

**TECHNICAL MANUAL**

**CONTRACTING FOR CUSTODIAL  
SERVICES AT ARMY FACILITIES  
OTHER THAN MEDICAL AND  
INDUSTRIAL FACILITIES**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

**APRIL 1978**

**CONTRACTING FOR CUSTODIAL SERVICES  
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 AND INDUSTRIAL FACILITIES**

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\*This manual supersedes TB ENG 400, 10 October 1961.

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# CHAPTER 1

## GENERAL

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**1-1. Purpose.** This manual is a guide and basic reference for facility engineers and other personnel engaged in the preparation of contract documents and the administration of custodial services obtained by contract. It covers the preparation of special conditions, technical specifications, and bid schedules; and it defines some of the specific ASPR clauses which should be included in the general provisions of the custodial services contract. Additionally, it covers policies and procedures concerning the monitoring and administration of the special conditions, technical specifications, and bid schedules by facility engineering personnel and concerning soil reduction and improvement in maintainability of facilities.

**1-2. Applicability.** The material contained herein is applicable to all Army facilities other than medical and industrial facilities.

**1-3. Responsibility.** The facility engineer has the responsibility of preparing the special conditions, technical specifications, and bid schedules for contracting custodial services and for monitoring the performance of the contractor with regard to these sections. Additionally, the facility engineer has the responsibility for reducing the soiling and improving the maintainability of facilities whenever practical.

### 1-4. Approach

#### 1-4.1. *Background*

**1-4.1.1.** A specific level of cleanliness is extremely difficult to define and is even more difficult to measure. A system to measure levels of cleanliness would have to include measurements of such parameters as loose, tangible soil—such as litter or grit; other visible soil—such as stains and discolorations; the presence and intensity of obnoxious odors; counts and growth rates of bacteria; the specific locations of soil (chewing gum or cigarette butts left in a water fountain would certainly detract from the cleanliness more than if such items were left in an ashtray); and many other factors.

**1-4.1.2.** Because of the difficulty in defining levels of cleanliness, Governmental cleaning contract specifications have often been ambiguous. The ambiguities have resulted in misunderstandings by bidders as to the desires of the government. As a result, bids based on the same set of specifications often vary widely. In fact, the accepted bid is some times so low that it is physically and financially impossible for the contractor to achieve the results desired by the Government.

**1-4.1.3.** The difficulty in measuring and defining cleanliness has led to instances in which the Government has accepted performance by the Contractor which neither complied with the required specifications nor yielded the intended results.

**1-4.1.4.** Because of these problems and the tendency of individuals to include their personal concepts of cleanliness in preparing and approving cleaning specifications, such specifications have become more detailed, more complex, often unnecessarily stringent, and always difficult to administer.

**1-4.1.5.** Because of limited knowledge of the technology of cleaning, Government personnel involved in preparing specifications have often concentrated on high levels of appearance while neglecting factors which contribute to the health and safety of occupants of an area or the protection of building surfaces, furnishings, and equipment.

**1-4.1.6.** Because of the emphasis on evaluating appearance without also monitoring the inputs of the cleaning process, many contractors have continually used inferior methods, equipment, tools, and chemicals. As a result, the Government has continually paid for custodial services which rely on ineffective or inferior techniques.

#### 1-4.2. *Type of Contract.*

**1-4.2.1.** The concept of this document emphasizes not only the results but the inputs of the cleaning process. The type of chemicals, equipment, methods and procedures to be used are specified. Also, the minimum number of worked-hours to be ex-

pended for routine tasks in each area is specified. These factors can, for the most part, be quantified and provide a more sound basis for evaluating the contractor's performance than a purely subjective evaluation of the appearance of the areas. On some occasions, contractors have gradually reduced the level of service until it was noticed and then returned to the required level of performance only when the Government complained. The approach of this document reduces the chances of such actions by the contractor. In other words, the Government is more likely to obtain a consistent level of service at a competitive price, but not at a price that is low simply because the contractor plans to provide the Government with less service sometime during the term of the contract. In addition to specifying requirements for chemicals, tools and equipment, methods and worked-hours for routine work, the bid schedule included in this document requires the contractor to specify the minimum number of supervisory personnel to be provided, and to describe the supervisory organization. The special conditions section of this document requires that the contractor provide this minimum level of supervision each week.

**1-4.2.2.** Even though this approach emphasizes the inputs, the results of the Contractor's performance must meet the performance standards as defined in the Technical Specifications.

**1-4.2.3.** Although this approach, to a large extent, defines the technology to be used by the contractor, a value engineering incentive clause, in the contract encourages the contractor to make improvements and innovations.

**1-4.2.4.** No contract document alone can insure that cleaning objectives can be met at the most economical price. The contract must be administered by a competent individual who has been adequately trained in cleaning technology and inspection techniques. The work must be performed by a competent and cooperative contractor.

## **1-5. The Technical Representative of the Facility Engineer.**

**1-5.1. Technical Assistance.** In order to properly prepare and administer the custodial services contract, the facility engineer normally will require technical assistance.

**1-5.2. Staffing.** The amount of time (Or the number of technical representatives) devoted to contract preparation and administration should be based on the amount of work involved and will vary from installation to installation (para 4-1.7.)

**1-5.3. Scheduling.** In order for the custodial

services to be observed while the work is in progress, the Technical Representative must spend considerable time on the evening or night shift unless the work is performed during the day shift. The normal work schedule of the Technical Representative must also be varied to observe conditions in an area during the area's normal period of occupancy.

**1-5.4. Communication.** The technical representative must have an adequate means of communication available for use at all times during the inspection of the work. A telephone must be available for receiving complaints from building custodian/monitors and for communicating with the contractor's job manager. Whenever the technical representative is away from the office, a means of contact such as a radio should be available and clerical support should be assigned to receive and relay telephone messages.

**1-5.5. Transportation.** The technical representative must have an adequate means of transportation available. Normally some type of powered vehicle is necessary unless the area involved is small and centralized.

## **1-6. What the Technical Representative Must Know.**

**1-6.1. Recent Innovations.** Progress in the technology of cleaning has greatly improved the productivity of custodial service activities in the last few years. This increase in productivity was brought about by the development of new techniques, more efficient tools and equipment, and more effective cleaning chemicals. However, this advance in technology has not been utilized by custodial service contractors at most military installations. Since cleanliness is a highly subjective concept and is very difficult to measure, the process of competitive bidding alone will not assure that the Government will benefit from these improvements. In most instances, lower bids are based on the intention of the contractor to provide less than the specified service-not on productivity. Since the approach to contracting custodial services defined in this document specifies, to a large extent, the technology to be utilized by the contractor; the individuals preparing and administering the contract must be well trained in such technology.

**1-6.2. Chemicals.** The technical representative must be able to determine which types of chemicals should and should not be used to clean and disinfect the various types of surface finishes. The determination is made by reviewing product labels and certificates of compliance of the various chemicals used by the contractor. The chemicals used

must comply with the appropriate chemical specifications. The technical representative must also ascertain by observing the chemicals being used, that they are mixed and used correctly.

**1-6.3. *Equipment and Tools.*** The technical representative must be able to determine which types of tools and equipment should and should not be used in the various cleaning operations. This determination is made by reviewing the specifications of the equipment and tools used by the contractor. The equipment and tools must comply with the requirements of the contract. The Technical Representative must ascertain by observing the various types of equipment being used that they are being used correctly and are in good operating condition. The minimum types and quantities of equipment to be specified for each building, or large area in larger buildings, must also be determined by the Technical Representative.

**1-6.4. *Techniques and Application.*** The technical representative must be able to determine the most appropriate cleaning techniques and methods to be used in performing the various cleaning tasks and must be able to determine if these techniques are being correctly performed.

**1-6.5. *Scheduling of the Work.*** The technical representative must be able to determine during what time periods the work must be performed in order not to unnecessarily interfere with or interrupt the occupants of the various areas, and must be able to determine the frequency and scheduling of the various project work such as stripping and refinishing, carpet shampooing, wall washing, etc.

**1-6.6. *Minimum Worked-Hours for Routine Work.*** The technical representative must be able to determine the minimum number of worked-hours to be specified for routine cleaning of the various areas.

**1-6.7. *Soil Reduction and Maintainability.*** The technical representative must be able to determine when the soiling of buildings or areas can be economically reduced without unnecessary hindrance to building occupants. One of the most important aspects of soil reduction is knowledge of the types and applications of entrance mats and runners.

**1-6.8. *Levels of Cleaning.*** The technical representative must be able to recommend and define specifications for levels of cleaning for various types of areas in terms of tasks and their frequencies of performance.

**1-6.9. *Results.*** The technical representative must be able to ascertain by inspection, during the cleaning process and after completion of the work, that performance standards have been achieved.

## **1-7. Building Custodian/Monitors**

**1-7.1. *Assistance.*** It is not practical for facility engineering personnel to attempt to inspect all areas serviced by the contractor on a daily basis. Therefore, the technical representative must rely to a large extent, on feedback from the persons occupying each area. Each building or each large area within a larger building or each group of smaller buildings must have an individual appointed to serve as the custodian/monitor for that area. The custodian/monitor must be informed by the technical representative of the services the Contractor is to provide.

**1-7.2. *Reporting of Appearance Deficiencies.*** Whenever significant nonperformance by the contractor occurs and can be detected by the appearance of an area, the custodian/monitor should report this information to the Technical Representative for follow-up action.

## **1-8. Clauses to be Included in the General Provisions**

**1-8.1. *Responsibility.*** The Facility Engineer should coordinate activities with the Contracting Officer to insure that the clauses in 1-8.2 through 1-8.7 below are included in the general provisions of the contract document.

### **1-8.2. *Contract Term***

**1-8.2.1.** The contract general provisions shall specify that the term of the contract shall be for an initial period of 1 year, beginning with the date specified in the notice to the contractor to proceed. The initial contract period term may be extended for two additional 1 year terms at the sole discretion of the Government.

**1-8.2.2.** Unless the contractor's performance has been consistently below expectations, it is normally in the best interests of the Government to extend the contract to the second and third terms. Although they are difficult to isolate and quantify, significant costs are associated with changing contractors. In many cases, these costs alone would offset any price reduction resulting from solicitations of bids each year. When the entire term of a contract is only 1 year, all costs of equipment and other one-time start-up costs must be amortized and recovered by the contractor within that year. This increases the costs of the contractor's services and increases the prices the Government must pay for these services. Also, when working under 1-year-only contracts, some contractors will postpone once-a-year project work as long as possible and perform these projects at a minimum level of quality (if at all). Even though the organizational

relationship between the contractor and those Government personnel administering the contract is clearly specified, different contractors have different supervisory and management styles. The increased familiarization with these styles which would come after 1 year's service could simplify the administration of the contract and provide other advantages to the Government.

**1-8.3. Bid Guarantee.** All bids must be accompanied by a bid guarantee of not less than 20 percent of the total contract price for one year.

**1-8.4. Performance and Payment Bond.** The selected bidder must provide a Performance and Payment Bond of not less than 50 percent of the total contract price for 1 year.

**1-8.5. Inspection of Services.** ASPR 7-1902-4,

Inspection of Services, shall be included in the General Provisions.

**1-8.6. Value Engineering Incentive.** The Value Engineering Incentive clause in ASPR 7-104.44 (a) shall be included in the General Provisions of the contract (ASPR 1-1702.1)

**1-8.7. Payments Clause.** The contract shall contain the Payments clause set out in ASPR 7-103.7. In addition, the following clause shall be included in the contract:

"RETAINAGE FROM PAYMENTS. In making payments of invoices or vouchers under the terms of the Payments clause of this contract, there shall be retained 10 percent of the amount of each invoice or voucher pending final completion of the contract."



## CHAPTER 2

### PREPARING THE CONTRACT DOCUMENTS

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#### 2-1. Introduction.

**2-1.1. Scope.** This chapter provides technical guidance to facility Engineering personnel in the preparation of specifications for contracting custodial services.

**2-1.2. Responsibility.** The facility engineer has the responsibility for the preparation of the following portions of the contract.

**2-1.2.1. Special Conditions.**

**2-1.2.2. Technical Specifications.**

**2-1.2.3. Bid Schedules.**

**2-1.2.4. Plans.**

**2-1.3. Guide Specifications.** The guide specifications for the preparation of these portions of the contract are included in appendixes B, C, and D. The explanation and instruction for using these guide specifications are contained in this chapter.

**2-1.4. Changes.** In reviewing these guide specifications, facility engineering personnel may have to make revisions or alternations and will have to make certain additions; however, the approach to contracting custodial services, as defined in chapter 1, must not be altered.

#### 2-2. Preparing the Special Conditions

**2-2.1. Contents.** The special conditions portion of the contract defines the basic parameters within which the Contractor shall perform the work. Guide specifications for the special conditions are included in appendix B.

**2-2.2. Incomplete Paragraphs.** Facility engineering personnel must complete the following paragraphs of appendix B.

**2-2.2.1.** Paragraph 24 entitled "Correction of Non-Performance of Routine Work."

**2-2.2.2.** Paragraph 28-1 entitled "Government Furnished Items for Routine Work."

**2-2.2.3.** Paragraph 29 entitled "Parking for Contractor's Employees and Contractor's Vehicles."

**2-2.2.4.** Paragraph 30 entitled "Contractor's Access to the Site(s) of the Work."

**2-2.2.5.** Paragraph 31 entitled "Post Regulations."

#### 2-3. Preparing the Technical Specifications.

**2-3.1. Contents.** The technical specifications portion of the contract contains a definition of the "key ingredients" of the cleaning process (such as chemicals, tools, and equipment), the work to be accomplished, the time frame within which the work must be completed, and the standards of performance for the contractor.

##### 2-3.2. Chemicals.

**2-3.2.1.** The types of chemicals to be used by the contractor in the performance of the work will be defined in the technical specifications in section 1—Chemicals, appendix C.

**2-3.2.2.** The container size and the Federal specification number and/or three approved brands for each type of chemical will also be defined.

**2-3.2.3.** If any additional types of chemicals which are not already included in appendix C are required to safely or productively perform the work, they must be included in section 1—Chemicals.

**2-3.2.4.** Any restrictions as to types of chemicals which can be used by the Contractor in the performance of the work must be included in paragraph 1-2, Section 1—Chemicals.

##### 2-3.3. Tools.

**2-3.3.1.** The types of tools to be used by the contractor in the performance of the work will be defined in the technical specifications in section 2—Tools, appendix C.

**2-3.3.2.** Requirements for the Contractor to issue specific types of tools to employees are included in paragraph 2-2, section 2—Tool Assignment.

**2-3.3.3.** Any restrictions as to the types of tools to be used by the Contractor in the performance of the work will be included in paragraph 2-3, section 2—Tools.

**2-3.3.4.** If any additional types of tools which are not already included in appendix C are required

to safely or productively perform the work, they must be included in section 2—Tools.

#### **2-3.4. Equipment.**

**2-3.4.1.** The types of equipment to be used by the contractor in the performance of the work will be defined in the technical specifications in section 3—Equipment, appendix C.

**2-3.4.2.** Any restrictions as to the types of equipment which may be used by the Contractor in the performance of the work will be defined in the technical specifications, section 3—Equipment.

**2-3.4.3.** If any additional types of equipment which are not already included in appendix C are required to safely or productively perform the work, they must be included in the technical specifications, section 3—Equipment.

**2-3.4.4.** The minimum required equipment for each building must be determined by Facility Engineering personnel and included in the technical specifications, section 4—Schedule of Minimum Equipment Required for Routine Work.

**2-3.4.5.** When determining the minimum required equipment for routine work, Facility Engineering personnel should consider that the cost of custodial equipment, when amortized over the contract term and adjusted by its resale value, is relatively insignificant if compared to the total contract price and the amount the contract price would increase if custodial workers did not have this equipment available.

**2-3.4.6.** When the possibility of having two or more cutodians share a piece of equipment is being considered, the anticipated nonproductive time associated with the following activities should be evaluated.

(a) Waiting for the equipment to become available for use.

(b) Traveling to "borrow" the shared piece of equipment.

(c) The cost associated with a custodian not performing a task because of the effort required to "borrow" the equipment.

(d) The decreased lifetime or increased maintenance costs of a piece of equipment associated with the lack of proprietorship evident when a piece of equipment is used by more than one person.

#### **2-3.5. Performance Standards for Routine Work.**

**2-3.5.1.** Any custodial services which are to be performed at least monthly and can be easily performed in conjunction with other such services

in a given area should be considered as routine work.

**2-3.5.2.** The performance standards for routine work will be included in the Technical specifications, section 5—Performance Standard for Routine Work-appendix C. Any custodial services to be considered as routine work which are not already included in appendix C must be added to section 5.

#### **2-3.6. Routine Work Schedules.**

**2-3.6.1.** How frequently each routine work task shall be performed in each building must be defined in the technical specifications, section 6—Schedule of Routine Work. Several schedules similar to the one contained in section 6 normally will be required to define the routine work in all of the buildings.

**2-3.6.2.** Since not all types of areas in each building undergo the same traffic or require the same level of service, the frequencies of performance of the routine work tasks may vary. For example, an entrance on the ground floor will experience more traffic and soiling than a corridor on the third floor of the same building. In order to provide the same level of custodial service without incurring excess cost, the facility engineer should specify less frequent performance of routine work tasks on the higher level. This will be accomplished by defining various area types within a building (classrooms, 1st floor corridors, all other corridors, offices, rest rooms, etc.) and indicating different frequencies for the area types in section 6—Schedule of Routine Work.

**2-3.6.3.** When establishing the frequencies of performance for routine work tasks, the following priorities should be considered. Obviously, many tasks may belong to more than one classification.

**2-3.6.3.1. Priority Number 1.** Those tasks which relate to the health and safety of the occupants and traffickers of the building. Examples of tasks which belong to this category are: disinfecting rest rooms and drinking fountains; removing accumulated waste paper and litter to eliminate potential fire hazards; keeping the floor surface from becoming slippery from the accumulation of grit or liquid.

**2-3.6.3.2. Priority Number 2.** Those tasks which relates directly to the completion of the mission of the group occupying the area. An example of this would be maintaining a relatively "dust-free" atmosphere in an electronic data processing area in order for the electronic data processing equipment to operate correctly.

**2-3.6.3.3. Priority Number 3.** Those tasks which

relate to the protection of building and fixture finished and equipment. Examples of tasks which belong to this category are: The cleaning of dirt entrapment devices such as entrance mats so the mats will reduce the grit and soil trafficked into an area when such grit or soil would cause excessive wear to floor coverings and vacuuming carpet to remove grit which cuts fibers and decreases carpet life.

**2-3.6.3.4. Priority Number 4.** Those tasks which relate only to the appearance of an area or which can be justified for other economic reasons. Examples of tasks which fall into this category are spot cleaning glass partitions and frequent dusting. An example of a task to be performed because of economic reasons is washing of light diffusers to reduce the consumption of energy.

**2-3.6.4.** The hours during which the contractor shall perform the work must be specified in section 6. In determining when the work is to be performed, the Facility Engineer should consider that normally such work can be most productively performed in an area during the period of least occupancy and activity in that area.

**2-3.6.5.** Guidelines for a basic level of custodial service and a moderate level of custodial service are included in figures 2-1 and 2-2.

**2-3.7. Routine Work Allowances.** The averages of the time allowances used by Facility Engineering personnel to determine the minimum number of required weekly worked-hours must be defined in the Technical Specifications, section 7 — Routine

Work Time Allowances. These allowances can, to some degree, be determined by following the instructions in chapter 2 of Military Custodial Services Manual, TM 5-609. If appropriate allowances cannot be determined from TM 5-609, then actual measurement of the time required to complete the work must be performed by Facility Engineering personnel.

**2-3.8. Performance Standards for Project Work**

**2-3.8.1.** Any custodial services which are to be performed less frequently than monthly or cannot be easily performed in conjunction with other routine work in an area should be considered as project work.

**2-3.8.2.** The performance standards for project work will be included in the technical specifications, section 8—Performance Standards for Work. Any custodial services to be considered project work which are not already included in appendix C must be added to section 8.

**2-4. Preparing the Bid Schedules.**

**2-4.1. Contents.** The bid schedules for custodial services contain a definition of the quantities of routine work and estimated quantities of project work to be performed, and the minimum number of worked-hours required for routine work. The Bid Schedules must allow for the Contractor to enter prices bid for the various items of work; and to define proposed supervisory coverage. Guide specifications for bid schedules are included in appendix D.

	High traffic corridors and lobbies	Other corridors and lobbies	Office areas	Classrooms	Lounges	Restrooms and locker rooms	Elevators
Remove trash	D	2W	W	W	2W	D	--
Sweep floors	D	2W	W	W	2W	D	D
Partially vacuum carpet	D	2W	W	W	2W	D	D
Completely vacuum carpet	M	M	M	M	M	--	M
Clean and supply restrooms	--	--	--	--	--	D	--
Spray-buff	W	W2	M	M	M	M	--
Dry buff (wood floors)	W2	M	M	M	M	M	--
Wet mop	W	M	M2	M2	M2	D	W
Regular dusting	W	M	W2	W2	W2	W	W
Complete dusting	M	M	M	M	M	W	M
Spot clean	W	W2	M	M	M	D	W
Clean chalk boards	--	--	W	W	--	--	--
Clean drinking fountains	D	2W	W	W	2W	--	--

Figure 2-1. Guidelines for basic level of custodial services.

D = daily, 2D = twice daily, D3 = every three days, etc. W = weekly, 3W = three every three weeks, etc. M = monthly	High traffic corridors and lobbies	Other corridors and lobbies	Office areas	Classrooms	Lounges	Restrooms and locker rooms	Elevators
Remove trash	D	3W	D	D	D	D	--
Sweep floors	D	3W	2W	2W	3W	D	D
Partially vacuum carpet	D	3W	2W	2W	3W	D	D
Completely vacuum carpet	D	3W	2W	2W	3W	D	D
Clean & supply restrooms	--	--	--	--	--	D	--
Spray-buff	2W	W	W2	W2	W2	W2	--
Dry buff (Wood floors)	2W	W	W2	W2	W2	W2	--
Wet mop	W	M	M2	W2	M2	D	--
Regular dusting	2W	W	W	W	W	2W	2W
Complete dusting	M	M	M	M	M	M	W
Spot clean	2W	W	2W	2W	2W	D	2W
Clean chalk boards	--	--	2W	2W	--	--	--
Clean drinking fountains	D	3W	2W	2W	D	--	--

Figure 2-2. Guidelines for moderate level of custodial services

## 2-4.2. Bid Schedules for Routine Work.

**2-4.2.1.** The minimum number of worked-hours the contractor shall provide for routine work must be entered by facility engineering personnel in the bid schedules, section 1—Schedules for Routine Work (refer to app D). Several individual schedules will normally be required to define the worked-hours for all buildings.

**2-4.2.2.** Refer to chapter 2 of Military Custodial

Services Manual, TM 5-609, for instructions in determining the minimum worked-hour requirements for routine work. Refer to figure 2-3 for an example of a correctly completed Schedule for Routine Work.

**2-4.2.3** Security areas may require a group cleaning effort rather than cleaning by an individual or by several individuals working independently. Group cleaning and is not recommended except in

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
	Building or Area	Weekly Minimum Worked-Hours for Routine Work	Weekly Maximum Charge for Wages	Weekly Maximum Charges for Equipment, Tools, & Chemicals	Weekly Maximum Charge for All Other Costs	Total Maximum Charge for Routine Work (D) + (E) + (F)	of Weeks Per Year	Total Yearly Maximum Charge for Routine Work (G) × (H)
1	101	165					52	
2	101 Annex	40					50	
3	110	111					52	
4	120	63					52	
5	130	10					52	
6	150	10					52	
7	160	12					52	
8	170	33					52	
9	180 1st Floor	5					52	
10	210	5					50	
11	350	7					52	
12	360	39					52	

continued

Figure 2-3. Correctly Prepared Bid Schedule for Routine Work.

instances where time limitations apply or when adequate security personnel are not available to allow individual cleaning assignments. Areas where group cleaning is required should be identified in the bid schedule for Routine work.

**2-4.3. Bid Schedules for Project Work.** The various types of project work to be performed in each building, estimated quantities of the types and estimated frequencies of performance must be defined in bid schedules, section 2—Schedule for Project Work (refer to app D). Several individual schedules will normally be required to define the project work for all buildings. Refer to figure 2-4 for an example of a correctly completed schedule.

**2-4.4. Contractor's Supervisory Organization.**

The contractor is required to describe a proposed supervisory organization in the bid schedules, section 3—Contractor's Proposed Organization (refer to app D).

**2-4.5. Preparing the Plans.** In order to adequately define the various area types within a particular building which shall be provided different types of routine work by the Contractor, it is normally necessary for the Contract Specifications to include plans which indicate the various area types. An alternative to including the plans if the building has permanently assigned and displayed room numbers is to list the various area types (classrooms, offices, rest rooms, etc.) by number. An example of a correctly marked plan is included in figure 2-5.

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Bid Item	Project	Location	Estimated quantity	Number of annual repetitions	Unit bid price	Bid price per year (D) × (E) × (F)
1	Strip and refinish resilient tile and terrazzo floors.	Bldgs 101, 101 Annex, 130, 150, 160.	78,000 sq. ft.	2	\$ _____ Per sq. ft.	\$ _____ Per Year
2	Carpet cleaning dry foam method.	Bldgs. 120, 170, 180—1st floor only, 210, 350, 360.	210,000 sq. ft.	.5	\$ _____ Per sq. ft.	\$ _____ Per Year
3	Carpet cleaning water extraction method.	Bldgs. 120, 170, 180—1st floor only, 210, 350, 360.	210,000 sq. ft.	.125	\$ _____ Per sq. ft.	\$ _____ Per Year
4	Machine scrubbing of grouted tile floors.	Bldgs. 101, 120, 150, 210, 350, 360.	25,000 sq. ft.	4	\$ _____ Per sq. ft.	\$ _____ Per Year
5	Wash interior glass (does not include interior side of exterior windows)	All areas in bldg. 101.	K/A	2	\$ _____ Per sq. ft.	\$ _____ Per Year

Continued

Figure 2-4. Correctly Prepared Bid Schedule for Project Work

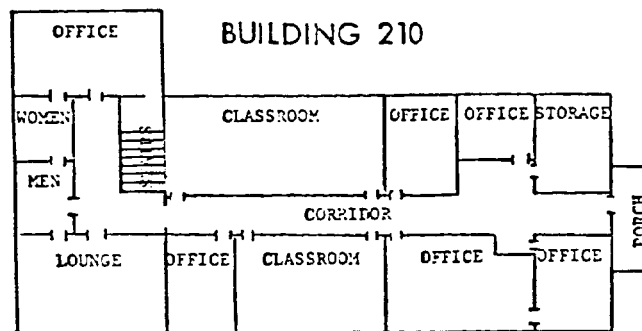


Figure 2-5. Correctly prepared plan showing area types

## CHAPTER 3

### PREBID CONFERENCE, SITE INSPECTION, AND BID EVALUATION

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**3-1. Introduction.** This chapter provides information regarding the prebid conference, site inspection, and evaluation of bids for custodial services contracts.

**3-2. Responsibility.** Although the contracting officer has the overall responsibility for the bidding process, evaluation of the bids, and award of contract, facility Engineering personnel should also participate.

#### **3-3. Prebid Conference.**

**3-3.1. Attendance.** Although attendance cannot be mandatory, all prospective bidders should be encouraged to attend a prebid conference to be conducted by the Contracting Officer or a designated representative. Facility engineering personnel should be present to answer any questions concerning the special conditions, Technical specifications, bid schedules, and plans.

**3-3.2. Questions.** Questions which cannot be answered by citing specific passages in the document should be submitted by prospective bidders as written requests for interpretation.

**3-3.3. Changes.** All changes in the contract document which may result from questions or suggestions, should be made by written addendum. Any such changes of the special conditions, technical specifications, big schedules, or plans, should be prepared by the technical representative, given to the contracting officer for approval, and distributed to prospective bidders.

#### **3-4. Site Inspection**

**3-4.1. Attendance.** All prospective bidders should be encouraged to simultaneously attend a site inspection conducted by the contracting officer or a designated representative and the technical representative.

**3-4.2. Inspection.** If it is not practical to visit all areas, typical or representative areas should be selected by the Technical Representative. The prospective bidders should be encouraged to visit the remaining areas. The prospective bidders should be shown those areas which will be available

for the use of the successful bidder for parking, storage, office areas, etc.

**3-4.3. Map of Facility.** Each prospective bidder should be given a map or a layout of the facility which identifies each building to be involved in the contract. This information will allow the bidders to estimate travel time, plan distribution of supplies, etc.

**3-4.4. Advantage.** The more familiar the prospective bidders are with the areas and the work that is to be performed, the more realistic will be their bids and the more acceptable would be their overall performance if selected.

#### **3-5. Evaluation of Bids**

**3-5.1. Discrepancies.** Any discrepancies between the form in which the bids are received and the instructions for preparing bids will be made known to the contracting officer.

**3-5.2. Price.** The unit prices bid by each contractor for each building of area should be evaluated prior to awarding the bid.

**3-5.3. Compliance.** The bids will be evaluated by the technical representative as to their compliance with the special conditions, technical specifications, and bid schedules.

**3-5.4. Organization.** The description of the contractor's proposed organization chart accompanying the bid should be evaluated. It should define all lines of authority, number of positions at each level, and should indicate that sound management and administrative practices will be followed.

**3-5.5. Previous Performance.** The Technical Representative will assist in evaluating the bids by providing whatever information can be gained as to each Contractor's technical competence. If possible, this information should be gained by observing the contractor's performance on other jobs in the area.

**3-5.6. Contract Award.** The contract will be awarded in accordance with part 4, section II of ASPR.

## CHAPTER 4

### MONITORING CUSTODIAL SERVICES

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#### 4-1. Introduction

4-1.1. *Purpose.* This chapter provides facility engineers with a system of monitoring the performance of a contractor who provides custodial services at non-medical and non-industrial facilities. The system described in this chapter is applicable whenever the type of contract described in chapter 1 is used and the special conditions contained in appendix B, technical specifications contained in appendix C, and bid schedules contained in appendix D are incorporated.

4-1.2. *Responsibility.* The facility engineer shall have the responsibility to administer the monitoring system defined in this chapter.

#### 4-1.3. Objectives

4-1.3.1. The system should observe sources of soiling and thus provide recommendations for means of reducing soiling of the facility.

4-1.3.2. The system should recognize custodial maintenance problems and thus provide recommendations for improving the maintainability of the facility.

4-1.3.3. The system should observe and investigate any hindrances or delays caused to the contractor by the Government, and recommend ways by which these hindrances or delays might be reduced or eliminated.

4-1.3.4. By observing the rates and levels of soiling, the system should make recommendations for possible cost reductions by varying the frequencies of various housekeeping activities.

4-1.3.5. The system should observe and handle any evidence of failure of the contractor to perform according to the special conditions and technical specifications.

4-1.3.6. The system should observe any damage to Government facilities and attempt to determine if such damage was directly or indirectly the result of the contractor's activities.

4-1.3.7. The system should receive, process and

resolve any complaints by building occupants, users, or others which concern custodial services or other activities of the contractor or the contractor's employees.

4-1.3.8. The system should determine the need for, schedule, and place formal orders for all project work.

4-1.3.9. The system should collect, verify and document information, provide feedback, select and use proper channels of communications, and take whatever action may be appropriate to insure practical follow-up of any of the items defined in 4-1.3., objectives, above.

4-1.4. *Overall Evaluation.* As the authorized representative of the contracting officer, the facility engineer will be responsible for the overall evaluation of the contractor's performance and for the determination of the contractor's compliance with the special conditions, technical specifications and bid schedules section of the contract.

4-1.5. *Assistance.* However, the facility engineer, in order to adequately monitor the performance of the contractor, must rely on "feedback" from occupants and users of the various buildings where custodial services are performed. Such "feedback" will be based primarily on the appearance of the areas.

4-1.6. *Emphasis.* The facility engineer will rely on facility engineering personnel who serve as technical representatives to monitor the overall performance of the contractor. The technical representatives will not only inspect the appearance of an area, but will emphasize inspections of those variables or inputs, which will give a better indication that the work is being performed as specified. For example:

4-1.6.1. Number of worked-hours expended.

4-1.6.2. Equipment.

4-1.6.3. Chemicals.

4-1.6.4. Tools and supplies.

**4-1.6.5. Methods and procedures.**

**4-1.6.6. Training.**

**4-1.6.7. Staffing.** In determining the number of technical representatives required for the effective administration of a contract at a specific installation or facility, the following factors must be considered.

**4-1.7.1.** The total number of worked-hours required in the technical specifications.

**4-1.7.2.** The total number of square feet which must be serviced.

**4-1.7.3.** The number of buildings involved.

**4-1.7.4.** The total number of work shifts per week.

**4-1.7.5.** The approximate amount of travel time required to cover the entire area to which the contract applies.

## **4-2. Building Custodian Monitor**

**4-2.1. Occupant.** One occupant from each building or large departmental area within a larger building will be appointed custodian/monitor for that building area. No technical training will be required for this position; however, the person selected must be informed of and understand the tasks to be performed in the building or area, the frequencies with which these tasks are to be performed, and the performance standards to which the Contractor is obligated.

**4-2.2. Appointment.** The Custodian / Monitor will be appointed or designated for each building or area (AR 420-81, Facilities Engineering-Custodial Services).

**4-2.3. Daily Inspection.** The custodian/monitor will normally inspect the building or area daily. If certain areas do not receive custodial services on a daily basis, these areas will normally be inspected after each servicing. Inspecting should be done immediately prior to the next period of occupancy of the building. For example, if a building received custodial services during a night shift ending at 7:00 A.M. and the normal work shift for most building occupants begins at 8 :00 A.M., the building should be inspected by the custodian/monitor between 7 :00 A.M. and 8 :00 A.M.

**4-2.4. Emphasis.** The custodian/monitor's inspection should be directed toward the most obvious results of the custodial effort. That is, the custodian/monitor should be primarily concerned with the appearance of the area, the presence of odors, wet or sticky surfaces, etc.

**4-2.5. Complaints.** The custodian/monitor should

receive all complaints concerning custodial services, or the activities of custodial personnel.

**4-2.6. Non-Performance.** The custodian/monitor should inform the technical representative of any indications of non-performance of custodial tasks or any indications of unauthorized changes in the frequencies of task performance. The custodian/monitor should inform the technical representative of any complaints which appear to be valid.

**4-2.7. Assistance.** The custodian/monitor should assist the technical representative in informing the occupants of the building or area of the obligations of the contractor and the levels of service and appearance which should be expected. The custodian/monitor and the technical representative will work together as required in attempting to reduce soiling, improve maintainability, and to eliminate avoidable delays and interference caused to the Contractor by building occupants and users.

## **4-3. Technical Representative.**

**4-3.1. Knowledge.** The technical representative shall be a member of the Facilities Engineering organization and should be knowledgeable of cleaning methods, equipment and products, and of inspection techniques.

**4-3.2. Responsibility.** The technical representative will have responsibility for monitoring the contractor's compliance with the special conditions and technical specifications parts of the document. The technical representative shall be responsible for the initial approval of all contractor's invoices for routine and project work.

**4-3.3. Emphasis.** Even though the technical representative will make inspections of areas to evaluate appearance (usually as a result of frequent complaints, past discrepancies, or requests from custodian/monitors), most of the inspecting efforts will be directed toward the various inputs of the chemicals and materials, methods and work habits or custodial personnel, etc.

**4-3.4. Levels of Service.** The technical representative shall inform the custodian/monitor of the custodial tasks to be performed in each building or area, the frequencies with which these tasks are to be performed, and the performance standards to which the contractor is obligated. The technical representative should provide the custodian/monitor with information and advice which will assist in informing the occupants of a building or area of the levels of service and appearance to be expected.

**4-3.5. Complaints.** The technical representative will receive and follow-up complaints and reports



of possible significant nonperformance from the custodian/monitor.

**4-3.6. Deductions.** The technical representative will report valid complaints and verified nonperformance or noncompliance with the special conditions and/or Technical Specifications to the contracting officer, and shall prepare documentation necessary to deduct from the contractors invoices.

**4-3.7. Project Work.** The technical representative shall schedule all project work and will prepare official orders for such work and submit such orders to the contractor.

#### **4-4. Joint Inspections**

**4-4.1. Schedule.** On occasion, buildings or areas should be inspected jointly by the technical representative and the custodian/monitor. These inspections should occur during the normal work shift of the custodian/monitor.

**4-4.2. Level of Service.** The technical representative should use these joint inspections to communicate to the Custodian/Monitor the obligations of the Contractor and the levels of service and appearance to be expected in the area.

**4-4.3. Soil Reduction.** During these inspections, the technical representative and the custodian/monitor should discuss the housekeeping habits of the occupants and users of the area, and the technical representative should impress upon the custodian/monitor the importance of determining the sources of soil and finding ways to prevent it.

**4-4.4. Specification.** The technical representative and the custodian/monitor should jointly discuss the adequacy and appropriateness of the tasks and frequencies given in the technical specifications.

**4-4.5. Appearance.** The technical representative and the custodian/monitor should jointly evaluate the appearance of the area and the contractor's performance.

**4-4.6. Delays and Interference.** The technical representative and the custodian/monitor should discuss any delays or interference caused by the occupants and users of the area.

#### **4-5. Inspections by the Building Custodian/Monitor.**

**4-5.1. Scheduling.** The custodian/monitor should perform inspections immediately after routine custodial services have been performed. When this is not practical (such as might be the case if services are completed during evening hours and the custodian/monitor's other responsibilities re-

quire day shift activity), the inspections should be made some time between the completion of routine servicing and the beginning of other activities in the building or area. In general, inspections should be scheduled so that it can be determined if visible soil, etc., is actually the result of non-performance of custodial tasks, and not the result of the resoiling of the area after the tasks were properly completed.

**4-5.2. Soiling.** The custodian/monitor should look for any unusual soiling, attempt to determine the cause, and make suggestions for improvement or elimination of the condition.

**4-5.3. Inspection Guide.** The custodian/monitor will be provided (by the technical representative) with a routine work task sheet which describes the tasks to be performed in each type of area and the frequencies with which they should be performed. This sheet should be used as a guide in determining if, in fact, variations or omissions of required work do exist.

**4-5.4. Priority.** When the custodian/monitor discovers conditions which indicate that custodial tasks have been omitted or not performed properly, the first concern should be the minimizing of risks to the health and the safety of people in the building or area. For example, if a mopped floor is still wet, and there are no "Wet Floor-CAUTION" signs present, the custodian/monitor should take whatever action is necessary to restrict traffic in that area.

**4-5.5. Nonperformance.** After risks to health and safety (if any) have been minimized, the custodian/monitor should contact the technical representative and inform him or her of apparent nonperformance or improper action by custodial personnel. The custodian/monitor should attempt to document and/or preserve evidence of nonperformance or improper action by custodial personnel.

**4-5.6. Follow-up.** The custodian/monitor should assist the technical representative in verifying that the contractor has corrected previously discovered discrepancies.

#### **46. Inspection by the Technical Representative.**

**46.1. Frequency.** The technical representative should inspect all buildings and areas at least once per month. More frequent area inspections will be conducted if there is a significant increase in the number of complaints from occupants in an area, if there have been cases of serious nonperformance by custodial personnel in an area, or if more frequent inspections are requested by the custodian/monitor for an area.

**4-6.2. Scheduling.** Area inspections by the technical representative should be conducted both during periods when custodial tasks are being performed and during times when other operational activities are in progress.

**4-6.3. Inspections During the Work.**

**4-6.3.1.** When inspecting areas where custodial activities are in progress, the technical representative should observe the equipment being used. It should be determined if the proper equipment is being used for each task, if the equipment conforms to the technical specifications, if the equipment is in good working order and is equipped with the proper accessories, if the equipment is reasonably clean and shows no indications of safety hazards, and if the equipment is properly identified with an assignment number and is being used in the assigned area.

**4-6.3.2.** The technical representative should observe the usage of chemicals to determine if the proper chemicals are being used for each task, if the chemicals conform to the technical specification, if the chemicals are being stored in and dispensed from proper and properly labeled containers.

**4-6.3.3.** The technical representative should observe the procedures and methods being used by the custodial personnel. Observation is necessary to determine if safety regulations are being followed and if use of equipment and chemicals is in accordance with instructions. Methods used should be observed to determine if they are the most effective and efficient for the task being performed and are they consistent with those covered in training classes.

**4-6.3.4.** The technical representative should observe the custodial personnel to determine if any illegal or disruptive activities are taking place or if personal habits or attitudes are exhibited which could be detrimental to the overall custodial effort.

**4-6.3.5.** The technical representative should inspect custodial closets and storage areas to determine if they are properly maintained, efficiently organized, contain no unauthorized items and can be secured.

**4-6.3.6.** The technical representative should observe the custodial personnel, their locations, and activities to determine if the proper number of worked-hours are being expended in each area.

**4-6.3.7.** While observing the activities of custodial personnel in an area, the technical representative should consider possible changes in the tasks specified for that area and/or changes in the frequen-

cies with which certain tasks are performed. Because of errors in original assignments, changes in traffic patterns, changes in the activities in the area, etc., present tasks and/or frequencies may no longer be adequate or appropriate.

**4-6.3.8.** The technical representative, through observation, should attempt to determine if the task specifications and frequencies given in the Technical Specifications are being followed.

**4-6.3.9.** The technical representative should verify that custodial activities are being performed in such a way as to properly preserve and protect building surfaces, fixtures, furniture and equipment in the area.

**4-6.3.10.** The technical representative should determine if performance standards have or have not been met. The performance of a task will be judged to be either acceptable or unacceptable. That is, there shall be no degrees of acceptability.

**4-6.3.11.** The technical representative should verify that conditions do not present health or safety hazards to the occupants, users or others who may be in the area.

**4-6.4. Inspections Prior to and During Occupancy.**

**4-6.1.** Since it is very difficult, if not impossible to ascertain during the performance of the work that performance standards have been met, from time to time, the schedule of the Technical Representative should vary. The Technical Representative, although relying to a great extent upon feedback from the occupants of an area, should ascertain first hand if the appearance of an area is adequate.

**4-6.4.2.** When inspecting areas during periods of normal usage, the Technical Representative must remember that unacceptable appearance may be due to factors other than nonperformance by the contractor or custodial personnel. The tasks and/or frequency specifications may no longer be appropriate or adequate for the area being inspected. The area may have become resoiled between the time that the custodial service was performed and the time of the inspection. The custodial effort may have been ineffective because of unusual levels or extraordinary conditions.

**4-6.5. Changes in Specifications.** During all inspections, the Technical Representative should consider changes in the task specifications and frequencies required in the technical specifications. These changes are made necessary by changes in the usage of an area, elimination of certain sources of soil, changes in traffic patterns, and other

factors. Often these changes can result in cost reductions because simpler and/or less frequent custodial efforts can provide acceptable results.

#### **4-6.6. Soiling and Maintainability.**

**4-6.6.1.** During all inspections, both while custodial services are being performed and during periods of normal area activity, the technical representative should note the levels of soil. When changes in the level of soil are noted attempt should be made to determine the source of the soil.

**4-6.6.2.** When the sources of soil can be determined, the technical representative should try to determine what actions could reduce soiling. For example, the adequacy of entrance mats, the adequacy and proper location of ash and waste receptacles, the work and personal habits of those who use the areas, the elimination of leaks, etc., should be considered.

**4-6.6.3.** During all inspections, the technical representative should seek ways to improve the maintainability of the facility, and reduce the custodial efforts required to remove that soil which cannot be stopped at its source. For example, what type floor surface would be easiest to maintain when exposed to a certain level of soil and traffic, what arrangement of furniture would simplify custodial efforts, what types of wall coverings would require the least attention, what sizes and locations of custodial closets and other storage facilities would reduce the time and effort required for proper maintenance, etc., should be considered.

**4-6.6.4.** In some instances, periodic meetings or conferences, conducted by the facility engineer or the technical representative may be an effective means of communicating the contractor's responsibilities to the building custodian/monitors and of soliciting suggestions for the improvement of custodial services.

#### **4-6.7. Training.**

**4-6.7.1.** The technical representative should receive schedules for training classes to be conducted by the contractor for the custodial personnel, including the supervisors. The technical representative should attend at least 10 percent of these classes on an unannounced, random basis.

**4-6.7.2.** The technical representative should review the attendance records for the classes.

**4-6.7.3.** The technical representative should determine if the physical environment in which the classes are held is adequate in size and properly

equipped (desks, chalkboards, projector, screen, etc.).

**4-6.7.4.** The technical representative should evaluate the content of the classes for accuracy, understandability, proper use of demonstrations and other teaching aids.

**4-6.7.5.** The technical representative should evaluate the delivery of the presentation for sincerity, enthusiasm, emphasis, and understandability.

**4-6.7.6.** The technical representative should observe the interest shown by those attending the classes to determine if the classes are of a proper length, scheduled at an acceptable time and are effectively presented.

**4-6.7.7.** The technical representative should compare the techniques and methods being taught in the classes with those observed during area inspections to help determine the effectiveness of the classes.

**4-6.7.8.** Discrepancies in class schedules and attendance records and any criticisms of the content, presentation, class size or location should be brought to the immediate attention of the contractor.

**4-6.8. Time Cards.** The technical representative should review all of the Contractor's time cards and other documents pertaining to routine custodial and project work performed. The Technical Representative should review all invoices submitted by the contractor to the Government for payment.

**4-6.9. Other Parameters.** Additionally, other aspects of the custodial services must be inspected.

**4-6.9.1.** The technical representative should inspect the offices and central storage areas of the contractor to determine if they are adequate in size, properly equipped and properly located. The technical representative should note any use of Government property which violates the special conditions of this document.

**4-6.9.2.** The technical representative should inspect the contractor's system for distributing materials and supplies to determine if the requirements of the special conditions section of this document are being met, if adequate safeguards against theft are enforced, and if possibilities exist for improving the efficiency with which materials and supplies are handled.

**4-6.9.3.** The technical representative should observe the contractor's supervisors and verify that they meet the qualifications given in the Special

Conditions section of this document and are performing acceptably.

**4-6.9.4.** The technical representative should verify that the contractor's communications system meets the specifications given in the special conditions.

#### **4-7. Handling of Complaints by Building or Area Occupants or users.**

**4-7.1. All Complaints.** All complaints concerning custodial services or other actions by custodial personnel should be registered with the custodian/monitor for the building or area involved.

**4-7.2. Valid Complaints.** Only complaints which appear to be valid should be forwarded to the technical representative.

**4-7.3. Significant Complaints.** If, in the opinion of the technical representative, the complaint is significant, the technical representative should personally inspect the area involved or contact the contractor.

**4-7.4. Deductions.** If the complaint is valid, and involves nonperformance or damage to property, it should be considered in evaluating invoices from the Contractor.

**4-7.5. Non-valid Complaints.** If the complaint is not valid, the technical representative should provide the custodian/monitor with sufficient information to properly inform the person(s) involved why the complaint was deemed invalid and inform them of the contractor's obligations and of the levels of service and appearance to be expected.

#### **4-8. Follow-Up Actions by the Technical Representative.**

**4-8.1. Soiling and Maintainability.** When the technical representative feels that changes in the physical facilities could reduce soiling and/or improve maintainability, written recommendations to the facility engineer should be submitted. These recommendations should include specific locations involved, the types of changes needed, the specific type of soiling or maintenance problem which could be reduced or corrected, and, if possible, an estimate of the savings which could result from these changes.

**4-8.2. Work Habits of Occupants.** When the technical representative feels that actions by building users and occupants reduce the effectiveness of the custodial efforts (poor work habits, unnecessary introduction to soil into the area, interference with custodial activities, etc.), the custodian /monitor for that building or area should be contacted and the

problem explained. The initial contact should be by telephone or an informal visit.

**4-8.3. Poor Cooperation.** If the problem described above persists after allowing a reasonable time for correction, the technical representative should document specific incidents, attempt to gather physical evidence and present these, with a written explanation of the problem, to those whose authority directly controls the actions of the individuals involved.

**4-8.4. Changes in Specifications.** When observations of the technical representative indicate that tasks, frequencies, number of man-hours, equipment specifications, shift hours, or any other parts of the special conditions and technical specifications are no longer adequate or appropriate, specific written recommendations for changes should be submitted to both the facilities engineer and the contracting officer.

**4-8.5. Non performance.** When the technical representative feels that the Contractor has not performed according to the special conditions and/or technical specification, the contractor should be contacted immediately in order to begin immediate correction on the nonperformance.

**4-8.6. Deductions.** The technical representative should document and preserve evidence of the nonperformance and include this with a recommendation for deductions from payment to the Contractor for the work involved. These recommendations and information should be sent to both the contracting officer and the facilities engineer.

**4-8.7. Damage.** When the technical representative observes damage to Government property (facilities, fixtures, furnishings, equipment, etc.) either as a result of direct action by the custodial personnel or as a result of nonperformance by the contractor, evidence of such damage should be documented and submitted to both the contracting officer and the facilities engineer.

**4-8.8. Interference.** When the technical representative feels that there has been interference with Government operations, either as a result of actions by the custodial personnel or nonperformance by the contractor, such interference should be reported to both the contracting officer and the facilities engineer. The report should include specific times, locations, activities, and if possible, the names of individuals involved.

#### **4-9. Scheduling and Ordering Project Work.**

**4-9.1. Responsibility.** The technical representative shall be responsible for the scheduling and ordering of all project work.

**4-9.2. Scheduling.** Any decision on the project work should be based on a project calendar, recommendations from the custodian/monitor, and/ or observations by the technical representative. Project work should not be ordered unless there is some evidence that a need for it exists.

**4-9.2.1.** In scheduling project work, the technical representative should consider other activities in the area. For example, the stripping and refinishing of floors should not be scheduled immediately prior to the rearranging of office fixtures, or other activities which could scratch the newly finished floors. In scheduling project work, the technical representative should allow the contractor sufficient flexibility to make the best use of labor and equipment which are available.

**4-9.3. Ordering Projects.**

**4-9.3.1.** In ordering project work, the technical representative should always use the proper report

and order documents. No project work should be ordered solely by verbal contact. The order for project work should specify the exact locations (i.e. building, room number, floor, etc.) where the project is to be performed, and the exact quantity (i.e. number of floors, number of fixtures, number of windows, boundaries of the area, etc.) of work to be done.

**4-9.3.2.** When practical, (para 4-9.2.1), the technical representative should set a specific date on which the project is to be done. When some flexibility would benefit both the Contractor and/or the building occupants (para 4-9.2.1.), a specific deadline should be set for the completion of the project. When no specific date, but only a deadline is established for project work, the contractor should be required to inform the technical representative of the exact date the project work will be performed.

By Order of the Secretary of the Army:

BERNARD W. ROGERS  
*General, United States Army*  
*Chief of Staff*

Official.

J. C. PENNINGTON  
*Brigadier General, United States Army*  
*The Adjutant General*

Distribution:

To be distributed in accordance with dA Form 12-34B, requirements or TM5-600 Series: Facilities Engineering: Maintenance and Operation of Facilities.

## APPENDIX A

### REFERENCES

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#### A-1. Army Regulations (AR)

- 1-3 Hours of Work, Tours of Duty, and Weekend and Holiday Staffing
- 5-3 Doctrine and Philosophy for Management of Class I Installations
- 235-5 Management of Resources; Commercial and Industrial Type Functions
- 310-25 Dictionary of United States Army Terms
- 310-50 Authorized Abbreviations and Brevity Codes
- 385-10 Army Safety Program
- 385-14 Accident/Incident Report—Shipments of Conventional Explosives and Dangerous Articles by Commercial Carriers
- 385-32 Protective Clothing and Equipment
- 385-40 Accident Reporting and Records
- 420-10 Facilities Engineering—General Provisions
- 420-17 Real Property and Resource Management
- 420-22 Preventive Maintenance and Self-Help Programs
- 420-41 Utilities Contracts
- 420-76 Pest Control Services
- 420-81 Custodial Services
- 420-90 Fire Prevention and Protection
- 600-21 Race Relations and Equal Opportunity
- 604-5 Clearance of Personnel for Access to Classified Defense Information and Material
- 604-305 Civilian Employees Security Program Reporting Requirements

- 606-5 Identification Cards, Tags, and Badges
- 670-10 Furnishing Uniforms or Paying Uniform Allowances to Civilian Employees
- 690-1 Civilian Applicant and Employee Security Program
- 710-1 Centralized Inventory Management of the Army Supply System.
- 710-2 Materiel Management for Using Units, Support Units, and Installations
- 750-1 Army Materiel Maintenance Concepts and Policies

#### A-2. Technical Manuals (TM)

- 5-609 Military Custodial Services Manual
- 5-610 Maintenance and Repair: Buildings and Structures; Preventive Maintenance, Safety Requirements, Repairs and Utilities
- 5-611 Repairs and Utilities: Post Engineer Shops

#### A-3. Technical Bulletin (TB)

- 420-10 Engineered Performance Standards Public Works Maintenance; Janitorial Handbook

#### A-4. OTHER PUBLICATIONS

- Building Design for Maintainability, 1975, Feldman, available from: Service Engineering Associates, Inc., Atlanta, Georgia 30319
- Housekeeping Handbook for Institutions, Business and Industry, 1973, Feldman, available from: Service Engineering Associates, Inc., Atlanta, Georgia 30319

## APPENDIX B

### SPECIAL CONDITIONS FOR CONTRACTING CUSTODIAL SERVICES FOR ARMY ACTIVITIES OTHER THAN MEDICAL AND INDUSTRIAL FACILITIES

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#### **B-1. Scope of the Work**

**B-1-1.** The contractor shall provide all labor, equipment, tools, chemicals supervision, inspection and other items or services necessary to perform the routine work and project work as defined in the special conditions, technical specification, big schedules, plans, and other contract documents.

**B-1-2.** For routine work only, as defined in the technical specifications and other contract documents, a minimum number of worked-hours, equipment, tools, and chemicals is required. However, in order to meet the requirements or use additional equipment, tools, or chemicals. Such additional worked-hours, equipment, tools, or chemicals for routine work will be at no additional cost to the Government.

**B-1-3.** For project work only, as defined in the technical specifications, and other contract documents, an estimated quantity of each project and an estimated frequency of performing each project have been provided for the purpose of bid comparison only. The technical representative will schedule and notify the Contractor, with a written project work order, of each project to be performed as such performance is required by the Government. The Contractor will be paid for the quantities of project work actually performed and approved at the unit prices bid in accordance with the Bid Schedule for project work.

#### **B-2. Technical Representative**

**B-2-1.** The Government shall designate an individual as the technical representative who shall be responsible for monitoring the performance of routine work and project work by the contractor as to conformance with the special conditions, technical specifications, bid schedules, and plans of the contract.

**B-2-2.** The technical representative shall have the authority to call attention to discrepancies between

the contractor's performance and the special conditions, technical specifications, bid schedules, and plans.

**B-2-3.** The technical representative cannot alter or waive any requirements defined in the special conditions and technical specifications or any other contract documents.

**B-2-4.** The technical representative is responsible for initial approval of the Contractor's invoices for routine work and project work. Approval will be based on compliance with the special conditions, technical specifications, bid schedules, and plans.

**B-2-5.** The technical representative shall have the authority to stop the performance of the work for the purpose of preventing damage to Government property or eliminating hazardous operations or conditions.

**B-2-6.** The Government may designate one or more inspectors to assist the technical representative in monitoring the performance of the work.

#### **B-3. Non-performance of Work.**

**B-3-1.** Routine work will be considered not to have been performed when any one of the following conditions exist:

**B-3-1-1.** The work tasks in an area were not performed in strict accordance with the performance standard.

**B-3-1.2.** The specified equipment, tools, and chemicals were not used or were not in good operating condition.

**B-3-1.3.** The tasks were not performed within the scheduled work shift.

**B-3-1.4.** The minimum number of worked-hours were not applied to the routine work tasks.

**B-3-2.** Projects work will be considered not to



have been performed when any one of the following conditions exist:

**B-3-2.1.** The project task was not performed in strict accordance with the project performance standard.

**B-3-2.2.** The specified equipment, tools, and chemicals were not used or were not in good operating condition.

**B-3-2.3.** The project task was not performed within the time period specified in the project work order.

**B-3-2.4.** The project task as requested by written work order was not completed in its entirety.

#### **B-4. Deductions for Nonperformance of Work.**

**B-4-1.** The value of deduction for nonperformance of routine work by the contractor shall be determined in one of the following ways:

**B-4-1.1.** The Government may perform the work by the use of Government employees or by the use of another contractor. The direct costs incurred by the Government as the result of using either Government employees or the use of another contractor shall be deducted from the 10 percent retainage prior to final payment to the contractor. In the event that the 10 percent retainage is inadequate to cover such direct costs, these direct costs will be withheld from future payments under the contract.

**B-4-1.2.** In lieu of performance of the routine task by the use of its own forces or another contractor, the contracting officer may determine an equitable amount to reimburse the Government for its failure to receive the value of the routine work. The amount so determined may be deducted from the 10 percent retainage prior to final payment under the terms of the contract. If the 10 percent retainage is insufficient to reimburse the Government, the amount determined by the contracting officer shall be retained from payments otherwise due under the contract.

**B-4-2.** The value of a deduction for nonperformance of project work shall be determined as follows:

**B-4-2.1.** The Government shall have the option of performing the project work by the use of Government employees or by the use of another contractor. The direct costs incurred by the Government as the result of using either Government employees or the use of another contractor shall be deducted from the 10 percent retainage prior to final payment to the contractor. In the event the

10 percent retainage is inadequate to cover such direct costs, these direct costs will be withheld from future payments under the contract.

**B-4-2.2.** In lieu of performance of the project work by the use of its own forces or another contractor, the contracting officer may determine an equitable amount to reimburse the Government for its failure to receive the value of the project work. The amount so determined shall be deducted from the 10 percent retainage prior to final payment under the terms of the contract. If, the 10 percent retainage is insufficient to reimburse the Government, the amount determined by the contracting officer shall be retained from payments otherwise due under the contract.

**B-4-3.** Any dispute concerning either the failure to perform a routine task, failure to perform project work or an equitable adjustment by the contracting officer shall be considered a dispute under the Disputes clause of this contract.

**B-4-3.1.** The contracting officer by exercising his rights under this clause, does not relieve the contractor of any of the other responsibilities or requirements imposed under the terms and conditions of this contract. Additionally, any actions taken by the contracting officer, pursuant to the provisions of this clause, will not be considered a termination of this contract.

#### **B-5. Increases or Decreases in Routine Work.**

**B-5-1.** An increase or decrease in routine work shall be defined as any change in the minimum number of worked-hours required for a building caused by a change in the total area cleaned or a change in the tasks or task frequencies to be performed in an area.

**B-5-2.** The Government shall have the right to make increases and decreases in the amount of routine work to be performed by the contractor.

**B-5-3.** The contractor shall be paid for the actual quantities of such work performed at the prices bid in accordance with Bid Schedule number 1 (app D).

**B-5-4.** However, should the total effect of all such changes in routine work cause an increase or decrease of more than 25 percent in the sum of the total yearly maximum charges for routine work of all bid items from Schedule number 1, then an adjustment in the unit prices bid for routine work only for those areas involved will be affected. Any such adjustments in a unit price will be negotiated and documented by supplemental agreements. Failure to agree to any adjustment shall be a

**B-4-4. Formula for determining deductions for nonperformance of routine work.**

$$\begin{aligned}
 & \left[ \begin{array}{l} \text{Value of} \\ \text{minimum} \\ \text{deduction} \\ \text{for non-} \\ \text{performance} \\ \text{in an area.} \end{array} \right] \\
 & \qquad \qquad \qquad = \\
 & \left[ \begin{array}{l} \text{Total daily} \\ \text{time required} \\ \text{to perform all} \\ \text{routine work} \\ \text{tasks in the} \\ \text{area rounded} \\ \text{to the next} \\ \text{higher whole} \\ \text{number of hours.} \end{array} \right] \times \left[ \begin{array}{l} \text{Maximum weekly charge for} \\ \text{routine work of the} \\ \text{building involved (from BID} \\ \text{SCHEDULE FOR ROUTINE WORK,} \\ \text{column G)} \end{array} \right] \times \left[ \begin{array}{l} \text{Minimum number of worked-hours} \\ \text{per week required for routine} \\ \text{work (from BID SCHEDULE FOR} \\ \text{ROUTINE WORK column C)} \end{array} \right] \times \left[ \begin{array}{l} \text{Number of complete} \\ \text{or partial work shifts} \\ \text{that the area is not} \\ \text{acceptable and is used} \\ \text{or occupied by the} \\ \text{Government.} \end{array} \right]
 \end{aligned}$$

*Note:* The total time required to perform all routine work tasks in an area will be determined by using the allowances for performing such work as defined in the Technical Specifications, Section 7—"Routine Work Allowances." The appropriate allowance for the area type will be multiplied by the size of the total area directly affected by the nonperformance (reference app C).

dispute concerning a question of fact within the meaning of the disputes clause of this contract.

**B-5-5.** The technical representative shall have the right to make minor adjustments in the tasks or task frequencies if such minor adjustments do not cause an increase or decrease in the amount of routine work to be performed.

**B-6. Damages Caused by the Contractor.** The contractor shall be held accountable and liable to the Government for any damages to Government facilities, fixtures, furnishings, equipment or grounds caused by the contractors or their employees.

**B-7. Interference With Government Operations.** The contractor and the contractor's employees shall perform all routine and project work in such a way as not to interfere with regularly scheduled Government operational activities.

**B-8. Use of Government Premises and Utilities.**

**B-8-1.** The Government shall furnish without cost to the contractor, suitable building space and a normal amount of utilities, except for telephone service, to be used only in connection with the performance of the work. The use of such areas by the contractor and the contractor's employees shall be limited to offices, training, and central storage of supplies.

**B-8-2.** Such building space occupied by the contractor and the contractor's employees shall be maintained in the same fashion as similar areas occupied by the Government.

**B-8-3.** The contractor and the contractor's employees shall comply with all applicable Post Regulations regarding the use of such building space and will make no alterations to the space except with the written permission of the Government.

**B-8-4.** Upon termination of this contract, the contractor and the contractor's employees shall vacate such building space within 3 working days after the effective date of termination and, within 10 days after termination shall restore the buildings and grounds to their original condition as existed when the contractor initially occupied such space.

**B-9. Contractor's Job Manager.**

**B-9-1.** The contractor shall provide a full time job manager who shall be responsible for the competent performance of the work.

**B-9-2.** The job manager shall have full authority to act for the contractor on the installation at all times

during the performance of the work in order to comply with all requirements of this contract.

**B-9-3.** The job manager shall demonstrate adequate knowledge of cleaning equipment, tools, chemicals and techniques and shall be able to recognize situations or circumstances under which cleaning techniques defined in the technical specifications may be hazardous to the facilities or to personnel. The job manager shall immediately notify the technical representative of such situations or circumstances.

**B-9-4.** The job manager shall make himself/herself present to the Government upon request of the contracting officer, the contracting officer's representative, or the technical representative to discuss the work.

**B-9-5.** The Government shall have the right to cause the contractor to replace any individual functioning as job manager.

**B-10. Contractor's Supervisors.**

**B-10-1.** The contractor shall provide an adequate number of competent supervisors to insure the performance of the work.

**B-10-2.** All supervisory personnel shall demonstrate adequate knowledge of cleaning equipment, tools, chemicals, techniques, and related activities and shall be able to recognize any situations or circumstances under which cleaning techniques defined in the Technical Specifications may be hazardous to the facilities or to personnel. Supervisory personnel shall immediately notify the Job Manager of any such situations or circumstances.

**B-10-3.** The Government shall have the right to cause the contractor to replace any individual functioning as a supervisor.

**B-10-4.** The contractor shall submit with the bid, on the forms included in the bid schedule, a diagram of the contractor's proposed organization of supervisory personnel. As a minimum, the diagram shall include all supervisors to be assigned to supervise routine work, inspection, training, distribution of supplies, and relief employees and their schedules of work. Such diagram shall not relieve the contractor of providing additional supervision as necessary to insure the competent performance of the work.

**B-10-5.** As a minimum, the contractor shall furnish a weekly total number of supervisory workedhours in accordance with the proposed diagram of organization.

**B-11. Contractor's Employees**

**B-11-1.** The contractor shall insure that all em-

ployees are capable of demonstrating adequate knowledge of chemicals, tools, equipment, and techniques necessary to competently perform the work.

**B-11-2.** The Government may require the contractor to discontinue using any employee in the performance of the work specified in this contract determined by the Government to be unsatisfactory.

**B-11-3.** Employees assigned to perform routine work shall not be used to perform project work during the time that such employees are assigned to perform routine work.

**B-12. Radio Communications System.**

**B-12-1.** The contractor shall provide and maintain in good working condition a radio communications system which enables the Government to immediately contact the job manager at any time during the performance of the work.

**B-12-2.** The system shall enable the job manager and each supervisor to remain in contact at all times during the performance of the work.

**B-12-3.** The system shall enable each employee performing routine work or project work who has access to a telephone to signal the respective supervisor by using a telephone. The system shall enable the supervisor to determine where the employee may be telephoned. Contractor's employees shall not use Government telephones for personal reasons.

**B-12-4.** Any radio communications system used by the contractor shall comply with all applicable rules, regulations and frequency approval of the installation Director of Communications.

**B-13. Training**

**B-13-1.** The contractor shall provide each employee used in the performance of work under this contract with adequate training to competently perform the work as defined in the technical specifications.

**B-13-2.** As a minimum, each employee performing

or supervising routine work shall attend classroom training in accordance with the following schedule within the first 2 weeks after such employee has initially performed such work.

**B-13-3.** No more than two of the minimum required for the performance of routine work.

**B-13-5.** Before conducting any such classroom training, the contractor shall submit an outline of each presentation to the technical representative and shall conduct no presentation unless the outline of that presentation has been *approved* by the technical representative. The Government, as it's option, may elect to provide the contractor with suitable material for classroom training to be presented by the contractor.

**B-13-6.** The contractor shall maintain a training record for each employee. The training record shall show, as a minimum, the employee's name, date of employment, and the type and date of each training class attended. Such records shall be made available to the technical representative upon request.

**B-13-7.** The contractor shall provide the technical representative with a written schedule, specifying times and locations, of all training classes to be conducted during each forthcoming week. This schedule shall be submitted to the technical representative at least 3 days prior to the first training class of each forthcoming week. The technical representative will, from time to time, monitor the conduct of such training classes.

**B-13-8.** The contractor shall be responsible for informing employees of all applicable post regulations. The contractor shall be responsible for their adherence to these post regulations.

**B-14. Identification of Contractor's Employees**

**B-14-1.** The contractor, before initiating the performance of work, shall provide the Technical Representative with a list of all employees who shall perform work under this contract. The list shall include the full name, badge serial number, and work assignment of each employee. The Con-

<i>Content of Class</i>	<i>Attendance required for</i>	<i>Minimum length of presentation</i>
Cleaning chemicals .....	All employees performing routine work.	40 minutes
Cleaning equipment and tools .....	All employees performing routine work.	60 minutes
Care of carpeted floors .....	All employees performing routine work in carpeted areas.	30 minutes
Care of non-carpeted floors .....	All employees performing routine work in non-carpeted areas	40 minutes
Rest room care .....	All employees performing routine work	30 minutes

tractor shall notify the technical representative, in writing, of any addition, deletion, or change in work assignment within 1 day of such change.

**B-14-2.** Each employee of the contractor shall conspicuously display on their person an identification card which shall include the full name of the employee, the legal name under which the contractor is doing business, a badge serial number, and, if the employee is performing routine rather than relief or project work, the name or number of the area or building to which the employee is assigned.

### **B-15. Circumstances to be Reported**

**B-15-1.** The contractor or the contractor's employees shall report any circumstance of needed repair of the facility or unusual soiling of an area which may affect the performance of the work, and unhealthful or hazardous conditions, or any delays or interference with the work caused by the employees of the Government.

**B-15-2.** Such report shall be made immediately upon discovery by the Contractor to the technical representative.

### **B-16. Removal and Disposition of Collected Trash**

**B-16-1.** The contractor shall be responsible for the removal of all collected trash to designated collection containers in or adjacent to the areas where routine work is performed.

**B-16-2.** The contractor or the contractor's employees shall immediately pick-up any trash that may fall onto the facility or grounds during the removal of such collected trash to the designated collection containers.

### **B-17. Key Control**

**B-17-1.** The contractor shall establish and implement adequate methods of insuring that all keys issued to the contractor by the Government are not lost, or misplaced, and are not used by unauthorized persons.

**B-17-2.** As a minimum, all such keys shall be kept in a locked key board in the office of the contractor. The contractor shall provide the Technical Representative with keys necessary to open the locked key board and the technical representative shall have access to such key board.

**B-17-3.** No keys issued the contractor by the Government shall be duplicated.

**B-17-4.** At the beginning of each work shift, the job manager will issue keys to the individuals who are to perform the work in the various locked areas and after these individuals have completed their

work shift, all such keys will be returned to the key board and shall remain secured.

**B-17-5.** All keys will be furnished by the Government, not by the contractor; however, the sum of \$1.00 will be charged the contractor for each key lost by the contractor. Furthermore, if keys are lost or duplicated by the contractor, and in the opinion of the Government it is necessary to replace or recode locks for reasons of security, the direct cost of such replacement or recoding will be charged to the contractor.

**B-17-6.** The contractor shall report the occurrence of a lost key immediately to the Technical Representative.

**B-17-7.** It is the responsibility of the contractor to prohibit the use of keys issued by the Government by any persons other than the contractor's employees. It is also the responsibility of the contractor to prohibit the opening of locked areas by the contractor's employees to permit entrance of persons other than contractor's employees engaged in the performance of assigned work in those areas.

**B-18.** Lost and Found. It is the responsibility of the contractor to instruct that all articles of possible personal or monetary value found by the Contractor's employees be turned in to the technical representative.

### **B-19. Equipment and Tools**

**B-19-1.** The contractor shall furnish all equipment and tools necessary to properly perform the work defined in this contract. As a minimum, the contractor shall furnish the types and quantities defined in the technical specifications.

**B-19-2.** Before beginning the work, the contractor shall submit to the technical representative a list of each type of equipment and tool to be used showing the manufacturer's names and brands. The list shall be accompanied by manufacturer's specifications and photocopies of each type of equipment and tool. The contractor shall use no equipment or tool in the performance of the work before obtaining the approval of the technical representative.

**B-19-3.** The contractor, if desirous of changing from the initial selection, shall first ascertain that the alternate equipment or tool complies with the equipment and tool description or specification in the Technical Specifications. Then, the contractor shall submit a written request to change to the technical representative defining the alternate along with the manufacturer's specifications and a photocopy of the alternate.

**B-19-4.** If the alternate complies with the equipment and tool specification defined in the technical specifications and performs as well as the initial selection as demonstrated by actual performance testing, if requested by the technical representative, and causes no operational interference with the Government or damage to facilities, and is in the best interest of the Government, then the alternate shall be approved for use.

**B-19-5.** If requested by the technical representative, the contractor shall make available for performance evaluation by the technical representative specific brands and models of equipment and tools proposed for use by the Contractor. Any such equipment or tools provided shall be returned to the Contractor after the evaluation has been completed.

**B-19-6.** Any costs associated with evaluating an alternate or changing to an alternate not included on the initial list submitted by the contractor shall be borne by the contractor if such testing or changing was a result of the contractor's request to change.

**B-19-7.** The contractor shall maintain on file at the site of the work one complete set of operating and maintenance instructions for all types, brands, and models of powered equipment used in the performance of the work.

**B-19-8.** The minimum required equipment and tools defined in the technical specifications must be present and in good operating condition at all times during the performance of the work.

**B-19-9.** All equipment and tools required for a specific building, group of buildings, or assignment area must be permanently identified with the assignment number or building number.

**B-19-10.** All equipment shall have adequate bumpers and guards to prevent marking or scratching of fixtures, furnishings, or building surfaces.

**B-19-11.** All electrical equipment used by the contractor or the contractor's employees shall meet all applicable safety requirements. This equipment must operate at full rated performance levels using existing building circuits. It shall be the responsibility of the contractor to prevent the operation or attempted operation of electrical equipment, or combinations or equipment which requires power exceeding the capacity of existing building circuits.

## **B-20. Cleaning Chemicals**

**B-20-1.** The Contractor shall furnish all cleaning chemicals necessary to perform the work defined

in the contract. As a minimum, the contractor shall furnish the following chemicals:

- metal link polymer floor finish
- floor finish remover
- water emulsion concrete and terrazzo sealers
- concentrated synthetic neutral detergent
- quaternary ammonium chloride germicidal detergent
- stainless steel polish
- lotion type cleanser
- glass cleaner
- acid bowl cleaner
- carpet shampoo concentrate
- furniture polish

**B-20-2.** All chemicals shall comply with the chemical specifications if applicable, or approved brands defined in the technical specifications.

**B-20-3.** Before beginning the work, the contractor shall submit to the technical representative a list of each type of chemical to be used in the performance of the work, showing the manufacturer's names and brands of each chemical. The list shall be accompanied by manufacturer's specifications and samples of each chemical in their original containers. The Contractor, if requested by the technical representative, shall obtain from the chemical manufacturer a certification as to compliance with the appropriate chemical specification defined in the technical specifications.

**B-20-4.** The contractor, if desirous of changing from the initial selection, shall first ascertain that the alternate chemical complies with the specification defined in the technical specifications. Then, the contractor shall submit a written request to change to the technical representative defining the alternate along with chemical specifications and a sample of the alternate chemical in its' original container.

**B-20-5.** If the alternate complies with the chemical specifications defined in the Technical Specifications and performs as well as the initial selection as demonstrated by actual performance testing, if requested by the technical representative, and causes no operational interference with the Government or damage to facilities and is in the best interest of the Government, then the alternate shall be approved for use.

**B-20-6.** Any costs associated with evaluating an alternate or changing to an alternate not included on the initial list submitted by the Contractor shall be borne by the contractor, if such testing or changing was a result of the Contractor's request to change.

## **B-21. Distribution of Supplies and Equipment**

**B-21-1.** Prior to each work shift, the contractor shall insure that all custodial storage closets and custodial carts are equipped with the tools, equipment and chemicals necessary to perform the work.

**B-21-2.** Employees of the contractor who are assigned to perform routine work shall not be used to supply custodial closets or carts with tools, supplies, or equipment during the time when they are scheduled to perform routine work.

**B-22. Relief Personnel.** The contractor shall employ an adequate quantity of personnel not permanently assigned to a specific building or area for routine cleaning who shall be utilized to complete routine work assignments of absent employees normally assigned to routine work in a specific area. Such relief personnel may perform authorized project work when not performing routine work.

**B-23. Determining the Size of an Area.** When the quantity of square feet of floor or ceiling space in an area or building is required either for calculating payment for project work or for applying allowances to determine the minimum number of worked-hours required for routine work, such quantity of square feet shall be determined by actual measurement from inside wall to inside wall and will not include any portion of the area where the project or the routine work is not performed.

**B-24. Correction of Nonperformance of Routine Work.** The contractor shall employ an adequate quantity of personnel to insure that any area not acceptable for use or occupancy due to the non-performance of routine work in such area shall be made acceptable by the performance of the routine work during the first \_\_\_ hours after non-performance has been observed by or reported to and verified by the technical representative.

## **B-25. Verification of Minimum Number of Work-ed-Hours Provided for Routine Work**

**B-25-1.** The contractor shall insure that each employee performing routine work under this contract and each supervisor of the contractor shall prepare and sign a daily time card or sheet showing the actual starting time and completion time of routine in each building or area.

**B-25-2.** These time cards or sheets shall be collected by the contractor and turned into the technical representative during the first work day of each following work week.

**B-25-3.** A weekly statement of routine work performed shall be prepared by the contractor and provided to the technical representative along with the time cards or sheets. The weekly statement shall define for each building or area the full name, badge number, and total weekly hours worked of each employee performing routine work, and shall indicate all employees who have completed the required classroom training.

**B-25-4.** The number of worked-hours reported by the contractor for routine work should include only hours during which an employee is performing routine work. The number of hours reported should apply to the minimum number of worked-hours required for routine work. The time spent by an employee assigned to routine work in traveling from one building or area to another building or area shall not be considered as part of the minimum number of worked-hours required for routine work unless the travel was between buildings or areas included in the same bid item in the bid schedule for routine work.

## **B-26. Invoicing for Routine Work and Completed Project Work**

**B-26-1.** The contractor shall submit separate invoices each month for routine work and for completed project work.

**B-26-2.** The invoice for routine work shall show each building or area in accordance with the bid schedule for routine work and indicate the minimum number of worked-hours per each such building or area that was provided.

**B-26-3.** The invoice for routine work must agree with the weekly statements of routine work prepared by the contractor and approved by the technical representative.

**B-26-4.** The invoice for completed project work shall indicate the project number, exact location of each project, the dates and times of performance of each project, the quantity of project performed, and the project work order number.

## **B-27. Conservation of Utilities**

**B-27-1.** The contractor shall be directly responsible for instructing employees in appropriate utilities conservation practices. Contractor employees and in turn the contractor shall be responsible for operating under conditions which preclude the waste of utilities which shall include but shall not necessarily be limited to:

**B-27-2.** Lights shall be used only in areas where

and at the time when work is actually being performed.

**B-27-3.** Mechanical equipment controls will not be adjusted by the workers.

**B-27-4.** Water faucets or valves will be turned off after the required usage has been accomplished.

**B-28. Government Furnished Items for Routine Work**

**B-28-1.** The Government shall furnish the contractor with the following rest rooms supplies.

**B-28-1.1.** Toilet tissue.

**B-28-1.2.** Hand towels. **B-28-1.3.** Hand soap.

**B-28-2.** The contractor shall establish and implement adequate methods of storage and distribution to insure that such supplies furnished by the Government are not pilfered after they have been received by the contractor.

**B-29. Parking for Contractor's Employees and Contractor's Vehicles.** All employees of the contractor will park their personal vehicles and Contractor's vehicles in areas and during times designated by the Technical Representative.

**B-30. Contractor's Access to the Site(s) of the Work.** The following restrictions shall apply to the contractor and contractor's employees access to the site(s) of the work:

(ITEMS NEGOTIABLE)

**B-31. Post Regulations.** The contractors and their employees must comply with the following

post regulations, copies of which are on file in the \_\_\_\_\_.



## APPENDIX C

### TECHNICAL SPECIFICATIONS FOR CONTRACTING CUSTODIAL SERVICES FOR ARMY ACTIVITIES OTHER THAN MEDICAL AND INDUSTRIAL FACILITIES

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#### Section 1—CHEMICALS

**C-1-1.** All chemicals used in the performance of the work must be purchased and issued to the Contractor's employees in the original manufacturer's containers. All such containers shall identify the type of chemical, instructions for use and dilution, and hazard warnings.

**C-1-2.** The contractor shall *not* use the following chemicals in the performance of the work.

**C-1-2.1.** Ammonia (except in floor finish remover).

**C-1-2.2.** Powdered Abrasive Cleaner (except on worn porcelain fixtures).

**C-1-3.** The following types of cleaning chemicals shall be used by the contractor in the performance of work when such work is required.

**C-1-3.1.** Neutral Detergent.

**C-1-3.1.1.** Federal Specifications—

**C-1-3.1.2.** Approved brands.

(a)

(b)

(c)

**C-1-3.1.3.** Size containers—one gallon only.

**C-1-3.1.4.** A synthetic neutral detergent concentrate shall be used in varying dilutions for the removal of soil from washable surfaces such as resilient tile floors, painted walls and woodwork, synthetic surfaces such as wall coverings and vinyl upholstery, etc. When used in various concentrations, the neutral detergent shall be adaptable for spot mopping, damp mopping, spot removal, wall washing, etc.

**C-1-3.2.** Germicidal Detergent.

**C-1-3.2.1.** Federal Specifications—

**C-1-3.2.2.** Approved brands.

(a)

(b)

(c)

**C-1-3.2.3.** Size containers—1 gallon only.

**C-1-3.2.4.** A quaternary ammonium germicidal detergent concentrate shall be used for disinfecting rest rooms, locker rooms, drinking fountains, food service areas, etc.

**C-1-3.3.** Acid Type Bowl Cleaner.

**C-1-3.3.1.** Federal Specifications—

**C-1-3.3.2.** Approved brands.

(a)

(b)

(c)

**C-1-3.3.3.** Size containers—one quart plastic squeeze bottle with flip-top cap.

**C-1-3.3.4.** An acid type bowl cleaner shall be used in toilet bowls and urinals to remove scum, rust, and scale build-up caused by mineral deposits in the water.

**C-1-3.4.** Lotion Type Cleaner.

**C-1-3.4.1.** Federal Specifications—

**C-1-3.4.2.** Approved brands.

(a)

(b)

(c)

**C-1-3.4.3.** Size container—one quart or smaller plastic squeeze bottle.

**C-1-3.4.4.** A creme or lotion type cleaner shall be used to remove soil from washable walls, furniture, fixtures, etc. A lotion type cleaner shall be used whenever a solution of neutral detergent or

germicidal detergent was not effective in removing the soil.

**C-1-3.5. Stainless Steel Cleaner and Polish.**

**C-1-3.5.1. Federal Specifications—**

**C-1-3.5.2. Approved brands.**

(a)

(b)

(c)

**C-1-3.5.3. Size container—one gallon or smaller.**

**C-1-3.5.4.** A stainless steel cleaner and polish shall be used to remove soil from polished metal surfaces and to reduce the soil and smudging of such surfaces. This chemical shall not be over-applied so as to leave an oily residue.

**C-1-3.6. Furniture Polish.**

**C-1-3.6.1. Federal Specifications—**

**C-1-3.6.2. Approved brands.**

(a)

(b)

(c)

**C-1-3.6.3. Size container—1 gallon or smaller.**

**C-1-3.6.4.** Furniture polish shall be used only on unsealed wood furniture or paneling and only to restore the natural moisture of the wood; not as a cleaner.

**C-1-3.7. Water Based Degreaser.**

**C-1-3.7.1. Federal Specifications—**

**C-1-3.7.2. Approved brands.**

(a)

(b)

(c)

**C-1-3.7.3. Size container—1 gallon.**

**C-1-3.7.4.** A water based degreaser shall be used in certain instances to remove petroleum based soils. The degreaser shall not be used on floors which have been sealed, or waxed.

**C-1-3.8. Glass Cleaner.**

**C-1-3.8.1. Federal Specifications—**

**C-1-3.8.2. Approved brands.**

(a)

(b)

(c)

**C-1-3.8.3. Size container—one gallon or smaller.**

**C-1-3.8.4.** Glass cleaner shall be used to spot clean and wash glass and other synthetic surfaces

where slight spotting or streaking would be detrimental to the appearance of the surface. The glass cleaner shall contain a soil retardant.

**C-1-3.9. Metal-linked Polymer Floor Finish.**

**C-1-3.9.1. Federal Specifications—**

**C-1-3.9.2. Approved brands.**

(a)

(b)

(c)

**C-1-3.9.3. Size container—6 gallon or smaller.**

**C-1-3.9.4.** A metal-link polymer floor finish shall be used on resilient tile and terrazzo floors. The floor finish shall enhance the appearance of the floor, decrease the wearing of the floor, and increase the effectiveness of dust mopping and wet mopping. The metal-link polymer floor finish shall be maintained by spray buffing the floor with a solution of 50 percent each, floor finish and water.

**C-1-3.10. Water Emulsion Concrete and Terrazzo Seal.**

**C-1-3.10.1. Federal Specifications—**

**C-1-3.10.2. Approved brands.**

(a)

(b)

(c)

**C-1-3.10.3. Size container—6 gallon or smaller.**

**C-1-3.10.4.** A water emulsion concrete and terrazzo floor seal shall be used to seal smoothed concrete and to prepare terrazzo floors prior to applying a metal-link polymer floor finish.

**C-1-3.11. Floor Finish Remover.**

**C-1-3.11.1. Federal Specifications—**

**C-1-3.11.2. Approved brands.**

(a)

(b)

(c)

**C-1-3.11.3. Size container—6 gallon or smaller.**

**C-1-3.11.4.** An ammoniated floor finish remover shall be used to remove metal-link polymer floor finish and water emulsion concrete and terrazzo floor seal from resilient tile, terrazzo and concrete floors.

**C-1-3.12. Solvent Wax.**

**C-1-3.12.1. Federal Specifications—**

**C-1-3.12.2. Approved brands.**

(a)

(b)

(c)

**C-1-3.12.3. Size container—6 gallon or smaller.**

**C-1-3.12.4.** A solvent wax shall be used on unsealed wood floors. The wax shall enhance the appearance of the floor, decrease the wearing of

the floors, and increase the effectiveness of dust mopping and wet mopping. The solvent wax shall be dry buffable.

## Section 2—TOOLS

**C-2-1. Requirements.** All employees of the contractor shall have tools and supplies in accordance with the following paragraph (2-2)). The required tools and supplies shall be available and accessible to each employee when performing routine work.

### C-2-2. Tool Assignment

**C-2-2.1. Custodial Closet.** Each custodial closet used by the contractor for routine work shall be supplied daily, or as frequently as the area is serviced, with the following items:

- one—funnel.
- one—measuring cup.
- one—gallon jug of neutral detergent concentrate with one ounce dispensing pump.
- one—gallon jug of germicidal detergent concentrate with one ounce dispensing pump.
- one—plastic pail.

**C-2-2.2. Routine Work.** Each employee of the contractor performing routine work shall have the following items:

- one—spray bottle with neutral detergent solution.
- one—spray bottle with germicidal detergent solution.
- one—spray bottle with glass cleaner.
- two—hand size sponges.
- one—hand size abrasive pad.
- one—gong brush.
- one—radiator brush.
- one—supply of clean synthetic cloths.
- one—hand size dusting tool.
- one—supply of treated dust cloths.
- one—urethane foam eraser (for chalk board cleaning only).
- one—container of lotion type cleaner.
- one—container of stainless steel cleaner.

**C-2-2.3. Rest Rooms.** Each employee of the contractor performing routine work in rest rooms shall have the following additional items:

- one—gallon jug of germicidal detergent with 1 oz. dispensing pump.
- two—hand size sponges.
- one—hand size abrasive pad.
- one—large perculator brush.
- one—bowl mop.

- one—pair rubber gloves.
- one—container of acid bowl cleaner.

**C-2-2.4. Noncarpeted Areas.** Each employee of the contractor performing routine work in non-carpeted areas shall have the following additional tools:

- one—spray bottle of spray-buff solution (for resilient tile and terrazzo floors only).
- one—dust pan.
- one—resilient tile, terrazzo, or other smooth floors which can be cleaned by dust mopping).
- one—putty scraper.
- one—push broom (for unsealed or rough concrete, quarry tile, or ceramic tile floors only).
- one—deck brush (for rough concrete, quarry tile, or ceramic tile floors only).
- two—spray-buff pads (for resilient tile or terrazzo floors only).
- one—wet mop, mopping pail, and wringer.
- one—cove brush and stick (for grouted tile or concrete floors only).

**C-2-2.5. Carpeted Areas.** Each employee of the contractor performing routine work in carpeted areas shall have the following additional tools:

- one—spray bottle of carpet shampoo.
- one—aerosol can of freon (for removing gum, etc.).
- one—small synthetic bristle broom.

**C-2-3. Prohibited Tools.** The contractor shall not use the following tools or supplies in the performance of the work:

**C-2-3.1. Steel Wool.**

**C-2-4. Definitions.** The tools used by the contractors shall comply with the following definitions:

**C-2-4.1. Measuring devices.** Plastic measuring cups graduated in one ounce intervals or one ounce dispensing pumps shall be used to prepare concentrated chemicals to the proper dilutions.

**C-2-4.2. Funnel.** Plastic funnels shall be used when filling spray bottles or gallon containers.

**C-2-4.3. *Spray Bottle.*** Plastic spray bottles shall be used to dispense neutral detergent, germicidal detergent, glass cleaner, spray-buff solution, etc. The plastic bottle shall be transparent, or translucent, graduated in one ounce intervals, 16 ounce capacity, pistol-grip type sprayer, and have an adjustable nozzle.

**C-2-4.4. *Sponges.*** Sponges shall be used for general cleaning operations such as spot cleaning walls, doors, vinyl upholstery, furniture, etc., and cleaning of rest room fixtures. The sponge shall be of a size which is easily held and used with one hand and shall be manufactured from cellulose.

**C-2-4.5. *Hand Held Dusting Tools.*** Hand held dusting tools shall be used for light-duty dusting of furniture, fixtures, ledges, etc. Dusting tools shall be chemically treated with a soil entrapping compound or be able to become electrostatically charged. Chemically treated dusting tools shall not leave a residue of the treating compound on the dusted surfaces. Dusting tools shall be vacuumed on a regular basis in order to maintain their capacity to entrap soil. Periodically, dusting tools shall be laundered and retreated.

**C-2-4.6. *Dust Mops.*** Treated dust mops shall be used to remove dry soil from resilient tile, terrazzo, wood, or smooth sealed concrete floors. Treated dust mops shall not be used on wet or heavily soiled floors. The dust mop head shall be attached to the mop stick by means of a swivel mop head holder. The dust mop strands shall be looped at the ends and stitched or secured firmly to prevent strands from falling out or becoming unraveled. The dust mop head shall be as wide as practical for the area. The dust mop head shall be vacuumed on a regular basis in order to maintain its capacity to entrap soil. Periodically, dust mop heads shall be laundered and retreated.

**C-2-4.7. *Wet Mop.*** Wet mops shall be used for spot mopping, damp mopping and wet mopping of floors, pick-up of spills, applying floor finish and finish remover, and other general cleaning operations of floors. Wet mop heads shall not be used to clean walls, furniture, rest room fixtures, etc. Wet mop heads, when dry, shall weigh from 16 ounces to 24 ounces. The wet mop head shall be a cotton and synthetic blend with looped-end mop strands and a stitched tail-band. Mop heads shall be rinsed on a regular basis and laundered periodically. Wet mop heads shall not have an objectionable odor.

**C-2-4.8. *Putty Scraper*** A putty or paint scraper shall be used to remove gum and other similar substances from noncarpeted floors.

**C-2-4.9. *Dust Pan.*** A nonmetallic dust pan shall be

used to pick-up soil and litter accumulated during dust mopping and sweeping of non-carpeted floors.

**C-2-4.10. *Plastic Pail.*** A plastic pail shall be used for heavy-duty cleaning operations such as wall and furniture washing. Plastic pails shall *not* be used for spot cleaning. Plastic pails shall be non-metallic, have a pouring spout, be graduated in one quart intervals, and have a metal bail with plastic handle.

**C-2-4.11. *Mop Buckets and Wringers.*** Mop buckets and wringers shall be used with wet mops to spot mop, damp mop, wet mop, apply floor finish and seal, apply stripping solution, etc. The mop bucket shall have a nonmetallic container with "CAUTION—WET FLOORS" printed on the exterior of the container. The nonmetallic container shall be mounted to a metallic crossbrace with swivel, nonmarking casters. The container shall have metallic bails which, when not in use, serve to reinforce the top edge of the sides of the container. If the worker using the mop bucket is issued a metal custodial cart, the casters may be removed and the bucket placed on the cart. The mop wringer shall be galvanized or stainless steel and shall have a down-pressure type lever. The size of the wringer shall be compatible with the size mop head used.

**C-2-4.12. *Toilet Bowl Mops.*** Toilet bowl mops shall be used to clean toilet bowls and urinals only. The toilet bowl mop head shall be a synthetic fiber and the mop handle shall be a pliable squeeze cup.

**C-2-4.13. *Synthetic Fiber Cloths.*** Synthetic fiber cloths shall be used for general purpose cleaning operations. The cloths shall not leave lint or string on the cleaned surface. Rags or paper towels are not an acceptable substitute for synthetic fiber cloths.

**C-2-4.14. *Rubber Gloves.*** Rubber gloves shall be used when cleaning rest rooms or using harsh chemicals. The rubber gloves shall be pliable, waterproof, and shall not significantly interfere with the productivity of the worker.

**C-2-4.15. *Push Broom.*** Push brooms shall be used to remove soil from rough concrete or non-resilient tile floors and to remove heavy concentrations of soil from other noncarpeted floors prior to dust mopping. The push broom shall have synthetic fiber bristles and shall be as wide as practical for the area being cleaned.

**C-2-4.16. *Deck Brush.*** A deck brush shall be used

to scrub concrete and nonresilient tile floors. The deck brush shall be made of stiff, synthetic fiber bristles and be as wide as practical for the area cleaned.

**C-2-4.17. Radiator Brush.** A synthetic fiber radiator brush shall be used to sweep or dust soil from hard-to-reach areas.

**C-2-4.18. Large Perculator Brush.** Large perculator brushes shall be used to clean hard-to-reach areas in commodes and urinals.

**C-2-4.19. Small Perculator Brush.** Small perculator brushes shall be used to clean the water spout and holes in the drain cover of drinking fountains.

**C-2-4.20. Gong Brush.** Synthetic fiber gong brushes shall be used to clean hard-to-remove soil from carpet, upholstery, and fabric or vinyl wall coverings.

**C-2-4.21. Urethane Foam Erasers.** Urethane

foam erasers shall be used to dry clean chalk boards. The eraser should be made of urethane foam with a leather or chamois backing. The eraser should be approximately 16 inches in length.

**C-2-4.22. Floor Machine Pads.** Floor machine pads shall be used with single disc floor machines to spray-buff, spray-clean and strip resilient tile and terrazzo floors. The floor machine pads shall be at least 3/4 inch thick and made from open-weave, polyester material.

**C-2-4.23. Cove Brush and Stick.** A synthetic bristle triangular cove brush shall be used to clean ceramic tile, quarry tile, and concrete floors where such floors have a base-board made of similar material or have a protective base-board.

**C-2-4.24. Abrasive scrubbing pads.** Hand size abrasive scrubbing pads shall be used to remove hard-to-remove soil from walls, partitions, rest room fixtures, etc.

### Section 3—EQUIPMENT

**C-3-1. Types of Equipment.** The equipment used by the contractor shall comply with the following paragraphs.

**C-3-2. Single Disc Floor Machine.** Single disc floor machines shall be used for floor finish stripping, spray-buffing, spray-cleaning, dry-buffing, and scrubbing ceramic tile, quarry tile, and concrete floors. The floor machine shall be 20 inches in diameter unless otherwise specified in section 4-"Schedule of Minimum Required Equipment for Routine Work." The floor machine shall be equipped with an aluminum driving block with nylon bristles set in fiber backing for securing spray-buff pads.

#### **C-3-3. Upright Carpet Vacuums.**

**C-3-3.1.** Upright carpet vacuums shall be used for routine vacuuming of carpet and carpet-type entrance mats. The upright carpet vacuum shall have as wide a swath as practical for a given area. The swath of the machine will vary from 14 inches to 32 inches depending on the size of the carpeted area, the obstruction of furniture, etc. The carpet vacuum motor shall be rated at least 1 horsepower. The beater bar of the upright carpet vacuum must be replaced whenever the bristles become worn or missing. The filter collection bag of the vacuum cleaner must be emptied routinely to insure adequate suction.

#### **C-3-4. Wet/Dry Tank Vacuums.**

**C-3-4-1.** Wet/Dry tank vacuums shall be used to vacuum areas inaccessible to upright carpet vac-

uums such as beneath desk and furniture, in corners, and along baseboards. However, they shall not be used to maintain trafficked areas of carpet. Additionally, wet/dry tank vacuums can be used to vacuum-up spills, stripping solution, or for removing excess water from damp mopping, or machine scrubbing. The wet/dry tank vacuum shall be 5 to 8 gallon capacity and shall be equipped with crevice tool, upholstery brush, floor tool, wet pick-up squeegee, a flexible hose, and a wand.

#### **C-3-5. Custodial Carts.**

**C-3-5.1.** Each custodian assigned to routine work shall have a custodial cart. The cart shall be used to transport tools, chemicals, supplies, and for the collection of trash. Such custodians assigned to carpeted areas or assigned to noncarpeted areas which are somewhat obstructed shall be equipped with a folding waste collection cart with an attachable caddy bag for holding smaller items of supply and tools. Custodians who are assigned to areas where the use of mop buckets is frequent or who must transport a considerable quantity of supplies for refilling rest room dispensers shall have a larger metal cart with shelves, unless the assigned area has obstructions or congestion which limits the mobility of the larger cart.

**C-3-5.2.** The folding waste collection cart shall have a 6 bushel capacity, plasticized waste collection bag, an attachable tool caddy, a folding shelf beneath the waste collection bag, and swivel casters.

**C-3-5.3.** The larger custodial cart shall have one

Section 4—SCHEDULE OF MINIMUM REQUIRED FOR ROUTINE WORK Schedule 4.

(SUGGESTED FORMAT)

Building or area	Single disc floor machine	Upright carpet vacuum	Wet/dry tank vacuum	Custodial cart	Automatic scrubbing machine.			

## Section 5—PERFORMANCE STANDARDS FOR ROUTINE WORK

or more shelves accessible from all sides of the cart, a bottom platform to hold the mop bucket, a 4 bushel or larger plasticized waste collection bag and four casters, two of which are swivel.

**C-5-1. Remove Trash.** All waste baskets, cigarette butt receptacles, pencil sharpeners, and other trash containers within the area shall be emptied and returned to their initial location. Boxes, cans, papers, etc. placed near a trash receptacle and marked "TRASH" shall be removed. All waste from such trash receptacles shall be removed from the area and emptied into a designated trash dumpster or receptacle in such a manner as to prevent the adjacent area from becoming littered by such trash. Any obviously soiled or torn plastic trash receptacle liners in such receptacles shall be replaced. Sand in cigarette butt receptacles will be strained to remove ashes and debris. The exterior of waste baskets shall be damp wiped with neutral detergent from a spray bottle and a clean sponge or synthetic fiber cloth to remove evident soil. Wet spills on the interior of waste baskets shall be removed. Cigarette butt receptacles shall be damp wiped with a sponge to remove evident soil. Lotion type detergent and an abrasive pad shall be used on hard-to-remove soil. In rest rooms, locker rooms, and food service areas, germicidal detergent will be used in lieu of neutral detergent.

**C-5-2. Partially Vacuum Carpet.** Prior to carpeted floors being partially vacuumed, the carpeted area shall be policed to remove all surface litter such as paper, gum, rubber bands, paper clips, etc., etc. Use an upright carpet vacuum with beater bar to remove any obvious soil on the surface of the carpet. The beater bar shall be adjusted to correspond with the pile height of the carpet. After being partially vacuumed, the carpeted floor shall be free of all visible litter and soil.

**C-5-3. Completely Vacuum Carpet.** Prior to carpeted floors being completely vacuumed, the carpeted area shall be policed to remove all surface litter such as paper, gum, rubber bands, paper clips, etc. An upright carpet vacuum shall be used to vacuum surface soil and embedded grit from all areas accessible to the carpet vacuum. The beater bar shall be adjusted to correspond with the pile height of the carpet. Chairs and trash receptacles shall be tilted or moved where necessary to vacuum underneath. Additionally, as necessary to prevent any visible accumulation of soil or litter in carpeted areas inaccessible to the upright carpet vacuum, a tank vacuum with crevice tool and brush attachment shall be used. After the carpeted floor

has been completely vacuumed, it shall be free of all visible litter, soil and embedded grit.

**C-5-4. Spray-Buff.** Prior to being spray-buffed, the floor surface shall be swept. A single disc floor machine, buffing pad and spray bottle with spray-buffing solution shall be used to restore a uniform gloss and protective finish to resilient tile or terrazzo floors which are finished with a metal-link polymer floor finish. The spray-buff solution shall be prepared by mixing a solution of equal parts of water and floor finish. The floor finish shall be of the type already on the floor. All areas accessible to the floor machine shall be spray-buffed. Chairs, trash receptacles, etc. shall be tilted or moved where necessary to spray-buff underneath. The floor shall be swept after being spray-buffed. After spray-buffing, the entire floor shall have a uniform, glossy appearance, free of scuff marks, heel marks, and other stains, and shall have a uniform coating of floor finish. All spray-buff solution shall be removed from baseboards, furniture, trash receptacles, etc.

**C-5-5. Dry-Buff.** Prior to being dry-buffed, the floor surface shall be swept. A single disc floor machine and buffing pad or brush shall be used to restore a uniform gloss and protective finish to waxed wooden floors. All areas accessible to the floor machine shall be dry-buffed. Chairs, trash cans, etc. shall be tilted or moved to dry-buff underneath. After being dry-buffed, the entire floor shall have a uniform glossy appearance, free of scuff marks, heel marks, and other stains and shall have a uniform coating of wax.

**C-5-6. Wet Mop Floors.** Prior to being wet mopped, the floor surface shall be swept. A wet mop, mop bucket and wringer and a neutral detergent solution shall be used to remove all soil and nonpermanent stains from the entire area. The neutral detergent solution shall be changed periodically and remain clear or the area damp mopped shall be rinsed with clear water. All accessible areas shall be damp mopped. Chairs, trash receptacles, etc. shall be moved when necessary to mop underneath. After being wet mopped, the floor shall have a uniform appearance with no streaks, swirl markets, detergent residue, or any evidence of soil. There shall be no splash marks or mop streaks on furniture, walls, baseboards, etc., or mop strands remaining in the area.

**C-5-7. Sweep Floors.** Prior to sweeping the floor surface, use a mop and neutral detergent to remove spills and obvious soil from the floor; and use a putty knife to remove gum, tar, and other sticky

substances from the floor. On resilient tile, terrazzo, smooth sealed concrete or other smooth finished floor surfaces, use a treated dust mop and a dust pan to remove accumulated soil and litter. On rough, unsealed concrete, or other floors where dust mopping is not effective, use a push broom. The entire area to be swept shall be thoroughly cleaned to remove dust, dry soil, and other litter. Chairs and trash receptacles shall be tilted or moved where necessary to sweep underneath. After the floor has been swept, the floor surface, including corners and abutments, shall be free of streaks, litter, and spots caused by spills, and no soil shall be detected on a clean white cloth when a cloth is pulled across the floor surface. Carpet type entrance mats shall be vacuumed with an upright carpet vacuum to remove soil and grit and to restore the resiliency of the carpet tile. Rubber or polyester entrance mats shall be swept, vacuumed or hosed-down to remove soil and grit. All entrance mats shall be lifted to remove soil and moisture underneath and shall then be returned to their normal location.

**C-5-8. Clean and Supply Rest Rooms.** Perform the following activities:

**C-5-8.1.** Remove trash (reference para 5-1).

**C-5-8.2.** Wet mop (reference para 5-6).

**C-5-8.3.** Sweep floors (reference para 5-7).

**C-3-8.4.** Complete dusting (reference para 5-11).

**C-5-8.5.** Spot clean (reference para 5-12).

**C-5-8.6.** Resupply all toilet tissue dispensers, towel dispensers, hand soap dispensers, and sanitary napkin dispensers.

**C-5-8.7.** Completely damp clean and disinfest *all* surfaces of toilet bowls, urinals, lavatories, showers, dispensers, and other such surfaces using a germicidal detergent from a spray bottle, a clean sponge, polyester abrasive pad, toilet bowl mop, synthetic fiber cloth, and a lotion detergent for hard-to-remove soil.

**C-5-8.8.** Disinfect all surfaces of partitions, stalls, stall doors, and wall areas adjacent to wall mounted lavatories, urinals, and toilets using a spray bottle of germicidal detergent and a clean sponge.

**C-5-9. Descal Toilet Bowls and Urinals.** Use acid-type bowl cleaner and a nylon bowl mop to remove scale, scum, mineral deposits, rust stains, etc. from toilet bowls and urinals. After descaling, the entire surface shall be free from streaks, stains, scale, scum, mineral deposits, rust stains, etc. Caution must be used to prevent damage to

adjacent surfaces caused by spills of the acid-type bowl cleaner.

**C-5-10. Regular Dusting.** Use a lightly treated dust cloth, lightly treated hand-held dusting tool, lambswool dusting tool, tank vacuum with dusting attachments, or combination of these dusting tools to remove all dust, lint, litter, dry soil, etc. from the horizontal surfaces of desks, chairs, file cabinets, and other types of office furniture and equipment and from horizontal ledges, window sills, blinds, hand rails, etc. below 6½ feet from the top of the floor surfaces. Items on desk tops are not to be disturbed. After regular dusting, all such surfaces shall have a uniform appearance, free of streaks, smudges, dust, lint, litter, etc. Dusting shall be accomplished by removal of soil from the area—not by rearranging it from one surface to another.

**C-5-11. Complete Dusting.** Use a lightly treated dust cloth, lightly treated hand held dusting tool, lambswool dusting tool, tank vacuum with dusting attachments, or combination of these dusting tools to remove dust, lint, litter, dry soil, etc. from all surfaces below 6½ feet from the top of the floor surface. Items on furniture tops shall be dusted and replaced; however, papers shall not be disturbed. After complete dusting, all such surfaces, including cracks, corners, vents, etc., shall have a uniform appearance free of streaks, smudges, dust, lint, litter, etc. Dusting shall be accomplished by removal of the soil from the area; not by rearranging it from one surface to another.

**C-5-12. Spot Clean.** Use a sponge, clean cloth and spray bottle of neutral detergent, germicidal detergent, or glass cleaner to remove smudges, finger prints, marks, streaks, etc. from washable surfaces of walls, partitions, doors, furniture, fixtures, appliances, etc. Germicidal detergent shall be used in rest rooms, locker rooms, food service areas, and drinking fountains. Glass cleaner shall be used on mirrors and glass surfaces. Lotion cleaner shall be used on hard-to-remove spots. After spot cleaning, the surface shall have a clean, uniform appearance, free of streaks, spots, and other evidence of removable soil.

**C-5-13. Clean Drinking Fountains.** Use a spray bottle of germicidal detergent, sponge or cloth, small percolator brush, abrasive pad, and lotion cleaner to remove all obvious soil, streaks, smudges, etc. from the drinking fountain and cabinet, then, disinfect all porcelain and polished metal surfaces including the orifices and drain. After cleaning, the entire drinking fountain shall be free from streaks, stains, spots, smudges, scale, and other obvious removable soil.



**C-5-14. Clean Chalkboards.** Use a polyurethane foam eraser with chamois backing to remove all chalk marks, finger marks, and excess chalk dust from the writing surface of the chalkboard. Wipe the chalk tray with a damp sponge or cloth to remove chalk dust. Remove excess chalk dust from

erasers by vacuuming. After cleaning the chalkboard, the writing surface shall have a uniform appearance with no remaining marks, streaks, or excess dust. The chalkboard tray and erasers shall contain no excess chalk dust.

**Section 6—SCHEDULE OF ROUTINE WORK Schedule Number 6.**

(SUGGESTED FORMAT)

Applicable to Buildings:

(Work must be performed during the times indicated)

D = daily, 2D = twice daily, D3 = every three days, etc. W = weekly, 3W = three times weekly, W2 = every two weeks, etc. M = monthly	High traffic corridors and lobbies	Other corridors and lobbies	Office areas	Classrooms	Lounges	Restrooms and Locker rooms	Elevators	
Remove trash								
Sweep floors								
Partially vacuum carpet								
Completely vacuum carpet								
Clean and supply restrooms								
Spray-buff								
Wet mop								
Regular dusting								
Complete dusting								
Spot clean								
Clean chalk boards								
Dry buff								
Clean drinking fountains								
Descale toilets and urinals								

## Section 7—ROUTINE WORK TIME ALLOWANCES

(SUGGESTED FORMAT)

The routine work allowances listed below are average allowances per building or area. These allowances shall be used by the Technical Representative to determine the minimum value of a deduction for nonperformance of routine work by the Contractor in accordance with the Special Conditions paragraph 4—Deductions for Nonperformance of Routine Work.

Building or area	Average minutes per/day per 1,000 sq. ft.	Building or area	Minutes per/day per 1,000 sq. ft.

## Section 8—PERFORMANCE STANDARDS FOR PROJECT WORK

### **C-8-1. Stripping and Refinishing Resilient Tile and Terrazzo Floors**

**C-8-1.1.** Stripping shall be defined as the complete removal, without damage to the floor surface, of all finish and/or sealer from all visible floor surfaces and from those floor surfaces which can be exposed by the removal of nonfixed furnishings. Stripping shall also include the complete removal of all marks, scuffs, stains, etc., except in cases in which there is damage to the floor surface. The stripping chemical(s) used shall meet the specifications given in this document for the type of finish and/or sealer being stripped, and shall be used according to the manufacturer's directions. The floors shall be scrubbed with a single disc floor machine equipped with a stripping pad, except those areas in which an auto-scrubber can safely and effectively be used; and those areas in which the use of manual scrubbing devices are necessary to completely remove the finish and/or sealer (along walls, in corners, etc.). The stripping solution and rinse water shall be picked-up with a wet/dry vacuum except in areas where its use is impossible or impractical (very small areas, areas with low amperage circuits, etc.). All floor surfaces to which stripper has been applied shall be thoroughly rinsed with clean water. When a wet/dry vacuum is used, the area should be rinsed at least once after the stripping solution has been removed. If a mop is used to pick-up the stripping solution, the area should be rinsed at least twice.

**C-8-1.2.** Refinishing shall be defined as the proper application of at least two coats of finish to all trafficked areas and one coat of finish to areas receiving no traffic. The finish shall be applied with a clean, fine-strand, rayon mop head. No finish which has been removed from its original container shall be returned to that container. After the finish has dried, the reflectancy shall be uniform and no streaks, swirls, etc., shall be visible. No stripping solution or finish shall remain on baseboards, doors, or other nonfloor surfaces.

**C-8-2. Carpet Cleaning, Water Extraction Method.** Carpet cleaning, water extraction method shall be defined as the spot cleaning, vacuuming, operation of the water extraction equipment, and revacuuming of all carpet in an area. All vacuuming, both before and after the use of the water extraction equipment shall be done with a medium duty pile lifter vacuum. All stained areas shall be treated with spot cleaning solution, following the directions of the manufacturer of the solution, or treated according to procedures given in TM 5-609, Military Custodian Services Manual for the particular stain involved. Spot cleaning

should continue until as much of the stain as possible has been removed. The water extraction equipment and materials shall meet the specifications given in this document. The water extraction equipment shall be operated over the entire carpeted area. All instructions provided by the manufacturer of the water extraction equipment and materials shall be followed during their use. After operating the water extraction equipment and allowing sufficient drying time, the carpet shall be vacuumed following a pattern which will give the carpet pile a uniform appearance.

### **C-8-3. Carpet Cleaning, Dry Foam Method.**

Dry foam shampooing of carpets shall be defined as the spot cleaning, vacuuming, shampooing, and revacuuming of all carpet in an area. All vacuuming, both before and after shampooing shall be done with a medium duty pile lifter type vacuum. All stained areas shall be treated with spot cleaning solution, following the directions of the manufacturer, or treated according to the procedures given in TM 5-609, Military Custodian Services Manual for the specific stain involved. Spot cleaning should be continued until as much of the stain as possible has been removed. The shampooing shall be done using equipment and materials specifically designed for dry foam shampooing and meeting the specifications for such equipment and materials given in this document. The instructions provided by the manufacturers of the equipment and materials should be followed during its use. Areas, such as corners, which are inaccessible to the machine shall be shampooed with foam from the machine and manual scrubbing devices. After shampooing and allowing sufficient drying time, the carpet shall be vacuumed following a pattern which will give the carpet pile a uniform appearance.

**C-8-4. Machine Scrubbing of Grouted Tile Floors.** Machine scrubbing of grouted tile floors such as ceramic tile or quarry tile shall be defined as applying an appropriate cleaning solution to all areas of the floor, allowing the solution to remain on the floor for three to four minutes, operating a single disc floor machine equipped with a bassine brush over all accessible floor areas (including those areas which can be made accessible by the removal of nonfixed furnishings), manually scrubbing those areas which are inaccessible to the floor machine, removing the solution from the floor and rinsing the floor with clean water. All equipment and chemicals shall meet the specifications given in this document. The proper chemicals for the type of area and level of soils shall be used. (For example, areas with badly stained grout may require one chemical while areas with clean, sealed grout require the use of another.)

**C-8-5. High Dusting.** High dusting shall be defined as the removal of dust, cobwebs, oily film, etc., from all fixtures and surfaces above 7 feet from the top of the floor. This includes lights, grills, light fixtures, pipes, sprinkler system, cables, ledges, walls, ceilings, vents, etc. High dusting shall be accomplished by using treated dust cloths, treated dusting tools, a damp sponge, and a tank vacuum with crevice tool, brush attachment, and wall attachment. After high dusting, all areas and surfaces above 6½ feet from the top of the floor surface shall be free from all types of soil removable by dusting or damp wiping and shall blend in with the area below 6½ feet high.

**C-8-6. Clean Office Furniture.** Cleaning office furniture shall consist of the removal of evident soil and dust from office desks, chairs, file cabinets, tables, and other type furnishings. Cleaning of vinyl furniture shall be accomplished with a spray bottle of neutral detergent, a damp sponge or synthetic fiber cloth, and a lotion detergent for hard-to-remove soil. Cleaning of upholstered furniture shall be accomplished using a tank vacuum with upholstery attachment, dry foam concentrate, and a soft bristle brush.

**C-8-7. Wash Interior Glass.** Wash interior glass shall be defined as the complete removal of

smudges, tape, oily film, and other types of soil from all glass in interior partitions, walls, doors, displays, and other glass areas (this includes both glass in exterior doors and vestibules). A glass cleaning chemical, window squeegee tool with rubber blade, clean sponge and synthetic fiber cloths shall be used. The glass shall be rinsed to remove any detergent solution residue. After washing, the glass areas shall be free of dust, smudges, oily film, tape, and all other types of soil, streaks, and water marks. Glass cleaner splash and drip marks shall be removed from all adjacent surfaces.

**C-8-8. Wash Exterior Windows.** Wash exterior windows shall be defined as the complete removal of smudges, tape, oily film, cobwebs, dust, and other types of soil from both sides of the glass and frames of exterior windows, doors, vestibules, etc. A glass cleaning chemical, window squeegee tool, with rubber blade, clean sponge, and synthetic fiber cloths shall be used. The glass and frame shall be rinsed to remove any detergent solution residue. After washing, the glass areas shall be free of smudges, tape, oily film, cobwebs, dust, and all other types of soil, streaks, and water marks. Glass cleaner splash and drip marks shall be removed from all adjacent surfaces.

**APPENDIX D**

**BID SCHEDULES**

**FOR CONTRACTING CUSTODIAL**

**SERVICES FOR NONMEDICAL AND NONINDUSTRIAL FACILITIES**

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**Section 1.0—BID SCHEDULES FOR ROUTINE WORK**

**Schedule Number 1**

(SUGGESTED FORMAT)

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Bid item no.	Building or area	Weekly minimum worked-hours for routine work	Weekly maximum charge for wages	Weekly maximum charge for equipment, tools, and chemicals	Weekly maximum charge for all other costs	Total weekly maximum charge for routine work (D) + (E) + (F)	No. of weeks per year	Total yearly maximum charge for routine work (G) X (H)

**Section 2.0—BID SCHEDULES FOR PROJECT WORK**

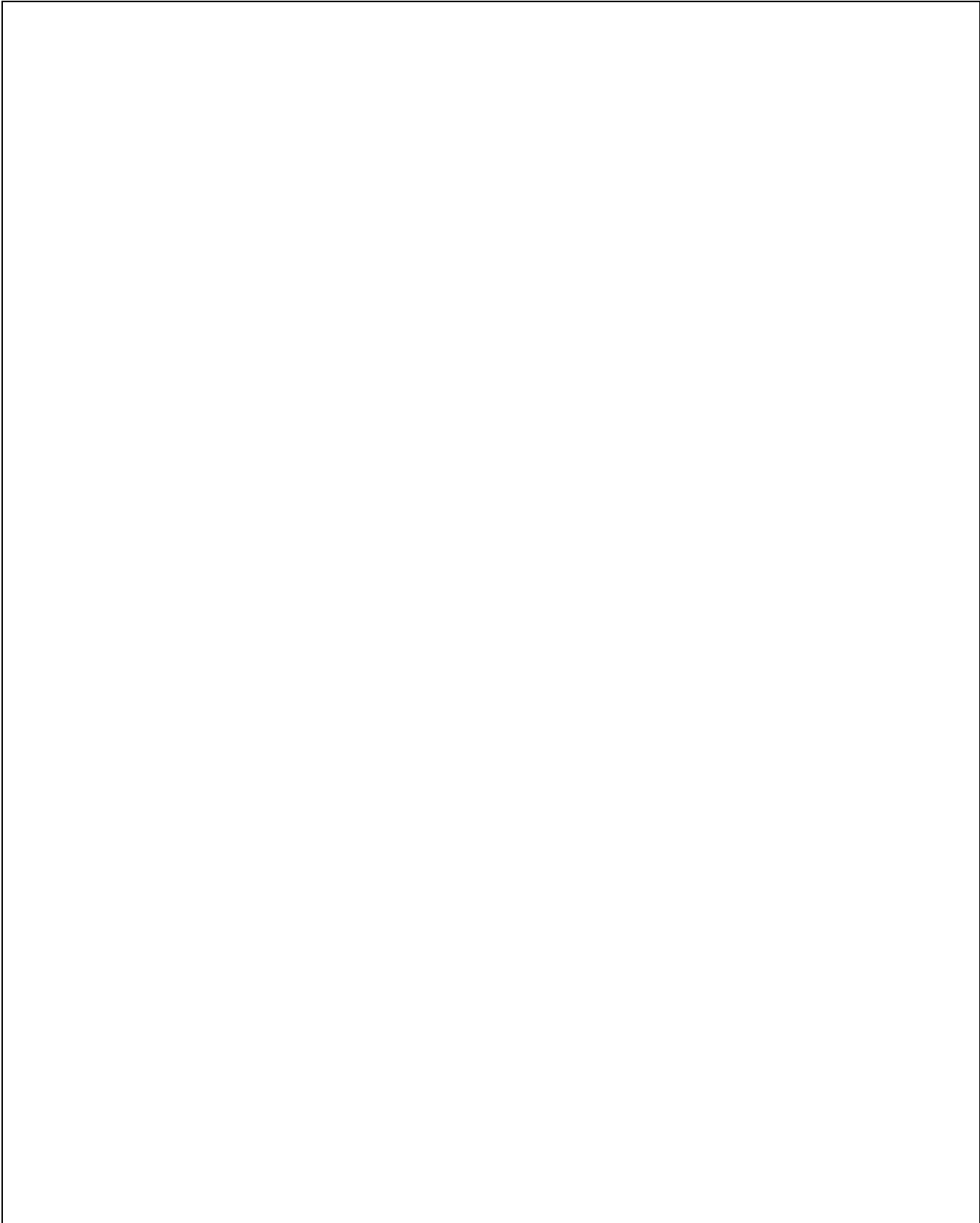
**Schedule Number 2**

(SUGGESTED FORMAT)

(A) Bid item no.	(B) Location	(C) Project	(D) Estimated quantity	(E) Number of annual repetitions	(E) Unit bid price	(G) Bid price per year (D) × (E) × (F)

**Section 3.0 — ORGANIZATIONAL DIAGRAM OF CONTRACTOR’S WORK FORCE**

(SUGGESTED FORMAT)



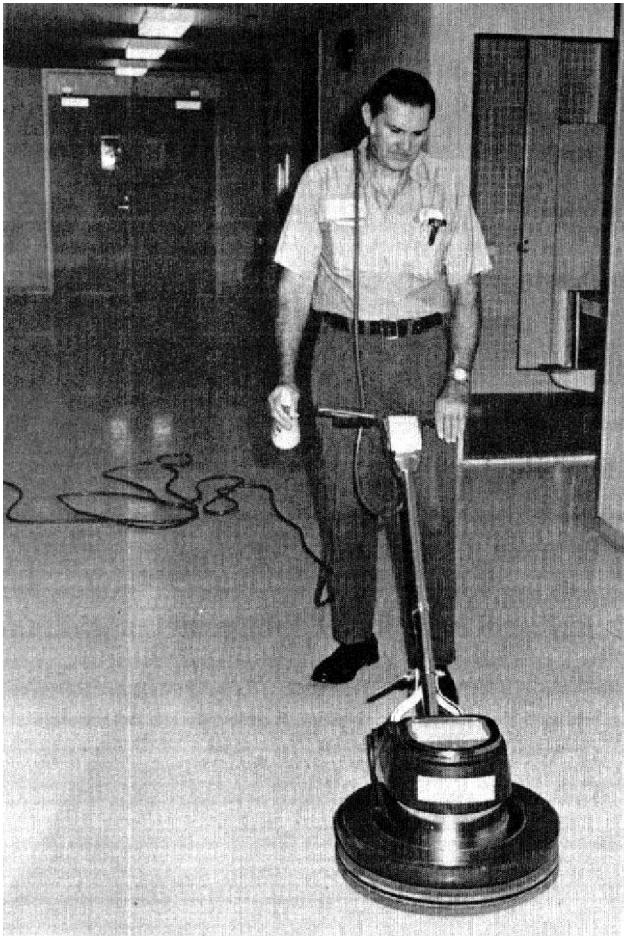


## APPENDIX E

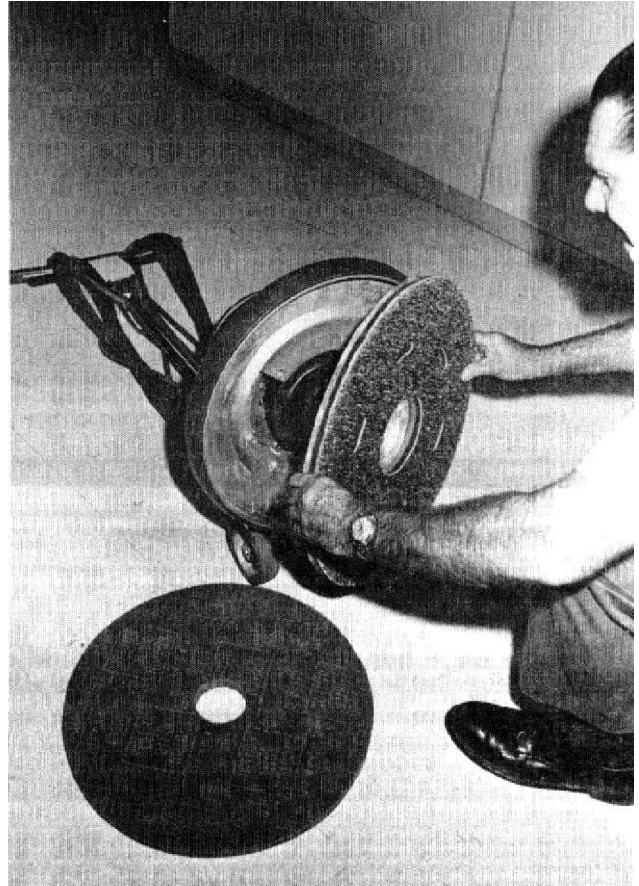
### ILLUSTRATIONS OF EQUIPMENT AND TOOLS

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This appendix contains illustrations of the various types of equipment and tools used in performing custodial services at nonmedical and nonindustrial facilities.



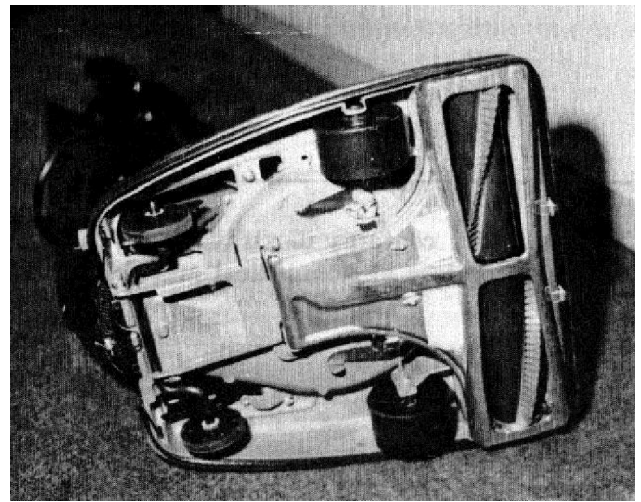
*Figure E-1. Single disk floor machine.*



*Figure E-2. Driving block and spray-buff pad.*



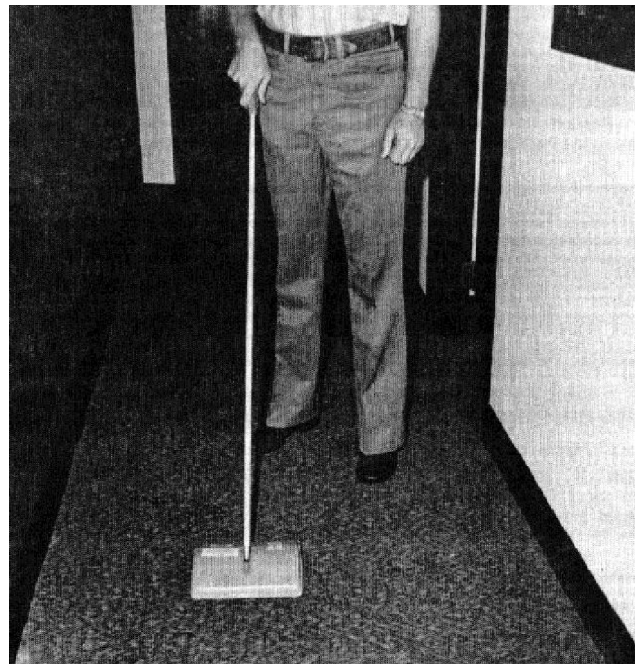
*Figure E-3. Upright carpet vacuum.*



*Figure E-5. Beater brush on upright carpet vacuum.*



*Figure E-4. Large area carpet vacuum.*



*Figure E-6. Carpet sweeper (for policing only).*



Figure E-7. Wet/dry tank vacuum.



Figure E-8. Accessories for wet/dry tank, vacuum: Carpet brush flexible hose, brush attachment, crevice tool, wand.

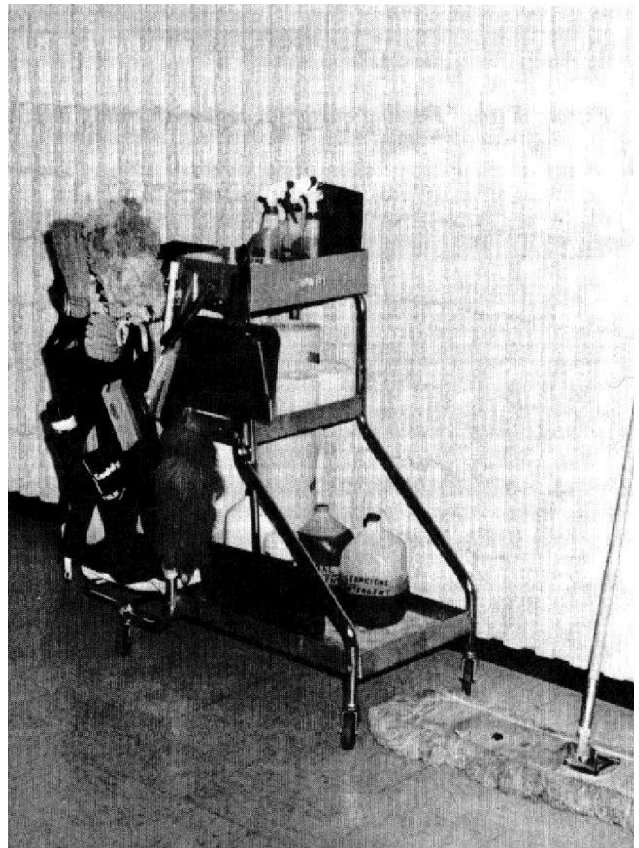


Figure E-9. Custodial cart with metal shelves.



Figure E-10. Folding custodial cart with caddy bag, dust mop.

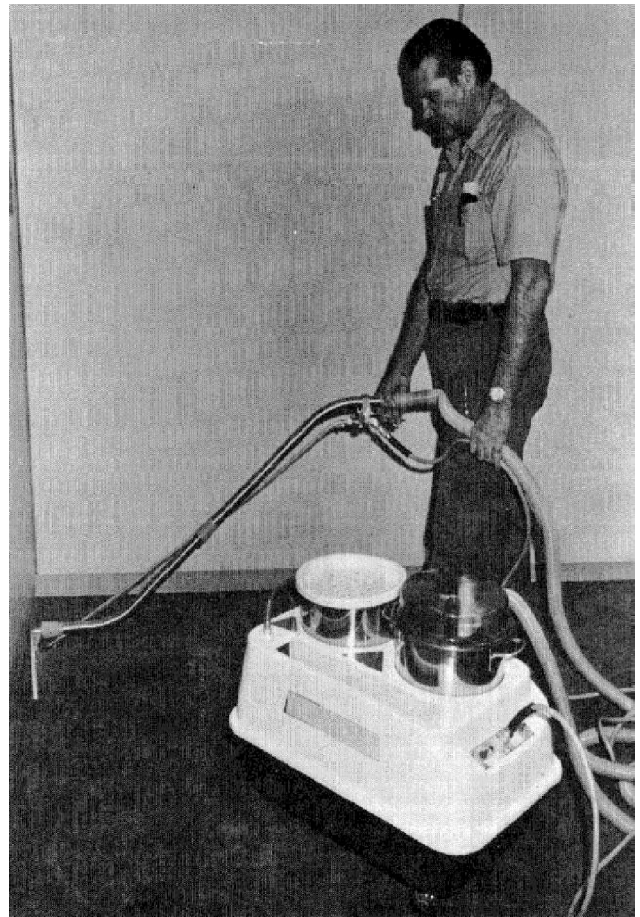


Figure E-12. Water extraction unit (for carpet maintenance).



Figure E-11. Dry foam carpet shampooer.



Figure E-13. Automatic scrubbing machine.



Figure E-14. Gallon jug with one-ounce dispensing pump.

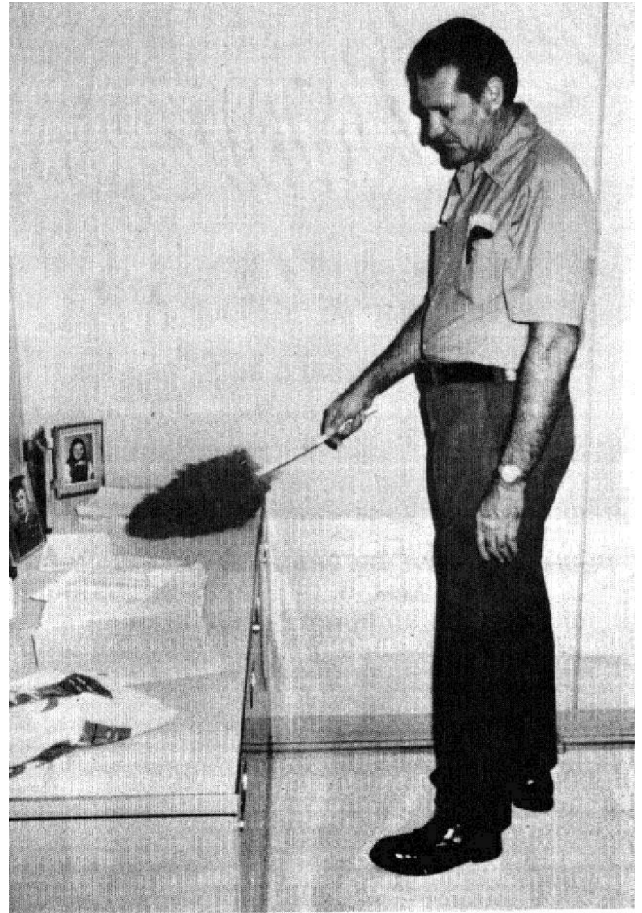


Figure E-16. Custodian dusting with lamb's wool duster.

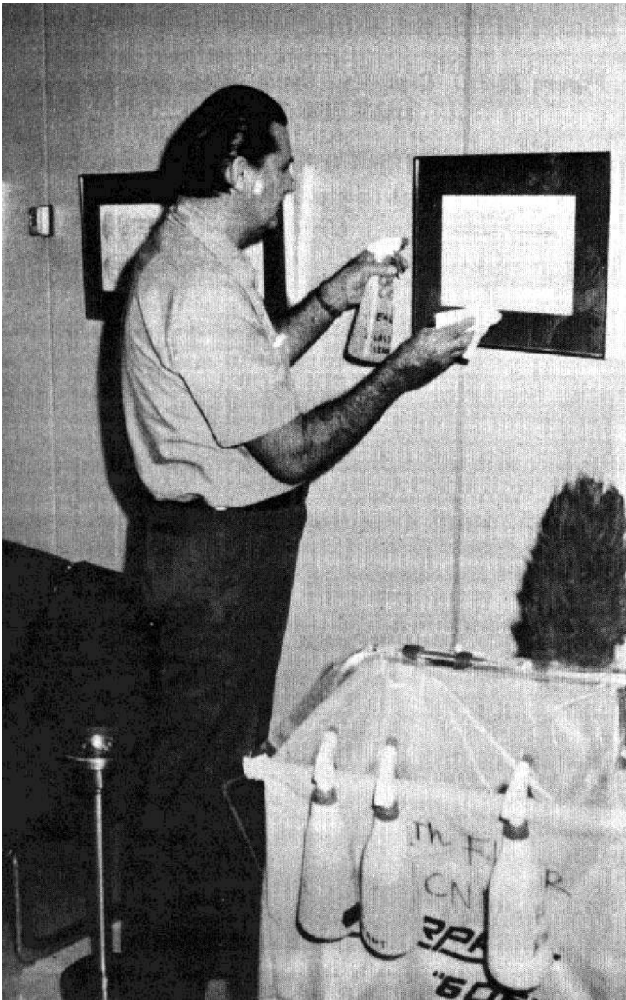


Figure E-15. Custodian spot cleaning with spray bottle.

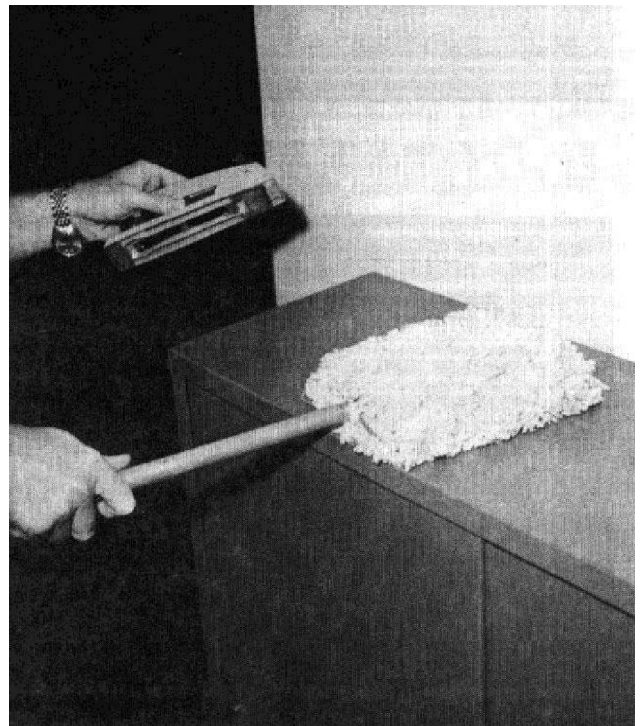
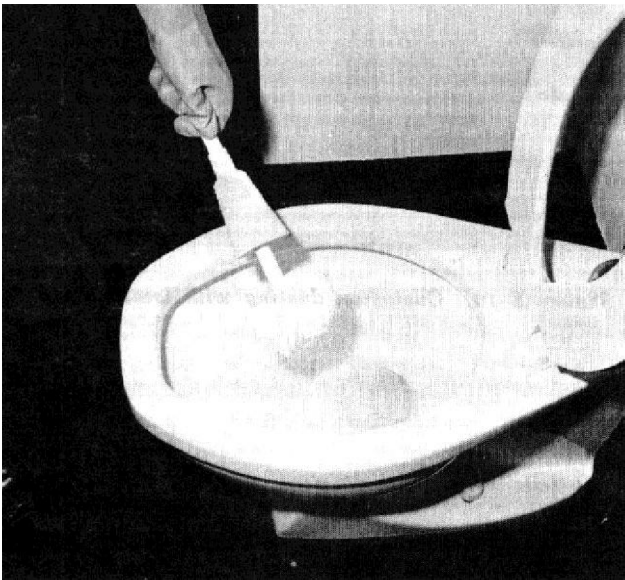


Figure E-17. Custodian dusting with treated dusting tool.



*Figure E-18. Wet mop with looped ends and stitched tail band.*



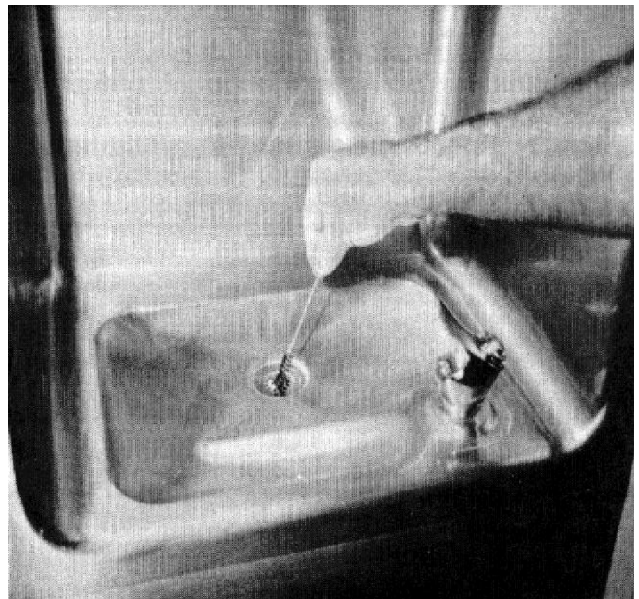
*Figure E-19. Toilet bowl mop.*



*Figure E-20. Radiator brush.*



*Figure E-21. Custodian using lobby type dust pan and small broom.*



*Figure E-22. Custodian using small percolator brush to clean drain of drinking fountain.*

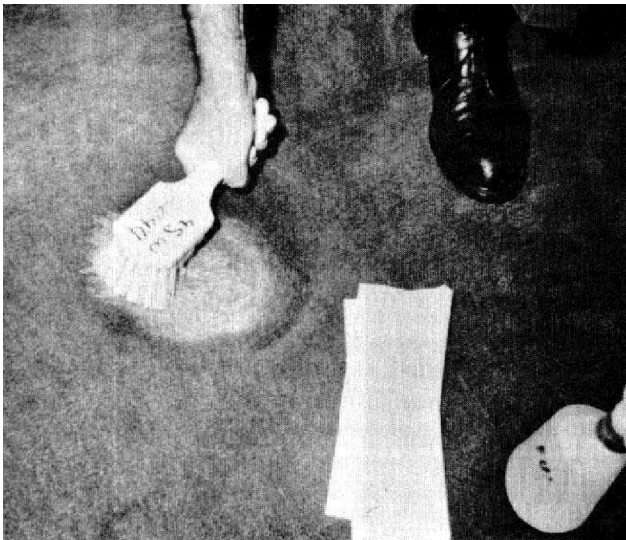


Figure E-23. Custodian using gong brush to spot clean carpet.

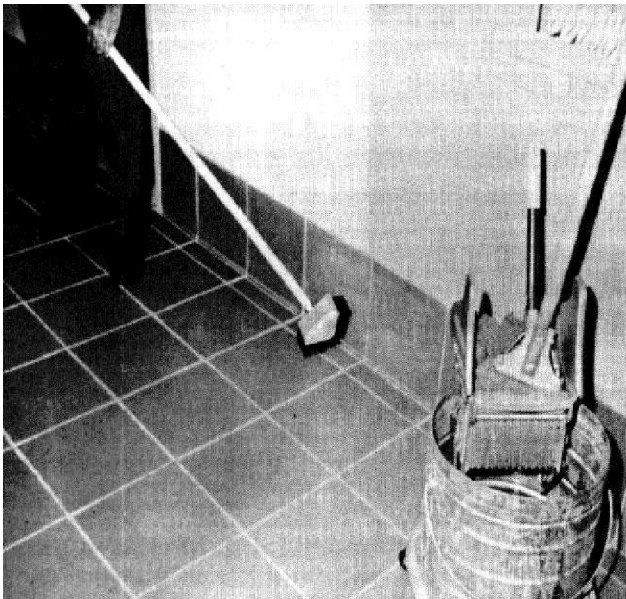
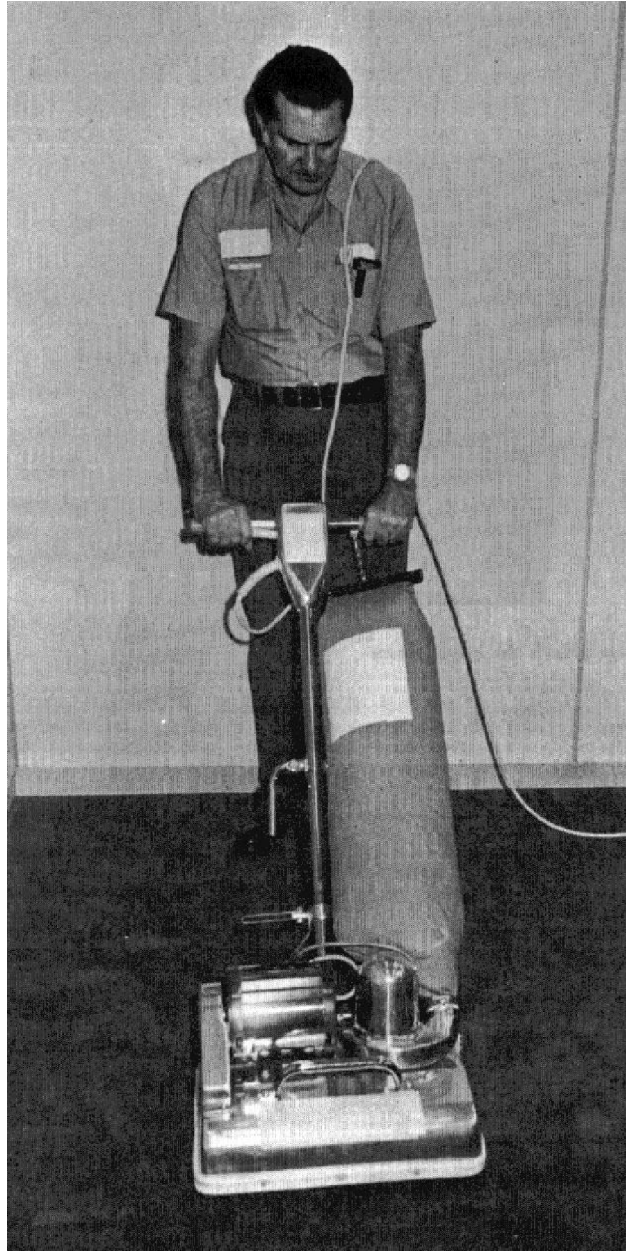


Figure E-24. Custodian using cove brush to clean corner.



Figure E-25. Wet mop, mop bucket and down pressure type wringer.



*Figure E-26. Heavy dish file lifter vacuum.*



**TM 5-608 CONTRACTING FOR CUSTODIAL SERVICES AT ARMY FACILITIES  
OTHER THAN MEDICAL AND INDUSTRIAL FACILITIES — 1978**