) 895-0551 (Mon-Fri)  
(714) 646-2914 (Sat/Emergency)

Southern California Edison Company (Planning)  
Mr. Ken Forte  
(South Gate, Lynwood, & Hollydale)  
1624 Cashdan Street  
Compton, CA 90224  
(310) 608-5135

Southern California Edison Company (Transmission)  
Mr. Arnie Aparicio  
Project Manager  
14803 Chestnut Street  
Westminster, CA 92683  
(714) 934-0846

Southern California Edison Company (Transmission)  
Mr. Wally Zimmerman  
Telephone (626) 237-0504

Southern California Gas Company - District Facility  
Mr. Jim Lucas  
Technical Supervisor  
P.O. Box 3334  
Anaheim, CA 92803-3334  
(714) 634-3121

Southern California Gas Company  
Mr. Richard Isaacs  
ML 8286 Box 3249  
Los Angeles, CA 90051-1249  
(310) 687-2017 (Mon-Fri)  
(213) 881-8113 (Sat/Emergency)

Texaco Trading and Transportation, Inc.  
Mr. Roger Ang  
(661) 328-2338

8.5.2 Permanent Utility Relocations by Others. Except as otherwise specified, the Contractor shall notify the Contracting Officer, in writing, not less than 14 days in advance of the date on which he will complete trenching, excavation, fill or rough grading, as applicable, at each location where such completed work is required for temporary or permanent relocations by others. The Contractor shall allow a period of 14 calendar days at each relocation, after which time the Contractor may resume his operations.

8.5.3 The Contractor shall notify Mr. Yggy C. Ruiz of the Los Angeles County Department of Public Works 14 days prior to start of construction to post notification

for the homeless to remove their personal belongings out of the project area, telephone (562) 861-0316.

8.5.4 Chevron Pipeline Requirement. The Contractor shall submit a copy of the approval letter or permit from Chevron Pipeline Company Engineering/Technical Services Department. To maintain compliance with Pipeline Safety Laws and Chevron Pipe Line Company (CPL) policy, all Contractors associated with the project shall comply with the following minimum facilities inspection requirements.

8.5.4.1 A CPL representative must be present whenever Contractors are working over or near CPL facilities. The Contractor is responsible for obtaining a permit or an approval letter from CPL prior to doing any work over or near CPL facilities.

8.5.4.2 Notify CPL Facilities Inspection Office at (714) 228-1503 and Underground Service Alert at: (800) 227-2600 a minimum of two working days prior to any on-site work.

8.5.4.3 Excavators must verify exact elevations/depth of cover (DOC) of CPL facilities in conflict with the project by excavating with hand tools. CPL facilities are to be exposed by hand digging only, before using power-operated equipment over or within pipeline easements operated or maintained by CPL. DOC information is proprietary and confidential property of Chevron Pipeline Company. The project Design Team and Excavation Contractors may use data obtained, for the sole purpose of assisting with design of the project to determine proper excavation techniques and construction requirements, to protect the pipelines in place during performance of project activity over or near CPL and to prevent unauthorized or illegal encroachment of CPL facilities.

8.5.4.4 CPL facilities must be protected from hazards causing pipelines to move or sustain abnormal loads, or excess localized stress and potential pipeline rupture. Anticipated external loads must be provided for during construction and upon completion of approved improvements over or near CPL facilities. DOC data must be obtained for calculation of safe load bearing factors to be determined before deployment of heavy equipment or placement of load-bearing structures over CPL product pipelines.

8.5.4.5 Final DOC over CPL facilities must meet minimum Department of Transportation depth of cover requirements, plus maximum allowable external load application and approved by CPL Engineering/Technical Services Department. Adequate ground cover is required and critical for maintaining safe pipeline operations. Existing cover over CPL is to be field verified by the Contractor under observation of the assigned CPL Facilities Inspector.

8.5.4.6 Specific details of proposed foreign utilities crossing CPL are required to be planned in advance with CPL. Installation of utility crossings must be placed below CPL facilities and provide 24" clearance if feasible, but not less than minimum 12" of clearance is required for any utility crossings. Only lateral service crossing are permitted within CPL easements. Parallel utilities are not permitted.

8.5.4.7 CPL facilities are Cathodically Protected: In event of improvements proposing any metallic pipes or structures in proximity to the easement, it is absolutely necessary that arrangements be made for the protection of CPL facilities in order to prevent problems of electrical interference upon the pipelines.

8.5.4.8 Backfill must protect coating and support pipe. Only rock free native soil or clean sand may be used as backfill material. No cement slurry allowed within 12" of CPL pipelines.

8.5.4.9 No unapproved structures are permitted (e.g., foundations, footings, trees, etc.) within CPL easements.

8.5.4.10 Proposed temporary or permanent structures or improvements adjacent to CPL easement boundaries require engineering/technical calculations to determine safe construction offset distances, appropriate angle of repose, surcharge or overburden factors, to ensure prevention of undermining proposed improvements in the event of future CPL pipeline maintenance or emergency excavations to access pipeline facilities. Contractor shall provide all calculations for temporary and permanent structures and loadings required for construction.

8.5.4.11 If it is determined by CPL Engineering/Technical Services that adequate cover, clearance or protection from load bearing forces from temporary or permanent structures cannot be obtained, then CPL would require CPL facilities to be relocated, lowered in place or additional fill placed above the pipelines. Except express terms and conditions in reference to responsibility for costs, it is expected that improvements requiring pipeline system design changes that CPL would be reimbursed for actual costs to perform work for such changes (i.e., changes in DOC, lowering, relocation or removal of pipelines to accommodate new construction improvements for Project Site Development).

8.5.4.12 All Contractors associated with the project agree to sign and abide by the terms of CPL's Acknowledgment of Line Crossing Procedures and/or Hazardous Liquid Substructure Notification, as specified at time of construction by the CPL Facilities Inspector. Failure to comply with requirements of Pipeline Safety Laws subject the violator to liability for any damage incurred by CPL Facilities during excavation/construction operations. Civil and/or Criminal Penalties may result from Failure to Comply.

8.5.5 Police, Highway Patrol, and Fire Department. Police, Highway Patrol, and Fire Department shall be notified by the Contractor whenever a street is to be closed to traffic. If the closing is to be of long duration, a single notification to each department on the last working day before closing will be sufficient. A single notification shall then be made at the time the street is again opened to traffic. If the closing is to be of short duration or if different sections of the streets are to be closed at different times, notifications shall be made on a day-to-day basis.

8.5.6 Existing Bench Marks and R/W Markers. The Contractor shall notify the Contracting Officer, in writing, 7 days in advance of the time he proposes to remove any bench mark or right-of-way marker.

8.5.7 Spill Reporting. The Contractor shall notify the Contracting Officer immediately after all spills, regardless of quantity, including all personnel exposures. The Contractor shall submit a written notification not later than 7 calendar days after the initial notification. The written notification shall include the following:

a. Item spilled, leaked or released in an unauthorized manner (Identification, Quantity and Manifest Numbers).

b. Whether the amount spilled, leaked or released in an unauthorized manner is EPA reportable and, if reported, a copy of the report.

c. Exact location of the spill, leak or unauthorized release.

d. Nature of exposure to personnel.

e. Containment procedures initiated.

f. Anticipated cleanup and disposal procedures.

g. Disposal location of spill, leak or unauthorized release residue.

8.5.8 The Contractor shall notify Mr. Ruben Lopez, Director of Community Development/Redevelopment, (323) 563-9566, City of South Gate, at least 14 days prior to using the staging area.

8.5.9 County Sanitation Districts of Los Angeles County.

8.5.9.1 Contractor must locate Districts' trunk sewers by potholing before constructing any footings within the Districts' easements.

8.5.9.2 Continuous access to the sewer manholes located within the project site must be maintained at all times. The minimum clearance requirements for a typical District maintenance vehicle is 12 feet in width and 15 feet in height. The means by which access is to be provided to any impacted sewer manholes must be indicated on a site plan and submitted to the Districts prior to construction.

8.5.9.3 All construction occurring within the Districts' easements shall be performed in the presence of a District inspector. Please contact Calvin Jin, Sewerage System Superintendent of the Compton Field Office, at (310) 638-1161, least two weeks prior to construction to make the necessary arrangements.

8.5.9.4 Construction Within a District's Easement and Adjustment of County Sanitation District Manholes to New Grade. Contractor must complete the following prior to construction within the District's easement. Contractor shall receive onsite approval of any proposed activity within the district's easement by a District inspector. When Sanitation District manholes must be adjusted to a new grade because of regrading and/or resurfacing over the manhole, the work will be done by District personnel in conjunction with the contractor responsible for the regrading and/or resurfacing, pursuant to the following procedure.

1. Contractor shall notify the District's Sewerage Superintendent at (310) 638-1161, forty-eight hours prior to commencement of any work in the area of the manhole.

2. If grade over manhole is to be lowered:

(a) Contractor shall furnish and deliver a temporary steel cover plate of a thickness and size approved by the District for said manhole.

(b) Contractor shall excavate around the manhole to a depth and distance outside of the manhole as required for District to accomplish (c) below.

(c) District shall remove the existing manhole frame and cover and any interfering portion of the manhole shaft and shall place the steel cover plate over the manhole.

(d) Contractor shall store and protect frame and cover for later installation by District and shall fill and/or pave over the steel plate to final grade.

(e) Contractor shall remove paving and/or fill as necessary to permit District to adjust manhole to final grade. (Removal of paving and/or fill shall be to a minimum of less than 6 inches below final grade and 12 inches outside of the manhole if the steel plate is more than 6 inches below final grade.)

(f) District personnel shall adjust manhole and set frame and cover to final grade.

(g) Contractor shall place and compact the backfill and pavement as necessary to complete the work.

3. If grade over manhole is to be raised:

(a) Contractor shall fill and/or pave directly over frame and cover to final grade.

(b) Steps (e) through (g) of 2 above shall be followed except that if grade is to be raised more than 2 feet, the Contractor shall excavate around the manhole shaft under step (2) to a depth and diameter as necessary for District to remove and reconstruct manhole shaft with required taper and as specified by District.

The Contractor shall be responsible for furnishing, placing, and maintaining barricades and lights as necessary to protect the public from danger due to the work being done.

8.5.10 Metropolitan Water District. The Contractor shall notify Mr. Benny Yee (Operations Maintenance Branch) at (213) 217-7723, at least two days (Monday through Thursday) prior to starting work in the vicinity of Metropolitan Water District (MWD) facilities.

8.5.10.1 If construction equipment is to be used that will impose loads greater than that of an AASHTO H-20 vehicle, specifications of said equipment shall be submitted to metropolitan for review and written approval a minimum of 14 days prior to starting work in the vicinity of MWD facilities. Construction equipment that will impose loads greater than that of an AASHTO H-20 vehicle shall not be used within 20 feet of MWD manholes or other structures.

8.5.10.2 When the total cover over MWD pipelines is greater than 5 feet, and when the ground is maintained in a smooth condition with a uniform slope for 50 feet on each side of the pipeline, equipment operating over the pipeline shall be restricted to a loaded CAT 666B scraper or equivalent.

8.6 Restrictions.

8.6.1 Representatives of Other Agencies. Personnel representing owners and agencies may be present for various portions of the work. However, the Contractor will be responsible only to the Contracting Officer.

8.6.2 The Contractor will not be permitted to cross existing paved roadways and residential roadways with construction equipment except at approved marked crossings. The Contractor shall maintain the crossings in accordance with applicable state, county, and city regulations.

8.6.3 Working Hours. The Contractor shall restrict all construction activities, including warming equipment, to the following schedule:

Monday through Friday	7 a.m. to 7:00 p.m.
Saturday	9 a.m. to 6:00 p.m.

Access to the job site will be allowed 30 minutes prior to starting time unless otherwise approved by the Contracting Officer. No work will be permitted on Sundays or Federal Holidays.

8.6.4 Bicycle Trail Closure and Signing and Striping

8.6.4.1 Closure. The bicycle trail shall be closed. Signage with the limits, date and time of closure shall be posted along the trail in both directions two (2) weeks prior to the actual closing of the trail. Signage shall contain the period and extent of closure. The Contractor shall notify Ryan Romo, Los Angeles County Department of Public Works at (626) 458-3941 at least one (1) month prior to bicycle trail closure and immediately after the signs have been placed. The bike path must be adequately barricaded at each end of the bike path closure limits. Additional signage warning of construction area, and location maps provided by L.A. County Department of Public Works Planning Division, as shown on the plans, shall be posted at the intermediate access gates and at each end of the closure.

8.6.4.2 Signing and Striping. Existing signage for the bicycle trail shall be removed and delivered to the Los Angeles County Department of Public Works. The Contractor shall contact Mr. Ryan Romo, Los Angeles County Department of Public Works (Bicycle Trail Coordinator), (626) 458-3941, 24 hours prior to delivering the existing bicycle trail signs to 1525 Alcazar Street, Los Angeles, CA 90033, for the anti-graffiti coating treatment to the signs by L.A. County. The Contractor shall be responsible for returning the treated signs and placing them at the locations indicated on the plans or as approved by the Contracting Officer.

8.6.5 Levee and Parapet Wall Construction. The contractor will be allowed to do any work on the landward side or the top of the levee during the flood season, November 15 to April 15, provided that the work does not effectively remove any more than the top one foot of the levee. This limitation will not impact the construction of the levee in the fill areas. The Contractor is restricted from building the parapet walls during the November 15 to April 15 rainy season unless the Contractor can demonstrate, to the satisfaction of the Contracting Officer, that the parapet wall can be constructed by removing only a two-foot portion of the concrete channel slope and reducing the effective levee height by 1 foot.

8.6.6 Right of Way and Permit Restrictions.

8.6.6.1 Gun Club (Trap Shooting Range). The Gun Club will be open between noon and dusk on Wednesday and Fridays. Construction activities will not be permitted on Wednesdays and Fridays between Rio Hondo Channel right levee, Station 9+00 to Station 24+50 and Los Angeles River left levee, Station 642+00 to Station 654+00.

8.6.6.2 No access is available on the west side of Rio Hondo Channel both north and south of the UPRR tracks. A temporary invert ramp(s) would be required to access the west side of Rio Hondo Channel and Los Angeles River confluence. A Right of Entry Agreement between the Contractor and UPRR will be required prior to any work within UPRR right of way. Contact Greg Jacquez, Railroad Coordinator, Programs Development Division, Los Angeles County Department of Public Works, (626) 458-3935, to obtain folder no. and forms for right of entry agreement.

8.6.6.3 Los Angeles County stockpile site Station 58+12 to 48+75 will be cleaned up by County forces. The clean-up is estimated to be completed by January 31, 2000. Contact Yggy Ruiz, (562) 861-0316.

8.6.6.4 World Oil property, Rio Hondo right levee Station 78+50 to 80+70: no construction can take place until April 1, 2000.

8.6.6.5 Janis Investment property, Station 637+69 to 647+54: no construction can be started until January, 2000.

8.6.6.6 Kroger Company (Sam's Club), west side of Rio Hondo Channel right levee, Station 81+00 to 83+20: no access available until April, 2000.

8.6.6.7 Caltrans property - L.A. River left levee Station 561+50 to Station 571+50; L.A. River left levee Station 652+00 to Station 658+00; L.A. River right levee Station 558+00 to Station 574+00; L.A. River right levee Station 648+25 to Station 653+50 - encroachment permit not available until January 15, 2000.

8.6.6.8 Chevron Pipeline Company - L.A. River left levee Station 535+00 to Station 539+00; L.A. River left levee Station 562+00 to Station 570+50; L.A. River left levee Station 618+00 to Station 620+00; L.A. River right levee Station 535+78 to Station 538+88; L.A. River right levee Station 618+00 to Station 620+00; L.A. River right levee Station 625+00 to Station 670+00 - permit will not be available until January, 2000. Contractor must comply with Section 1200, paragraph 8.5.4.

8.6.6.9 Arco Pipeline, Rio Hondo Channel left levee, Station 15+00 to Station 23+20. Permission to work within the vicinity of utility lines is subject to approval from Arco Pipeline.

8.6.6.10 Pacific Pipeline, Rio Hondo Channel left levee, Station 15+00 to Station 23+20. Permission to work within the vicinity of utility lines is subject to approval from Pacific Pipeline.

9. PUBLIC SAFETY. Attention is directed to the CONTRACT CLAUSE: PERMITS AND RESPONSIBILITIES. The Contractor shall furnish, install, maintain and remove temporary fencing, barricades, and/or guards, as required, to provide protection in the interest of public safety and in conformance with applicable Federal, State, and local laws and ordinances. As a minimum, this will include an 8-foot chain-link fence which completely encloses each and every part of the project which the Contractor worked in or is working on. The plan of this temporary fencing shall be furnished to

the Contracting Officer for approval and the fence erected prior to commencement of any work. Whenever the Contractor's operations create a condition hazardous to the public, he shall furnish at his own expense and without cost to the Government, such flagmen and guards as are necessary to give adequate warning to the public of any dangerous conditions to be encountered and he shall furnish, erect, or maintain such fences, barricades, lights, signs and other devices as are necessary to prevent accidents and avoid damage or injury to the public. Flagmen and guards, while on duty and assigned to give warning and safety devices, shall conform to applicable city, county, and state requirements. Should the Contractor appear to be neglectful or negligent in furnishing adequate warning and protection measures, the Contracting Officer may direct attention to the existence of a hazard and the necessary warning and protective measures shall be furnished and installed by the Contractor without additional cost to the Government. Should the Contracting Officer point out the inadequacy of warning and protective measures, such action of the Contracting Officer shall not relieve the Contractor from any responsibility for public safety or abrogate his obligation to furnish and pay for those devices. The installation of any general illumination shall not relieve the Contractor of his responsibility for furnishing and maintaining any protective facility.

10. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) STANDARDS. The OCCUPATIONAL SAFETY and HEALTH ACT (OSHA) STANDARDS for CONSTRUCTION (Title 29, Code of Federal Regulations Part 1926 as revised from time to time) and the Corps of Engineers General Safety and Health Requirements Manual, EM 385-1-1, are both applicable to this contract. The most stringent requirement of the two standards will be applicable.

10.1 Accident Reporting. In accordance with EM 385-1-1, the Contractor shall submit a written summary of worker's compensation claims which have been filed by workers in connection with work on the project. The summary shall be submitted at the time when the work is approximately 50 percent complete and at project completion. The summary shall include all subcontractors. The Contractor's and subcontractor's compensation insurance carrier shall certify that the summaries are "correct and true".

11. PERMITS.

11.1 General. Reference is made to the clause of the contract entitled "Permits and Responsibilities," which obligates the Contractor to obtain all required licenses and permits, including, but not necessarily limited to the following specified hereinbelow.

11.1.1 National Pollutant Discharge Elimination System (NPDES) Permit. The project requires an NPDES permit from the California State Water Resources Control Board, Division of Water Quality. The general permit requires development and implementation of Storm Water Pollution Prevention Plan (SWPPP), which shall be maintained on-site throughout the construction period. A copy of a plan will be furnished to the Contractor by the Government. The Contractor shall maintain a current copy of the plan on-site, and shall comply with all provisions of the plan. Modifications to the plan as necessary to reflect Contractor's construction methods shall be submitted by the Contractor to the Government for approval.

12. REQUIRED INSURANCE. Contractor shall maintain insurance in full force and effect throughout the term of this contract. The policy or policies of insurance maintained by Contractor shall provide the limits and coverages as set forth herein below.

12.1 Insurance shall be in force the first day of the term of this contract.

12.2 Each insurance policy required by this Contract shall contain the following clauses:

a. "This insurance shall not be canceled, limited in scope of coverage or nonrenewed until after thirty (30) days written notice has been given to Los Angeles County, Department of Public Works, 900 S. Fremont Avenue, P.O. Box 1460, Alhambra, CA 91802.

b. "All rights of subrogation are hereby waived against the County of Los Angeles, and the members of the Board of Supervisors and elective or appointive officers or employees, when acting within the scope of their employment or appointment, and County Districts and their Board or Commissions which are governed by the County Board of Supervisors."

c. "As respects operation of the named insured performed on behalf of the Government, the following are added as additional insureds:

The County of Los Angeles, the City of Long Beach, the City of Paramount, and the City of Compton.

LIABILITY INSURANCE

<u>Coverage</u>	<u>Minimum Limits</u>
Comprehensive General Liability including Completed Operations, Broad Form Property Damage Endorsement, and Comprehensive Automobile Liability	\$1,000,000.00 combined single limit per occurrence.
Worker's Compensation	Statutory

12.3 Worker's Compensation. Each liability and worker's compensation insurance policy required by this contract shall contain clause numbers 13.2 (a.) and (c.) above, and the following clause:

"It is agreed that any insurance maintained by the County of Los Angeles will apply in excess of, and not contribute with, insurance provided by this policy."

12.3.1 The procuring of such required policies of insurance shall not be construed to limit Contractor's liability hereunder not to fulfill the indemnification provisions and requirements of this Contract.

12.3.2 Contractor agrees to indemnify and save harmless agency, its officers, and employees from and against any and all claims, demands, losses, defense costs, or liability of any kind or nature which Agency, its officers, agents and employees may sustain or incur or which may be imposed upon them for injury to or death of persons, or damage to property as a result of, arising out of, or in any manner connected with Contractors performance under the terms of this contract, excepting only liability arising out of the sole negligence of agency.

13. GRAFFITI REMOVAL. The Contractor shall remove or cover all graffiti found in the work area within 48 hours of findings.

## 14. AS-BUILT DRAWINGS.

14.1 General. The Contractor shall prepare and furnish the as-built drawings for the project. The as-built drawings shall be a record of the construction as installed and completed by the Contractor. They shall include all the information shown on the contract set of drawings and a record of all deviations, modifications, or changes from those drawings, however minor, which were incorporated in the work, all additional work not appearing on the contract drawings, and all changes which are made after final inspection of the contract work. In event the Contractor accomplishes additional work which changes the as-built conditions of the facility after submission of the as-built drawings, the Contractor shall furnish revised and/or additional drawings as required to depict as-built conditions. The requirements for these additional drawings will be the same as for the as-built drawings included in the original submission. The drawings shall show the following information, but not be limited thereto:

(a) 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.

(b) The location and dimensions of any changes within the building or structures.

(c) Correct grade or alignment of roads, channels, structures or utilities if any changes were made from contract plans.

(d) Correct elevations if changes were made in site grading.

(e) 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, dimensions of equipment foundations, etc.

(f) The topography and grades of all drainage installed or affected as a part of the project construction.

(g) All changes or modifications which result from the final inspection.

14.2 Preliminary As-Built Drawings. The Contractor shall maintain one (1) set of full size, blue line prints marked up in red to show the as-built conditions. This set of as-built prints shall be kept current and available at the job site at all times. All changes from what is shown on the contract plans, whether it be from changes requested by the Contracting Officer or resulting from 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 marked-up as-built prints will be jointly inspected for accuracy and completeness by the Contracting Officer and Contractor prior to submission of each monthly pay estimate. Information to be included on these preliminary drawings shall conform to the requirements as stated above. Any and all as-built modifications shall be reflected on all sheets affected by the modifications.

14.2.1 Review Submittal. Not later than 14 calendar days after acceptance of the project by the Government, the Contractor shall deliver to the Contracting Officer one

(1) full size set of blue-line drawings marked up to depict the as-built conditions. If upon review, the drawings are found to contain errors and/or omissions, they shall be returned to the Contractor for corrections.

#### 14.3 Computer Drawing Files (CADD).

14.3.1 General. The Contractor shall develop the final computer file as-built drawings from the approved preliminary drawings. The computer files shall be delivered in MicroStation file format DGN, a Computer-Aided Design and Drafting (CADD) program. Drawings shall be prepared in general accordance with the Los Angeles District manual "Standards Manual for U.S. Army Corps of Engineers Computer-Aided Design and Drafting (CADD) Systems".

14.3.2 Original contract CADD files. The Government will provide all the computerized drawing files used to produce the advertised contract drawings on CD-ROM.

14.3.3 Delivery. Prior to finalizing the plans, two sets of drawings shall initially be provided to the Contracting Officer for review and approval. The Contracting Officer shall complete his review within ten (10) working days. Upon final approval, the Contractor shall furnish two (2) full size sets and two (2) half size sets of the final as-built plans on reproducible mylars, and the computerized project files in MicroStation file format DGN on CD ROM. All project files, whether revised or not, shall be provided to the Contracting Officer.

15. NOTICE OF PARTNERSHIP. The Government intends to encourage the foundation of a cohesive partnership with the Contractor and its subcontractors. This partnership will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient contract performance and intended to achieve completion within budget, on schedule, and in accordance with plans and specifications. This partnership would be bilateral in makeup, and participation will be totally voluntary. Any cost associated with effectuating this partnership will be agreed to by both parties and will be shared equally with no change in contract price. To implement this partnership initiative, it is anticipated that within 60 days of Notice to Proceed the Contractor's on-site project manager and the Government's Resident Engineer would attend a one or two day partnership development seminar/team building workshop together with the Contractor's key on-site staff and key Government personnel. Follow-up workshops of 1 to 2 days duration would be held periodically throughout the duration of the contract as agreed to by the Contractor and Government.

#### 16. TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (ER 415-1-15, 31 OCT 89).

16.1 This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the Contract Clause entitled: DEFAULT (FIXED PRICE CONSTRUCTION). In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

(a) The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipation for the project location during any given month.

(b) The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

16.2 The following schedule of monthly anticipated adverse weather delays will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

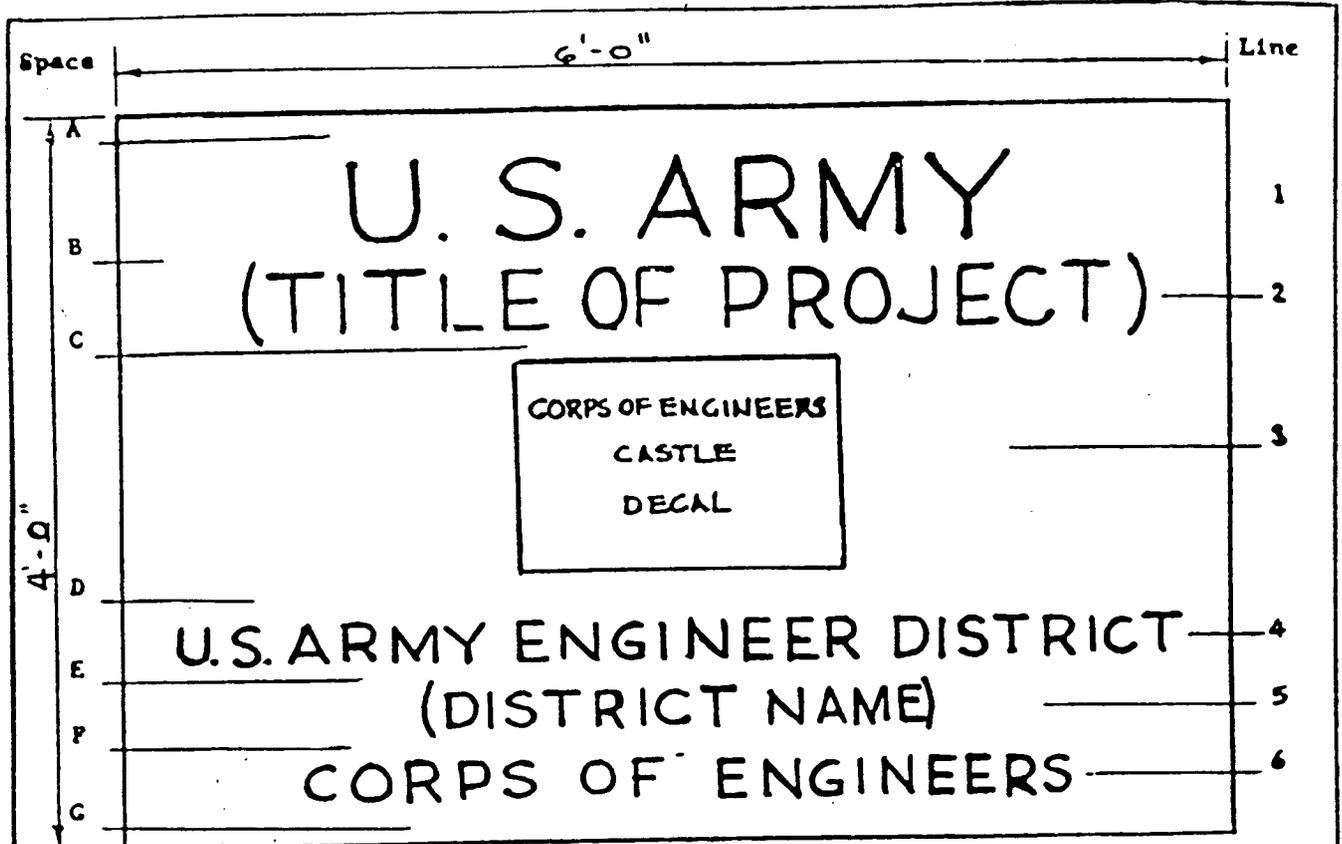
MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK DAYS BASED ON FIVE (5) DAY WORK WEEK

<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
10	10	2	1	0	0	1	1	3	3	5	5

16.3 Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract, the Contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled work day. The number of actual adverse weather days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in subparagraph 17.2, ABOVE, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days. and issue a modification in accordance with the Contract Clause entitled: DEFAULT (FIXED PRICE CONSTRUCTION).

-- End of Section --

insert Signs.pdf



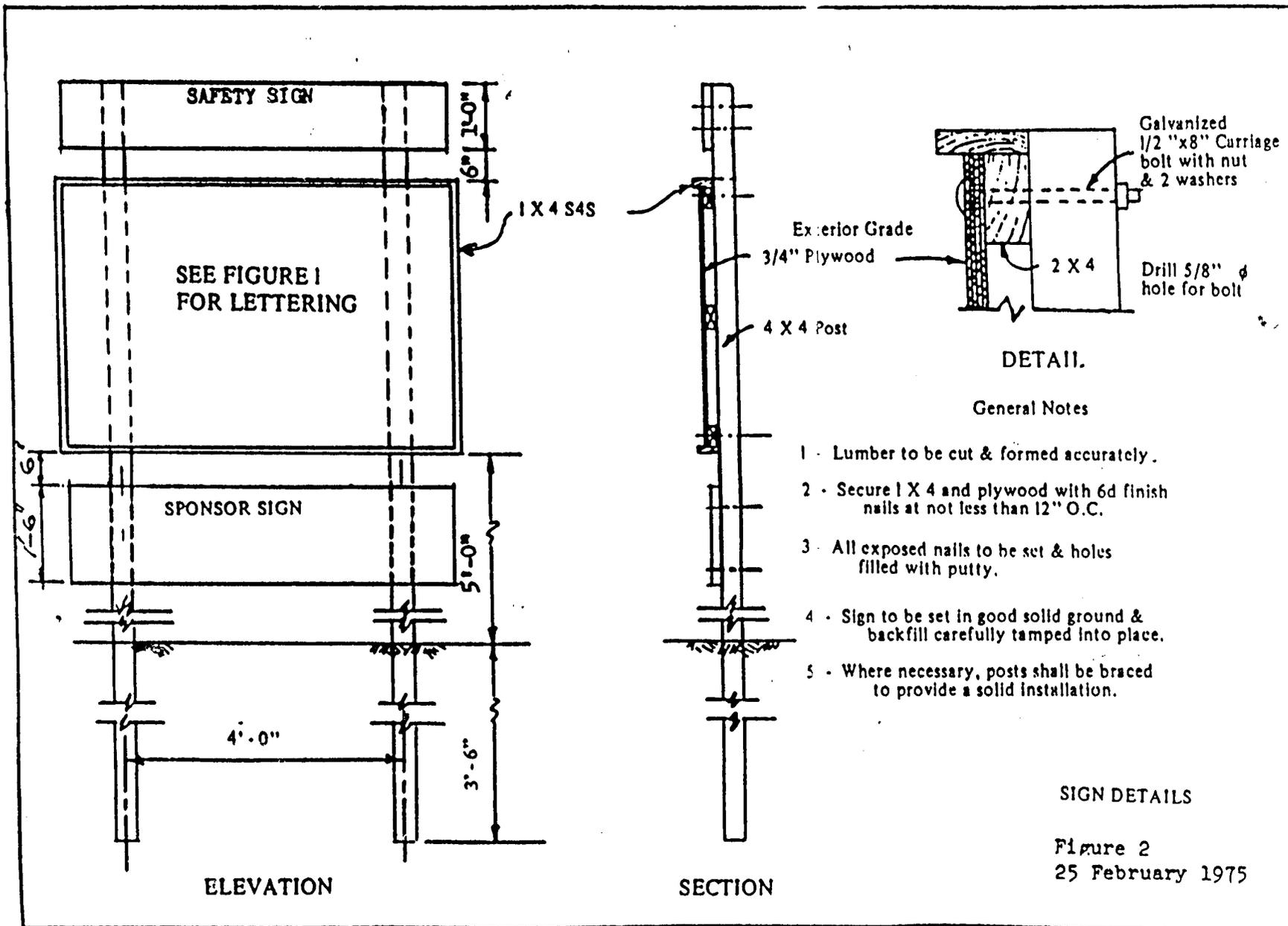
SCHEDULE

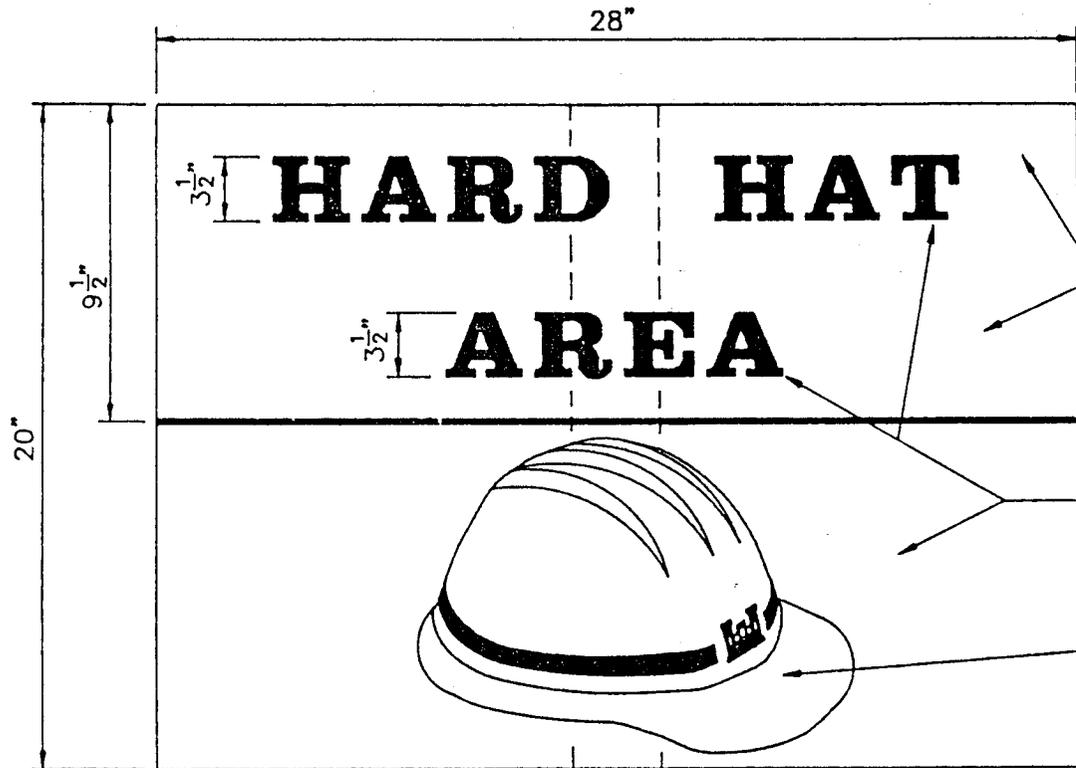
<u>Space</u>	<u>Height</u>	<u>Line</u>	<u>Description</u>	<u>Letter Height</u>	<u>Stroke</u>
A	3"	1	U. S. ARMY	5 1/2"	7/8"
B	2"	2	PROJECT NOMENCLATURE	4"	5/8"
C	2"	3	CORPS OF ENGINEERS CASTLE (DECAL)	1 1/2"	--
D	3"	4	U. S. ARMY ENGINEER DISTRICT	2 3/4"	3/8"
E	2"	5	DISTRICT NAME	2 1/4"	1/4"
F	2"	6	CORPS OF ENGINEERS	2 1/2"	3/8"
G	3"				

Lettering Color -- Black

PROJECT SIGN  
(Army-Civil Works)

Figure 1  
14 August 1972



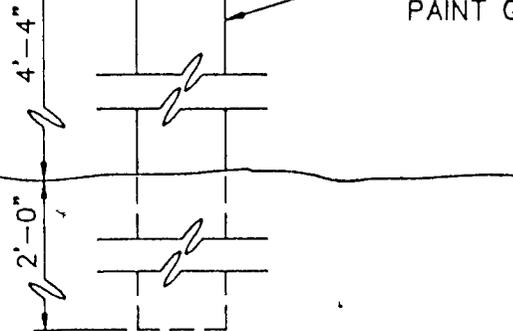


WHITE:  
PAINT BACK OF SIGN WHITE

GREEN

HARD HAT DECAL FURNISHED  
BY GOVERNMENT

4" X 4" POST  
PAINT GREEN



GENERAL NOTES:

1. Green & White Paint shall be opaque glossy as specified in ANSI Standard Z53.1.
2. Bolt Sign to post w/2 1/2" dia. Carriage Bolts.

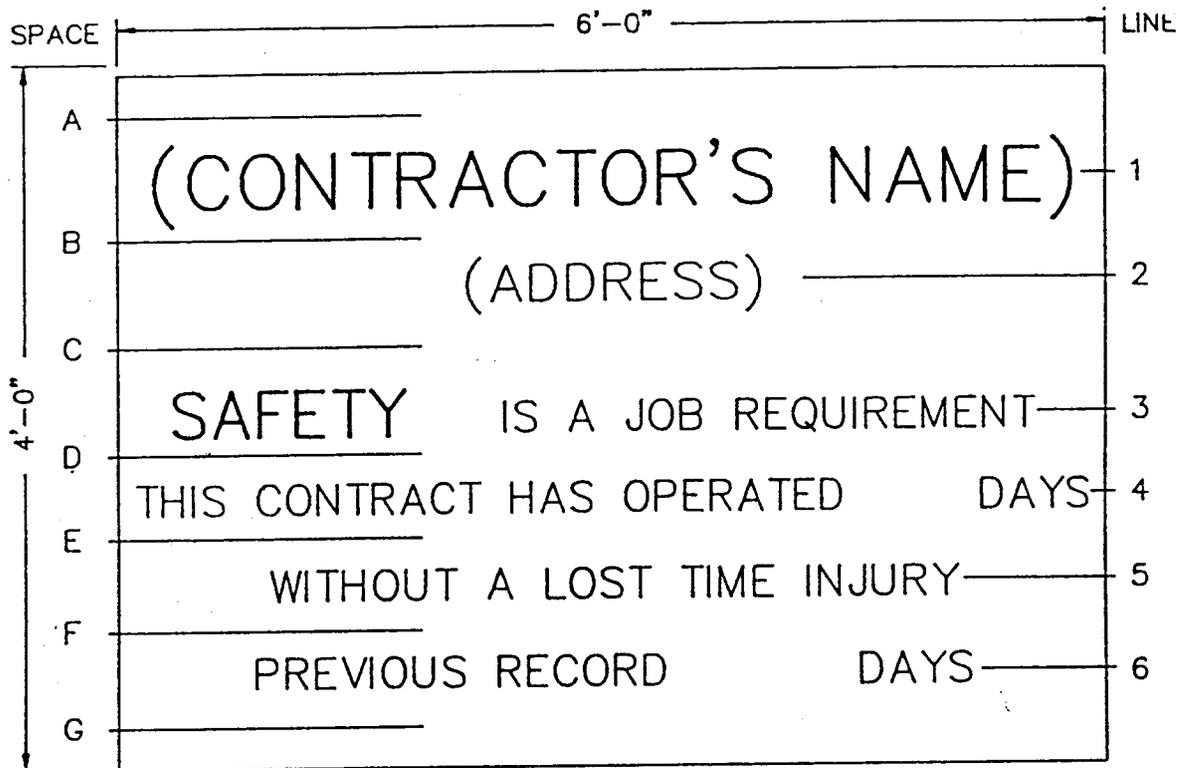
STANDARD DETAIL  
**HARD HAT SIGN**

U.S. ARMY ENGINEER DISTRICT  
SACRAMENTO

Drawn T. Tufts  
Checked R. Simmons

Not to Scale  
NOV. 1987

File No. 80-25-774



## SCHEDULE

<u>SPACE</u>	<u>HEIGHT</u>	<u>LINE</u>	<u>DISCRIPTION</u>	<u>LETTER HEIGHT</u>
A	5"	1	CONTRACTOR'S NAME	5"
B	3"	2	ADDRESS	3"
C	6"	3	<b>SAFETY</b> IS A JOB REQUIREMENT	4 1/2" & 3"
D	3"	4	ALL LETTERING	3"
E	3"	5	ALL LETTERING	3"
F	3"	6	ALL LETTERING	3"
G	5"			

NOTE:

LETTERING SHALL BE BLACK No. 27038, FEDERAL STANDARD 595.  
SIGN SHALL BE INSTALLED IN THE SAME MANNER  
AS THE PROJECT SIGN.

STANDARD DETAIL

**SAFETY SIGN**

U S ARMY ENGINEER DISTRICT  
SACRAMENTO

Drawn T. Tufts

Not to Scale

Checked R. Simmons

NOV. 1987

File number 80-25-707

SECTION TABLE OF CONTENTS

MEASUREMENT AND PAYMENT

SECTION 01250

1. GENERAL.....	SECTION 01250	PAGE 1
2. CLEAR SITE AND REMOVE OBSTRUCTIONS.....	SECTION 01250	PAGE 1
3. EXCAVATION.....	SECTION 01250	PAGE 1
4. COMPACTED FILL.....	SECTION 01250	PAGE 2
5. STONE PROTECTION.....	SECTION 01250	PAGE 2
6. GROUTING STONE PROTECTION.....	SECTION 01250	PAGE 2
7. GEOTEXTILE.....	SECTION 01250	PAGE 3
8. CONCRETE.....	SECTION 01250	PAGE 3
9. RETAINING WALLS.....	SECTION 01250	PAGE 4
10. SIDE DRAIN.....	SECTION 01250	PAGE 4
11. ASPHALT CONCRETE PAVEMENT.....	SECTION 01250	PAGE 4
12. AGGREGATE BASE COURSE.....	SECTION 01250	PAGE 4
13. SAFETY RAILING.....	SECTION 01250	PAGE 5
14. FENCING.....	SECTION 01250	PAGE 5
15. GATES.....	SECTION 01250	PAGE 5
16. BOLLARDS.....	SECTION 01250	PAGE 5
17. ACCESS LADDER.....	SECTION 01250	PAGE 5
18. HYDROSEEDING.....	SECTION 01250	PAGE 5
19. HYDROSEEDING MAINTENANCE.....	SECTION 01250	PAGE 5
20. TREE, SHRUB, GROUND COVER, AND VINE PLANTINGS.....	SECTION 01250	PAGE 6
21. TREES, SHRUBS, GROUND COVERS, AND VINES MAINTENANCE.....	SECTION 01250	PAGE 6
22. JUTE MESH.....	SECTION 01250	PAGE 6
23. IRRIGATION SYSTEM.....	SECTION 01250	PAGE 6
24. BICYCLE TRAIL STRIPING AND SIGNING.....	SECTION 01250	PAGE 6
25. BICYCLE TRAIL CLOSURE AND DETOUR.....	SECTION 01250	PAGE 7
26. BENCHES, BICYCLE RACKS, PADS AND SIGN PEDESTALS.....	SECTION 01250	PAGE 7
27. GAGING STATION.....	SECTION 01250	PAGE 7

28. UTILITY RELOCATION/RECONSTRUCTION .....SECTION 01250 PAGE 7

30. AS-BUILT DRAWINGS .....SECTION 01250 PAGE 7

31. QUALITY ASSURANCE VEHICLES .....SECTION 01250 PAGE 7

-- End of Table of Contents --

## SECTION 01250

## MEASUREMENT AND PAYMENT

## 1. GENERAL.

The contract price and payment shall constitute full compensation as stated in the Contract Clause, CONTRACT PRICES - BIDDING SCHEDULES, for completion of the work. No separate payment will be made for any material or work covered in this specification, but not specifically mentioned as part of a bid items, and all costs into which the work pertains or considered incidental to all bid items. As stated in Contract Clause, SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, the word "provided" shall be understood to mean "furnished and installed" when used in this section or elsewhere in the technical sections.

## 2. CLEAR SITE AND REMOVE OBSTRUCTIONS.

Payment for Clear Site and Remove Obstructions will be made at the applicable contract price, which payment shall constitute full compensation for clearing, grubbing within the channel rights-of-way and at fill sites inside the construction easement and removal of all indicated obstructions within the project limits. Except as otherwise specified, payment for includes applicable earthwork; removing and plugging abandoned lines; removal of existing asphalt concrete pavement, asphalt concrete berms, wood sheds, K-rail, concrete pier noses, concrete training walls, concrete walls, concrete piles, concrete wing walls, gaging station, flood control features (stone, reinforced concrete, removal of fencing, grouted stone work); removal of junk (old street lights, light standards, tanks, conveyors, pipes, etc.), piles of rock, rubble, concrete and asphalt; removal of miscellaneous trash and debris; removal of vegetation; removal of materials for salvage; protection, replacement or restoration of utilities, fences, walls and features indicated to remain; and the disposal of all materials.

## 3. EXCAVATION.

3.1 Measurement. A survey of the site shall be made prior to commencement of work, and all measurements will be based on this survey without regard to any changes in the site that may be made between the excavation lines and grades indicated on the drawings or staked in the field and ground surfaces as indicated by the above mentioned surveys. The actual slopes as excavated may be greater or less than those indicated or staked depending on the materials excavated and methods used in performing the work, but such alterations shall not change the measurement for payment from the original lines as specified herein. The quantity of directed excavation necessary for the removal of unsuitable foundation material as specified shall be included in the measurement of the excavation where the unsuitable soils are encountered. Quantities will be computed in cubic yards by the average end area method and the planimeter will be considered a precise instrument for measurement of plotted cross sections. All excavation outside of excavation lines shown on the drawings or staked in the field will be considered as being for the convenience of the Contractor.

## 3.2 Payment.

3.2.1 Payment for Excavation will be made at the applicable contract price, which payment shall constitute full compensation for excavation and disposal of excavated materials.

3.2.2 Unsatisfactory Soils. No separate payment will be made for the excavation and disposal of unsatisfactory soils. When such excavation is directed, payment will be included in the applicable contract price for the items of work under which the unsuitable soils are encountered. When there is no applicable contract item an adjustment will be made.

3.2.3 Excavation for Structures. No separate payment will be made for excavation for structures. All costs therefore shall be included in the applicable contract item to which the work applies.

3.2.4 Trenches. No separate payment will be made for excavation of utility and pipe trenches. All costs therefore shall be included in the applicable contract prices for the items to which the work applies.

#### 4. COMPACTED FILL.

4.1 Measurement for compacted fill will be made between the excavation and structure lines and the fill limit lines, or between the ground lines and fill lines, as indicated or staked in the field. Quantities will be computed in cubic yards by the average end area method and the planimeter will be considered a precise instrument for measuring plotted cross sections.

#### 4.2 Payment.

4.2.1 Payment for Compacted Fill will be made at the applicable contract price, which payment shall constitute full compensation for obtaining, placing and compacting the fill.

4.2.2 Fill for Structures. No separate payment will be made for fill or backfill about structures. All such costs shall be included in the applicable contract prices for items to which the work applies.

4.2.3 Trenches. No separate payment will be made for backfilling of pipelines. All costs in connection therewith shall be included in the contract prices for items to which the work applies.

4.2.4 Subgrade Preparation. No separate payment will be made for subgrade preparation and all costs in connection therewith shall be included in the contract prices for items to which the work applies.

4.2.5 No separate payment will be made for borrow.

#### 5. STONE PROTECTION.

5.1 Measurement. The quantity of stone to be paid for will be number of tons (2,000 pounds), determined by scale weights, acceptably placed within the lines and grades shown on the drawings or directed by the Contracting Officer.

5.2 Payment for Landscape Stone and Grouted Landscape Stone will be made at the applicable contract price, which payment shall constitute full compensation for obtaining and placing the stone, complete.

5.3 Payment for Stone Protection will be made at the applicable contract price, per ton, which shall constitute full compensation for obtaining and placing the stone protection, complete.

#### 6. GROUTING STONE PROTECTION

6.1 Measurement. The quantity of grouting stone protection and grouting landscape stone will be measured in cubic yards based on the volume determined from the calculated batch volume and number of batches acceptably placed within the lines and grades shown on the drawings.

6.2 Payment. Payment for grouting stone protection and grouting landscape stone will be made at the applicable contract price per cubic yard, which shall constitute full compensation for grouting stone protection, complete.

#### 7. GEOTEXTILE.

7.1 Measurement. Installed Geotextile will be measured for payment in place to the nearest square yard of protected area as delineated in the drawings.

7.2 Payment for Geotextile will be made at the applicable contract price, which payment shall constitute full compensation for constructing the filter fabric, complete. No payment will be made for filter fabric replaced because of waste, contamination, damage, repair, or due to contractor fault or negligence.

#### 8. CONCRETE.

8.1 Concrete Parapet Wall. Payment for the Concrete Parapet Wall shall be made at the applicable contract price, which payment shall constitute full compensation for the parapet wall, complete. Payment shall not include removal of stonework, asphalt, and concrete channel lining for which other applicable payment items are provided.

8.2 Concrete Slope Paving. Payment for the Concrete Slope Paving shall be made at the applicable contract price, which payment shall constitute full compensation for the slope paving, complete. Payment shall not include removal of stonework, and concrete channel lining for which other applicable payment items are provided.

8.3 Concrete Channel Lining. Payment for the Concrete Channel Lining shall be made at the applicable contract price, which payment shall constitute full compensation for the channel lining, complete. Payment shall not include removal of stonework, and concrete channel lining for which other applicable payment items are provided.

8.4 Concrete Channel Invert. Payment for the Concrete Channel Invert shall be made at the applicable contract price, which payment shall constitute full compensation for the channel invert, complete. Payment shall not include removal of concrete channel lining for which other applicable payment items are provided.

8.5 Concrete Training Wall. Payment for Concrete Training Wall shall be made at the applicable contract price, which payment shall constitute full compensation for the training wall, complete. Payment shall not include removal of concrete channel lining for which other applicable payment items are provided.

8.6 Concrete Cutoff Wall. Payment for Concrete Cutoff Wall for the armoring shall be made at the applicable contract price, which payment shall constitute full compensation for the cutoff wall, complete.

8.7 Concrete Driveway. Payment for Concrete Driveway shall be made at the applicable contract price, which payment shall constitute full compensation for the driveway, complete.

8.8 Concrete Ribbon Gutter. Payment for Concrete Ribbon Gutter shall be made at the applicable contract price, which payment shall constitute full compensation for the ribbon gutter, complete.

8.9 Concrete Curb. Payment for Concrete Curb shall be made at the applicable contract price, which payment shall constitute full compensation for the curb, complete.

8.10 Concrete Curb and Gutter. Payment for Concrete Curb and Gutter shall be made at the applicable contract price, which payment shall constitute full compensation for the curb and gutter, complete.

8.11 Concrete Sidewalk. Payment for Concrete Sidewalk shall be made at the applicable contract price, which payment shall constitute full compensation for sidewalk, complete.

8.12 Concrete Pilasters. Payment for Concrete Pilasters shall be made at the applicable contract price, which payment shall constitute full compensation for the pilaster, complete.

8.13 Concrete Pilasters (Ralph C. Dills Park). Payment for Concrete Pilasters (Ralph C. Dills Park) shall be made at the applicable contract price, which payment shall constitute full compensation for the pilaster, complete. The concrete pilasters will be provided by the Resident Engineer and will be stockpiled at the Los Angeles County Maintenance Yard.

## 9. RETAINING WALLS.

Payment for Retaining Walls (Retaining Walls Nos. 8, 28, 41, 542, and 656 will be made at the applicable contract price, which payment shall constitute full compensation for the retaining wall, complete. The earthwork included shall be only that earthwork which is located outside the limits of earthwork for which other payment is provided. Payment will not include fencing for which other applicable payment items are provided.

## 10. SIDE DRAIN.

Payment for Side Drain at each location shall be made at the applicable contract price, which payment shall constitute full compensation for the side drain, complete.

#### 11. ASPHALT CONCRETE PAVEMENT.

11.1 Measurement. The unit of measurement for the asphalt concrete pavement will be the ton (2,000 pounds). The Contractor shall weigh each load on a certified platform scale and shall furnish the Contracting Officer with duplicate Weighmaster's Certificates showing the actual net weights. One tickets shall be furnished to the plant inspector and one ticket to the inspector at the construction site. The bituminous mixture shall be weighed after mixing and no deduction will be made for the weight of bituminous material incorporated therein. Asphalt concrete used for the convenience of the Contractor will not be measured for payment.

11.2 Payment for Asphalt Concrete Pavement will be made at the applicable contract price, which payment shall constitute full compensation for asphalt concrete surfacing, complete, including the concrete header and appurtenant work.

11.3 Payment for Asphalt Concrete, dikes and downdrains will be made at the applicable contract price, which payment shall constitute full compensation for asphalt concrete, dikes and downdrains, complete.

#### 12. AGGREGATE BASE COURSE.

12.1 Measurement. The unit of measurement for the Aggregate Base Course will be the ton (2,000 pounds). The Contractor shall weigh each load on a certified platform scale and furnish the Contracting Officer with Duplicate Weighmaster's Certificates showing the actual net weights. One ticket shall be furnished to the plant inspector and one ticket to the inspector at the construction site. Aggregate base course used for the convenience of the Contractor will not be measured for payment.

12.2 Payment for Aggregate Base Course will be made at the applicable contract price, which payment shall constitute full compensation for aggregate base course, complete.

#### 13. SAFETY RAILING

13.1 Measurement of Safety Railing will be made to the nearest linear foot horizontally along the centerline from end-to-end of the railing in place.

13.2 Payment

13.3 Payments for Safety Railing will made at the applicable contract price, which payment shall constitute full compensation for the safety railing, complete.

#### 14. FENCING

14.1 Measurement of Chain Link Fencing, Ornamental Fencing, and Ornamental Fencing (Ralph C. Dills Park) will be made to the nearest linear foot horizontally along the centerline from end-to-end of the fence in place. Temporary fencing will not be included in the measurement.

14.2 Payment

14.2.1 Payment for Chain Link Fencing, Ornamental Fencing, and Ornamental Fencing (Ralph C. Dills Park) will be made at the applicable contract price, which payment shall constitute full compensation for furnishing and installing the fencing, complete in place.

15. GATES.

14.1 Gates. Payment for Chain Link Maintenance, Chain Link Pedestrian, Chain Link Access, Ornamental Maintenance, and Ornamental Pedestrian and Ornamental Access Gates will be made at the applicable contract price, which payment shall constitute full compensation for the gates, complete.

16. BOLLARDS. Payment for Bollards will be made at the applicable contract price, which payment shall constitute full compensation for the bollards, complete.

17. ACCESS LADDER. Payment for Access Ladder will be made at the applicable contract price, which payment shall constitute full compensation for Access Ladder, complete.

18. HYDROSEEDING. Payment for Seeding Operations will be made at the applicable contract price which payment shall constitute full compensation for the grading, tillage, soil amending, fertilizing, seeding, mulching, establishing, and maintaining of areas to be seeded.

19. HYDROSEEDING MAINTENANCE. Payment for Hydroseeding Maintenance will be made at the applicable contract price, which payment shall constitute full compensation for maintenance, including the cost of the water, during the establishment period of the hydroseeded area of 12 months.

20. TREE, SHRUB, GROUND COVER, AND VINE PLANTINGS. Payment for Tree, Shrub, Groundcover, and Vine Plantings will be made at the applicable contract price, which payment shall constitute full compensation for obtaining, planting, and maintaining all trees, shrubs, ground cover, and vines, complete, including the cost of the water and electricity.

21. TREES, SHRUBS, GROUND COVERS, AND VINES PLANTING MAINTENANCE. Payment for Trees, Shrubs, Ground Covers and Vines Maintenance will be made at the applicable contract price, which payment shall constitute full compensation for maintenance during the establishment period of the Trees, Shrubs, Ground Covers, and Vine Plantings of 12 months, including the cost of water and electricity.

22. JUTE MESH. Measurement of jute mesh will be by square foot placed. Payment for jute mesh will be made at the applicable contract price, which payment shall constitute full compensation for jute mesh, complete.

23. IRRIGATION SYSTEM. Payment for Irrigation System will be made at the applicable contract price, which payment shall constitute full compensation for the irrigation system, complete in place, including irrigation crossover hardware, trenching, bedding, and backfilling. Payment will include all costs for electrical system for irrigation controller, including the cost of water and electricity.

24. BICYCLE TRAIL STRIPING AND SIGNING. Payment for Bicycle Trail Striping and Signing will be made at the applicable contract price, which payment shall constitute full compensation for providing bicycle trail striping and signing.

25. BICYCLE TRAIL CLOSURE AND DETOUR. Payment for Bicycle Trail Closure will be made at the applicable contract price, which payment shall constitute full compensation for providing the closure and detours, including, striping, temporary barricades, signing, fences, and restoration of the closure and detour areas upon completion of the work.

26. BENCHES, BICYCLE RACKS, PADS AND SIGN PEDESTALS. Payment for Benches, Bicycle Racks, Pads and Sign Pedestals will be made at the applicable contract price, which payment shall constitute full compensation for providing the benches, trash receptacles, bicycle racks and concrete pads and sign pedestals, complete, including concrete and steel reinforcement.

27. GAGING STATION. Payment for Gaging Station will be made at the applicable contract price, which payment shall constitute full compensation for the gaging station, complete.

28. UTILITY RELOCATION/RECONSTRUCTION

28.1 SWIFT-WATER RESCUE ANCHOR DEVICE. Payment for Swift-water Rescue Anchor Device will be made at the applicable contract price, which payment shall constitute full compensation for the anchor device, complete.

29. TEMPORARY BARRIER. Payment for Temporary Barrier will be made at the applicable contract price, which payment shall constitute full compensation for providing Temporary Barrier, complete.

30. AS-BUILT DRAWINGS. Payment for As-built drawings will be made at the applicable contract price, which payment shall constitute full compensation for providing the project as-built drawings.

31. QUALITY ASSURANCE VEHICLES. Payment for Quality Assurance Vehicles will be made at the applicable contract price, which payment shall constitute full compensation for providing the vehicles, including all fuel, maintenance, repair, replacement of parts and insurance, complete.

-- End of Section **B**

SECTION TABLE OF CONTENTS

GENERAL REQUIREMENTS

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUBMITTAL CLASSIFICATION .....SECTION 01330 PAGE 1

    1.1.1 Government Approved.....SECTION 01330 PAGE 1

    1.1.2 Information Only.....SECTION 01330 PAGE 1

1.2 APPROVED SUBMITTALS .....SECTION 01330 PAGE 1

1.3 DISAPPROVED SUBMITTALS .....SECTION 01330 PAGE 1

1.4 WITHHOLDING OF PAYMENT .....SECTION 01330 PAGE 1

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL .....SECTION 01330 PAGE 2

3.2 SUBMITTAL REGISTER (ENG FORM 4288) .....SECTION 01330 PAGE 2

3.3 SCHEDULING .....SECTION 01330 PAGE 2

3.4 TRANSMITTAL FORM (ENG FORM 4025) .....SECTION 01330 PAGE 2

3.5 SUBMITTAL PROCEDURE .....SECTION 01330 PAGE 3

    3.5.1 Procedures.....SECTION 01330 PAGE 3

    3.5.2 Deviations.....SECTION 01330 PAGE 3

3.6 CONTROL OF SUBMITTALS .....SECTION 01330 PAGE 3

3.7 GOVERNMENT APPROVED SUBMITTALS .....SECTION 01330 PAGE 3

3.8 INFORMATION ONLY SUBMITTALS .....SECTION 01330 PAGE 3

3.9 STAMPS .....SECTION 01330 PAGE 3

ENG FORM 4288.....SECTION 01330 PAGE 5

ENG FORM 4025.....SECTION 01330 PAGE 14

-- End of Table of Contents --



## SECTION 01330

## SUBMITTAL PROCEDURES

## PART 1 GENERAL

## 1.1 SUBMITTAL CLASSIFICATION

Submittals are identified with submittal description (SD) numbers and are classified as follows:

## 1.1.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

## 1.1.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

## 1.2 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the CQC requirements of this contract, is responsible for the dimensions and design of adequate connections, details and satisfactory construction of all work.

After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be given consideration unless accompanied by an explanation as to why a substitution is necessary.

## 1.3 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies as specified for the initial submittal. The Contractor shall resubmit corrected submittal within 14 days. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, notice as required under the Contract Clause entitled "Changes" shall be given promptly to the Contracting Officer.

## 1.4 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

## PART 2 PRODUCTS (Not Applicable)



## PART 3 EXECUTION

### 3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) representative and each respective transmittal form (ENG Form 4025) shall be stamped, signed, and dated by the CQC representative indicating actions taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with Manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

### 3.2 SUBMITTAL REGISTER (ENG FORM 4288)

At the end of this section is one set of ENG Forms 4288 listing each item of equipment and material for which submittals are required by the specifications. The Contractor will also be given the submittal register as a diskette containing the computerized Eng Form 4388 and instructions on the use of the diskette. Columns "d" through "r" have been completed by the Government; the Contractor shall complete columns "a" and "s" through "u" and submit the forms (hard copy plus associated electronic file) to the Contracting Officer for approval within 15 calendar days after Notice to Proceed. The Contractor shall keep this diskette up to date and shall submit it to the Government together with the monthly payment request. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. This register and the progress schedules shall be coordinated.

### 3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 15 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delays, damages or time extensions will be allowed for time lost in late submittals.

### 3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished

to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care will be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

### 3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

#### 3.5.1 Procedures

Submittals shall be made to the Contracting Officer's Representative. Two copies of submittals for information only are required. Six copies are required for all other submittals.

#### 3.5.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

### 3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

### 3.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Four copies of the submittal will be retained by the Contracting Officer and two copies of the submittal will be returned to the Contractor.

### 3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. These submittals will be used for information purposes. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications and will not prevent the Contracting Office from requiring removal and replacement if nonconforming material is incorporated in the work. This does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or check testing by the Government in those instances where the technical specifications so prescribe.

### 3.9 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

<p>CONTRACTOR (Firm Name)</p>
<p>_____ Approved</p>
<p>_____ Approved with corrections as noted on submittal data and/or attached sheets(s).</p>
<p>SIGNATURE: _____</p>
<p>TITLE: _____</p>
<p>DATE: _____</p>

-- End of Section --

**SUBMITTAL REGISTER**

(ER 415-1-10)

CONTRACT NO.

TITLE AND LOCATION

LOS ANGELES RIVER IMPROVEMENT  
CONFLUENCE REACH

CONTRACTOR

SPECIFICATION SECTION

TRANS MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NO.	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL										CLASSIFI CATION		REVIEWER	CONTRACT SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
				DATA	DRAWINGS	INSTRUCTIONS	SCHEDULES	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	INFORMATION ONLY	GOVERNMENT APPROVED	SUBMIT		APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERN MENT	CODE	DATE		
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	
		SECTION 01200 GENERAL REQUIREMENTS																							
		8.8.4	APPROVAL LETTER (CPL)										X	X											
		12.1.4	SAFETY PLAN						X					X											
		15	AS BUILT DRAWINGS		X									X											
		SECTION 01430 ENVIRONMENTAL PROTECTION																							
		1.2.1	ENVIRONMENTAL PROTECTION PLAN						X					X											
		SECTION 1451 CONTRACTOR QUALITY CONTROL																							
		3.2	QUALITY CONTROL PLAN						X					X											
		3.11	PROJECT MANAGEMENT SYSTEM						X					X											
		SECTION 02200 EXCAVATION																							
		1.5.1	BRACING/SHORING		X									X											
		1.8	BURIED STONE -	X								X		X											
			EXCAVATION LIMITS																						
		SECTION 02215 GEOTEXTILES USED AS FILTERS																							

**SUBMITTAL REGISTER**

(ER 415-1-10)

CONTRACT NO.

TITLE AND LOCATION

LOS ANGELES RIVER IMPROVEMENT  
CONFLUENCE REACH

CONTRACTOR

SPECIFICATION SECTION

TRANS MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NO.	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL										CLASSIFI CATION	REVIEWER	CONTRACT SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
				DATA	DRAWINGS	INSTRUCTIONS	SCHEDULES	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	INFORMATION ONLY			GOVERNMENT APPROVED	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERN MENT	CODE	
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y
		2.1.4	MILL CERTIFICATE							X				X										
SECTION 02316 EXCAVATION, TRENCHING AND BACKFILLING FOR UTILITY SYSTEMS																								
		1.3.1	FIELD DENSITY TESTS						X					X										
SECTION 02250 FILLS AND SUBGRADE PREPARATION																								
		1.3.1	FIELD DENSITY TEST						X					X										
		1.3.3	SOURCES						X		X			X										
SECTION 02551 BITUMINOUS PAVING																								
		1.2.1	TEST RESULTS						X					X										
		1.2.2	WAYBILLS AND DELIVERY TICKETS										X	X										
SECTION 02558 BITUMINOUS TACK COAT																								
		1.2.1	TEST						X					X										

**SUBMITTAL REGISTER**

(ER 415-1-10)

CONTRACT NO.

TITLE AND LOCATION

LOS ANGELES RIVER IMPROVEMENT  
CONFLUENCE REACH

CONTRACTOR

SPECIFICATION SECTION

TRANS MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NO.	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL										CLASSIFI CATION	REVIEWER	CONTRACT SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS	
				DATA	DRAWINGS	INSTRUCTIONS	SCHEDULES	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	INFORMATION ONLY			GOVERNMENT APPROVED	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERNMENT	CODE		DATE
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	
		1.2.1	WAYBILLS AND DELIVERY TICKETS									X	X												
		SECTION 02580 PAVEMENT MARKINGS																							
		1.2.1	EQUIPMENT LIST	X										X											
		1.2.1	INSTRUCTIONS	X										X											
		1.2.1	MATERIALS TEST						X					X											
		1.2.1	VOLATILE ORGANIC COMPOUND VOC CONTENT							X				X											
		SECTION 02600 STONE PROTECTION																							
		1.2.1	FIELD SAMPLE								X			X											
		3.2.3	SCALE TICKETS									X	X												
		SECTION 02605 LANDSCAPE STONE																							
		1.2.1	FIELD SAMPLE								X			X											
		3.2.3	SCALE TICKETS									X	X												

**SUBMITTAL REGISTER**

(ER 415-1-10)

CONTRACT NO.

TITLE AND LOCATION

LOS ANGELES RIVER IMPROVEMENT  
CONFLUENCE REACH

CONTRACTOR

SPECIFICATION SECTION

TRANS MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NO.	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL										CLASSIFI CATION	REVIEWER	CONTRACT SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
				DATA	DRAWINGS	INSTRUCTIONS	SCHEDULES	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	INFORMATION ONLY			GOVERNMENT APPROVED	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERN MENT	CODE	
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y
		SECTION 02650 GROUTING STONE PROTECTION																						
		1.2.1	QUALITY TESTS						X					X										
		1.2.2	CERTIFICATES							X				X										
		SECTION 02720 STORM DRAINAGE SYSTEM																						
		1.2	FRAME AND COVER							X				X										
		1.2	PLACING PIPE			X								X										
		1.2	PIPELINE TESTING							X				X										
		1.2	HYDROSTATIC TEST							X				X										
		1.2	DENSITY							X				X										
		1.2	PIPE								X			X										
		SECTION 02722 AGGREGATE BASE COURSE																						
		1.4.1	EQUIPMENT	X										X										
		1.4.2	SAMPLING AND TESTING						X					X										
		1.4.3	WAYBILLS AND DELIVERY TICKETS									X	X											

**SUBMITTAL REGISTER**

(ER 415-1-10)

CONTRACT NO.

TITLE AND LOCATION

LOS ANGELES RIVER IMPROVEMENT  
CONFLUENCE REACH

CONTRACTOR

SPECIFICATION SECTION

TRANS MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NO.	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL										CLASSIFI CATION		REVIEWER	CONTRACT SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
				DATA	DRAWINGS	INSTRUCTIONS	SCHEDULES	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	INFORMATION ONLY	GOVERNMENT APPROVED	SUBMIT		APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERN MENT	CODE	DATE		
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	
			SECTION 02811 IRRIGATION SYSTEMS																						
		1.2	TEMPORARY IRRIGATION		X									X											
		1.3	FRAMED INSTRUCTIONS	X									X												
		1.3	CATALOG DATA / MAT'LS	X									X												
		1.3	FIELD TESTS/VALVES/ACC.						X				X												
		1.3	PRESSURE TESTS							X			X												
		1.3	OPERATION & MAINTENANCE MANUAL									X	X												
			SECTION 02935 HYDROSEEDING																						
		1.2	DELIVERY SCHEDULE					X					X												
		1.2	APPLICATION OF PESTICIDE			X		X						X											
		1.2	MAINTENANCE REPORT						X				X												
		1.2	HYDROSEED EST.						X				X												
		1.2	CERTIFICATES							X			X												
		1.2	SEED							X			X												
		1.2	FERTILIZER							X			X												

**SUBMITTAL REGISTER**

(ER 415-1-10)

CONTRACT NO.

TITLE AND LOCATION

LOS ANGELES RIVER IMPROVEMENT  
CONFLUENCE REACH

CONTRACTOR

SPECIFICATION SECTION

TRANS MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NO.	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL										CLASSIFI CATION	REVIEWER	CONTRACT SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS	
				DATA	DRAWINGS	INSTRUCTIONS	SCHEDULES	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	INFORMATION ONLY			GOVERNMENT APPROVED	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERN MENT	CODE		DATE
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	
		1.2	PESTICIDE							X				X											
		1.2	TOP SOIL							X				X											
		SECTION 02950 TREE, SHRUBS, GROUNDCOVER, AND VINES																							
		1.2	EROSION CONTROL MAT'L	X								X													
		1.2	APPLICATION OF PESTICIDE				X							X											
		1.2	DELIVERY OF PESTICIDE					X						X											
		1.2	SOIL TEST						X					X											
		1.2	PERCOLATION TEST						X					X											
		1.2	TOP SOIL							X				X											
		1.2	SOIL AMENDMENTS							X				X											
		1.2	PLANTS							X				X											
		1.2	PESTICIDE							X				X											
		1.2	PLANT ESTABLISHMENT PERIOD										X	X											
		1.2	MAINTENANCE REPORT										X	X											
		1.2	INSTRUCTIONS									X	X												

**SUBMITTAL REGISTER**  
(ER 415-1-10)

CONTRACT NO.

TITLE AND LOCATION  
LOS ANGELES RIVER IMPROVEMENT  
CONFLUENCE REACH

CONTRACTOR

SPECIFICATION SECTION

TRANS MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NO.	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL										CLASSIFICATION		REVIEWER	CONTRACT SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
				DATA	DRAWINGS	INSTRUCTIONS	SCHEDULES	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	INFORMATION ONLY	GOVERNMENT APPROVED	GOVERNMENT APPROVED		REVIEWER	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERNMENT	CODE	
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	
		SECTION 03101 FORMWORK FOR CONCRETE																							
		1.3.1	MATERIALS	X										X											
		1.3.2	SHOP DRAWINGS		X										X										
		1.3.3	FIELD INSPECTION						X					X											
		1.3.3	FORMWORK NOT SUPPORTING																						
			WEIGHT OF CONCRETE						X					X											
		SECTION 03150 EXPANSION, CONTRACTION, AND CONSTRUCTION JOINTS																							
		1.2	REPORTS						X					X											
		1.2.2	SAMPLES								X		X												
		SECTION 03210 STEEL BARS AND WELDED WIRE FABRIC FOR CONCRETE REINFORCEMENT																							
		1.3.1	FABRICATION PLACEMENT		X									X											
		1.3.2	BUTT SPLICES					X						X											
		1.3.3	MATERIALS									X	X												
		SECTION 03301 CAST IN PLACE STRUCTURAL CONCRETE																							
		1.5.1.1	CONCRETE MIXTURE PROPORTIONS						X					X											

**SUBMITTAL REGISTER**

(ER 415-1-10)

CONTRACT NO.

TITLE AND LOCATION

LOS ANGELES RIVER IMPROVEMENT  
CONFLUENCE REACH

CONTRACTOR

SPECIFICATION SECTION

TRANS MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NO.	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL										CLASSIFI CATION	REVIEWER	CONTRACT SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
				DATA	DRAWINGS	INSTRUCTIONS	SCHEDULES	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	INFORMATION ONLY			GOVERNMENT APPROVED	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERN MENT	CODE	
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y
		1.5.1.2	CEMENT AND POZZOLAN						X					X										
		1.5.1.3	GROUT						X					X										
		1.5.1.3.2	PREPACKAGED MATERIAL						X					X										
		1.5.1.3.3	MIXTURE PROPORTIONS						X					X										
		1.5.2.1	IMPERVIOUS SHEET CURING MATERIALS								X			X										
		1.5.2.2	AIR-ENTRAINING ADMIXTURE								X			X										
		1.5.2.3	CURING COMPOUND								X			X										
		1.5.3.1	BATCH PLANT	X										X										
		1.5.3.2	MIXERS	X										X										
		1.5.3.3	CONVEYING EQ.	X										X										
		1.5.3.4	PLACING	X										X										
		1.5.3.5	JOINT CLEANUP	X										X										
		1.5.3.5	CURING	X										X										
		1.5.3.7	HOT WEATHER REQUIREMENTS	X										X										
		SECTION 03340 CONCRETE SIDEWALKS, CURBS, BUTTERS AND DRIVEWAY ENTRANCES																						
		1.2	FIELD CONTROL TESTS								X		X											

**SUBMITTAL REGISTER**  
(ER 415-1-10)

CONTRACT NO.

TITLE AND LOCATION  
LOS ANGELES RIVER IMPROVEMENT  
CONFLUENCE REACH

CONTRACTOR

SPECIFICATION SECTION

TRANS MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NO.	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL										CLASSIFI CATION	REVIEWER	CONTRACT SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
				DATA	DRAWINGS	INSTRUCTIONS	SCHEDULES	STATEMENTS	REPORTS	CERTIFICATES	SAMPLES	RECORDS	INFORMATION ONLY			GOVERNMENT APPROVED	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERNMENT	CODE	
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y
		SECTION 05500 MISCELLANEOUS METALS																						
		1.2.1.1	SHOP DRAWINGS		X									X										
		1.2.1.2	MATERIALS CERT.							X				X										
		1.2.1.3	PAINTS SYSTEM						X					X										
		SECTION 16375 ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND																						
		1.3.1	CATALOG DATA	X										X										
		1.3.1	MATERIAL, EQUIPMENT AND FIXTURE LISTS	X										X										
		1.3.2	ELECTRICAL DISTRIBUTION SYSTEM		X									X										
		1.3.3	FACTORY TEST						X				X											
			FIELD TESTING						X				X											
			TEST REPORT						X				X											





## INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No." This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box, on resubmittals, insert transmittal number of last submission as well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288 for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on a separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation " column when a submittal is not in accordance with the plans and specifications..also, a written statement to that effect shall be included in the space provided for "Remarks."
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

### THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

- |     |  |      |  |
|-----|--|------|--|
| A - | Approved as submitted.   | E -  | Disapproved (See attached).  |
| B - | Approved, except as noted on drawings.   | F -  | Receipt acknowledged.  |
| C - | Approved, except as noted on drawings.<br>Refer to attached sheet resubmission required. | FX - | Receipt acknowledged, does not comply<br>As noted with contract requirements |
| D - | Will be returned by separate correspondence.   | G -  | Other (Specify)  |

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

SECTION TABLE OF CONTENTS

SECTION 01430

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

- 1.1 DEFINITIONS . . . . . SECTION 01430 PAGE 1
- 1.2 ENVIRONMENTAL PROTECTION REQUIREMENTS . . . . . SECTION 01430 PAGE 1
  - 1.2.1 Environmental Protection Plan . . . . . SECTION 01430 PAGE 1
- 1.3 SUBCONTRACTORS . . . . . SECTION 01430 PAGE 5
- 1.4 PERMITS OBTAINED BY CORPS OF ENGINEERS . . . . . SECTION 01430 PAGE 6
- 1.5 REGULATORY REQUIREMENTS . . . . . SECTION 01430 PAGE 6

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 PROTECTION OF ENVIRONMENTAL RESOURCES . . . . . SECTION 01430 PAGE 6
  - 3.1.1 Protection of Land Resources . . . . . SECTION 01430 PAGE 6
- 3.2 HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES . SECTION 01430 PAGE 8
- 3.3 PROTECTION OF WATER RESOURCES . . . . . SECTION 01430 PAGE 8
  - 3.3.1 Washing and Curing Water . . . . . SECTION 01430 PAGE 9
  - 3.3.2 Cofferdam and Diversion Operations / Dewatering Operations  
 . . . . . SECTION 01430 PAGE 9
  - 3.3.3 Stream Crossings . . . . . SECTION 01430 PAGE 9
  - 3.3.4 Monitoring of Water Areas Affected by Construction / Water  
 Contamination . . . . . SECTION 01430 PAGE 9
  - 3.3.5 Hazardous Materials . . . . . SECTION 01430 PAGE 9
  - 3.3.6 Equipment Refueling . . . . . SECTION 01430 PAGE 10
  - 3.3.7 Street Sweeping . . . . . SECTION 01430 PAGE 10
- 3.4 PROTECTION OF FISH AND WILDLIFE RESOURCES . . . . . SECTION 01430 PAGE 11
- 3.5 PROTECTION OF AIR RESOURCES . . . . . SECTION 01430 PAGE 11
  - 3.5.1 Particulates . . . . . SECTION 01430 PAGE 11
  - 3.5.2 Hydrocarbons and Carbon Monoxide . . . . . SECTION 01430 PAGE 11
  - 3.5.3 Odors . . . . . SECTION 01430 PAGE 12
  - 3.5.4 Monitoring Air Quality . . . . . SECTION 01430 PAGE 12
  - 3.5.5 Transport of Materials . . . . . SECTION 01430 PAGE 12
  - 3.5.6 Smog Alerts . . . . . SECTION 01430 PAGE 12
  - 3.5.7 Trip Reduction Plan . . . . . SECTION 01430 PAGE 12
  - 3.5.8 Construction Equipment Idling . . . . . SECTION 01430 PAGE 12
  - 3.5.9 Traffic Routing Plan . . . . . SECTION 01430 PAGE 12
  - 3.5.10 Notification to Local Jurisdictions . . . . . SECTION 01430 PAGE 13
  - 3.5.11 Fuel Source for Equipment . . . . . SECTION 01430 PAGE 14
  - 3.5.12 Bus Stop Access Plan . . . . . SECTION 01430 PAGE 14
  - 3.5.13 Pedestrian Access . . . . . SECTION 01430 PAGE 14
- 3.6 NOISE . . . . . SECTION 01430 PAGE 14
  - 3.6.1 Construction Equipment and Vehicles . . . . . SECTION 01430 PAGE 14
  - 3.6.2 Mobile or Fixed Equipment . . . . . SECTION 01430 PAGE 14
  - 3.6.3 Electrically-Powered Equipment . . . . . SECTION 01430 PAGE 14
  - 3.6.4 Noise-Producing Construction Activity . . . . . SECTION 01430 PAGE 15
  - 3.6.5 Equipment and Vehicles . . . . . SECTION 01430 PAGE 15

3.6.6	Stockpile of Material and Mobile Equipment	SECTION 01430	PAGE 15
3.6.7	Posted Traffic Signs . . . . .	SECTION 01430	PAGE 15
3.6.8	Impact Pile Drivers . . . . .	SECTION 01430	PAGE 16

3.7 TESTS . . . . . SECTION 01430 PAGE 16

    3.7.1 Laws, Regulations and Ordinances . . . . . SECTION 01430 PAGE 16

    3.7.2 Protection of Land Resources . . . . . SECTION 01430 PAGE 16

    3.7.3 Protection of Water Resources . . . . . SECTION 01430 PAGE 16

    3.7.4 Pollution Control Facilities . . . . . SECTION 01430 PAGE 17

3.8 INSPECTION . . . . . SECTION 01430 PAGE 17

3.9 POST CONSTRUCTION CLEANUP . . . . . SECTION 01430 PAGE 17

3.10 MAINTENANCE OF POLLUTION FACILITIES . . . . . SECTION 01430 PAGE 17

3.11 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL AND HAZARDOUS  
MATERIALS . . . . . SECTION 01430 PAGE 17

3.12 PROTECTION OF RECREATIONAL ACTIVITIES . . . . . SECTION 01430 PAGE 17

    3.12.1 Recreational Trail Plan . . . . . SECTION 01430 PAGE 17

3.13 PROTECTION FOR PUBLIC SAFETY . . . . . SECTION 01430 PAGE 18

    3.13.1 Project Construction Schedule . . . . . SECTION 01430 PAGE 18

    3.13.2 Safety Structures . . . . . SECTION 01430 PAGE 18

3.14 ENVIRONMENTAL PROTECTION MEASURES DURING CONSTRUCTION  
. . . . . SECTION 01430 PAGE 19

3.15 MITIGATION MONTHLY LOGS . . . . . SECTION 01430 PAGE 19

-- End of Table of Contents --

## SECTION 01430

## ENVIRONMENTAL PROTECTION

## PART 1 GENERAL

## 1.1 DEFINITIONS

For the purpose of this specification, environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or degrade the utility of the environment for but not limited to aesthetic, cultural and/or historical purposes. The control of environmental pollution and damage requires consideration of air, water, and land, and includes management of visual aesthetics, noise, solid waste, radiant energy and radioactive materials, as well as other pollutants.

## 1.2 ENVIRONMENTAL PROTECTION REQUIREMENTS

These requirements are to provide and maintain, during the life of the contract, environmental protection. Plan for and provide environmental protective measures to control pollution that develops during normal construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project; and comply with Federal, State, and local regulations pertaining to the environment, including but not limited to water, air, and noise pollution; biological resources, transportation, recreation, public services and utilities; geology, seismicity and soils; hazardous materials and waste management. The Contractor shall comply with all the requirements of the Environmental Protection Plan as described in this section. This plan shall be applicable prior to and during the construction of the confluence of the Los Angeles River and Rio Hondo.

## 1.2.1 Environmental Protection Plan

Within seven calendar days after the Notice of Award, the Contractor shall submit in writing an Environmental Protection Plan covering all mitigation measures contained herein for the protection of the environment as identified and discussed further in this section. The Government shall review the environmental protection plan and all the pre-construction submittals within seven calendar days of receipt from the Contractor. The Contractor shall meet with representatives of the Contracting Officer to develop a mutual understanding relative to compliance with this provision and administration of the environmental protection program immediately after the Notice of Award to ensure complete compliance. Construction and/or associated activities thereof shall not commence until the environmental protection plan is approved by the Government. Approval of the Contractor's plan shall not relieve the Contractor of his responsibility for adequate and continuous control of pollutants and other environmental protection measures. The Government reserves the right to make changes in the Contractor's environmental protection plan and operations as necessary to maintain satisfactory environmental protection performance. The Contractor shall be in complete environmental compliance with the Los Angeles County Drainage Area Environmental Impact Report dated April 6,

1995 and the Los Angeles County Drainage Area Review Environmental Impact Study dated June 1992. The Government reserves the right to halt construction operations at the expense of the Contractor should the Contractor be found in non-compliance with the environmental protection plan approved by the Contracting Officer. Construction operations would resume when compliance is met. The environmental protection plan (with details for each requirement specified in later provisions of Section 01430) will include but not be limited to the following:

- a) a list of Federal, State and local laws, regulations, and permits concerning environmental protection, pollution control and abatement that are applicable to the Contractor's proposed operations and the requirements imposed by those laws, regulations and permits.
- b) a commuter trip reduction plan to achieve an average ridership of 1.5 individuals.
- c) written procedures limiting the idling of construction equipment at construction sites to two minutes or less.
- d) written procedures to be followed to suspend the use of powered equipment during second-stage smog alerts within one hour of notification.
- e) a list of all construction equipment anticipated to be used on the project, listing the make and model, type of fuel used (diesel, gasoline, or alternative), and engine specifications (e.g. engine size, horsepower, etc.)
- f) a written description of the installation of a wind-speed monitoring device capable of recording and displaying peak 10-second gusts during each hour of construction.
- g) a specification list of parapet wall coatings indicating the volatile organic compound content of all paint formulations.
- h) a map of proposed sediment barriers to be in place during construction.
- i) a list of waste asphalt, concrete, and masonry disposal locations at sites away from the construction site/construction staging sites.
- j) a list of all noise producing equipment and vehicles listing the type of noise pollution control device used on each piece of equipment and identifying equipment for which noise control devices are unavailable.
- k) written procedures limiting the use of noise-producing signals (e.g., safety warnings, etc.), public address systems, music systems, and any other noise producing equipment.
- l) a list of noise specifications for all pile drivers used on the project.
- m) a list of sensitive receptor locations where noise levels may exceed 14 decibels (A-weighted) and where sound barrier walls may need to be constructed.
- n) anticipated traffic flow patterns and changes due to construction activities in the areas impacted by the construction project, access to bus stops, sidewalk

access plans, locations of recreational trails, safety structures, and rest stop/seating areas.

- o) locations of signs both on the construction site (limiting speeds to 25 m.p.h. and construction hours to 7:00 AM to 7:00 PM weekdays and 8:00 AM to 7:00 PM Saturdays), and on impacted streets as part of the overall traffic mitigation plan.
- p) a construction routing plan identifying the locations of access driveways to both construction staging sites and construction sites, and the locations of preferred traffic routes to and from construction staging sites and construction sites.
- q) a map identifying the equipment refueling and maintenance areas, locations of hazardous waste storage, materials stockpiles, mobile equipment staging, and parking areas.
- r) a list of transit agency contacts.
- s) a hazardous materials transport plan identifying preferred traffic routes to and from the construction staging sites and construction sites.
- t) records documenting that the training of all project construction workers involved in the use of hazardous materials took place prior to the start of project construction.
- u) an Emergency Response Plan including but not limited to locations of hazardous waste spill kits, specific procedures for hazardous materials spill containment and public notification, and notification of local emergency service providers.

#### 1.2.1.1 Laws, Regulations, and Permits

The Contractor shall prepare a list of Federal, State and local laws, regulations, and permits concerning environmental protection, pollution control and abatement that are applicable to the Contractor's proposed operations and the requirements imposed by those laws, regulations and permits. These shall include, but not be limited to, all Caltrans permits, local city ordinance compliance permits (e.g. business excavation and hauling permits), California OSHA permits, and Air Quality Management District permits. NPDES and 401 Permits have already been obtained by the Government as discussed in Section 3.3. Permits identified shall be obtained by the Contractor and submitted along with the initial list to the Contracting Officer within seven calendar days after the Notice of Award.

#### 1.2.1.2 Protection of Features

The Contractor shall determine methods for the protection of features to be preserved within authorized work areas. The Contractor shall prepare a listing of methods to protect resources needing protection, i.e., trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, historical, archaeological and cultural resources. These methods, if not discussed in detail in the environmental protection plan identified in this section, shall be added and submitted to the Contracting Officer within seven calendar days after the Notice of Award.

#### 1.2.1.3 Procedures

The Contractor shall implement procedures to provide the required environmental protection and to comply with the applicable laws and regulations. The Contractor shall set out procedures to be followed to correct pollution of the environment due to accident, natural causes or environmental protection plan as described more in detail in this section. Failure to comply with the approved environmental protection plan could result in payment delays.

#### 1.2.1.4 Permit or License

The Contractor shall obtain all needed permits or licenses. Copies of these permits and/or licenses shall be submitted to the Contracting Officer within seven calendar days after the Notice of Award date.

#### 1.2.1.5 Drawings

The Contractor shall include drawings showing locations of any proposed temporary excavations or embankments for haul roads, material storage areas, structures, sanitary facilities, stockpiles of earth materials, and disposal areas for excess earth material and unsatisfactory earth materials as discussed and/or in addition to measures described further in this section.

#### 1.2.1.6 Environmental Monitoring Plans

The Contractor shall include environmental monitoring plans for the job site which incorporate land, water, air, traffic, recreation, public service, hydrogeology, soils, hazardous materials / waste management and noise monitoring as described further in this section.

#### 1.2.1.7 Traffic Control Plan

The Contractor shall include a traffic control plan for the job site and other surrounding areas that would be used during construction hours for transport of materials, equipment, etc., as described further in this section.

#### 1.2.1.8 Surface and Ground Water

The Contractor shall establish methods of protecting surface and ground water during construction activities by methods described further in this section.

#### 1.2.1.9 Work Area Plan

The Contractor shall include a work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. The plan shall include measures for marking the limits of use areas. This plan shall be submitted to the Contracting Officer for review and approval within seven calendar days after the Notice of Award.

#### 1.2.1.10 Plan of Borrow Area

The Contractor shall include a plan of the borrow area for the job site as discussed further in this section. This plan shall be submitted to the

Contracting Officer for review and approval within seven calendar days after the Notice of Award.

#### 1.2.1.11 Emergency Response Plan

An emergency response plan shall be prepared for responding to hazardous materials spills at all project construction sites. The plan shall identify actions to immediately control hazardous materials spills, and procedures to notify appropriate health officials.

The Contractor shall submit to the Contracting Officer for review and approval within seven calendar days after the Notice of Award an emergency response plan. The plan should outline the response to be taken should an emergency involving but not limited to hazardous material spills at project construction and/or staging area sites occur during construction hours. The plan should identify actions to immediately control hazardous spills, and procedures to notify appropriate health officials, local jurisdictions and authorities. The plan should identify the lead Contractor representative to address an incident of this nature.

The plan should also include specific procedures for hazardous materials spill containment and public notification. The plan should also consider and address appropriate response measures to prevent and/or minimize the exposure of fish and wildlife resources in the lower River, construction workers, and nearby residents.

#### 1.2.1.12 Noise Control Plan

The Contractor shall develop a noise control plan. Noise control features and plans shall be reviewed and approved by a noise control engineering professional as provided for by the Contractor. This plan shall include the mitigation measures identified and discussed further in this section and submitted within seven calendar days after the Notice of Award as discussed further in this section.

##### a. Noise Producing Equipment:

The Contractor shall submit a list of all noise producing equipment and vehicles. The list shall describe the type of noise control device used on each piece of equipment and identify equipment and vehicles for which noise control devices are not available or feasible as discussed further in this section.

##### b. Noise-Producing Signals:

The Contractor shall submit written procedures limiting the use of noise producing signals to safety warnings. The procedures shall be distributed to all construction supervisors, foreman and workers. Procedures shall also be prepared and distributed regarding the volume of project related public address or music systems. The Contractor shall also submit a list with signatures showing that each construction worker and employee on-site have received these procedures.

The Contractor shall submit these written procedures and signature sheet to the Contracting Officer for review and approval within seven calendar days from the awarded contract date, limiting the use of noise producing signals for safety

warnings. Noise-producing signals such as horns, whistles, alarms and bells shall be limited and approved by the Contracting Officer.

c. Public Address or Music Systems:

The Contractor shall submit to the Contracting Officer within seven calendar days after the Notice of Award, written procedures identifying the limited use of public address or music systems or items similar for all construction workers and employees to observe on-site during construction hours. The full-time monitor, Contracting Officer and/or representatives of the Contracting Officer can at anytime require any representative of the Contractor in non-compliance be removed from the site at the expense of the Contractor if the individual is not willing to abide by the requirements. The Contractor representative can resume work as soon as compliance is met.

1.2.1.13 Public Services and Utilities

The Contractor shall send a schedule of project construction activities to all emergency service providers and utility companies near the project area within seven calendar days after the Awarded contract date. The schedule shall identify the date and location of proposed construction activities as discussed further in this section.

1.3 SUBCONTRACTORS

Assurance of compliance with this section by subcontractors shall be the responsibility of the Contractor and subject to disciplinary action and/or shut down until compliance is met.

1.4 PERMITS OBTAINED BY CORPS OF ENGINEERS

The Corps of Engineers shall not obtain any permits for this project. See Contract Clause entitled "PERMITS AND RESPONSIBILITIES".

1.5 REGULATORY REQUIREMENTS

The Contractor shall comply with all state regulatory and statutory requirements.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 PROTECTION OF ENVIRONMENTAL RESOURCES

The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract shall be protected during the entire period of this contract. The Contractor shall confine his activities to areas defined by the contract drawings and specifications. Environmental protection shall also include the following subparagraphs.

3.1.1 Protection of Land Resources

After the Awarded contract date and prior to the beginning of any construction, the Contracting Officer shall identify all land resources to be preserved within the Contractor's work area. The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, top soil, and land forms without special permission from the Contracting Officer. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized by the Contracting Officer. Where such special emergency use is permitted, the Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs.

#### 3.1.1.1 Work Area Limits

Prior to any construction, the Contractor shall mark the areas where no work is to be performed under this contract. Isolated areas within the general work area which are to be saved and protected shall also be marked or fenced. Monuments and markers shall be protected before construction operations commence and during all construction operations. Where construction operations are to be conducted during darkness, the markers shall be visible during darkness. The Contractor shall convey to his personnel the purpose of marking and/or protection of all necessary objects.

#### 3.1.1.2 Protection of Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features to be preserved, indicated and defined on the drawings submitted by the Contractor as a part of the Environmental Protection Plan, shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

#### 3.1.1.3 Reduction of Exposure of Unprotected Erodible Soils

Earthwork brought to final grade shall be finished as indicated and specified. Side slopes and back slopes shall be protected as soon as practicable upon completion of rough grading. All earthwork shall be planned and conducted to minimize the duration of exposure of unprotected soils. Except in instances where the constructed feature obscures borrow areas, quarries and waste material areas, these areas shall not initially be cleared in total. Clearing of such areas shall progress in reasonably sized increments as needed to use the areas developed as approved by the Contracting Officer.

#### 3.1.1.4 Temporary Protection of Disturbed Areas

Such methods as necessary shall be utilized to effectively prevent erosion and control sedimentation, including but not limited to the following:

##### a. Retardation and Control of Runoff

Runoff from the construction site shall be controlled by construction of diversion ditches, benches, and berms to retard and divert runoff to protected drainage courses, and the Contractor shall also utilize any measures required by area-wide plans approved under Paragraph 208 of the Clean Water Act.

The Contractor shall abide by and implement the provisions outlined in the Storm Water Pollution Prevention Plan required under the General Storm Water

Construction Activity Permit for the control of storm water. A copy of the plan can be obtained from the Contracting Officer. All erosion control measures and other protection measures mentioned in this plan shall be used for compliance.

b. Erosion and Sedimentation Control Devices / Sediment Barriers

Sediment from construction areas and the construction staging site shall be trapped in temporary basins as necessary as directed by the Contracting Officer. The Contractor shall institute effluent quality monitoring programs as required by state and local environmental agencies. The Contractor shall submit a map and/or plan identifying the location of proposed sediment basins.

The Contractor shall submit to the Contracting Officer for review and approval a map identifying locations of necessary sediment barriers to trap sediments (i.e., sandbags, silt fence, temporary containment dams) downstream of each construction site/operation resulting from construction activities such as dewatering operations.

The Contractor shall construct or install all temporary and permanent erosion sedimentation control features. Temporary erosion and sediment control measures such as berms, dikes, drains, sedimentation basins, grassing and mulching shall be maintained until permanent drainage and erosion control facilities are completed and operative.

3.1.1.5 Location of Contractor Facilities

The Contractor's field offices, staging areas, stockpiles, storage, and temporary buildings shall be placed in areas designated on the contract drawings and approved by the Contracting Officer.

3.1.1.6 Temporary Excavation and Embankments

Temporary excavation and embankments shall be controlled to protect adjacent areas from contamination.

3.1.1.7 Disposal of Solid Wastes

Solid wastes (excluding clearing debris), which include broken concrete, asphalt, metal scrap, wood and debris from the modification work, shall be placed in containers which are emptied on a regular schedule. All handling and disposal shall be conducted to prevent contamination. All solid waste materials generated from construction activities shall become the property of the Contractor and shall be removed from the construction site to an area approved by the Contracting Officer. The Contractor shall transport all solid waste off all construction site and staging areas and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. All material shall be handled as directed by the Contracting Officer.

The Contractor shall submit to the Contracting Officer for review and approval, a list of off-site disposal locations for masonry, concrete, and/or asphalt. Disposal shall be prohibited at project construction sites. Masonry, concrete and/or asphalt shall be contained and covered while waiting to be disposed.

#### 3.1.1.8 Disposal of Chemical Wastes

Chemical wastes shall be stored in corrosion resistant containers, removed from the work area and disposed of in accordance with Federal, State, and local regulations as discussed further in this section.

#### 3.1.1.9 Disposal of Contaminated Soils

a. The Contractor shall monitor excavations and areas of earthmoving for gaseous emissions and shall sample and analyze any suspected materials. If materials are verified to be contaminated, notify the Contracting Officer for appropriate action. The Contractor shall take remedial action based on the extent and magnitude of contaminated conditions as directed by the Contracting Officer.

b. Contaminated soils encountered during project construction shall be disposed of in accordance with applicable local, state and federal regulations. Appropriate actions shall be taken to minimize exposure to construction workers, recreational users, and nearby residents as discussed further in this section.

### 3.2 HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

Existing historical, archaeological and cultural resources within the Contractor's work area shall be so designated by the Contracting Officer and precautions shall be taken by the Contractor to preserve all such resources as they existed at the time they were pointed out to the Contractor. The Contractor shall install all protection for these resources so designated on the contract drawings and shall be responsible for their preservation during this contract. If during construction items of apparent archaeological or historical interest are discovered, they shall be left undisturbed and the Contractor shall report the find immediately to the Contracting Officer.

### 3.3 PROTECTION OF WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management and control to avoid pollution of surface and ground waters. Special management techniques as set out below shall be implemented to control water pollution by the listed construction activities which are included in this contract.

The Contractor shall keep copies on-site and comply with the conditions contained in the General Storm Water Construction Activity Permit (Storm Water Pollution Prevention Plan (SWPPP) in compliance with NPDES requirements) and the Section 401 Water Quality Certification obtained for this job. Copies of the permit and Storm Water Pollution Prevention Plan can be obtained from the Contracting Officer. Diversion techniques as described in the Storm Water Pollution Prevention Plan shall be used during construction operations.

#### 3.3.1 Washing and Curing Water

Waste waters directly derived from construction activities shall not be allowed to enter water areas. These waste waters shall be collected and placed in retention ponds where the suspended materials can be settled out or the water evaporated in order to separate the pollutants from the water.

### 3.3.2 Cofferdam and Diversion Operations / Dewatering Operations

The Contractor shall plan his operations and perform all work necessary to minimize adverse impact or violation of the water quality standard for the State of California. Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure shall be controlled at all times to limit impact of water turbidity on the habitat for wildlife and impacts on water quality for downstream use.

The Contractor shall submit to the Contracting Officer for review and approval a map identifying the location of proposed dewatering operations to the Department. All dewatering operations should be done behind temporary sheet pile coffer dams or by other equivalent methods, as directed and approved by the Contracting Officer.

### 3.3.3 Stream Crossings

Stream crossings shall be controlled during construction. Crossings shall provide movement of materials or equipment which does not violate water pollution control standards of the Federal, State or local government.

### 3.3.4 Monitoring of Water Areas Affected by Construction / Water Contamination

3.3.4.1 Monitoring of water areas affected by construction activities shall be the responsibility of the Contractor in order to prevent contamination of ground water and water along waterways. Shotcrete (or gunite) shall not be permitted to be used within the channel boundaries. All refuse, oil, greases, and other petroleum products; all toxic materials; all cement or concrete; or water containing such materials shall be disposed of in a manner to prevent their entry into the ground water and water along the Los Angeles River. These procedures shall be reviewed and approved by the Contracting Officer. A log of monitoring activities shall be submitted monthly for compliance as discussed further in this section.

3.3.4.2 A spill kit containing absorbent materials shall be maintained at construction site(s). All employees shall be familiar with the procedures to utilize the spill kit and the locations where they are kept.

### 3.3.5 Hazardous Materials

3.3.5.1 If hazardous materials are released during construction, appropriate actions shall be taken to minimize the exposure of fishery and wildlife resources in the lower Los Angeles River and San Pedro Bay, construction workers, and nearby residents as discussed further in this section.

### 3.3.5.2 Hazardous Materials, Transport and Storage Plan

The Contractor shall submit to the Contracting Officer for review and approval a hazardous materials storage plan. The plan shall prohibit hazardous materials storage near the channel and/or subdrains. The Contractor shall temporarily store all fuels and other hazardous materials away from the project area. Liquid fuels, paints, solvents, and other hazardous materials would not be stored or handled in bulk quantities in spreading basins and/or channels.

The Contractor shall submit to the Contracting Officer for review and approval a hazardous materials transport and storage plan that identifies preferred traffic routes for the transport of hazardous materials, and areas in which hazardous materials storage is proposed. Hazardous materials would be defined but not limited to contaminated soils and fuel for equipment. Confirmation of hazardous materials shall be coordinated with the Environmental Planning representatives from the Corps of Engineers and/or Los Angeles County Department of Public Works. The Contractor shall also provide written verification that any hazardous materials proposed to be transported and stored off-site are in accordance with current state and federal regulations.

Any hauling of material such as but not limited to sediment, rock, masonry, concrete and asphalt, shall be covered or maintain at least two feet of freeboard during transport or haul of material.

3.3.5.3 The Contractor shall provide proof that all project construction workers involved in the use of hazardous materials were trained prior to construction, including a description of the content of the training. The Contractor shall submit a monthly list of persons known to have been exposed to hazardous materials. See Monthly Logs.

#### 3.3.6 Equipment Refueling

The Contractor shall submit to the Contracting Officer for review and approval a list of equipment and vehicle refueling and maintenance areas. Maintenance of equipment and vehicles in, near or on the levees of the flood control channel are prohibited. Refueling of equipment and vehicles shall also be prohibited in, near, or on the levees of the flood control channel unless proper written justification for in-channel refueling is provided by the Contractor and approved by the Government. Should in-channel refueling be required and approved by the Government, appropriate mitigation measures such as, but not limited to, containment structures shall be constructed in order to prevent the introduction of spilled fuel into the river. Refueling of pile driver rigs will be permitted in the channel with appropriate mitigation measures. All other refueling operations shall be conducted at least 25 feet from the top of the outermost edge of the channel levee. The Contractor shall use only low sulfur content diesel fuel in all internal combustion engines used at the construction site. The Contractor is responsible for refueling all equipment and vehicles off-site or at the staging area designated on the plans. Other refueling site locations requested by the Contractor shall be approved by the Contracting Officer.

The Contractor shall store all equipment at the staging site area. No construction equipment shall be left in the channel, on the levee or other areas of the construction site at the end of a construction day, except that equipment for which prior approval has been obtained by the Government. Pile driver rigs shall be permitted to remain in the channel overnight, but shall be removed when rainfall is predicted in the Los Angeles River watershed. All other equipment should be stored at the staging site and/or other off-site locations obtained at the expense of the Contractor. All construction and staging site areas shall be secured and protected by the Contractor.

#### 3.3.7 Street Sweeping

At the close of each working day, any materials as a result of construction activities, such as dirt, tracked into the adjacent streets (streets for construction access) or lying uncontained in the construction areas are to be swept up. A log of street sweeping activities shall be maintained and submitted monthly for compliance. See Monthly Logs.

#### 3.4 PROTECTION OF FISH AND WILDLIFE RESOURCES

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish and wildlife. Species that require specific attention along with measures for their protection shall be listed for all workers by the Contractor prior to beginning of construction operations. The Contractor may contact the Environmental Planning representatives from the Corps of Engineers, Ronald F. Lockmann at (213) 452-3847 and/or from the Los Angeles County Department of Public Works, Ulysses Fandino at (626) 458-4337 for assistance in preparing this list. This list shall be reviewed and approved by the Contracting Officer.

#### 3.5 PROTECTION OF AIR RESOURCES

The Contractor shall keep construction activities under surveillance, management and control to minimize pollution of air resources. All activities, equipment, processes, and work operated or performed by the Contractor in accomplishing the specified construction shall be in strict accordance with the State of California and all Federal emission and performance laws and standards. Special management techniques as set out below shall be implemented to control air pollution by the construction activities which are included in the contract.

##### 3.5.1 Particulates

Dust particles, aerosols, and gaseous by-products from all construction activities, processing and preparation of materials shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, spoil areas, borrow areas, and all other work areas within or outside the project boundaries free from particulates which would cause the air pollution standards mentioned in the paragraph: PROTECTION OF AIR RESOURCES to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type or other methods shall be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated at such intervals as to keep the disturbed area damp at all times. The Contractor must have sufficient competent equipment available to accomplish this task. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs.

The Contractor shall water down active construction sites to prevent the uplift of dust at all construction site and staging areas at least two (2) times per day. See Mitigation Monthly Logs.

##### 3.5.2 Hydrocarbons and Carbon Monoxide

Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to Federal and State allowable limits at all times.

The Contractor shall submit written procedures to limiting idling of construction equipment at construction sites and staging areas to the Contracting Officer. The procedures shall be distributed to all construction supervisors, foreman and workers. A signature sheet with all construction workers and employees anticipated to be present on the project site shall acknowledge receipt of the idling procedures and commitment for compliance by signing the signature sheet.

The Contractor shall provide good maintenance of all equipment including but not limited to the proper tuning of off-road heavy equipment to reduce combustion sources of air emissions. See Mitigation Monthly Logs.

### 3.5.3 Odors

Odors shall be controlled at all times for all construction activities, processing and preparation of materials.

### 3.5.4 Monitoring Air Quality

Monitoring of air quality shall be the responsibility of the Contractor.

#### 3.5.4.1 Wind-speed Monitoring

The Contractor shall install wind-speed monitoring equipment at the construction site(s) at locations approved by the Contracting Officer. The monitoring equipment shall record and display the peak 10-second gust of wind during each hour of construction. A weekly summary shall be submitted for compliance and include periods when construction activities are curtailed in response to wind conditions along with the meteorological data. The Contracting Officer shall suspend excavation, grading, or other particulate-generating activities when winds (peak 10-second gusts) exceed 25 miles per hour. The contract completion date shall be extended by the number of days activities are suspended.

### 3.5.5 Transport of Materials

All trucks hauling dirt, sediment or other loose materials from construction site are to be covered or shall maintain at least 2 feet of cover from the top edge of the truck to the material being hauled. Trucks shall not be allowed to idle for more than two minutes when not in active use.

### 3.5.6 Smog Alerts

The Contracting Officer shall notify the Contractor when a second stage smog alert is in effect and order the suspension of the use of powered construction equipment or construction vehicles. The Contractor shall not claim shut-down time due to smog alerts. A log of these shut-down periods shall be prepared and submitted. See Mitigation Monthly Logs.

### 3.5.7 Trip Reduction Plan

The Contractor shall develop a trip reduction plan for all construction workers and employees who would be at the construction site to achieve an average vehicle ridership of 1.5 individuals per day. The trip reduction plan should be submitted to the Contracting Officer for review and approval.

### 3.5.8 Construction Equipment Idling

The Contractor shall submit written procedures to limiting idling of construction equipment at construction sites and staging areas to the Contracting Officer. The procedures shall be distributed to all construction supervisors and foreman. A signature sheet with all the construction workers signatures shall acknowledge receipt of the idling procedures and commitment for compliance.

### 3.5.9 Traffic Routing Plan

The Contractor shall develop a traffic routing plan identifying the most efficient traffic routes to the project site and staging areas and submit to the Contracting Officer for review and approval. The routes should consider community safety and route construction traffic on less-congested streets and away from residential streets. The Contractor shall schedule all fill material and concrete deliveries to occur between the hours of 7:00 am and 7:00 pm weekdays and 8:00 am and 7:00 pm Saturdays. All other deliveries of materials shall occur between the hours of 9:00 am and 4:00 pm Monday through Saturday. No construction shall occur on Sundays.

Signing and flagmen shall be utilized where construction equipment interfaces with public traffic. The plan shall identify where the flagmen shall be situated to assist the flow of traffic during deliveries.

The plan shall also identify locations of access driveways for construction workers, employees, deliveries construction routes. Access for equipment for construction activities from the channel shall be permitted from the staging site area. The Contractor has the option to construct an access ramp from the staging site to the top of the levee. Access ramps from the levee into the channel located at points to be determined. Modification of existing access ramps shall not be permitted unless written justification as to why the existing conditions prevent the Contractor from completing the construction and why no other alternatives are acceptable is provided to and approved by the Government. No other access into the channel invert shall be permitted. If the Contractor constructs the access from the staging site to the channel levee, the Contractor shall take down the existing fencing located between the staging site and channel levee slope, as directed by the Contracting Officer, and shall replace in kind after construction is completed. The plan shall also include vehicular and pedestrian detour plans (including autos and buses), details of truck haul routes and site access points, details of roadway restriping and signage for vehicular and pedestrian circulation, including turn restrictions, lane assignments, speed limit and crosswalks, relocation of bus stops, and parking details, including restrictions and prohibitions. Access driveways shall be planned with the consideration of prohibiting construction vehicles on local residential streets.

The Plan shall also identify construction activities currently planned for the designated staging area. The Plan shall also establish the locations of haul routes on major streets or highways into and out of staging sites and construction sites and specifically near these sites.

### 3.5.10 Notification to Local Jurisdictions

The Contractor shall coordinate with the Contracting Officer and Environmental Planning representatives from the Corps of Engineers and Los Angeles County Department of Public Works regarding public outreach. Letters shall be distributed by the Contractor to affected city departments of planning, public works, public information, and public libraries. The Contractor may be required to conduct and coordinate community meetings in a city adjacent to the project reaches. Information provided at this meeting shall identify potential temporary road, bike and equestrian trail detours and/or closures, and vehicular detours resulting from project construction activities. Signage of these detours and/or closures shall be prepared and posted by the Contractor at all appropriate access locations approved by the Contracting Officer. The Contracting Officer may require the Contractor to be responsible for preparing and sending flyers to local residents within 500 feet of the project limits and staging areas upon request of the Contracting Officer. All correspondence with the local community shall be approved and directed by the Contracting Officer.

#### 3.5.11 Fuel Source for Equipment

The Contractor shall use methane, natural gas, or propane-powered equipment and vehicles, rather than gasoline or diesel-powered equipment or vehicles where feasible. The Contracting Officer shall approve the equipment not powered by methane, natural gas, or propane-powered equipment or vehicles prior to the start of construction. The Contractor shall submit a list of construction equipment anticipated to be used on the project to the Department for review and approval. The list shall identify all construction equipment by type of fuel used (diesel, gasoline, or alternative fuel). The Contractor shall provide documentation of contact with Contractors and/or major equipment suppliers for each piece of equipment using gasoline or diesel fuel to indicate why the use of an alternative fuel is not feasible.

#### 3.5.12 Bus Stop Access Plan

The Contractor shall contact the local transit agencies servicing the area to notify them of construction activities. If bus stops are affected, the Contractor shall coordinate with the transit agencies and prepare a bus stop access plan identifying the locations and anticipated duration of closure of bus stops. Bus stop access should be maintained wherever possible during the entire construction period. Install safety feature such as fencing, barriers, and/or warning signs if bus stops are affected to allow adjacent bus stops to remain open. The Contractor shall submit to the Contracting Officer a list of transit agency contacts and written verification by the Contractor that bus stops would not be affected. Verification shall include the date, transit agency contact, map of routes to be used and statement of no effect.

#### 3.5.13 Pedestrian Access

The Contractor shall submit to the Contracting Officer for review and approval a sidewalk access plan, identifying the location and anticipated duration of closure of sidewalks. The plan should maintain pedestrian access throughout the construction period by keeping sidewalks open as much as public safety considerations would permit. Install safety features such as, but not limited to, fencing, barriers, and warning signs in construction areas to allow adjacent sidewalks to remain open.

### 3.6 NOISE

#### 3.6.1 Construction Equipment and Vehicles

All noise-producing construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, and air-inlet silencers where appropriate, in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welder, air compressor) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.

#### 3.6.2 Mobile or Fixed Equipment

All mobile or fixed noise-producing equipment used on the project, which is regulated for noise output by a local, state, or federal agency, shall comply with such regulation as discussed further in this section.

#### 3.6.3 Electrically-Powered Equipment

Electrically-powered equipment instead of pneumatic or internal combustion powered equipment shall be used where feasible, as discussed further in this section.

3.6.3.1 The Contractor shall submit a monthly summary of the number of electrically powered, pneumatically powered and internal combustion powered equipment used on the project as discussed further in this section. See Mitigation Monthly Logs.

#### 3.6.4 Noise-Producing Construction Activity

Noise-producing construction activity shall comply with local noise control regulations.

#### 3.6.5 Equipment and Vehicles

The Contractor shall submit to the Contracting Officer a list of all noise producing project equipment and vehicles. The list shall describe the type of noise control device used on each piece of equipment, and identify equipment and vehicles for which noise control devices are not available or feasible. All equipment shall provide noise-producing project equipment and vehicles using internal combustion engines with mufflers, and air-inlet silencers, that meet or exceed original factory specifications. Equip mobile or fixed "package" equipment (eg. arc-welders, air compressors) with shrouds and noise-control features that are readily available for that type of equipment. Anything used different from what is described shall be approved by the Contracting Officer in writing.

#### 3.6.6 Stockpile of Material and Mobile Equipment

The Contractor shall submit to the Contracting Officer for review and approval a list of material stockpile (such as but not limited to concrete, asphalt, and masonry) and mobile equipment staging, parking, and maintenance areas. Stockpiles are defined as any type of material left temporarily on site and the property of the Contractor. These stockpiles should be located at least 50 feet away (or the greatest distance allowable as approved by the Contracting Officer if 50 feet is

not available) from noise-sensitive receptors. Receptors are identified as schools, hospitals, residential areas.

The Contractor shall stabilize any areas of exposed soil, such as dirt stockpiles, dirt berms, and temporary dirt roads, with covers to prevent the uplift of material from wind.

#### 3.6.7 Posted Traffic Signs

The Contractor shall post traffic signs at all construction and staging site areas limiting traffic speeds to 25 miles per hour. The signs shall be posted such that all construction workers and employees on the site can visually observe the sign from their vehicles at all access points of the project limits. The Contractor shall also place 25 miles per hour signs on local streets alongside or adjacent to the construction zone areas. Upon completion of the posting, the Contractor shall provide the Contracting Officer with a written statement stating that signs have been posted, with the identification of all locations. The Contractor shall make sure that all workers abide by the speed limits. The Contracting Officer and/or representatives of the Contracting Officer has the right to stop work at the Contractor's expense until compliance is met.

The Contractor shall post signs at all construction zones limiting construction hours to 7:00 a.m. - 7:00 p.m., weekdays, 8:00 a.m. - 7:00 p.m. on Saturdays. The Contractor shall submit, one day after posting, in writing to the Contracting Officer, written verification that the construction hours of operation signs were posted at all access locations in areas visible to all construction workers, employees and local residents. These hours of construction would apply, but not be limited to noisy maintenance activities and all debris and material transport. Where local jurisdictions impose more stringent limits on the hours of construction activity, these limits should take precedence and be followed.

The Contractor shall submit to the Contracting Officer for review and approval a list identifying locations prohibiting left-turns along the restriped street segment near construction staging sites so that the remaining roadway width not utilized by traffic accessing the staging site could be fully used for through-traffic flow. The Contractor shall post signs prohibiting left turns along the restriped street segment near construction staging sites, seven days after the Awarded contract date. The Contractor shall submit to the Contracting Officer written verification that no left turn signs were posted at all appropriate construction site access points.

The Contractor shall submit to the Contracting Officer for review and approval a list of contacts made with local City jurisdictions during the permitting process.

The Contractor shall submit to the Contracting Officer for review and approval a construction traffic routing plan, identifying the locations of access driveways. Local streets are prohibited as routes leading to access driveways. Exceptions can apply where necessary and unavoidable and at the approval of the Contracting Officer.

#### 3.6.8 Impact Pile Drivers

The Contractor shall submit to the Contracting Officer for review and approval a list of noise specifications for all impact pile drivers to be used during project construction. These specifications shall include the noise intensity and pile driver make and model. Impact pile drivers shall be limited to 95 decibels, A-weighted at a distance of 50 feet, consistent with federal GSA "Construction Equipment and Practices" Guide Specifications.

### 3.7 TESTS

The Contractor shall establish and maintain quality control for environmental protection operations to assure compliance with contract requirements and maintain records of his quality control for all construction operations, including, but not limited to the following items. The Contractor shall record on daily reports any problems in complying with laws, regulations and ordinances and corrective action taken. Three copies of these records and tests, as well as the records of corrective action taken, shall be furnished to the Government as directed by the Contracting Officer.

#### 3.7.1 Laws, Regulations and Ordinances

The Contractor must comply with all Federal, State, and local laws, regulations and ordinances concerning pollution control.

#### 3.7.2 Protection of Land Resources

The Contractor shall prevent landscape defacement and provide post-construction clean-up and replacement, if necessary.

#### 3.7.3 Protection of Water Resources

The Contractor shall prevent the contamination of Los Angeles River or other bodies of water with harmful chemicals; the Contractor shall dispose of waste materials; and the Contractor shall provide erosion control. A clean site shall be maintained at all times. Trash and all refuse generated by the construction workers and/or employees shall be disposed of properly.

#### 3.7.4 Pollution Control Facilities

The Contractor shall provide for the maintenance of pollution control facilities. The Contractor shall conduct a training course on the maintenance of pollution control facilities.

### 3.8 INSPECTION

The Corps monitor shall notify the Contracting Officer of non-compliance with the Environmental Protection Plan. The Contracting Officer shall notify the Contractor in writing of any observed non-compliance with the Contractor's Environmental Protection Plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of proposed corrective action and take such action as may be approved. If the Contractor fails 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 time extensions shall be granted or costs or damages allowed to the Contractor for any such suspension.

### 3.9 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction.

### 3.10 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain all constructed facilities and temporary pollution control devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

### 3.11 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL AND HAZARDOUS MATERIALS

The Contractor shall train personnel in all phases of environmental protection prior to construction. The training shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, and installation and care of facilities (instruments required for monitoring purposes) to insure adequate and continuous environmental pollution control.

The Contractor shall provide training to all construction workers involved in the use of hazardous materials. This training shall take place five calendar days prior to the start of construction with the Contracting Officer present. The Contractor shall submit to the Contracting Officer documentation that the training class occurred and provide an outline of the content of the course and a list and sign-in sheet of attendees. The training class should give project construction workers orientation training on the start day of construction to ensure that the workers understood the training received earlier.

### 3.12 PROTECTION OF RECREATIONAL ACTIVITIES

#### 3.12.1 Recreational Trail Plan - Lario Bike Trail, Pedestrian Paths, Equestrian Trails and Local Coastal Zone Access

##### Equestrian Trails

The Contractor shall prepare an equestrian trail closure plan. The plan shall identify the signage that shall be used to close the equestrian trail during the week from Monday to Friday for the duration of the project. The Contractor shall provide for the usage of the equestrian trail, on Saturdays and Sundays. Should the Contractor anticipate that construction activities shall continue to commence on Saturdays, the Contractor shall post the proper signage to reflect that closure at least two days prior to the Saturday closure.

The Contractor shall provide access to the equestrian trail on all Sundays throughout the duration of the project. The signage shall identify the closed reach and duration of the closure. All signage for the temporary weekend detour(s) and/or closure of the equestrian trail shall be placed within seven calendar days of the approved plan. Closures and/or detours would be determined by the Los Angeles County Department of Parks and Recreation. These plans shall include the location for posting temporary detour and/or closure signs at construction sites affecting the equestrian trail, all temporary access locations and the applicable dates and time impacted.

The proposed equestrian trail plan shall include maintenance near all construction sites and be provided for by the Contractor and coordinated with the approval of the Contracting Officer and Jim McCarthy, from the Los Angeles County Department of Parks and Recreation, at (213) 738-2972.

#### Bicycle Trail Closure

Typical bike path signs shall read "BIKE PATH CLOSED BETWEEN \_\_\_\_\_ AND \_\_\_\_\_ , (DATE TO DATE)". Temporary closure shall be adequately signed two weeks prior to construction. The location of closure, dates and time consistent throughout the project period shall be posted. Construction signage must also advise the public of the potential presence of vehicles and construction equipment on the bike trail. The limits of closures, proposed signage and location shall be submitted in a plan for review by the Contracting Officer. The Contractor shall provide flagmen to coordinate movement on the levee when construction equipment and trail users are present at the same time. The Contractor shall ensure the safety of the construction workers and trail users, by protective measures as outlined in the Contractor's plan.

All closures shall be adequately barricaded at all access ramps within the closure phase. The Contractor shall contact and coordinate with Mr. Romo at (625) 458-3941 within 5 days after the awarding of the contract, regarding temporary closures, detours and protection of the public for recreational usage of the trail.

### 3.13 PROTECTION FOR PUBLIC SAFETY

#### 3.13.1 Project Construction Schedule

The Contractor shall send a schedule of project construction activities in writing to all emergency service providers and utility companies that service the project area and adjacent properties within seven calendar days after the Awarded contract date. Review and approval of this notification should be obtained from the Contracting Officer prior to submittal to the emergency service providers and utility companies. The schedule shall identify the date and location of proposed construction activities. The Contractor shall submit copies of the written notification to the Contracting Officer one day after compliance for record.

#### 3.13.2 Safety Structures

The Contractor shall submit a list of safety structures to the Contracting Officer for review and approval. The Contractor shall provide adequate safety structures in the construction areas during bridge modifications. Safety features could include but are not limited to fencing, barriers placed around construction areas, warning signs, and placement of construction equipment at night in areas that are secured from the general public. The Contractor shall provide written notice to the Contracting Officer that the approved safety structures are in place one day after placement.

### 3.14 ENVIRONMENTAL PROTECTION MEASURES DURING CONSTRUCTION

The Contractor shall prepare the following Mitigation Monthly Logs by completing the forms on a daily basis. Each entry shall identify the necessary information

required on the logs, and the signature of the Contractor and in some cases the Contracting Officer and/or Representatives thereof on a daily and/or weekly basis. The following is the list of Mitigation Monthly Logs required to be completed by the Contractor.

TEMPORARY TRAFFIC CONTROL ACTIVITIES  
CONSTRUCTION MATERIALS DELIVERY RECORDS  
SECOND-STAGE SMOG ALERT/SUSPENSION OF POWER EQUIPMENT USE  
SUMMARY OF POWER SUPPLY TYPES  
WIND SPEED MONITORING \*\*  
INSPECTION OF HAUL OF MATERIAL  
SITE WATERING ACTIVITIES  
OFF-ROAD HEAVY EQUIPMENT MAINTENANCE ACTIVITIES  
CONSTRUCTION WORK WITHIN FLOOD CONTROL CHANNELS  
INSPECTION OF BULK GRANULAR MATERIALS  
STREET SWEEPING ACTIVITIES  
HAZARDOUS MATERIAL SPILL KIT INSPECTION  
POWER EQUIPMENT USAGE  
VIBRATORY /IMPACT PILE DRIVER USAGE  
HAZARDOUS MATERIALS USERS\*\*\*  
EXCAVATED MATERIALS SAMPLING  
SUMMARY OF PERSONS EXPOSED TO HAZARDOUS MATERIALS  
SUMMARY OF ENVIRONMENTAL PROGRAMS (WASTE MANAGEMENT DIV.) COORDINATION

\*\* These logs shall be submitted on a weekly basis to the Contracting Officer.

\*\*\* These logs shall be submitted on a quarterly basis to the Contracting Officer.

### 3.15 MITIGATION MONTHLY LOGS

Listed below is the first page of each monthly log required to be completed by the Contractor. The complete logs shall consist of entries for each day of each month for the duration of the construction period as directed by the Contracting Officer. A complete log chart package shall be furnished to the Contractor after the Notice to Proceed.

-- End of Section --

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
 TEMPORARY TRAFFIC CONTROL ACTIVITIES (AQ-2)

Mo. _____ Yr. _____	TIME	TEMPORARY TRAFFIC CONTROL ACTIVITIES IMPLEMENTED	LOCATION	REASON REQUIRED	CONTRACTOR SIGNATURE
1					
2					
3					
4					
5					
<b>COMMENTS</b>					

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
**CONSTRUCTION MATERIALS DELIVERY RECORDS (AQ-3)**

Mo. _____ Yr. _____	TIME	CONSTRUCTION MATERIALS DELIVERED	LOCATION DELIVERED	NUMBER OF DELIVERIES	CONTRACTOR SIGNATURE
1					
2					
3					
4					
5					
COMMENTS					

**LACDA - DM5/CONFLUENCE  
MITIGATION MONITORING MONTHLY LOGS**

SECOND-STAGE SMOG ALERTS/SUSPENSION OF POWER EQUIPMENT USE (AQ-6)

Mo. _____ Yr. _____	2 <sup>ND</sup> -STAGE SMOG ALERT CALLED?	TYPE OF EQUIPMENT WHERE USE SUSPENDED	LOCATION	CONTRACTOR SIGNATURE
1				
2				
3				
4				
5				
COMMENTS				

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
SUMMARY OF POWER SUPPLY TYPES (AQ-7)

Mo. _____ Yr. _____	TYPE OF POWER SUPPLY USED	LOCATION	REASON REQUIRED	CONTRACTOR SIGNATURE
1				
2				
3				
4				
5				
<b>COMMENTS</b>				

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
WIND SPEED MONITORING (AQ-9)

Mo. _____ Yr. _____	WIND SPEED		TIME		CONSTRUCTION ACTIVITIES SUSPENDED	CONTRACTOR SIGNATURE
1						
2						
3						
4						
5						
COMMENTS						

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
 DIRT AND SEDIMENT HAUL TRUCK INSPECTIONS (AQ-10)

Mo. _____ Yr. _____	TIME	LOCATION	INSPECTION OF DIRT AND SEDIMENT HAUL TRUCKS	CONTRACTOR SIGNATURE
1				
2				
3				
4				
5				
<b>COMMENTS</b>				

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
 SITE WATERING ACTIVITIES (AQ-11/WQ-5)

Mo. _____ Yr. _____	TIME OF WATERING	LOCATION	CONTRACTOR SIGNATURE
1			
2			
3			
4			
5			
COMMENTS			

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
OFF-ROAD HEAVY EQUIPMENT MAINTENANCE ACTIVITIES (AQ-EIS-1)

Mo. _____ Yr. _____	TIME	MAINTENANCE ACTIVITY	LOCATION	CONTRACTOR SIGNATURE
1				
2				
3				
4				
5				
<b>COMMENTS</b>				

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
**CONSTRUCTION WORK WITHIN FLOOD CONTROL CHANNEL (WQ-1)**

Mo. _____ Yr. _____	WORK HOURS	LOCATION OF WORK WITHIN THE FLOOD CONTROL CHANNEL	CONSTRUCTION WORK WITHIN THE FLOOD CONTROL CHANNEL	FLOW CONDITIONS IN THE FLOOD CONTROL CHANNEL	CONTRACTOR SIGNATURE
1					
2					
3					
4					
5					
COMMENTS					

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
 INSPECTION OF BULK GRANULAR MATERIALS (WQ-4)

Mo. _____ Yr. _____	TIME	TYPE OF MATERIAL STOCKPILE (APPROXIMATE QUANTITY AND LOCATION)	CONDITION OF STOCKPILE (COVERED/DUST EMISSIONS?)	CONTRACTOR SIGNATURE
1				
2				
3				
4				
5				
COMMENTS				

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
**STREET SWEEPING ACTIVITIES (WQ-6)**

Mo. _____ Yr. _____	TIME	STREET SWEEPING ACTIVITIES (ADJACENT STREET LOCATIONS)	CONTRACTOR SIGNATURE
1			
2			
3			
4			
5			
<b>COMMENTS</b>			

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
**HAZARDOUS MATERIAL SPILL KIT INSPECTION (WQ-9)**

Mo. _____ Yr. _____	TIME	LOCATION OF SPILL KITS (LIST ALL CONSTRUCTION SITE AREAS)	CONTRACTOR SIGNATURE
1			
2			
3			
4			
5			
COMMENTS			

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
**POWER EQUIPMENT USAGE (NOI-4)**

Mo. _____ Yr. _____	TYPES OF POWER EQUIPMENT USED	LOCATION	CONTRACTOR SIGNATURE
1			
2			
3			
4			
5			
<b>COMMENTS</b>			

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
**VIBRATORY/IMPACT PILE DRIVER USAGE (NOI-10)**

Mo. _____ Yr. _____	NUMBER AND TYPES OF PILE DRIVERS USED	LOCATION	CONTRACTOR SIGNATURE
1			
2			
3			
4			
5			
<b>COMMENTS</b>			

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
 LOG OF HAZARDOUS MATERIALS USERS (HAZ-2)

Mo. _____ Yr. _____	USERS NAME	TYPE OF HAZARDOUS MATERIAL USED	CONTRACTOR SIGNATURE
1			
2			
3			
4			
5			
<b>COMMENTS</b>			

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
 REPORTS ON EXCAVATED MATERIAL SAMPLING (HAZ-6)

Mo. _____ Yr. _____	TYPE OF EXCAVATED MATERIALS	LOCATION OF SAMPLING	CONTRACTOR SIGNATURE
1			
2			
3			
4			
5			
COMMENTS			

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**  
SUMMARY OF PERSONS EXPOSED TO HAZARDOUS MATERIALS (HAZ-7)

Mo. _____ Yr. _____	NAME OF EXPOSED PERSON	TYPE OF HAZARDOUS MATERIAL	CONTRACTOR SIGNATURE
1			
2			
3			
4			
5			
COMMENTS			

**LACDA - DM5/CONFLUENCE**  
**MITIGATION MONITORING MONTHLY LOGS**

SUMMARY OF ENVIRONMENTAL PROGRAMS (WASTE MANAGEMENT) COORDINATION (HAZ-8)

Mo. _____ Yr. _____	TIME	CONTACT NAME	EXPLANATION OF COORDINATION	CONTRACTOR SIGNATURE
1				
2				
3				
4				
5				
<b>COMMENTS</b>				

SECTION TABLE OF CONTENTS

GENERAL REQUIREMENTS

SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES . . . . . SECTION 01451 PAGE 1

1.2 PAYMENT . . . . . SECTION 01451 PAGE 1

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL . . . . . SECTION 01451 PAGE 1

3.2 QUALITY CONTROL PLAN . . . . . SECTION 01451 PAGE 1

3.2.1 General . . . . . SECTION 01451 PAGE 1

3.2.2 Content of the CQC Plan . . . . . SECTION 01451 PAGE 2

3.2.3 Acceptance of Plan . . . . . SECTION 01451 PAGE 2

3.2.4 Notification of Changes . . . . . SECTION 01451 PAGE 3

3.3 COORDINATION MEETING . . . . . SECTION 01451 PAGE 3

3.4 QUALITY CONTROL ORGANIZATION . . . . . SECTION 01451 PAGE 3

3.4.1 General . . . . . SECTION 01451 PAGE 3

3.4.2 CQC System Manager . . . . . SECTION 01451 PAGE 3

3.4.3 Organizational Changes . . . . . SECTION 01451 PAGE 3

3.4.4 Additional Requirement. . . . . SECTION 01451 PAGE 4

3.5 SUBMITTALS . . . . . SECTION 01451 PAGE 4

3.6 CONTROL . . . . . SECTION 01451 PAGE 4

3.6.1 Preparatory Phase . . . . . SECTION 01451 PAGE 4

3.6.2 Initial Phase . . . . . SECTION 01451 PAGE 5

3.6.3 Follow-up Phase . . . . . SECTION 01451 PAGE 5

3.6.4 Additional Preparatory and Initial Phases . . SECTION 01451 PAGE 5

3.7 TESTS . . . . . SECTION 01451 PAGE 5

3.7.1 Testing Procedure . . . . . SECTION 01451 PAGE 5

3.7.2 Testing Laboratories . . . . . SECTION 01451 PAGE 6

3.7.3 On-Site Laboratory . . . . . SECTION 01451 PAGE 6

3.7.4 Furnishing or Transportation of Samples for Testing  
. . . . . SECTION 01451 PAGE 6

3.8 COMPLETION INSPECTION . . . . . SECTION 01451 PAGE 7

3.8.1 Punch-Out Inspection . . . . . SECTION 01451 PAGE 7

3.8.2 Pre-Final Inspection . . . . . SECTION 01451 PAGE 7

3.8.3 Final Acceptance Inspection . . . . . SECTION 01451 PAGE 7

3.9 DOCUMENTATION . . . . . SECTION 01451 PAGE 8

3.10 NOTIFICATION OF NONCOMPLIANCE . . . . . SECTION 01451 PAGE 8

3.11 CONTRACTOR PROJECT MANAGEMENT SYSTEM. . . . . SECTION 01451 PAGE 9

3.11.1 General . . . . . SECTION 01451 PAGE 9

3.11.2 Submission and Approval . . . . . SECTION 01451 PAGE 9

3.11.3 Network Modifications . . . . . SECTION 01451 PAGE 10

3.11.4 Logic Diagrams and Reports . . . . . SECTION 01451 PAGE 10

3.11.5 Payment Requests . . . . . SECTION 01451 PAGE 11

3.12 IMPLEMENTATION OF GOVERNMENT RESIDENT MANAGEMENT SYSTEM  
. . . . . SECTION 01451 PAGE 12

-- End of Table of Contents --

## SECTION 01451

## CONTRACTOR QUALITY CONTROL

## 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 | (1994a) 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  | (1993b) 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.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause entitled "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 project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for on-compliance with quality requirements specified in the contract. The Quality Control Plan shall include a System Manager (other than the project superintendent) who shall report to the project superintendent. The project superintendent in this context shall mean the individual with the responsibility for the overall management of the project including quality and production.

## 3.2 QUALITY CONTROL 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 entitled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, test, records, and forms to be used. The Government will consider an interim plan for the first 15 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 will 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: 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. (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 will 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 and has separate control requirements. It could be identified by different trades or disciplines, or it could 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 feature 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 General

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization which shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

### 3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within his organization at the site of the work 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 construction person with a minimum of 3 years in related work. This CQC System Manager shall be on the site at all times during construction and will be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager will be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate will be the same as for the designated CQC System Manager.

#### 3.4.3 Organizational Changes

The Contractor shall maintain his 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.

#### 3.4.4 Additional Requirement.

In addition to the requirements described above, the CQC System Manager shall have completed the course entitled "Construction Quality Management for Contractors". This course is offered periodically. Contact U.S. Army Corps of Engineers, Los Angeles District, Phil Strayhorn, (213) 452-3374 for information.

### 3.5 SUBMITTALS

Submittals shall be made as specified in SECTION: SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals 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.
- 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 24 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 24 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 or 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, will 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 will 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 will 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 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$675.00 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

#### 3.7.3 On-Site 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

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 Corps of Engineers Division Laboratory, f.o.b., at the following address:

For deliveries:                   U.S. Army Engineer  
  Attn: Water Ways Experiment Station  
  P.O. Box 631  
  Vicksburg, MS 39181-0631

Coordination for each specific test, exact delivery location, and dates will be made through the Area Office.

### 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 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 "punch list" 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 this 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 and so notify 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 will be accomplished within the time slated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

### 3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, his superintendent or other primary management person and the contracting Officer's representative will be in attendance at this 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 will be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and must 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 entitled "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 should 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 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.
- k. 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(s) 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 seven 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 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 worksite, 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.

### 3.11 CONTRACTOR PROJECT MANAGEMENT SYSTEM.

#### 3.11.1 General.

3.11.1.1 The Contractor project Management System is included to assure adequate planning and execution of the work, to assist the Contracting Officer on appraising the reasonableness of the schedule, to evaluate progress of the work, and make progress payments, and to make decisions relative to time and/or cost adjustments which may result from changes in the work.

3.11.1.2 The management system is to be based on a computerized Network Analysis (Critical Path Method) operated by on-site personnel at terminals located in the

Contractors's on-site office. On-site management shall be capable of using the system to address all project activities and resources on a real time interactive basis and be capable of rapidly evaluating alternative scenarios which will optimize project management. Evidence of technical expertise of on-site personnel with the proposed computerized Network Analysis System shall be submitted for Contracting Officer's approval prior to on-site work.

3.11.1.3 The Contractor shall resource load all work activities. As a minimum, resource loading shall identify equipment, management, skilled and unskilled labor requirements. The Contractor may at his option decide on greater detail for his own purposes, but if this option is elected, the system must be able to consolidate resources into the above defined categories for use by the Contracting Officer.

3.11.1.4 The Contractor shall incorporate any and all milestone and contract required events which may be specified elsewhere within these specifications. Should milestone events be not specifically identified by the Government within these specifications, the Contractor shall identify at least five percent of the network activities and designate them as milestone activities.

3.11.1.5 The Contractor Project Management System is to be staffed and prepared pursuant of CONTRACT CLAUSE: SCHEDULE FOR CONSTRUCTION CONTRACTS, and CONTRACT CLAUSE: SUPERINTENDENT BY THE CONTRACTOR. In preparing this system the Contractor assume responsibility for conformance with contract requirements, planning, sequencing of work, and determining the construction means and methods.

3.11.2 Submission and Approval. Submission and approval of the system shall be as follows:

3.11.2.1 The complete network system consisting of the detailed network mathematical analysis (including on-site manpower loading schedule) and network logic diagrams shall be submitted for approval within thirty (30) calendar days after receipt of Notice to Proceed. This shall be submitted in assembled hardcopy paper format and via 3-1/2 HD (High Density) floppy disk to allow restoring on Government Computers in accordance with the Corps of Engineers Standard Data Exchange Format as described in ER 1-1-11.

3.11.2.2 The Contractor shall participate in a review and evaluation of the proposed network logic diagrams and mathematical analysis by the Contracting Officer. Any revisions necessary as a result of this review shall be resubmitted for approval of the Contracting Officer within three (3) calendar days after the conference. The approved schedule shall be used by the Contractor for planning, organizing and directing the work, reporting progress, and requesting payment for work accomplished.

3.11.3 Network Modifications.

3.11.3.1 In those cases where the contract performance is delayed due to causes beyond the control of the Contractor, and a time extension may be allowable under one or more of the CONTRACT CLAUSES: CHANGES, or DIFFERING SITE CONDITIONS, or DEFAULT (FIXED PRICE CONSTRUCTION), or SUSPENSION OF WORK, or other applicable clauses, as a condition precedent to granting a time extension, the Contractor

shall submit a time proposal in such format as to identify the specific subnet diagram and activities affected.

3.11.3.2 Change order proposals shall include description or listing of all proposed changes to the network, by activity, and demonstrate the effect on the contract required completion date. A complete list of activities changed and subnet of activities affected by the change shall be submitted.

3.11.3.3 Float or slack is defined as the amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any of the activities in the NAS schedule. Float or slack is not time for the exclusive use or benefit of either the Government or the Contractor. Extensions of time for performance may be granted to the extent that equitable time adjustment for the activities affected exceed the total float or where otherwise justified, effect on contract completion can be shown. The contract completion date is fixed, and will be amended only if the modifications which include time are signed by the Contracting Officer.

3.11.3.4 Rapid resolution of change orders and the granting of other time extensions where authorized by the Contracting Officer is a critical part of the overall management system. Implementation of all justified activity and logic changes shall be made and reflected on the next monthly update after approval of the Contracting Officer.

3.11.3.5 If, in the opinion of the Contracting Officer, the current schedule no longer accurately reflects the Contractor's real plan for accomplishing the work, or no longer reflects a viable way of finishing the work on schedule, the Contractor shall be directed to revise the schedule and submit it for approval within seven (7) calendar days of direction.

3.11.4 Logic Diagrams and Reports.

3.11.4.1 Logic diagrams.

3.11.4.1.1 Logic diagrams shall show the order and interdependency of activities and sequence in which the work is to be accomplished as planned by the Contractor.

3.11.4.1.2 Detailed networks need not be timed scaled, but drafted to have a continuous flow from left to right, showing how the start of a given activity is dependent on the completion of preceding activities, and how its completion restricts the start of the following activities.

3.11.4.1.3 An assembled logic diagram of the complete project shall be submitted with the initial NAS, showing each activity's identifying numbers, duration and description, with the critical path easily identified. Updated assembled diagrams will be provided as required by logic changes (but not more frequently than the monthly update). The logic diagram shall be plotted on architectural size E paper.

3.11.4.1.4 In addition to the detailed schedule, a summary schedule shall be developed by the Contractor. The summary schedule shall consist of minimum thirty (30) activities and maximum of 100 activities, and be updated monthly.

#### 3.11.4.2 Reports.

3.11.4.2.1 After the network approval, the Contractor shall review and evaluate the actual progress with the Contracting Officer's representative on a weekly basis, and submit any updated weekly reports three (3) workdays after the meeting.

3.11.4.2.2 Three (3) weekly reports, selected from specific items of the menu will be required, for specified time window of the project (such as the next two weeks). These reports must be flexible in format, allowing generation of reports relating specifically to critical work areas, or areas of particular interest. The Government will identify the subject of the requested reports for the following week at a weekly review meeting. All activities involving the Government that affect progress will be coded to allow a separate report.

3.11.4.2.3 Monthly update reports will be submitted at midmonth showing status and actual start and finish dates of project activities, and will be capable of comparing the current status with the approved base schedule. Each monthly update report shall be uniquely identified and shall be stored on the Contractor's computer until the final pay estimate is processed. The content of the monthly update shall be flexible to show items listed in the menu. The midmonth report shall be used for partial payments.

3.11.4.2.4 A meeting shall be held three (3) workdays before the delivery of the midmonth report to discuss all input data. If the Contractor desires to make changes in his method of operation and scheduling, he shall clearly present the proposed changes.

3.11.4.2.5 A narrative report shall be submitted with midmonth report indicating current and anticipated problems, delaying factors, and conditions that are impacting the Contractor's work effort. An analysis showing the reasons for the delay/gain and their impact upon the current schedule shall be included. When it is apparent the scheduled milestone(s) and completion date(s) will not be met, the Contractor shall propose specific methods he intends to implement to bring the project back on schedule at no cost to the Government. Such measure may include but are not limited to:

a. Increasing construction manpower in such quantities and crafts as will substantially eliminate the backlog of work effort.

b. Increasing the number of working hours per shift; shifts per workday; workdays per week; the amount of construction equipment; or any combination thereof.

c. Rescheduling of activities to achieve maximum practical concurrence of work shifts.

3.11.4.2.6 The Contractor shall implement such procedures as may be necessary for the active participation by his subcontractors in preparing and updating the schedule. Subcontractors shall be provided with schedules which identify the interfaces of their work with the work of others. At minimum, the Contractor shall provide bar graphs to each major subcontractor showing activity times with plots on an Early Start basis. Copies of these schedules shall also be provided to the Contracting Officer. The relationship between subcontractor and

interdependency or work shall be managed by the Contractor. When these interdependencies are violated or impaired, the Contractor shall identify the problem, resolve it, and provide the information to the Contracting Officer as part of the monthly report.

#### 3.11.5 Payment Requests.

3.11.5.1 The monthly update report shall be used as a basis for the monthly partial pay estimate. The report will state the cost, actual percent complete, and current value of partially completed or completed work. Subtotals from subnets representing separate areas of construction will be given, along with a grand dollar value of work completed for the project.

3.11.5.2 The first payment shall not be made until the Network Analysis Schedule has been approved by the Contracting Officer. If, in the judgment of the Contracting Officer, The Contractor fails or refuses to provide an approved schedule and other progress or input data specified, the Contractor shall be deemed not to have provided the required information upon which progress payments may be made, and no payment request will be honored.

3.11.5.3 Activities submitted for payment shall be based on the approved network activities and monetary amount. No payment shall be made for activities conducted in deviation of the approved logic.

3.11.5.4 Payment for activities conducted when previously dependent activities have not been completed or accepted due to quality defects shall be restricted at the discretion of the Contracting Officer, and may be the basis for a resubmittal of the logic diagram.

#### 3.12 IMPLEMENTATION OF GOVERNMENT RESIDENT MANAGEMENT SYSTEM FOR CONTRACTOR QUALITY CONTROL OF CONTRACT

The contractor shall utilize a Government furnished CQC Programming Module (A computerized executable file which is DOS based and operates on a minimum of 80386 IBM compatible computers). The contractor must use the CQC module and provide updates from this module on electronic format. The Module includes a Daily CQC Reporting System form which must also be used. This form may be in addition to other Contractor desired reporting forms. However, all other such reporting forms shall be consolidated into this one Government specified Daily CQC Report Form. The Contractor will also be required to complete Government-Furnished Module elements which includes, but is not limited to Prime Contractor staffing; letter codes; planned cumulative progress earnings; subcontractor information showing trade, name, address, point-of-contact, and insurance expiration dates; definable features of work; pay activity and activity information; required Quality Control tests tied to individual activities; planned User Schooling tied to specific specification paragraphs and contractor activities; Installed Property Listing, Transfer Property Listing and submittal information relating to specification section, description, activity number, review period and expected procurement period. The sum of all activity values shall equal the contract amount, and all Bid Items, Options and Additives shall be separately identified, in accordance with the "Bidding Schedule". Bid Items may include multiple Activities, but Activities may only be assigned to one such Bid Item. This Module shall be completed to the satisfaction of the Contracting Officer prior to any contract

payment (except for Bonds, Insurance and/or Mobilization, as approved by the Contracting Officer) and shall be updated as required.

(1) During the course of the contract, the Contractor will receive various Quality Assurance comments from the Government that will reflect corrections needed to Contractor activities or reflect outstanding or future items needing the attention of the Contractor. The Contractor will acknowledge receipt of these comments by specific number reference on his Daily CQC Report, and will also reflect on his Daily CQC Report when these items are specifically completed or corrected to permit Government verification.

(2) The Contractor's schedule system shall include, as specific and separate activities, all Preparatory Phase Meetings (inspections); all O&M Manuals; and all Test Plans of Electrical and Mechanical Equipment or Systems that require validation testing or instructions to Government representatives.

(3) The Contracting Officer can provide information regarding training on the use of the RMS system.

-- End of Section -

SECTION TABLE OF CONTENTS

SECTION 01500

QUALITY ASSURANCE VEHICLES

1. QUALITY ASSURANCE VEHICLES . . . . . 01500-1

-- End of Table of Contents --

## SECTION 01500

## QUALITY ASSURANCE VEHICLES

1. QUALITY ASSURANCE VEHICLES. The Contractor shall furnish vehicles for use by Government personnel during the contract period. The vehicles shall be new 4 door model Chevrolet mini-Blazers, or equal, 4x4, equipped with high floatation all terrain tires, automatic transmission, air conditioning, AM/FM radio, heavy duty suspension, and other appropriate options for use in heavy duty off road conditions. Each vehicle shall also be equipped with a 5 lb. ABC type fire extinguisher, readily accessible to the driver. The vehicles shall be suitable for the intended purpose and shall remain the property of the Contractor and be removed from the site at the completion of the contract.

1.1 Delivery. The Contractor shall deliver the vehicles within thirty (30) days after receipt of the Notice to Proceed.

1.2 Licenses and Fees. The Contractor shall be responsible for all vehicles registration fees, licenses, and inspections required by the State of California throughout the contract period. The vehicles shall be licensed for highway use.

1.3 Maintenance. Upon delivery of the vehicles, and continuing throughout the duration of the contract, complete maintenance shall be provided for the Contractor-furnished vehicles. Quality of services shall be to the normal standards of commercial service stations. Servicing and/or repairs of vehicles shall be started when the vehicle is received at the Contractor's service area and completed with reasonable promptness. Maintenance shall consist of the regular furnishing of gas and oil in the vehicle, washing, steam cleaning, lubrication consisting of 2,000-mile lube, 4,000-mile oil and filter change, or more if recommended by the vehicle manufacturer, tire services and any major or minor repair of body or fenders, transmission, rearend, engine, brakes, steering, front-end, radiator, etc. All necessary parts and supplies, and consumables shall be Contractor-furnished. The vehicles shall be washed and the interior of all vehicles shall be cleaned every week and the motor and undercarriage shall be steam cleaned as directed. Whenever gas or oil is furnished, windshields shall be washed, tires inflated to proper pressure, brake fluid level checked and filled if necessary, and the battery filled to proper levels. Gasoline and oil shall be of the quality recommended by the vehicle manufacturer. The Contractor may elect to contract with a local commercial service station and/or service garage in the immediate local vicinity of the construction site to provide these maintenance services, so long as all of the above required services can be provided. If more than 3 of the Contractor-furnished vehicles are being served at any particular time, the Contractor shall immediately provide replacement vehicles of equal quality as replacements. Maintenance shall also include servicing of the 5 lb. fire extinguisher.

-- End of Section --