

\*\*\*\*\*  
USACE / NAVFAC / AFCEC / NASA UFGS-01 50 00 (August 2009)  
Change 3 - 02/16  
-----  
Preparing Activity: USACE Superseding  
UFGS-01 50 00 (October 2007)

## UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated July 2016

\*\*\*\*\*

### SECTION TABLE OF CONTENTS

#### DIVISION 01 - GENERAL REQUIREMENTS

##### SECTION 01 50 00

#### TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS

08/09

#### PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 CONSTRUCTION SITE PLAN
- 1.4 BACKFLOW PREVENTERS CERTIFICATE
  - 1.4.1 Backflow Tester Certificate
  - 1.4.2 Backflow Prevention Training Certificate
- 1.5 [TYPHOON][HURRICANE] CONDITION OF READINESS

#### PART 2 PRODUCTS

- 2.1 TEMPORARY SIGNAGE
  - 2.1.1 Bulletin Board
  - 2.1.2 Project and Safety Signs
- 2.2 TEMPORARY TRAFFIC CONTROL
  - 2.2.1 Haul Roads
  - 2.2.2 Barricades
  - 2.2.3 Fencing
  - 2.2.4 Temporary Wiring
  - 2.2.5 Backflow Preventers

#### PART 3 EXECUTION

- 3.1 EMPLOYEE PARKING
- 3.2 TEMPORARY BULLETIN BOARD
- 3.3 AVAILABILITY AND USE OF UTILITY SERVICES
  - 3.3.1 Temporary Utilities
  - 3.3.2 Payment for Utility Services
  - 3.3.3 Meters and Temporary Connections
  - 3.3.4 Advance Deposit
  - 3.3.5 Final Meter Reading
  - 3.3.6 Utilities at Special Locations
    - 3.3.6.1 Utilities at Guam by Contractor for Special Projects
    - 3.3.6.2 Utility Services at Midway

- 3.3.7 Utility Services for Diego Garcia Projects
  - 3.3.7.1 Contractor-Owned and Operated Radio Telecommunications
  - 3.3.7.2 Off-Island
- 3.3.8 Utility Services for Wake Island
- 3.3.9 Telephones at Midway, Wake, and Diego Garcia
- 3.3.10 Electricity
- 3.3.11 Water
- 3.3.12 Sanitation
- 3.3.13 Telephone
- 3.3.14 Obstruction Lighting of Cranes
- 3.3.15 Fire Protection
- 3.4 TRAFFIC PROVISIONS
  - 3.4.1 Maintenance of Traffic
  - 3.4.2 Protection of Traffic
  - 3.4.3 Rush Hour Restrictions
  - 3.4.4 Dust Control
  - 3.4.5 Commercial Vehicles In/Out of NAVSTA/NAS Norfolk, VA
- 3.5 CONTRACTOR'S TEMPORARY FACILITIES
  - 3.5.1 Safety
  - 3.5.2 Administrative Field Offices
  - 3.5.3 Storage Area
  - 3.5.4 Supplemental Storage Area
  - 3.5.5 Appearance of Trailers
  - 3.5.6 Trailers or Storage Buildings
  - 3.5.7 Maintenance of Storage Area
  - 3.5.8 New Building
  - 3.5.9 Security Provisions
  - 3.5.10 Storage Size and Location
  - 3.5.11 Storage in Existing Buildings
  - 3.5.12 Weather Protection of Temporary Facilities and Stored Materials
    - 3.5.12.1 Building and Site Storm Protection
- 3.6 GOVERNMENT FIELD OFFICE
  - 3.6.1 Resident Engineer's Office
  - 3.6.2 Quality Control Manager Records and Field Office
  - 3.6.3 Trailer-Type Mobile Office
- 3.7 PLANT COMMUNICATION
- 3.8 TEMPORARY PROJECT SAFETY FENCING
- 3.9 DUMPSTERS
- 3.10 CLEANUP
- 3.11 RESTORATION OF STORAGE AREA

-- End of Section Table of Contents --

\*\*\*\*\*  
USACE / NAVFAC / AFCEC / NASA UFGS-01 50 00 (August 2009)  
Change 3 - 02/16  
-----  
Preparing Activity: USACE Superseding  
UFGS-01 50 00 (October 2007)

## UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated July 2016

\*\*\*\*\*

### SECTION 01 50 00

#### TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS 08/09

\*\*\*\*\*

NOTE: This specification covers the requirements for temporary construction facilities, safety systems, construction traffic provisions, construction signage and controls over contractor operations required for use in all projects.

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specification sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable items(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).

\*\*\*\*\*

#### PART 1 GENERAL

\*\*\*\*\*

NOTE: TO DOWNLOAD UFGS GRAPHICS go to:

<http://www.wbdg.org/ccb/NAVGRAPH/graphtoc.pdf>.

On the drawings, show:

1. Location of temporary buildings and storage areas, if specified;
2. Location of temporary utility connections, if specified.

\*\*\*\*\*

## 1.1 REFERENCES

\*\*\*\*\*

NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a Reference Identifier (RID) outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

\*\*\*\*\*

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

### AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA C511 (2007) Standard for Reduced-Pressure  
Principle Backflow Prevention Assembly

### FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH (FCCCHR)

FCCCHR List (continuously updated) List of Approved  
Backflow Prevention Assemblies

FCCCHR Manual (10th Edition) Manual of Cross-Connection  
Control

### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 241 (2013; Errata 2015) Standard for  
Safeguarding Construction, Alteration, and  
Demolition Operations

NFPA 70 (2014; AMD 1 2013; Errata 1 2013; AMD 2  
2013; Errata 2 2013; AMD 3 2014; Errata  
3-4 2014; AMD 4-6 2014) National  
Electrical Code

### U.S. FEDERAL AVIATION ADMINISTRATION (FAA)

FAA AC 70/7460-1 (2015; Rev L) Obstruction Marking and  
Lighting

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

MUTCD

(2009) Manual on Uniform Traffic Control  
Devices

1.2 SUBMITTALS

\*\*\*\*\*

NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project.

The Guide Specification technical editors have designated those items that require Government approval, due to their complexity or criticality, with a "G." Generally, other submittal items can be reviewed by the Contractor's Quality Control System. Only add a "G" to an item, if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

Use the "S" classification only in SD-11 Closeout Submittals. The "S" following a submittal item indicates that the submittal is required for the Sustainability Notebook to fulfill federally mandated sustainable requirements in accordance with Section 01 33 29 SUSTAINABILITY REPORTING.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

\*\*\*\*\*

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for [Contractor Quality Control approval.][information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submittals with an "S" are for inclusion in the Sustainability Notebook, in conformance to Section 01 33 29 SUSTAINABILITY REPORTING. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

\*\*\*\*\*

**NOTE: The following submittal must be included for NAVFAC SE projects at the Charleston Air Force Base and for other NAVFAC SE projects, as determined by the Contracting Officer, based on project size, scope, complexity, and visibility.**

\*\*\*\*\*

Construction Site Plan; G[, [\_\_\_\_]]

Traffic Control Plan; G[, [\_\_\_\_]]

SD-03 Product Data

\*\*\*\*\*

**NOTE: Include the following for all projects connecting to a potable water supply.**

\*\*\*\*\*

Backflow Preventers; G[, [\_\_\_\_]]

SD-06 Test Reports

Backflow Preventer Tests

SD-07 Certificates

Backflow Tester Certification

\*\*\*\*\*

**NOTE: Include the following for all projects connecting to a potable water supply.**

\*\*\*\*\*

Backflow Preventers Certificate of Full Approval

### [1.3 CONSTRUCTION SITE PLAN

Prior to the start of work, submit a site plan showing the locations and dimensions of temporary facilities (including layouts and details, equipment and material storage area (onsite and offsite), and access and haul routes, avenues of ingress/egress to the fenced area and details of the fence installation. Identify any areas which may have to be graveled to prevent the tracking of mud. Indicate if the use of a supplemental or other staging area is desired. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

### ]1.4 BACKFLOW PREVENTERS CERTIFICATE

Certificate of Full Approval from FCCCHR List, University of Southern California, attesting that the design, size and make of each backflow preventer has satisfactorily passed the complete sequence of performance testing and evaluation for the respective level of approval. Certificate of Provisional Approval will not be acceptable.

#### [1.4.1 Backflow Tester Certificate

Prior to testing, submit to the Contracting Officer certification issued by the State or local regulatory agency attesting that the backflow tester has

successfully completed a certification course sponsored by the regulatory agency. Tester must not be affiliated with any company participating in any other phase of this Contract.

#### ]1.4.2 Backflow Prevention Training Certificate

Submit a certificate recognized by the State or local authority that states the Contractor has completed at least 10 hours of training in backflow preventer installations. The certificate must be current.

#### ]1.5 [TYPHOON][HURRICANE] CONDITION OF READINESS

Unless directed otherwise, comply with:

- a. Condition FOUR (Sustained winds of 93 km/hr 50 knots or greater expected within 72 hours): Normal daily jobsite cleanup and good housekeeping practices. Collect and store in piles or containers scrap lumber, waste material, and rubbish for removal and disposal at the close of each work day. Maintain the construction site including storage areas, free of accumulation of debris. Stack form lumber in neat piles less than one m 4 feet high. Remove all debris, trash, or objects that could become missile hazards. [Contact Contracting Officer for [Condition Requirements][Condition of Readiness (COR) updates and completion of required actions].]
- b. Condition THREE (Sustained winds of 93 km/hr 50 knots or greater expected within 48 hours): Maintain "Condition FOUR" requirements and commence securing operations necessary for "Condition ONE" which cannot be completed within 18 hours. Cease all routine activities which might interfere with securing operations. Commence securing and stow all gear and portable equipment. Make preparations for securing buildings. Review requirements pertaining to "Condition TWO" and continue action as necessary to attain "Condition THREE" readiness. Contact Contracting Officer for weather and COR updates and completion of required actions.
- c. Condition TWO (Sustained winds of 93 km/hr 50 knots or greater expected within 24 hours): Curtail or cease routine activities until securing operation is complete. Reinforce or remove form work and scaffolding. Secure machinery, tools, equipment, materials, or remove from the jobsite. Expend every effort to clear all missile hazards and loose equipment from general base areas. Contact Contracting Officer for weather and Condition of Readiness (COR) updates and completion of required actions.
- d. Condition ONE. (Sustained winds of 93 km/hr 50 knots or greater expected within 12 hours): Secure the jobsite, and leave Government premises.

#### ]PART 2 PRODUCTS

##### 2.1 TEMPORARY SIGNAGE

###### 2.1.1 Bulletin Board

Immediately upon beginning of work, 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.

#### 2.1.2 Project and Safety Signs

The requirements for the signs, their content, and location are [as indicated][ and ][as specified in Section 01 58 00 PROJECT IDENTIFICATION]. Erect signs within 15 days after receipt of the notice to proceed. Correct the data required by the safety sign daily, with light colored metallic or non-metallic numerals.

### 2.2 TEMPORARY TRAFFIC CONTROL

#### 2.2.1 Haul Roads

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

#### 2.2.2 Barricades

Erect and maintain temporary barricades to limit public access to hazardous areas. 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 will be required. Securely place barricades clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

#### 2.2.3 Fencing

\*\*\*\*\*

NOTE: Fencing requirements must be evaluated based on the exposure potential of the construction site to the public. The public is considered as any non-construction personnel. Minimum fencing may range from nylon fabric (reinforced by a top supporting cable to provide adequate strength to provide needed physical protection) to 2400 mm 8 foot chain link fencing.

Use the second (optional) paragraph for NAVFAC SE projects at the Charleston Air Force Base, other NAVFAC SE projects and NAVFAC NW projects, as determined by the Contracting Officer, based on project size, scope, complexity, and visibility. Consult the Contracting Officer for base temporary fencing standards and for base standard color.

\*\*\*\*\*

Provide fencing along the construction site at all open excavations and tunnels to control access by unauthorized people.



- a. The safety fencing must be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 1.2 m 48 inches high and maximum mesh size of 50 mm 2 inches, supported and tightly secured to steel posts located on maximum 3 m 10 foot centers, constructed at the approved location. Install fencing to be able to restrain a force of at least 114.00 kg 250 pounds against it.
- b. [Enclose the project work area and Contractor lay-down area with a 2400 mm 8 ft high [shadow-box type, wooden fence and gates][chain link fence and gates with brown, UV light resistant, plastic fabric mesh netting (similar to tennis court or other screening)]. Remove the fence upon completion and acceptance of the work. Intent is to block (screen) public view of the construction.
- c. In addition, prior to the start of work, enclose those areas at the construction site which are not within the construction fence with a temporary safety fence, including gates and warning signs, to protect the public from construction activities. The safety fence shall match the base standard color (or bright orange where it protects excavated areas), shall be made of [high density polyethylene grid or approved equal][plastic fence from recovered materials containing 60-100 percent recovered content level plastic], a minimum of 1100 mm 42 inches high, supported and tightly secured to steel posts located on minimum 3000 mm 10 foot centers. Remove the fence from the work site upon completion of the contract.]

#### 2.2.4 Temporary Wiring

Provide temporary wiring in accordance with NFPA 241 and NFPA 70. Include frequent inspection of all equipment and apparatus.

#### [2.2.5 Backflow Preventers

\*\*\*\*\*

**NOTE: Include the following for all projects connecting to a potable water supply.**

**Consider using a lead free, brass body backflow preventer assembly on water lines 50 mm 2 inches or smaller. For water lines greater than 50 mm 2 inches, consider using a cast-iron body backflow preventer assembly.**

**For NAVFAC SW, information on FCCCHR List approved reduced pressure principle backflow devices may be obtained from the Navy Public Works Center, San Diego, Utilities Department, (619) 556-7964.**

**For NAVFAC Hawaii projects include the bracketed text containing NAVFAC Hawaii Water Utilities.**

\*\*\*\*\*

Reduced pressure principle type conforming to the applicable requirements AWWA C511. Provide backflow preventers complete with [65 kg][150 pound] [\_\_\_\_\_] flanged [cast iron], [bronze][brass] mounted gate valve [and strainer], [304][\_\_\_\_\_] stainless steel or bronze, internal parts. [The particular make, model/design, and size of backflow preventers to be installed must be included in the latest edition of the List of Approved Backflow Prevention Assemblies issued by the FCCCHR List and be accompanied

by a Certificate of Full Approval from FCCCHR List.] [After installation conduct Backflow Preventer Tests and provide test reports verifying that the installation meets the FCCCHR Manual Standards.] [After installation, NAVFAC Hawaii Water Utilities shall test and certify backflow preventer. If the temporary water connection needs to be moved to another location during construction, the Contractor shall notify the Contracting Officer in writing a minimum of 5 working days prior to movement. The relocated backflow preventer shall be re-tested and re-certified by NAVFAC Hawaii Water Utilities.]

## ]PART 3 EXECUTION

\*\*\*\*\*  
**NOTE: Delete inapplicable paragraphs, selecting desired options for electricity, water, gas, heating and ventilating, sanitary, and fire protection facilities.**  
\*\*\*\*\*

### 3.1 EMPLOYEE PARKING

Contractor employees will 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 must not interfere with existing and established parking requirements of the government installation.

### 3.2 TEMPORARY BULLETIN BOARD

Locate the bulletin board at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer.

### 3.3 AVAILABILITY AND USE OF UTILITY SERVICES

#### 3.3.1 Temporary Utilities

Provide temporary utilities required for construction. Materials may be new or used, must be adequate for the required usage, not create unsafe conditions, and not violate applicable codes and standards.

#### 3.3.2 Payment for Utility Services

\*\*\*\*\*  
**NOTE: Use the following subparts related to payment of utilities for Army and Navy projects only. NASA does not normally charge for the use of utilities.**

**This paragraph must be coordinated with the Contracting Officer. Coordinate with FAR Clause 52.236-14. Choose one of the following options. For NAVFAC LANT, delete the article if utility service is covered in a Section "Special Conditions for Projects at (\_\_\_\_)"; used for some stations on a regional basis.**

**Government utilities listed in this paragraph may be furnished, if available without interfering with Government needs. These services are not made free of charge except: (1) on Air Force projects; (2) on**

other projects when administrative costs exceed the value of the services; or (3) when otherwise advantageous to the Government. Indicate the point at which the Government will deliver each utility specified and should show pertinent data such as voltage, L/min gal/min, and pipe sizes on the general layout plan or other appropriate drawing. Information regarding the types of utilities available, the rates, the points of connection' and the quantities available should be obtained from the Government.

\*\*\*\*\*

- a. The Government will make all reasonably required utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed will be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. Carefully conserve any utilities furnished without charge.
- b. Reasonable amounts of the following utilities will be made available to the Contractor [without charge.] [at the prevailing rates.] [at the following rates:]

Utility Services		
	Cost (\$) per	Unit
Electricity		
Potable Water		
Salt Water		
Compressed Air		
Steam		
Natural Gas		
Sanitary Sewer		

- c. The point at which the Government will deliver such utilities or services and the quantity available is as indicated. Pay all costs incurred in connecting, converting, and transferring the utilities to the work. Make connections, including [providing backflow-preventing devices on connections to domestic water lines;] [providing meters;] and providing transformers; and make disconnections. [Under no circumstances will taps to base fire hydrants be allowed for obtaining domestic water.]

### 3.3.3 Meters and Temporary Connections

At the Contractors expense and in a manner satisfactory to the Contracting Officer, provide and maintain necessary temporary connections, distribution lines, and meter bases (Government will provide meters) required to measure the amount of each utility used for the purpose of determining charges.

Notify the Contracting Officer, in writing, 5 working days before final electrical connection is desired so that a utilities contract can be established. The Government will provide a meter and make the final hot connection after inspection and approval of the Contractor's temporary wiring installation. The Contractor will not make the final electrical connection.

#### 3.3.4 Advance Deposit

An advance deposit for utilities consisting of an estimated month's usage or a minimum of \$50.00 will be required. The last monthly bills for the fiscal year will normally be offset by the deposit and adjustments will be billed or returned as appropriate. Services to be rendered for the next fiscal year, beginning 1 October, will require a new deposit. Notification of the due date for this deposit will be mailed to the Contractor prior to the end of the current fiscal year.

#### 3.3.5 Final Meter Reading

Before completion of the work and final acceptance of the work by the Government, notify the Contracting Officer, in writing, 5 working days before termination is desired. The Government will take a final meter reading, disconnect service, and remove the meters. Then remove all the temporary distribution lines, meter bases, and associated paraphernalia. Pay all outstanding utility bills before final acceptance of the work by the Government.

#### 3.3.6 Utilities at Special Locations

\*\*\*\*\*

**NOTE: For NAVFAC LANT projects choose one of the following options. For the first option, in the first set of brackets, insert the name of the activity to which application should be made. Include the second bracketed expression for projects located at MCAS Cherry Point.**

\*\*\*\*\*

- a. [Reasonable amounts of utilities will be made available to the Contractor at the prevailing Government rates. These rates may be obtained upon application to the Commanding Officer, [\_\_\_\_], by way of the Contracting Officer. The Contractor will be responsible for making connections, providing transformers and meters, and making disconnections; and for providing backflow preventer devices on connections to domestic water lines. [Neither potable water nor sanitary facilities will be available at the main Contractor laydown area at Marine Corps Air Station (MCAS), Cherry Point, NC.]]

\*\*\*\*\*

**NOTE: Use the following option for projects located in Argentina and the Azores and for Air Force projects in the NAVFAC Atlantic. Use this paragraph for other activities only when approved by the activity.**

\*\*\*\*\*

- b. [Reasonable amounts of utilities will be made available without charge. The Contractor will be responsible for making connections, providing transformers and meters, and making disconnections; and for

providing backflow preventer devices on connections to domestic water lines. Under no circumstances will taps to base fire hydrants be allowed for obtaining domestic water.]

\*\*\*\*\*  
**NOTE: Use the following option only for MCON funded  
and non-appropriated funds projects at Marine Corps  
Base, Camp Lejeune and Marine Corps Air Station  
(Helicopter (H)), New River.**  
\*\*\*\*\*

[Reasonable amounts of utilities will be made available to the Contractor at the prevailing Government rates and may be obtained upon application to the Base Maintenance Officer, Bldg. 1202, Marine Corps Base, Camp Lejeune. A refundable security deposit to the Resident Officer in Charge of Construction shall be made prior to application for services. Provide transformers, meter bases, electrical service poles and drops for electrical services, and backflow preventer devices on connections to domestic water lines. Final taps and tie-ins to the Government utility grid will be made by Base Maintenance who will also provide and seal a 120 or 208 volt, three-wire kWh meter. Tap-in cost, if any, shall be the responsibility of the Contractor. Tampering or movement of a sealed meter without notification to base maintenance is grounds for discontinuance of electrical service. Provide larger meters required if they are not available from the Government. The Contractor is responsible for the cost of utility services required until the date of Government acceptance. Under no circumstances will taps to base fire hydrants be allowed for obtaining domestic water.]

[3.3.6.1 Utilities at Guam by Contractor for Special Projects

Contact the Government of Guam for water and electricity.

][3.3.6.2 Utility Services at Midway

- a. Potable water is rationed during dry periods and not available for construction purposes during the months of June and July.
- b. Electrical power available, primary voltage is 2400 volt 3 phase, 3 wire, 60 cycle AC. Secondary voltages may be 120/208 or 120/240 volts.
- c. Provide new meters for potable water, brackish water and electricity. The cost of utility services furnished may be reduced by the cost the Government would normally pay for comparable meters if, at the end of the job, the meters are delivered to the Government in good condition.

][3.3.7 Utility Services for Diego Garcia Projects

- a. Potable water will be made available to Contractor's office and housing. The prevailing rate for potable water is \$2.07 per thousand gallons.
- b. No charge for brackish water.
- c. Electrical power available is primary, 2400 volt 3 phase, 3 wire, 60 cycle AC, secondary voltages may be 120/208 or 120/240 volts. The prevailing rate for electricity is \$0.0647 per kilowatt hour (KWH).
- d. Sewage costs at \$1.09 per 3800 L KGAL.

- e. Provide new meters for potable water and electricity. The cost of utility services furnished may be reduced by the cost the Government would normally pay for comparable meters if, at the end of the job, the meters are delivered to the Government in good condition.

#### [3.3.7.1 Contractor-Owned and Operated Radio Telecommunications

\*\*\*\*\*  
**NOTE: Use for Diego Garcia projects.**  
\*\*\*\*\*

If approved, the Contractor may erect a transmitter/receiver and antenna. Submit for approval, 30 calendar days prior to the use of the equipment, the type of radio equipment power and band width of the equipment.

#### ]3.3.7.2 Off-Island

\*\*\*\*\*  
**NOTE: Use for Diego Garcia projects.**  
\*\*\*\*\*

The Government will provide military message communication from Diego Garcia at no cost. The Contractor is responsible for the cost of retransmitting messages through commercial sources. Process messages through the Contracting Officer. Messages will be screened and limited use of communication facilities will be permitted. Private messages will be permitted only for emergencies. The Navy voice communication system will not be available for use by the Contractor. A local vendor provides commercial voice and teletype services for [\$3.32][\_\_\_\_\_] per minute.

#### ]3.3.8 Utility Services for Wake Island

- [a. Potable water may not be available for construction during dry periods. Desalinized water available during dry periods at \$1300.00 per day for 114-150 kL 30,000-40,000 gallons per day.
- b. Available primary voltage is 4160 volts, 3 phase, 3 wire, 60 cycle. Secondary is 120/208 volts, 3 phase, 60 cycle.]

#### [3.3.9 Telephones at Midway, Wake, and Diego Garcia

On-Island service may be obtained if lines are available. Make arrangements through the Contracting Officer. The prevailing rate for cable or wireless is \$100.00 per phone. There is no charge for on-island telephone service. [Current rates are [\$\_\_\_\_\_] per month for each private telephone line plus an installation charge of [\$\_\_\_\_\_] for each instrument and [\$\_\_\_\_\_] per month for two-party lines plus [\$\_\_\_\_\_] per month for each extension. Pay for the cost of the wiring on runs in excess of two spans]. Long distance services are usually available at commercial rates. The Navy Radio Communication System or Defense Switch Network will not be available for use. [Limited teletypewriter circuit service is available.]

#### ]3.3.10 Electricity

\*\*\*\*\*  
**NOTE: Use the following subparts for NASA projects only.**  
\*\*\*\*\*

Provide connections, sized to provide service required for power and lighting. Locate feeder and branch wiring with area distribution boxes so that power is available throughout the project site by use of power cords. [120/240][ and ][480] electrical volt feeder service is available. Provide lighting as required for safe and secure operations. Electricity used will [not ]be furnished by the Government. [Maximum power supplied by the Government will be [\_\_\_\_].]

#### 3.3.11 Water

Make connections to existing facilities to provide water for construction purposes. Water used will[ not] be furnished by the Government.

#### 3.3.12 Sanitation

a. Provide and maintain within the construction area minimum field-type sanitary facilities approved by the Contracting Officer and periodically empty wastes into a municipal, district, or station sanitary sewage system, or remove waste to a commercial facility. Obtain approval from the system owner prior to discharge into any municipal, district, or commercial sanitary sewer system. Any penalties and / or fines associated with improper discharge will be the responsibility of the Contractor. Coordinate with the Contracting Officer and follow station regulations and procedures when discharging into the station sanitary sewer system. Maintain these conveniences at all times without nuisance. Include provisions for pest control and elimination of odors. Government toilet facilities will not be available to Contractor's personnel.

b. Provide temporary sewer and sanitation facilities that are self-contained units with both urinals and stool capabilities. Ventilate the units to control odors and fumes and empty and clean them at least once a week or more often if required by the Contracting Officer. The doors shall be self-closing. The exterior of the unit shall match the base standard color. Locate the facility behind the construction fence or out of the public view.

#### 3.3.13 Telephone

Make arrangements and pay all costs for telephone facilities desired.

#### 3.3.14 Obstruction Lighting of Cranes

Provide a minimum of 2 aviation red or high intensity white obstruction lights on temporary structures (including cranes) over 30 meter 100 feet above ground level. Light construction and installation must comply with FAA AC 70/7460-1. Lights must be operational during periods of reduced visibility, darkness, and as directed by the Contracting Officer.

#### 3.3.15 Fire Protection

Provide temporary fire protection equipment for the protection of personnel and property during construction. Remove debris and flammable materials [daily][weekly][monthly] to minimize potential hazards.

### 3.4 TRAFFIC PROVISIONS

#### 3.4.1 Maintenance of Traffic

- a. Conduct operations in a manner that will not close any thoroughfare or interfere in any way with traffic on railways or highways except with written permission of the Contracting Officer at least 15 calendar days prior to the proposed modification date, and provide a Traffic Control Plan detailing the proposed controls to traffic movement for approval. The plan must be in accordance with State and local regulations and the MUTCD, Part VI. [Make all notifications and obtain any permits required for modification to traffic movements outside Station's jurisdiction.]. Contractor may move oversized and slow-moving vehicles to the worksite provided requirements of the highway authority have been met.
- b. Conduct work so as to minimize obstruction of traffic, and maintain traffic on at least half of the roadway width at all times. Obtain approval from the Contracting Officer prior to starting any activity that will obstruct traffic.
- c. Provide, erect, and maintain, at contractors expense, lights, barriers, signals, passageways, detours, and other items, that may be required by the Life Safety Signage, overhead protection authority having jurisdiction.

#### 3.4.2 Protection of Traffic

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 the work, and the erection and maintenance of adequate warning, danger, and direction signs, will be as required by the State and local authorities having jurisdiction. Protect the traveling public from damage to person and property. Minimize the interference with public traffic on roads selected for hauling material to and from the site. Investigate the adequacy of existing roads and their allowable load limit. Contractor is responsible for the repair of any damage to roads caused by construction operations.

#### 3.4.3 Rush Hour Restrictions

Do not interfere with the peak traffic flows preceding and during normal operations for [\_\_\_\_\_] without notification to and approval by the Contracting Officer.

#### 3.4.4 Dust Control

Dust control methods and procedures must be approved by the Contracting Officer. Treat dust abatement on access roads with applications of calcium chloride, water sprinklers, or similar methods or treatment.

#### [3.4.5 Commercial Vehicles In/Out of NAVSTA/NAS Norfolk, VA

\*\*\*\*\*

**NOTE: Use the following paragraphs only for  
projects located at Naval Station (NAVSTA) or Naval  
Air Station (NAS), Norfolk, VA.**



\*\*\*\*\*

a. Definitions. Commercial vans and trucks are differentiated as follows:

- (1) Closed truck. A truck enclosed on four sides, top, and bottom to which entry can be made only through end or side doors and to which a seal can be applied.
- (2) Open truck. A truck which is either fully open, such as flatbed, or contained by wooden slats or sideboards; or any truck to which a seal cannot be applied.
- (3) Commercial vehicles. A common contract or commercial truck without a decal issued by Norfolk, VA.
- (4) Trailer. A non-self-propelled enclosed cargo container used for the transportation of goods, e.g., a trailer pulled by a truck.

b. Instructions and directions. Ensure that commercial trucks and trailers follow the instructions below to provide for effective control over their entry and exit from the base, movement within the base, and to reduce congestion both at the gates and within the base. In general, commercial trucks and common carriers are required to enter and exit through specified gates and process immediately to a truck control point for cargo manifest check. The driver shall be issued a Material Movement Control and Gate Pass, routing instructions, and directions to depart the base via a designated exit point where the pass is to be turned in.

- (1) Common contract and commercial trucks going to the area of Building LP-84 (MAC Terminal), NAS Norfolk shall enter and exit Gate 22. Gate 22 hours of operations are 5:30 a.m. through 6:30 p.m. and 10:30 p.m. through 3:00 a.m., 7 days a week. The gate is closed on holidays.
- (2) Other common contract and commercial trucks, except as noted below are allowed to enter the Naval Base through any Gate and exit through Gate 2.
- (3) Common contract and commercial trucks which enter the base may depart through Gate 5, Gate 4, and Gate 22 only. The exit Truck Control Point at Gate 4 is operated from 7:00 a.m. to 5:00 p.m.
- (4) For concrete- and asphalt-carrying trucks, the Resident Officer in Charge of Construction (ROICC), Norfolk VA shall arrange entry and exit through any gate other than Gate 2.
- (5) Contractor vehicles with black Norfolk Naval Base decals shall be granted routine access to the base at all times. These trucks shall not enter or exit the base through Gate 2. These trucks are subject to random checks and searches at exit gates like other personal and commercial vehicles to ensure that Government property is not being taken off the base without authorization and documentation.

c. Movement and Exit

- (1) Material movement control and gate pass. A Material Movement Control and Gate Pass (5ND GEN 5510/1) is required for the removal

of Government, public, or private property from NAVSTA and NAS Norfolk complex via commercial vans and truck.

(a) The Material Movement Control and Gate Pass shall be originated by the Naval Base Police Truck Control Officer, and shall be given to drivers of commercial trucks for retention during transit to intermediate stops and to the exit gates. The pass shall be presented by the driver to the Truck Control Officer at the exit truck stop. If the driver has more than one delivery or pickup point, the driver shall present the pass at each stop so the new activity may fill in appropriate information on the pass. A copy of the pass shall be retained by each activity after appropriate information has been entered; remaining copies of the pass shall be returned to the driver. Passes are subject to review by the Naval Base Police Department during transit and within command areas by activity officials for verification of cargo content and to determine if drivers are transiting promptly and by the proper route. For trailers expecting to be picked up and depart outside normal working hours, pre-prepared passes shall be provided by the activity duty officer or authorized supervising person prior to close of working hours. Trucking companies expecting to pick up trailers after working hours should be instructed to pick up a Material Movement Control and Gate Pass from the responsible activity. The activity duty officer or official shall notify Base Police Headquarters to clear the truck for exit at Gate 5 if the seal and Material Movement Control and Gate Pass are in order.

(b) When filling out a Material Movement Control and Gate Pass, the last activity where business is conducted on the base is responsible to ensure that the original of the pass is given to the driver to turn in to the Truck Control officer at the truck control stops.

(c) The Material Movement Control and Gate Pass shall be turned in by the vehicle driver to a base police officer at a truck control stop when he departs from the base.

(d) Government or commercial vehicles departing Naval Base, Norfolk with Government, public, or private property shall possess a Material Movement Control and Gate Pass filled out by a naval officer or equivalent grade civilian within the driver's chain of command. The Material Movement Control and Gate Pass shall be inspected and verified during random gate departure searches.

## (2) Car Seals

(a) Commercial, sealable, closed trailers and trucks, full, partially full, or empty, destined to leave the base shall be sealed upon departure from any activity. The seal number and trailer or truck number shall be entered on the Material Movement Control and Gate Pass.

(b) Commercial closed trailers and trucks received empty for loading with Government material shall have a Navy car seal affixed to cargo doors after loading and prior to departing through designated gates.

(c) Closed trailers and trucks which have been only partially

loaded or off-loaded shall be sealed completely at the end of working hours with a Navy car seal.

(d) Application of Navy car seals is the responsibility of the activity in charge of loading and unloading of trailers and trucks.

(e) The Naval Base Police Department will conduct random checks of contents, seals, and forms of trailers and trucks on the Naval Base complex.

(f) A truck driver whose van or truck does not have a properly completed Material Movement Control and Gate Pass or car seal will be refused exit clearance.

### 13.5 CONTRACTOR'S TEMPORARY FACILITIES

\*\*\*\*\*  
**NOTE: For NASA projects use the following paragraph  
and insert NASA center regulatory document number  
and time period compliance.**  
\*\*\*\*\*

Contractor-owned or -leased trailers must be identified by Government assigned numbers. Size and location of the number will comply with [\_\_\_\_]. Apply the number to the trailer within [14][\_\_\_\_] calendar days of notification, or sooner, if directed by the Government.

#### 3.5.1 Safety

Protect the integrity of any installed safety systems or personnel safety devices. If entrance into systems serving safety devices is required, the Contractor must obtain prior approval from the Contracting Officer. If it is temporarily necessary to remove or disable personnel safety devices in order to accomplish contract requirements, provide alternative means of protection prior to removing or disabling any permanently installed safety devices or equipment and obtain approval from the Contracting Officer.

#### 3.5.2 Administrative Field Offices

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.

#### 3.5.3 Storage Area

Construct a temporary 1.8 m 6 foot high chain link fence around trailers and materials. 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. Do not place or store Trailers, materials, or equipment 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 installation boundaries. Trailers, equipment, or materials must not be open to public view with the exception of those items which are in support of ongoing work on any given day. Do not stockpile materials outside the fence in preparation for the next day's work. Park mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment within the fenced area at the end of each work day.

#### 3.5.4 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 will be within the installation boundaries. Fencing of materials or equipment will not be required at this site; however, the Contractor is 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.

#### 3.5.5 Appearance of Trailers

- a. Trailers utilized by the Contractor for administrative or material storage purposes must present a clean and neat exterior appearance and 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 installation property.

\*\*\*\*\*

**NOTE: For NAVFAC SE projects at the Charleston Air Force Base and for other NAVFAC SE projects as determined by the Contracting Officer, use the first painting option. Consult the Contracting Officer for base paint standards.**

\*\*\*\*\*

- b. [Paint in accordance with facility standards][Paint using suitable paint] and maintain the temporary facilities. Failure to do so will be sufficient reason to require their removal.

#### 3.5.6 Trailers or Storage Buildings

\*\*\*\*\*

**NOTE: Use this paragraph for projects located on the Naval Base Complex, Norfolk, Virginia.**

\*\*\*\*\*

- a. Trailers or storage buildings will be permitted, where space is available, subject to the approval of the Contracting Officer. The trailers or buildings shall be in good condition, free from visible damage rust and deterioration, and meet all applicable safety requirements. Trailers shall be roadworthy and comply with all appropriate state and local vehicle requirements. Failure to maintain storage trailers or buildings to these standards shall result in the removal of non-complying units at the Contractor's expense. A sign not smaller than 600 by 600 mm 24 by 24 inches shall be conspicuously placed on the trailer depicting the company name, business phone number, and emergency phone number. Trailers shall be anchored to resist high winds and must meet applicable state of local standards for anchoring mobile trailers.
- b. NAVFACENGCOM LANT Trailer Sign. A sign shall be mounted on the trailer or building that shows the company name, phone number, emergency phone number and conforms to the following requirements and sketch :

Graphic panel	Aluminum, painted blue
Copy	Screen painted or vinyl die-cut, white
Typeface	Univers 65 u/lc
See Sketch No. 01500 (graphic).	

### 3.5.7 Maintenance of Storage Area

- a. Keep fencing in a state of good repair and proper alignment. Grassed or unpaved areas, which are not established roadways, will be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways, should the Contractor elect to traverse them with construction equipment or other vehicles; gravel gradation will be at the Contractor's discretion. Mow and maintain grass located within the boundaries of the construction site for the duration of the project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers will be edged or trimmed neatly.

\*\*\*\*\*  
**NOTE: Use the following paragraph for NAVFAC SE projects at the Charleston Air Force Base, for other NAVFAC SE projects, and for NAVGFAC NW projects as determined by the Contracting Officer based on project size, scope, complexity, and visibility.**  
 \*\*\*\*\*

- b. Cut grass (or annual weeds) within the construction and storage sites to a maximum 100 mm 4 inch height at least once a week during the growing season unless the grass area is not visible to the public. Trim the grass around fences at time of grass cutting. Maintain grass or weeds on stockpiled earth as described above.

### 3.5.8 New Building

In the event a new building is constructed for the temporary project field office, it will be a minimum 3.6 m 12 feet in width, 5 m 16 feet in length and have a minimum of 2.1 m 7 feet headroom. Equip the building with approved electrical wiring, at least one double convenience outlet and the required switches and fuses to provide 110-120 volt power. Provide a work table with stool, desk with chair, two additional chairs, and one legal size file cabinet that can be locked. The building must be waterproof, supplied with a heater, 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 must be furnished. Screen the windows and doors and provide the doors with dead bolt type locking devices or a padlock and heavy duty hasp bolted to the door. Door hinge pins will be non-removable. Arrange the windows to open and to be securely fastened from the inside. Protect glass panels in windows by bars or heavy mesh screens to prevent easy access. In warm weather, furnish 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. Any

new building erected for a temporary field office must be maintained by the Contractor during the life of the contract and upon completion and acceptance of the work become the property of the Contractor and removed from the site.

#### 3.5.9 Security Provisions

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

#### [3.5.10 Storage Size and Location

The [roofed][enclosed][open] site available for storage must be [confined to the indicated operations area][within 300 m 1,000 feet of the operations area][as indicated]. The storage area will be approximately [\_\_\_\_\_] square meter square feet.

#### ] [3.5.11 Storage in Existing Buildings

The Contractor will be working [in][around] existing building[s]; the storage of material [will be allowed in a [\_\_\_\_\_] square meter square foot area][where indicated][will not be allowed in the building[s]]. [Provide 2.4 m 8 foot high security fence with a lockable gate around the storage area. Remove at the completion of work.]

#### ] 3.5.12 Weather Protection of Temporary Facilities and Stored Materials

Take necessary precautions to ensure that roof openings and other critical openings in the building are monitored carefully. Take immediate actions required to seal off such openings when rain or other detrimental weather is imminent, and at the end of each workday. Ensure that the openings are completely sealed off to protect materials and equipment in the building from damage.

#### 3.5.12.1 Building and Site Storm Protection

When a warning of gale force winds is issued, take precautions to minimize danger to persons, and protect the work and nearby Government property. Precautions must include, but are not limited to, closing openings; removing loose materials, tools and equipment from exposed locations; and removing or securing scaffolding and other temporary work. Close openings in the work when storms of lesser intensity pose a threat to the work or any nearby Government property.

### 3.6 GOVERNMENT FIELD OFFICE

#### 3.6.1 Resident Engineer's Office

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. Provide a mail slot in the door or a lockable mail box mounted on the surface of the door. Include a 1200 by 2400 mm 4 by 8 foot plan table, [computer work space] a standard size office desk and chair, and telephone. At completion of the project, the office will remain

the property of the Contractor and be removed from the site. Utilities will be connected and disconnected in accordance with local codes and to the satisfaction of the Contracting Officer.

#### [3.6.2 Quality Control Manager Records and Field Office

\*\*\*\*\*

**NOTE: Include this paragraph when project has  
separate QC Manager and project Superintendent.  
Edit to suit the size and location of the project.**

\*\*\*\*\*

Provide on the jobsite an office with approximately [9][18][\_\_\_\_\_] square meter [100][200][\_\_\_\_\_] square feet of useful floor area for the exclusive use of the QC Manager. Provide a weathertight structure with adequate [heating and cooling,] toilet facilities, lighting, ventilation, a 1200 by 2400 mm 4 by 8 foot plan table, a standard size office desk and chair, computer station, and working communications facilities. [Provide either a 1,500 watt radiant heater and a window-mounted air conditioner rated at 2.6 kW 9,000 Btus minimum or a window-mounted heat pump of the same minimum heating and cooling ratings.] Provide a door with a cylinder lock and windows with locking hardware. Make utility connections. Locate [as directed][where indicated]. File quality control records in the office and make available at all times to the Government. After completion of the work, remove the entire structure from the site.

#### [3.6.3 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. Securely anchor the trailer to the ground at all four corners to guard against movement during high winds.

#### 3.7 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 must install a satisfactory means of communication, such as telephone or other suitable devices and made available for use by Government personnel.

#### 3.8 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, furnish and erect temporary project safety fencing at the work site. Maintain the safety fencing during the life of the contract and, upon completion and acceptance of the work, will become the property of the Contractor and be removed from the work site.

#### 3.9 DUMPSTERS

\*\*\*\*\*

**NOTE: Use this paragraph for NAVFAC SE projects  
only. Use the bracketed item where visibility to  
the public is an issue.**

\*\*\*\*\*

Equip dumpsters with a secure cover and paint the standard installation color. Keep dumpster closed, except when being loaded with trash and

debris.[ Locate dumpsters behind the construction fence or out of the public view.] Empty site dumpsters at least once a week, or as needed to keep the site free of debris and trash. If necessary, provide 200 liter 55 gallon trash containers painted the darker installation color to collect debris in the construction site area. For large demolitions, large dumpsters without lids are acceptable, but must not have debris higher than the sides before emptying.

### 3.10 CLEANUP

Remove construction debris, waste materials, packaging material and the like from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways must be cleaned away. Store any salvageable materials resulting from demolition activities within the fenced area described above or at the supplemental storage area. Neatly stack stored materials not in trailers, whether new or salvaged.

### 3.11 RESTORATION OF STORAGE AREA

Upon completion of the project remove the bulletin board, signs, barricades, haul roads, and any other temporary products from the site. After removal of trailers, materials, and equipment from within the fenced area, remove the fence that will become the property of the Contractor. Restore areas used by the Contractor for the storage of equipment or material, or other use to the original or better condition. Remove gravel used to traverse grassed areas and restore the area to its original condition, including top soil and seeding as necessary.

-- End of Section --