

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

03/04

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.

DEPARTMENT OF COMMERCE (DOC)

DOC PS 1 (1993) Construction and Industrial Plywood
 DOC PS 20 (1970) American Softwood Lumber Standard.

FEDERAL SPECIFICATIONS (FS)

FS TT-E-2784 (Rev A) Enamel (Acrylic-Emulsion, Exterior)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z535.1 (1991) Safety Color Code

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM F 547 (1977; R 1990) Definitions of Terms
 Relating to Nails for Use with Wood and
 Wood-Base Materials

U.S. ARMY CORPS OF ENGINEERS

EM 385-1-1 Safety and Health Requirements Manual
 (3 September 1996).

WEST COAST LUMBER INSPECTION BUREAU (WCLIB)

WCLIB 16 (1970; Rev 1983) Standard Grading and
 Dressing Rules for Douglas Fir, Western
 Hemlock, Western Red Cedar, White Fir,
 Sitka Spruce Lumber

WESTERN WOOD PRODUCTS ASSOCIATION (WWPA)

WWPA-01 (1991; Supple No. 1) Western Lumber
 Grading Rules 91

1.2 GENERAL REQUIREMENTS

1.2.1 Site Plan

The Contractor shall prepare a site plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor, the number of trailers to be used, avenues of ingress/egress to the fenced area

and details of the fence installation. Any areas which may have to be graveled to prevent the tracking of mud shall also be identified. The Contractor shall also indicate if the use of a supplemental or other staging area is desired.

1.2.2 Identification of Employees

The Contractor shall be responsible for furnishing to each employee and for requiring each employee engaged on the work to display identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

1.2.3 Employee Parking

Contractor employees shall park privately owned vehicles in an area designated by the Contracting Officer. This area will be within reasonable walking distance of the construction site. Contractor employee parking shall not interfere with existing and established parking requirements of the military installation.

1.3 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN

1.3.1 Bulletin Board

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 915 by 1220 mm (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.

1.3.2 Project and Safety Signs

(A) General:

The Contractor shall construct and erect one project sign, one safety sign and a minimum of [1] hard hat signs at locations designated by the Contracting Officer. The signs shall conform to the requirements of the drawings attached at the end of this section. The signs shall be erected as soon as possible and within 15 days after date of commencement of work under this contract. The data required by the safety sign shall be corrected daily.

1.3.3 Project and Safety Signs

(A) General:

The Contractor shall construct and erect one safety sign and a minimum of [__] hard hat signs at locations designated by the Contracting Officer.

The signs shall conform to the requirements of the drawing attached at the end of this section. The signs shall be erected as soon as possible and within 15 days after date of commencement of work under this contract. The hat decal called for on the signs will be furnished by the Government.

(B) Maintenance and Disposal:

The Contractor shall maintain the signs in good condition throughout the life of the project. Signs shall remain the property of the Contractor and upon completion of the project they shall be removed from the site.

(A) General:

The Contractor shall construct and erect one project sign and a minimum of [1] hard hat signs at locations designated by the Contracting Officer. The signs shall conform to the requirements of the drawings attached at the end of this section. The signs shall be erected as soon as possible and within 15 days after date of commencement of work under this contract.

(B) Materials:

(1) Lumber shall conform to DOC PS 20 and grading rules of applicable grading agencies, WCLIB or WWPA. Grade shall be "Standard" or better Douglas Fir, S4S and shall be stamped S-Dry.

(2) Plywood: Plywood shall conform to DOC PS 1, Grade AC, Group 1, Exterior.

(3) Bolts, Nuts and Nails: Bolts and nuts shall be galvanized, and type, and size best suited for intended for use. Nails shall conform to ASTM F 547.

(4) Paint: Type of paint for primer, finish coats, and lettering, shall be as indicated on the attached standard drawing, Project Sign, paragraph PAINTING. The color of signs and lettering shall be as directed by the Contracting Officer. Safety signs shall be painted in the same colors as the project sign. Hard hat signs shall be painted as indicated on the attached drawing.

(5) Decals: Corps of Engineers castle decal and the hard hat decal called for on the signs will be furnished by the Government.

(C) Construction:

(1) Signs shall be constructed as detailed on attached drawings.

(2) 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 one finish coat as indicated. All lettering shall be sized as indicated. Width of letter stroke shall be 1/6 of the letter height, except as noted.

(D) Maintenance and Disposal:

The Contractor shall maintain the signs in good condition throughout the life of the project. Signs shall remain the property of the Contractor and upon completion of the project they shall be removed from the site.

1.3.4 Project and Safety Signs

(A) General:

The Contractor shall construct and erect project, safety, auxiliary, information, and hard hat signs at locations designated by the Contracting Officer. The signs shall conform to the requirements of the drawings attached at the end of this section. The signs shall be erected as soon as possible and within 15 days after date of commencement of work under this contract.

(B) Number of Signs:

The Contractor shall furnish the following signs:

Standard sign for Levee and Channel

Projects		
Hard Hat Signs	<u>1</u>	at each site while construction is in progress
Auxiliary Sign	_____	
Information Sign	_____	
Safety Sign	_____	

(C) Materials:

(1) Plywood: Exterior.

(2) Bolts, nuts, and nails shall be galvanized, and type, and size best suited for intended for use.

(3) Paint: Exterior. Color of signs and lettering shall be as indicated on the attached drawing. Hard hat signs shall be painted as indicated on the attached drawing.

(4) Decals: Corps of Engineers castle decal and the hard hat decal called for on the signs will be furnished by the Government.

(D) Construction:

(1) Signs shall be constructed as detailed on attached drawings.

(2) All lettering shall be sized as indicated.

(E) Maintenance and Disposal:

The Contractor shall maintain the signs in good condition throughout the life of the project. Signs shall remain the property of the Contractor and upon completion of the project they shall be removed from the site.

1.4 BULLETIN BOARD AND HARD HAT SIGNS

1.4.1 Administrative Field Offices

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 915 by 1220 mm (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.

1.4.2 Hard Hat Signs

The Contractor shall construct and erect 2 hard hat signs at locations designated by the Contracting Officer. The signs shall conform to the requirements of the attached drawing. The signs shall be erected prior to beginning work.

1.4.3 Project and Safety Signs

(A) General:

The Contractor shall construct and erect one project sign, one safety sign and a minimum of [1] hard hat signs at locations designated by the Contracting Officer. The location is to have the concurrence of the Using Service. The signs shall conform to the requirements of the drawings attached at the end of this section. The signs shall be erected as soon as possible and within 15 days after date of commencement of work under this contract.

(B) Materials:

(1) Woodwork: Posts shall be construction grade Douglas Fir, S4S. Trim shall be clear Douglas Fir, thoroughly dry, Grade B or better.

(2) Plywood: Plywood shall conform to DOC PS 1, Grade BC, medium density overlay both sides, 3/4" thick.

(3) Metal: All bolts, washers, screws, nails, straps, anchors, etc. to be galvanized. Bolts and nuts shall be galvanized, and type, and size best suited for intended for use. Nails shall conform to ASTM F 547.

(4) Paint: Primer and finish paints shall be specifically for exterior use and of a type best suited for the intended purpose. All finish paint to be flat (lusterless).

(5) Concrete: Concrete shall be Class "B", 2500 psi, or better.

(6) The safety sign and hard hat decal called for on the signs will be furnished by the Government.

(C) Construction:

(1) Signs shall be constructed as detailed on attached drawings. All exposed nails to be set and holes filled with putty. All components shall be cut and fitted accurately and then assembled and finished in a first class manner.

(2) Painting: All woodwork shall receive a priming coat on all surfaces before assembly. All exposed surfaces of the sign and supports shall be given two coats of finish paint after assembly. The lettering to be in lines as shown in Elevations "A" and "B", for Stages 1 and 2, and of the sizes scheduled. Width of letter stroke shall be 1/6 of the letter height. Samples of the painted lettering shall be submitted for approval

of the Contracting Officer.

(3) Colors: The field of the sign shall be white; all lettering blue and the insignias outlined and painted as shown on the attached drawings.

(D) Maintenance and Disposal:

(1) The sign shown in Elevation "A" (Stage 1) will be for use during construction of the building and shall be maintained in good condition by the Contractor during this period.

(2) After completion of construction the sign shall remain in place and be re-lettered in certain lines and the safety sign shall be removed as shown in Elevation "B" (Stage 2). The Corps of Engineers' insignia shall be replaced by that of Sixth US Army. The sign shall be repainted where necessary and presented in a condition acceptable to the Contracting Officer and for permanent use by the Reserve Center.

1.5 PROTECTION AND MAINTENANCE OF TRAFFIC

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the State and local authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.

1.5.1 Haul Roads

The Contractor shall, at its own expense, construct access and haul roads necessary for proper prosecution of the work under this contract. Haul roads shall be constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided. The Contractor shall provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, shall be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and hauling roads shall be subject to approval by the Contracting Officer. Lighting shall be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations. Upon completion of the work, haul roads designated by the Contracting Officer shall be removed.

1.5.2 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary

to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

1.6 CONTRACTOR'S TEMPORARY FACILITIES

1.6.1 Administrative Field Offices

The Contractor shall provide and maintain administrative field office facilities within the construction area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

1.6.2 Storage Area

The Contractor shall construct a temporary 1.8 meter (6 foot) high chain link fence around trailers and materials. The fence shall include plastic strip inserts, colored [green] [brown], so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Trailers, materials, or equipment shall not be placed or stored outside the fenced area unless such trailers, materials, or equipment are assigned a separate and distinct storage area by the Contracting Officer away from the vicinity of the construction site but within the military boundaries. Trailers, equipment, or materials shall not be open to public view with the exception of those items which are in support of ongoing work on any given day. Materials shall not be stockpiled outside the fence in preparation for the next day's work. At the end of each work day mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment, shall be parked within the fenced area.

1.6.3 Supplemental Storage Area

Upon Contractor's request, the Contracting Officer will designate another or supplemental area for the Contractor's use and storage of trailers, equipment, and materials. This area may not be in close proximity of the construction site but shall be within the military boundaries. Fencing of materials or equipment will not be required at this site; however, the Contractor shall be responsible for cleanliness and orderliness of the area used and for the security of any material or equipment stored in this area. Utilities will not be provided to this area by the Government.

1.6.4 Appearance of Trailers

Trailers utilized by the Contractor for administrative or material storage purposes shall present a clean and neat exterior appearance and shall be in a state of good repair. Trailers which, in the opinion of the Contracting Officer, require exterior painting or maintenance will not be allowed on the military property.

1.6.5 Maintenance of Storage Area

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse with construction equipment or other vehicles grassed or unpaved areas which are not established roadways, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways; gravel gradation shall be at the Contractor's discretion. Grass located within the boundaries of the construction site shall be mowed for the duration of

the project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers shall be edged or trimmed neatly.

1.6.6 New Building

In the event a new building is constructed for the temporary project field office, it shall be a minimum 3.6 meters (12 feet) in width, 4.9 meters (16 feet) in length and have a minimum of 2.1 meters (7 feet) headroom. It shall be equipped with approved electrical wiring, at least one double convenience outlet and the required switches and fuses to provide 110-120 volt power. It shall be provided with a work table with stool, desk with chair, two additional chairs, and one legal size file cabinet that can be locked. The building shall be waterproof, shall be supplied with heater, shall have a minimum of two doors, electric lights, a telephone, a battery operated smoke detector alarm, a sufficient number of adjustable windows for adequate light and ventilation, and a supply of approved drinking water. Approved sanitary facilities shall be furnished. The windows and doors shall be screened and the doors provided with dead bolt type locking devices or a padlock and heavy duty hasp bolted to the door. Door hinge pins shall be non-removable. The windows shall be arranged to open and to be securely fastened from the inside. Glass panels in windows shall be protected by bars or heavy mesh screens to prevent easy access to the building through these panels. In warm weather, air conditioning capable of maintaining the office at 50 percent relative humidity and a room temperature 11 degrees C (20 degrees F) below the outside temperature when the outside temperature is 35 degrees C, (95 degrees F,) shall be furnished. Any new building erected for a temporary field office shall be maintained by the Contractor during the life of the contract and upon completion and acceptance of the work shall become the property of the Contractor and shall be removed from the site. All charges for telephone service for the temporary field office shall be borne by the Contractor, including long distance charges up to a maximum of \$75.00 per month.

1.6.7 Security Provisions

Adequate outside security lighting shall be provided at the Contractor's temporary facilities. The Contractor shall be responsible for the security of its own equipment; in addition, the Contractor shall notify the appropriate law enforcement agency requesting periodic security checks of the temporary project field office.

1.6.8 Temporary Structures and Devices

Provide, maintain and remove upon completion of Work, all temporary barricades, lights and other protective structures or devices necessary for safety of workers and public property as required to complete all Work.

1.6.9 Protection

Protect all workers and equipment from power lines and maintain safe distances and protective devices as required by Industrial Safety Commission and CAL-OSHA.

1.6.10 Temporary Construction and Equipment

Conform to all regulations, ordinances, laws and other requirements of City, County, State and other authorities having jurisdiction, including insurance companies, with regards to safety precautions, operation and fire

hazard.

1.6.11 Security

Provide security to protect the facility, material and equipment from vandalism and theft.

1.6.12 Storage

The storage of all materials and equipment must be kept within the area designated for storage and kept within the security fencing.

1.6.13 Parking

The Contractor shall make arrangements with the Contracting Officer and local authorities for workman parking and truck delivery.

1.6.14 Drainage

The Contractor shall maintain gutters and drain inlets, protecting them from damage and keeping them free of debris. The contractor shall insure that his work does not change existing drainage patterns that could cause flooding of the job site or adjacent properties.

1.6.15 Protection of Existing Facilities

Any damage to existing structures, equipment, roads, walks, landscaping or other items of the existing site or adjacent property from Work performed under the Contractor, shall be the responsibility of the Contractor. The Contractor shall repair, replace and make good all such damage to the satisfaction of the Contracting Officer.

1.6.16 Security Fencing

The Contractor shall install all required fencing and barricades prior to the start of construction.

1.6.17 Maintenance and Removal

Maintain all temporary facilities and controls as long as needed for safe and proper completion of Work; remove all such temporary facilities and controls as rapidly as progress of Work will permit.

1.6.18 Protection

Use all means necessary to maintain temporary facilities and controls in proper and safe condition throughout progress of Work.

1.6.19 Damage or Theft

Protect work and materials to be used on project from damage or loss due to elements, theft, vandalism, malicious mischief, or other causes. Provide temporary roofs, window and door coverings, boxing or other construction as required.

1.7 GOVERNMENT FIELD OFFICE

1.7.1 Resident Engineer's Office

The Contractor shall provide the Government Resident Engineer with an office, approximately 19 square meters (200 square feet) in floor area, located where directed and providing space heat, electric light and power, and toilet facilities consisting of one lavatory and one water closet complete with connections to water and sewer mains. A mail slot in the door or a lockable mail box mounted on the surface of the door shall be provided. At completion of the project, the office shall remain the property of the Contractor and shall be removed from the site. Utilities shall be connected and disconnected in accordance with local codes and to the satisfaction of the Contracting Officer.

1.7.2 Trailer-Type Mobile Office

The Contractor may, at its option, furnish and maintain a trailer-type mobile office acceptable to the Contracting Officer and providing as a minimum the facilities specified above. The trailer shall be securely anchored to the ground at all four corners to guard against movement during high winds.

1.8 GOVERNMENT FIELD OFFICE

The Contractor shall provide a suitable modular unit approximately 12' by 50' divided into two rooms (12' by 12' and 12' by 38'). The unit shall be adequately heated, well lighted, suitably ventilated and air conditioned. Maintenance of the unit shall be the Contractor's responsibility. An adequate supply of cooled drinking water shall be furnished and maintained. The appropriate number of the following items shall be provided:

- 1 ea Telephone line, instrumentation and service
- 1 ea Desk, 3' by 5' dbl ped 6 drawer, lockable
- 1 ea File cabinet, 4 drawer, legal, lockable
- 1 ea Chair, desk, swivel, arms
- 2 ea Book case, 3' by 4', 3 shelves
- 1 ea Print Table, 4' by 6', attached to wall
- 1 ea Table, conference 4' by 8'
- 8 ea Chairs, conference

1.9 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

1.10 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, the Contractor shall furnish and erect temporary project safety fencing at the work site. The safety fencing shall be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 1.07 meters (42 inches) high, supported and tightly secured to steel posts located on maximum 3 meters (10 foot) centers, constructed at the approved location. The safety fencing shall be maintained by the Contractor during the life of the

contract and, upon completion and acceptance of the work, shall become the property of the Contractor and shall be removed from the work site.

1.11 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways shall be cleaned away. Materials resulting from demolition activities which are salvageable shall be stored within the fenced area described above or at the supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored.

1.12 HOUSEKEEPING AND CLEANUP

Pursuant to the requirements of paragraph, CLEANING UP, and paragraph, ACCIDENT PREVENTION, of the CONTRACT CLAUSES, Section 00700, the Contractor shall assign sufficient personnel to insure strict compliance. The Contractor shall keep the total construction area, structures and accessways free of debris and obstructions at all times. Work will not be allowed in those areas that have unsatisfactory cleanup and housekeeping as determined by the Government representative in charge. At least once each day all areas shall be checked by the Prime Contractor and, if necessary, corrected to comply with the above requirement. Housekeeping and cleanup shall be assigned by the Contractor to specific personnel. The name(s) of the cleanup personnel shall be available at the project site; each will be supplied with a distinctively marked hard hat, to be worn from the beginning to the end of the project.

1.13 HOUSEKEEPING AND CLEANUP

Pursuant to the requirements of paragraph, CLEANING UP and paragraph, ACCIDENT PREVENTION, of the CONTRACT CLAUSES, Section 00700, the Contractor shall assign sufficient personnel to insure strict compliance. The Contractor shall submit a detailed written plan for implementation of this requirement. The plan will be presented as part of the preconstruction safety plan and will provide for keeping the total construction site, structures and accessways free of debris and obstructions at all times. Work will not be allowed in those areas that, in the opinion of the Contracting Officer's representative, have unsatisfactory cleanup and housekeeping at the end of the preceding day's normal work shift. At least once each day all areas shall be checked by the Quality Control person of the Prime Contractor and the findings recorded on the Quality Control Daily Report. In addition, the Quality Control person will take immediate action to insure compliance with this requirement. Housekeeping and cleanup shall be assigned by the Contractor to specific personnel. The name(s) of the personnel shall be available at the project site; each person will be supplied with a distinctively marked hard hat, to be worn from the beginning to the end of the project.

1.14 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of trailers, materials, and equipment from within the fenced area, the fence shall be removed and will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including top soil and seeding as necessary.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --