PERFORMANCE WORK STATEMENT (PWS) FOR

BASE OPERATIONS FOR

WARREN & USAG-SELFRIDGE

MICHIGAN

Date: 29 May 2003

Table of Contents for the PWS			
PERFORMANCE WORK STATEMENT (PWS) for BASE OPERATIONS FOR WARREN & USAG-SELFRIDGE			
PWS #	**APPENDIX #**	**PWS TITLE**	**No. of Pages**
		APPENDIX TILE	

1		**PWS-1 GENERAL**	19
		Table of Contents for Appendixes of PWS-1	1
	I	REGULATIONS, PUBLICATIONS, FORMS AND REPORTS	3
	II	DEFINITIONS	2
	III	FACILITIES AVAILABLE FOR CONTRACTOR USE	1
	IV	GOVERNMENT-PROVIDED COMMUNICATIONS	2
	V	HISTORICAL DATA	3
	VI	CONTRACT DISCREPANCY REPORT	1
	VII	INTER-SERVICE SUPPORT AGREEMENTS (ISSA's)	1
	VIII	PERFORMANCE REQUIREMENTS SUMMARY	9
2		**PWS-2, FACILITY ENGINEERING: WARREN & USAG-SELFRIDGE.**	194
		Table of Contents for Appendixes of PWS-2	1
	1	PUBLICATIONS, LAWS, CODES, STANDARDS	12
	2	DEFINITIONS	7
	3	CRITICAL SYSTEM	3
	4	HISTORICAL WORKLOAD	21
	5	PROPERTY INVENTORY	84
	6	SCHEDULE OF TASKS (INSTALLED BLDG EQUIP), BLDG 212	23
	7	BASIC INFORMATION MAPS	1
	8	IPE/OPE SUPPORTED EQUIPMENT LIST	11
	9	SCHEDULE OF TASKS, B212, ANNUAL CPM SCHEDULE	8
	10	FLUSHING OF WATER DISTRIBUTION SYSTEM	4
	11	DETROIT ARSENAL ENVIRONMENTAL PROTECTION PERMITS	1
	12	DETROIT ARSENAL CHEMICAL INVENTORY	59
	13	DETROIT ARSENAL ENVIRONMENTAL FORMS	10
	14	BUILDING LIST	7
	15	PROPERTY INVENTORY	161
	16	REFUSE PICK-UP, LOCATIONS, CAPACITIES, AND FREQUENCIES	4
	17	CUSTODIAL SERVICES SCHEDULE AND FREQUENCY	7
	18	INTERSERVICE SUPPORT AGREEMENT	8
	19	WORKLOAD DATA	22
	20	GENERAL SITE PLANS	1
	21	LANDSCAPING	1
	22	SNOW AND ICE CONTROL	1
	23	CUSTODIAL FLOOR PLANS	1
	24	ROOF SYSTEM INSPECTIONS SCHEDULE (DTA & USAG-S)	1
	25	HISTORICAL BUILDING/DISTRICT MAINTENANCE	93
3		**PWS-3, FAMILY HOUSING**	12
		Table of Contents for Appendixes of PWS-3	1
	I	PUBLICATIONS AND REGULATIONS	1
	II	DEFINITIONS/ABBREVIATIONS	1

Table of Contents for the PWS			
PERFORMANCE WORK STATEMENT (PWS) for BASE OPERATIONS FOR WARREN & USAG-SELFRIDGE			
PWS #	**APPENDIX #**	**PWS TITLE**	**No. of Pages**
		APPENDIX TILE	

	III	HISTORICAL WORKLOAD	14
	IV	DESCRIPTION OF UNITS	3
	V	COMMANDER'S INSPECTION STANDARDS	3
	VI	SAMPLE CONTRACT FOR QUARTER'S CLEANING	3
	VII	PERMIT TO SOLICIT	2
4		**PWS-4, TRANSPORTATION SERVICES**	5
		Table of Contents for Appendixes of PWS-3	1
	I	TRANSPORTATION DEFINITIONS/ABBREVIATIONS	1
	II	REGULATIONS, PUBLICATIONS, FORMS AND REPORTS	2
	III	TRANSPORTATION WORKLOAD	4
TOTAL PAGES			**841**

PWS-1

GENERAL

PERFORMANCE WORK STATEMENT

1.0 SCOPE OF WORK
1.1 INSTALLATION
1.2 MANAGEMENT
1.3 ACCESS HOURS
1.4 EMERGENCY OPERATIONS
1.5 SECURITY
1.6 PHYSICAL SECURITY
1.7 PERSONNEL SECURITY
1.8 RESTRICTED AREAS AND ROUTES
1.9 PROTECTION OF CLASSIFIED INFORMATION
1.10 INTERPRETATION
1.11 COMPLIANCE WITH REGULATIONS
1.12 INTEGRATION REQUIREMENTS
1.13 TRUCK INSPECTION PASSES FOR REMOVAL OF CONTRACTOR'S PROPERTY FROM THE INSTALLATION
1.14 SEARCH
1.15 APPEARANCE OF PERSONNEL
1.16 BADGES
1.17 PERSONNEL ROSTER
1.18 PERSONNEL
1.19 STANDARDS OF CONDUCT
1.20 EMPLOYEE CERTIFICATION/TRAINING
1.21 OFFICIAL INVESTIGATION
1.22 TRAINING OF CONTRACTOR'S EMPLOYEES
1.23 RELATIONSHIP BETWEEN GOVERNMENT CONTRACTOR AND CONTRACTOR PERSONNEL
1.24 USE OF GOVERNMENT FURNISHED VEHICLES
1.25 CONTRACTOR FURNISHED AUTOMATIC DATA PROCESSING SUPPORT
1.26 HAZARDOUS MATERIAL COMMUNICATION (DETROIT ARSENAL & U.S. ARMY GARRISON-Selfridge)
1.27 MEDICAL SERVICES
1.28 PERMITS, LICENSES AND RESPONSIBILITIES
1.29 RECORDS/FILES MAINTENANCE
1.30 RELEASE OF NEW INFORMATION
1.31 PHASE-IN PLAN
1.32 ABBREVIATIONS/DEFINITIONS
1.33 QUALITY CONTROL
1.34 WARRANTY REPAIR
1.35 REFERENCE AND OTHER APPLICABLE DOCUMENT
1.36 REFERENCE LIBRARY
1.37 FORMS
1.38 CORRESPONDENCE
1.39 INSPECTIONS AND INQUIRIES
1.40 GOVERNMENT FURNISHED UTILITIES
1.41 TELEPHONE SERVICES
1.42 GOVERNMENT FURNISHED FACILITIES

1.43 JANITORIAL SERVICES
1.44 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY (GFE/GFP)
1.45 PHASE-OUT PLAN
1.46 SAFETY (DETROIT ARSENAL & U.S. ARMY GARRISON-Selfridge)
1.47 GOVERNMENT QUALITY ASSURANCE
1.48 INTER-SERVICE SUPPORT AGREEMENTS (ISSA)
1.49 BUDGET
1.50 U.S. ARMY GARRISON-Selfridge SECURITY
1.51 PROCESSING OF OBSERVATION RECORD SHEET (ORS) (STA FORM 737)

APPENDICES

I REGULATIONS, PUBLICATIONS, FORMS AND REPORTS
II DEFINITIONS
III FACILITIES AVAILABLE FOR CONTRACTOR USE
IV GOVERNMENT-PROVIDED COMMUNICATIONS
V HISTORICAL DATA
VI CONTRACT DISCREPANCY REPORT
VII INTER-SERVICE SUPPORT AGREEMENTS (ISSA's)
VIII PERFORMANCE REQUIREMENTS SUMMARY

1.0 SCOPE OF WORK: The purpose of this Performance Work Statement (PWS) is to describe the general and administrative requirements applicable to the entire contract. The Contractor, shall provide all labor, equipment and materials to manage, operate and maintain U.S. Army Tank-automotive and Armaments Command-Warren (DETROIT ARSENAL) and U.S. Army Garrison-Selfridge (USAG-S) functions listed herein in accordance with the following Performance Work Statements:

PWS 1: General
PWS 2: Facilities Engineering
PWS 3: Family Housing Management
PWS 4: Transportation Services

1.1 INSTALLATION: Note: The U.S. Army Tank-automotive and Armaments Command (TACOM) refers to the total functional requirements of both DETROIT ARSENAL and the U.S. Army Garrison-Selfridge (USAG-S).

1.1.1 DETROIT ARSENAL provides support to that portion of the U.S. Army Tank-automotive and Armaments Command that is located at the DETROIT ARSENAL in Warren, MI. It is located on 169.64 acre site and consists of approximately 49 buildings. A breakout of the physical layout and areas incorporated under DETROIT ARSENAL can be found in PWS 2, Facilities Engineering.

1.1.2 USAG-S provides support to that portion of the U.S. Army Tank-automotive and Armaments Command and other Armed Forces activities located on or near Selfridge Air National Guard Base (SANGB), Mt. Clemens, MI. SANGB is located approximately 20 miles northeast of the DETROIT ARSENAL. A complete breakout of the physical layout and areas incorporated under the PWS can be found in PWS 2, Facilities Engineering. Sebille Manor (Chesterfield Township, MI - family housing complex located approximately 5 miles Northwest of SANGB) is provided support in various degrees as delineated within the PWSs.

1.1.3 Exceptions, additions, or deletions to provide complete support to any or all of the above locations shall be identified in the applicable PWS.

1.2 MANAGEMENT: The contractor shall provide overall management of the performance of this contract including the submission of staffing plans, general management Standard Operating Procedures, technical operational procedures, quality control and any schedules that are required.

1.3 ACCESS HOURS:

1.3.1 The Access Hours shall be from 0630 to 1730 (6:30 AM to 5:30 PM), Monday through Friday except as otherwise specified in this contract, excluding the Federal Holidays listed below and announced Base closings.

New Year's Day	Labor Day
Martin Luther King's Birthday	Columbus Day
Washington's Birthday	Veteran's Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

NOTE: The Friday after Thanksgiving is an announced Base Closing for both DETROIT ARSENAL and USAG-S.

1.3.2 The Contractor shall schedule all work to be performed during the relevant Access Hours above, except as otherwise may be specified in a functional area PWS. Notwithstanding any access hours or duty hours described elsewhere in this contract, during heightened threat situations the Government will notify the Contractor when temporary revised (staggered) access hours will be implemented and any other temporary revised access requirements. The Contractor shall adhere as notified to the revised access hours and access requirements, and shall further notify its management, employees and subcontractors.

1.3.3 SHIFT OPERATIONS: The Contractor shall be allowed to establish shift operations during the Access Hours and any specific hours set forth in the PWS. Therefore, the Contractor is permitted and encouraged to establish more than one shift, split shifts, schedule employees to work on Saturdays, Sundays, and holidays, while providing alternate days off, etc., so that overtime costs and impact on Government operations can be minimized.

1.4 EMERGENCY OPERATIONS: Emergency services required to support special commitments required outside the Access Hours including Saturdays, Sundays, and Holidays shall be provided by the Contractor upon notification by the Contracting Officer (KO) or his authorized functional representative (COFR). The Contractor shall respond immediately and arrive at the site as close as possible to the time designated by the KO or COFR.

1.4.1 EMERGENCY RESPONSE PLANS: The Contractor shall be responsible for implementing all necessary support as shown in the DETROIT ARSENAL Disaster Control Plan (2002), the U.S. Army TACOM Operations, Planning and Execution System (SECRET) (2002), the TACOM Civil Disturbance Plan (1992), the TACOM Anti-terrorism/Force Protection Plan, and the SANGB Disaster Plan, as appropriate. Refer to paragraph 1.50.2, DISASTER PREPAREDNESS, AND FIRE PREVENTION PROGRAMS in this PWS for additional requirements for USAG-S. Plans are available for review at the TACOM G-2 Office, Warren, Michigan.

1.4.2 BIOLOGICAL AND CHEMICAL PROTECTION: The Contractor shall ensure that selected Contractor Mission Essential Personnel (MEP), both primary and alternate, are equipped with individual biological and chemical protective equipment through Level B protection (body splash protection/vapor protection/self contained breathing apparatus) in accordance with 19CFR1910.120 and Occupational Safety and Health Administration (OSHA) standards. Level B protection shall be for Contractor MEP use while performing duties related to hazardous material incidents/scenarios of the emergency response plans mentioned in paragraph 1.4.1 above, or as otherwise directed by the KO. As related to Level B protection, the Contractor shall certify and test the following:

a. Selected MEP shall be certified physically fit to perform Contractor emergency response related duties while using a self-contained breathing apparatus (SCBA).
b. Selected MEP shall receive a minimum of 40 hours training annually on the SCBA and be fit tested specifically for the SCBA.
c. Inspect SCBA cylinders after use or on a monthly basis if not used (for training or otherwise).
d. Maintain a minimum of one (1) complete backup set of Level B suits for each primary and alternate designated Contractor MEP.
e. A compressor to provide air for the SCBA.

Primary responders are the Government Fire Departments. Contractor requirements are to integrate alongside the Fire Department to contain and perform consequence management on the installation after a terrorist chemical, or biological attack.

1.4.3 REDUCED OPERATIONS: On occasion, the Contractor's services may not be required, or may be required at a different level of service during alerts, disaster situations, snow storms, etc. The Contracting Officer (KO) or his authorized representative (COR) will notify the Contractor's Project Manager or his alternate if this should occur.

l.5 SECURITY: The Contractor’s Security Program, plans and procedures shall comply with the principles and procedures found in AR 190-11, AR 190-13, and AR 190-51. All Contractor employees requiring access to the Government's computer systems shall request a National Agency Check (NAC) by submitting a completed Standard Form 85P prior to accessing any systems.

1.6 PHYSICAL SECURITY: The Contractor shall develop and implement a Physical Security Plan addressing physical security aspects associated with contract performance. This Plan shall describe how the Contractor shall prevent unauthorized access, vandalism, pilferage, larceny, sabotage, and arson directed toward Contractor controlled facilities and GFP. The following regulations shall be complied with when developing the Physical

Security Plan: AR 190-11, AR 190-13, AR 190-51, and TACOM-WR-R 190-3. The Contractor shall establish key control procedures. Duplication of keys is prohibited, except as authorized by the COR. The Contractor shall notify the COR when keys are lost, stolen or when additional keys are required. Refer to the paragraph U.S. ARMY GARRISON-SELFRIDGE SECURITY in this PWS for additional information.

1.7 PERSONNEL SECURITY - PRIVATELY OWNED VEHICLES (POV): Contractor employees may operate POV 's on the installation(s) provided they are registered with the appropriate authority (see Paragraphs 1.7.1 and 1.7.2, below) immediately upon introduction. A decal will be affixed by the Government to the front of each POV. The Contractor is responsible for ensuring that decals are removed from the vehicle upon termination of an employee or upon completion of the contract. Decals may also be issued to subcontractor employees who will require access over an extended period of time.

1.7.1 DETROIT ARSENAL: The Contractor shall ensure that all employees are processed through the Public Safety Division to obtain badges and Privately-Owned Vehicle (POV) decals.

1.7.2 U.S. ARMY GARRISON-SELFRIDGE: The Contractor shall ensure that all employees are processed through the 127th Tactical Fighter Wing (TFW) Michigan Air National Guard (MIANG) Pass and ID Section to obtain POV decals.

1.8 RESTRICTED AREAS: The Contractor shall not enter into any Government area which is restricted without prior authorization (i.e., a work authorization form showing specific work to be performed) unless notified of an emergency which requires immediate attention.

1.9 PROTECTION OF CLASSIFIED INFORMATION: The Contractor shall ensure that all employees whose duties require access to classified defense information, possess security clearance equal to that of the highest classified material to which they will require access. Security clearances shall be obtained in accordance with the provisions of DOD 5220.22-M. The level of clearance is specified in the DD Form 254 Contract Security Specification Classification Attachment. The Government will provide an escort to those Contractor employees who require access to secured areas or facilities on a non-routine basis.

1.9.1 DETROIT ARSENAL: Classified information in the custody of the Contractor shall be protected and handled in accordance with the provisions of DOD 5220.22-M and AR 380-5 (See DD Form 254). Such protection includes adequate measures for the accountability, protection, dissemination, production, marking, transmittal, reproduction, storage and destruction of classified information, and use of any ADP equipment/systems.

1.9.2 U.S. ARMY GARRISON-SELFRIDGE: The Contractor shall be required to handle classified material. In the event classified material to which the Contractor does not require access is received or discovered, it shall be immediately turned over to the USAG-S Commander or his immediate staff.

1.10 INTERPRETATION: Conflicts in interpreting requirements may arise during contract performance. If a conflict can not be resolved, the Contractor shall forward a written recommendation and supporting rationale to the Contracting Officer for a decision.

1.11 COMPLIANCE WITH REGULATIONS: The Contractor shall comply with all rules, regulations and policies as prescribed by competent authority concerning safety, security, smoking, alcohol, other illegal substances, cameras, and preservation of order activities, etc. while upon TACOM property. The Contractor shall conduct a security indoctrination of all new Contractor employees within 30 days after their arrival, and conduct refresher sessions for all personnel annually thereafter. Contractor personnel or representatives shall be subject to security checks as may be deemed necessary to assure that their presence on the installations does not violate security and other requirements. No employee will be permitted on the installation when such a check reveals that his presence would be detrimental to the security of the installation. When directed by the KO, the Contractor shall remove any employee from an assignment to perform services under this contract for reasons of misconduct or breach of security in connection with his or her employment. Any such notice from the KO shall be in writing

and shall state the reasons therefor and shall be subject to appeal under the provisions of the Disputes Clause. In other instances, the Contractor shall take appropriate personnel action as required in the event of employee misconduct in connection with his or her employment.

1.12 INTEGRATION REQUIREMENTS:

1.12.1 TACOM has and will award other contracts requiring performance at the DETROIT ARSENAL and Selfridge Air National Guard Base. These contracts will be for services and construction needed to support the TACOM and USAG-S missions. The Contractor shall fully cooperate with other contractors onsite with the intention of promoting efficient, timely contract performance of all contractors.

1.12.2 The cooperation shall include:

a. Meeting and sharing information about the Contractor's operations, plans, and schedules as needed to facilitate each contractors operations, plans, and schedules.
b. Avoiding interference with the performance of other contractors or Government operations.
c. Adhering to schedules mutually agreed upon between the base operations contractor and other installation contractors to ensure timely overall performance of the "project". Some requirements require a series of sequential steps each performed by a number of contractors. For example, the Contractor would perform a specific task required by this contract on the schedule agreed on so that the other contractor may schedule his performance accordingly and is not adversely affected or delayed.
d. Providing access to an area furnished to the Contractor when needed by another contractor to perform a service.
e. Instructing employees to avoid entering another contractor's work area, unless invited, or has a valid work order requiring entry.
f. Referring misdirected work requests to the appropriate contractor.
g. Referring customers to the appropriate contractor when erroneously contacted.
h. Cooperate with other contractors during official Government reviews, audits, investigations, etc.

1.12.3 Should two contractors agree, the Contracting Officer will consider a formal written arrangement to share specific pieces of any Government Furnished Property. Non-availability of equipment from another contractor shall not constitute a basis for an excusable delay or a claim against the Government.

1.12.4 Contractors may agree to hire each other's employees on a temporary, part-time or other basis. This would be an agreement between two contractors and any problems encountered shall
not constitute a basis for an excusable delay or a claim against the Government.

1.12.5 The above requirements should not be construed to mean that one contractor is required to perform any part of the work required of another contractor. The requirements are not intended to make one contractor subordinate to another contractor.

1.13 TRUCK INSPECTION PASSES FOR REMOVAL OF CONTRACTOR'S PROPERTY FROM THE INSTALLATION: The following procedures are prescribed for the issuance of passes for removing Contractor owned material and equipment which has been brought onto the installation for accomplishing work, or Government-furnished property which, under the terms of this contract, may properly be removed by the Contractor.

1.13.1 The Contracting Officer's Representative (COR), will determine whether property being removed is Contractor or Government owned. For USAG-S, the appropriate COFR may substitute for the COR.

1.13.2 The Contractor shall prepare and obtain a COR/COFR signature on a Property Pass (DA Form 1818) toremove property, including Contractor owned property, from the Installation. The pass shall contain the name of the Contractor, the Contract Number, and a description of the property in sufficient detail to permit identification. The property pass shall be provided to the guard on duty at the exit gate and, depending on the situation, Security may retain the Pass.

1.14 SEARCH: All vehicles, equipment, and packages, without exception, are subject to search or examination at entry/exit of the installation.

1.15 APPEARANCE OF PERSONNEL: The Contractor shall ensure that all personnel are well groomed commensurate with their positions while on duty. Shorts and undershirts will not be permitted as attire unless an exception is granted by the Contracting Officer.

1.16 BADGES:

1.16.1 DETROIT ARSENAL: The Government will issue Government Identification Badges to those Contractor employees working on the installation. The Contractor shall submit an Application/ Approval for Contractor's /Visitor's Badge/Pass (STA Form 15) to the COR for each employee. All Contractor employees must wear badges at all times while on the installation. The Contractor shall ensure that badges are returned to the Public Safety Division when an individual's employment is terminated or upon completion of the contract. The Contractor shall also recover badges from employees that have departed his/her employment and retained their security identifica-tion badge. Badges may also be issued to subcontractor employees provided that they will require access for a continuous period of thirty (30) days or longer. The above procedure shall be followed to request badges for subcontractors.

1.16.2 SPECIAL BADGING - DETROIT ARSENAL: When required by the KO, the Contractor shall obtain and submit fingerprints of all persons employed or to be employed. Visiting contractor employees and short term (less than thirty (30) continuous days) subcontractor employees require issuance of Visitor or Escort badges. Advance written notification shall be furnished to the COR or COFR for all required entrances to the site(s) by the above personnel.

1.16.3 U.S. ARMY GARRISON-SELFRIDGE: Contractor personnel shall be easily recognized as employees of the Contractor. This shall be accomplished by wearing appropriate Contractor-provided badges which contain the company name and employee name and photograph. This badge shall be worn whenever an employee is on the installa-tion.

1.17 IDENTIFICATION OF CONTRACTOR PERSONNEL:

1.17.1 PERSONNEL ROSTER: At least five working days prior to starting work, the Contractor shall furnish a complete listing (including full names and addresses) of all personnel expected to be engaged in contract work at the site(s), to the Public Safety Division, with copies to the KO and COR. The Contractor shall provide a Point of Contact (POC) for the purpose of resolving any questions concerning identification of personnel.

1.17.2 The Contractor shall furnish updated lists of the above to the Public Safety Division, with copies to the KO and COR, whenever a net of three or more employees are added to or deleted from the listing.

l.17.3 All personnel presenting themselves at the site must be able to identify themselves by means of a driver's license or photographic identification, other than a Government issued badge.

1.18 PERSONNEL:

1.18.1 PROJECT MANAGER: The Contractor shall provide an on-site Project Manager (PM) who shall be responsible for the performance of work and shall have full authority to act for the Contractor on the installation including signing of contract modifications. The name of this person and an alternate(s) who can act for the Contractor in the PM's absence shall be designated in writing to the KO.

1.18.1.1 The PM or alternate shall meet as necessary with Government personnel designated by the KO to discuss immediate problem areas. The PM and/or alternate shall be on site during normal duty hours. The PM and alternate(s) must be able to read, write, speak, and understand English.

1.18.2 KEY PERSONNEL: During the Phase-In Period of this contract, the Contractor shall electronically furnish to the KO, COR and COFRs an organizational listing of the Contractor's staff including names, home addresses, home phone and beeper numbers of supervisory and key management personnel. The Contractor's key personnel shall meet as necessary with Government personnel designated by the KO. The Contractor shall furnish updated lists whenever a net of three or more changes is made.

1.18.3 The Contractor shall hire replacement employees within 90 calendar days, so that performance is not adversely affected by the vacancy.

1.19 STANDARDS OF CONDUCT: All Contractor personnel shall be required to adhere to standards consistent with the guidelines in AR 600-50. Violations shall be reported to the Contractor's PM. Discipline shall be IAW Contractor's internal policy.

1.20 EMPLOYEE CERTIFICATION/TRAINING: Key personnel are defined as any contractor employee holding a management, supervisory, team leader, or senior technical position. Key personnel shall perform at a level commensurate with their position, and responsibilities and shall be able to effectively represent the contractor when interfacing with Government Officials. Key personnel shall possess skills in the areas of policy, strategic planning, review, analysis, and evaluation as they relate to this contract. Skilled trade personnel will be journeyman level, certified as state licensed and/or graduates of a Department of Labor approved apprenticeship program.

1.20.1 The Contractor shall ensure that employees have current and valid qualifications and certifications necessary to perform the work in this contract (e.g., state certifications for mechanics) before starting work. Non-journeyman employees performing tasks requiring journeyman-level certification shall be under the direct supervision of a journeyman-level or higher level employee.

1.21 OFFICIAL INVESTIGATIONS: The Government reserves the right to interview any Contractor employee(s) suspected of criminal wrongdoing, security violations or breaches of the peace or those who are witnesses to such acts. When appropriate, the Contractor will be furnished with either verbal or written notice of the interviews. Such interviews will be conducted on a non-interference basis whenever possible.

1.22 TRAINING OF CONTRACTORS' EMPLOYEES: The Contractor shall be responsible for all work and its quality as required by this contract regardless of any training approved or not approved by the Government for the Contractor's employees.

1.22.1 GOVERNMENT TRAINING: The Contractor's personnel may be eligible to enroll in Government seminars and participate in Government training when it is related to the employee's job and is of direct benefit to the Government. Such training must be approved by the KO and shall be provided at the contractor’s expense.

1.22.2 OTHER TRAINING: Contractor personnel employed under a cost contract type portion of the contract may be eligible to enroll in non-Government sponsored training when it is related to the employee's job and is of direct benefit to the Government. Any requests for such training must be submitted in writing through the COFR to the KO for approval. The Contractor is responsible for the providing and expense of all training for employees under the fixed price portions of the contract.

1.23 RELATIONSHIP BETWEEN GOVERNMENT AND CONTRACTOR:

1.23.1 The Contractor shall be independent of the Government in performance of this contract. The services required by this contract are non-personal services and no employer-employee or master-servant relationship between the Government and the Contractor and/or between the Government and the Contractor's personnel exists

or will exist under the contract. The Contractor's personnel shall be responsible, not to the Government, but solely to the Contractor, who in turn, shall be accountable to the Government, but only by virtue of its contractual relationship.

1.23.2 Contractor personnel shall not be placed under the supervision, direction, or evaluation of a Federal Officer, military or civilian, in connection with performance under this contract. Likewise, Contractor personnel shall not be placed in a position of command, supervision, administration or control over DA military or civilian personnel, or personnel of other prime Contractor, or become an integrated part of the Government organization in con-nection with performance under this contract, nor shall Contractor personnel be used in administration or super-vision of military procurement activities. Contractor personnel shall not be considered employees of the Federal Government and shall not be eligible, by virtue of performance under this contract, for payment by the Government of entitlements and benefits accorded federal employees.

1.23.3 The Contractor shall be responsible for keeping its personnel informed of all relevant changes to the contract.

1.23.4 Rules, regulations, directives and requirements which are issued during the contract term by DA Military Command Activities, under their responsibility for law and order, administra-tion, and security on the installation shall be applicable to all Contractor personnel or representatives who, enter the installation, or who travel on Government transportation. This requirement shall not be construed or interpreted to establish any degree of Government control which is inconsistent with the intent of a non-personal services contract.

1.23.5 The services to be performed under this contract shall not require the Contractor or his employees to exercise personal judgment and discretion on behalf of the Government, but rather, the Contractor's employees shall act and exercise personal judgment and discretion on behalf of the Contractor. The entire consideration to the Contractor for performance of this contract is contained in the provision for payment set forth in this contract.

1.24 USE OF GOVERNMENT FURNISHED VEHICLES: Contractor personnel shall operate various kinds of Government furnished automotive, construction and other miscellaneous vehicles as and when provided. The lack of a specific Government-furnished vehicle shall not relieve the Contractor from the performance of any contract task. Operators shall exercise due care while operating equipment and shall execute appropriate preoperation and operational checks of equipment. Under no circumstances shall the Contractor release a Government-furnished vehicle for use by Government or other parties except by written permission of the Contracting Officer.

1.25 CONTRACTOR FURNISHED AUTOMATED DATA PROCESSING SUPPORT: The Contractor shall provide any automated data processing support needed for his own internal requirements, such as general accounting, cost accounting, employee records, procurement and payroll records and related items that he may deem necessary for the performance of this contract.

1.26 HAZARDOUS MATERIAL COMMUNICATION: The Contractor shall inform TACOM supervisors of hazardous materials used in TACOM work areas & precautionary measures to be taken to protect TACOM employees, and shall provide TACOM supervisors with Material Safety Data Sheets (MSDS) for those materials.

1.27 MEDICAL SERVICES: Medical services for Contractor's employees are generally the responsibility of the Contractor. However, IAW AR 40-3, the Government will provide, to the extent available, medical services on an emergency basis for Contractor employees who are performing under this contract. The Contractor shall reimburse the Government for emergency medical services at the rate prescribed in AR 40-330.

1.28 PERMITS, LICENSES AND RESPONSIBILITIES: The Contractor shall, without additional effort by the Government, be responsible for obtaining any necessary licenses and permits, giving all notices, and complying with any applicable Federal, State and municipal laws, codes and regulations in connection with the business carried on under this contract.

1.29 RECORDS/FILES MAINTENANCE:

1.29.1 The records, reports, files, etc., required below and in the other PWS's, may be provided on an automated equivalent to the manual form, provided that such submission(s) is not prohibited by the governing regulations. All ledgers and cost records shall be format compatible with Government systems to aid the auditing, reporting and developing of performance data.

1.29.2 All records, reports, files, etc., except those containing proprietary information on the Contractor's operation or related to employee personnel files, generated under this contract shall become Government property. During a contract Phase-Out period, the Contractor shall make all records, deemed by the KO to be Government property, available to the COR. The COR shall provide disposition instructions which shall be followed by the Contractor.

1.29.3 The Contractor shall maintain sufficient files to document information contained in all reports and records required by this contract. The Contractor shall make all data applicable to this contract available for review by any agency or individual authorized access by the COR or the Contracting Officer.

1.30 RELEASE OF NEW INFORMATION: The Contractor shall secure approval of the Contracting Officer prior to the release to the General Public or News Agencies of any acquisition award and/or contractual information.

1.31 PHASE-IN: The Contractor shall plan and implement the actions necessary for a smooth transition of these operations from the incumbent to them as the successor. During this period, the Contractor will be provided some temporary office space on site. During Phase-In the Contractor shall:

a. Mobilize, train, observe and otherwise prepare to assume full and complete operational and contract responsibility from the existing contractor.
b. Recruit and hire employees so that a full staffing level is provided on the first day of the Base Contract Period. Any interviews with the incumbent contractor's employees shall be conducted during their non-duty hours.
c. Handle contingencies that arise that may hinder the completion of any phase-in activity.
d. Prepare and submit all plans, procedures, etc. that the PWSs or other parts of the contract require to be furnished during the Phase-In Period.
e. Avoid disruption of the incumbent contractor's operations.
f. Participate in the joint inventory of any Government Furnished Property involved with this contract. Complete all preparations to assume full accountability of the GFP prior to the start of the Base Contract Period.
g. Establish the necessary key control procedures and ensure an orderly transfer of keys from the incumbent contractor.
h. Request and obtain Government security badges, Government driver licenses, Government security clearances, etc. prior to the start of the Base Contract Period.

1.32 ABBREVIATIONS/DEFINITIONS: Special terms, phrases and abbreviations used in the contract are spelled out in the PWSs.

1.33 QUALITY CONTROL. NOTE: The Acceptable Quality Level (AQL) is 100% full performance and compliance with all contract terms, conditions, inspection, industry, and maintenance and repair standards and schedules. The Government requires a 0.0% deviation from the Acceptable Quality Level. Deviation from the Acceptable Quality Level may result in cost and payment contract deductions.

1.33.1 The Contractor shall conduct inspections in accordance with its Quality System/Plan to assure that the service operations performed by them, or by a subcontractor, are accomplished economically and in accordance with the standards set forth in this contract.

1.33.2 Quality Control Program: A written Quality Control Plan (QCP) is required under contract clauses

"Inspection of Services-Fixed-Price (FAR 52.246-4)" and "52.246-6 Inspection of Services-Time-and-Material and Labor-Hour (FAR 52.246-6)". The QCP shall be submitted to the COR for approval within 15 days after contract award. The approved QCP shall be implemented by the Contractor starting no later than the beginning of the contract's Base Contract Period. The QCP shall detail the means by which the Contractor will manage all quality assurance aspects of its performance. The Plan shall include, as a minimum, the following:

a. A system or strategy for conducting inspections of performance, covering all work tasks to be performed and all supplies and services to be furnished under the contract. The system or strategy shall identify any inspections that will be performed 100% of the time, and any performance areas that will be assessed on a sampling basis or other surveillance methods.

Further areas to be specifically addressed:

(1) The manner in which inspections/tests are to be conducted;
(2) The position title of the individuals who shall do the inspections/tests;
(3) The criteria for acceptance or rejection of each performance area being inspected; and
(4) The way in which sampling inspections, if any, will be scheduled, performed, and assessed.

b. A procedure for inspecting materials provided or acquired under this contract to assure detection of damaged or nonconforming supplies.

c. A method of documenting and evaluating the results of the inspections/tests are conducted and a method of enforcing any recommendations made that are based on the results of such inspections or tests. The Contractor shall maintain adequate records of all inspections/tests to indicate, as a minimum, the nature (when, where, and what) and number of observations made; the name of the person conducting the tests/inspections; the number, location, and type of deficiencies found; approval/ rejection status; and the corrective action taken for deficiencies.

d. A method of identifying deficiencies in the quality of services performed before the level of performance becomes unacceptable. Describe any process control procedures and quality data analysis techniques that will be utilized by the Contractor and identify the elements of performance to which these procedures and/or techniques will apply.

e. Corrective action procedures for deficiencies and measures to prevent recurrence of such deficiencies.

f. A procedure for assuring that the latest applicable drawings, specifications, and other technical instructions required by the contract, including plans developed by the Contractor, are used for accomplishing the required tasks/ services and the associated inspections/tests.

1.34 WARRANTY REPAIR: The Contractor shall perform all coordination required to obtain warranty repairs/services for all facilities or equipment covered by warranty. The Contractor shall comply with warranty provisions necessary to preserve the warranties. The Contractor shall not perform maintenance or repair work on facilities and equipment covered by warranty, except when directed to perform such work by the KO or when such work is necessary in order to deal with emergencies as defined in PWSs 4 and 5, subject to concurrence by the COFR. The Contractor assumes responsibility and expense for voiding a warranty unless authorized to perform such work by the KO or COFR. The Contractor shall perform repairs, maintenance, and related work as required by the PWS's on facilities and equipment as identified in other PWSs when the warranties have expired.

1.35 REFERENCE AND OTHER APPLICABLE DOCUMENTS:

1.35.1 Reference and other applicable documents and publications are listed in an appendix of each PWS. Notwithstanding any other provision of the contract, the Contractor shall adhere to the legal, regulatory, policy, and code provisions of the documents and publications and, except as stated in 1.35.2, the Contractor shall comply with any superseding or new legal, regulatory, policy, and code provisions which may be

implemented from time to time by appropriate authority(s).

1.35.2 When any such superseding or new legal, regulatory, policy, and code provisions are deemed to cause an increase or decrease in the cost of contract performance, the Contractor shall inform the Contracting Officer, in writing, prior to their implementation. The Contractor shall implement them upon Contracting Officer written direction to do so. Any applicable equitable adjustment may be preceded by negotiation and may be expressed in a bilateral or unilateral contract modification.

1.36 REFERENCE LIBRARY: The Contractor shall acquire and maintain a current library of reference and controlling documents at DETROIT ARSENAL and USAG-S for both contractor and Government use, and ensure that affected Contractor personnel are appropriately familiar with the contents. These libraries shall consist of DOD, Army, TACOM and, at USAG-S, appropriate MIANG/SANGB regulations, pamphlets, circulars, and other pertinent publications associated with PWS performance. The Contractor shall provide control of the use and access to the libraries. The Contractor shall maintain these libraries in a current status and obtain and post all changes or updates. The Contractor shall be responsible for procuring all other manuals and publications, including manufacturer's manuals, necessary to perform under the terms of this contract.

1.37 FORMS: The Contractor shall be responsible for obtaining all forms necessary for performance of this contract.

1.38 CORRESPONDENCE: The Contractor, when preparing external correspondence relating to any PWS contained in this contract, shall submit drafts to the Government for review. Upon return the Contractor shall prepare the correspondence in its final form and return it to the Government for signature and mailing. Correspondence will normally consist of replies, requests for assistance, suggestions and other routine correspondence to other installations or activities. The Contractor shall prepare and answer correspondence within the suspense dates.

1.39 INSPECTIONS, AUDITS AND INQUIRIES: The Contractor shall cooperate with TACOM and other Government agencies conducting inspections, audits, inquiries, etc. The Contracting Officer will, when appro-priate, furnish the Contractor with a copy of a Memorandum appointing Government personnel to serve as a Contracting Officer’s Representative for a specific purpose (e.g., an Inspector General inspection).

1.40 GOVERNMENT FURNISHED UTILITIES: The Government shall furnish the Contractor the following utilities at no cost:

a. Heat
b. Electricity
c. Water/Sewage Treatment

1.41 TELEPHONE SERVICES:

1.41.1 The Government will furnish to the Contractor the tele-phone services (official voice and record services) listed in Appendix IV, GOVERNMENT PROVIDED COMMUNICATIONS. Only Class A, AA and C telephone service will be furnished. Class A (Official) telephones are authorized for the transaction of official govern-ment business over commercial trunks (Dial 9) and at DETROIT ARSENAL only, the current official long distance network e.g. SPRINT (Dial 7). Class AA designation indicates authorization for the transaction of government business over AUTOVON (Dial 8). Class C (Official Restricted) telephones are authorized for the transac-tion of official business on a military installation, however, they do not have access to commercial or AUTOVON trunks. Class C telephones may receive all types of incoming calls.

1.41.2 All telephone services provided by the Government shall be used only for the performance of this contract. The Contractor shall establish and maintain controls over the use of telephone systems to prevent their use for other than performance of this contract. The Contractor shall be required to reimburse the Government for any

non-official calls.

1.41.3 The Contractor shall submit a written request to the COR for desired telephone services or equipment in addition to that furnished by the Government. The request will be approved if determined proper under regulations. The cost of any such telephone services or equipment shall be at the Contractor's expense.

1.41.4 The Contractor shall comply with the Government's communications security requirements and regulations.

1.41.5 The Contractor shall assist in all probes of questionable long-distance telephone calls.

1.42 GOVERNMENT FURNISHED FACILITIES:

1.42.1 The Contractor will be furnished the facilities identified in Appendix III, GOVERNMENT FACILITIES AVAILABLE FOR CONTRACTOR USE, for exclusive use in the performance of this contract. The facilities will be provided at the end of the Phase-In Period at no cost to the Contractor.

1.42.2 All requests for physical alterations to the space provided to the Contractor must be submitted in writing to the Contracting Officer for written approval prior to starting any alterations. If the alterations are determined to be primarily for the Contractor's convenience, comfort or benefit, the alterations shall be at no cost to the Government. If the alterations are requested based on Government actions or changing Government requirements, the costs will be negotiated. The Contractor will be allowed to relocate his employees on the installation in the Contractor controlled areas at no cost to the Government.

1.43 JANITORIAL SERVICES:

1.43.1 The Contractor shall provide all janitorial services for the facilities controlled and occupied by the Contractor. The services and practices performed shall be IAW generally accepted commercial/industrial standards. The Contractor shall follow manufacturer's recommended methods, cleaning agents, etc. to protect and prolong the useful life of such items as floor tile and carpeting. The type of services shall include:

a. Restroom cleaning
b. Floor cleaning and preservation
c. Glass cleaning
d. Venetian blind cleaning, and repair/replacement
e. Light fixture cleaning
f. Fan cleaning
g. Miscellaneous cleaning (dusting, metal polishing, trash removal, etc.)

1.43.2 The Contractor shall furnish all labor and supervision, on a fixed-price basis as part of the appropriate Contract Line Item Number(s).

1.43.3 SANITATION AND CLEANLINESS: The Contractor shall maintain all work sites in a neat, clean, orderly and sanitary condition satisfactory to the Contracting Officer Functional Representative or the Contracting Officer Representative. All debris shall be removed as work is completed and the premises shall be kept free at all times from accumulations of waste material and/or rubbish resulting from work performed under this contract.

1.44 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY (GFE/GFP): The Government will make available, for exclusive performance of this contract, the Government Furnished Equipment listed in Government Furnished Property attachment and requested by the Contractor. This property will be provided at the end of the Phase-In Period. Under no circumstances shall the Contractor release a Government-furnished vehicle for use by

Government or other parties except by written permission of the Contracting Officer.

1.44.1 The Contractor shall control, maintain/repair, be accountable for and maintain records in accordance with the appropriate Government Property clause in this contract.

1.44.2 An initial inventory of Government furnished equipment, materials and/or supplies shall be made jointly by the Contractor and the Government during the Phase-In Period stated in this contract. The operational or condi-tion status shall be jointly determined. Items found not to be in working order or not suitable for their intended purpose shall be recorded and the Government and the Contractor shall certify the joint inventory as accurate. If the Contractor fails to participate in the inventory, he must accept as complete and accurate the listings provided by the Government. The Contractor shall establish a schedule to perform periodic inventories in accordance with Federal Acquisition Regulation (FAR) 45.5.

1.44.2.1 Throughout the contract period, the Contractor shall maintain the following in a current status:

a. Detailed equipment installation layout drawings. Mark-ups are acceptable.
b. Detailed floor plans of affected facilities, office areas and warehouses. Mark-ups are acceptable.
c. Available manufacturer's literature and appropriate mechanical, plumbing and functional schematic diagrams.

1.44.2.2 All shop stock including supplies, materials and parts shall be made available to the Contractor on the first day of the Base period of this contract. An inventory will be made jointly between Government and Contrac-tor personnel to determine dollar value and number of line items; duplicate copies of the inventory will be prepared and agreed to by the Contractor. In addition, a joint inventory of all backorder material will be conducted and added to the on hand storage lists when received. If any subsequent inventory, including a final inventory, should disclose that supplies, materials, or parts have been lost or damaged, Contractor liability shall be determined in accordance with the appropriate FAR clause on Government Property specified in Section I of the contract.

1.44.3 Parts which can only be obtained through Government sources will be provided at no cost to the Contractor. All commercially available parts shall be furnished by the Contractor on a reimbursable basis.

1.44.4 UNSERVICEABLE CONTRACTOR EQUIPMENT: Contractor-furnished items that are inoperable or unserviceable for whatever reason (including failure to meet Federal, State or Local safety requirements), shall be removed from the installation within 24 hours after failure except for items undergoing maintenance by the contractor in Government-provided facilities, in which case they shall be removed from the installation after 30 days if still not repaired.

1.45 PHASE-OUT PLAN:

1.45.1 The Contractor shall provide a plan for a phase-out period, in the event that the Contractor is not selected for a follow-on contract, or the Government elects not to exercise any options to extend the performance period of this contract.

1.45.2 The services to be provided in the proposed contract are vital to the Government, and their continuity must be maintained at a consistent level without interruption. The successor, another contractor or the Government, will require phase-in training. The contractor shall be prepared to negotiate in good faith with the successor to ensure continuity and consistency of services under the proposed contract. The Phase-Out Plan shall be submitted IAW the FAR clause entitled CONTINUITY OF SERVICES in Section H (also see Section H clause ADVANCE UNDERSTANDING-COST OF FRINGE BENEFITS).

1.46 SAFETY (DETROIT ARSENAL & U.S. ARMY GARRISON-Selfridge):

1.46.1 The Government and the Contractor shall each be responsible for maintaining a safety program in each of their own areas of responsibility. The Safety Office shall also make periodic spot reviews of the Contractor's safety coverage, with particular attention being directed to Government-owned buildings and/or equipment under the accountability and responsibility of the Contractor. The Contractor shall comply with all applicable provisions of Local, State, and Federal ordinances (including OSHA), laws and building & construction codes. The Contractor shall use AMC-R 385-100, AR 385-10, Local Supplements, and consensus standards as changed or amended as a guide in the operation of the facilities. The Contractor shall maintain the maximum degree of safety in the administration of its safety program. The Contractor shall develop and apply as mandatory those provisions of said manuals and consensus standards that are consistent with the existing building structures and facilities. When modifying or altering current building layouts, structures, or equipment, the contractor shall correct any safety deficiencies or update the facility to the new standard.

1.46.2 The Contractor shall provide personnel with Personal Protective Equipment (PPE), such as: safety shoes, safety glasses, hard hats, gloves, aprons, and goggles, appropriate to the type of work being performed

1.46.3 The Contractor shall be responsible to ensure that all subcontractors comply with the provisions of this paragraph.

1.46.4 The Contractor shall submit to the COR an "Occupational Safety and Health Abatement Plan", AMC Form 2457-R, when correction of an OSHA deficiency/hazard cannot be completed
within 30 days after the hazard was identified.

1.46.5 All Contractor employees shall be educated, trained and licensed to operate assigned equipment. This includes, but is not limited to: fork lifts, cranes, material handling equipment, construction equipment, and grounds maintenance equipment.

1.46.6 All Contractor employees shall be educated, trained and certified in any operation that they will be required to perform. This includes, but is not limited to: confined space entry, rag out/lockout, and hazardous communications.

1.46.7 Any violation of safety requirements may be grounds for immediate suspension of the employee's badge. He/she will be escorted off the premises and not allowed to return until proof of remedial training has been provided in writing.

1.47 GOVERNMENT QUALITY ASSURANCE. NOTE: The Government requires a 0.0% deviation from the Acceptable Quality Level. Deviation from the Acceptable Quality Level may result in cost and payment Contract deductions.

1.47.1 The Government will monitor Contractor performance using Quality Assurance procedures established for this contract. However, the Government reserves the right to utilize other methods of surveillance as necessary. The concepts of ANSI/ASQC Z1.4-1993, AMERICAN NATIONAL STANDARD FOR SAMPLING PROCEDURE AND TABLES FOR INSPECTION BY ATTRIBUTES, will be used, as appropriate, by the Government. The Government will also use any/all of the following other inspection methods: random sampling; periodic sampling; trend analysis; customer feedback; and third party audits.

1.47.2 Acceptable and unacceptable contract performance will be determined as follows:

1.47.2.1 For areas monitored by random sampling, the Government will use the lot Size, Sample Size and AQL to determine the number of defects which deems the Contractor's performance unsatisfactory. The COR will subsequently initiate an Observation Record Sheet (ORS), and the Contracting Officer's Functional Representative (COFR) will provide feeder data to the Contracting Officer's Representative (COR) describing the Contractor's failure to perform specific contract task(s).

1.47.2.2 The Contracting Officer (KO) may issue Contract Discrepancy Reports (CDR) requiring the Contractor to explain, in writing, why performance was unsatisfactory, how performance will be returned to acceptable levels, and how a recurrence of the problem will be prevented in the future (See sample CDR, in Appendix VI, CONTRACT DISCREPANCY REPORT). CDRs are generally issued when: health, safety, or security deficiencies are observed, the corrective action proposed for an ORS fails to address the deficiency(s), the implemented corrective action is ineffective or a quantity of minor ORSs indicates a potential systemic problem.

1.47.2.3 RESPONSES TO OBSERVATION RECORD SHEETS AND CONTRACT DISCREPANCY REPORTS: The Contractor shall provide an initial, signed, written response to the COR within seven (7) working days of receipt of an ORS or to the KO for a CDR. This response may be either a completed final action, an interim reply or a request for an extension. In the case of the latter two types of responses, a proposed date for completion shall also be provided.

1.47.3 DEDUCTS: See Appendix VIII, PERFORMANCE REQUIREMENTS SUMMARY. The description of the deduction process in this contract that will be used for all PWSs in this contract.

1.48 INTER-SERVICE SUPPORT AGREEMENTS (ISSA): A list of the ISSA's is located in Appendix VII, INTER-SERVICE SUPPORT AGREEMENTS. Other applicable ISSAs may be mentioned in other PWSs.

1.48.1 DETROIT ARSENAL: DETROIT ARSENAL presently has ISSAs with other Government organizations (tenants of DETROIT ARSENAL) to provide various services to them. The Contractor shall provide these tenants with the same services required by the contract for DETROIT ARSENAL.

1.48.2 U.S. ARMY GARRISON-SELFRIDGE: USAG-S presently has ISSAs with other Government organizations (tenants of USAGS or co-located at Selfridge) to provide various services to them. The Contractor shall provide these tenants with the same services required by the contract for USAG-S. Some of the services to be provided require reimbursement from the tenant. During the Phase-In Period, the Contractor will be furnished information regarding the capture and reporting (see BUDGET, paragraph 1.49 below) of the Contractor's expenditures for the services rendered.

1.48.3 Tasks in the contract shall supersede the tasks defined in the ISSAs whenever discrepancies or conflicts occur between the two. The Contractor shall immediately notify the COR of any discrepancies.

1.49 BUDGET:

1.49.1 DETROIT ARSENAL AND U.S. ARMY GARRISON-SELFRIDGE (USAG-S): The Contractor shall provide price /cost data to the Government utilizing the applicable accounting codes (e.g., Army Management System, Job Order Numbers (JON), Element of Resources, etc.) found in the current DFAS 37-100-XX series of regulations. The Contractor shall provide a breakout of administrative costs for each site under this PWS, i.e., Warren & USAG-S, for both OMA & AFH funds.

1.49.1.1 The Contractor shall provide data for those applicable accounts prescribed by the current DFAS 37-100-XX series of regulations. The Government will provide applicable JONs to the Contractor on an annual basis and as changes occur. If the Government fails to provide an
applicable JON, the Contractor shall request the Government to provide one.

1.49.1.2 The Contractor shall provide feeder data for the following reports. Separate reports for DETROIT ARSENAL and USAG-S are required:

a. IFSM System Reporting
b. AFH Long Range Plan
c. General Flag Officers' Quarterly (GFOQ) Report

1.49.2 DETROIT ARSENAL & U.S. ARMY GARRISON-SELFRIDGE:

1.49.2.1 The Contractor shall provide a combined Obligation Schedule for TACOM and USAG-S (regarding CLINs associated with the Base Performance Period and all analogous CLINs for option periods) and a combined Cost Report for DETROIT ARSENAL and USAG-S (regarding CLINs associated with the Base Performance Period and the Phase-In Period, and all analogous CLINs for option periods) within the parameters outlined below:

1.49.2.2 DEFINITIONS:

a. An obligation schedule is a dollar breakout of the contract award value by CLIN at the AMS, JON, and Element of Resource level(s). Neither the obligation schedule nor recorded obligations based thereon shall constitute government-imposed limits for Cost Reimbursement CLINs/SLINs in Section B. That portion of the obligation schedule or recorded obligations for the Firm-Fixed-Price CLINs/SLINs in Section B shall constitute limits.

b. A cost report is a schedule provided as a part of an invoice reflecting expenses incurred and unbilled supplies/labor worked, broken down to the same levels as obligation schedules.

c. All obligation schedules and cost reports shall be on EXCEL spreadsheets.

1.49.2.3 CONTENT:

l.49.2.3.1 The obligation schedule shall be structured as follows:

a. IAW the detailed Army Management Structure(AMS) codes as identified in current DFAS 37-100-XX series. NOTE: the estimated number of AMS codes to be provided is approximately 100.

b. IAW the Job Order Number (JONs) (reference TACOM-R 37-X) provided by the government. NOTE: the estimated number of JONS to be provided is approximately 750.

c. With respect to materials (CLIN 5000 and analogous option period CLINs) IAW current DFAS 37-100-XX series which requires classification of items as to whether purchased or rented and as to whether equipment or supplies IAW current DFAS 37-100-XX. A list of equipment purchased or leased by type and dollar value shall be furnished to balance with the dollar value of the elements of resource 31XX and 23XX recorded on the obligation schedule.

d. Including three columns identifying the amount previously scheduled, amount of increase or decrease to the previously scheduled amount, and the cumulative amount scheduled at the same level of detail. Additionally, previously scheduled amounts and current adjustments for overtime shall be identified.

e. Subtotal cumulative amounts at the sixth digit AMS codes level.

f. With respect to labor (CLIN 2000 and analogous option period CLINs) the proposed original (base year) cost should be provided by AMS, and increased each year thereafter to reflect DOL Labor increases.

1.49.2.3.2 The content of the cost report shall be structured in keeping with items 1.49.2.3.1(a) through (e) above. In addition, four columns labeled Last Previously Billed Amount, Current Billing, Cumulative Billed-to-Date, and Unbilled Supplies Ordered/ Labor worked shall be required at the same level of detail. Additionally, previously Billed and Current Billing costs incurred for overtime shall be identified.

1.49.2.4 An obligation schedule shall be required as follows:

a. To be received in the OMA Finance and Accounting Office no later than two (2) workdays prior to EOM that Phase-in Period begins, and thereafter no later than two (2) workdays prior to the end of the month for any modifications affecting the contract award value. If a modification is received at the end of the month, and its amounts have not been included in an obligation schedule for that month, a verbal breakdown by each JON shall be telephonically given to the OMA Finance & Accounting Office by COB of the last working day of the month. Then, within five (5) working days, the follow-up Obligation Schedule shall be forwarded. For this purpose amounts which are subject to availability of funds are not considered part of the contract award value.

b. The Contractor shall submit amended obligation schedule(s) when last submitted figures need to be changed, and in every instance prior to the Contractor incurring costs which would exceed any dollar value on the latest obligation schedule submitted.

1.49.2.5 A cost report shall be required as a part of all invoices. If the invoice processes two fiscal years, separate cost reports are required for each fiscal year.

1.49.3 U.S. ARMY GARRISON-SELFRIDGE. The Contractor shall perform the following finance and accounting activities:

1.49.3.1 The Contractor, in processing statement of charges against service members vacating quarters shall be required to furnish a copy of the Statement of Charges (DD 362) to Pay, Policy and Reports Unit, at the time charges are levied and payment is made, including the member's forwarding address. The only acceptable forms of payments are cash, money orders or certified checks.

1.49.3.2 On behalf of the Government, the Contractor shall make collections within the Funded Reimbursable Authority (FRA) for Army Family Housing (AFH) units occupied by the Coast Guard and civilians. The Contractor shall also make collections within OMA reimbursable accounts for Unaccompanied Personnel Housing (UPH) units at USAG-S. The Contractor shall forward these collections, along with Collection Vouchers (DD Form 1131) on which the Contractor shall list the Accounting Classification, MRRN, AMS, and JON(s) to which the actual amount of funds collected is to be debited. The Collection Vouchers and funds received shall be forwarded immediately by the Contractor to DFAS-OPLOC-SL, copy furnished to the USAG-S Resource Management Office.

1.49.3.3 On a monthly basis, the Contractor shall prepare two SF1080 billings vouchers to the Coast Guard, depicting their occupancy status for AFH and UPH. The SF1080 will show total amount billed for the month specified, and reference the Symbol Number and Coast Guard MIPR Number appropriate to the month of billing. The Contractor shall attach to the SF1080s an occupancy listing. This listing will itemize Resident Name, Rank, Address, Dates Occupied, and Amount Billed for each resident. The Contractor shall mail the original SF1080 to the Coast Guard Finance Center (Interagency Agreements Finance, P.O. Box 4116, Chesapeake , VA 23327-4116), and provide copies to the Ninth Coast Guard District Housing Manager (Commanding Officer, Coast Guard Integrated Support Command, 1240 East Ninth Street, Cleveland, OH 44199), and USAG-S Resource Management Office. The Contractor shall forward SF1080 billings and back-up documentation by the tenth day of the following month, unless otherwise specified by the Government. When payment is received by the Government (via U.S. Treasury Check), the Contractor shall prepare Collection Voucher (DD Form 1131) as specified above.

1.50.0 U.S. ARMY GARRISON-SELFRIDGE SECURITY:

1.50.0.1 The Contractor shall be responsible for providing security support services and fire prevention support services, coordination and maintenance of disaster preparedness plans, environmental protection plans, and coordination between USAG-S and TACOM on these matters. The Contractor shall acquire and maintain a current library of reference and controlling documents and ensure that affected personnel are familiar with the contents.

1.50.1 SECURITY PROGRAM AND PHYSICAL SECURITY:

1.50.1.1 The Contractor shall coordinate local plans and procedures with MIANG Security Office, USAG-S Plans and Operations, and TACOM Security Office for the purpose of complying with all security regulations pertaining to entering or leaving areas, issue and wearing of security identification badges, the physical security of all building and facilities and ensuring the security of personnel and property within USAG-S.

1.50.1.2 The Contractor shall coordinate with SANGB DA Police and local security offices on the Traffic regulations and parking plans for Family Housing and commercial buildings. The Contracor shall monitor security surveys, and perform follow-up action as required.

1.50.1.3 The Contractor shall receive reports of incidents and forward to the Commander USAG-S on a daily basis.

1.50.2 The Contractor shall make periodic inspections and analyses to determine readiness for disaster. The Contractor shall provide locator maps (posted appropriately), shelter provisions, and adequate transportation to shelters for Garrison personnel, including dependents and children. The Contractor shall report quarterly readiness status to USAG-S Plans and Operations for overall Garrison risk analysis acceptance by the Commander.

The Contractor shall possess a working knowledge of current doctrine from U.S. Army and Air Force Base Regulations on disaster preparedness.

1.50.2.1 The Contractor shall act as a staff point of contact for all plans on emergencies or disaster preparedness support. Paragraph 1.50.2 requires an analysis, an ability to work with general military technology, and to transport personnel. The Contractor shall plan, direct, and coordinate implementation of all emergency or disaster plans with the USAG-S Plans and Operations Officer, subject to the approval of the USAG-S Commander, his designate, or the COR. The Contractor shall participate in formulation and reviews of defense organization plans, operating procedures, and manpower requirements, as they pertain to security or disaster preparedness. The Contractor shall maintain liaison with other agencies and civilian industry to effect the interchange of mobilization or emergency requirements for the purpose of continuing a sound foundation which encompasses personnel continuity, records protection, disaster control operations, mutual aid to civilian population and emergency relief.

1.50.2.2 The Contractor shall recommend needed equipment, such as warning sirens, based on dispersal and numbers of Garrison population. The Contractor shall recommend and prepare appropriate regulations/ supplements for the Base Disaster Preparedness Operation Plan, available through the Garrison's Plans and Operations Office. The Contractor shall request assignment of personnel to serve in mission essential disaster preparedness roles, such as shelter managers or exposure control assistants; and schedule appropriate training for these personnel. Personnel presently assigned in mission essential positions may anticipate hazardous duty and extended hours during natural, or man-made crisis situations, e.g., consequence management of tornadoes, explosions, and fire. Civilian employees who are required to work overtime will be compensated IAW Federal law and, if applicable, the local Negotiated Labor-Management Agreement.

APPENDIXES FOR PWS-1
TABLE OF CONTENTS

APPENDIX #	APPENDIX TITLE	No. of Pages
I	REGULATIONS, PUBLICATIONS, FORMS AND REPORTS	3
II	DEFINITIONS	2
III	FACILITIES AVAILABLE FOR CONTRACTOR USE	1
IV	GOVERNMENT-PROVIDED COMMUNICATIONS	2
V	HISTORICAL DATA	3
VI	CONTRACT DISCREPANCY REPORT	1
VII	INTER-SERVICE SUPPORT AGREEMENTS (ISSA's)	1
VIII	PERFORMANCE REQUIREMENTS SUMMARY	9
	TOTAL NUMBER OF PAGES	**22**

APPENDIX I
GENERAL PWS 1
REGULATIONS, PUBLICATIONS, FORMS & REPORTS

NOTE: The following publications and forms are mandatory for the Contractor to use and/or observe as applicable.

DA PAMPHLET 37-100-XX	The Army Management Structure (current FY)
AR 380-5	Department of the Army Information Security Program
AR 190-11	Physical Security of Arms, Ammunition, and Explosives
AR 190-13	The Army Physical Security Program
AR 190-51	Security of Unclassified Army Property
DOD 5220.22-M	Standard Practice Procedures

FORMS

AMC 2457-R	OSHA Deficiency and Abatement Plan
SF 85P	Questionnaire for Public Trust Positions
STA Form 15	Contractor's/Visitor Badge/Pass Application
STA Form 737	Observation Record Sheet

NOTE: The following are provided as general program and procedures guidance, and for information purposes only. Their use cannot be enforced or required for performance.

ARMY REGULATIONS

AR 25-50	Preparing and Managing Correspondence
AR 25-400-2	The Modern Army Record keeping System (MARKS)
AR 210-1	Private Organizations on DA Installations
AR 310-25	Dictionary of US Army Terms
AR 310-50	Catalog of Abbreviations and Brevity
AR 340-21	The Army Privacy Program
AR 385-10	Army Safety Program
AR 385-15	Water Safety
AR 385-32	Protective Clothing and Equipment
AR 385-40	Accident Reporting and Records
AR 385-55	Prevention of Motor Vehicle Accidents
AR 420-90	Fire Prevention and Protection
AR 500-60	Disaster Relief
AR 530-1	Operations Security
AR 600-50	Standards of Conduct for DOD Personnel

AR 600-290	Passports and Visas
AR 735-5	Policies and Procedures for Property Accountability
AR 750-1	Army Material Maintenance Concepts and Policies

AMC REGULATIONS

AMC-R 385-100	Army Safety Manual

SANGB REGULATIONS

0-2	Numerical Index of SANGB Regulations
125-7	Control of Pet Animals
125-12	Law Enforcement
125-14	Motor Vehicle Traffic Supervisions
O Plan 32-1	Base Disaster preparedness O Plan

SANG Supp 1 to AFI 31-204 Air Force Motor Vehicle Traffic Supervision

TACOM REGULATIONS
TACOM Suppl to AR 385-10
TACOM Suppl 1 to AR 385-32
TACOM Suppl to AR 385-40
TACOM 190-4 Removal and Introduction of Property
TACOM-R 15-38 Crime Prevention/Physical Security Committee
TACOM-R 190-3 Lock and Key Control

MISCELLANEOUS
TACOM Counterterrorism Plan

FORMS REQUIREMENTS:

DA 285	US Army Accident Investigation Report
DA 285-1	US Army Accident Investigation Report (Continuation)
DA 2819	Law Enforcement and Discipline Report
DA 2820	Statement by Accused or Suspect Person
DA 4696	Government Property Lost or Damaged (GPLD) Report
DA 4697	Report of Survey
DD 362	Statement of Charges for Government Property Lost, Damaged or Destroyed

DD 577	Signature Card
DD 1131	Cash Collection Voucher
DD 1351-5	Government Quarters and Mess
DD 2398	Summary of Accident Exposure
DARCOM 2207-R	Family Housing BP 1900 Project Status
SANGB 19	Notice for Base Bulletin
SANGB 25	Building Security Record
AF 1070	Local Communications Service Request
SF 1034	Public Voucher for Purchase and Services other than Personal
SF 1049	Public Voucher for Refunds
SF 1080	Voucher for Transfer Between Appropriations and/or Funds
OF 41	Routing and Transmittal Slip

GENERAL PERFORMANCE WORK STATEMENT PWS 1
APPENDIX II
DEFINITIONS

A. ISSA - Interservice Support Agreement
B. MOU - Memorandum of Understanding
C. HAZARDOUS MATERIAL: A material as defined by Federal Standard, Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities ([FED-STD-313C, 3 April 96][The General Services Administration has authorized the use of this federal standard by all federal agencies]).

1. Any item or chemical which is a “health hazard” or “physical hazard” as defined by OSHA in 29 CFR 1910.1200, which in-cludes the following:
   a. Chemicals which are carcinogens, toxic, or highly toxic agents, reproductive toxins; irritants, corrosives, sensitizers, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucus membranes.
   b. Chemicals which are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive.
   c. Chemicals which in the course of normal handling, use, or storage operations may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteris-tics.
2. Any item or chemical which is reportable or potentially reportable or notifiable as inventory under the requirements of the Hazardous Chemical Reporting (40 CFR Part 370), or as an environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CRF Part 372), which include chemicals with special characteris-tics which in the opinion of the manufacturer can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).
3. Any item or chemical which, when being transported or moved, is a risk to public safety or an environmental hazard and is regulated as such by one or more of the following:
   a. Department of Transportation Hazardous Material Regulations (49 CFR 100-180).
   b. Internal Maritime Dangerous Goods Code of the International Maritime Organization.
   c. Dangerous Goods Regulations of the International Air Transport Association.
   d. Technical Instructions of the International Civil Aviation Organization.
   e. U.S. Air Force Joint Manual, Preparing Hazardous Materials for Military Air Shipments (AFJMAN 24-204).

D. Hazardous substance: A substance as defined by section 101(14) of Comprehensive Environmental Response Compensation and Liability Act.
1. For the purposes of this regulation a hazardous substance is any of the following:
   a. Any substance designated pursuant to Section 311(b)(2)(A) of the Clean Air and Water Act.

b. Any element, compound, mixture, solution, or substance designated pursuant to Section 102 of the Clean Air Act.

c. Any hazardous waste having the characteristics identified under the Resource Conservation and Recovery Act.

d. Any toxic pollutant listed under Toxic Substance Control Act.

e. Any hazardous air pollutant listed under Section 112 of the Clean Air Act.

f. Any imminently hazardous chemical substance or mixture with respect to which the Environmental Protection Agency Administrator has taken action pursuant to Subsection 7 of Toxic Substance Control Act.

2. The term does not include:

a. Petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance in paragraph “a.” above.

b. Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures or natural gas and such synthetic gas usable for fuel).

3. A list of hazardous substances is found in 40 CFR 302.4.

GENERAL PERFORMANCE WORK STATEMENT PWS 1
APPENDIX III
FACILITIES AVAILABLE FOR CONTRACTOR USE

A. SUPPORT ACTIVITY WARREN (TACOM-WRN)

Bldg #	Location	Est. SF	Currently Used For
T202		2,450	Maintenance Shop
T209	NW of 201	360	Compressed Gas
T216	NW of 201	360	Compressed Gas
T224		3,920	DPW Operations - Storage
T225		3,920	DPW Operations - Storage
230E	1st Floor	1,435	Maintenance Shop
200D		180	Machine Repair Shop
203		28,500	Office, Maintenance Shop, Storage, Warehouse
212		533	Maintenance Shop
250		2,020	Maintenance Shop

B. SUPPORT ACTIVITY SELFRIDGE (USAGS)

Bldg #	Location	Est. SF	Currently Used For
970		13,019	Office, Maintenance Shop, Storage, Warehouse - Rooms 100A warehouse, 101, 101A & adjacent warehouse, 102, 103A, 104, 104A, 108, 112, 113, 114, 116, 119,120, 121, 122, 124, 126, 128, 130, 131,132, 134, 134A, 136, 138, 200, 200A & mezzanine, 201, 201A, 202, 203, 204, 205, 206, 207, 208, 209, 211, & 213
951		3,374	Bayshore Hardware Store/Self-Help Store
950		2,880	Storage
945	1st floor	3,000	Office/Storage - Suites 235, 242, 244 & storage area in center of building
972		9,125	Maintenance Shop & Storage

PERFORMANCE WORK STATEMENT 1
APPENDIX IV
GOVERNMENT-PROVIDED COMMUNICATIONS

I. SUPPORT ACTIVITY SELFRIDGE (USAGS):

Building	Functional Area	Base Lines
970	Office, Maintenance Shops, Warehouse	574-6242 4188/4110/5359 6024/5620/6022 4839/5218/5174 6267/4134/5818 4409/5130/50516130/ 5132/50614864/5905/ 47255232/4661/4708 5469/5905/41324667/ 4520/54615358/4125/ 53555973/5354/4208 5977/5384
951	Bayshore (Self-help Store)	4181/4101
945	Maintenance Shop	4130
972	Maintenance Shop	5412

II. SUPPORT ACTIVITY - WARREN (TACOM-WRN):

Building	Functional Area	Base Lines
203	Office, Maintenance Shop, Warehouse	47973/45448 47949/4865345818 /47804 48811/45839 47994/46093 46213/45302 46814/45300 45326/45593 47995/45748 45031/45585 45073 751-0132
T202	Maintenance Shop	46086
230E	Maintenance Shop	45534
212	Maintenance Shop	753-2492

PERFORMANCE WORK STATEMENT 1
APPENDIX V
BUDGET OFFICE
HISTORICAL DATA

DESCRIPTION	QUANTITY BY FY			
	99	00	01	02
Obligation Schedule: This schedule provides an estimated dollar breakdown of the contract award value by CLINs (labor/supply) by AMS, JON and EOR level.	87	60	76	100
Cost Report and Public Voucher: A report of actual costs provided as part of an invoice reflecting expenses incurred and unbilled costs, reported at the same level as the obligation schedule.	69	54	97	104
Data files (accounts by AMS codes): These accounting ledgers are utilized for recording expenditures for all costs incurred under the contract.	661	643	646	648
Accounting Transfers: Transferring cost within applicable accounting AMS codes and CLIN accounts.	458	406	1,223	766
Davis Bacon (Hour/Dollars)Report: A report that provides actual costs by employee and monthly total.	12	12	12	12
Accounts Payable Listing (All Accounts): Generated computer print out for verification Of A/P and Unbilled Commitments (P.O.s and subcontracts)	1,791	1,533	2,940	1,735
Computer generated General Ledgers for all accounts to reconcile costs by CLIN categories and AMS codes.	N/A	N/A	120	120
Status of Funds Report: Provides estimated funding status of obligations/commitments (reimbursable accounts at summary level).	12	12	12	12
Family Housing Material Report	12	12	4	4

TRAVEL/TRAINING WORKLOAD
AGGREGATE COST

	AGGREGATE # OF PERSONS	AGGREGATE # OF DAYS	AGGREGATE COSTS
FY98:			
SANGB	131	101	$33,758.46
TACOM	171	160	$61,679.88
TOTAL:	302	261	$95,438.34
FY99:			
SANGB	20	57	$14,609.38
TACOM	99	81	$22,.006.88
TOTAL:	119	138	$36,616.26
FY00:			
SANGB	49	96	$63,692.88
TACOM	40	27	$10,786.31
TOTAL:	89	123	$74,479.19
FY01			
SANGB	40	98	$45,657.12
TACOM	22	31	$11,553.65
TOTAL:	62	129	$57,210.77

In-house training (no dollar cost)

	AGGREGATE # OF PERSONS	AGGREGATE # OF DAYS
FY98:		
SANGB	440	40
TACOM	670	47
TOTAL:	1,110	87
FY99:		
SANGB	192	23
TACOM	580	34
TOTAL:	772	57
FY00:		
SANGB	556	28
TACOM	507	21
TOTAL:	1,063	49

FY01		
SANGB	181	15
TACOM	84	8
TOTAL:	265	23

MATERIAL/SUPPLY DATA

	FY99	FY00	FY01	FY02
SELFRIDGE				
MATERIAL ISSUES	6,420	6,587	10,284	7,883
MATERIAL COSTS	$785,017	$1,119,079	$929,378	$886,457
TACOM				
MATERIAL ISSUES	4,745	5,925	10,346	6,770
MATERIAL COSTS	$620,044	$511,589	$883,339	$807,802

PWS I
APPENDIX VI
CONTRACT DISCREPANCY REPORT

<table>
<tr><td colspan="4">PART I: DISCREPANCY</td></tr>
<tr><td colspan="2">1. CONTRACT NUMBER</td><td colspan="2">2. DISCREPANCY REPORT NUMBER</td></tr>
<tr><td colspan="2">3. CONTRACTOR</td><td>4. PREPARED BY</td><td>5. DATE</td></tr>
<tr><td colspan="4">6. DISCREPANCY OR PROBLEM: (DESCRIBE IN DETAIL: INCLUDE REFERENCE TO CONTRACT. ATTACH CONTINUATION SHEET IF NECESSARY)</td></tr>
<tr><td>7. CONTRACTING OFFICER'S REPRESENTATIVE</td><td>8. DATE</td><td>9. CONTRACTING OFFICER'S SIGNATURE</td><td>10. DATE</td></tr>
<tr><td colspan="4">PART ii: RESPONSE</td></tr>
<tr><td colspan="2">11. TO: (CONTRACTING OFFICER)</td><td colspan="2">12. FROM: (CONTRACTOR)</td></tr>
<tr><td colspan="4">13. CONTRACTOR'S RESPONSE AS TO CAUSE, CORRECTIVE ACTION AND/OR ACTIONS TO PREVENT RECURRENCE: ATTACH CONTINUATION SHEET IF NECESSARY.</td></tr>
<tr><td colspan="3">14. SIGNATURE OF CONTRACTOR</td><td>15. DATE</td></tr>
<tr><td colspan="4">PART III: EVALUATION</td></tr>
<tr><td colspan="4">16. GOVERNMENT EVALUATION (ACCEPTANCE, PARTIAL ACCEPTANCE, REJECTION: ATTACH CONTINUATION SHEET IF NECESSARY.)</td></tr>
<tr><td colspan="3">17. SIGNATURE OF CONTRACTING OFFICER</td><td>18. DATE</td></tr>
</table>

STA FORM 760
8 JAN 85

APPENDIX VII
GENERAL PWS 1
INTER-SERVICE SUPPORT AGREEMENTS (ISSA's)

1. W56HZX-99235-001 (Army Audit Agency)
2. W56HZX-99278-001 (U.S. Army Research Lab)
3. W56HZX-99257-001 (U.S. Army Corps of Engineers)
4. W56HZX-03276-001 (Defense Logistics Agency)
5. W56HZX-93239-001 (USMC Logistics)
6. W56HZX-96026-001 (USMC LNO)
7. W56HZX-94343-001 (MEDDAC)
8. W56HZX-93257-002 (SFAE-TWV)
9. W56HZX-93257-001 (SFAE-ASM)
10. W56HZX-96289-001 (DCMA Detroit)
11. W56HZX-94133-001 (SFAE-FAS)
12. W56HZX-02056-001 (Defense Acquisition University [DAU])
13. W56HZX-93141-002 (Small Business Office)
14. W56HZX-01008-002 (902nd Military Intelligence Group)
15. W56HZX-99257-002 (TMDE Support Group)
16. W56HZX-98323-001 (USN Printing Service)
17. FB6221-93008-012 (127th TFW MIANG)
18. FB6221-01151-025 (127th TFW MIANG)

MEMORANDUM OF UNDERSTANDING (MOU)

1. MOU 31 Aug 00 (PM-LAV)

MEMORANDUM OF AGREEMENT (MOA)

1. MOA 1 Oct 01 (FMS, Bldg. 252)

APPENDIX VIII

GENERAL PWS

PERFORMANCE REQUIREMENTS SUMMARY (PRS)

1.0 The rights of the government and remedies described in this appendix, which is a part of the contract, are in addition to other rights and remedies set forth in the contract. Specifically, the Government reserves its contract rights under the Inspection of Services Clause and the Default Clause. Government quality assurance actions and remedies applied against deficiencies found during surveillance will be in accordance with the provisions of the Inspection of Services Clause. The purpose of this appendix is to define performance evaluation and payment procedures. The absence from this PRS of any contract requirement, however, shall not detract from its enforceability or limit the rights or remedies of the Government under any other provision of the contract, including the Inspection of Services Clause and the Default Clause.

1.1 The Government expressly reserves the right to deduct and/or reduce contract payments for performance which is deficient and does not meet an Acceptable Quality Level of 100% contract performance. This appendix provides the payment computation formula resulting in payment of less than 100% of the maximum payment for any deficient service (see paragraphs 4.0 and 6.0 below).

2.0 GOVERNMENT QUALITY ASSURANCE. Using the Surveillance Plan (SP)Contractor performance will be compared to the contract standards and the actual contract performance based on 100% performance = an AQL of 0.0%.

2.1 The Government may use a variety of surveillance methods, alone or in combination, during an inspection period to evaluate the contractor's performance, and for payment computation purposes. The methods of surveillance that may be used are:

2.1.1 Random Sampling of recurring service output using the selected sampling plans of ANSI/ASQC Z1.4-1993.

2.1.2 Planned Inspection of output items daily, weekly, monthly, quarterly, semiannually, or annually as necessary to assure a sufficient evaluation of contractor performance.

2.1.3 Validated Customer Complaints.

2.1.4 100% Inspection.

2.1.5 Management Information System (MIS) reported results. MISs are usually computer programs (may be a manual system) set up to monitor and collect data in a given area.

3.0 CRITERIA FOR ACCEPTABLE AND UNACCEPTABLE PERFORMANCE. The performance standards in each PWS and the contract AQL of 0.0% are the level of performance acceptable to the Government. When deficiencies in the Contractor's performance are found, the Contractor may be required to respond to a Contract Discrepancy Report (CDR). The CDR will require the Contractor to explain, in writing, why performance was unacceptable; how performance will be returned to acceptable levels; and how recurrence of the problem will be prevented in the future. The Contracting Officer will evaluate the Contractor's explanation and determine if full payment, partial payment, or the contract termination process is applicable. The Contractor's payment for services rendered will be calculated as stated in paragraph 4.0 of this appendix.

3.1 DETERMINING THE NUMBER OF DEFECTS THAT MAY CAUSE LESS THAN MAXIMUM PAYMENT:

3.1.1 At the sole election of the Government and upon notification to the Contractor, the Contractor may be required to re-perform or perform late any or all defective work disclosed by Government inspection including defective and incomplete performance. The Contractor will be notified promptly after inspection that specified defective services shall be re-performed, and completed within a reasonable time specified by the Government. The Government will re-inspect work designated for re-performance, and the Contractor may be held liable for any damages incurred by the Government, i.e. re-inspection costs.

3.1.2 Where the Government requires re-performance or late performance solely of sample defective service disclosed by random sampling inspection, the Contractor's original inspection results shall not be modified upon re-inspection since the sample reflects only a portion of the service lot. Instead, if the AQL is exceeded for that performance period, any payment computation shall include credit for re-performance or late performance of sample defective service during that period according to the payment computation method described in paragraph 4.1.1.1 of this technical exhibit.

3.1.3 Where the Government requires re-performance or late performance of all defective service in a lot, the Contractor shall resubmit the entire service lot for re-inspection. If re-inspection is conducted by random sample, a new random sample will be employed. Upon re-inspection, the original inspection results will be revised to reflect the resubmitted lot.

4.0 CONTRACTOR PAYMENT: Each month's Contractor performance will be compared to contract standards and actual contract performance. The Government's monthly payments to the Contractor will be reduced for unsatisfactory performance using a Government estimate and/or the following methods:

4.1 If Contractor performance has been unacceptable and is determined to be the fault of the Contractor, contract payments will be deducted accordingly.

4.1.1 The payment for listed services which exceed the AQL, i.e., are defective, will be calculated as follows: AQL.

4.1.1.1 For services for which the method of surveillance is Random Sampling, the maximum payment value for the service is used to determine the maximum payment for acceptable service. This payment is multiplied by the percentage of the sample found acceptable to determine the percentage of the contract price that the Contractor will be paid for the listed service. The total number of defects found are used to determine the percentage of the contract payment reduction. The percentage of the sample found unacceptable subtracted from 100 percent determines the percentage of the lot found unacceptable. Sample defects that are corrected in accordance with section 3.1.1 will effect a credit (see paragraph 5.1.1. below for example of payment computation).

4.1.1.2 For services for which the method of surveillance is periodic inspection, customer complaint, or MIS reports, the maximum payment value for the service is multiplied by the percentage of the lot found acceptable. The resulting percentage is the percentage of the monthly contract price that the Contractor will be paid for the listed service. The total number of defects found, not just the defects in excess of the reject level, are used to determine the percentage of the lot found unacceptable. The percentage of the lot found unacceptable subtracted from 100 percent determines the percentage of the lot found acceptable (See paragraph 5.2.1. below for example of payment computation).

4.1.1.3 For those services that are performed less frequently than monthly, surveillance and computation of the Contractor's payment will be made during or immediately following the month when that service is performed. The payment computation will be determined for the entire period since the start of the contract or the last surveillance, whichever is applicable, and will be based upon the total maximum payment available for the entire period since the last surveillance (See paragraph 5.3.1. below for example of payment computation.) Should computation of the

Contractor's payment result in an amount less than has already been paid for the preceding month(s) of the period since the last surveillance, the Government will deduct the overpayment from the current month's invoice (See paragraph 5.3.2 below for example of payment computation).

5.0 EXAMPLES OF PAYMENT COMPUTATION.

5.1. For services for which random sampling is the method of surveillance:

5.1.1 Assume an AQL of 0.0%, a lot size of 450 units, a resulting sample size of 50 units, and that 10 defects were found by Government surveillance. The reject level is 1 defective sample. The payment computation would be as follows:

(1)	Maximum monthly payment value for the service	$ 500
(2)	10 defects exceed reject level of 1 defect	
(3)	Percentage of sample found unacceptable (number defects divided by sample size times 100)	20%
(4)	Percentage of sample found acceptable [100% minus percentage of sample found unacceptable from (3) above]	80%
(5)	Credit for 2 sample defects corrected (samples corrected divided by lot size times 100)	+ 4%
(6)	Acceptable percentage [(4) plus (5) above]	84%
(7)	Payment for percentage of acceptable service [(1) times (6) above]	$ 420

5.2 For services for which the method of surveillance is other than random sampling:

5.2.1 Assume an AQL of 0.0%, a lot size of 50 units, and that 5 defects were found by government surveillance. The reject level is 1 defective sample. The payment computation would be as follows:

(1)	Maximum monthly payment value for the service	$ 400
(2)	5 defects exceed reject level of 1	
(3)	Percentage of lot found unacceptable (5 defects divided by lot size times 100)	10%
(4)	Percentage of lot found acceptable [100% minus percentage of lot found unacceptable from (3) above]	90%
(5)	Payment for percentage of acceptable services [(1) times (4) above]	$ 360

5.3 For services for which surveillance is less often than monthly:

5.3.1 Assume surveillance is semiannual; the AQL is 0.0%; and a defect of 10% is found by the Government during surveillance. The reject level is 1 defective sample. Also, assume the percentage of the total contract line item price for the service is 4%. The payment would be computed as follows:

(1)	Monthly contract line item payment	$10,000
(2)	Number of months represented by the period since the last surveillance	X 6
(3)	Total maximum payment value for the period	$ 60,000
(4)	Percentage of monthly contract line item price	X 4%
(5)	Total maximum payment for period	$ 2,400
(6)	Percentage acceptable (100% minus 10%)	X 90%
(7)	Contractor payment for the period	$ 2,160
(8)	Amount previously paid for the period ($10,000 times 4% = $400; 5 months times $400 = $2,000)	- 2,000
(9)	Payment to the contractor this month	$ 160

5.3.2 When the contractor has been paid more in previous months than the computed payment for the period, computation will be as follows: Assume surveillance is semiannual; the AQL is 0.0%; and a defect of 25% is found by the Government. The reject level is 1 defective sample. Also, assume the percentage of the total contract line item price for the service is 4%:

(1)	Monthly contract line item payment	$ 10,000
(2)	Number of months represented by the period since the last surveillance	X 6
(3)	Total maximum payment value for the period	$ 60,000
(4)	Percentage of monthly contract line item price	X 4%
(5)	Total maximum payment for service	$ 2,400
(6)	Percentage acceptable (100% minus 25%)	X 75%
(7)	Contractor payment for the period	$ 1,800
(8)	Amount previously paid during the period ($10,000 times 4% = $400; 5 months times $400 = $2,000)	-$ 2,000
(9)	Payment to the contractor this month	$ 0

(10) Reduction from current invoice due to overpayment ($ 200)
(to be off set against amounts due for other services)

6.0 MAXIMUM PAYMENT VALUE. Following is a list of the services to be performed under this contract, and the maximum payment value (of the total contract) to be used in calculating any payment deductions.

REQUIRED SERVICES	MAXIMUM PAYMENT VALUE
GENERAL	
Administration of Security Program	3.0%
Safety, Disaster Preparedness, & Fire Prevention Programs	3.0%
Budget Support Services	4.0%
FACILITIES ENGINEERING	
WORK MANAGEMENT (BOTH DETROIT ARSENAL & USAG-S)	
Work Management, Supervision, Coordination, Scheduling, Planning, Annual Work Plans	1.5%
Work Documentation Management	0.3%
Energy Conservation	0.3%
Engineering Plans and Services	0.6%
Statistical Information, Records, Logs, Files, Real Property Records	0.6%
Facilities Engineering Self-Help Store	0.6%
Structural Inspections	0.3%
Emergency Calls	1.4%
Urgent Calls	1.4%
Automated Data Processing System Requirements, IFS-M (Integrated Facilities Management/Micro System)	0.6%
Estimating	0.6%
Personnel	1.2%
Safety	0.6%
DETROIT ARSENAL	
RESOURCE MANAGEMENT	
General Work Management, Coordination, Control, Scheduling Levels, Categories, Work Planning, Documentation, Prioritization	0.7%
Statistical Information Records, Logs, Files, Real Property Records	0.6%
Emergency Response, Critical Systems	1.5%
Energy Conservation Support	0.7%
Safety	0.7%
ELECTRICAL SERVICES	
Routine and Preventive Maintenance on types of systems and equipment.	0.8%
Repair and Modification on types of systems and equipment.	0.7%
Support Other Contractors	0.6%

REQUIRED SERVICES	MAXIMUM PAYMENT VALUE
REFRIGERATION SYSTEMS	
Routine and Preventive Maintenance on types of systems and equipment.	0.8%
Temporary Cooling Systems	0.6%
Air Conditioning Operations Center	1.4%
Repair and Modification on types of systems and equipment.	0.7%
Startup – Shutdown	1.4%
BOILER, HEATING, STEAM, AND NATURAL GAS SYSTEMS	
Routine and Preventive Maintenance on types of systems and equipment. Treatment and Protection of Systems	1.5%
Operation and Maintenance of Package Boiler	1.5%
Startup - Shutdown	1.5%
Repair and Modification on types of systems and equipment.	0.7%
Alternate Steam Source	0.6%
PLUMBING/PIPEFITTING AND WATER AND SEWAGE DISTRIBUTION	
Routine and Preventive Maintenance on types of systems and equipment	0.8%
Repair and Modification on types of systems and equipment.	0.7%
METAL AND MECHANICAL	
Routine Maintenance on types of structures and equipment	0.8%
Repair/Replace Roofing	0.6%
Rigger Tasks	0.6%
Repairs, Modification on types of structures and equipment	0.7%
CARPENTRY, MASONRY, PAINTING AND PRESERVATION	
Routine Maintenance on Floors, Wall, Ceilings, Doors, Windows, Kitchens, Bathrooms, Exterior Carpentry, and Miscellaneous Carpentry Work, Concrete & Masonry	0.8%
Painting and Preservation	0.6%
Signs and Marking	0.6%
Repairs and Modifications	0.7%
ROADS, PAVEMENT, RAILROADS, APPURTENANCES AND GROUNDSKEEPING	
Routine and Preventive Maintenance	0.8%
Pavement Markings	0.6%
Snow and Ice Removal, S&I Removal Time Criteria, Priorities and Other S&I Removal Tasks	0.6%
Groundskeeping, Cutting Levels,	0.6%
Repairs and Modifications	0.6%
Install Improvements, Fencing	0.6%
Miscellaneous Support Services	0.6%

REQUIRED SERVICES	MAXIMUM PAYMENT VALUE
Arbor Activities	0.6%
Fertilization and Irrigation	0.6%
VECTOR AND PEST CONTROL	
Vector and Pest Control Report	0.6%
Pesticide restrictions, Handling, Storage, Control and Reporting	1.4%
Licensing/Personnel Certification	1.2%
Vector and Pest Control Services	0.6%
LOCKSMITHING	
General Tasks, Work Control, Provost Marshal/Other Locking Systems	0.6%
Key and Core Control System	1.2%
Locking Devices, Systems and Ancillary Equipment, Locksmith Tasks	1.2%
ENVIRONMENTAL SERVICES	
Environmental Protection Support, Environmental Health and Support, HAZMAT Support, Spill Control, waste handling, storage, and disposal, Ozone emission reduction	1.4%
Asbestos Control and Abatement	1.2%
Lead Control and Abatement	1.2%
PCB	1.2%
MISCELLANEOUS SERVICES AND APPLIANCES	
Routine and Preventive Maintenance	0.6%
Repair of Miscellaneous Equipment, Appliances and Systems	0.6%
SPECIAL ACTIVITES	
Special Events	0.6%
BUILDING 212	0.6%
Routine and Preventive Maintenance	
Dynamometer Repairs	
EMERGENCY VEHICLES	
Preventive Maintenance and Major Repair	0.6%
USAG-S	
FACILITIES ENGINEERING	
ELECTRICAL SYSTEMS	
Work Levels, Maintenance Work	1.0%
Work Levels, Repair Work	0.5%
Work Levels, New Work	0.1%
AIR CONDITIONING, VENTILATION AND REFRIGERATION	
Work Levels, Maintenance Work	1.0%
Work Levels, Repair Work	0.5%

REQUIRED SERVICES	MAXIMUM PAYMENT VALUE
Work Levels, New Work	0.1%
HEATING SYSTEMS	
Work Levels, Maintenance Work	1.0%
Work Levels, Repair Work	0.5%
Work Levels, New Work	0.1%
ROADS, PAVEMENTS, APPURTENANCES, GROUNDSKEEPING	
Work Levels, Maintenance Work	1.0%
Work Levels, Repair Work	0.5%
Work Levels, New Work	0.1%
Snow and Ice Removal	1.4%
Special Events	0.3%
CARPENTRY, CONCRETE, MASONRY, PAINTING AND PRESERVATION AND LOCKSMITHING	
Work Levels, Maintenance Work	1.0%
Work Levels, Repair Work	0.5%
Work Levels, New Work	0.1%
Locksmithing	1.2%
PLUMBING/PIPEFITTING, WATER DISTRIBUTION AND SEWAGE	
Work Levels, Maintenance Work	1.0%
Work Levels, Repair Work	0.5%
Work Levels, New Work	0.1%
METAL AND MECHANICAL	
Work Levels, Maintenance Work	1.0%
Work Levels, Repair Work	0.5%
Work Levels, New Work	0.1%
ENVIRONMENTAL SUPPORT	
Maintaining Environmental Compliance	1.4%
Identification of Unknown Wastes	0.3%
Environmental Field Support	0.3%
Hazardous Materials Management	0.6%
Minimize Ozone Depleting Substances	0.3%
Environmental Health and Support	0.6%
Asbestos Control and Abatement	0.6%
Vector and Pest Control	2.1%
Lead Control and Abatement	0.6%
PCB	0.6%

REQUIRED SERVICES	MAXIMUM PAYMENT VALUE
Records	0.3%
Environmental Maintenance Work	0.6%
CYCLIC PREVENTIVE MAINTENANCE	
Work Levels, Maintenance Work	1.2%
REFUSE COLLECTION	
Scheduled Curb Refuse Collection and Disposal Service	1.4%
Can Container, Equipment and Vehicle Maintenance and Sanitation	0.3%
CUSTODIAL SERVICES	
General Cleaning, Maintenance and Dusting	1.2%
Clean and Services Restrooms	1.2%
Police Building Exteriors	0.6%
KITCHEN AND HOME APPLIANCES	
Work Levels, Maintenance Work	0.6%
INACTIVATION PROCEDURES	
Work Levels, Repair Work	0.3%
FAMILY HOUSING	
Housing Management	0.7%
Financial Management	0.4%
Unaccompanied Personnel Housing Management	0.2%
Furnishings Management	0.4%
Assignments & Terminations	0.4%
Inspections	0.6%
Housing Engineer	0.4%
CHRRS	0.4%
Preparation and Processing of Paint and Floor commitment documents	0.2%
Residential Quarters Cleaning - private custodial contractors	0.2%
Reports of Survey/Statement of Charges	0.1%
TRANSPORTATION	
Transportation Administration and Supervision	0.1%
Movement Management	2.6%
Transportation Quality Control	0.3%

PWS-2, PERFORMANCE WORK STATEMENT 2
FACILITY ENGINEERING: WARREN & USAG-SELFRIDGE

TABLE OF CONTENTS of PWS-2

2.1 GENERAL

2.1.1 REQUIREMENTS
2.1.2 CONTRACTOR RESPONSIBILITY
2.1.3 MANAGEMENT AND PERSONNEL
2.1.4 CONTRACTOR ARCHITECTURE & ENGINEERING SUPPORT
2.1.5 CONTRACTOR ENGINEERING SERVICES
2.1.6 REQUESTING CORRECTIVE ACTION
2.1.7 EMERGENCY STANDBY EQUIPMENT ITEMS
2.1.8 BURNING AND WELDING, DIGGING PERMITS
2.1.9 SHUTDOWNS
2.1.10 COOLING POND AND FORDING PIT
2.1.11 INSTALLATION CLOSURES
2.1.12 DEFINITIONS/ACRONYMS
2.1.13 PARKING
2.1.14 MANAGEMENT INFORMATION SYSTEMS
2.1.15 CLEAN UP OF WORK AREAS
2.1.16 CONTRACTOR SUPPORT
2.1.17 SUSTAINABLE DESIGN
2.1.18 RESERVED
2.1.19 TRAINING
2.1.20 PLANS RESUBMISSION PROCEDURES
2.1.21 NOTIFICATION
2.1.22 PAVEMENT LOAD RESTRICTIONS

2.2 RESOURCE MANAGEMENT

2.2.1 RESOURCE MANAGEMENT TASKS
2.2.2 SUPERVISION
2.2.3 WORK DOCUMENTATION MANAGEMENT
2.2.4 STATISTICAL INFORMATION
2.2.5 PRIORITIES
2.2.6 WORK LEVELS
2.2.7 WORK SCHEDULES
2.2.8 RECORDS, LOGS, AND FILING
2.2.9 EXTENT OF CONTRACTOR'S RESPONSIBILITIES
2.2.10 WORK EXCEEDING CONTRACTOR LIMITS OF RESPONSIBILITY
2.2.11 WORK PLANNING
2.2.12 ESTIMATING
2.2.13 UPDATES OF REAL PROPERTY RECORDS
2.2.14 AUTOMATED DATA PROCESSING SYSTEM REQUIREMENTS
2.2.15 PROVISIONS OF MATERIALS AND SUPPLIES
2.2.16 FACILITY EQUIPMENT REPLACEMENT
2.2.17 SALVAGE
2.2.18 ENERGY AND UTILITIES CONSERVATION PROGRAMS
2.2.19 SAFETY

2.2.20 SELF-HELP STORE & U-DO-IT PROGRAM (USAG-S)
2.2.21 WORK PERFORMANCE
2.2.22 PERSONNEL
2.2.23 WORK COORDINATION
2.2.24 WORK REPORTS
2.2.25 MOVES
2.2.26 SURVEY DATA

2.3 AIR CONDITIONING, VENTILATION AND REFRIGERATION
2.3.0 GENERAL
2.3.1 TYPES OF EQUIPMENT AND SYSTEMS
2.3.2 AIR CONDITIONING, VENTILATION, AND REFRIGERATION SYSTEMS
2.3.3 AIR CONDITIONING OPERATIONS CENTER (DTA)
2.3.4 AIR COMPRESSOR EQUIPMENT AND SYSTEMS
2.3.5 TEMPORARY COOLING SYSTEMS

2.4 BUILDINGS AND STRUCTURES AND PRESERVATION
2.4.0 GENERAL
2.4.1 CONTRACTOR SUPPORT
2.4.2 CARPENTRY TASKS
2.4.3 CONCRETE AND MASONRY
2.4.4 PAINTING AND PRESERVATION
2.4.5 SIGNS AND MARKINGS

2.5 ELECTRICAL SYSTEMS
2.5.0 GENERAL
2.5.1 CONTRACTOR SUPPORT
2.5.2 TYPES OF SYSTEMS AND EQUIPMENT
2.5.3 ELECTRICAL DISTRIBUTION SYSTEMS
2.5.4 EXTERIOR ELECTRICAL
2.5.5 INTERIOR ELECTRICAL
2.5.6 SUBSTATION AND EQUIPMENT
2.5.7 STANDY GENERATORS AND ALTERNATE POWER SOURCES
2.5.8 FIRE ALARMS, INTRUSION DETECTION SYSTEMS (IDS) AND OTHER ALARM SYSTEMS
2.5.9 GROUNDING
2.5.10 RESERVED
2.5.11 ELECTRIC MOTORS AND DYNAMOMETER SYSTEMS
2.5.12 ELECTRIC MOTORS
2.5.13 TRANSFORMERS
2.5.14 MISCELLANEOUS ELECTRICAL SERVICES

2.6 ENVIRONMENTAL PROTECTION (DTA)
2.6.1 GENERAL
2.6.2 ENVIRONMENTAL PROTECTION PLAN
2.6.3 CONTRACTOR NON-COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS
2.6.4 AIR MANAGEMENT
2.6.5 ASBESTOS MANAGEMENT

2.6.6 CULTURAL RESOURCES
2.6.7 ENVIRONMENTAL MANAGEMENT SYSTEM
2.6.8 ENVIROMENTAL REVIEWS
2.6.9 HAZARDOUS MATERIALS
2.6.10 HAZARDOUS WASTE
2.6.11 LEAD BASED PAINT MANAGEMENT
2.6.12 PCBS
2.6.13 PEST MANAGEMENT
2.6.14 POLLUTION PREVENTION
2.6.15 NATURAL RESOURCES
2.6.16 SOLID WASTE
2.6.17 SPILL CONTROL/RESPONSE
2.6.18 STORM WATER
2.6.19 STORAGE TANK/OIL WATER SEPARATOR MGT
2.6.20 SANITARY WASTE WATER
2.6.21 WATER QUALITY/SAFE DRINKING WATER
2.6.22 TRAINING

2.7 HEATING, STEAM, AIR AND NATURAL GAS SYSTEMS, BOILER

2.7.0 GENERAL
2.7.1 TYPES OF SYSTEMS AND EQUIPMENT
2.7.2 STEAM AND HOT WATER BOILERS & SPACE HEATING SYSTEMS
2.7.3 STEAM DISTRIBUTION SYSTEMS
2.7.4 AUTOMATIC FORCED AIR HEATERS/UNIT HEATERS
2.7.5 RESERVED
2.7.6 SAFETY AND RELIEF VALVES
2.7.7 MISCELLANEOUS HEATING AND DISTRIBUTION SYSTEMS TASKS
2.7.8 GAS DISTRIBUTION SYSTEMS
2.7.9 TREATMENT AND PROTECTION OF GAS, AIR, HEATING AND STEAM DISTRIBUTION SYSTEMS.
2.7.10 ALTERNATE STEAM SOURCE (DTA)

2.8 LOCKSMITHING

2.8.0 GENERAL
2.8.1 LOCKSMITHING WORK CONTROL
2.8.2 LOCKSMITH TASKS
2.8.3 KEY AND CORE CONTROL SYSTEMS
2.8.4 OTHER CONTRACTOR LOCKING SYSTEMS
2.8.5 LOCKING DEVICES, SYSTEMS, AND ANCILLARY EQUIPMENT

2.9 METAL AND MECHANICAL SERVICES

2.9.0 GENERAL
2.9.1 TYPES OF WORKS
2.9.2 TASKS
2.9.3 RESERVED
2.9.4 RIGGER TASKS
2.9.5 ELEVATORS

2.10 ENVIRONMENTAL PROTECTION (USAG-S)

2.10.1 GENERAL
2.10.2 CONTRACTOR NON-COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS
2.10.3 ENVIRONMENTAL PROTECTION PLAN
2.10.4 AIR MANAGEMENT
2.10.5 ASBESTOS MANAGEMENT
2.10.6 CULTURAL RESOURCES
2.10.7 ENVIRONMENTAL MANAGEMENT SYSTEM
2.10.8 NEPA
2.10.9 HAZARDOUS CHEMICALS/HAZARDOUS WASTE
2.10.10 ENVIRONMENTAL HEALTH
2.10.11 LEAD BASE PAINT MANAGEMENT
2.10.12 PCB
2.10.13 PEST MANAGEMENT
2.10.14 POLLUTION PREVENTION
2.10.15 NATURAL RESOURCES
2.10.16 SOLID WASTES
2.10.17 SPILL CONTROL/RESPONSE
2.10.18 STORM WATER
2.10.19 STORAGE TANK/OIL-WATER SEPARATOR MGT
2.10.20 SANITARY WASTE WATER
2.10.21 WATER QUALITY/SAFE DRINKING WATER
2.10.22 ENVIRONMENTAL SUPPORT
2.10.23 TRAINING
2.10.24 NOTIFICATION
2.10.25 OTHER REQUIREMENTS

2.11 MISCELLANEOUS SERVICES, APPLIANCES & EQUIPMENT
2.11.0 GENERAL
2.11.1 APPLIANCES AND EQUIPMENT
2.11.2 MISCELLANEOUS SERVICES

2.12 PLUMBING/PIPEFITTING, WATER,SEWAGE, GAS, AND FUEL DISTRIBUTION SYSTEMS
2.12.0 GENERAL
2.12.1 TYPES OF SYSTEMS AND EQUIPMENT
2.12.2 WATER DISTRIBUTION SYSTEMS
2.12.3 SWIMMING POOLS (USAG-S)
2.12.4 SEWAGE COLLECTION AND STORM SEWER SYSTEMS
2.12.5 WATER AND SEWAGE SYSTEMS EMERGENCIES
2.12.6 FUEL DISTRIBUTION AND STORAGE SYSTEMS
2.12.7 FIRE SUPPRESSION SYSTEMS
2.12.8 CONTRACTOR SUPPORT

2.13 PREVENTIVE MAINTENANCE
2.13.0 GENERAL
2.13.1 PREVENTIVE MAINTENANCE DATA
2.13.2 WORK ORDERS
2.13.3 COORDINATION
2.13.4 PM REPORTS

2.14 ROADS, PAVEMENT, RAILROADS, APPURTENANCES, AND GROUNDS KEEPING

2.14.0 GENERAL
2.14.1 ITEMS AND EQUIPMENT
2.14.2 SURFACE AREAS, STRUCTURES AND APPURTENANCES
2.14.3 SNOW AND ICE REMOVAL
2.14.4 GROUNDS KEEPING AND ARBOR ACTIVITIES
2.14.5 FERTILIZATION AND IRRIGATION
2.14.6 DRAINAGE SYSTEMS
2.14.7 IMPROVEMENTS
2.14.8 FENCING
2.14.9 RAILROADS (DTA)
2.14.10 PLAYGROUNDS (USAG-S)
2.14.11 CONTRACTOR SUPPORT
2.14.12 MISCELLANEOUS

2.15 SPECIAL ACTIVITIES

2.15.0 GENERAL
2.15.1 APPRECIATION DAY
2.15.2 SPECIAL KIDS DAY
2.15.3 AFTER ACTION SUMMARY
2.15.4 OTHER SPECIAL EVENTS
2.15.5 SPECIAL EVENTS (USAG-S)

2.16 PREVENTIVE MAINTENANCE BUILDING 212 (DTA)

2.16.0 GENERAL
2.16.1 NORMAL ACCESS HOURS
2.16.2 PRIORITIES
2.16.3 ENGINEERING TESTS
2.16.4 DYNAMOMETERS
2.16.5 TEST CELLS PREVENTIVE MAINTENANCE

2.17 EMERGENCY VEHICLES (DTA)

2.17.0 GENERAL
2.17.1 TYPES OF EMERGENCY VEHICLE & EQUIPMENT
2.17.2 MAJOR REPAIRS
2.17.3 PREVENTIVE MAINTENANCE
2.17.4 STATUS MEETINGS
2.17.5 BENCH STOCKS

2.18 INDUSTRIAL MACHINE REPAIR AND MAINTENANCE (DTA)

2.18.0 GENERAL
2.18.1 OPERATING HOURS
2.18.2 MAINTENANCE AND REPAIR PROGRAM
2.18.3 RECORDS MAINTENANCE
2.18.4 REPAIR PARTS
2.18.5 MACHINE SET-UP

2.18.6 WARRANTY REPAIRS
2.18.7 TECHNICAL INSPECTION FOR DAMAGE AND CLASSIFICATION
2.18.8 ADMINISTRATION
2.18.9 COST AND PERFORMANCE REPORTING

2.19 REFUSE COLLECTIONS (USAG-S)
2.19.1 GENERAL
2.19.2 HOURS OF OPERATION
2.19.3 PERFORMANCE OF WORK
2.19.4 PROCEDURE
2.19.5 VEHICLES
2.19.6 SANITATION REQUIREMENTS
2.19.7 SPILLAGE
2.19.8 SALVAGE OPERATION
2.19.9 REPORTS

2.20 CUSTODIAL SERVIES (USAG-S)
2.20.1 GENERAL
2.20.2 INSPECTION
2.20.3 MATERIALS
2.20.4 STOCKS SUPPLY
2.20.5 HOLIDAYS
2.20.6 WORK SCHEDULES
2.20.7 RESERVED
2.20.8 ARRANGEMENT OF FURNITURE & EQUIPMENT
2.20.9 PROTECTION OF WALLS, BASEBOARDS & EQUIPMENT
2.20.10 GENERAL
2.20.11 LIGHT FIXTURES
2.20.12 SERVICING DISPENSERS
2.20.13 TRASH REMOVALS
2.20.14 ASH TRAY SAND URNS
2.20.15 FACILITY ENTRANCES, PLATFORMS & AWNINGS/CANOPIES
2.20.16 POLICING BUILDING EXTERIOR
2.20.17 EMERGENCY SPECIAL EVENTS/ACTIVITIES
2.20.18 FAN CLEANING
2.20.19 CHILD DEVELOPMENT CENTER & YOUTH CENTER
2.20.20 VACANT QUARTERS

2.21 INACTIVATION PROCEDURES (USAG-S)
2.21.1 GENERAL
2.21.2 BUILDING INACTIVATION

APPENDICES
1 PUBLICATIONS, LAWS, CODES, STANDARDS, REGULATIONS, TMs
2 DEFINITIONS

APPENDICES: Detroit Arsenal (DTA)
3 CRITICAL SYSTEM
4 HISTORICAL WORKLOAD

5 PROPERTY INVENTORY
6 SCHEDULE OF TASKS (INSTALLED BLDG EQUIP), BLDG 212
7 BASIC INFORMATION MAPS
8 IPE/OPE SUPPORTED EQUIPMENT LIST
9 SCHEDULE OF TASKS, B212, ANNUAL CPM SCHEDULE
10 FLUSHING OF WATER DISTRIBUTION SYSTEM
11 DETROIT ARSENAL ENVIRONMENTAL PROTECTION PERMITS
12 DETROIT ARSENAL CHEMICAL INVENTORY
13 DETROIT ARSENAL ENVIRONMENTAL FORMS

APPENDICES: US Army Garrison-Selfridge (USAG-S)
14 BUILDING LIST
15 PROPERTY INVENTORY
16 REFUSE PICK-UP, LOCATIONS, CAPACITIES, AND FREQUENCIES
17 CUSTODIAL SERVICES SCHEDULE AND FREQUENCY
18 INTERSERVICE SUPPORT AGREEMENT
19 WORKLOAD DATA
20 GENERAL SITE PLANS
21 LANDSCAPING
22 SNOW AND ICE CONTROL
23 CUSTODIAL FLOOR PLANS
24 ROOF SYSTEM INSPECTIONS SCHEDULE (DTA & USAG-S)
25 HISTORICAL BUILDING/DISTRICT MAINTENANCE

2.1 GENERAL

2.1.1 **REQUIREMENTS** The Contractor shall provide all services, materials, supplies, supervision, labor, equipment and vehicles, except that specified as Government-furnished to perform a Total Maintenance Program and related services at Detroit Arsenal (DTA) and the US Army Garrison-Selfridge (USAG-S) in accordance with all terms, conditions, special contract requirements, specifications, drawings, attachments, exhibits, etc., contained herein or incorporated by reference. Appendices, Basic Information Maps, Property and Equipment Inventory List and Building List contain information of the facilities and equipment for which the Contractor shall be responsible.

2.1.2 **CONTRACTOR RESPONSIBILITY:** The Contractor's work and responsibility shall include all planning, programming, administration, and management necessary to provide the required services. The work shall be conducted in accordance with the contract, standard industry practice, and all applicable federal, state and local laws, Department of Defense (DOD) and Army regulations, pamphlets, technical manuals and guide specifications, codes, or directives, manufacturers instructions to include applicable documents listed in the Appendix “Forms,

Publications and Regulations". In the event of an inconsistency between Government, manufacturer, standard commercial practices, laws, codes, regulations, etc the most stringent shall apply. The Contractor shall ensure that all work meets critical reliability rates or tolerances specified or included in applicable referenced documents and/or the manufacturer's recommendations. In the event the Contractor cannot find an applicable standard, the Contractor shall immediately inform the COFR. The Contractor shall maintain accurate and complete records, files, and libraries of documents to include federal, state, and local laws, regulations, codes, technical manuals, and manufacturer's instructions and recommendations, which are necessary and related to requirements of this PWS. The Contractor shall provide related services such as formatting data for automated systems input and data base maintenance, preparing and providing required reports, compiling and providing historical data, performing administrative activities and submitting necessary information as specified.

2.1.2.1 **CUSTOMER/CONTRACTOR INTERACTION:** Contractor personnel shall interact with tenants, users, residents and Government designated building monitors. This contract shall be handled in a positive and supportive manner consistent with the PWS. Significant problems shall be brought to the attention of COFR for resolution. The contractor shall:

a. Honor customer requests for work when feasible and advise the customer when the request is considered not feasible. Meet all agreed upon or required performance commitments. Honor all mutually agreed upon appointments made with customers. Reschedule customer appointments as required to accomplish the work.

b. Accept service/repair requests by phone, fax, electronically or hard copy to promote customer satisfaction, convenience, efficiency, and simplicity.

c. Provide a work control number to each customer for accepted work requests to allow customers to follow up on their work order requests.

2.1.3 **MANAGEMENT AND PERSONNEL:** The Contractor shall provide necessary personnel to accomplish all contract work and services within specified time frames. The Contractor's personnel qualifications and licensing shall be commensurate with the work assignments they receive. For example, the Contractor shall only permit a journeyman electrician to make an electrical connection, a journeyman plumber to solder pipes, a licensed operator to operate a backhoe. The Contractor shall assure that all non-journeyman trades persons are under the immediate supervision of a journeyman or higher.

2.1.4 **CONTRACTOR ARCHITECTURE AND ENGINEERING SUPPORT:**

a. The Contractor shall provide Computer Aided Design and Drafting (CADD) and the current Public Works (DPW) Geographic Information System (GIS) operation and database maintenance. The Contractor-Furnished CADD equipment system shall be compatible with the Government's current CADD (Micro Station at the DTA and AUTOCAD at USAG-S) shall be linked to those system. Also see 2.2.13.

b. The Contractor shall perform daily back-ups of CADD and the current DPW GIS data, prepare and update the current DPW GIS maps and data, prepare and update CADD data, process requests for as-built data, CADD data, and the current DPW GIS data. The Contractor shall also prepare briefing charts, provide coordination of the master plan, and perform field surveys of buildings and roads to ensure that CADD and the current DPW GIS data is accurate.

c. The Contractor shall perform field surveys of location of hazardous materials/waste, spill kits, air emissions sources, wastewater and storm water discharge points, asbestos and lead-based paint to ensure that CADD and the current DPW GIS data is accurate. The Contractor shall develop and prepare a property site plan book (8X11) using CAD visuals and a spread sheet format to show site improvement characteristics and equipment such as utility poles, meters, transformers, dumpsters, playgrounds, pavements, fencing, utilities, seawall/berms, signs (traffic, building & room), pavement markings, etc. Maintain and update as required to show current items. Provide to the COFR 6 months after contract start and provide updates as required.

d. The Contractor shall perform CADD and the current DPW GIS maintenance to include performing hardware and software maintenance and installing hardware and software as necessary.

e. The Contractor shall maintain and provide reproductions of most current facility plans and documents, engineering record drawings, digital format drawings, engineering maps, design drawings, and as-built drawings. The Contractor shall incorporate the as-built drawings into the facility plans and documents within five (5) working days of receipt of the documents.

f. The Contractor shall obtain site clearance documents for all work. The Contractor shall review all excavation requirements, verify site condition, mark out all utilities and authorize excavation requirements. The Government DPW shall have the final approval as indicated in para 2.1.8 BURNING AND WELDING (B&W), DIGGING PERMITS. The Contractor shall be responsible to correct all damage resulting from inaccurate mark out of utilities.

g. The Contractor shall review and update annually the General Site Map.

2.1.5 **CONTRACTOR ENGINEERING SERVICES**: The Contractor shall provide conceptual engineering, technical, administrative and management support to provide: data, specifications, plans, schedules, work initiation and data processing, quality control and assurance, safety awareness, adequate descriptions of work, drawings, work orders, justification of work (when the work order is generated by the contractor), advisory, environmental, and industrial engineering services for facilities engineering activities relative to all elements of contracted work functions and facilities. The Contractor shall provide the following:

a. Drawing and drafting support for Contractor operational, maintenance and repair, and new work activities. All drawings shall be in accordance with (IAW) applicable state, national and local building codes..

b. Engineering supervisory and management support to assure engineering integrity in all aspects of the Contractor's responsibilities. In particular, provide mechanical, electrical, structural, civil, environmental, and supervisory engineering support for utility and building operations, maintenance and repair activities, new work, and roads and ground work.

c. Review and make recommendations to the Public Works Engineer on design and construction drawings submitted for function, operation, and maintainability of the facility under the purview of the Contractor.

d. Provide advisory services to Public Works engineering personnel in development of criteria for equipment installation, maintenance, repair, and construction job order requests when related to facilities engineering.

e. The Contractor shall be responsible to observe engineering needs and shall recommend appropriate actions by initiating work request for the engineering design and construction of those actions.

2.1.6 **REQUESTING CORRECTIVE ACTION**: The Contractor shall require his personnel, in the performance of their duties, to report to their supervisor and in turn to the COFR or his designee: fire hazards, unsafe conditions, environmental hazards and items in need of repair. The Contractor shall initiate work orders to correct the problems and perform the work if required elsewhere in this PWS.

2.1.7 **EMERGENCY STANDBY EQUIPMENT ITEMS**: The Contractor shall be responsible for providing emergency standby equipment as directed by the COFR in the event of electrical, plumbing, heating, or other failures. This includes electrical power from generators, temporary water supplies from hydrants, and heat from boilers. This also includes all ancillary hook-up modifications, safety,

fire, and security requirements.

2.1.8 **BURNING AND WELDING (B&W), DIGGING PERMITS**: The Contractor shall obtain the required permits from the Detroit Arsenal Fire Department (DAFD) and the USAG-S Fire Department prior to the start of any burning, welding, grinding, cutting, or operation that may pose a fire hazard as determined by the fire departments. The Contractor shall comply with all requirements of the B&W Permit programs. For the Detroit Arsenal, the Contractor shall obtain clearance from the Public Works Office at Building 205 prior to excavation on government's property. For USAG-S, the Contractor shall obtain Excavation Permits through USAG-S, Miss Dig and the 127th Air National Guard prior to excavating. The Contractor shall locate and provide information on utility locations and sign off on the respective portion of the Permit as part of the Excavation Permit process. Request for digging permits shall be accompanied with maps (sketch, drawing) of the proposed locations for excavation and the purposes of the excavation. Digging permits are valid for thirty days (i.e. digging must start within 30 days). The Contractor shall obtain other types of permits from the County, EPA or other authorities that are applicable to the work being performed such as Erosion Control Permits, Dust Control Permits, Asbestos Removal Permits, etc.

2.1.9 **SHUTDOWNS**:

a. **Scheduled**: The Contractor shall schedule and coordinate utility shutdown in advance with the COFR and obtain COFR concurrence. The Contractor shall provide a minimum of 48-hour notice in writing to affected customers of all utility shutdowns. The Contractor shall draft and prepare notices, newsletter articles, e-mail/cable TV notices and distribute to the affected customers. The Contractor shall obtain COFR approval prior to releasing the notices to the customers. The Contractor shall inform the COFR and customers of any revisions to the shutdowns. Refer all unresolved conflicts between customers and the Contractor over shutdowns to the COFR for final decision. Shutdowns for PM of utilities will be normally scheduled for after normal duty hours and weekends.

b. **Unscheduled**: The Contractor shall immediately notify the COFR and affected customers of unscheduled utility shutdowns. The Contractor shall draft and prepare notices and e-mail/cable TV notices and distribute to the affected customers. The Contractor shall inform the COFR and customers of any revisions to the shutdowns.

2.1.10 **COOLING POND AND FORDING PIT (DETROIT ARSENAL)**. The contractor shall perform an annual cleaning of the cooling pond and the adjacent fording pit. The Contractor shall coordinate the

cleaning with the using organization to prevent interference with tests in progress. The cooling pond and adjacent fording pit shall not be emptied at the same time in order to retain a source of water for the fire department in the event of a fire. The Contractor shall follow the exact procedures and discharge approval requirements found in Section “Environmental Services (Detroit Arsenal)” of this PWS when discharging the contents of the cooling pond to the Warren Waste Water Treatment Plant (WWTP) for its annual repair and cleaning.

2.1.11 **INSTALLATION CLOSURES**: When an unforeseen installation closure occurs on a regularly scheduled day of work, the Contracting Officer and the Contractor shall agree to one of the following options:

a. Reschedule the work on any day mutually agreeable (normally the next workday).

b. When mutually agreed, to forego the work and make an equitable adjustment to the contract cost or price.

2.1.12 **DEFINITIONS/ACRONYMS.** As used throughout this PWS, all terms and acronyms shall have the meaning set forth in the Appendix “Definitions”.

2.1.13 **PARKING**. Subject to availability, the Contractor will be provided parking space for work vehicles in the vicinity of facilities. The Contractor shall comply with the post parking regulations.

2.1.14 **MANAGEMENT INFORMATION SYSTEMS** The Government will provide Local Area Network (LAN) drops (RJ 45) in the Contractor's office which will be used to connect the Contractor-furnished computer equipment to the Integrated Facilities System. (See paragraph Automated Data Processing System Requirements for Contractor data input requirements for IFS.) The Contractor will have access to all screens necessary to perform their requirements. The Government will provide one copy of the technical documentation needed to operate IFS.

2.1.15 **CLEAN UP OF WORK AREAS:** The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

2.1.16 **CONTRACTOR SUPPORT:** The Contractor shall provide necessary personnel to support other contractors and Government agencies as may be deemed necessary by the COFR and as described in

paragraphs 2.5.1, 2.14.11, 2.4.1 and 2.12.8 of this Performance Work Statement. The Contractor shall treat these supports as normal maintenance operation and intended to compliment the activities of other contractors and Government personnel and not intended to supplement their contract requirements. Work performed in direct support of these efforts outside the normal access hours shall be classified per the definitions of repair work. Any use of repair work overtime shall be submitted in advance through the COFR to the Contracting Officer for approval. The Contracting Officer's approval/disapproval of the overtime request may contain a determination of how much "waiting" or "dead" time (while awaiting completion of work by other contractors or Government agencies) is to be treated per the definitions of maintenance work.

2.1.17 **SUSTAINABLE DESIGN:** It is the Army's policy that Sustainable Design and Development principles be incorporated into all construction and repair projects. The Army's Sustainable Project Tool (SpiRit) is an adaptation of industry's US Green Buildings Council's Leadership in Energy and Environmental Design Building Rating System (LEED). The goal is to achieve a minimum SpiRit rating Bronze sustainability rating. The Contractor shall rate all construction and repair projects with the goal of achieving a Bronze sustainability rating.

2.1.18 **Reserved**

2.1.19 TRAINING: Attend training classes and conferences associated with this PWS (6 per year). Tuition for these classes are funded by head quarters, however, the Contractor shall pay for lodging, transportation, meal and other costs associated with attending the classes. This does not include mandatory training for safety and environmental, to maintain certifications, qualifications and current knowledge which is the Contractor's responsibility.

2.1.20 PLANS RESUBMISSION PROCEDURES. All plans, surveys, schedules, procedures and other requirements requiring resubmission by the Contractor shall be re-submitted 15 days after the government review except as determined by the COFR, EC/QAE or as stated elsewhere in this PWS. The re-submittal shall address the comments and concerns of the review. The COFR, EC or QAE reserves the right to require the Contractor to make changes to the submissions if the government determines that requirements are not being met.

2.1.21 NOTIFICATION. The Contractor shall immediately notify the COFR, or DPW of problems that affect the health or safety of people or cause damage to facilities and property.

2.1.22 The Contractor shall observe Macomb County Road Commission vehicles loads restrictions for roads in the execution

of work of this contract to include subcontractors and vendors. For parking lots, load restrictions shall not exceed 20 tons - gross vehicle weight.

2.2 RESOURCE MANAGEMENT

2.2. **RESOURCE MANAGEMENT** The Contractor shall perform the general tasks specified herein. These general tasks apply to all services required under this PWS. The Contractor shall prepare a Resource Management Plan (RMP) and submit it to the COFR within 55 days of contract award and submit updates to the RMP every 6 months thereafter until end of contract. The general elements of the RMP shall include (1) Resource information: staffing levels by classification. (2) Annual Work Plan (AWP): detailed expansion of the fixed and variable workloads, actions, strategies and time phasing required accomplishing the work. The AWP is a planning document reflecting the best information concerning known Real Property maintenance, repair and new work requirements for the upcoming fiscal year. The Government shall accept or reject within 15 days. If the Government rejects the AWP, the Contractor shall continue working with the Government until resolution. The AWP shall be continually revised and updated on the basis of unprogrammed but essential requirements, changed priorities, and adjustments in funding posture. The Contractor shall develop the AWP in accordance with the procedures in DA Pam 420-6. (3) Life Cycle Cost Analysis Plan: identify when equipment, building and infrastructure components will need replacement within the next ten years.

2.2.1 **RESOURCE MANAGEMENT TASKS** The Contractor shall plan, program, coordinate, estimate, respond to Government schedule, and evaluate resources for work requests approved by the COFR for performance by the Contractor. The Contractor’s work management activity shall fulfill timely, coordinated, efficient, and orderly performance to meet the requirements in this PWS. In conjunction with these functions, the Contractor shall prepare, input, and maintain Contractor-generated data for the government automated systems databases (see paragraph “AUTOMATED DATA PROCESSING SYSTEM REQUIREMENTS”). Contractor shall provide timely, complete and accurate reports or other output to include operational data.

2.2.2 **SUPERVISION** The Contractor shall have a project manager or superintendent with authority to provide sufficient labor, materials and equipment to perform the requirements of this PWS. This individual shall be available to meet with the Contracting Officer, COR, COFR or senior Public Works employees during normal

working hours and within 3 hours at other times. Information given by the Contracting Officer, COR, COFR or senior Public Works employees to the Contractor's representative shall be considered to have been given directly to the Contractor.

2.2.3 **WORK DOCUMENTATION MANAGEMENT.** The Contractor shall establish, maintain, and file all work documents and all project files.

a. Each project file shall include: a DA Form 4283, or electronic version, as completed by either the Contractor or the Government; other appropriate work documents, including estimates, drawings, plans, specifications, funding documents, work records, inspection records, warranties, guarantees, material lists, memorandums, correspondence; or, any other miscellaneous documents.

b. The Contractor shall track all Facility Engineer (FE) projects and work orders and provide a computerized status on monthly basis to all authorized customers and provide a computerized status to the Director of Public Works and the COFR on a weekly basis. For those individual projects with Command interest, more frequent status reports may be requested. The Contractor shall participate in status briefings as requested by the COR/COFR for the Command group, directors, committees, visitors, inspection, etc. The Contractor shall provide copies of data as required for the briefings. The Contractor shall maintain the priority/flag lists as required and keep the status of all elements of the lists current. The Contractor shall provide an electronic notification of any significant changes in projects to the customers, Government DPW, and the COFR as the change occurs.

c. The Contractor shall input data to maintain the Government Integrated Facilities System (IFS) database management system and shall use IFS to generate automated reports. The Contractor shall utilize all Government provided software.

d. The Contractor shall compare all submitted work orders against future projects and provide recommendations to the COFR regarding incorporation of the work order into a project, cancellation to reduce duplication of requirements, modification of the work order, etc. The Contractor shall advise the customer of the COFR action (e.g. approval, consolidation, funding, cancellation, modification, etc.), on their work order. The Contractor shall participate in preconstruction conferences between the Government and other contractors when requested by the Government.

e. The Contractor shall provide initial cost estimates for all FE and Contractor projects unless otherwise directed by the COFR. These estimates shall become part of the project file. Working copies of the project file documentation shall be provided to the Government DPW as requested by the COFR. The Contractor shall maintain the original file and shall not release it unless otherwise approved by the COFR. As requested by the COFR the Contractor shall provide photos, initial/rough plans, sketches, mark ups of existing drawings, etc. as supporting documentation for project files. Estimating shall be based on the " RS Means Facilities Maintenance & Repair & Construction Cost Data " or other commercial unit price standards.

f. The Contractor shall provide, when requested by the COFR, draft scopes of work, initial environmental and economic impact analyses, technical studies, life cycles cost analysis, technical surveys and studies, solids, liquids and gases, analysis, as supporting information for efforts which may or may not be accomplished as part of the contract. These efforts will be for problem identification and resolution, cost reduction, work method improvements, efficiency and development of policies and procedures. All information contained in project files is to be considered procurement sensitive information, labeled as "For Official Use Only" (FOUO) and shall not be released or reclassified without prior written COFR approval.

g. The Contractor shall provide an advisory review of work performed by other contractors (e.g., construction, architecture and engineering, etc.) prior to acceptance of their work by the Government. Such advisory reviews shall include periodic review of proposed A&E design packages, proposed specification requirements, actual contractor performance of contractual requirements, etc. These reviews shall address the impact on the Contractor's operations in the areas of supportability, comparability, and maintainability. The Contractor shall advise the Government of any noted omissions and/or conditions, which may affect supportability, compatibility, or maintainability. Written reports of the reviews, including Contractor recommendations, shall be provided by the Contractor to the COFR or his designee within 5 work days after being provided the proposed A&E packages, proposed specifications, etc. or 5 workdays after review of actual contractor performance.

h. Information shall be provided as needed to COFR on the status of warranties/guarantees.

i. The Contractor shall provide all necessary support work required in the collation, distribution, storage, copying, and filing of work documentation, project files, solicitation packages, records holding, filing and packaging, etc., including

but not limited to sorting, stapling, folding, stamping, labeling, transporting, duplicating, packaging, etc.

2.2.4 **STATISTICAL INFORMATION** The Contractor shall provide statistical information as requested by the COFR. This involves extraction of specific data from the IFS system, facility information or other data associated with the work in a format as required by the COFR (e.g., number of work orders for a specific week with corresponding hours worked).

2.2.4.1 The Contractor shall participate in providing information, data and metrics to support the Garrison's Army Communities of Excellence, Lodging Operation of the Year, Residential Communities Initiative, Specialized Legislation, other privatizations and other similar programs.

2.2.5 **PRIORITIES** The Contractor shall establish a priority system and apply that system to all work orders. Priorities shall be established to insure the accomplishment of preventive maintenance objectives prior to routine requests for work on Maintenance Work Orders and Repair Work Orders. The COFR shall have final authority in categorizing work as emergency, urgent and routine (as defined below).

2.2.5.1 Priorities, plans, schedules, and work control established by the Contractor shall be subject to review by the COFR who may recommend changes on priorities and scheduling.

2.2.5.2 The Contractor shall perform all work (i.e., Maintenance, Repair and New Work) based on the following:

a. **EMERGENCY** Priority No.1, consists of correction of failures or deficiencies which constitute an immediate danger/health hazard to persons, environmental hazards, threaten damage to property, physical security, or threaten critical systems, force protection, essential mission requirements (as determined by the COFR), or otherwise seriously impair the abilities to complete the missions. Examples of emergencies include but are not limited to: air conditioning failures, security requests, broken water lines, water heater failures, heating system failures, overflowing drains, toilets or urinals, gas leaks, broken electrical service which might cause fire or shock, disrupted electrical service (during work hours), broken electrical distribution components that may cause fire or shock, accidental lock-ins or lock-outs, terrorist attacks, etc. Initial response time shall be within thirty (30) minutes during normal access hours and within two (2) hours during off-duty hours. Work shall be conducted on a continuous basis until the emergency is terminated or corrected. Permanent repairs can be completed during normal access hours if delay would not cause

further loss or result in major inconvenience to the Government or tenants if approved by the COFR. All work to alleviate the emergency shall be completed within four (4) calendar days. All Emergency New Work shall be completed within four (4) calendar days from date of Government's approval of the work order.

b. **URGENT** Priority No. 2 - Failures or deficiencies or conditions which do not immediately endanger the occupants or threaten damage to property, but would soon inconvenience and seriously affect the morale, health and well-being of the occupants missions. Initial response shall be within four (4) hours during normal business hours and five (5) hours during off-duty hours. All work shall be completed within fourteen (14) calendar days. Examples of urgent calls include plugged drains, toilets, urinals, leaky water pipes, roof leaks, temperature complaints, disrupted electrical service (after work hours). All Urgent New Work shall be completed within fourteen (14) calendar days from date of Government's approval of the work order.

c. **ROUTINE** Priority No. 3 - Calls of lesser importance that do not meet the criteria of an emergency or urgent call. Initial response shall be within seven (7) calendar days. All funded routine work requests shall be completed within ten (10) weeks of receipt of work requests. All Routine New Work shall be completed within twenty (20) calendar days from date of Government's approval of the work order. The COFR may grant an exception to the twenty (20) calendar day limit on New Work orders based on unusual circumstances (e.g., the purchase of long lead time items, the necessity for concrete to cure prior to resuming the work, etc.)

2.2.5.3 **EMERGENCY RESPONSE** The Contractor shall provide an emergency response service twenty-four (24) hours a day; seven (7) days a week to receive and provide initial response to service calls. The Contractor personnel on-site shall be responsible for making an initial assessment of a problem and determining an appropriate course of action to include the initial response, notifying Contractor management and the COFR, calling the appropriate repair personnel, and notifying, if appropriate, fire or security personnel. The COFR shall be notified of all emergency responses. The Contractor shall maintain and furnish the COFR with a current listing of Key Contractor personnel with after-hours phone numbers in the Contractor's emergency center. The COFR will provide a current roster of key Government personnel to notify in case of an emergency. The Contractor shall immediately notify the Contracting Officer when the performance of Emergency work will require additional contract funding.

2.2.5.4 **CRITICAL SYSTEMS** The Appendix "Critical Systems List"

contains items considered critical by the Government. Generally, these systems or items are vital to the performance of mission or provide for the security, safety, or health of installation personnel and property. The Contractor shall provide close monitoring, inspection, maintenance support, and spare parts inventory for this equipment and systems to assure their continuous effective operation. Failure of these systems is automatically classified as an emergency (Priority 1) unless the COFR advises to the contrary.

2.2.5.5 **WORK CONTROL** The Contractor shall receive work orders, perform their initial plan and estimate, purchase needed materials, schedule, and control work for all maintenance (including preventive maintenance), repair, and new work requests IAW all terms and conditions contained in this contract. The building occupants, residents, Government Facilities Engineering staff, COFR/COR, and Contractor personnel may generate these requests. Requesters shall be provided with identification numbers for their work requests so that follow-up status can be easily obtained. Any person may submit emergency requests and service orders.

2.2.6 **WORK LEVELS** The Contractor shall plan, schedule, and control all work described in this PWS. The COFR is the final authority on classification of work. The Contractor shall receive, plan, schedule, and control all work covered by this PWS. This PWS will not normally include segregable project type work. Work is divided into three levels: Maintenance, Repair and New Work.

2.2.6.1 **MAINTENANCE WORK** - Is the recurring day-to-day, periodic, or scheduled work required to preserve or maintain real property facilities, equipment, tools, etc., in such condition that they may be effectively utilized for their functional purposes. This category of work also includes called in requests regarding temperature problems, leaking faucets, electrical circuit problems, etc. Maintenance Work includes the sustainment of components such as repair or replacement of worn-out washers, ballasts, switches, hinges, filters, and broken/failed equipment/item such as water heaters, locks, faucets, floor tile, trim and molding, casings, ceiling tiles, circuit breakers, fuses, light fixtures, receptacles, diffusers vents, grills, etc., which are brief in scope. Maintenance also includes work done to prevent damage which would be more costly to restore than to prevent such as sealing bituminous pavements, refastening loose siding, painting and caulking, etc. In addition, provide all maintenance of all Installed Building Equipment (IBE). IBE are real property items that are affixed or built into the facility and become an integral part of the facility. Examples of supporting equipment that are considered IBE can be found in

Abbreviations/Definitions Appendix of this PWS. Maintenance Work will not normally include segregable project-type work or Repair Work (see below). Maintenance Work includes all repairs less than 32 hours of labor per occurrence. The 32 hour threshold shall be based on the “RS Means Facilities Maintenance & Repair & Construction Cost Data Manual” and not actual repair time. The hours shall include the time to make the repairs and excludes time for administrative or other support tasks (e.g., purchasing, material handling, estimating, receiving, billing, and accounting). In the event that additional repairs are discovered due to unforeseen conditions, the Contractor may request concurrence from the COFR to convert the order to a Repair Work order. The Contractor shall perform all non-repairs Maintenance Work regardless of hours needed. Maintenance Work excludes all work on Emergency Vehicles and Dynamometers regardless of hours needed.

Note: As used above, the 32-hour threshold is for administratively classifying work as maintenance or repair work under this PWS and does not affect the Contractor’s obligation to utilize the appropriate SCA or DBA labor rates.

Examples of Maintenance Work include:

a. Air Conditioning Operation Center operations (DTA).

b. Scheduled inspections and preventive maintenance services performed by operators, but exclude major repair work.

c. Operation of (including operator maintenance):
   (1) Energy Management and Control Systems (EMCS)(DTA)
   (2) Environmental Test Chambers Support (DTA)
   (3) Sewage systems
   (4) Water system
   (5) Boiler and heating systems

d. Supervision and administrative-type functions needed for the accomplishment of Maintenance Work.

e. Vector and pest control services.

f. Initial emergency and urgent responses.

g. Locksmithing

h. Preventative Maintenance (PM)

i. Snow & Ice removal

j. Grounds keeping and arbor activities.

k. Preservation and Painting.

l. Work specified in the Special Activities section of the PWS.

m. Custodial (USAG-S)

n. Failing Asbestos Remediation

2.2.6.2 **REPAIR WORK:** The non-scheduled repairs or replacement required when equipment or facilities suddenly fail or are inoperative, malfunctioning, broken-down, or cannot be used or their functional purposes. Repairs less than 32 man-hours per occurrence IAW the “RS Means Facilities Maintenance & Repair & Construction Cost Data Manual” and not actual repair time are still classified as Maintenance Work. Repairs include the corrective action needed to restore equipment or facilities to serviceable condition resulting from a specific sudden failure or unserviceable condition; the correction of deficiencies in failed or failing components of existing facilities or systems to meet current Army standards and codes where such work, for reasons of economy, should be done concurrently with restoration of failed or failing components. Corrective work may involve incidental increases in quantities or capacities. Repair may be overhaul, reprocessing, or replacement of deteriorated components, parts, or materials. Repair work will not normally include segregable project type work. The Contractor shall provide the COFR with a written weekly schedule (see below) of Repair Work to be accomplished. Estimated man-hour and other resource requirements are predetermined for each individual repair job. All work on Emergency Vehicles and Dynamometers shall be defined as Repair work regardless of hours needed.

Note: As used above, the 32 hour threshold is for administratively classifying work as maintenance or repair work under this PWS and does not affect the Contractor’s obligation to utilize the appropriate SCA or DBA labor rates.

Examples of Repair Work include:

a. Structural failures
b. Chiller, boilers, furnace, HVAC, refrigeration Replacement
c. Water main breaks
e. Transformers failures
f. Primary and secondary electric feeder line failures

2.2.6.2.1 The Contractor shall certify Repair Work as physically and administratively completed and concurrently provide copies of the same to the COFR. On Repair Work Orders that did not originate from Contractor operations, the Contractor shall obtain the requester's sign-off on the order and place the same on file. Problems with requesters shall be brought to the attention of the COFR. If during the course of work the contractor encounters unforeseen conditions which impact the work and which could not be evaluated during the initial estimating procedures, the Contractor shall contact the COFR immediately and shall not proceed without the COFR authorization. If the COFR instructs the Contractor to stop work on a specific order, the Contractor shall clean and secure the work site.

2.2.6.3 **NEW WORK** is the minor construction, alterations, or non-maintenance and repair (non-M&R) work generated by the Government or Contractor. All New Work Orders must have separate, written COFR approvals for estimating and commencement of work. COFR approval of a work order does not include the technical approval of the project covered by that work order. The Contractor is required to plan, design and execute New Work orders in accordance with PWS requirements and all other terms and conditions of this contract. The Contractor shall provide the COFR with a written weekly schedule (see below) of New Work to be accomplished. Examples of new work include:

a. Construction of new facility, structure, addition, or extension

b. Alteration of interior and exterior physical characteristics

c. Installation of additional electric panels/transformers

d. Installation of HVAC system, window air conditioners, etc.

e. Land improvements.

f. Installation of furnishings that require utility connections or alteration of existing utilities. Communication lines are not covered by this requirement.

g. Installation of personal property that require utility connections or alteration of existing utilities but limited to a maximum of five (5) utility connections or alterations per work order. Utility disconnection or reconnection of personal property limited to a maximum of five (5) per work order.

h. Performance of work on non-construction type items.

Examples of these items are making and installing shelving, cabinet, TV and recorder stands, pedestals; hanging pictures, bulletin boards; fire proofing curtains, etc.

2.2.7 **WORK SCHEDULES**

The Contractor shall develop and provide to the COFR an automated work schedule matrix for daily, weekly, biweekly, monthly, quarterly, semi-annual, annual and other recurring frequencies of inspection, testing and Maintenance Work requirements for the equipment, building & infrastructure components, also see 2.13. The schedules shall reference and describe suitable industry standards, codes, manufacturer's technical manuals, life cycle analysis and other recommendations for maintenance and inspection frequencies for the equipment, building & infrastructure components. The schedule will indicate buildings number, specific equipment, building & infrastructure components, what is to be accomplished and when the work is to be accomplished. The Contractor shall submit the initial schedule forty-five (45) calendar days prior to start of contract with weekly updates (Thursday) thereafter. Also see 2.20.6 for custodial schedules. The Contractor shall provide an automated status report to the COFR on a weekly basis (Thursday) for Maintenance, Repair and New Work orders seven (14) calendar days after start of contract. Authorized customers shall be provided an automated status report on a monthly basis. Status reports as a minimum shall include the current working estimate, funding status, projected/actual start and completion dates and percent completion.

2.2.7.1 The Contractor shall be available to attend scheduled maintenance coordination meetings with the Government Facility Engineer to assist in development of mutually compatible work schedules. Revisions or changes to any schedule shall be submitted by the Contractor in advance and will indicate reasons for requested revision or change.

2.2.8 **RECORDS, LOGS, AND FILING SYSTEMS**

2.2.8.1 LOGS: The Contractor shall establish and maintain an accurate operating, maintenance, and repair log for all work under his purview. The log shall indicate:

a. Name of caller or requester
b. Time and date call or order received
c. Location of work to be performed
d. Time and date work initiated
e. Activity Cost Code
f. Data Approved/Disapproved (those requiring prior Government approval)

g. Date completed
j. When applicable, reference to individual files

2.2.8.2 FILES: The Contractor shall maintain individual files on each Repair and New Work order. The file shall include the following:

a. The DA Form 4283 or electronic equivalent
b. A “List of Materials” for itemizing materials
c. Copies of any material issues, receipts, invoices, memorandums, correspondence, or any other documents relating to the order.
d. Actual items installed or consumed
e. Other COFR requested information for updating Real Property Records
f. As-built drawings (required whenever any alteration or reconfiguration of an existing system or facility is made)
g. Total hours expended (broken down by labor classification and sttraight time/overtime) and cost

2.2.8.2.1 All files for completed work shall be annotated to include actual items installed or consumed. Upon completion of a work order, the Contractor shall:

a. Fully complete the DA Form 4283 or DA Form 4287 or electronic equivalent.
b. Submit one copy of the above to the COFR when work involves real property changes.
c. Submit as-built drawings or other requested information to the COFR. Mark-up drawings must be legible and shall include adequate details so that the Government can update the master drawings.
d. Retain the completed file

2.2.8.2.2 The Contractor shall provide the COFR access to the Contractor maintained files. All files are the property of the Government and shall be turned over to the Government upon completion or termination of the contract.

2.2.9 **EXTENT OF CONTRACTOR’S RESPONSIBILITIES**

2.2.9.1 MAINTENANCE WORK ORDERS. The Contractor shall be responsible for initiating, planning, estimating, and performing all Maintenance Work Orders. The Contractor shall perform all non-repair Maintenance Work orders regardless of hours needed.

2.2.9.2 REPAIR WORK ORDERS. The Contractor shall initiate, plan, estimate document, and accomplish all Repair Work Orders on facilities and equipment under this PWS, regardless of man-hours. All routine Repair Work Orders estimated at 100 man-hours or more

must be approved by the COFR prior to start of work, except that emergency and urgent orders may be approved after-the-fact but no later than close of business (NLT COB) the next work day. The Contractor shall, when the work in process will exceed the original estimate by 20 percent or more, immediately document the reasons why, prepare a revised estimate and obtain written approval from the COFR. COFR approval of a work order does not include the technical approval of the project covered by that work order. The Contractor is required to plan, design and execute Repair Work orders in accordance with PWS requirements and all other terms and conditions of this contract.

2.2.9.3 NEW WORK ORDERS. The Contractor shall perform all New Work Orders on facilities and equipment under this PWS at the option and written approval of the COFR prior to commencement of work. The Contractor is responsible under other areas of this PWS to initiate, plan, estimate and document new work. The Contractor shall, when the work in process will exceed the original estimate by 20 percent or more, immediately document the reasons why, prepare a revised estimate and obtain written approval from the COFR.

a. The Contractor shall be required to perform New Work up to $25,000 (twenty-five thousand dollars) for all costs (e.g. labor, subcontract, overhead, materials, equipment) and profit.

b. If a New Work Order or group of related New Work Orders are originally estimated to exceed the above dollar threshold, the COFR will review the requirements to determine whether or not the requirement is suitable for competition or performance as a segregable project under a separate contract. Similar work, which should be performed under a single order, shall not be segregated to avoid the $25,000 (twenty-five thousand dollars) limitation. If the Government determines that competition is suitable, the Contractor shall not perform the work. If in the opinion of the COFR the requirement is only suitable for performance under this contract, the COFR will submit a written sole source justification and the complete work order file to the Contracting Officer clearly explaining the unusual or compelling urgency or why the requirement is so merged with other related contract work that no other source could satisfy agency requirements. The Contracting Officer will either concur or nonconcur with the work order in writing. If the Contracting Officer non-concurs, the COFR may be required to furnish a funding document to the Contracting Office for negotiation and modification of the requirement into the contract or may be required to process the requirement for a separate contract.

c. The contractor shall not perform work on New Work Order in excess of $25,000 (twenty-five thousand dollars) unless the

Contracting Officer has provided written concurrence directly on the work order. Such concurrence means that the Contracting Officer does not object to the contractor performing the work. The Contracting Officer's concurrence is not an indication that adequate funding is presently available in the contract for performance or that funding will be increased.

2.2.10 **WORK EXCEEDING CONTRACTOR LIMITS OF RESPONSIBILITY.** Work identified by the Contractor and estimated to exceed the limits of its responsibility shall be reported to the COFR at the earliest possible time, but not later than the end of that workday. The Contracting Officer will make final determination of the Contractor’s limit of responsibility. Work performed beyond the Contractor’s limit of responsibility, as determined by the Contracting Officer, shall not be reimbursable or subject to an equitable adjustment.

2.2.11 **WORK PLANNING.** The Contractor shall determine and document the labor standard application for each service call and work order for this contract IAW the following guidance:

a. Service Contract Act (SCA) coverage: Apply SCA clauses and minimum wage and fringe benefit requirements to all contract service calls or work orders for maintenance and support work. Contract installation support requirements, such as plant operation and installation services (i.e., custodial, grass cutting, snow removal, etc.) are subject to the SCA.

b. Davis-Bacon Act (DBA) coverage: Apply DBA clauses and minimum wage requirements to all contract service calls or work orders for New Work arising under this contract for minor construction, alteration, renovation and painting, or for repairs to buildings or other works. Repair requirements (i.e., roof shingling, building structural repair, paving repairs, etc.) are subject to the DBA; however, some contract work may be characterized as either DBA painting/repairs or SCA maintenance. For example, either the DBA or the SCA could cover replacing broken windows, spot painting, or minor patching of a wall. In those instances where a contract service call or work order requires construction trade skills (i.e., carpenter, plumber, painter, etc.), but it is unclear whether the work required is SCA maintenance or DBA painting/repairs, apply the following rules:

a. Individual service calls or works orders, which will require a total of 32 or more work-hours to perform shall be considered to be repair work subject to the DBA.

b. Individual service calls or works orders, which will require less than 32 work-hours to perform shall be considered to be maintenance subject to the SCA.

c. Painting preservation work regardless of quantity is classified as Maintenance work, however, the Contractor shall pay DBA wages for painting preservation work greater than 200 square feet.

d. Individual tasks shall not be split between work orders to avoid application of DBA.

e. The Contractor shall assure documentation provides adequate tractability of the classification of work as SCA or DBA to include identification of employee(s), their job classification, and labor rate(s) utilized.

2.2.12 **ESTIMATING** In addition to the estimating requirements under “Work Documentation Management” 2.2.3, the Contractor shall provide scoping and unit price estimates for all Repair and New Work Orders prior to the final COFR approval to commence work on the orders. Estimating shall be R.S. Means software based and compatible with the DPW Pulsar software. The estimator shall have at least 7 years experience in estimating facility engineering type projects and be certified. The Contractor shall provide the COFR with accurate and complete estimates within the following time frames (unless additional time is granted, in writing, by the COFR):

a. Routine Repair & New Work Orders	10 work days
b. Urgent Repair & New Work Orders	3 work days
c. Emergency Repair & New Work Orders	4 hours

The Contractor shall accept requests for estimating Repair and New Work Orders from sources such as the customers, COFR, tenant activities, and Public Works personnel.

2.2.13 **UPDATES OF REAL PROPERTY RECORDS AND REPORTS.** The Contractor shall be responsible for updating property lists and for providing input to the Government Facility Engineer for all changes in real property as made by the Contractor, other Contractors or as found by the Contractor to vary from Government plans or data. As a minimum, the Contractor shall provide input including:

a. All pertinent drawings [i.e., field (modified to show "as built" conditions) and shop drawings].

b. Certified accountable property data sheets and certified new construction field data sheets for installed building equipment and equipment-in-place (include disposition of removed equipment).

c. Guarantee/warranty documents, properly executed and dated, spare parts lists and manufacturers catalogs for all equipment.

d. Comprehensive operating and maintenance instructions.

2.2.13.1 The government will furnish the Contractor the initial hard drawings and CADD electronic computer aided design files for buildings, facilities, roads, surfaces, grounds, utilities, systems, etc. The Contractor shall maintain the drawings and files and update them to reflect as-built changes. The Contractor shall create drawings to reflect the as-built conditions when such drawings do not exist. The Contractor shall be permitted to make reproducible drawings for their operational requirements. Provide the COFR copies of drawings and files as requested. The Contractor shall survey the post as necessary to update as-built drawings and files of the facilities, grounds and utilities. The Contractor's personnel who operate CCAD shall have 5 year experience in civil, architectural, electrical and mechanical facility type work, be CADD certified for the respective systems and follow COE standards in the drawings. The Contractor shall be responsible to purchase upgrades to the CADD systems. All drawings of existing facilities and any subsequent new work will remain the property of the U.S. Government. Also see 2.1.4.

2.2.13.2 The Contractor shall prepare an As-Built Drawing Update Operations Plan within 30 days after the start of the Contract and update every 6 months, submit to COFR. The plan shall describe how the Contractor plans to accomplish updating the USAG-S drawing file, what buildings, utilities or site plans are to be worked on during the 6 month period, updates on what was accomplished and what needs to be accomplished.

2.2.13.3 The Contractor shall perform an inventory of all structures, utilities, roads, sidewalks, fences, temporary facilities, installed building equipment, etc. on a triennial basis. The Contractor shall propose an inventory schedule based on facility numbers to the COFR for comment. The COFR will provide the appropriate format and information requirements. The contractor updated Real Property shall be furnished to the COFR on 1 Sep of each contract period. Also see 2.2.8.2.1b. The data collected shall document the increases and decreases in inventory by facility and class. All changes shall be identified in a manner that provides an audit trail of the increases and decreases on an annual basis.

2.2.13.4 The Contractor shall continually monitor changes to the building equipment and update the Property Inventory List in the Appendices to reflect changes in the equipment list. The data collected shall document the increases and decreases in inventory by facility. All changes shall be identified in a manner that provides an audit trail of the increases and decreases. Provide the COFR the updated lists when requested.

2.2.14 **AUTOMATED DATA PROCESSING SYSTEM REQUIREMENTS**. The Government uses the Integrated Facilities System (IFS) as a production scheduling and contract monitoring system to monitor repair and maintenance expenditures for individual facilities, to monitor minor construction and alterations (new work) project expenditures and to provide information reported to higher levels of command. The Contractor shall input data to maintain the IFS database management system and shall use IFS to produce reports. Requirements include coding and formatting for entering data into IFS, entering data and correcting errors in accordance with Government-furnished IFS manuals. The applicable IFS referenced manuals are provided electronically within the IFS client software. The Contractor shall provide user support and perform all functions as listed in paragraph 2.2.14.9 “AUTOMATED DATA PROCESSING SYSTEM REQUIREMENTS” of this PWS.

2.2.14.1 **INPUT TO IFS.** The Contractor shall input data via on-line entry utilizing contractor-furnished IBM compatible personal computer with TCP-IP capability. The Contractor shall maintain Preventive Maintenance (PM) records in the IFS. (PM) records in IFS shall reflect periodic maintenance performed, including scheduled and accomplished dates. The Contractor shall keep the PM records in IFS current within three days of performance of the PM.

2.2.14.2 **LABOR ENTRIES AND IFS WORK ORDERS.** Prior to contract start date, the Government will give the Contractor a listing of the existing task codes with correlating shops. The Contractor shall have the opportunity to furnish a list of task codes with correlating shops for data entry of Contractor performance of Maintenance, Repair and New Work orders. The COFR must approve this list prior to its implementation. If the Contractor does not submit and receive approval for alternative task codes listing, the Contractor shall utilize the existing Government task codes for data entry.

2.2.14.3 **OTHER COSTS** The Contractor shall input, into IFS, other costs (e.g., direct contract costs and material costs) to account for Contractor and subcontractor expenditures against work documents. Input other contractor work performed, COFR will provide the data.

2.2.14.4 **LABOR AND EQUIPMENT (L&E) UTILIZATION FORMS** The Contractor shall complete L&E forms daily for each Contractor employee and subcontractor employee. L&E forms shall accurately reflect the labor man-hours, materials and equipment usage for each work document in accordance with applicable IFS reference manuals. The Contractor may elect to use the Government L&E forms or may develop their own forms (manual or electronic) provided all of the same data fields found on the Government form is used. The data on the L&E forms shall be input into the IFS within 5 workdays of completing the forms.

2.2.14.5 **IFS FILE MAINTENANCE**: The Contractor shall maintain a file on all guidance received from the Government regarding changes to the IFS. The Contractor shall acknowledge the receipt of the change to the COFR and provide the date the change was implemented. The Contractor shall identify problems with the change(s) and inform the COFR in writing by 1600 hours the next workday.

2.2.14.6 **IFS EDITING & INPUT**: The Contractor shall edit and correct errors resulting from transaction input by the Contractor and reenter the corrected transaction(s) by the next workday.

2.2.14.7 **REAL PROPERTY NUMBER DESIGNATION**: All equipment items and real property facilities listed in the Detroit Arsenal inventories have been assigned a unique number consistent with IFS instructions. The Contractor shall be responsible for updating and maintaining the numbers in the equipment inventories as equipment items are added, deleted or replaced and notifying the Government of changes to the list. The Government will assign the unique number for equipment items installed by the Contractor. The Contractor shall include the unique number when reporting work performed under this contract.

2.2.14.8 **WARRANTY PROGRAM**: The Contractor shall input and maintain warranty information into IFS for each item of property installed under this contract and also, when provided by the Government, property item installed by other contractors.

2.2.14.9 **IFS SYSTEM ADMINISTRATION**: The Government will provide an IFS Server and software (server operating system and application/client). The Contractor shall provide set up and IFS Client software technical support to all IFS users (regardless of whether the client software is installed on government-owned or contractor-owned equipment). The Contractor shall act as interface with IFS Support Office to add users to the IFS database management system; install and maintain IFS client software; reset passwords/permissions to the system. The Contractor shall perform data transfers and provide IFS system information to higher headquarters as required.

2.2.14.10 **CUSTOM REPORTS**: The Contractor shall be required to write and generate customize queries or reports of the IFS database. All customized queries or reports, once written, shall become the property of the government and shall be considered standard reports. Subsequent generation of these queries or reports shall be treated as generation of standard reports. Requests for custom reports are to be routed through the Government IFS Systems Administrator for approval by the COFR, prior to performance by the Contractor.

2.2.15 **PROVISIONS OF MATERIALS AND SUPPLIES** The Government may elect to provide materials and supplies for the Contractor to utilize or install under any type of work order. Government-furnished materials shall not be included in the dollar limitation for New Work Orders.

2.2.16 **FACILITY EQUIPMENT REPLACEMENT** If a piece of facility equipment is considered by the Contractor to be beyond economical repair, the Contractor shall recommend to the COFR in writing that such equipment be replaced. Substantiating data to support the recommended replacement shall be included. If the Government decides that such equipment should be replaced or repaired, and replacement or repair is authorized, the Contractor shall accomplish the work. Disposal instructions will be provided by the COFR.

2.2.17 **SALVAGE** The Government retains all salvage rights to replaced property of value. The Government will determine if the property has value. The Contractor shall dispose of items of no value. For items of value, and for all Government equipment regardless of value, the Contractor shall advise the COFR of the need to prepare the automated paperwork for disposal and deliver the item(s) to the TACOM contractor performing Logistics Functions unless other arrangements have been made with that contractor.

2.2.18 **ENERGY AND UTILITIES CONSERVATION PROGRAMS:** The Installation conservation program is established by Installation Management Agency (IMA) Northwest Region for the judicious management and controlled consumption of energy and water in accordance with published regulations and guidance from higher headquarters. The Installation is evaluated on energy consumption per square foot basis. The Contractor shall develop an energy and utilities conservation SOP for operations, maintenance activities, and equipment acquisitions that is accomplished and pursued within the limits and intents of the various energy conservation standards mentioned below. Submit to COFR within 60 days of contract start, submit updates annually to COFR thereafter. The Contractor shall assure that its operations,

maintenance activities and equipment acquisitions are accomplished and pursued within the limits and intents of the various energy conservation laws, regulations, rules, executive orders, and Command guidance now established or to be established. The Contractor shall ensure adherence by its personnel to these standards. Variations in standards or goals may be authorized by COFR. The Contractor shall provide energy information upon request to the COFR in order that reports and coordination can be made with higher Headquarters. The following standards define the purpose and scope of the Installation conservation program:

- o Executive Order 13123, Greening The Government Through Efficient Energy Management.
- o Executive Order 13221, Energy Efficient Standby Power Devices
- o Public Law 102-486, Subtitle A, Subtitle C, Subtitle F,
- o Energy Policy Act of 1992
- o 10 CFR Part 450, Subpart D, Energy.
- o ASHRAE Fundamentals Handbook, Chapter 22.
- O Clean Air Act

2.2.18.1 **CONTRACTOR PARTICIPATION AND SUPPORT** The Contractor shall execute work orders, with full consideration given to energy conservation measures. The Contractor shall monitor building control systems and parameters to ensure compliance with energy regulations. The COFR is the sole authority for deviations of parameters from established procedures, conditions and requirements.

2.2.18.2 **ENERGY MANAGEMENT CONTROL SYSTEM (EMCS)** An automated EMCS is in place at Detroit Arsenal to effect conservation for heating, ventilating, air conditioning and other energy consuming equipment and lighting for most major buildings. The Contractor shall operate, install, modify, test, inspect, adjust, maintain and repair the EMCS.

2.2.19 **SAFETY** The Contractor shall:

a. Post safety posters, displays, caution, danger and warning signs and devices in conspicuous places on the interior and exterior of shops, plants, facilities, and public buildings.

b. Maintain, repair, inspect, and modify the safety billboards located near the entrance gates to Detroit Arsenal and at USAG-S, bldg 970. This work includes removing old posters and signs; installing new posters and signs; and the repair touch-up, or alteration of existing signs.

c. HAZARDOUS OR UNSAFE CONDITIONS: If inspections reveal hazardous or unsafe conditions, actual or potential, immediate repair actions shall be initiated. The area of the hazardous or unsafe condition shall be marked or barricaded immediately upon discovery to warn personnel of the dangerous area. The markings or barricades shall remain in place until the condition is corrected. The COFR shall be advised of the hazardous or unsafe conditions immediately upon discovery.

2.2.20 **SELF-HELP STORE AND U-DO-IT PROGRAM (USAG-S):** The Contractor shall operate and maintain a Facilities Engineering Self-Help Store and shall establish, operate and maintain a U-Do-It program for Army Family Housing and Unaccompanied Personnel Housing to accommodate expanded self-help (ESH) and normal self-help (NSH) actions. TACOM Reg. 210-54 requires the customers to perform various work in housing. The Contractor may need to perform work on ESH and NSH items up to 24 occasions per year as requested by the COFR and shall not perform any ESH or NSH work for the customer without written COFR concurrence.

2.2.20.1 The Contractor shall operate and have the U-Do-It ESH and NSH store open from 0900-1730 Tuesday through Saturday, except for Federal Holidays and announced Base closures. The Contractor may modify the store hours for Christmas holidays, winter months, etc with the approval of the COFR.

2.2.20.2 The store will be a one-stop facility for accomplishing all ESH and NSH actions. The Contractor shall handle all customer transactions such as issuing tools, equipment and materials, warehouse supplies, displaying training models for each NSH maintenance task, and displaying models/drawings and bills of materials for approved ESH projects. The Contractor shall conduct resident Self-Help orientation and training for U-Do-It projects and provide a U-Do-It repair reference library. The store should be aesthetically pleasing. Provide technical assistance to residents at their quarters on U-Do-It projects. The Contractor shall also be responsible for acquiring materials and equipment for the store operations.

2.2.20.3 The Contractor shall issue loaner tools and equipment (i.e. lawnmowers, power and manual tools) to customers on a short-term loaner basis through this facility. The Contractor shall provide operational and safety orientation prior to issue of power tools before issuing to a customer. The Contractor shall perform equipment and tool serviceability checks upon return from customer use. The Contractor shall maintain and repair all tools and equipment in its custody in accordance with manufacturer’s recommendations, industry standards or best commercial practice (whichever is most stringent). The Contractor shall pursue, with the customer, the return of equipment and tools when they become

3 days overdue. The Contractor shall report all items more than 7 days overdue to the COFR. The Contractor shall initiate a "Statement of Charges" when, in the Contractor's opinion lost, damaged or destroyed items resulted from customer negligence. The Contractor shall:

a. Update stock lists and levels to support changing customer demands.

b. Stock, size and issue window shades on an exchange basis.

c. Fabricate and issue name signs for Family Housing Residents.

2.2.20.4 **Expanded Self Help:** The Contractor shall administer the ESH program for the installation. The Contractor shall perform the following:

a. Assist the customer in filling out the DA Form 4283 for established ESH projects. Route completed 4283s for Government approval. After approval or disapproval, notify the customer.

b. Coordinate ordering, warehousing, delivering and issuing of ESH stock, materials, tools and supplies.

c. Provide technical advice and assistance to residents at the store and at the quarters. Inspect and provide acceptance of the work.

d. Track status of all ESH projects, conduct in-process inspections, and final inspection. Provide technical assistance for purposes of resolving issues or defects.

e. Recommend final acceptance of completed ESH projects to government.

f. After Contractor acceptance, update real property records in the IFS (see "Automated Data Processing System Requirements") and update the master drawings (see "Records, Logs and Filing Systems)

2.2.20.5 **Tools and Publications:** The Contractor shall submit a tool and publication list to the COFR to support the U-Do-It Store operation 10 days before contract start and as required thereafter. After Government approval, the Contractor shall purchase (other than accountable property items) and control issue.

2.2.20.6 **Data** The Contractor shall maintain data on the cost and quantity of completed NSH and ESH projects.

2.2.20.7 The Contractor shall respond to Emergency and Urgent work requests when the problem results from normal self help/expanded self-help projects or as requested by the COFR, also 2.4.2.6.m.

2.2.20.8 The Contractor shall maintain adequate stock of self help supported parts for the variety of appliances utilized, e.g. burners, reflectors, handles, knobs etc.

2.2.21 **WORK PERFORMANCE.** The Contractor shall comply with the federal and state laws, codes, regulations, manufacturers instructions, industry standards and other publications referenced in the chapters and the Appendix of this PWS. The Contractors shall perform the work to maintain the facilities and systems in a safe, reliable, efficient and operational manner. The latest editions, supplements and amendments shall apply. In case of conflict the more stringent requirement shall apply.

2.2.22 **PERSONNEL:** The Contractor's personnel qualifications and licensing shall be commensurate with the work assignments they receive. For example, the Contractor shall only permit a journeyman electrician to make an electrical connection, a journeyman plumber to solder pipes, a licensed operator to operate a backhoe, a mechanic with a mechanical code license to work on heating, ventilation and air conditioning systems. The Contractor shall assure that all non-journeyman trades person are under the immediate supervision of a journeyman or higher. Also see 2.2 Resource Management Plan.

2.2.23 The Contractor shall coordinate work efforts with organizations such as the 127th Wing, Regional directorate, IMA, DA, EPA, COE, utility companies, surrounding communities, contractors and other organizations at Selfridge and the Detroit Arsenal, etc. to coordinate the work effort and gather information to accomplish the work. Attend meetings organized by the Commander, DPW, customers, COFR, COR, contracting officer and other organizations and establish meetings to support the work effort. Provide briefings related to the work effort. Develop and maintain charts, graphs, boards, sketches and other similar visual aids.

2.2.24 The Contractor shall provide a report of the previous week identifying the number of completed and backlogged Maintenance, Repair, New work orders and estimates by work classification, shop/trade and priority, include the number of additional work orders and estimates for the reporting period. Also provide information on Preventive Maintenance work accomplished and backlogged by facilities, building, grounds and utilities. Also see 2.2.7 & 2.13. The Contractor shall submit this report to the COFR every Thursday beginning at the start of the contract.

2.2.25 The Contractor shall provide labor to move/replace/disassemble/reassemble furniture, equipment and other materials when necessary for the performance of this PWS. Office moves will be accomplished by a separate contract.

2.2.26 The Contractor shall prepare and distribute survey data to customers and organizations(e.g. customer satisfaction survey of Contractor services provided) collect the data and prepare monthly summary reports of the data and provide to COFR. For USAG-S route returning surveys to the DPW for review. The Contractor shall take action to resolve issues with the customers.

2.3 AIR CONDITIONING, VENTILATION AND REFRIGERATION

2.3.0 **GENERAL:** The Contractor shall develop and perform the total maintenance program for all refrigeration, chillers, air conditioning, electronic air cleaners, ventilation, humidifying and dehumidification equipment and systems; window air conditioning units; split units; and combination heating and air conditioning systems. The Contractor shall perform Preventive and Recurring Maintenance on the systems. Appendix “Real Property and Equipment Inventory Lists” shows the type of air conditioning, refrigeration and ventilation systems for each building. The Contractor shall assure that all systems and equipment are safe and operating efficiently. The Contractor shall perform work in accordance with manufacturer's operating and maintenance manuals, ASHRAE Guide and Data Books, and National Fire Protection Association Standards, and other applicable industry codes, standards, guide specs, technical manuals, pamphlets and regulations. The Contractor shall maintain temperatures in air conditioned areas IAW with the standards contained in ASHRAE, except for the standards contained in the Critical Systems Appendix, from 0600 to 1800 hours Monday through Friday, excluding holidays.

a. Maintenance and repair of ventilation, air conditioning, refrigeration and freezer equipment at the Commissary (Building 701) and the food court equipment of Building 700 is not included in this contract. Also see 2.5.1a.

2.3.1 **TYPES OF EQUIPMENT AND SYSTEMS:** The Contractor shall, operate, inspect, test, calibrate, adjust, maintain, repair and install and perform preventive maintenance work necessary for proper and efficient operation of the following equipment and systems:

a. Drinking fountains, ice machines.

b. All air compressors and related systems.

c. Cascade Recharge Systems for breathing air.

d. All air handlers and related systems.

e. Coils, heating coils, water coils, evaporative coils, cooling coils.

f. Unit air conditioners, window units, fan.

g. Chillers.

h. Reach-in/walk-in refrigeration/freezer equipment.

i. Cold storage and cold room facilities.

j. Instrument and control systems, electric/electric pneumatic and pneumatic controls, and mechanical controls.

k. Cooling towers.

l. All condensers.

m. Water coolers.

n. Pumps/piping.

o. Plenum chambers, duct distribution system, diffusers, deflectors, registers, grilles, fire dampers.

p. Water, heating, air conditioning, electrical, refrigeration, steam and alarm detection equipment and related units (e.g., components, controls, starters, drives, and accessories) associated with air conditioning, ventilation and refrigeration systems.

q. Combination air conditioning and heating systems.

r. Refrigerated air driers.

s. Ventilation systems (air lifts).

t. Electronic air cleaners (smoke eaters).

u. Domestic and commercial refrigerators and freezers.

v. Air towers and water towers.

w. Humidifiers and dehumidfiers.

x. Heat Pumps

2.3.2 **AIR CONDITIONING, VENTILATION, AND REFRIGERATION SYSTEMS**

The Contractor shall perform the following:

a. Operate, inspect, test, maintain, calibrate, adjust, install, repair and replace all air conditioning, refrigeration and ventilation equipment, systems, controls, and components.

b. Take air velocity measurements and balance air flow, whenever air flow has been disturbed.

c. Provide water treatment for closed systems and cooling towers, (i.e., chemical treatment).

d. Purge air and non-condensable from refrigerant systems.

e. Prepare all cooling tower water lines for the cooling season.

f. Prevent noise from either equipment or air movement in excess of ASHRAE standards. In the event of a power failure, the Contractor shall shut down all electrical power to refrigeration equipment and related machinery. Upon the restoration of power, the Contractor shall re-start and check all equipment to assure its proper operation.

g. Assure that central air conditioning systems, window units, and chilled water systems are serviced and in operational status for the cooling season no later than May 15, unless a later date is approved by the COFR.

h. Maintain and change the compressor oil level within the manufacturer’s recommendations.

i. Test units to assure the refrigerant charge is within the manufacturer’s recommendations and add refrigerant if needed.

j. Repair or replace damaged, wet or missing insulation, broken or loose bands, vapor barriers on ductwork, lines and wires.

k. Seal air duct leaks.

l. Winterize all air conditioning related units, systems and components no later than Nov 15th (unless a later date is approved by the COFR) to prevent damage. Depending on the system or unit, the contractor shall: drain piping, circulating pumps and condensers; cover exterior partitions of window air conditioners with plastic; de-energize control circuits of units (to prevent an accidental starting of air conditioners); adjust control circuits and ventilation systems from summer to winter operation.

m. Clean water side of all condensers.

n. Maintain and repair refrigerated storage facility within temperature and humidity requirements.

o. Maintain and repair all air handling systems and equipment (e.g., ventilation systems, recirculating air systems, induced draft, forced draft, water spray systems, electrostatic air handling systems, radial flow, axial flow, positive air pressure systems, negative air pressure systems, and intermittent and continuous forced air systems).

p. Repair/replace worn, damaged, broken, or inoperative parts, linkage, and components on all equipment.

q. Repair/replace worn, damaged, broken, or inoperative valves, fittings, packing, tubing, piping, wiring, wiring conduit and other components as required.

r. Check for refrigerant gas leaks and repair all leaks. Report all leaks to the Installation Air Quality Manager and record amount of leakage.

s. Treat circulating water for biological control and corrosion IAW accepted industry practice.

u. Maintain clean cooling towers, evaporative condensers, and other components in HVAC system. The Contractor shall follow ASHRAE suggested maintenance practices to reduce Legionella risks. Clean ductwork systems, evaporators and other components to maintain a clean air quality standard in the buildings. Remove moisture and sanitize air handling systems and drip pans to avoid air borne diseases in and around the buildings. Treat circulating water for biological control and corrosion IAW accepted industry practice. Also see 2.7.7.f.

v. Test units to assure proper refrigerant charge and proper suction, and discharge pressures. Where leaks are found, prompt repair shall be accomplished. Defective components shall be repaired or replaced, as required. Units shall be tested for unusual vibrations, excessive noise, misalignment, excessive play of shafts, ineffective sound insulators, and unbalanced moving parts. Defective components shall promptly be repaired or replaced.

w. Chemically clean or disassemble and clean to remove scale dirt, lint, grease, debris, and foreign matter from water side of condensers. This maintenance shall be scheduled and performed during the winter off-season.

x. Check and clean plenum chambers, air ducts, registers, grills, louvers, insect and bird screens. Adjust seasonal

settings of dampers. Check air distribution in branch circuits. Repair or replace guards, hangers, supports, mounting bolts, sound insulators, platforms, and pads.

y. Inspect, test and clean ventilation systems utilized in kitchen or food handling areas IAW the NFPA to ensure a clean, safe and efficient system. Chemically clean all ducts and related component parts to assure removal of all grease and dirt build-up in ducts, damper mechanisms, screens, guards, fan motors, blades, housings, etc. The users of the ventilation systems are responsible to clean the filters, interior areas prior to and at the filters and the exposed exterior within the kitchen area. The Contractor shall be responsible to clean all other areas and components of the ventilation system. Repair or replace defective components to assure conformance to fire protection codes. Inspect, test, and repair safety devices. Also see 2.10.1.h and 2.12.7.

2.3.3 **AIR CONDITIONING OPERATIONS CENTER (ACOC) DETROIT ARSENAL**

2.3.3.1 The Contractor shall be responsible for a total maintenance program and total operation of all air conditioning equipment located in Bldg. 230 and facility No. 234. The ACOC, Room E 103, Bldg. 230, shall be manned Monday through Saturday from 0500 hours to 2100 hours. The ACOC will not be manned on holidays except for Memorial Day and Labor Day.

2.3.3.2 The Contractor shall perform a total operations program incorporating the following function which include, as a minimum, the following :

a. Operate centrifugal water Chillers as required to maintain proper chilled water temperature supply for all building air conditioners/air handlers.

b. Keep formal climate control log sheets

c. Continuously watch high, medium and low steam pressure stations. Shut system off in the event of a power failure and return to operation when power is restored.

d. Repair steam leaks or condensate leaks as required.

e. Check air conditioning and steam systems hourly during the core hours of 0500 to 2100 hours.

f. Monitor, on an hourly basis, all chiller system controls for proper calibration.

g. The Contractor shall bring any components out of range with system requirements into range.

h. Clean chilled water supply coils at least annually, or as

required by the COFR.

i. Remove all sludge and algae from cooling towers monthly.

j. Add water treatment in the proper water conditions between major clean ups of towers as required on a continuous basis.

k. Clean fans and fan motors for proper operation on a daily basis.

l. Lubricate fan motors semi-annually.

m. Catch bleed off water daily.

n. Check condenser water pumps daily.

o. Monitor condenser in and out temperatures hourly to determine if the heat rejected by the cooling towers matches the amount of heat absorbed by the chillers. Adjust, as necessary.

p. Make sure the fence around the towers is secure on a daily basis.

q. For nighttime operations, change all the burned out spotlights on the towers and in the equipment rooms, as required on a daily basis.

r. Repair or replace worn, broken tower parts as required on a daily basis.

s. Clean tower grounds daily.

t. Read and change graphs daily or as required on temperature humidity recorders located in the ADP area. This shall be monitored on an hourly basis during the core hours.

u. Check air handlers on an hourly basis, and make adjustments, as required, and log reading of each zone twice daily. Monday through Friday (except holidays), between the hours of 0800 and 1600, check and adjust, as required, air handlers in the Building 230 penthouse and AC #3 and AC #5 serving the Televideo Conference Room and telecommunications area. Log readings of each unit checked.

v. Any zone out of compliance with operating design shall be adjusted to resume normal operations as required on a hourly basis.

w. Physically inspect all filters quarterly. Change pre-air filters on a semiannual basis, and high efficient bag filters on an annual basis (unless directed otherwise by the COFR in writing).Enter readings on the equipment cards when the filters

are changed. Monitor daily the static pressure drop across the coil. If pressure is found to be in excess of 0.39 inches of water column, change filters as required to drop pressure below 0.39 inches of water column.

x. Calibrate safety controls at least annually.

y. Clean all work areas for Bldg. 230 pertaining to HVAC operators.

z. Paint air conditioning equipment and related equipment presently in the ACOC.

Aa. Make repairs to all equipment located in the ACOC.

Ab. Operate, monitor, calibrate, adjust, maintain, and repair the Delta 1000 System.

Ac.. Respond to alarms and perform appropriate repair function IAW the priority system contained in paragraph “Priorities” of the Resource Management PWS.

2.3.3.3 The above systems require records, logs, and close, detailed surveillance, maintenance support, and spare parts inventory on hand or readily available to ensure constant operations. The Contractor shall ensure backup means are used to eliminate potential damage to ADP system caused by outages. All ADP air conditioning outages shall be reported to the COFR immediately.

2.3.4. **AIR COMPRESSOR EQUIPMENT AND SYSTEMS:** The Contractor shall inspect, test, operate, maintain, repair, remove and install non-portable/portable air compressors and systems. Changes in the location of the compressors may occur during the contract period without affecting the Contractor’s responsibilities. The Contractor shall annually test pressure vessels to assure safety of units. The Contractor shall mark compressors IAW OSHA requirements.

2.3.5 **TEMPORARY COOLING SYSTEMS (DETROIT ARSENAL):** The Contractor shall provide, connect, disconnect, operate, maintain, and repair temporary cooling systems for the West wing of Bldg. 230 and for Bldg. 200A. These temporary systems shall be operational during the period 15 May through 31 Oct annually. For daily operation, all systems should be on-line in sufficient time to allow cooling prior to the daily heat load increase caused by building occupancy. The temporary cooling systems shall be connected to existing piping and electrical lines available for this purpose.

2.3.5.1 **OPERATION:** The Contractor shall operate the temporary cooling and building air handling systems to maintain temperatures within ASHRAE standards inside the buildings from 0600 to 1800 hours, Monday through Friday, excluding holidays.

The Contractor shall anticipate the hours of operation based on US Weather Service forecasts.

2.3.5.1.1 The Contractor shall balance the temporary cooling systems with permanent building systems to provide uniform cooling throughout the buildings. The Contractor shall adjust and modify the controls and measuring systems for both the temporary and permanent building systems to obtain the balance.

2.3.5.1.2 The Contractor shall provide all materials and associated equipment needed to connect and protect the systems (e.g., power cables, piping, auxiliary pumps and controls, sensors, security devices, fences, fire extinguishers, pads, covers, lighting, breakers, control panels and safety controls).

2.3.5.2 **BUILDING 230 TEMPORARY A/C (DETROIT ARSENAL):** The Contractor shall provide a system that meets or exceeds the following criteria:

a. A centrifugal or reciprocating self-contained chiller with an air-cooled condensing unit.

b. 200 tons nominal capacity.

c. Capable of producing 43.5 degrees F water outlet temperature (given 95 degrees F outside air temperature, and a 54.5 degrees F water inlet temperature).

d. 404 GPM chilled water flow.

2.3.5.3 **BUILDING 200A TEMPORARY A/C (DETROIT ARSENAL)**: The Contractor shall provide a system that meets or exceeds the following criteria:

a. A centrifugal or reciprocating self-contained chiller with air-cooled condensing

b. 320 tons nominal capacity.

c. Capable of producing 45 degrees F water outlet temperature (given 95 degrees F outside air temperature, and a 54.5 degrees F water inlet temperature).

d. 746 GPM chilled water flow.

2.4 BUILDINGS AND STRUCTURES AND PRESERVATION

2.4.0 **GENERAL** The Contractor shall develop and perform the total maintenance program for all buildings and structures and their preservation. The Contractor shall perform Preventive and Recurring Maintenance on the buildings and structures. The

Contractor shall inspect, test, service, adjust, install, modify, alter, maintain and repair all buildings, structures, appurtenances and equipment. The Contractor shall also provide all material, equipment and labor to accomplish all painting and preservation work. The Contractor shall assure that all systems, items and equipment are safe and operating efficiently. Work performance shall comply with BOCA and UBC, environmental laws and directives, NFPA, NEC, OSHA, American Concrete Institute, American Institute of Steel Construction, National Concrete Masonry Association, Brick Institute of America, Steel Joist Institute, National Forest Products Association, National Roofing Contractors Association (NRCA), manufacturer's instructions and specifications, industry standards, applicable State and Federal standards and codes, regulations, pamphlets, guide specs, and technical manuals. All historically eligible buildings shall be maintained in accordance with U.S. Department of the Interior, National Park Service historic preservation standards for wood, paint, masonry, concrete and 20th Century materials. The Contractor shall accomplish the requirements of Appendix for USAG-S, Historical Building/District Maintenance and the DTA Historical facilities as stated in 2.6.6.2.

2.4.1 **CONTRACTOR SUPPORT:** The Contractor shall assist Government personnel and other contractors in assessing whether asbestos or lead is present in their work areas and the current condition of the asbestos or lead. Contractor shall take samples if needed to confirm the presence of asbestos or lead. The Contractor shall take air samples to determine if asbestos is present in the air and provide to the COFR as a baseline.

2.4.2 **CARPENTRY TASKS**. The maintenance, repair and modification of buildings, structures and appurtenances shall include floor coverings, screening, shelving, exterior and interior finishes, movable partitions, walls, moldings, ceilings, concrete foundations, slabs, structural components and walls. Other miscellaneous carpentry work includes fabricating, installing, modifying, maintaining, repairing and painting built-in fixtures, trim, floors, ceilings, walls, roofs, partitions, framing, casings, moldings, flashings, dumpster enclosures, fencing, gazebos, exterior facility signs, and exterior tables, benches and furniture. Carpentry work shall be planned and accomplished to provide maximum protection from fungus, mildew, termites, water absorption and all other harmful effects of the environment. All wood in contact with concrete, masonry, soil, water, etc., shall be preserved and treated in conformance with the American Wood Preservers Institute Standards. Carpentry performed shall be consistent with the construction of the existing structure. No structural framing shall be altered from its original design without the prior written approval of the COFR.

2.4.2.1 **FLOORS AND FLOOR COVERINGS:** The Contractor shall perform the following examples of work:

a. Inspect, maintain, repair or modify the condition of floor covering within each building and structure. Floor covering may be tile, sheet goods, hardwood, or carpeting. The Contractor shall replace isolated areas of carpet squares which become stained that cannot be cleaned or which become deteriorated.

b. Replace missing, broken or cracked floor tile for each building or structure. Re-glue all loose tiles that are in good condition.

c. Replace missing, broken or cracked baseboard, molding, cove or other trim for each building or structure. Refasten any loose trim that is in good condition.

d. Paint, stain or retile all repaired areas to match as closely as possible the color of the area adjacent to the repair.

e. Inspect all register covers and grills. Repair or replace broken and missing units when necessary.

f. Inspect all metal strips and replace those that are bent, broken or deteriorated.

g. Inspect, modify, maintain and repair hardwood floors and stairs. The Contractor shall sand and varnish worn surfaces and replace sections as required.

2.4.2.2 **WINDOWS:** The Contractor shall perform the following examples of work on windows:

a. Inspect, install, modify, maintain and repair or replace all windows (e.g., motorized windows, hand operated windows, storm windows) and screens, including fixed glass panels and all window hardware.

b. Lubricate, repair or replace as necessary window chains, spring tension arms, sash cords, locks, or handles, in order that windows may be opened, closed and locked easily.

c. Caulk around interior and exterior of windows where caulking is either missing or has become deteriorated. Install weather stripping. Replace if it has deteriorated.

d. Install replacement window shades, blinds, curtains, draperies, rods and brackets.

e. Repair or replace damaged or missing screens in windows.

2.4.2.3 **DOORS.** The Contractor shall perform the following examples of work on all types of doors:

a. Inspect, install, modify, maintain, repair and replace all doors to include: door frames, passage and lock sets, hinges, thresholds, trim, door stops, closers, electrical locking devices, electric door openers, emergency exit hardware, push bars, casings, and other door hardware. The Contractor shall temporarily remove doors as required to support equipment and furniture moves.

b. Ensure that all doors open and close properly. This may require cutting, planing the bottom and edges of doors, aligning striker plates with passage sets and adjusting, repairing or replacing broken door closers and door stops.

c. Install or replace weatherstripping around all exterior doors.

d. Repair or replace broken, cracked or deteriorated molding around doors.

e. Install, maintain, repair or replace storm doors and associated hardware.

f. Repair or replace damaged or missing screens or glass in storm doors.

2.4.2.4 **WALLS AND CEILINGS:** The Contractor shall perform the following examples of work on walls and ceilings:

a. Inspect, modify, replace and repair all ceiling and wall surfaces to maintain a safe and clean condition.

b. Reset major nail pops (where nail is protruding above the drywall tape).

c. Repair or replace damages drywall tape, plaster and patch cracks and holes.

d. Remove miscellaneous nails, wall hangers which are not in use and patch holes.

e. Patch, sand and paint all repaired areas.

f. Repair and replace studs, sheeting, siding and insulation

2.4.2.5 **KITCHENS AND BATHROOMS.** The Contractor shall perform the following examples of work on kitchens and bathrooms:

a. Maintain, repair, replace and install ceramic tile, sinks and tubs.

b. Touch up porcelain paint scratches and chips in sinks and tubs.

c. Clean, maintain, repair, replace and install cabinets, doors, drawers and hardware, counter tops, back splashes, range hoods, dryer vents and tubing. Plastic flexible dryer vent tubing shall be replaced with aluminum flexible double wall tubing.

d. Remove rust where present, repaint cabinets, drawers and shelves.

e. Lubricate and clean exhaust fans.

f. Maintain, repair, replace and install towel racks and paper dispensers.

2.4.2.6 **OTHER CARPENTRY:** The Contractor shall inspect, modify, install, maintain, repair and replace the exterior surfaces, appurtenances and fixtures of building and structures. Examples of this work are as follows:

a. Provide positive drainage to the building. Clean out gutters and downspouts. Position properly the downspout splash block conductors. Replace missing or deteriorated gutters, downspouts and splash blocks.

b. Repair or replace torn screening on doors, windows and porches.

c. Make repairs to porches, steps front or rear enclosures, fire escapes, exterior metal and wooden stairs, storage rooms, bins, carports, storage sheds and garage doors. Work does not include family housing self help projects, except see 2.4.2.6 m.

d. Make repairs to wooden, metal or cement steps, stairs and handrails and fire escapes.

e. Recaulk where needed around doors, windows, trim, vents, stacks, etc.

f. Perform touch up painting to peeling and deteriorated exterior trim, siding, soffits and facia boards.

g. Repair or replace as applicable asbestos shingles, wood, metal, vinyl, siding, trim, soffits and facia boards.

h. Repair, replace or install vents and covers.

i. Inspect, install, maintain or repair antennas, towers and other appurtenances.

j. Repair or replace deteriorated/damaged mailboxes and building members.

k. Make repairs to cracks and surface imperfections in steps, porches, foundations and walls.

l. Inspect all utility service chase covers, crawl space access doors and vents and make sure they are secured to prevent pedestrian intrusion and are in serviceable condition.

m. WOOD STRUCTURES: The Contractor shall maintain, repair and replace all dumpster enclosures, fencing, two gazebos in the 400 area, gazebo at the Chapel, four gazebos in the Top 4 area, five gazebos in the shore line campground 900 Area, one gazebo in the 700 area, the sports storage shack in the 700 area, the wooden drainage ditch bridge in the 700 area, the wooden deck and canopy at Bldg 326, the ice skate changing hut by bldg 970, the USAG HQ sign at bldg 970, the wooden sign structures at DTA as required including, staining/preserving to prevent deterioration. Wood decks (also masonry patios) and privacy fencing associated to a specific set of family housing quarters is usually the responsibility of the resident. The Contractor shall repair safety hazards on decks, patios and privacy fences located in family housing areas if the resident moves and did not accomplish the work or when requested by the COFR, also 2.2.20.7.

o. Maintain, repair, replace, and install structural screw jacks and turnbuckles.

2.4.2.7 **ROOFING** The Contractor shall repair/replace all roofing on buildings and structures to maintain a dry, watertight and safe condition. Types of roofing include, but are not limited to: metal roofs, asphalt and slate shingled roofs, asphalt flat roofs, tar and gravel roofs and other built-up roofs (BUR). Contractor shall develop and execute an inspection and maintenance program. Maintenance and Repair of roofs shall be accomplished IAW the American Society for Testing and Materials (ASTM), National Roofing Contractors Association (NRCA), Single-Ply Roofing Institute (SPRI), Sheet Metal & Air Conditioning Contractor’s National Association, Inc (SMACNA), Underwriters Laboratories (UL), Factory Mutual Engineering and Research (FM), Manufacturer’s warranty stipulation of roofs under warranty and other applicable industry standards. Contractor shall maintain permanent records of inspection and maintenance for each building.

2.4.2.7.1 Contractor shall make temporary repairs to roofing during periods of inclement weather. These repairs shall be of sufficient durability to preclude leakage until permanent repairs are made.

2.4.2.7.2 The Contractor shall remove snow, ice and water accumulation on roofs before the structure of the building is damaged.

2.4.2.7.3 Roofing responsibilities shall also cover the full range of roofing activities such as the following:

a. Perform general roof repairs on damaged or deteriorated roofing.

b. Solder, repair and/or replace damaged/deteriorated flashing, leaders and gutters on roof.

c. Fabricate, install, maintain and repair roof jacks, vents and weatherproofing.

d. Provide temporary coverings such as tarps to prevent damage to the buildings.

e. Maintain, repair and replace induction systems as required.

f. Inspect roof drains and gutters, remove debris and vegetation as needed to prevent water accumulation on roofs and in other components.

g. The Contractor shall inspect flats roofs two times per year,(early spring and fall) and identify problems and make repairs. Inspect other roofs at least annually problem areas shall be re-inspected as needed to prevent recurring problems until the roofing deficiencies are corrected by the Contractor.

h. The Contractor shall provide recommendations to the COFR for repair or replacement of roofs.

2.4.2.7.4 **ROOFING SYSTEMS STRUCTURAL INSPECTIONS:** The Contractor shall inspect the roofing systems (trusses, roof framing, roof covering and associated structural components) The inspections shall be conducted by a structural engineer to identify signs of failing or failed structural members. The Contractor shall determine any corrective action needed to correct any deficiencies. The Contractor shall provide a written report of the inspections to the COFR identifying problems and providing recommendations for corrective actions by 30 November of the

required calendar year. Roofing systems shall also be inspected after severe and unusual seismic activity or weather conditions and after installation of any roof mounted equipment by the Contractor and other contractors. The Appendix contains a schedule of inspections for facilities to be inspected under normal conditions.

2.4.2.8 **MISCELLANEOUS CARPENTRY WORK.** The Contractor shall perform miscellaneous carpentry work as follows:

a. Fabricating, installing, modifying, maintaining, repairing and painting built-in handrails, shelving, nameplates and holders, mailboxes, signs, picnic tables, plaques, or benches.

b. Reserved

c. Repair, replace, adjust and level foundation jacks, turnbuckles and tension rods.

d. Repair, replace adjust and modify facility structural systems such as columns, rafters, beams, foundations, trusses, joists, purlins, studs, etc. The Contractor shall immediately notify the COFR of any structural problems with facilities.

2.4.3 **CONCRETE AND MASONRY:** The Contractor shall inspect, install, modify, maintain, repair and replace buildings, structures and appurtenances, involving masonry including stonework, brick, concrete, block, clay tile, concrete or other masonry items including masonry in boilers. Examples of this work are as follows:

a. Install, modify, maintain and repair all foundations, basement walls, stairs and slabs to keep them structurally sound and free of leaks. Inspect buildings and structures for unusual cracking and settling and annotate these conditions on the work order for the DPW office.

b. Inspect, maintain and repair all chimneys, flues, fireplaces and interior or exterior brick walls and appurtenances. For the family housing fireplace chimneys in the 200/400 areas, complete inspections, cleaning and any repair work by the end of October. Also see 2.7.7.n.

c. Maintain and repair all masonry ceilings and walls. This work shall include patching or replacing broken or cracked areas to include feathering to match existing surface textures. Touch-up painting of the affected areas shall be accomplished using a matching paint.

d. Cut, shape and lay bricks, blocks and stone.

e. Pour and finish concrete including placing reinforcements, rebar and other imbedded items.

f. Repair cracks and surface imperfections in concrete steps and porches.

g. Repair cracks, breaks, damaged areas and imperfections on interior and exterior of pool areas.

2.4.4 **PAINTING AND PRESERVATION**: Painting and preservation work for all interior and exterior surfaces of all buildings, structures, fencing and appurtenances, static display vehicles (tracked and wheeled) or monuments, hydrants, steam tunnels, paint booths and general supporting steel includes:
a. General and protective preparation and painting;
b. General and protective preparation and application of waterproofing and preservative materials as may be required;
c. Glazing;
d. Application of all decorative finishes such as stain, varnish, lacquer, shellac, trim, etc.; and
e. Painting of exterior facility signs and floor striping.
Repainting shall be accomplished when one of the following conditions exists: peeling, weather damage, deterioration, excessive mildew, corrosion, and eyesore, as directed by the COFR. The Contractor shall perform the tasks as a normal part of FE operations and the work is not considered New Work as defined in section “WORK LEVELS” of this PWS.

2.4.4.1 **PAINTING AND PRESERVATION STANDARDS**: The Contractor shall assure that all painting is in accordance with recognized commercial standard practice (e.g., wall preparation, the new paint completely covers and hides the old finish, is free of runs and drips, etc.). Paint shall closely match the color and texture of surrounding areas. The color of paint for entire walls or rooms will be selected by the COFR from samples furnished by the Contractor. Painting solely or primarily for purposes of decoration is not authorized. Paint and other finishes shall be applied in accordance with the manufacturer’s recommendations. All paints and finishes used shall last a minimum of three years under normal conditions. Kitchens, bathrooms and high use areas may require attention more frequently than normal areas, if COFR approved. The Contractor shall match the existing types of paints and colors whenever possible. The Contractor shall only use latex paints for interior areas, except for floor striping. The Contractor shall use Low VOC paint to reduce air emissions in the installation and the southeast area of the State. A hazardous level of vapors from floor striping, varnishing, etc. shall not be allowed to accumulate in any area. The Contractor shall prepare a painting and preservation operations and maintenance

plan, submit to COFR 60 days after contract award with annual updates thereafter by 15 March.

2.4.4.2 **STRUCTURES AND EQUIPMENT**: The Contractor shall perform the following services on structures and installed building equipment:

a. After painting has been completed, re-stencil all items with the same or updated identifying information that appeared on the items prior to painting unless otherwise authorized by the COFR.

b. Clean, lubricate and adjust all doors, windows and latches as required to provide smooth, trouble free operation.

c. Inspect equipment for leaks and correct all deficiencies.

d. Remove signs prior to painting structures, display vehicles, or equipment. After painting has been completed, re-install the signs. When a sign is no longer readable, damaged or is obsolete, a new sign of the same type and size as the previous sign (e.g. markings, warning signs, facility/room number, etc.) shall be installed.

2.4.5 **SIGNS AND MARKINGS**: Also see 2.14.2.1. The Contractor shall plan, layout, construct, erect, paint, touch-up, replace and/or install the following:

a. Interior signs and markings including building signs, room numbers, entrance/exit gate signs, signs for installed equipment, decorations, warning signs and markings, posters, and reflective signs.

b. Exterior signs place on buildings, structures, appurtenances, and street/road names. When requested by the COFR, signs and street names shall be updated to reflect changes in the content of the text of the sign or names.

The contractor shall determine the type of paint best suited for the job; mix colors for consistency needed, paint/letter free-hand, and embellish signs with symbols and insignia. The Contractor shall perform the Signs and Markings tasks as a normal part of FE operations and the work is not considered New Work as defined in section “WORK LEVELS” of this PWS, unless directly associated with a construction project or other new work.

2.5 ELECTRICAL SYSTEMS

2.5.0 **GENERAL:** The Contractor shall develop and perform the total maintenance program for all the electrical systems. The Contractor shall operate, maintain, repair, test and service all electrical equipment and systems. The Contractor shall test equipment using calibrated testing devices. The Contractor shall perform Preventive and Recurring Maintenance on electrical systems and equipment, transmission and distribution systems, and appurtenances, including street, flood, security, fire, obstruction, and parking lighting and tower/poles. The Contractor shall maintain records of maintenance, repair, and testing performed on all electrical systems and components. The Contractor shall ensure continuous electrical power availability to Detroit Arsenal. Upon completion of any maintenance work, the electrical system and its components shall be cleaned and shall have no missing or damaged parts. The Contractor shall assure that all systems and equipment are safe and operating efficiently. Work performance shall comply with the National Electric Code (NEC), National Electric Safety Code (NESC), Unified Facilities Criteria (UFC) 3-600-02, National Fire Protection Association Code (NFPA), OSHA, environmental laws and directives, industry standards, manufacturers instructions and specifications, and applicable State and Federal standards and codes, technical manuals, pamphlets and guide specs for electrical system operations and maintenance.

2.5.1 **CONTRACTOR SUPPORT:** The Contractor shall de-energize existing substations, panels, distribution lines, and circuits that are energized for servicing and inspection for Contractor's own operations, for other contractors, and for Government inspections. The Contractor shall assist with all switching operations with the Utility Provider and install and remove jumpers on lines to de-energize the lines at each station. Stations shall be worked in a sequence to be coordinated with the COFR. The Contractor shall re-energize once work has been completed. Essential outage tests shall be coordinated with operating tenants. All electrical shutdowns must receive the prior approval of the COFR. The Contractor shall disconnect power supply to workstations, Equipment in Place (EIP), Industrial Plant Equipment (IPE) and Other Plant Equipment (OPE). The Contractor shall reconnect power supply to the workstations once work has been completed. The Contractor shall coordinate electrical work with the 127th Wings when the work affects their portion of the electrical system.

a. Notwithstanding 2.3.a & 2.7.a, in the event of a power failure, Contractor shall shut down all electrical power to heating, refrigeration equipment and related machinery in the Commissary. Contractor shall coordinate restoration of power with Commissary personnel.

2.5.2 **TYPES OF SYSTEMS AND EQUIPMENT:** Examples of systems and equipment include:
a. Lighting systems of various types and intensities.

b. Motors and controls of various voltages and frequencies.
c. Solid state temperature and motor controls.
d. Panel boards, motor control centers, and low/high voltage switch gear.
e. Motor generators and controls.
f. Wiring systems of various amperages, phases, and voltages.
g. Solid state and electric/mechanical controls.
h. AC/DC motors, generators, and synchronous motors.
i. Batteries and battery charging equipment.
j. Emergency generators.
k. Electronic air cleaners (smoke eaters).
l. High voltage switch gear and motor starters.
m. Fire detection/alarm systems, fire control systems, and alarm panels.
n. Emergency lighting devices.
o. Main primary switch gear.
p. Intrusion detection/security systems, panels, alarms, and duress alarms systems.
q. Video Surveillance/CCTV systems.
r. Distributions systems, primary and secondary lines, switches, transformers and poles.
s. Electronic signs and score boards
t. Lightning protection systems.

2.5.3 **ELECTRICAL DISTRIBUTION SYSTEMS** The Contractor shall provide for all operations, maintenance, inspection, installation, repair, modification, and/or replacement to: (1) Overhead system to include secondary and building service entrance power and control systems. Maintenance and repair shall include the inspection, repair, and replacement of poles, insulators, conductors, cross arms, lighting arresters, fuses, capacitor banks, bolts, braces, cutouts, grounds, guys, anchors, conduits, distribution transformers, primary oil and air break switches, service drops, service entrances and service equipment; (2) Underground distribution primary/secondary system. Maintenance and repair shall include the repair and replacement of cables, splices, duct banks, lines, manholes, and conduits as required to maintain electric service to all Government-owned and leased facilities. Contractor shall coordinate with any necessary tenant Activities (e.g. building occupants, residents, 127th Wing and Utility Provider) in the performance of above efforts. The Contractor's work shall include high voltage splice and repair of cable when applicable.

2.5.4 **EXTERIOR ELECTRICAL**. The Contractor shall operate, maintain, inspect, test, install, repair, modify, and/or replace all exterior lighting fixtures, accessories, switches, conduits, brackets, utility poles, guy wires, connectors, taps, cross arms, service drops and system components and other applicable items and components. Inspect each distribution feeder associated with tripped breaker or recloser for visual defects such as broken poles, insulators, cross arms, or conductors. All defects shall

be repaired prior to re-energizing a circuit. Operations, including reclosing of circuit breakers, shall be accomplished in such a manner as to prevent single phasing of electric motors and damage to standby generator units, computer equipment, etc.

2.5.5 **INTERIOR ELECTRICAL.** The Contractor shall provide total maintenance program of all interior electrical system components. The Contractor shall maintain and repair electric controls such as thermostats, camper operators, valve operators and pressure switches. The Contractor shall calibrate, align, and test for electrical defects; repair or replace parts on electric control equipment which governs operation of gas/oil-fired heating, air conditioning, refrigeration, air handling, and ventilation systems. The Contractor shall check high and low voltage control of all steam, gas, and hot water boiler controls, regulators, low water pressure cut-off switches, and related safety devices and make any necessary repairs to ensure proper functioning.

2.5.5.1 Interior electrical requirements include a total maintenance, repair, replacement and inspection program of all electrical system components. Interior responsibilities shall include the following:

a. Maintain, repair and install electrical wiring systems and associated appurtenances, (e.g. switches, distribution panels, light sockets and outlet boxes).

b. Measure, cut, thread, bend, assemble and install conduits; insert splice and connect wires to fixtures, outlets, switches, receptacles and power sources.

c. Work from blueprints, wiring diagrams and/or sketches.

d. Locate, diagnose, and repair problems occurring in power circuits, controls, switches, rheostats, thermostats, flow meters and stop controls.

e. Test circuits and equipment. Identify circuits at the panel in all the facilities.

f. Install, maintain, and repair electrical fixtures, tools and appliances.

g. Comply with maintenance schedules and work orders in performing services to include inspection of equipment, diagnosis of malfunctioning system(s) and repair as required.

h. Replace ballasts, and lighting fixtures.

i. Inspect, test, clean, repair, replace and adjust electrical buzzer and bell circuits, light sockets, lighting fixtures, fans, switches, emergency lighting, alarms, clocks, thermostats,

electrical drills and grinders.

j. Re-lamp lighting systems USAG-S.

k. The fire department performs random spot checks on some of the fire alarm systems, smoke detectors and emergency lighting. The fire department will inform the Contractor of problems they find. Contractor shall be responsible for maintenance, repair and corrective action of the problems. The Contractor shall also inspect the systems for operation. The Contractor inspections shall serve as the primary inspections for identifing problems.

2.5.6 **SUBSTATION, SWITCH STATION AND EQUIPMENT**. The Contractor shall perform complete inspections and repairs on outdoor unit type and conventional substation and switchstations in strict conformance to the manufacturer's maintenance instructions and the appropriate NEC Codes. All electrical equipment in the substation and switchstations shall be inspected whether or not specifically listed in this PWS. Inspection and maintenance performed shall ensure that the substation and switchstations are kept in a clean and orderly condition. Contractor shall service and calibrate the substation and switchstations annually or more frequently as may be required to ensure proper functioning of the equipment and meet NEC standards.

2.5.7 **STANDBY GENERATORS AND ALTERNATE POWER SOURCES**

2.5.7.1 **STANDBY GENERATORS**. The Contractor shall perform monthly preventive maintenance (PM) on standby power/emergency generators, related components, and on other units providing standby electrical service. Service shall include maintaining the charging systems and checking the batteries, switches, and fuel tank levels. PM shall be exercised as a prerequisite to test runs of generator systems. The Contractor shall make repairs as required and maintain generators per manufacturer’s recommendation. The Contractor shall exercise the generators monthly for at least 30 minutes under the actual load supported by the generator during emergency conditions. Visual inspection of equipment shall be done on a bi-weekly basis. In the event the generators need to be energized, the Contractor shall provide an Emergency Priority 1 response to ensure the generators are working and delivering the back-up power to the building. Maintain the back-up power systems until commercial power can be restored and return the generator and back-up electrical system to stand-by.

2.5.7.2 **ALTERNATE POWER SOURCE**. The Contractor shall provide generators as alternate power sources for situations including, but not limited to: temporary power outages caused by servicing

and inspection of circuits and equipment, equipment malfunctions, short circuits, and open circuits; special events requiring power; in support of outside contractor operations that may interrupt power; and as may be requested by the COFR. The hook-up, inspection, fueling, adjustment, and transportation are the Contractor's responsibility. The Contractor shall ensure that round-the-clock, uninterrupted power service is provided as a part of normal operations. Work performed to support other contractors shall be classified per the definitions of maintenance work and repair work. Work performed to support other contractors outside of normal access hours shall be classified as Repairs work.

2.5.7.3 **UNINTERRUPTABLE POWER SOURCES (UPS).** The UPS systems for Detroit Arsenal are of two types, large-scale mainframe support systems (e.g., the Bldg. 230 NICP computer Room UPS system) and small-scale computer support systems (e.g., solid-state computer and office automation systems exclusive of "plug-in" hand receipt equipment). The Contractor shall maintain detailed record files and logs of the surveillance and maintenance support the Contractor performs. The Contractor shall make sure spare parts are readily available or maintain an on-hand inventory to ensure constant operation on these critical systems. The Contractor shall immediately notify the COFR of any interruption of service that ceases operation of a large-scale mainframe computer system. The preventive maintenance checklist below shall be the minimum acceptable preventive maintenance performed by the contractor. The Contractor shall perform a monthly preventive maintenance and bi-weekly visual inspections on the systems.

For the LARGE SCALE UPS SYSTEMS, The Contractor shall:

1. Operate, inspect, modify, maintain and repair the UPS units and associated power systems to include the area ventilation systems.

2. Maintain a log of all vital functions, services, malfunctions, repairs, parts used, equipment brought on line, etc. The log will contain dates and times of all actions (pertaining to the operation and condition of the power systems serving critical loads), all abnormal conditions (pertaining to the sub-station, UPS room, and battery room) that may affect the efficient operation of the UPS. The Contractor shall take corrective action as necessary.

3. Check and maintain the batteries IAW manufacturer's recommendations.

4. Monitor the printer tapes and log the status of the

units and the presence of any non-shutdown alarm conditions three (3) times (within one hour of 0800, 1400, and 2100 hours) Mondays through Fridays and take corrective action on an emergency basis. Respond to shutdown alarm conditions and take necessary corrective actions immediately.

5. Operate, inspect, maintain, and repair all UPS monitors, printers, and system status alarm indicators as necessary to operate the system, to include maintaining printer paper in all installed system printers (local and remote).

6. Check all filters monthly and replace as necessary or as a minimum IAW manufacturer's recommendations.

7. Check and record ambient air temperature and humidity of the UPS room daily.

8. Ensure that the UPS room and battery rooms are Kept clean.

For the SMALL SCALE UPS SYSTEMS, The Contractor shall:

1. Inspect, monitor, adjust, maintain, and repair all small-scale UPS systems.

2. Inspection logs shall be maintained including, but not limited to: date inspected, maintenance actions performed, parts used, and the times when the equipment is off line.

3. Batteries will be inspected and maintained IAW manufacturer's requirement.

4. Record and file printer tapes and replace paper when necessary.

5. Check all filters and replace as necessary IAW manufacturer's specs.

2.5.8 **FIRE ALARMS, INTRUSION DETECTION SYSTEMS (IDS), AND OTHER ALARM SYSTEMS**. The Contractor shall perform all necessary operations, troubleshoot, calibrate and test, maintain, repair, or replace all intrusion detection devices, fire, duress and other alarm systems and closed circuit television (CCTV) systems to include, but not limited to the following: maintain and repair power and control wiring, aerial signal cables, raceways, risers, and power controls. The Contractor shall ensure that an alarm will sound upon violation of alarm system. The Contractor shall immediately notify the fire, security and COFR of any problems or inspections that may adversely impact the operation of fire/security alarm systems. Notify fire and security departments prior to starting work on the systems.

2.5.8.1 The Contractor shall also perform work on the following:

a. Servicing power and control wiring, aerial signal cables, raceways, risers, and power controls.

b. Test all batteries under load to determine expected useful life remaining in the cell. Recharge or replace batteries as required.

c. Install wiring consisting of insulated conductors, coaxial cables, switches, detectors, controls, and other equipment.

d. Conduct visual and technical inspection of all alarm systems, test, inspect, maintain, repair, replace, and install vents, valves, switches, detectors, sensors, cameras and systems, motor controls, motors, TV monitors, video recording equipment, transmitters, alarm panels, warning lights, bells, sirens, microphones, and speakers.

2.5.8.2 Perform regular inspections, testing and maintenance of each system. All operating units shall be checked and all adjustments performed to ensure that an alarm will sound upon violation of alarm system. A log shall be maintained by the Contractor detailing actions taken, parts used, and system on-off line times.

2.5.9 **GROUNDING** The Contractor shall test, inspect, install, maintain and repair ground control units, audible alarms, monitor cabinets, etc. The Contractor shall perform monthly PM and bi-weekly visual inspections of grounds and grounding systems. Measure resistance annually in addition to visual inspections. Resistance should be measured at all branch connection points, grounding rods, mats and networks, gateposts, between gates, flexible ground connections, between rods and at all bonds. Defective components and problems causing the overheating or corrosion of grounds and connections shall be corrected. Perform and record ground resistance tests on substation grounds.

2.5.10 RESERVED

2.5.11 **ELECTRIC MOTORS AND DYNAMOMETER SYSTEMS (Detroit Arsenal)** The Contractor shall inspect, test, install, maintain, and repair and replace electric motors and dynamometer systems.

2.5.12 **ELECTRIC MOTORS**. The Contractor shall perform the following:

a. Inspect and replace bearings.

b. Clean, oil, grease and paint motors.

c. If necessary and economically feasible, rewind and apply insulating paint to windings.

d. Replace defective capacitors.

e. Inspect and maintain all controls and components associated with motor controls and circuits.

f. Replace defective electric motors.

g. Fabricate sleeve bearings, washers, rings, bushings, and other parts related to electric motors where economically feasible.

h. Inspect the 3-phase motors in the following facilities at USAG-S to ensure proper shut down and start up when electrical outages, brown-outs or loss of phases occur.
Buildings:310,328,410,570,572,700,780,826,835,970,1060 & 2250

2.5.13 **TRANSFORMERS**. The Contractor shall repair, replace maintain, test, inspect, install and perform services on transformers to include:

a. Check for leaks above and below oil levels. Check line fuses and cut-off. If transformers containing PCBs are found, take immediate corrective action to include removal and disposal of contaminated material IAW applicable environmental, safety, and health regulations.

b. Check level and condition of insulating oil for moisture, carbonization, dirt, sludge, color, and dielectric strength. Oil shall be replaced or filtered. Dispose of contaminated oil including PCB contaminated oil IAW environmental, safety and health regulations.

c. Inspect, maintain and test transformers as required to ensure proper functioning of the transformers.

d. Inspect each transformer for leaks; record leaks found or not found and take actions to correct leaks. See Section 3.10.12 for more on PCBs.

e. Repair or replace transformer on the day a leak is observed. Replace failed transformers.

f. Report leaks from transformers posing a hazard to the environment to the DPW the same day the leak is observed.

g. Inspect, test and replace equipment grounds, insulators, bushings, air cooling equipment, windings, grounds, vacuum relief valves and gauges.

2.5.14 **MISCELLANEOUS ELECTRICAL SERVICES**.

2.5.14.1 The Contractor shall inspect, test, install, maintain, repair and replace a wide variety of electrical fixtures, tools, and appliances to include: thermostats, rental boilers, meters, electric door locks and releases, automatic door openers, fans, ceiling fans, switches, ballasts, clocks, electric/gas ranges, range hoods, electric/gas heaters, garbage disposal units, microwave ovens, electric coffee makers, refrigerators, ovens, dishwashers, dryers, ballasts, emergency lights and signs, TV antennas, garage door openers, lamps, toasters, food service equipment, space heaters, drills, saws, and grinders.

a. Perform repairs on electrical equipment and machines, replacing gears, bearings, bushings, cords, and plugs, as required.

b. The Contractor shall install, maintain, repair and remove Christmas lighting systems and equipment at the Base Chapel.

c. The Contractor shall hook up electrical circuits for emergency back up temporary systems such as rental heating systems and other equipment needed during utility shutdowns.

d. USAG-S The Contractor shall relamp lighting systems for all facilities. Use information provided by custodial personnel and other means to determine outage locations and set up a PM system for replacement. Insure this work is performed in the most efficient and economical method.

e. Inspect and correct lightning arresters and insulators for fractures and debris deposit which may cause a flashover.

f. Check ground connections and measure ground. Test for accidental grounds on equipment.

g. Clean equipment with CFC free cleaner.

h. Check all electric panels and label circuits.

i. Install GFCIs where called for by code.

j. The Contractor shall repair automatic fire control systems, electronic control systems of clocks, bells, fire alarms, and related controls.

k. The Contractor shall align and test for electrical defects; repair or replace parts on electric control equipment, which governs the operation of gas, air conditioning, refrigeration, air handling, and ventilation systems.

l. The Contractor shall maintain and repair electric controls such as thermostats, damper operators, valve operators, and

pressure switches.

m. The Contractor shall check high and low voltage control of all steam, gas, and hot water boiler controls, and regulators, low water pressure cut-off switches, and related safety devices for proper functioning.

n. The Contractor shall check gasoline refueling pump stations for proper grounding of equipment.

2.6 ENVIRONMENTAL PROTECTION (DETROIT ARSENAL)

2.6.1. GENERAL

This PWS identifies contractor actions, both to support the Detroit Arsenal environmental program and assure their operations are in compliance with all federal (including Executive Orders), state, and local (county/city) laws, regulations, guidance and policies. The over all purpose of this PWS to prevent pollution of the air, water, and land, protect human health, conserve the Detroit Arsenal's and surrounding communities natural and cultural resources and assure compliance with laws. While the contractor is an independent contractor and not an agent of the Detroit Arsenal, all the contractors actions will reflect on the Detroit Arsenal and as such the contractor is required to follow all Department of Defense, Department of Army and installation policy, plans, directives and regulations. The contractor is an integral part of the Detroit Arsenal's environmental protection and pollution prevention program. The contractor shall assure that all their actions shall comply with all laws, reduce pollution at the source and meet the environmental goals and standards set by the Department of Defense and the Department of the Army. In addition the contractor's operations shall be subject to inspections from all regulators and any Department of Defense Activity. For the purpose of this PWS, pollution is defined as the introduction of and/or the presence of chemical, physical, or biological elements that adversely affect human health or welfare or unfavorably alter biological balances of any all species. The contractor must also insure that none of their actions shall endanger the health and safety of any individual on the Detroit Arsenal. The contractor must maintain environmental records during contract performance. All records shall be turned over to the government at the end of contract. The government may inspect the records at any time. The records may be subject to inspections by all regulators and headquarters activities of the Detroit Arsenal.

2.6.2 ENVIRONMENTAL PROTECTION PLAN

The contractor shall prepare an environmental protection plan.

The plan shall detail the actions which the Contractor shall take to comply with all applicable Federal, State, and local laws and regulations concerning environmental protection and pollution control and abatement, as well as the additional specific requirements of this contract. The Contractor shall refer to the applicable existing environmental documentation to insure that the natural, historic, and cultural resources specific or unique to any of their actions are protected. The plan shall include, at a minimum, a section on each of the paragraphs in the environmental protection section of this PWS. They shall submit a draft plan within 45 calendar days of contract award. The Government shall have 30 calendar days to review. If the COFR rejects the contractor's plan, the contractor shall continue working with the Government until a plan is acceptable. The Contractor shall submit a final plan within 15 calendar days. The Government reserves the right to require the Contractor to make changes in the Environmental Protection Plan or operations if the Contracting Officer determines that environmental protection requirements are not being met.

2.6.3 CONTRACTOR NON-COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

The Army's goal is to have no enforcement actions at any installation. The contractor's actions and support are absolutely essential to achieve this goal at the Detroit Arsenal. In the event the Detroit Arsenal is issued an enforcement action, the Contractor shall be liable for the cost of all fines and penalties resulting from the violation of any laws due to their actions. Also the contractor shall be responsible to reimburse the Government for all expenses incurred because of the receipt of any enforcement actions. The contractor is responsible to insure that all subcontractors adhere to all environmental requirements.

2.6.4 AIR MANAGEMENT

The purpose of the Detroit Arsenal's Air Management program is two fold.

- Manage outdoor air emissions to protect human health and the environment and comply with all Federal and local air quality control laws and regulations.
- Manage indoor air quality at the Detroit Arsenal to protect human health.

2.6.4.1 AIR EMISSIONS

a. The Detroit Arsenal's air emissions are restricted. The Detroit Arsenal is currently located in an Attainment Area as defined by the EPA. The EPA has the authority to change this at any time, based on emissions in the SE Michigan area.

b. Ozone Actions Alerts are forecast by the Clean Air Coalition's meteorology_team to a number of factors that

include meteorological conditions like temperature, wind speed/direction, cloud cover and ultraviolet radiation. The team also considers the likelihood of ozone transport from other areas and expected emissions from regional sources. While there are no legally binding requirements to reduce emissions that could reduce Ozone in the atmosphere, the contractor should be cognizant of the actions they can take to reduce emissions. Ozone Action Alerts address the importance of preventing the formation of ground-level ozone and protecting public health.

2.6.4.2 PERMIT REQUIREMENTS

a. Monitor air pollutants

b. Submit monthly reports IAW the DTA Air Management Plan 5 work days after the end of the month. The government will review for completeness and accept within 10 calendar days.

c. Permit to install. All new air emission sources (vent hoods, boilers, stationary engines, paint booths, etc) that do not qualify for an exemption, must have a permit to install and/or construction waiver. While the Government must submit the permit, the contractor is responsible to complete the permit application and submit it to the DTA Environmental Management Office. The Environmental Management Office has the final decision on whether a source is exempt. The permit to install could take up to 6 months to receive approval from the State of Michigan.

2.6.4.3 OZONE DEPLETING CHEMICALS (ODC)

a. It is Army policy to minimize the procurement, use and emissions of ODC’s to the greatest extent possible. Installation of new equipment using Class I ODC’s is prohibited. Only equipment using refrigerants listed by the EPA Strategic New Alternatives Program (SNAP) are acceptable. It should be noted, however, that HCFC 22 and HCFC 123 shall be phased out in 2020 and 2030 respectively. Equipment must be labeled with type of chemical used and date installed. As built drawings shall include location, installation date and type of refrigerant.

b. The use of Class I or II ODC’s are not by themselves damaging to the environment provided the refrigerant does not leak during operation and is recovered upon retirement of the equipment. All personnel maintaining, repairing or replacing ODCs must be licensed and their equipment must be certified. Licenses and equipment certification must be retained on site and copy submitted to the Environmental Management Office (EMO) within 30 calendar days of the start of work. New worker licenses or new equipment certifications must be provided to the EMO before work on any ODC equipment can be conducted. Updates of certifications and licenses must be submitted to the EMO within 10 calendar days of receipt.

c. DoD has a program to retain certain Class I ODC's for strategic reuse. Turn all recovered and excess ODC's into the HAZMART for disposal.

2.6.4.4 INDOOR AIR QUALITY

Maintain a log of **ALL** indoor air quality complaints. The required information to be collected for complaints is IAW EPA IAQ standards. An example form is at Figure A of Appendix 13. The Contractor may use this form or create a form as long as the same information is collected. The contractor must maintain all forms and turn over to the Government at the end of the contract. The Contractor shall investigate all calls as an URGENT action and recommend corrective action to the Contracting Officer Functional Representative (COFR) within 5 workdays of a call. The Government shall review and approve all recommended corrective actions within 5 workdays. If the COFR rejects the contractors recommended corrective action, the contractor shall continue working with the Government until resolution. Fifteen calendar days after the end of each quarter, evaluate all air quality calls, determine if there are any systemic problems and recommend corrective action for the systemic problems. The COFR shall review and approve corrective actions within 15 calendar days. If the COFR rejects the contractors recommended corrective action, the contractor shall continue working with the Government until resolution.

2.6.4.5. MOLD

a. The key to the control of mold is moisture control. Since all leaks can potentially cause mold, which in turn can affect the health and welfare of our employees, all leaks, flooding, identification of damp or wet spots should be considered a health problem.

b. Prevention requirements

1). Conduct inspection of all plumbing at least twice a year

2). Fix leaks IAW Work Management priorities.

3). Conduct both visual inspections and air monitoring to determine if mold has developed due to the leak. Use TG 278 Industrial Hygiene/Preventative Medicine Mold Assessment Guide.

c. The contractor shall initiate corrective action and notify the COFR within 5 work days of discovering mold.

2.6.4.6. SCHEDULING

Provide a schedule of all ODC, air quality and mold activities (inspections, remediation, maintenance, etc) NLT than Thursday of the week preceding the work to the COFR. All changes to the work schedule must be sent to the COFR prior to the start of work, including emergencies. If an emergency happens after duty hours, notify the COFR at the start of the next workday.

2.6.4.7 AIR MANAGEMENT COFR
The COFR is the EMO Air Management Manager. In the absence of the Air Management Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.4.8. TRAINING REQUIREMENTS.
a. The Detroit Air manager can provide instruction on Air Permit Requirements and Permit to Install.
b. The contractor shall have to ensure that all employees doing ODC maintenance are properly trained.

2.6.5. ASBESTOS MANAGEMENT
The purpose of the Detroit Arsenal's asbestos management program is to prevent human exposure to asbestos hazards on the arsenal. The contractor shall be responsible to manage the Detroit Arsenal Asbestos program.

2.6.5.1 ASBESTOS INSPECTION
a. Complete the asbestos inspection and submit a draft within 180 calendar days of the start of work IAW Michigan Rule PA 440 and submit to the COFR. The government has 30 calendar days to review the inspection. The contractor will have 15 days to make corrections and submit the final inspection report to the COFR.

b. Prior to the start of the inspection, the contractor shall meet with the COFR to review the contractors inspection plan, discuss areas of concern within the installation, discuss the need to conduct air sampling in all areas where asbestos is failing and the format for the final inspection report.

2.6.5.2 OPERATION AND MAINTENANCE PLAN
Contractor shall develop and submit an asbestos Operation and Maintenance (O&M) plan within 45 calendar days of contract award using the currant approved Detroit Arsenal Asbestos Management Plan.

2.6.5.3 PERIODIC SURVEILLANCE
a. The contractor shall conduct periodic surveillance IAW all current Federal and State Laws and the Asbestos Management Plan. These shall be conducted every 6 months. This shall start 6 months after the date of the final inspection report.
b. Any changes observed during the periodic surveillance shall be reflected in the Asbestos Management Plan and the O & M plan. The contractor shall update their O&M plan and submit a copy to the COFR 15 calendar days after completion of the periodic surveillance.

2.6.5.4 WORK REVIEW

The contractor shall review all work orders, IJOs, SOOs and service orders to determine if asbestos could be encountered during execution of the work. This will be done whether the contractor will do the work or another entity will do the work.

a. Determine if there is a current work order that requires asbestos remediation. If there is a work order, make a recommendation to the COFR of the best way to meet both requirements.

b. Insure that the estimate includes all required asbestos work and replacement of asbestos with non-asbestos material.

c. If the work order is forwarded to the DPW for work, note the fact that asbestos may be encountered and identify any asbestos work that is anticipated in the area of work.

2.6.5.5 ASBESTOS MAINTENANCE AND REPAIR

Contractor shall maintain all asbestos in such a manner that it does not create a human health hazardous or pollute the environment. They shall remediate all failing asbestos. For the purpose of this contract, remediation of failing asbestos is considered maintenance. This shall be accomplished IAW with all Federal and State laws. All removed asbestos shall be properly packaged, labeled and turned into the HAZMART for disposal IAW with the HAZMART Users Pamphlet.

a. The contractor shall update and submit an electronic version of facility drawings to reflect the removal of asbestos within 15 calendar days upon removal or repair of asbestos or receipt of as-built drawings from other contractors.

b. The contractor shall provide an updated O&M plan after completion of the asbestos work

c. If friable asbestos has been found, conduct air monitoring to determine if asbestos is airborne. If it is above the Permissible Exposure Limit (PEL), immediately isolate the area and begin the abatement process.

d. Investigate all complaints of failing asbestos on the Detroit Arsenal.

e. It should noted that it is EPA and Army policy to manage asbestos in place whenever possible.

f. In order to control the possibility of uncontrolled asbestos releases, the contractor shall complete an asbestos permit entry form (Figure B of Appendix 13). The contractor must submit a completed form to the COFR 3 working days prior to the start of work.

g. The contractor shall submit all state notifications to the COFR prior to submission to the State. The COFR shall have 3 working days to review. If approved, the contractor shall submit the form to the Stae.

2.6.5.6 SCHEDULING

Provide a schedule of all asbestos activities NLT than Thursday

of the week preceding the work to the COFR. All changes to the work schedule must be sent to the COFR prior to the start of work, including emergencies. If an emergency happens after duty hours, notify the COFR at the start of the next workday.

2.6.5.7 EMERGENCY ACTIONS

If during the execution of any work order asbestos containing material is disturbed or dislodged the contractor shall take the following actions:

a. Restrict entry into the area and post signs to prevent entry into the area by persons other than those necessary to perform the response action.

b. Shut off or temporarily modify the air handling system to prevent the distribution of fibers to other areas in the building.

c. Conduct clean up IAW all Federal and State laws.

2.6.5.8 ASBESTOS MANAGEMENT BOARD

Contractor shall participate on the Detroit Arsenal Asbestos Management Board.

2.6.5.9 ASSISTANCE TO OTHER CONTRACTORS

Contractor shall assist other contractors in assessing whether asbestos is present in their work area and the condition of the asbestos. This may include:

a. Taking samples to confirm if asbestos is present

b. Taking air samples to determine if asbestos is present in the air and provide the results to the contractor as a baseline.

2.6.5.10 CONTRACTOR ACTIONS DURING CONDUCT OF THE CONTRACT

a. Asbestos is present on the Detroit Arsenal. All contractor employees that work in areas that may contain asbestos shall be properly trained to assure neither their employees nor anyone on the Detroit Arsenal is exposed to asbestos fibers during contract operations. The contractor must insure that all subcontractors are properly trained and they have records of the training.

b. In case there a accidental disturbance of asbestos, the contractor must have a competent person, as defined by the EPA, on site at all times work is being done in areas with Asbestos Containing Material (ACM) or Presumed Asbestos Containing Material (PACM).

c. The contractor must be licensed by the state of Michigan.

2.6.5.11 END OF CONTRACT INSPECTION

Three months prior to the end of the fourth option of the contract, the contractor shall complete and have accepted an inspection of the entire facility and a new Asbestos Management

plan. The Government shall have 30 days to review the draft. If the COFR rejects the contractors plan, the contractor shall continue working with the Government until resolution. After receipt of Government Approval, the contractor shall 15 days to submit a final plan.

2.6.5.12 COFR
The COFR is the EMO Asbestos Manager. In the absence of the Asbestos Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.5.13. TRAINING REQUIREMENTS.
The type of course an individual should attend is based on the functions they do.

a. The COFR can provide instruction on the Asbestos Management Plan.
b. Management Planner
c. Building Inspector
d. Project Designer
e. Contractor/Supervisor
f. Abatement Worker
g. Asbestos Awareness

2.6.6 CULTURAL RESOURCES
The purpose of the Detroit Arsenal Cultural Resources Management is to assure all actions on the Detroit Arsenal are in compliance with the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act (AIFRA), Executive Order 13007, Native American Graves Protection and Repatriation Act (NAGPRA), Archeological Resources Protection Act (ARPA), and 36 CFR 79.

2.6.6.1 CULTURAL RESOURCE MANAGEMENT PLAN
The Detroit Arsenal has a Cultural Resource Management Plan. The contractor must understand the requirements of this plan and the impact on their operations. The COFR has an electronic copy of the plan.

2.6.6.2 NATIONAL HISTORICAL PRESERVATION ACT (NHPA)

a. The following buildings are eligible to be placed on the historical register and shall be considered historical:
Bldg. 212 Bldg. 7 Bldg. 8 Bldg. 200D

b. The following 19 buildings and structures shall meet the 50 year review requirement for historical eligibility during the contract.
Bldg. 200A Bldg. 200B Bldg. 200C Bldg. 201 Bldg. 203
Bldg. 205 Bldg. 208 Bldg. 213 Bldg. 214 Bldg. 219
Bldg. 222 Bldg. 223 Bldg. 226 Bldg. 252 Bldg. T202

Bldg. T209 Bldg. T216 Bldg. T224 Bldg. T225

c. The following monuments must be maintained IAW all historical preservation requirements:

MON02 – Howitzer, Heavy, Self-propelled, 8-inch (Bldg. 230)

MON05 – Reconnaissance Vehicle, High Mobility (Twister), 8x8, XM808 (Bldg. 200C)

MON07 – Tank, Combat, Heavy, Full Tracked, T30, 155mm Gun (Center/Service Road)

MON08 – Self-propelled 240mm Gun (9.5-inch) (Center/Service Road)

d. Until a final determination has been made on whether these buildings are eligible to be placed on the historical register, they shall be considered historical. The contractor shall confer with the Cultural Resource manager prior to performing any work on historical buildings or those that are eligible to be placed on the National Register.

e. All historical buildings and monuments must be maintained IAW National Park Service Standards for Rehabilitation of Historical Buildings.

2.6.6.3. AMERICAN INDIAN RELIGIOUS FREEDOM ACT (AIFRA)

There is no indication that Native American tribes that have a religious connection to the Detroit Arsenal property. However, if a Native American tribe expresses interest in the site, the Detroit Arsenal will have to contacted the tribe to determine if they have religious connection to this property. To date no tribe has indicated a religious tie to this area.

2.6.6.4. Executive Order 13007 (Access to Indian Sacred Sites)

No Native American Indian tribe has indicated that any of the Detroit Arsenal is sacred site. If during the performance of the contract, a Native American Tribe indicates a sacred site is on the installation, the contractor shall ensure that their operations do not adversely affect the site.

2.6.6.5. NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT (NAGPRA)

Upon discovery of human remains or evidence of human culture (pottery, arrowheads, etc), all work must stop at the physical location of the site. Allow no further disturbance of the discovery site and immediately notify both the Cultural Resources Manager (CRM), x45154 and the Federal Police Desk, x45564. Work is not allowed to proceed until cleared by both the CRM and Police.

2.6.6.6. ARCHEOLOGICAL RESOURCES PROTECTION ACT(ARPA)

There have been no archeological finds on the Detroit Arsenal or in the surrounding area. However, if the items are discovered

during the course of the contractor's performance, immediately contact the Detroit Arsenal Cultural Resource Management Officer and stop work until a determination can made concerning the discovered items.

2.6.6.7. CULTURAL RESOURCE COFR

The COFR is the EMO Cultural Resource Manager. In the absence of the Cultural Resource Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.6.8. TRAINING REQUIREMENTS

a. There are no specific training requirements associated with Cultural Resource Management.

b. The Detroit Arsenal Cultural Resource Management Manager can assist in providing awareness training for the contractors employees and subcontractors.

2.6.7. ENVIRONMENTAL MANAGEMENT SYSTEM

The purpose of the Environmental Management System (EMS) at the Detroit Arsenal is to:

1. Maintain environmental compliance with all laws.
2. Reduce pollution and use of natural resources.
3. Continuous improvement of all base operations to improve environmental performance
4. Consider environmental and health risks in all business decisions (see environmental review section).
5. The implementation of an EMS is one of the top three Department of Defense priorities.

2.6.7.1 IMPLEMENTATION

IAW Executive Order 13123, the Detroit Arsenal shall be implementing an EMS. The EMS shall be in place NLT 2005 and fully in compliance with all aspects of the system by 2009. Since the contractor's actions affect the Detroit Arsenal's EMS goals, they shall be required to support all the goals of the Detroit Arsenals EMS. They shall not be required to have their own EMS.

2.6.7.2 EMS COFR

The COFR is the EMO EMS Manager. In the absence of the EMS Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.7.3 TRAINING REQUIREMENTS.

a. There are no legally required training classes for the implementation of an Environmental Management System.

b. The Detroit Arsenal EMS Manager will provide awareness training for the contractors employees on the Detroit Arsenal's Environmental Management program.

2.6.8 ENVIRONMENTAL REVEIWS

The purpose of environmental reviews at the Detroit Arsenal are:

a. Ensure compliance with the National Environmental Policy Act.

b. Ensure all environmental requirements have been identified for all work performed by the contractor, e.g. service orders, IJOs, SOOs and work orders.

c. Ensure the contractor takes actions to minimize or mitigate any adverse environmental impacts during their performance of the contract.

2.6.8.1 POLICY

a. All work must be reviewed for compliance with all environmental laws permits plans and regulations. IAW Detroit Arsenal policy, all work that requires or may require the use of Hazardous Material, generates or has the potential to generate a Hazardous Waste, pollutes the air, water or soil, work on all buildings/structures eligible to be placed on the National Register or with a total cost greater than $25,000, shall have a documented review that remains in the project file. The contractor shall use the Categorical Exclusions listed in AR 200-2, dtd. March 29, 2002. Some Categorical Exclusions requiring a Record of Environmental Consideration (REC), which also must be included in the project file. The contractor can use the Detroit Arsenal Review form or develop their own form. This form is on the Detroit Arsenal EMO intranet web site.

b. That work that does not meet the threshold requirement for a formal environmental review must still be reviewed for environmental compliance. The review and any environmental requirements or controls shall be indicated on the DA Form 4283 or any other form the contractor uses to initiate work.

c. The Government has the right to review all project files to determine the adequacy of the contractors environmental reviews.

2.6.8.2 ENVIRONMENTAL REVIEW COFR

The COFR is the EMO NEPA Manager. In the absence of the NEPA Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.8.3 TRAINING REQUIREMENTS

a. There are no legal environmental training requirements.

b. The Environmental Management Office can provide instruction on how to conduct and document an environmental review.

2.6.9 HAZARDOUS MATERIALS

The purpose of the Detroit Arsenal’s Hazardous Material management program is

a. Reduce the health risk to all Detroit Arsenal

employees, the public and to protect the environment. This is accomplished by tracking all hazardous materials from the time they enter the installation to the time they are used or disposed of as a waste.

b. Reduce the amount of hazardous materials entering the Detroit Arsenal.

c. Track the location of all hazardous materials on the Detroit Arsenal.

2.6.9.1 CONTRACTOR USE OF HAZMART

All hazardous materials required by the contractor must be obtained through the Detroit Arsenal HAZMART. The HAZMART Users Pamphlet explains how to requisition materials. In conjunction with the HAZMART, the contractor shall establish its Authorized Usage List (AUL) 45 days after contract award (during the phase-in period) in order to have deliveries when the contractor starts work.

2.6.9.2. SUB-CONTRACTOR USE OF HAZMART

The contractor's subcontractors do not have to obtain their hazardous materials through the HAZMART, however, all hazardous materials must be processed through the HAZMART when they come on the installation and all containers must be processed through the HAZMART before they leave the installation. The contractor must assure that their subcontractors are aware of the hours of the HAZMART for processing materials.

2.6.9.3 ENVIRONMENTAL PROTECTION AND COMMUNITY RIGHT TO KNOW (EPCRA)

Besides the cradle to grave tracking of hazardous materials, the HAZMART also provides the information for all Environmental Protection and Community Right to Know (EPCRA) reporting and the Fire Fighters Right to Know. In order track the EPCRA reporting data, the contractor shall submit all processes to the COFR 90 days after the start of work. The COFR shall have 30 days to review and accept all processes. If the COFR rejects the contractor's processes, the contractor shall continue working with the Government until all processes are acceptable. Failure to have processes approved and entered in the HSMS may result in material not being delivered.

2.6.9.4 HAZARDOUS MATERIAL STORAGE

a. As part of their facility management operations, the contractor shall add all hazardous material storage points located on the Detroit Arsenal locations to the facility drawings within 30 calendar days of receiving locations from the COFR. The Government shall review within 15 calendar days. The COFR shall notify the contractor of new or discontinued storage points. Changes must be made within 10 calendar days and the COFR will review within 10 calendar days.

b. Hazardous or toxic materials not owned by the Federal Government may not be stored on the Detroit Arsenal unless authorized under 10 USC 2692.

2.6.9.5 Installation Hazardous Material Committee
The contractor will provide a representative to the Installation Hazardous Material Committee (IHMC) which meets monthly.

2.6.9.6. HAZARDOUS MATERIALS COFR
The COFR is the EMO Hazardous Materials Manager. In the absence of the Hazardous Material Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.9.7 TRAINING REQUIREMENTS
a. All contractor and subcontractor personnel handling hazardous material shall have Storm Water Awareness training.
b. The Environmental Management Office can provide instruction on how to order material through the HAZMART.
c. HAZCOM training is required under OSHA.

2.6.10 HAZARDOUS WASTE
The purpose of the Detroit Arsenal's Hazardous Waste Program is to:
1. Reduce the amount of hazardous waste generated on the installation.
2. Assure all Hazardous Waste is properly identified and disposed of in an approved Hazardous Waste landfill or recycled.

2.6.10.1 HAZARDOUS WASTE GENERATOR CATEGORY
The Detroit Arsenal is a large quantity generator. The Detroit Arsenal is not authorized to store hazardous waste longer than 90 days.

2.6.10.2 HAZARDOUS WASTE DISPOSAL
a. The contractor shall dispose of all hazardous waste generated incidental to its own activities on the Detroit Arsenal through HAZMART. If the contractor desires to have a satellite accumulation point, they must request authorization from the hazardous waste manager and have their people properly trained IAW RCRA. Procedures for disposal of hazardous waste are identified in the Detroit Arsenal Hazardous Waste Management Plan and the HAZMART Users Pamphlet.
b. The contractor's subcontractors must dispose of all hazardous/universal waste generated on the Detroit Arsenal through the HAZMART. The contractor must assure that their subcontractors are aware of the hours of the HAZMART for processing hazardous/universal waste, packaging requirements and proper documentation.

c. Hazardous or toxic waste not owned by the Federal Government may not be stored or disposed of on the Detroit Arsenal unless authorized under 10 USC 2692.

2.6.10.3. UNIVERSAL WASTE

The Detroit Arsenal collects certain material for recycling which than falls under the rules of Universal Waste. The contractor shall dispose of the following universal waste generated incidental to their work through the HAZMART.

a. Fluorescent Light bulbs. Fluorescent lights contain mercury. Because of the quantity generated on the installation all fluorescent lights removed must be boxed and brought over to the HAZMART. Under no circumstances shall fluorescent lights be disposed of as solid waste on the Detroit Arsenal.

b. Lead Acid Batteries.

c. Mercury.

d. PCBs

2.6.10.4. HAZARDOUS WASTE STORAGE POINTS

As part of their facility management operations, the contractor shall add all hazardous waste storage points located on the Detroit Arsenal locations to the facility drawings within 30 calendar days of receiving locations from the COFR. The Government shall review within 15 calendar days. The COFR shall notify the contractor of new or discontinued storage points. Changes must be made within 10 calendar days and the COFR will review within 10 calendar days.

2.6.10.5. HAZARDOUS WASTE COFR

The COFR is the EMO Hazardous Waste Manager. In the absence of the Hazardous Waste Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.10.6 TRAINING REQUIREMENTS

a. All contractor employees that manage satellite accumulation points must have 40CFR 265 hazardous waste training.

b. All employees that could possibly come in contact with or work near a satellite or hazardous waste storage point must have hazardous waste awareness training.

c. All employees that manage or come into contact with hazardous waste must also have Storm Water Awareness training (see section on Storm Water Management).

d. The Environmental Management Office can provide instruction on how to dispose of hazardous waste through the HAZMART.

2.6.11 LEAD BASED PAINT MANAGEMENT

The purpose of Lead Management Program is to insure:

1. Lead Based Paint (LBP) is identified and in good condition so that people are not adversely affected

2. LBP is properly identified and disposed in the correct waste stream.

3. Workers remediating LBP Paint are properly trained to protect themselves and those around them.

2.6.11.1 LBP INSPECTION

Complete a LBP inspection and risk assessment IAW the Government furnished LBP Management Plan and submit a draft within 180 calendar days of the start of work. This shall include location and condition of all lead based paint. Prior to the start of the inspection, the contractor shall meet with the COFR to review the contractor's inspection plan, discuss areas of concern within the installation, and the format for the final inspection report. The government has 30 calendar days to accept or reject the inspection. If the COFR rejects the contractor's plan, the contractor shall continue working with the Government until resolution. The contractor will have 15 days to make corrections and submit the final inspection report to the COFR.

2.6.11.2 LBP OPERATION AND MAINTENANCE PLAN

a. Contractor shall develop and submit an LBP Operation and Maintenance (O&M) plan within 45 calendar days of contract award using the currant approved Detroit Arsenal LBP Management Plan. If the COFR rejects the contractor's plan, the contractor shall continue working with the Government until resolution. The contractor shall have 15 calendar to correct and submit the final LBP Management Plan.

b. In order to control the possibility of uncontrolled LBP releases, the contractor shall institute an LBP permit entry form. All contractors or government workers that could disturb LBP must submit a LBP entry permit form. The contractor shall review and approve all entry forms within 3 working days of receipt. The form shall include all the data identified in Figure C. The contractor may use this form or develop their own form. The contractor shall maintain copies of this for the entire contract. At the end of the contract they shall be turned over to the COFR.

c. Upon completion of the inspection, update the LBP O&M plan. The draft O&M plan must be submitted within 15 calendar days after approval of the inspection to the COFR for approval. The Government has 30 calendar days to accept or reject the O&M Plan. If the COFR rejects the contractor's draft plan, the contractor shall continue working with the Government until resolution. The Contractor shall have 15 calendar days to correct and submit the final LBP O&M Plan.

2.6.11.3 Annual Surveillance, and Operation and Maintenance Plan Update

a. The contractor shall conduct annual LBP surveillance/risk assessment IAW the LBP Management Plan. This shall be completed within four months of the exercise of an option. The government has 15 calendar days to accept or reject the surveillance. If the COFR rejects the contractor's re-inspection, the contractor shall continue working with the Government until resolution.

b. Any changes observed during the re-inspection shall be reflected in the LBP the O & M plan. A draft copy of the updated LBP O&M plan shall be submitted to the COFR within 15 calendar days of acceptance of the re-inspection. The Government shall accept or reject within 15 days. If the COFR rejects the contractors plan, the contractor shall continue working with the Government until resolution. The contractor will have 15 calendar days to submit the final updated LBP O&M plan.

2.6.11.4 LBP MAINTENANCE

a. Contractor shall maintain all LBP in such a manner that it does not create a human health hazardous or pollute either. They shall remediate all failing LBP. This shall be accomplished IAW with all Federal and State laws. All removed LBP debris shall be properly packaged, labeled and turned into the HAZMART for disposal IAW with the HAZMART Users Pamphlet if it is considered a HAZARDOUS Waste.

b. In order to control the possibility of uncontrolled LBP releases, the contractor shall complete a LBP permit entry form (Figure C of Appendix 13). The contractor must submit a completed form to the COFR 3 working days prior to the start of work.

2.6.11.5 LBP SCHEDULE

Provide a schedule of all LBP activities NLT than Thursday of the week preceding the work to the COFR. All changes to the work schedule must be sent to the COFR prior to the start of work, including emergencies. If an emergency happens after duty hours, notify the COFR at the start of the next work day.

2.6.11.6 EMERGENCY PROCEDURES

If during the execution of any work order LBP is disturbed or dislodged the contractor shall take the following actions:

a. Restrict entry into the area and post signs to prevent entry into the area by persons other than those necessary to perform the response action.

b. Shut off or temporarily modify the air handling system to prevent the distribution of fibers to other areas in the building.

c. Conduct clean up IAW all Federal and State laws.

2.6.11.7 END OF CONTRACT INSPECTION
Three months prior to the end of the contract, the contractor shall complete and have accepted an inspection of the entire facility and a new LBP Management plan IAW the requirements listed above.

2.6.11.8 LICENSE REQUIREMENTS
The contractor must be licensed by the state of Michigan for LBP abatement.

2.6.11.9 LBP COFR
The COFR is the EMO LBP Manager. In the absence of the LBP Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.11.10 TRAINING REQUIREMENTS

a. Since housing is not part of the Detroit Arsenal program, there is no environmental required LBP training

b. In an effort to protect the health/safety of all employees on the Detroit Arsenal, managers and leaders of actives that may contact LBP shall attend contractor supervisor and Building inspector training.

c. Training on the LBP management plan can be obtained from the LBP COFR.

d. The Environmental Management Office can provide instruction on how to dispose of hazardous waste through the HAZMART.

2.6.12. PCBs

2.6.12.1 TRANSFORMERS
There are no PCB transformers on the Detroit Arsenal.

2.6.12.2. LIGHT BALLASTS
PCBs may be present in fluorescent light ballast. While individually these ballast are not hazardous waste, the Detroit Arsenal collects all ballast that may contain PCBs. They must be brought to the HAZMART for disposal (see section on Hazardous Waste).

2.6.12.3 CONTRACTOR'S EQUIPMENT
All contractor equipment must be PCB free. Provide a list of equipment and certification that the equipment is free of PCBs to the COFR prior to bring equipment on the installation.

2.6.12.4. PCB COFR
The COFR is the EMO PCB Manager. In the absence of the PCB

Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.12.5. TRAINING REQUIREMENTS

a. All workers removing ballast's must have RCRA awareness training.

b. The EMO Hazardous Waste Manager can provide instruction on disposal of light ballast.

2.6.13. PEST MANAGEMENT

The purpose of the Detroit Arsenal's pest management program is to prevent and control pest problems and/or infestations on the arsenal. The contractor shall manage the pest management program. The contractor shall use the current Installation Pest Management Plan (IPMP) until September 30, 2004 when the contractor shall rewrite the IPMP. The contractor shall review and recommend updates to the IPMP on an annual basis not later than September 15 of each year to the COFR/QAE in the Environmental Management Office.

2.6.13.1 GENERAL

a. Description of Program: Federal agencies are mandated by Public Law (7 United States Code, Section 136 r-l) to use Integrated Pest Management (IPM). This specification is the basis for the Detroit Arsenal's IPM program. IPM uses a wide variety of technological and management practices to achieve long-term and environmentally sound pest suppression and prevention. Control strategies in the IPM program shall include:

1). Structural and procedural modifications to reduce food, water, harborage, and access routes used by pests.

2). Use of pesticide compounds, formulations, and application methods that present the lowest potential chemical hazard to humans and the environment.

3). Non-pesticide technologies such as trapping and monitoring devices.

4). Coordinating among all facility management programs, including facility tenants that have an impact on the pest control effort.

b. Responsibilities: The contractor shall develop and implement the IPM program. It shall satisfy the requirements of the Department of Defense/Environmental Protection Agency Memorandum of Agreement, the U.S. Army and the State of Michigan, Department of Agriculture to reduce environmental risk from pesticide applications. The contractor's IPM program shall cover the Detroit Arsenal supporting all organizations to include tenants and contractors. If part or the entire program is subcontracted the contractor shall still be held fully responsible for all applications on Detroit Arsenal.

c. Contractor Service Requirements: The contractor shall furnish all supervision, labor, materials, and equipment necessary to accomplish the monitoring, trapping, pesticide application, and pest removal components of the IPM program. As a quality assurance measure, the contractor shall submit contract and/or subcontract specifications to the Government Contracting Officer's Functional Representative/Quality Assurance Evaluator (COFR/QAE) for review and approval at least seventy-five (75) working days before the planned advertisement date. The Government shall return the specifications no latter than forty-five (45) working days before the planned advertisement. The purpose of the review is to ensure the contract and subcontracts implement IPM and follow the control guidance listed in this specification. As part of the subcontract specifications, the contractor shall describe the procedures they shall use to perform quality assurance on any subcontractor. The contractor shall continue to operate under the current IPM program until proper authority reviews and recommends approval of this contract.

d. The contractor shall provide pest control, not only for all government activities located on the Detroit Arsenal, but also for all contractors performing work on the Detroit Arsenal.

2.6.13.2 PESTS INCLUDED AND EXCLUDED

a. The Contractor Shall Suppress the Following Pests IAW the IPMP:

1). Indoor populations of rodents, insects, arachnids, birds and other arthropods or mammals.

2). Outdoor populations of potentially indoor-infesting species—including mosquitoes and filth flies--that are within the property boundaries of the Detroit Arsenal.

3). Nests of stinging insects within the property boundaries of Detroit Arsenal.

4). Organisms effecting interiorscape vegetation or structures.

5). Federal and State listed noxious weeds, non-native and invasive species.

6). Individuals of all excluded pest populations that are incidental invaders inside the buildings of Detroit Arsenal.

b. Populations of the Following Pests are excluded From This Contract:

1). Bats, snakes, and all other vertebrates other than commensal rodents.

2). Pests that primarily feed on outdoor vegetation.

3). Endangered or Threatened Species.

2.6.13.3 INTEGRATED PEST MANAGEMENT PLAN

a. The Integrated Pest Management Plan (IPMP) shall consist of

1). This guide specification.
2). The subcontracts specifications.
3). The contractor's quality control program
4). Plus the information listed below which the contractor shall provide to the government.

b. The contractor shall submit a draft IPMP NLT 30 June 2004. The Government shall review within 45 calendar days (this will include the mandatory Army review) . The contractor shall submit the final IPMP NLT 30 August 2004. If the COFR rejects the contractors plan, the contractor shall continue working with the Government until the plan is acceptable.

c. Proposed Materials and Equipment for Service: Current labels and Material Safety Data Sheets for all pesticides to be used, brand names of pesticide application equipment, rodent bait boxes, insect and rodent trapping devices, pest monitoring devices, pest detection equipment, and any other pest control devices or equipment that may be used to provide service.

d. Proposed Methods for Monitoring and Detection: Methods and procedures to be used for identifying sites of pest harborage and access, and for making objective assessments of pest population levels throughout the term of the contract.

e. Projected Service Schedule for Each Building or Site: Complete service schedules that include weekly or monthly frequency of subcontractor visits, specific day(s) of the week of subcontractor visits, and approximate duration of each visit not later than Thursday before the start of the work week.

f. Description of any Structural or Operational Changes That Would Facilitate the Pest Control Effort: Site-specific solutions for observed sources of pest food, water, harborage, and access.

g. Commercial Business Licenses, Pesticide Applicator Certificates or Licenses: Forty-five calendar days after contract award provide Photocopies of State-issued Commercial Pesticide Application Business Licenses and Commercial Pesticide Applicator Certificates or Licenses for every employee who shall be performing on-site service under this contract. The contractor shall include the name of certified applicators, their certified categories, and other data requested for the Army Environmental Quality Report (EQR). New applicators must provide copy of their license to the COFR prior to applying any pesticide.

2.6.13.4 RECORD KEEPING

The contractor shall be responsible for maintaining a pest control logbook or file for each building or site specified in this contract in an electronic format. These records shall be kept for each visit and maintained on-site by the contractor. If requested the contractor shall provide this logbook to the COFR/QAE. Each logbook or file shall contain at least the following items:

a. IPM Plan.

b. Pest Control Work and Inspection Report, or an electronic equivalent . These forms shall be used to advise the contractor of routine service requests and to document the performance of all work, including emergency work.

c. Service Report Forms: Copies of the contractor's Service Report Form, documenting all information required for DD Form 1532 (Pest Management Report) and the DD Form 1532-1 (Pest Management Maintenance Record) or the electronic equivalents as found in the Integrated Pest Management Information System (IPMIS). These forms shall not be mandatory if all required information on each pesticide application is included on the Pest Control Work and Inspection Report.

d. All pesticide records shall be kept in building 250. At the completion of the contract, the records shall be turned over to the Government.

2.6.13.5 MANNER AND TIME TO CONDUCT SERVICE

a. Time Frame of Service Visits: The subcontractor shall perform routine pest control services that do not adversely affect tenant health or productivity. When it is necessary to perform work that shall interfere with Government operations, the contractor shall notify the COFR/QAE at least one day in advance.

b. Safety and Health:

1). The contractor shall observe all safety precautions throughout the performance of this contract. All work shall be in strict accordance with all applicable Federal, State, and local safety and health requirements. Where there is a conflict between applicable regulations, the most stringent shall apply.

2). The contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work.

3). Vehicle(s) used by the contractor shall be identified in accordance with State and local regulations. These vehicles shall have external lockable storage compartments. The vehicle(s) shall not be used for any other purpose.

2.6.13.6 SPECIAL REQUESTS AND EMERGENCY SERVICE

On occasion, the COFR/QAE may request that the contractor perform corrective, special, or emergency service(s) that are beyond routine service requests. The contractor shall respond to these exceptional circumstances and complete the necessary work within one (1) day after receipt of the request.

2.6.13.7 CONTRACTOR PERSONNEL

All pesticide applicators must have appropriate State commercial pesticide applicator certifications.

2.6.13.8 USE OF PESTICIDES

a. The contractor shall be responsible for application of pesticides according to the label. All pesticides used by the contractor must be registered with the U.S. Environmental Protection Agency (EPA), the appropriate State and/or local jurisdiction, and must be documented in the Operations Plan. Transport, handling, and use of all pesticides shall be in strict accordance with the manufacturer's label instructions and all applicable Federal, State, and local laws and regulations. The contractor and any subcontract specifications shall adhere to the following rules for pesticide use:

b. Products:

1) Disapproved Products: The Contractor shall not use any Federal or State restricted-use, State limited-use, or any Category I and II pesticide (i.e., a product carrying a WARNING or DANGER signal word) without prior approval in writing from the proper authority. The contractor shall submit requests at least thirty (30) working days before the planned date of application.

2) Approved Products: The Contractor may use any Federal or State listed pesticide code labeled with the word CAUTION with prior written approval from the COFR/QAE. The only pesticides that are authorized for use are on the DOD approved monthly listing as found on the Armed Forces Pest Management Board website (www.afpmb.org). All of the approved pesticides shall be properly identified and listed in the IPMP.

c. Pesticide Storage: The contractor shall store and/or mix pesticide products in building 250.

d. Application by Need: Pesticide application shall be according to need and not by schedule. As a general rule, application of pesticides in any inside or outside area shall not occur unless visual inspection or monitoring devices indicate the presence of pests in that specific area.

e. Minimization of Risk: When pesticide use is necessary, the contractor shall employ the least hazardous material, most precise application technique, and minimum quantity of pesticide necessary to achieve control.

f. All pesticides must be order through the HAZMART. They must be ordered IAW the HAZMART Users Pamphlet.

2.6.13.9 INSECT CONTROL

a. Emphasis on Non-Pesticide Methods: The contractor shall use non-pesticide methods of control wherever possible. For example:

1). Portable vacuums rather than pesticide sprays shall be the standard method for initial cleanouts of cockroach infestations, for swarming (winged) ants and termites, and for control of spiders in webs.

2). Trapping devices rather than pesticide sprays shall be the standard method for indoor fly control.

b. Application of Insecticides to Cracks and Crevices: As a general rule, the contractor shall apply all insecticides as “crack and crevice” treatments only, defined in this contract as treatments in which the formulated insecticide is not visible to a bystander during or after the application process.

c. Application of Insecticides to Exposed Surfaces or as Space Sprays: Application of insecticides to exposed surfaces or as space sprays (“fogging”) shall be restricted to exceptional circumstances where no alternative measures are practical. No surface application or space spray shall be made while tenant personnel are present. The contractor shall take all necessary precautions to ensure tenant and employee safety, and all necessary steps to ensure the containment of the pesticide to the site of application.

d. Insecticide Bait Formulations: Bait formulations shall be the standard pesticide technology for cockroach and ant control, with alternate formulations restricted to unique situations where baits are not practical.

e. Monitoring: Sticky traps shall be used to guide and evaluate indoor insect control efforts wherever necessary.

2.6.13.9 RODENT CONTROL

a. Indoor Trapping: As a general rule, rodent control inside buildings shall be accomplished with trapping devices only. All such devices shall be concealed out of the general view and in protected areas so as not to be affected by routine cleaning and other operations. The contractor shall be responsible for disposing of all trapped rodents and all rodent carcasses in an appropriate manner.

b. Use of Rodenticides: In exceptional circumstances, when rodenticides are deemed essential for adequate rodent control inside buildings. All rodenticides, regardless of packaging, shall be placed either in locations not accessible to children, pets, wildlife, and domestic animals, or in EPA-approved tamper-resistant bait boxes. As a general rule, rodenticide application outside buildings shall emphasize the direct treatment of rodent burrows wherever feasible.

c. Use of Bait Boxes: All bait boxes shall be maintained in accordance with EPA regulations, with an emphasis on the safety of non-target organisms. The contractor shall adhere to the following five points:

1). All bait boxes shall be placed out of the general view, in locations where they shall not be disturbed by routine operations.

2). The lids of all bait boxes shall be securely locked or fastened shut.

3). All bait boxes shall be securely attached or anchored to floor, ground, wall, or other immovable surface, so that the box cannot be picked up or moved.

4). Bait shall always be secured in the feeding chamber of the box and never placed in the runway or entryways of the box.

5). All bait boxes shall be labeled on the inside with the contractor's business name and address, and dated by the contractor's technician at the time of installation and each servicing.

2.6.13.10 STRUCTURAL MODIFICATIONS AND RECOMMENDATIONS

Throughout the term of this contract, the contractor shall be responsible for advising the COFR/QAE about any structural, sanitary, or procedural modifications that would reduce pest food, water, harborage, or access. The contractor shall be responsible for adequately suppressing all pests included in this contract regardless of whether or not the suggested modifications are implemented.

2.6.13.11 PROGRAM EVALUATION

The on site COFR/QAE shall continually evaluate the progress of this contract in terms of effectiveness and safety, and shall require such changes as are necessary. The contractor shall take prompt action to correct all identified deficiencies. The contractor shall submit subcontract pest control contracts to the onsite COFR/QAE for review and approval. The contractor shall provide their logbook at any time and shall allocate five man-days every three years for Government on-site assistance/quality assurance visit by the command consultant or his designated representative.

2.6.13.12 QUALITY CONTROL PROGRAM

The contractor shall establish a complete quality control program to assure the requirements of the contract is provided as specified. As part of the subcontract specifications, the contractor shall describe the procedures they shall use to perform quality assurance on the subcontractor. These procedures shall include at least the following items:

a. Inspection System: The contractor's quality control inspection system shall cover all the services stated in this contract. The purpose of the system is to detect and correct deficiencies in the quality of services before the level of performance becomes unacceptable and/or the onsite COFR/QAE identifies the deficiencies.

b. Checklist: A quality control checklist shall be used in evaluating contract performance during regularly scheduled and unscheduled inspections. The checklist shall include every building or site serviced by the contractor as well as every task that is required to be performed.

c. Quality Control File: A quality control file shall contain a record of all inspections conducted by the contractor and any corrective actions taken. The file shall be maintained

throughout the term of the contract and made available to the onsite COFR/QAE.

d. Quality Report: The contractor shall provide data to the COFR/QAE for input to the pest management section of the EQR.

e. Operations Plan: The contractor shall provide an annual update of the Operations Plan to the COFR/QAE no later than September 30 each year.

f. Subcontract Specifications: The contractor shall provide revisions to pest control subcontract for review and approval prior to advertising the contract.

2.6.13.13 PEST MANAGEMENT COFR

The COFR/QAE is the EMO Pest Manager. In the absence of the Pest Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.13.14 TRAINING REQUIREMENTS

a. All contractor personnel applying pesticides shall attend the State of Michigan Certification course.

b. HAZCOM

c. Storm Water Pollution Prevention

d. All applicators shall be knowledgeable of all the requirements in the Detroit Arsenal Installation Pest Management Plan.

e. The Environmental Management Office can provide instruction on how to order Hazardous Materials and dispose of hazardous waste through the HAZMART.

2.6.14 POLLUTION PREVENTION

The purpose of the Detroit Arsenal’s Pollution Prevention program is:

a. Reduce the amount of hazardous material used on the installation.

b. Reduce the amount of hazardous waste generated on the installation

c. Increase the amount of waste (both hazardous and solid waste) diverted from landfills.

d. Increase the amount of EPA designated recycled materials used in the performance of the contract.

2.6.14.1 POLICY

It is the Army's policy to reduce the pollution at all its facilities and increase the use of recycled materials. Every effort shall be made to substitute the use of hazardous materials with non-hazardous materials. The contractor shall participate in the Detroit Arsenal’s recycling program and adhere to the Detroit Arsenal’s Pollution Prevention plan. See paragraph on Solid Waste for requirements to meet the DoD diversion goals.

2.6.14.2 AFFIRMATIVE PROCUREMENT

a. The use of EPA designated items is required during performance of this contract. The EPA issued the Comprehensive Procurement Guidelines (CPG's) that have established the mandatory procurement by federal agencies of 54 items produced with recovered materials. The EPA has also issued Recovered Material Advisor Notices (RMANs) to accompany the CPGs and provide detailed information on the designated items. The number of items designated by the EPA may change during the contract period. The contractor must use all newly designated items. The use of these items is mandatory for all actions on the Detroit Arsenal unless one of the following exemptions applies. The contractor must follow the Detroit Arsenal Affirmative Procurement Plan in order to obtain a waiver to not use one of the EPA designated items RCRA provides the following exemptions from the requirement to purchase EPA-designated items:

1). The product is not available within a reasonable period of time.

2). The product does not meet the performance standards in applicable specifications or fails to meet reasonable performance standards of the procuring agency.

3). The product is not available at a reasonable price. For Detroit Arsenal purposes, "unreasonable price" is defined as follows: If the price of the recycled-content product exceeds the cost of a non-recycled item, then the price is considered unreasonable.

2.6.14.2 SUSTAINABLE DESIGN

It is the Army's policy that Sustainable Design and Development principles be incorporated into all construction and repair projects. The Army's Sustainable Project Rating Tool (SpiRit) is an adaptation of industry's U. S. Green Building Council's Leadership in Energy and Environmental Design Building Rating System (LEED). The goal is to achieve a minimum SpiRiT rating Bronze sustainablity rating. The contractor shall rate all construction and repair projects with the goal of achieving a Bronze sustainability rating. See FAR 23.203. IAW with Executive Order 13123, all projects shall have a Life-Cycle Cost Analysis (see Section 401, EO 13123) and use ENERGY STAR and other energy efficient products.

2.6.14.3 POLLUTION PREVENTION COFR

The COFR is the EMO P2 Manager. In the absence of the P2 Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.14.4 TRAINING REQUIREMENTS

a. Contractor personnel involved with requirements definition and purchasing need to have Affirmative Procurement Awareness Training.

b. The EMO P2 Manager can provide training on requirements of the Detroit Arsenal Pollution Prevention Plan and Affirmative Procurement on site.

2.6.15 NATURAL RESOURCES

The purpose of the Natural Resources program is to protect all the natural resources at the Detroit Arsenal. The Detroit Arsenal is not required to have a Natural Resource Management plan. However, there are compliance requirements in the following areas.

2.6.15.1 INVASIVE SPECIES

The Contractor shall use no plants other than native species unless specifically directed by the COFR. The contractor shall inspect the grounds monthly from April thru October to determine if invasive plants are on the installation. If any are found, the contractor shall eradicate IAW the Detroit Arsenal Installation Pest Management Plan.

2.6.15.2 MIGRATORY BIRDS

The Contractor shall control migratory birds on the Detroit Arsenal IAW with Michigan Department of Natural Resource guidance. There are a number of acceptable programs to control the migratory bird population on an installation.

2.6.15.3 NATURAL RESOURCE MANAGER COFR

The COFR is the EMO Natural Resource Manager. In the absence of the Natural Resource Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.15.4 TRAINING REQUIREMENTS

Migratory Bird control. The EMO Natural Resource Manager can provide general awareness training for natural resource issues.

2.6.16 SOLID WASTE

The purpose of Solid Waste Management is to:

1. Reduce the amount of Solid Waste generated on this installation.
2. Increase the amount of solid waste sent out for recycling. The goal for solid waste is to divert 40% of the total solid waste generated on the Detroit Arsenal from landfills.
3. Insure no hazardous waste materials, prohibited wastes or recyclable commodities are mixed in with the solid waste. The lists of items restricted and those permitted in the installation dumpsters are contained in the Installation Integrated Solid Waste Management Plan.

2.6.16.1 RECYCLING

a. Contractor personnel that are involved with the generation of solid waste must be aware of the requirements of the Detroit Arsenal Solid Waste Management Plan and the Detroit Arsenal's solid waste reduction goals. The contractor shall participate in the installations recycling, donation and re-use, or source reduction programs as identified in the Installation Integrated Solid Waste Management Plan. The contractor is encouraged to recycle any Construction and Demolition debris where economically feasible and will report any voluntary recycling to the COFR by the 10th workday after the end of each quarter.

b. The contractor will appoint a recycling coordinator to work with the installation EMO on the recycling program.

2.6.16.2 SOLID WASTE DISPOSAL

In order to meet the diversion goal the contractor shall track the amount of solid waste generated in any of its projects. If the contractor uses the installation’s dumpsters the weight shall be identified in those numbers. If the contractor uses their own dumpsters, weights shall be forwarded to the Environmental Management. The contractor shall also be responsible for keeping the area around their dumpsters clean and assure no pollutants or trash enter a storm drain. Report any solid waste disposals tonnage to the COFR 10 calendar days after the end of each quarter.

2.6.16.3 COMPOSTING

The state of Michigan prohibits yard waste from being disposed of as solid waste. The contractor must collect all yard waste and send it to an approved composting site. Provide compost tonnage by the 10 calendar days after the end of each quarter.

2.6.16.4 SOLID WASTE COFR

The COFR is the EMO Solid Waste Manager. In the absence of the Solid Wate Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.16.5 TRAINING REQUIREMENTS

a. There are no legal Solid Waste training requirements.

b. The EMO Solid Waste Manager can provide training in the Solid Waste Management Plan. Contractor personnel that are involved with the generation of solid waste must be aware of the requirements of the Detroit Arsenal Solid Waste Management Plan and the Detroit Arsenal's solid waste reduction goals

2.6.17 SPILL CONTROL/RESPONSE

The purpose of the spill control operations are:

1. Contractor shall conduct all operations to minimize the possibility of a spill off any hazardous material or pollutant.

2. Assist the Detroit Arsenal Fire Department in containing all spills.

3. Clean up all spills that occur on the Detroit Arsenal. This shall include going off the installation for those spills that migrate off the installation

2.6.17.1 DEFINITION

A spill is defined as the un-permitted release of oil or a hazardous substance to the environment.

2.6.17.2 Contractor Operations

a. After establishing their AUL and NLT 30 calendar days after start of work, the contractor shall, submit a list of all hazardous waste satellite accumulation points and hazardous materials stored or used by the contractor, location and responsible person w/phone number to the COFR. All contractor sites with hazardous materials (including petroleum products) or satellite accumulation points shall be identified in the Detroit Arsenal Spill Prevention, Control and Countermeasure (SPCC) Plan.

b. Spill Containment Kits shall be provided to the contractor at all sites identified in the SPCC. If the contractor uses any material from the kit, notify the COFR for replacement materials within 24 hours of use.

c. All maintenance trucks transporting storing hazardous materials must have spill containment/cleanup kits.

1). Spill containment/clean up kits on vehicles should be adequate to control the largest single container on the truck.

2). Contact the COFR for material.

d. Procedures for actions to take in case of a spill are in the Detroit Arsenal SPCC and Installation Spill Contingency Plan (ISCP).

e. The contractor is responsible to ensure that all subcontractors have spill containment kits for their operations and that they are aware of the procedures for spill containment, clean up and reporting.

f. If the contractor finds containers with unknown materials, contact the HAZMART for pick-up and disposal.

2.6.17.3 Contractor Support to the Detroit Arsenal's ISCP

a. The Contractor shall provide HAZMAT support to the Senior Fire Department official on-scene and IAW the ISCP. At a minimum this support consists of turning off of utilities, protecting the waters of the state of Michigan (which also includes spills to the ground) by protecting storm drains, placing booms in Bear Creek to catch pollutants (See Section on Storm Water). The Contractor shall also conduct clean up of all spills, including hazardous material spills, that occur on the Detroit Arsenal at the request of the Senior Fire

Department Official on-scene. The Senior Fire Department Official on-scene shall have full authority to direct the contractor during the emergency. The on-scene coordinator determines the incident action plan, the strategic goals and the tactical objectives. The contractor shall perform all actions to contain, control and complete clean-up of all areas affected by the spill. This may include collection, sampling and analysis of any area affected by the spill, including of the installation.

b. The Contractor shall have personnel available on an on-call basis, twenty-four (24) hours per day, seven days per week, to support the DAFD. During Access Hours (See 1.3.1) the contractor shall respond within 10 minutes. During Non Access Hours, weekends and holidays the contractor shall do a recall upon notification from the Senior Fire Department Official on-scene. Contractor shall have a 2 hour recall time.

c. All Spill Clean Up residue shall be properly packaged for disposal, including proper labeling of all containers and delivered to the HAZMART. In the event that the spill and clean up occurs after normal duty hours, the Contractor shall store the disposal material until the HAZMART is open.

d. After a spill, the contractor shall participate in the after action review IAW the ISCP. Additional information may be required to meet the reporting requirements of the State of Michigan General Water Permit (See section on Storm Water).

e. The contractor shall participate in all exercises IAW the ISCP.

2.6.17.4 SPILL CONTROL COFR

The COFR is the EMO Spill Control Manager. In the absence of the Spill Control Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.17.5 TRAINING REQUIREMENTS

a. HAZWOPPER
b. Hazardous Waste Mgt.
c. Storm Water Awareness Training
d. Emergency Response Training
e. Incident Command Course

2.6.18 STORM WATER

The purpose of the Storm Water Management program is to insure that no pollutants or hazardous substance enter the waters of the State of Michigan (both ground and surface water).

2.6.18.1 PERMIT

The Detroit Arsenal has a Certificate of Coverage under a State of Michigan General Permit. This applies to outfall #2, which is north of Arsenal Avenue and empties into Bear Creek. This permit requires a Storm Water Pollution Prevention Plan (SWP3) and a certified Storm Water Operator. The Detroit Arsenal Certified Storm Water Operator is the Storm Water Manager. All contractor operations must conform to the requirements of the SWP3.

2.6.18.2 Phase II CWA

a. The Federal Government has enacted phase II CWA Storm Water Regulations. The State of Michigan has not yet promulgated their rules. It is likely additional requirements will be placed upon the Detroit Arsenal with regards to inspections, training and sampling. The contractor should be aware Bear Creek is a tributary of the Clinton River. The Clinton River and it's watershed area is a designated impaired waterway. As such, it is subject to increasing regulatory control.

b. The impact on contractor activities will not know until the State has issued their rules.

2.6.18.3 DETROIT ARSENAL STORMWATER OUTFALLS

There are three other outfalls that currently do not require a permit that empty into either Bear Creek or the City of Warren storm sewer system. Contractor must conduct all operations to minimize contributing to the pollution in any storm water system.

2.6.18.4 POSITIONS AFFECTING STORMWATER

Within 60 days of contract award, the contractor shall identify all positions that may impact storm water discharges and the assigned personnel and receive the required training. See below for training requirements. A trained individual must accompany personnel that have not received training at all times when they are working in areas that can affect storm water pollution.

2.6.18.5 STORM WATER POLLUTION PREVENTION

a. The SWP3 requires monthly storm water inspections. The contractor shall inspect all storm drains, drainage ditches, retention pond, and outfalls outside of all buildings. If the inspections uncover storm water systems deficiencies, the contractor shall initiate action to correct the deficiency and notify the COFR of the corrective action. The SWP3 also requires indoor inspections and best management practices applicable to operational areas and at the shop level. The Contractor shall comply with the SWP3 requirements for their work areas. All inspection records shall be forwarded to the COFR IAW the SWP3.

b. A semi-annual comprehensive review of the Contractors Storm Water Management shall be performed and sent to the COFR by 1 February and 1 August IAW the SWP3.

c. Provide a schedule to the COFR of all storm water activities (inspections and repairs) NLT than Thursday of the week preceding the work. All changes to the work schedule must be sent to the COFR prior to the start of work, including emergencies. If an emergency happens after duty hours, notify the COFR at the start of the next work day.

d. The contractor shall assign an individual knowledgeable in construction site storm water management to be a member of the DTA SWP3 team. It is not required that this individual be certified by the state in construction site storm water management.

e. The SWP3 identifies best management practices (BMPs). The contractor shall adhere to all SWP3 requirements in their operational areas.

f. The contractor is responsible to insure that all subcontractors adhere to all the SWP3 requirements.

2.6.18.6 SOIL EROSION

a. Under part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Act, 1994 PA 451, section 9116, soil erosion control must be maintained to reduce soil erosion or sedimentation. The State of Michigan's erosion control requirements are defined in Michigan Rule 323. Soil erosion control has been delegated to Macomb County by the state of Michigan. Only the Government shall apply for a Soil Erosion permit from the County. The contractor shall have to provide all necessary information to the COFR for the permit. It is anticipated that at least 30 calendar days shall be necessary to obtain a permit.

b. The law allows for exemptions to obtaining a permit. If the contractor feels an exemption is suitable, they shall provide all pertinent information and rationale to the COFR 7 calendar days prior to the start of work. Either the COFR or the Detroit Environmental Coordinator shall approve the exemption within 5 calendar days.

c. The contractor shall submit a soil erosion plan to the COFR 7 calendar days prior to the start of work whether or not a permit is required. Either the COFR or the Detroit Environmental Coordinator shall approve the exemption within 5 calendar days.

d. In the case of an emergency, the contractor must still take precautions to insure no pollutants or hazardous materials enter the storm drains and immediately contact the COFR or the Detroit Arsenal Environmental Coordinator.

e. Conduct weekly visually inspections of all storm drains and outfalls to determine the presence of any pollutants that could enter Bear Creek. Provide results of the inspection and identify any sedimentation problems and corrective action to the COFR within 3 workdays.

f. The contractor is responsible to insure that all subcontractors adhere to all the soil erosion requirements.

g. Provide a schedule to the COFR of all activities that must have soil erosion controls NLT than Thursday of the week preceding the work. All changes to the work schedule must be sent to the COFR prior to the start of work, including emergencies the duty day. If an emergency happens after duty hours, notify the COFR at the start of the next workday.

2.6.18.7 STORM WATER COFR

The COFR is the EMO Storm water Manager/Certified Storm water Operator. In the absence of the Storm Water Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.18.8 TRAINING REQUIREMENTS

a. All contractor employees must receive the Detroit Arsenal Storm water training within 60 days of the starting work

b. All contractor employees must receive the Detroit Arsenal Storm water training annually after the initial training.

c. Within 60 days of starting work, all new employee must receive Storm Water training. Contact the EMO Storm water Manager.

d. The contractor must assure that all subcontractors are aware of the requirements of the Detroit Arsenal SWP3.

2.6.19 STORAGE TANK/OIL WATER SEPERATOR MANAGEMENT

The purpose of the Storage Tank/Oil Water Separator Management program is:

1. To insure that no pollutants or hazardous substance enter the waters of the State of Michigan (both ground and surface water) through leaks from the tanks or piping of either Underground Storage Tanks (UST) or Above ground Storage Tanks (AST) and during off loading or removal of any product.

2. No prohibited pollutants enter the City of Warren's waste water treatment plant from any oil water separator (OWS) or holding tank on the Detroit Arsenal. See the Section on Waste Water management.

2.6.19.1 STORAGE TANKS

a. There are three USTs and six fuel ASTs (of which two are dispensing tanks) on the Detroit Arsenal. All inspection, maintenance and record keeping requirements are identified in the Detroit Arsenal Storage Tank Maintenance Plan, dated February 2001.

b. The six ASTs have secondary containment.

c. The contractor is responsible to insure that precautions are taken to prevent incidental leakage, overfill or discharges during offloading from entering the Waters of the State of Michigan from the 4 standby emergency generators. The logistics contractor is responsible for fueling the two dispensing tanks.

d. If the contractor must extract product from the emergency generator tanks they must insure that precautions are

taken to prevent any discharge from entering the Waters of the State of Michigan

2.6.19.2 OIL WATER SEPARATORS AND HOLDING TANKS

a. There are five OWS with holding tanks and one separate holding tank. Also see 2.12.4.12.

b. All inspection, maintenance and record keeping requirements are identified in the Detroit Arsenal Storage Tank Maintenance Plan, dated February 2001. Provide the COFR with results of all inspections and recommended corrective actions for all deficiencies NLT 10 calendar days after the end of the month.

c. If product must be removed, the contractor must request this service from the HAZMART.

2.6.19.3 STORAGE TANK WORK SCHEDULE

Provide a schedule to the COFR of all storage tank activities (inspections, maintenance, repairs, fueling and extraction) NLT than Thursday of the week preceding the work. All changes to the work schedule must be sent to the COFR prior to the start of work, including emergencies. If an emergency happens after duty hours, notify the COFR at the start of the next workday.

2.6.19.4 STORAGE TANK COFR

The COFR is the EMO Storage Tank Manager. In the absence of the Storage Tank Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.19.5 TRAINING REQUIREMENTS

a. There are no legally mandated training requirements under UST/AST regulations or for Oil Water Separators (OWS).

b. The EMO Storage Tank Manager can provide training on the Detroit Arsenal Storage Tank Maintenance Plan for contractor personnel that are involved with the maintenance, fueling or extraction of product from all storage tanks.

c. Contractor personnel that are involved with the maintenance, fueling or extraction of product from all storage tanks or OWS must receive Storm Water Pollution Prevention training.

2.6.20 SANITARY WASTE WATER

The purpose of the Sanitary Waste Water Management program is to insure that no prohibited materials enter the waters of the City of Warren Wastewater Treatment plant.

2.6.20.1 PERMIT

The Detroit Arsenal has a Significant Industrial User (SIU) waste water permit with the City of Warren.

a. The contractor shall not allow polluting materials down the sanitary sewers. These materials are defined in the DTA

(SIU) Permit under "Prohibited Discharges" page 4, Part I - paragraph (D). Should the City, County or State ordinances change or increase the list of prohibited discharges, the contractor shall comply with the updated requirements. NOTE: Storm water discharges are included in the list of "Prohibited Discharges".

b. The SIU requires a 90 calendar day notification for any change in our normal discharge.

c. The Cooling Pond Discharge to the Sanitary Sewer is a "Special Condition" and requires 4 week notification prior to discharge. The Contractor shall provide notification of the need to discharge from the cooling pond or fording pit to the sanitary sewer at a minimum of 30 calendar days prior to the discharge. The Environmental Management Office shall coordinate the permission from the City of Warren. No discharge shall be made until the City of Warren through the Environmental Management Office grants permission. The notification shall contain the following information: Anticipated time line for the discharge (when begin, what time, what days), the estimated volume (gpm or gph), and the duration (stop date). In addition the City may require sampling prior to granting approval to discharge. The City shall indicate the specific parameters to be tested.

2.6.20.2 MAINTENANCE

a. All Grease Traps and Solid Waste Interceptors shall be maintained IAW with the manufacturer's recommended procedures to prevent break through to the sanitary sewers. The contractor shall provide a report of all inspections conducted and recommended corrective actions NLT 10 calendar days after the end of the month. The contractor shall maintain all records of inspections and maintenance. These records shall be turned over to the Government at the end of the contract. If the equipment is modified, the contractor shall annotate the manufacturer's procedures to take into account the modifications. The contractor shall maintain all manufacturer's procedures and modification to these procedures. At the end of the contract, these procedures shall be turned over to the government.

b. Provide a schedule to the COFR of all sanitary sewer system activities (inspections, maintenance, repairs, etc.) NLT than Thursday of the week preceding the work. All changes to the work schedule must be sent to the COFR prior to the start of work, including emergencies. If an emergency happens after duty hours, notify the COFR at the start of the next workday. Also see 2.12.4.10.

2.6.20.3 SANITARY WASTE WATER COFR

The COFR is the EMO Sanitary Waste Water Manager. In the absence of the Sanitary Waste Water Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.20.4 TRAINING REQUIREMENTS

a. There are no legally mandated training requirements under SUI or state law.

b. The EMO Water Quality Manager can provide training on the requirements of the DTA SUI for contractor personnel that are involved with the maintenance of the cooling pond and sewer system.

2.6.21 WATERQUALITY/SAFE DRINKING WATER

The purpose of the Water Quality/Safe Drinking Water program is to insure that:

1. The Detroit Arsenal provides safe drinking water to all employees.

2. The Detroit Arsenal protects the City of Warren Potable water system from possible contamination by our industrial processes and fire lines.

2.6.21.1 WATER QUALITY COMPLAINTS

Maintain a log of **ALL** water quality complaints. At a minimum, information at Figure D of Appendix 13 shall be collected (contractor can use this or develop their own form). The contractor shall investigate all calls as an URGENT action and recommend corrective action to the COFR within 5 working days IAW the Water Quality Plan (there may be no corrective action required) and also notify the complainant of their action. The Government shall have 5 working days to review and approve corrective actions. If the COFR rejects the contractors recommended corrective action, the contractor shall continue working with the Government until resolution. Fifteen calendar days after the end of each quarter, evaluate all water quality calls, determine if there are any systemic problems and recommend corrective action for the systemic problems. The COFR shall review and approve corrective actions within 15 calendar days. If the COFR rejects the contractors recommended corrective action, the contractor shall continue working with the Government until resolution.

2.6.21.2 WATER LINE FLUSHING

A component of the Water Quality Plan is a flushing program. Contractor shall adhere to all aspects of the installations flushing plan. Contractor shall notify the COFR 15 calendar days prior to flushing water lines. If there are operational or environmental concerns e.g. water shortage, the COFR may delay the flushing. Contractor may recommend changes to the flushing plan. All changes to the flushing plan must be approved by the COFR and included in the Water Quality Plan.

2.6.21.3 WATER RESTRICTIONS

Contractor shall adhere to water use restrictions issued by the City of Warren

2.6.21.4 NON-POTABLE WATER

In the event that tap water is not potable or a main is broken, the contractor shall:

a. Provide Potable water to affected areas.

b. Take all appropriate actions to assure that the effects on human health is minimized due to the non-potable water

c. Assure that the contaminated water does not adversely affect other areas.

2.6.21.5 MAINTENANCE

a. Inspection, maintenance and repair of backflow preventors should be IAW with Michigan Plumbing Code sec 312 and 608, MDEQ Cross Connections Rules Manual, American Society for Sanitary Engineering (ASSE) standards, American Water Works Association (AWWA) standards, the Detroit Arsenal Backflow Preventor Inspection and Maintenance plan and recommended manufactures procedures. The contractor shall provide a report of all inspections conducted and recommended corrective actions NLT 10 calendar days after the end of the month. The contractor shall maintain all records of inspections, maintenance and repair. These records shall be available for inspection at any time and turned over to the Government at the end of the contract.

b. The contractor shall maintain all manufactures maintenance manuals. If the equipment is modified, the contractor should annotate the manufacture’s procedures to take into account the modifications. The contractor shall document and maintain all changes to manufactures inspection, maintenance and repair procedures. At the end of the contractor, these procedures shall be turned over to the government.

c. All potable water mains (all pipes outside of buildings that connect to the City of Warren potable water system) should be repaired and maintained IAW with the AWWA standards. The Michigan Department of Environmental Quality (MDEQ) has adopted AWWA for all maintenance procedures.

d. Provide a schedule to the COFR of all water quality activities (inspections, maintenance, repairs, etc.) NLT than Thursday of the week preceding the work. All changes to the work schedule must be sent to the COFR prior to the start of work, including emergencies. If an emergency happens after duty hours, notify the COFR at the start of the next workday.

2.6.21.6 WATER QUALITY COFR

The COFR is the EMO Water Quality Manager. In the absence of the Walter Quality Manager, the Environmental Coordinator shall be the alternate COFR.

2.6.21.7 TRAINING REQUIREMENTS

a. There are no legally mandated training requirements under Water Quality, except for state certification of specific backflow preventor inspectors.

b. The EMO Water Quality Manager can provide training in the Detroit Arsenal Water Quality Plan for contractor personnel that are involved with the maintenance of the potable water and fire suppression lines.

2.6.22 TRAINING

2.6.22.1 EMPLOYER TRAINING REQUIREMENTS

The contractor is responsible to assure all employees are trained IAW applicable laws. The training requirements identified under each area are the minimum requirements. The contractor may require their employees to attend additional training.

2.6.22.2. DETROIT ARSENAL CENTRALIZED TRAINING

The Detroit Arsenal Environmental Management Office (EMO) conducts centralized training on the Detroit Arsenal for specific areas. In order to insure consistency, site specific requirements and protect the work force, the contractor shall attend the following the training classes conducted by the Detroit Arsenal Environmental Management Office:

a. RCRA-Initial
b. RCRA-Refresher
c. Asbestos Awareness
d. Asbestos Contractor Supervisor-Initial
e. Asbestos Contractor Supervisor-Refresher
f. Asbestos Building Inspector
g. Asbestos Management Planner
h. Storm Water Pollution Prevention
i. Affirmative Procurement
j. Lead Based Paint Contractor Supervisor
k. Lead Based Paint Building Inspector

2.6.22.2. If the contractor has employees that could not attend scheduled classes, contact the appropriate COFR to determine if there will be another class. If there are no scheduled classes, and law requires the classes, the contractor must assure employees attend a commercially available class.

2.7 HEATING, STEAM, AIR AND NATURAL GAS SYSTEMS, BOILER

2.7.0 **GENERAL** The Contractor shall develop and perform the total maintenance program for all the equipment and systems. The Contractor shall perform Preventive and Recurring Maintenance on heating, steam, air and natural gas systems, boiler systems and equipment. The Contractor shall assure that all systems and equipment are safe and operating efficiently. The Contractor shall operate, inspect, test, maintain, repair, alter, and otherwise service all components of building heating systems, gas distribution systems, etc. for all facilities using the technical guidance and concepts in the applicable American Society of Mechanical Engineers (ASME) standards, the National Boiler Code, Boiler and Pressure Vessel Code, NFPA, NEC, ASHRAE Guide and Data Books, American Gas Assoc., OSHA, industry standards, manufacturers specifications and instructions, environmental laws and directives and all other applicable State and Federal standards and codes, and regulations, technical manuals, pamphlets and guide specs for system operations and maintenance. The Contractor shall maintain temperatures in heated areas IAW with the standards contained in the American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE).
The Contractor shall operate, calibrate, do summer overhaul and make alterations to package boiler, steam stations, compressed air supply lines, fuel systems, associated feedwater, steam and hot water systems, gas and oil hot air furnaces, make-up warm air furnaces, heat pumps, air handling equipment, all unit heaters, ductwork, insulation, accessories, convectors, converters, and any other components involving heating systems. Work shall be accomplished in a manner that will render the systems and equipment reliable, operationally efficient, and safe to personnel or other equipment. The Contractor shall maintain temperatures in heated areas IAW with the standards contained in the American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE), except for the standards contained in the Critical Systems Appendix, from 0600 to 1800 hours Monday through Friday, excluding holidays.

a. Maintenance and repair of heating equipment at the Commissary, Building 701 is not included in this contract, also see 2.5.1a.

2.7.1 **TYPES OF SYSTEMS AND EQUIPMENT** The Contractor is responsible for the total maintenance and operation of the following systems and equipment:

a. Automatic oil/gas fired low-pressure package boiler

b. Steam distribution systems and equipment (including, but not limited to: piping, hot water and condensate return lines,

hot water supply lines, heat exchanges, expansion joints, loops, crossovers, valves, etc.)

c. Safety and relief valves

d. Automatic forced air heaters

e. Automatic gas/steam/hot water unit heaters

f. Radiators/convectors

g. Steam traps

h. Condensate receiving tanks

i. Fans

j. Gauges and meters

k. Underground/aboveground fuel tanks and lines

l. Natural gas lines and equipment

m. Converters

n. Heat Pumps

o. Water Heaters

p. Chimneys/vents

q. Ducts and plenums

2.7.2 **STEAM AND HOT WATER BOILERS AND SPACE HEATING SYSTEMS**. Boilers shall be secured at the end of each heating season, and thoroughly cleaned internally and externally. Boilers and all related components shall be inspected. An appropriate desiccant shall be installed in the fueling chamber to absorb moisture during the no heat season. Boilers and all component shall be maintained/repaired as needed to insure that the equipment is safe and operating efficiently for use in the heating season.

2.7.2.1 The annual PM shall be completed before the start of the heating season. The following operational checks, inspections, and adjustments shall be performed during the heating season and if needed during annual PM. At least one full operating cycle from start-up through shut-down to start-up again shall be observed during an operational visit. The Contractor shall note, report and correct all deficiencies. Inspections and adjustments shall also include the following:

a. Check heater base plate for signs of leaks.
b. Check and clean smoke pipe and exhaust vents for loose connections.
c. Check smoke pipe, dampers, elbows, roof jacks, rain caps, and accessories.
d. Check and clean siphon.
e. Clean smoke stack of soot and carbon as required.
f. Check the burners electrical and electronic controls.
g. The test levers on the relief valves shall be lifted and the flow from the relief pipe observed. If the flow is restricted or if the valve is otherwise defective, replacement shall be accomplished immediately. A hot water heater with defective safety valves shall not be used and shall be tagged as such until repairs/replacement can be made.
h. Check and oil the gun motor as required.
i. Inspect and clean the fuel nozzle.
j. Check and maintain valves and cocks in good working condition.
k. Lubricate circulating and condensate pumps and motors IAW manufacturer's instructions. Water seals shall be checked for leaks and pumps checked for unusual vibration and other deficiencies.
l. Ensure that all parts move freely and function properly. Lubricate bearings.
m. Drain water out of the water trap and strainer.
n. Check water tank and water line for any leaks.
o. Check and relate the draft.
p. Check, the aquastat. The aquastat shall not be set above (a) 140 degrees Fahrenheit for domestic heaters not serving dishwashers; (b) 180 degrees Fahrenheit for domestic heaters serving dishwashers.
q. Clean the furnace room. At no time shall spilled or leaked oil be allowed to sit in the furnace room.
r. Check and adjust the tension on the air handling unit belts. Care shall be taken to ensure that the fan belts do not squeal on start-up.
s. Clean, oil and grease all motors, fans, fuel pumps, fittings, bearings, etc.
t. Check humidifiers.
u. Clean or replace air filters.
v. Check fuel system and interior/exterior valves and lines for leaks.
w. Check all safety devices and controls including, but not limited to, thermostats, stack switches and burner cut-offs. Conduct efficiency tests.
x. Check the electrical wiring in the heating room and report any required maintenance.
y. Check electrodes and reset gap IAW manufacturer's specifications.
z. Check and repair all insulation on equipment, ducts and

aa. The Contractor shall record emissions monthly as required by the Installation Air Permit using the Michigan Air Emission Reporting System format.
bb. Test control valves, relief valves, radiators, conveyors, and condensate receiving tanks annually.
cc. Bleed radiators when required.
dd. Repair defective hose bibs.
ee. Inspect furnaces and thermostats and make repairs when required.

2.7.3 **STEAM DISTRIBUTION SYSTEMS** The Steam Distribution Systems include the steam distribution, high and low pressure steam and hot water systems, expansion joints, loops, crossover traps, heat exchangers, and steam, hot water and condensate return systems. Work on the above exterior/interior systems shall include:

a. Repair leaks of all kinds.

b. Replacement of sections of lines.

c. Removal of insulation and replacement with new insulation and jacket.

d. Repair/replacement of supports.

e. Repair/replacement/rebuilding/installation of all pumps (e.g., vacuum pumps, condensate pumps, etc.) traps, steam pits, reducing stations, flash tanks, all valves (e.g., check valves, gate valves, globe valves, etc.) strainers, etc.

f. Inspection by line-walking the distribution system piping except during extremely cold weather. The inspections shall be bi-weekly. More frequent inspections shall be made during periods of heavy rains or floods or at any time soil displacement is likely to occur. Leaks shall be located and repairs made. Repack high-pressure slip-type expansion joints as required.

2.7.4 **AUTOMATIC FORCED AIR HEATERS/UNIT HEATERS** The Contractor shall ensure efficient and continuous equipment performance throughout the heating season. The Contractor shall perform the following:

a. Test gas valves, regulators and gas burning equipment for leaks.

b. Clean or replace filters on furnaces twice each year (at the beginning of both the heating and cooling seasons, and more often if air flow becomes restricted and heating efficiency is

reduced).

c. Clean fans and burners of furnaces.

d. Test all safety equipment and fuel cut-off devices for proper operation once a month during heating season.

e. Inspect thermostats and make repairs when required.

2.7.5 Reserved

2.7.6 **SAFETY AND RELIEF VALVES**. The Contractor shall perform services on safety and relief valves and shall include the following:

a. Equip boilers, furnaces, water heaters and tanks, gas distribution systems and the like with safety devices necessary to protect the equipment against damage and to prevent hazards to life and property. These devices shall be maintained, periodically tested and visually inspected to ensure proper operation.

b. Set pressure relief or safety valves on all fired and unfired pressure vessels at not more than the maximum allowable working pressure. Where changes are made in the type of firing equipment or fuel, the safety or relief valve capacity shall be verified for adequacy under the new conditions. Valves shall be tested at least annually and on start-up after being out of service.

c. Inspect and test annually unfired pressure vessels. The inspection and tests shall be IAW the latest edition of the ASME Boiler and Pressure Vessel Code, Section: Unfired Pressure Vessels, Inspections, and Tests. The Contractor shall have available any reports on these inspections for review.

d. The Contractor shall visually inspect safety and relief valves at least quarterly. The Contractor for each safety and relief valve inspected, tested or serviced shall keep records for future reference.

2.7.7 **MISCELLANEOUS HEATING AND DISTRIBUTION SYSTEMS TASKS** The Contractor shall perform the following on miscellaneous heating and distribution systems and equipment as listed below:

a. Install, maintain, replace, adjust and inspect equipment controls (e.g., thermostats, aquastats, switches, burner fuel cut-off equipment, flame safeguard controls, blower and draft motors, pressure and water regulators, pneumatic and electronic switch gear and safety devices).

b. Inspect, install, adjust, maintain, repair and replace all other related equipment (e.g., bearings, warm air furnaces, gaskets, oil seals, water feed tanks, bushings, linkage pins, bellows, tanks, transformers, converters, regulators, thermocouples, valves, oil pumps, piping, controls, electrical components).

c. Inspect, adjust, install, maintain, repair and replace burners, burner nozzle strainers and assemblies, dismantle and repair defects, reassemble and reinstall components.

d. Inspect and reline furnaces with firebrick or other refractory material, strainers, orifices, ignition electrodes, sensors, steam traps, etc., and remove soot and fly ash from tubes, combustion chamber, chimneys, breeching, etc.

e. Clean and clear all buildings, boiler rooms, mechanical rooms and fuel dispensing facilities, maintained under this contract of rubbish, dirt, debris, POL and chemical spillage, or any other material. All chemicals or fuels spilled or dropped shall be removed in such a manner that the surface is not damaged. All fixtures and devices shall be clean and in workable condition.

f. Clean ductwork systems and other components to maintain a clean air quality standard in the buildings. Remove moisture and sanitize air handling systems and drip pans to avoid air borne diseases in and around the buildings. Treat circulating water for biological control and corrosion IAW accepted industry practice. Also see 2.3.2u.

g. Observe and test the efficiency of the operating equipment for conservation of energy, adjust firing and combustion and shall note test results on the work authorization document.

h. Replace, repair and/or overhaul valves to include repacking and alignment of seats, internal linkage and breech rings.

i. Weld boiler tubes in such a manner that the health, safety, and well being of the occupants are not endangered.

j. Clean equipment to ensure maximum operating efficiency.

k. Treat and test water in boiler systems to ensure energy efficient operations. Drain contaminated water from boilers. Dispose of the contaminated water IAW State and EPA requirements.

l. Provide maintenance inspection, repair, and modification to the fuel supply and accessory equipment for the heating systems.

m. Red tag equipment when required.

n. Inspect, maintain and repair all chimneys, flues and vents, associated with the heating systems. Complete inspection, cleaning, repairs or other maintenance work prior to the start of the heating season. Also see 2.4.3.b.

2.7.8 **GAS DISTRIBUTION SYSTEMS:** The Contractor shall perform necessary maintenance to ensure efficient and continuous gas distribution. The Contractor shall use the technical guidance found in 49 CFR part 192 “Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards” for all Army owned gas distribution systems. The Contractor shall prepare a natural gas systems operation and maintenance plan, submit 60 days after contract award with annual updates thereafter by 1 September. The Contractor shall perform the following:

a. Determine causes and locations of gas leaks within all areas and correct them. In the event a gas appliance is at fault and cannot be repaired, the unit shall be shut off and tagged out of service. The tagged unit shall not be placed back in service until repaired or replaced.

b. Inspect, test, and repair all gas regulators.

c. Maintain and repair exterior and interior gas lines and components.

d. Inspect, install, adjust, maintain and repair air and natural gas lines, to and within fixtures and facilities.

e. Maintain, adjust and lubricate gas valves as required.

f. The Contractor shall perform preventive maintenance on a quarterly basis on gas distribution systems to include but not limited to the following: lubricate plug cocks with appropriate lubricants and remove any hardened lubricants; tighten gland bolts for proper operation; operate all valves to ensure proper function and adjust as required; inspect gas regulator monthly for cleanliness, hazards, or damage, and correct as required; check delivery pressure; check valve and diaphragm stems; check breather vents and protective screens; inspect and clean filters and screens ; check pilot loading regulator; check relief valves; overhaul regulators as required; test for any gas leaks.

g. Personnel who work on natural gas systems shall be certified by the Michigan Public Service Commission for natural gas systems.

h. The Contractor shall develop a natural gas systems operations and maintenance SOP within 60 days of contract start, submit to COFR, update and submit annually thereafter to the COFR.

2.7.9 **TREATMENT AND PROTECTION OF GAS, AIR, HEATING AND STEAM DISTRIBUTION SYSTEMS** The Contractor shall inspect, test, adjust, install, modify, maintain and repair all treatments and protection for distribution systems including, but not limited to: addition of chemical treatments; cathodic protection of metals; application of sealants, paints, etc.; and the installation and maintenance of protective barriers and covers.

2.7.10 **ALTERNATE STEAM SOURCE (Detroit Arsenal)** In the event temporary steam is required due to sudden failure or malfunction of the Steam Contractor's Boiler Plant, the BaseOps Contractor may be required to provide temporary alternate steam source until the primary Boiler Plant is restored to service by the Steam Contractor. The temporary steam source shall be on-line within (24) twenty-four hours from COFR's verbal or written request for an alternate steam source. The hook-up, inspection, fueling, adjustment, transportation of the alternate steam source shall be the BaseOps Contractor's responsibility. The BaseOps Contractor shall provide all equipment, supplies and labor necessary to ensure continuous operation of the temporary steam source and uninterruptible supply of steam.

2.8 LOCKSMITHING

2.8.0 **GENERAL** The Contractor shall develop and perform a total maintenance program for all the locking devices and systems. The Contractor shall perform Preventive and Recurring Maintenance on the locking devices and systems. The Contractor shall assure that all devices and systems are safe, secure and operating efficiently. The locksmithing portion of this PWS includes those functions related to locksmithing, key control, locking devices, work processing and control, planning, and other locksmith duties. The Contractor shall maintain, repair, installation and control program for all locks, locking devices, mechanisms, keys, and systems, for all building doors, gates, fences, and all other locks and systems installed to real property. The Contractor is not responsible for locks installed in property such as vehicles, desks, furniture, etc.) The Contractor shall perform all work in accordance with the National Fire Protection Association (NFPA) standards and manufacturers recommendations. Since locksmithing

services are an essential facet of the installation’s physical security, the Government, as a critical task, will monitor these services. Contractor shall provide 24 hour-per-day locksmithing services IAW the definitions of Emergency, Urgent and Routine in section “ WORK LEVELS ” of this PWS. All personnel performing locksmithing services on classified or restricted areas must possess a secret security clearance. The Contractor shall prepare a Lock Smith Operations and Maintenance SOP within 30 days after the start of the contract, submit to COFR and update annually thereafter.

2.8.1 **LOCKSMITHING WORK CONTROL** The Contractor shall log in all requests, provide requesters with work order numbers for future reference, maintain records detailing location of work, labor, materials, and equipment used or expended. Installation of new locks, cores, lockets, padlocks, fabrication of keys, etc., shall be approved in writing by the COFR prior to start of work. The Contractor shall develop a key system for each facility that includes master, sub-master, individual, and special keys within the system. The Contractor shall maintain all keys, cores, etc. and all records and logs in a secure manner so as to preclude any unauthorized use of information or items thereby impairing physical security.

2.8.2 **LOCKSMITH TASKS.** The Contractor shall perform the following locksmithing tasks:

a. Maintain log(s)/register of:
- All services performed and for whom,
- All cores installed and keys issued,
- Combinations,
- A master log of all keys, cores, and other locking devices including locations and recipients,
- Identifying codes for all keys, cores, and locking devices.

b. Maintain, repair, and inspect a wide variety of locking devices, systems, mechanisms, and equipment.

c. Open various locking mechanisms, devices, or equipment using picks, listening devices, drills, saws, etc.

d. Install passage/entry sets, panic hardware and alarms, striker plates, security covers, etc.

e. Install new cores and keys, replace existing cores and keys, and fabricate duplicate keys and cores, as required, to maintain physical security. Switch lock cores in doors after construction contractors have installed new doors with locks with keyed cores. Instruct and assist building occupants on setting or

changing combinations on cipher door locks.

f. Change combinations on vaults, safes, etc., as approved in writing the COFR. Combinations for classified containers and physical security equipment shall be changed at least annually or whenever security may have been compromised. "Compromised" includes, but is not limited to: transfer, discharge, or reassignment of an individual with knowledge of the combination; or if the system is discovered unlocked and unattended or malfunctioning.

g. Perform a semiannual inventory of all issued or installed keys, cores, padlocks, locks, or other locking devices IAW appropriate regulations.

h. Coordinate with Provost Marshall Office or other contractors over areas of responsibility. Bring all problems to the attention of the COFR. Notify the COFR immediately of any evidence of tampering with equipment.

i. Provide duplicates of keys to the Detroit Arsenal Public Safety Office, and others as may be directed in writing by the COFR.

j. Establish keying systems for all facilities, subject to written COFR approval. Update as required to maintain security and correct changes in personnel, physical structure of the facility, or security requirements.

k. Stamp all keys, cores, and locking devices with an identifying code. Stamp all keys with the legend "US Government - DO NOT DUPLICATE".

2.8.3 **KEY AND CORE CONTROL SYSTEMS** The Contractor shall maintain key and core control records for all keys/cores that are the responsibility of the contractor. These records shall include the following information:

a. The total number of keys, blanks, and cores in the system.

b. Total number of keys by core code.

c. Total number of keys issued, dates of issue, and the recipients of the keys.

d. Register of key recipients and hand receipts for the keys.

e. Date and results of semiannual inventories of keys,

cores, and other locking devices.

f. Locations of cores by core code and the date of the last core change.

g. Recipients of padlocks, proposed locations of the padlocks, core codes for the padlocks, and number of keys issued. Padlocks shall be inventoried by serial number semi-annually by the Contractor.

h. Listing of all keys and cores for installed building equipment, panels, cabinets, padlocks, etc., by description, code, and location.

2.8.4 **OTHER CONTRACTOR LOCKING SYSTEMS** The Contractor is not responsible for keys, locks, etc. that are being maintained or installed by the custodial contractor at DTA. If the origin or responsibility for a specific key, lock, etc., cannot be determined then the Contractor shall assume responsibility for that device, unless the COFR concurs with the Contractor that they should not assume the responsibility.

2.8.5 **LOCKING DEVICES, SYSTEMS, AND ANCILLARY EQUIPMENT.** The Contractor shall perform services on a wide variety of locking devices, systems, and ancillary equipment on real property or installed property that becomes real property as listed below:

a. Key locks, Combination locks, Padlocks, Pin tumbler locks, Wafer or disc tumbler locks, Lever Locks, Dead bolt locks and latches, Safe locks,

b. Relocking devices.

c. Interchangeable cores.

d. Chain latches.

e. Equipment locks and latching devices.

f. Keys and other entry devices.

g. Entry and passage sets.

h. Hasps, brackets, astragals, shields, etc.

i. Panic hardware and panic alarms.

j. Door buzzers, remote electric entry latches, etc.

k. Key and core cutting equipment and all other supporting

locksmithing equipment.

l. Key cabinets, boxes, vaults, etc.

m. Combination safes, vaults, etc.

n. Panel cover locks for switchgear, alarm systems, breaker boxes, lockouts, etc.

o. Electronic Access Control System (Key cards)

2.9 METAL AND MECHANICAL SERVICES

2.9.0 **GENERAL:** The Contractor shall develop and perform the total maintenance program for all the equipment and systems. The Contractor shall perform Preventive and Recurring Maintenance on the equipment and systems. The Contractor shall assure that all systems and equipment are safe and operating efficiently. The Contractor shall perform a variety of metal and mechanical work on all facilities, structures, etc. All services shall be performed in accordance with applicable national Codes, manufacturer's recommendations, and all federal and state laws, regulations, technical manuals, pamphlets and guide specs.

2.9.1 **TYPE OF WORK:** The Contractor shall inspect, test, calibrate, maintain, repair, replace, and alter all systems of buildings, structures, and installed real property equipment, unattached loading ramps, bicycle racks and display vehicles. The Contractor shall be responsible for maintenance and repair or replacement of metal and mechanical components of buildings and structures, installed building equipment, FE equipment, and shall construct and install metal components in support of other maintenance and service activities.

2.9.2 **TASKS:** Contractor’s responsibilities shall encompass the full range of metal working, sheet metal activities, and mechanical services which include the following:

a. Fabrication, installation, repair and replacement of parts or complete assemblies as required for metal components of buildings, metal parts of installed building equipment, utility systems, roadway structures, drainage structures, metal signs, installation of anchors in floors and walks to secure pilferable items.

b. Maintenance, installation, and repair of venetian blinds for those areas not covered by the current Custodial Contract.

c. Performance of welding shop services on all equipment

(both Government and Contractor).

d. Breeching from boilers to stacks.

e. Assembling and fastening of fabricated parts by installing bolts, rivets, screws and/or seaming, soldering and spot welding.

f. Maintenance and repair of conveyor lines, trolleys, and switching units.

g. Maintenance and repair of sawdust collecting systems.

h. Maintenance and repair of all oiling and oil cooling systems, acid fume collection systems and acid collection systems.

i. Maintenance and repair of all vacuum systems.

j. Maintenance and repair of all shredding machines.

k. Repair, modification or fabrication of metal items for all types of equipment, including light or intricately made mechanical parts which must fit in assemblies where close to tolerances are required.

l. Construction, replacement/repair of tool cribs and storage cribs.

m. Preheating of metal and maintenance of heat to prevent distortion.

n. Maintenance and repair of gas, fuel, and oil systems.

o. Maintenance and repair of all exhaust omissions ventilation and monitoring equipment and systems.

p. Maintenance and repair of spark arresters systems.

q. Repair/replacement of all metal ducting and air conditioning ducts.

r. Performance of metalworking services on all equipment (both Government and Contractor).

s. Fabrication, assembling, and installation of gutters, ducts, flashing, safety guards, roof stacks, down spouts, sink tops, drain boards, shelves, tool boxes and other containers, counter and table tops; wall brackets, shower parts and sections, parts for air conditioning, heating and ventilating equipment,

sheet metal components of buildings, shelter, buses, trailers and other industrial equipment of equivalent complexity.

t. Recommend to the COFR design changes during and after installation of new equipment.

u. Maintenance and repair of plows and hoppers for snow removal.

v. Support of pipe fitters as necessary in the repair and/or maintenance of high pressure steam lines, water lines, air lines and oil lines.

w. Fabrication of boxes, radiator covers, heat deflectors and hasps used for security locks.

x. Semi-annual inspection, PM, maintenance and repair and emergency services of sliding doors including replacement of screening glass, hardware and weather stripping.

Y. Annual inspection, PM, maintenance and repair and emergency services on automatically operated doors indicated in the Real Property Appendix.

y. Straightening of warped screen doors and frames to fit squarely in opening. Replace warped items if beyond repair.

z. Repair and replacement of acoustical and other drop ceiling metal supports and frames.

aa. Maintenance and repair of all jib cranes.

ab. Maintenance, repair or replacement of electrical or air cranes and hoists which are installed on the exterior and interior of buildings or structures.

ac. Safety Inspection and Testing of Lifting Devices.

(1) Scope. The Contractor will perform the maintenance, repair, safety inspections and testing of all lifting devices and fixtures on a periodic basis in accordance with this scope of work, the Occupational Safety and Health Act of 1970 and OSHA Regulations (Standards - 29 CFR) Overhead and gantry cranes. - 1910.179. Army Technical Bulletin (TB) 43-0142, 28 Feb 1997 is referenced for information only on the Army policy and procedures for the safety inspection and testing of lifting devices.

(2) Definitions:

(a) Lifting Devices. Any device or component used to raise, lower, hold, or position a load from one location to another or elevation to another. Examples of lifting devices include forklift trucks, cranes, manual or motorized pallet jacks, hoists, wreckers, A-frames, slings, ropes, wire ropes, hooks, O-rings, pear rings, spreader bars or lifting clamps, beams, jacks, safety stands, and jack stands.

(b) Lifting Fixtures. Any device or assembly of devices used to facilitate attachment of a load to a lifting device. Examples of lifting fixtures include an H-beam with nylon slings, wire rope with spreader bars, or rope with lifting clamps.

(c) Periodic. As related to inspections and testing, a period of one year or less, based upon the nature of the lifting device and the degree of exposure to wear, deterioration, or malfunction.

(d) Load Rating. The load rating is the maximum authorized load that may be lifted by a lifting device. The load rating may be less than or equal to, but shall not exceed the Manufacturer's Rated Load. For fixtures, the smallest Manufacturer's Rated Load component shall equal the fixtures rated load. Testing shall be based on the load rating of the device.

(3) Required tasks. The Contractor is responsible for performing the periodic safety inspection and testing of all lifting devices and fixtures in use, contained or stored, except those specifically excluded or covered by another contract, at the following buildings at Detroit Arsenal: Building 7, 200B, 200C and 200D, 210, 212,215, 219 and at USAG-S building 104,auto shop and building 972. The Contractor shall not be responsible for inspecting/certifying customer-fabricated (not obtained from a commercial source) chains, slings or other lifting devices and fixtures.

(a) Inspection procedure. The Contractor shall develop an operating procedure and provide it to the COFR within 30 days of contract start. The Contractor shall inventory all lifting devices and fixtures and perform an initial inspection and tests within 30 days of award. Thereafter, the Contractor will perform a periodic inspection and tests NLT 1 Oct every year thereafter. The Contractor will affix a metal or other durable tag, with a barcode (or other local control number as determined by the contractor), add the item control number and description to an manual or automated database, and document the periodic inspection and test when completed. The inspection criteria will be manufacturers standard and/or best industry practice. Prior

to initial tagging by the Contractor and use by the user, the item will be given a functional test to determine operability of the equipment. The customer upon presenting any new item for service record, tagging and tracking will provide the manufacturers load test certification to the contractor before the item can be tagged for service. It is noted that these items are customer purchased, wear type items, and that the customer may add new items, and/or discard any items Red tagged as "unserviceable" by the Contractor after the failure of any test or inspection. The Contractor shall destroy non-repairable chains and slings so they cannot be placed back into service. The Contractor shall be responsible for the safety inspection and testing of all lifting devices and fixtures defined herein, within each of the buildings specified, up to a total workload not to exceed 500 items per year. The total annual workload will not exceed 15 chains repaired and 5 hooks Magnafluxed. If it is determined by industry practice or OSHA requirement that an item requires load testing, the item will be sent to the manufacturer or qualified vendor to perform the test. The Contractor shall be considered a "qualified vendor." All locally fabricated weights and available items used for load testing must be verified for proper weight by the use of a calibrated scale.

(b) Maintenance Records. Ensure that maintenance records for each lifting device and fixture are initiated and maintained to a standard equal to or better than that outlined in DA Pamphlet 738-750 or equivalent industry accepted practice. Inspections and testing results, excluding the daily inspections, shall become part of the maintenance record of the lifting device.

(c) Annual Safety and Test Inspection Schedule. Provide a copy to the COFR of an annual safety inspection and test schedule not later than 1 Oct each year of the contract.

(d) Inspection. All lifting devices shall be inspected in accordance with manufacturer's recommendations and the following minimum criteria:

[1] Daily inspection by the operator prior to use.

[2] Periodic inspection by the Contractor's maintenance personnel, assisted by Operator/Crew personnel, at least every twelve (12) months and prior to the use of lifting devices which have been idle for six (6) months.

[3] Slings only require a functional test prior to initial use when they have been extensively repaired or

altered. The manufacturer is responsible for performing the load test and providing written certification to the using facility.

(4) The following Table 1 outlines the periodic inspections:

Periodic Inspections for Lifting Devices and Fixtures*
Table 1.

Category of Lifting Device or Fixture	Inspection Metric	Responsibility
Wire ropes and wire rope slings	Daily and monthly Annual	User Contractor
Alloy Steel Chain Slings	Daily and Monthly Annual	User Contractor
Metal Mesh Slings	Daily and Monthly Annual	User Contractor
Rope, Natural and Synthetic Fiber Slings	Daily and Monthly Annual	User Contractor
Synthetic Web Slings	Daily and Monthly Annual	User Contractor
Hoisting Beam Slings	Daily and Monthly Annual	User Contractor
Hooks	With the sling	User and Contractor
Jacks and Stands	Daily and Monthly Every six months	User Contractor
Any item meeting the general definition at least annually		

***For load testing see PWS paragraph 2.9.2.ac**

ad. Maintenance of mechanical and electronic operated doors, fire doors and fuseable links, overhead doors, pneumatic operated doors, fire dampers and hydraulic doors.

ae. Fabrication of special equipment, jibs, fixtures, boxes, air conditioning duct work, flashing, gutters, exhaust stacks, guide wires and down spouts.

af. Installation and removal of temporary partitions.

ag. Assemble, disassemble and reassemble all non-permanent buildings and structures (e.g., guard shacks, tents, storage areas, etc.) in any location as required by the COFR.

2.9.3 Reserved

2.9.4 **RIGGER TASKS**

The Contractor shall perform a wide variety of rigging tasks including, but not limited to, the following:

a. Be responsible for moving heavy equipment, furniture, bulky materials, and vehicles, which may require the use of cranes, block and tackle, jacks, dollies, skids, and other rigging equipment as required by the COFR.

b. Perform the assembly, erection, dismantling, moving, maintenance and repair of wood and metal towers, including TV monitor towers, water towers, antennas, etc.

c. Unload, load, move, and place large pieces of equipment and material.

d. Assist forklift drivers, crane operators, truck drivers, and others in the movement of heavy equipment.

e. Cut, splice, assemble, repair, and install a variety of standing and running rigging.

f. Cut and splice wire cables.

g. Manufacture chokers and slings (e.g., cable, rope, chain and wirerope).

h. Inspect and test all cables on cranes annually.

i. Load tests all lifting devices (e.g., slings, jacks, cables, cranes, etc.) and after major repairs or cable replacement as required by OSHA.

2.9.5 **ELEVATORS** The Contractor shall inspect, test, maintain, repair, and perform certification services of elevators. All inspections and testing will be performed in the presence of a Contractor-provided certified inspector. All inspection and testing shall be IAW current editions of State codes, ANSI A17.1, ANSI A17.2, ANSI A17.2a, and State of Michigan Code Public Act 227, NFPA standards and NEC Codes. The Contractor shall obtain an annual State of Michigan elevator certificate of operation and post in the elevators. In the event that an unscheduled shutdown of an elevator/dumb waiter occurs, the Contractor shall immediately notify the COFR. The Contractor shall coordinate scheduled shutdown with the affected building occupants after written approval is provided by the COFR.

2.10 ENVIRONMENTAL PROTECTION (USAG-S)

2.10.1 **General.** The overall purpose of this PWS is to prevent pollution of air, water, and land, protect human health, conserve the natural and cultural resources of the USAG-S and surrounding community and assure compliance with all applicable Federal, State, and local laws, regulations, guidance and policies. As an independent activity located on the USAG-S, the Contractor shall follow all Department of Defense, Department of Army and installation policy, plans, directives and regulations. All the Contractors actions shall reflect on the USAG-S. This PWS identifies Contractor actions, both to support the USAG-S environmental program and assure their operations are in compliance with the above. The Contractor is an integral part of the USAG-S's environmental protection and pollution prevention programs. For the purpose of this PWS, pollution is defined as the introduction of and/or the presence of chemical, physical, or biological elements that adversely affect human health or welfare or unfavorably alter biological balances of any all species. Actions of the Contractor shall make all attempts to reduce pollution at the source and ensure that these actions do not endanger the health and safety of any individuals. The Contractor’s operations shall be subject to inspection by all applicable regulatory agencies and Department of Defense Activities. The Contractor shall maintain environmental records as specified in the PWS and turn over all records to the Environmental Coordinator (EC) at the end of contract. These records are subject to inspection by all regulatory agencies and Department of Defense Activities at any time. The EC is the COFR for all environmental aspects of the PWS.

2.10.2 **CONTRACTOR NON-COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS.** The Army's goal is to have no enforcement actions at any installation. The Contractor's actions and support are absolutely essential to achieve this goal at the USAG-S. In the event the USAG-S is issued an enforcement action, and the Contractor is found culpable due to their actions, the Contractor shall be liable for all fines and penalties. In such a case the Contractor shall also be responsible to reimburse the Government for all expenses incurred as a result of the enforcement action.

2.10.3 **ENVIRONMENTAL PROTECTION PLAN**

2.10.3.1. The Contractor shall prepare an Environmental Protection Plan (EPP) and submit it to the EC within 45 days of awarding the contract. Update the plan and provide to the EC annually 15 days after anniversary. Allow 30 days for comments.

The EPP shall detail the actions that the Contractor shall take to comply with all applicable Federal, State, and local laws and regulations concerning environmental protection and pollution control and abatement, as well as the additional specific requirements of this contract. The Contractor shall refer to the applicable existing environmental documentation to ensure that the natural, historic, and cultural resources specific or unique to any of their actions are protected. The EMP shall include, but is not limited to, the sections on each of the areas of this PWS.

2.10.3.2 The Contractor has the option to incorporate the EPP into their safety plan, making it a Risk Management Plan.

2.10.3.3 The Contractor shall maintain the appropriate personal protective equipment and supplies needed to perform the environmental operations. The Contractor shall ensure that equipment and supplies are inspected, tested, repaired and utilized IAW applicable laws and regulations.

2.10.4 **AIR MANAGENENT.** The purpose of the USAG-S Air Management Program is two fold.

a. Manage air emissions to protect human health and the environment and comply with all Federal, State and local air quality control laws and regulations.

b. Manage indoor air quality at the USAG-S to protect human health.

2.10.4.1 **Air Emissions.** The USAG-S's air emissions are not restricted. The USAG-S is currently located in an Attainment Area as defined by the U.S. Environmental Protection Agency (EPA). The EPA has the authority to change this at any time, based on emissions in the SE Michigan area. Ozone Action Alerts address the importance of preventing the formation of ground-level ozone and protecting public health. Ozone Actions Alerts are issued by the Clean Air Coalition (CAC) as a result of a number of factors that include meteorological conditions such as temperature, wind speed/direction, cloud cover and ultraviolet radiation. The CAC also considers the likelihood of ozone transport from other areas and expected emissions from regional sources. While there are no requirements to reduce emissions that can attribute to the formation of low level ozone in the atmosphere, the Contractor shall be cognizant of the actions that they can take to prevent the formation of low level ozone.

2.10.4.2 **Air Management Plan.** The Contractor shall prepare an Air Quality Management Plan for all garrison activities that addresses all applicable Federal, State, Local and DOD laws and

regulations. The Contractor shall submit plan to the EC 90 days after the award of the contract. Update the plan and provide to the EC annually 15 days after anniversary. Allow 30 days for comments. The Plan shall include, but not limited to:
a. Monitoring of air pollutants.
b. Procedures for submittal of monthly reports to the EC for identified air pollutants. Report will be submitted to EC 5 working days after the end of each month. EC has 10 working days to approve.
c. Procedures to address the preparation and management of permits to install for all new air emission sources at USAG-S (vent hoods, boilers, stationary engines, paint booths, etc.) whether or not they qualify for an exemption, a permit to install must be prepared and submitted to EC before construction or operation. The EC will submit the permit and any applicable fees, but the Contractor shall prepare the permit application and supporting documentation and submit to the EC. The EC has the final decision on whether a source is exempt. When other entities besides the Contractor are to install new air emission sources, the EC will serve as an interface between the Contractor and the other entities to help coordinate the Contractor's effort to prepare the permit.

d. Procedures for addressing indoor air quality issues and corrective action.

2.10.4.3 **Ozone Depleting Chemicals (ODC).**
a. The Contractor shall ensure that all employees and operations conform to the requirements of the Clean Air Act and State of Michigan implementation rules. The U.S. Army policy is to minimize the procurement, use and emissions of ODCs to the greatest extent possible. Installation of equipment using Class I ODCs is prohibited. Only equipment utilizing refrigerants listed by the EPA Strategic New Alternatives Program (SNAP) are acceptable. It should be noted that HCFC 22 and HCFC 123 shall be phased out in 2020 and 2030 respectively. Equipment shall be labeled with the type of refrigerant used and the date of installation. As-built drawings shall include location, installation date and type of refrigerant.

b. The use of Class I or II ODCs are not by themselves damaging to the environment provided the refrigerant is not released during operation and is recovered upon retirement of the equipment. The Contractor shall remove and recover Class I and II ODCs where required. All personnel removing Class I ODCs shall be licensed and their equipment shall be certified accordingly. Licenses and equipment certification shall be retained on site by the Contractor and copy submitted to the EC annually. The Contractor shall also properly dispose of all refrigeration units (window a/c units, refrigerators, etc.) from residents put at

curbside, found on post, from other customers and from Contractor operations. This includes (but is not limited to) the handling and disposal of the unit and the reclaiming, labeling and disposal of CFCs.

c. The Department of Defense has a program to retain certain Class I ODCs for strategic reuse. The Contractor shall be responsible for proper turn-in to DRMO for this purpose.

2.10.4.4 **INDOOR AIR QUALITY.**
a. The Contractor shall maintain a log of all indoor air quality calls (except for mold, see 2.10.4.4.1). Complaints shall be recorded on a complaint form, see Figure A of Appendix 13. The Contractor may use this form, modify it or create a form as long as the same information is collected. The Contractor is responsible for completing, maintaining and saving the complaint form for each complaint call. Turn over forms to the government at the end of the contract. The Contractor shall respond to all calls as an Urgent action and if the Contractor cannot resolve, recommend corrective action to the COFR. Evaluate all air quality calls quarterly to determine if systemic problems are present. If these problems cannot be corrected by the Contractor, recommend corrective action to the COFR.
b. MOLD - The key to control of mold is moisture control. Any uncontrolled source of water can result in mold growth which may affect the health and welfare of our employees and resident. The identification of uncontrolled waters should be considered a health problem and addressed accordingly. Response to mold calls or findings shall be addressed by the Mold Team according to the USAG-S Mold Protocol.

2.10.4.4.1 MOLD RESPONSE/SUPPORT: The Contractor shall receive reports of a potential mold conditions from customers, government personnel and other sources. Respond to mold actions as an Urgent Priority or as requested by the COFR. Make site visits to access, locate, identify potential moisture sources, take samples, monitor, perform investigative work, eliminate the moisture/source, make repairs and remediate any mold, if they cannot correct, recommend repair/remediation requirements to the COFR. During the performance of the work the Contractor shall take precautions to minimize mold spore release. After site visits, the Contractor shall issue an electronic notification to the Mold Team to report on the situation and recommend required action. Mold Team members include representatives from: USAG-S Family Housing, Engineer and Safety offices, MEDDAC Industrial Hygienist (IH), Community Health Nurse, consultants, Contractor DPW, Family Housing and other offices.

a. The Contractor shall provide assistance to the Government representative, industrial hygienists and consultants during site

visits and investigation work as requested. Assistance will include access plumbing, structural interiors and other areas not readily accessible, sampling, air monitoring, laboratory testing/analysis and distribution of analytical laboratory results to the mold team. The Contractor shall remediate mold IAW EPA guidance and follow the TG 278 Industrial Hygiene/Preventive Medicine Mold Assessment Guide. Mold work shall be performed in accordance with Maintenance and Repair definitions.

b. The Contractor family Housing office shall maintain original and copies of mold related activity documentation received from the Mold Team and other sources and shall record and maintain a log (Mold Activity/Status Report), to reflect relevant mold activity. The Mold Activity/Status Report log shall be disseminated weekly to the Mold Team. The log shall contain the following columns:

1. Address of unit of potential mold condition.
2. Name of POC at the address.
3. Date of initial service order site visit.
4. Date of initial Mold Team notification.
5. Date analytical lab results are received by IH.
6. Date MEDDAC IH submits report to Mold Team.
7. Date IH notifies or provides resident with lab report/MEDDAC IH report.
8. Status of case (open or closed) as determined by USAG-S Housing office.

The log shall be in Excel format containing individual columns for each data element so the report can be sorted by any column.

2.10.4.5 Training Requirements: The Contractor shall ensure that all it’s employees providing ODC maintenance are properly trained and State certified. The Contractor shall include applicable training for air management in its Environmental Training Plan, see 2.10.23.

2.10.5. ASBESTOS MANAGEMENT.

The purpose of the USAG-S Asbestos Management Program is to document and describe how asbestos policies are to be implemented for the controlling potential health hazards created by the presence of asbestos-containing materials (ACM) within structures at USAG-S. The Contractor shall be responsible to manage the USAG-S Asbestos Program. All activities of the Contractor shall follow the existing USAG-S Asbestos Management Plan.

2.10.5.1. The Contractor shall perform an initial asbestos inspection of all the garrison facilities and a risk assessment within 6 months of the start of contract for all garrison facilities. The Contractor can utilize the existing garrison

asbestos survey inspection data to aid in the inspection. The contractor shall then prepare an Asbestos Survey from the inspection data and a risk assessment. Laboratory analysis of sample materials will be required to confirm material contents. Prior to the start of the inspection, the Contractor shall meet with the EC to review the Contractor's inspection plan, discuss areas of concern within the garrison, what type of information will be collected and the format for the final survey report. The Asbestos Survey and risk assessment shall be in electronic format to include discussions of existing asbestos containing material conditions, remediation recommendations, test methods, sample locations, test results, pictures, CAD drawings with diagrams showing the locations, type, extent and condition of asbestos within the facilities. Submit to the EC, allow 30 days for comments.

2.10.5.2. Contractor shall prepare and submit to the EC an asbestos Operation and Maintenance (O&M) Plan IAW Federal and State regulations and laws within 30 days after completion of asbestos inspection. The Contractor shall maintain and update the O&M Plan as needed. The O&M Plan is to establish responsibilities and prescribe procedures for minimizing and controlling potential exposure to airborne asbestos fibers in facilities maintained by the Contractor. The Contractor shall identify a person to serve as the Asbestos Control Officer (ACO) to include an alternate Asbestos Control Officer. The ACO shall be present to supervise asbestos operations.

2.10.5.3. The Contractor shall perform and submit to the EC an annual asbestos re-inspections. This shall be completed within four months of the exercise of a contract option. The Contractor shall update the USAG-S Asbestos Survey/Management Plan and O&M Plan with any changes observed during the re-inspection. The contractor shall submit to the EC, allow a 15 days comments.

2.10.5.4. The Contractor shall review all projects, work orders and service orders to determine if asbestos could be encountered during execution of the work order.
a. Identify projects, work orders and service orders that require asbestos remediation and make recommendations to the COFR.
b. Ensure that estimates include all required asbestos work.

2.10.5.5. Contractor shall provide the following types of work, and all work will be conducted IAW the O&M Plan:
a. Encaspulation of ACM on equipment and facilities to prevent further spread of fibers and material.
b. Removal of ACM where feasible or necessary to prevent a health or environmental hazard. All work involving asbestos removal, encapsulation, etc. shall be limited to that which is directly associated with and required to perform maintenance and repair

work as otherwise required by the contract. This shall be accomplished IAW with all Federal and State laws. Asbestos work may be performed at anytime, 24 hours a day, 7 days per week at the discretion of the EC and /or COFR. The COFR and EC will approve all work before start up.
c. Cleaning of contaminated areas with appropriate equipment necessary in order to reduce the residual asbestos level to acceptable levels IAW Federal and State regulations.
d. Packaging, labeling, storage and disposal of all ACM generated by the Contractor.
e. Provide for collection and testing of samples for asbestos determination. Analytical work will be conducted by an accredited laboratory and when applicable the results will be incorporated into the Asbestos Survey.
f. Investigate complaints of failing asbestos.
g. It should noted that it is the policy of the U.S. EPA and U.S. Army policy to manage asbestos in place whenever possible.

2.10.5.6. The Contractor shall provide the EC a schedule of all asbestos activities NLT than Friday of the week preceding the work. All changes to the work schedule must be sent to the EC prior to the start of work.

2.10.5.7. If during the execution of any work, asbestos containing material is disturbed or dislodged the Contractor shall take the following actions:
a. Restrict entry into the area and post signs to prevent entry into the area by persons other than required to perform the response action.
b. Shut off or temporarily modify the air handling system to prevent the distribution of fibers to other areas in the building.
c. Conduct clean up IAW all Federal and State laws and the O&M Plan.

2.10.5.8. The Contractor shall assist government personnel and other contractors in assessing whether asbestos is present in their work area and the condition of the asbestos.
a. Take samples if needed to confirm if asbestos is present
b. Take air samples to determine if airborne asbestos is present and provide to the Contractor as a baseline.

2.10.5.9 CONTRACTOR ACTIONS DURING CONDUCT OF THE CONTRACT.
a. Asbestos is present on the USAG-S. All of the Contractor’s employees that work in areas that may contain asbestos shall be properly trained to assure no one on the USAG-S is exposed to asbestos fibers during contract operations. The Contractor must ensure that all their subcontractors are properly trained and have records of the training.

b. In case there a accidental disturbance of asbestos, the Contractor must have a competent person, as defined by the EPA, on site at all times work is being done in areas with Asbestos Containing Material (ACM) or Presumed Asbestos Containing Material (PACM).
c. The Contractor must be licensed by the state of Michigan.

2.10.5.10. During the progression the contract, the Contractor will continually maintain and update the USAG-S Asbestos Survey with information that is obtained during O&M activities, remediation projects, demolition and re-inspections. This will ensure that the survey reflects the current status of any existing asbestos.

2.10.5.11. Training Requirements. The Contractor shall have trained and certified persons available to perform asbestos work required by this section. This will include:

Management Planner
Building Inspector
Project Designer
Contractor/Supervisor
Abatement Worker
Asbestos Awareness

The Contractor shall ensure that all its affected employees receive general awareness training. The Contractor shall include general awareness training for all affected garrison personnel in its Environmental Training Plan, see (2.10.23).

2.10.6 CULTURAL RESOURCES.
The purpose of the USAG-S Cultural Resources Management Plan is to ensure all actions at the USAG-S are in compliance with the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act (AIFRA), Executive Order 13007, Native American Graves Protection and Repatriation Act (NAGPRA), Archeological Resources Protection Act (ARPA), 36 CFR 79 and the State Historic Preservation Office Section 106.

2.10.6.1 The USAG-S has a Cultural Resource Management Plan, Archeological Assessment, Cultural Resource Maintenance Plan and Programmatic Agreement with the State Historical Preservation Office. The Contractor will ensure that all activities on the USAG-S comply with the Plans and Acts referred to in this section.

2.10.6.2 The Contractor shall prepare all necessary documentation to comply with all aspects of Cultural Resources for all activities on the Garrison and submit to the EC for approval and submittal with in 10 calendar days of receipt of new job, this may include but not limited to Federal, State, Local and DOD agencies. EC has 5 working days to accept the documentation.

2.10.6.3 The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected persons.

2.10.6.4 Appendix, Historical Building/District Maintenance contains a historical listing and requirements on maintaining the USAG-S historical buildings and districts. The Contractor shall consult with the EC before work is accomplished on the historical buildings and districts that may alter appearances.

2.10.7 ENVIRONMENTAL MANAGEMENT SYSTEM.
The implementation of an Environmental Management System (EMS) is one of the top three Department of Defense priorities. IAW Executive Order 13123, the USAG-S will be implementing an EMS. The purpose of the Environmental Management System (EMS) at the USAG-S is to:
1. Maintain environmental compliance with all laws.
2. Reduce pollution and use of natural resources.
3. Continuous improvement of all base operations to improve environmental performance
4. Consider environmental and health risks in all business decisions.
The EMS shall be in place NLT 2005 and fully in compliance with all aspects of the system by 2009. Since the Contractors actions affect the USAG-S EMS goals, they shall be required to support meeting all goals for all activities at USAG-S. They shall not be required to have their own EMS.

2.10.7.3 Training Requirements. The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected persons.

2.10.8 National Environmental Policy Act (NEPA).
The purpose of environmental reviews at the USAG–S is to ensure all environmental requirements have been identified and actions shall be taken during the performance of the contract to minimize the impact to the environment and human health.

2.10.8.1 The Contractor shall prepare all NEPA documentation for all activities at the USAG–S with in 15 calendar days and submit to the EC for review and signature. The EC has 10 working days to accept work.

2.10.8.2 All projects, work orders and service orders shall be reviewed by the Contractor for compliance with all environmental laws, permits, plans and regulations.

2.10.8.3 Training Requirements. The Contractor shall include training for this part of the PWS in its Environmental Training

Plan (2.10.23) for all affected persons at the garrison.

2.10.9 HAZARDOUS CHEMICALS/HAZARDOUS WASTE(HC/HW)

The purpose of the USAG-S's HC/HW management program is to:

1. Reduce the health risk to all persons
2. Protect the environment
3. Track all hazardous chemicals and waste from the time they enter the installation to the time they are used or disposed of.

2.10.9.1 The Contractor shall establish a program with a single point of contact for hazardous chemicals/waste management for all activities at USAG-S. Consumer commodities that are designated for retail sale on base are exempt. This program will generate data for Pollution Prevention efforts and completion of necessary Federal, State, local and DOD reporting.

2.10.9.2 The Contractor shall be responsible to expeditiously manage and control all hazardous chemicals/waste found or generated on garrison property regardless of the source or quantity generated. The Contractor shall be responsible for disposal of the hazardous chemicals/waste in accordance with Federal, State, local and DOD regulations.

2.10.9.3. The Contractor shall be responsible for cradle to grave tracking of hazardous chemicals/wastes for all USAG-S activities. The Contractor will compile the information for all Emergency Planning and Community Right to Know (EPCRA) reporting and the Fire Fighters Right to Know. The Contractor shall prepare all necessary documents and submit to the EC for review and signature. The government has the responsibility for submittal to the necessary agency.

2.10.9.4 As part of their facility management operations the Contractor shall identify all storage areas of regulated waste including all HC/HW satellite accumulation points for all USAG–S activities with in 30 days of contract award. These areas shall be inspected on a weekly basis and documented in writing, submit inspection reports to the EC on a weekly basis. Any deficiencies shall be reported to the EC immediately. The weekly inspections shall contain the following information at a minimum and will be approved by EC with in 5 working days:

a. Date of inspection.
b. Location of site.
c. Name of inspector.
d. Name of waste generator.
e. Description of waste currently in storage.
f. Amount of each waste in storage.
g. Condition of containers and labels.
h. Generation start date for HW at 90-day storage areas.

i. Discrepancies noted.
j. Corrective action taken, if discrepancies are noted.

2.10.9.5. The Contractor will utilize the DRMO for disposal but an alternate means (i.e. blanket purchase agreement, etc.) shall be in place to preclude violation of the storage time limitation. The Contractor shall immediately notify the EC if it appears that the time limit may be exceeded.

2.10.9.6 The Contractor shall ensure that the accumulation of hazardous waste at all locations does not exceed Federal, State and local regulations.

2.10.9.7 The Contractor shall develop, prepare and maintain a Standard Operating Procedure (subject to review by the EC, submit 30 days after contract start) delineating the Management and Disposal Turn-In Procedures for Regulated Wastes. The Contractor shall coordinate any changes within 10 working days after the EC review.

2.10.9.8 The Contractor shall ensure that all regulated wastes turned in for disposal is properly identified, labeled, stored and processed IAW applicable Federal, State and local regulations. The Contractor shall provide unique marking of each item to preclude incorrect labeling, handling, storage or manifesting. The Contractor shall ensure that all necessary documentation is filled out properly for disposal and are required to sign off on these documents.

2.10.9.9 The Contractor shall provide analysis at the EC request of unidentified gasses, liquids and solids. When such tests are requested the Contractor shall recommend type of analysis and will get the EC approval prior to the testing. This support includes, but is not limited to providing for collection, sampling, transportation and analysis of soils, water, air and other material for compliance with the various regulations including but not limited to National pollutant discharge elimination system (NPDES), Stormwater and RCRA.

2.10.9.10 Training Requirements. The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected people at the garrison.

2.10.10. Environmental Health
The Contractor shall continually monitor and identify all environmental factors for all activities at the USAG–S. The contractor shall take necessary actions to eliminate and avoid environmental health problems.

2.10.10.1 The Contractor shall provide support and access for

government personnel and other contractors in regards to environmental health and inspections of building, facilities, equipment and all facets of Contractor operations.

2.10.11. LEAD BASED PAINT MANAGEMENT. The purpose of the USAG-S Lead Management Program is to ensure:
1.Lead Based Paint (LBP)is identified and in good condition so that people are not adversely affected in housing and OMA buildings.
2.LBP is properly identified and is disposed of properly.
3.Workers conducting LBP remediation are properly trained to protect themselves and those around them.

2.10.11.1 The Contractor shall ensure that all its actions are in compliance with the USAG-S Lead-Based Paint Management Plan for all USAG-S facilities.

2.10.11.2. The Contractor shall perform a LBP inspection and a LBP Risk Assessment and prepare respective reports within 6 months of the start of contract. The Contractor may utilize the existing hard copy lead paint survey data from the family housing facilities and the existing e-version lead paint survey data for OMA facilities to perform the inspection and risk assessment. The risk assessment shall be conducted IAW the USAG-S Lead-Based Paint Management Plan. Prior to the start of the inspection, the Contractor shall meet with the EC to review the Contractor’s inspection plan, discuss areas of concern within the installation, what type of information will be collected, and the format for the final inspection report. The LBP inspection shall be in electronic format to include discussions of existing LBP, conditions, remediation recommendations, test methods, sample locations, test results, pictures, CAD drawings with diagrams showing the locations, type, extent and condition of the paint within the facilities. Submit the inspection and risk assessment in e-version for both OMA and family housing facilities to the EC, allow a 30 day period for comments. The final documents will serve as the USAG-S LBP Survey.

2.10.11.3. The Contractor shall prepare and submit to the EC a LBP Operation and Maintenance (O&M) Plan within 15 days after approved inspection, EC has 15 calendar for approval. The Contractor shall maintain and update the O&M Plan as needed. The purpose of the O&M Plan is to establish responsibilities and prescribe procedures for minimizing and controlling potential exposure to LBP in facilities maintained by the Contractor. The Contractor shall identify a person to serve as the LBP Control Officer (LBPCO) and include an alternate. The LBPCO shall be present to supervise LBP operations.

2.10.11.4. The Contractor shall perform a LBP annual reevaluation

and inspection and update management/O&M Plan. The contractor shall make updates observed during the reevaluation in the USAG-S LBP Survey. A synopsis of the reevaluation shall be submitted to the EC within 15 days of completion of the reevaluation, allow 15 days for comments.

2.10.11.5. The Contractor shall provide the following types of work, and all work shall be conducted IAW the O&M Plan:
a. Abatement of LBP where feasible or necessary to prevent a health or environmental hazard. All work involving LBP abatement and interim controls, shall be limited to that which is directly associated with and required to perform maintenance and repair work as otherwise required by the contract. This shall be accomplished IAW with all Federal and State laws. LBP work may be performed at anytime, 24 hours a day, 7 days per week at the discretion of the EC. The EC will approve all work before start up.
b. Cleaning of contaminated areas with appropriate equipment necessary in order to reduce LBP residues to acceptable levels IAW Federal and State regulations.
c. Packaging, labeling, storage and disposal of all LBP waste generated by the Contractor.
d. Provide for collection and testing of samples for lead level determination. Analytical work will be conducted by an accredited laboratory and when applicable the results will be incorporated into the LBP Survey.
f. Investigate complaints of failing LBP.

2.10.11.6 The Contractor shall maintain the LBP IAW all Federal and State Laws and the O&M Plan.

2.10.11.7. During the progression the contract, the Contractor shall continually update the USAG-S LBP Survey with information that is obtained during O&M activities, remediation projects, demolition and reevaluations. This will ensure that the survey reflects the current status of any existing LBP.

2.10.11.8. The Contractor will have persons trained to the appropriate levels to conduct LBP abatement. The Contractor must be licensed by the state of Michigan for LBP abatement.

2.10.11.9. Training Requirements. The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected persons.

2.10.12. Polychlorinated Biphenyls (PCBs)

2.10.12.1 There are not any PCB transformers on the USAG-S.

2.10.12.2. PCBs may be present in fluorescent light ballasts and

other capacitors manufactured prior to 1979. All ballasts and capacitors will be collected at the USAG-S. Pre-1979 shall be treated and disposed according to PCB Federal requirements. Post-1979 items shall be recycled as scrap metal.

2.10.12.3. All Contractor equipment shall be PCB free.

2.10.12.4 Training Requirements. The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected persons.

2.10.13. PEST MANAGEMENT

The purpose of the USAG-S Pest Management Program is to prevent and control pest problems and/or infestations on the facility. The Contractor shall manage the USAG-S pest management program. The Contractor shall use the current Integrated Pest Management Plan (IPMP). The Contractor shall rewrite the IPMP for all garrison activities, submit first update to the COFR/QAE (Quality Assurance Evaluator) within 6 months after the start of the contract for review and approval. The Contractor shall update and maintain the IPMP on an annual basis thereafter, submit to the COFR/QAE for review and approval. Allow 45 days for comments. The Contractor shall follow the requirements of the IPMP for all USAG-S activities.

2.10.13.1. GENERAL. Description of Program: Federal agencies are mandated by Public Law (7 United States Code, Section 136 r-l) to use Integrated Pest Management (IPM). This specification is the basis for the USAG-S's IPM program. IPM uses a wide variety of technological and management practices to achieve long-term and environmentally sound pest suppression and prevention. Control strategies in the IPM program shall include:

1. Structural and procedural modifications to reduce food, water, harborage, and access routes used by pests.
2. Use of pesticide compounds, formulations, and application methods that present the lowest potential chemical hazard to humans and the environment.
3. Non-pesticide technologies such as trapping and monitoring devices.
4. Coordinating among all facility management programs, including facility tenants that have an impact on the pest control effort.

b. Responsibilities: The Contractor shall prepare and implement the IPM. The Contractor's IPM program shall cover all activities at USAG-S. If part or the entire program is subcontracted the Contractor shall still be held fully responsible for all applications on USAG-S.

c. Contractor Service Requirements: The Contractor shall furnish all supervision, labor, materials, and equipment necessary to

accomplish the monitoring, trapping, pesticide application, and pest removal components of the IPM program. As a quality assurance measure, the Contractor shall submit contract and/or subcontract specifications to the COFR/QAE for review seventy-five (75) calendar days before the planned advertisement date or as agreed upon with the COFR/QAE. The Government shall return the specifications no latter than forty-five (45) calendar days before the planned advertisement or as agreed upon with the COFR/QAE. The purpose of the review is to ensure the contract and subcontracts implement IPM and follow the control guidance listed in this specification. As part of the subcontract specifications, the Contractor shall describe the procedures they shall use to perform quality assurance on any subcontractor. The Contractor shall continue to operate under the current IPM program until proper authority reviews and recommends approval of this contract.

d. The Contractor shall provide pest control for all activities at the USAG-S.

2.10.13.2 PESTS
The Contractor shall suppress the following pests IAW the IPMP:

1. Rodents, insects, spiders, arachnids, birds and other arthropods or mammals.
2. Organisms effecting interior scape vegetation or structures.
3. Federal and State listed noxious weeds, non-native and invasive species.
4. Bats, snakes, and all other vertebrates, and commensal rodents.
5. All wood destroying organisms.

2.10.13.3. INTEGRATED PEST MANAGEMENT
The Contractor shall prepare, maintain and update an Integrated Pest Management (IPM) Operations Plan. It shall consist of this guide specification, the subcontracts specifications, the Contractor's quality control program, plus the information listed below. The Contractor shall submit the plan to the environmental COFR/QAE within 45 days after the contract is awarded. The EC has 45 days to approve. Any subcontract(s) shall be included in the IPM and contain the same information as required in the prime contract.
a. Proposed Materials and Equipment for Service: Current labels and Material Safety Data Sheets for all pesticides to be used, brand names of pesticide application equipment, rodent bait boxes, insect and rodent trapping devices, pest monitoring devices, pest detection equipment, and any other pest control devices or equipment that may be used to provide service.

b. Proposed Methods for Monitoring and Detection: Methods and procedures to be used for identifying sites of pest harborage and access, and for making objective assessments of pest population levels throughout the term of the contract.
c. Projected Service Schedule for Each Building or Site: Complete service schedules that include weekly or monthly frequency of subcontractor visits, specific day(s) of the week of subcontractor visits, and approximate duration of each visit not later than Friday before the start of the work week.

d. Description of any structural or operational changes that would facilitate the pest control effort: site-specific solutions for observed sources of pest food, water, harborage, and access.

e. Commercial Business Licenses, Pesticide Applicator/Sub contractors Certificates or Licenses: Photocopies of State-issued Commercial Pesticide Application Business Licenses and Commercial Pesticide Applicator Certificates or Licenses for every employee who shall be performing on-site service under this contract. The Contractor shall include the name of certified applicators, their certified categories, and other data requested for the Army Environmental Quality Report (EQR). This information will be submitted to the EC with in 30 calendar days after award of contract.

2.10.13.4. RECORD KEEPING.
The Contractor shall be responsible for maintaining a pest control logbook or file for each building or site specified in this contract in an electronic format. These records shall be kept for each visit and maintained on-site by the Contractor. If requested the Contractor shall provide this logbook or file to the environmental COFR/QAE. Each logbook or file shall contain at least the following items:
a. IPM Operations Plan.
b. Pest Control Work and Inspection Report, or an electronic equivalent DDForm 1532/1532-1. These forms shall be used by the Contractor for service requests to document the performance of all work. Submit to COFR/QAE monthly, 5 working days after the end of the month. The EC has 5 working days to approve.

2.10.13.5. MANNER AND TIME TO CONDUCT SERVICE
a. Time Frame of Service Visits: The subcontractor shall perform routine pest control services that do not adversely affect tenant health or productivity. When it is necessary to perform work that shall interfere with Government operations, the Contractor shall notify the COFR/QAE at least one (1) day in advance.

b. Safety and Health:
1. The Contractor shall observe all safety precautions

throughout the performance of this contract. All work shall be in strict accordance with all applicable Federal, State, and local safety and health requirements. Where there is a conflict between applicable regulations, the most stringent shall apply.

2. The Contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work.

3. Vehicle(s) used by the Contractor shall be identified in accordance with State and local regulations. These vehicles shall have external lockable storage compartments. The vehicle(s) shall not be used for any other purpose.

2.10.13.6. SPECIAL REQUESTS AND EMERGENCY SERVICE.
On occasion, the environmental COFR/QAE may request that the Contractor perform corrective, special, or emergency service(s) that are beyond routine service requests. The Contractor shall respond to these exceptional circumstances and complete the necessary work within one (1) day after receipt of the request.

2.10.13.7. CONTRACTOR PERSONNEL

All employees who provide services on Selfridge will be certified as commercial applicators by the State of Michigan in one or more of the following categories as appropriate:

Right of way (6)
Structural (7A)
Vertebrate Pest Management (7D)
Interiorscape (7E)
Mosquito (7F)
Turfgrass (3A)
Ornamental (3B)

2.10.13.8. USE OF PESTICIDES.
The Contractor shall be responsible for application of pesticides according to the label. All pesticides used by the Contractor shall be registered with the U.S. Environmental Protection Agency (EPA) and the State of Michigan Department of Agriculture, and must be documented with current labels and material safety data sheets in the Operations Plan. Pesticide misuse which includes use inconsistent with the label is a violation of Federal Law. In accordance with DOD policy, Selfridge personnel will record and report any instances of pesticide misuse or falsification of records by contractors to the State of Michigan. Furthermore, Selfridge personnel will cooperate with the State and the EPA in any subsequent investigation or actions. The Contractor and any subcontract specifications shall adhere to the following rules for pesticide use:
a. Products: Disapproved Products: The Contractor shall not use any Federal or State restricted-use, State limited-use, or any Category I and II pesticide (i.e., a product carrying a WARNING

or DANGER signal word) without prior approval in writing from an Army pest management consultant. The Contractor shall submit requests to COFR/QAE at least thirty (30) working days before the planned date of application.

b. Pesticide Storage: The Contractor shall store and/or mix pesticide products in building 572. This facility is operated by the government golf course support staff. The Contractor shall coordinate with the golf course greens keeper for usage activities.

c. Application by Need: Pesticide application shall be according to need and not by schedule. As a general rule, application of pesticides in any inside or outside area shall not occur unless visual inspection or monitoring devices indicate the presence of pests in that specific area.

d. Minimization of Risk: When pesticide use is necessary, the Contractor shall employ the least hazardous material, most precise application technique, and minimum quantity of pesticide necessary to achieve control.

2.10.13.9. INSECT CONTROL.

a. Emphasis on Non-Pesticide Methods: The Contractor shall use non-pesticide methods of control wherever possible. For example:

1.Portable vacuums rather than pesticide sprays shall be the standard method for initial cleanouts of cockroach infestations, for swarming (winged) ants and termites, and for control of spiders in webs.

2.Trapping devices rather than pesticide sprays shall be the standard method for indoor fly control.

b. Application of Insecticides to Cracks and Crevices: As a general rule, the Contractor shall apply all insecticides as "crack and crevice" treatments only, defined in this contract as treatments in which the formulated insecticide is not visible to a bystander during or after the application process.

c. Application of insecticides to exposed surfaces or as space sprays: Application of insecticides to exposed surfaces or as space sprays ("fogging") shall be restricted to exceptional circumstances where no alternative measures are practical. No surface application or space spray shall be made while tenant personnel are present. The Contractor shall take all necessary precautions to ensure tenant and employee safety, and all necessary steps to ensure the containment of the pesticide to the site of application.

d. Insecticide Bait Formulations: Bait formulations shall be the standard pesticide technology for cockroach and ant control, with

alternate formulations restricted to unique situations where baits are not practical.
e. Monitoring: Sticky traps shall be used to guide and evaluate indoor insect control efforts wherever necessary.

2.10.13.10. RODENT CONTROL
a. Indoor Trapping: As a general rule, rodent control inside buildings shall be accomplished with trapping devices only. All such devices shall be concealed out of the general view and in protected areas so as not to be affected by routine cleaning and other operations. The Contractor shall be responsible for disposing of all trapped rodents and all rodent carcasses in an appropriate manner.

b. Use of Rodenticides: In exceptional circumstances, when rodenticides are deemed essential for adequate rodent control inside buildings. All rodenticides, regardless of packaging, shall be placed either in locations not accessible to children, pets, wildlife, and domestic animals, or in EPA-approved tamper-resistant bait boxes. As a general rule, rodenticide application outside buildings shall emphasize the direct treatment of rodent burrows wherever feasible.

c. Use of Bait Boxes: All bait boxes shall be maintained in accordance with EPA regulations, with an emphasis on the safety of non-target organisms. The Contractor shall adhere to the following five points:
1. All bait boxes shall be placed out of the general view, in locations where they shall not be disturbed by routine operations.
2. The lids of all bait boxes shall be securely locked or fastened shut.
3. All bait boxes shall be securely attached or anchored to floor, ground, wall, or other immovable surface, so that the box cannot be picked up or moved.
4. Bait shall always be secured in the feeding chamber of the box and never placed in the runway or entryways of the box.
5. All bait boxes shall be labeled on the inside with the Contractor's business name and address, and dated by the Contractor's technician at the time of installation and each servicing.

2.10.13.11 OTHER RESPONSIBILITIES The Contractor shall also be responsible for the following pest control services:
a. Screening and rodent proofing of buildings and structures.
b. Applications of wood preservatives to lumber and allied products.

c. Application of pesticides for soil treatment to control soil nematodes, turf inserts and fertilizers for control of weeds, weeds and pests.
d. Treating, draining, clearing, and ditching to control vegetation and prevent mosquito and fly breeding.
e. Application of pesticides for protection of trees, shrubs bushes and plants.
f. Indoor application of pesticides (aerosols, fogging, vapors, etc.) shall use only formulations that are EPA approved for such purposes and shall be accomplished only with the prior approval of the COFR.
g. When a unit within a multi-unit building is infested, investigate the other units in the building to determine if additional treatment is required.
h. Inspection and treatment (if needed) of housing quarters whenever change of occupancy occurs or as required.
i. Inspection and treatment of impounded waters for mosquito larvae once-a-week.
j. The Contractor shall provide scheduled mosquito spraying not to exceed five times a week in all garrison controlled areas based on surveillance data, resident complaints and COFR/QAE instructions. Spraying shall be performed during the hours when optimum control can be expected, depending on the mosquito species present (normally from dusk to 2400). The proposed treatment schedule and hours shall be submitted to the COFR/QAE for approval not later than 15 April of each year, shall be jointly agreed upon between the COFR and the Contractor and shall not change without the approval of the COFR. The Contractor shall use insecticides approved for mosquito control by the U.S. Environmental Protection Agency (EPA) IAW the work sheet for mosquitoes in the Garrison Pest Management Plan approved by the U.S. Army Material Command Pest Management Consultant. All mosquito control treatments shall be made with calibrated ULV and/or backpack sprayers. The Contractor shall cease mosquito control operations immediately upon directions of the COFR/QAE if unsafe or environmentally damaging spray operations are observed or reported.

k. Placement, mosquito retrieval and maintenance of two mosquito traps. Send mosquitos to AEC for species identification.

l. Place and service as required rodent stations.

m. Conducting inspection and treatment (if needed) of Commissary, food service/cafeterias and storage areas during days or hours when the facility is closed. Survey traps shall be placed and monitored to determine if an infestation exists and if treatment is warranted.

n. If food is contaminated by spraying or treatment, the building manager and COFR shall be immediately notified of any such incident.
o. If utensils are contaminated by spraying or treatment, utensils, the building manager and COFR shall be notified of any such incident.
p. Inspect and treat kennels as needed for fly control at Vet, bldg 836.
q. Inspect and treat sewers as needed for rodent infestations.
r. Control and treatment of aquatic vegetation in the 350, 700, and 903 boat basins. The Contractor shall obtain a permit from the Michigan Dept of Environmental Quality prior to the work.

2.10.13.12. STRUCTURAL MODIFICATIONS AND RECOMMENDATIONS
throughout the term of this contract, the Contractor shall be responsible for advising the environmental COFR/QAE about any structural, sanitary, or procedural modifications that would reduce pest food, water, harborage, or access. The Contractor shall be responsible for adequately suppressing all pests included in this contract regardless of whether or not the suggested modifications are implemented.

2.10.13.13. PROGRAM EVALUATION
The on site environmental COFR/QAE shall continually evaluate the progress of this contract in terms of effectiveness and safety, and shall require such changes as are necessary. The Contractor shall take prompt action to correct all identified deficiencies. The Contractor shall submit subcontract pest control contracts to the environmental COFR/QAE when requested. The Contractor shall provide assistance for inspection visits by headquarters, consultants, federal agencies or by other organizations.

2.10.13.14. QUALITY CONTROL PROGRAM
The Contractor shall establish a complete quality control program to assure the requirements of the contract is provided as specified. As part of the subcontract specifications, the Contractor shall describe the procedures they shall use to perform quality assurance on the subContractor. These procedures shall include at least the following items:
a. Inspection System: The Contractor's quality control inspection system shall cover all the services stated in this contract. The purpose of the system is to detect and correct deficiencies in the quality of services before the level of performance becomes unacceptable and/or the onsite environmental COFR/QAE identifies the deficiencies.
b. Checklist: A quality control checklist shall be used in evaluating contract performance during regularly scheduled and unscheduled inspections. The checklist shall include every building or site serviced by the Contractor as well as every task that is required to be performed.

c. Quality Control File: A quality control file shall contain a record of all inspections conducted by the Contractor and any corrective actions taken. The file shall be maintained throughout the term of the contract and made available to the onsite environmental COFR/QAE.
d. Subcontract Specifications: The Contractor shall provide to COFR/QAE revisions to pest control subcontract, allow 7 working days for comments prior to advertising the contract.

2.10.13.15 Training Requirements: The Contractor shall implement and conduct all required and best management training, also see 2.10.23.

2.10.14. POLLUTION PREVENTION.
The purpose of the USAG-S Pollution Prevention Plan is:
a. Reduce the amount of hazardous material used on the installation.
b. Reduce the amount of hazardous waste generated on the installation.
c. Increase the amount of waste (both hazardous and solid waste) diverted from landfills.
d. Increase the amount of EPA designated recycled materials used in the performance of the contract.

2.10.14.1. It is the policy of the U.S. Army to reduce pollution at all its facilities and increase the use of recycled materials. Every effort shall be made to substitute the use of hazardous materials with non-hazardous materials. The Contractor shall manage the USAG-S Pollution Prevention Program, follow the USAG-S Pollution Prevention Plan for all USAG-S activities, maintain and update the plan annually. Submit first update of the plan to EC within 60 days of the start of the contract for review and approval, allow 30 days for comments. See 2.10.16 on Solid Waste for requirements to meet the DoD diversion goals.

2.10.14.2. AFFIRMATIVE PROCUREMENT.
a. The use of EPA designated items is required during performance of this contract. The EPA issued the Comprehensive Procurement Guidelines (CPG's) that have established the mandatory procurement by federal agencies of 54 items produced with recovered materials. The EPA has also issued Recovered Material Advisor Notices (RMANs) to accompany the CPGs and provide detailed information on the designated items. The number of items designated by the EPA may change during the contract period. The Contractor must use all newly designated items. The use of these items is mandatory for all actions on the USAG-S unless one of the following exemptions applies. The Contractor must follow the USAG-S Affirmative Procurement Plan in order to obtain an exemption waiver from one of the EPA designated items. RCRA

provides the following exemptions from the requirement to purchase EPA-designated items:

1). The product is not available within a reasonable period of time.

2). The product does not meet the performance standards in applicable specifications or fails to meet reasonable performance standards of the procuring agency.

3). The product is not available at a reasonable price. For USAG-S purposes, "unreasonable price" is defined as follows: If the price of the recycled-content product exceeds the cost of a non-recycled item, then the price is considered unreasonable.

2.10.14.2. SUSTAINABLE DESIGN

It is the policy of the U.S. Army that Sustainable Design and Development principles be incorporated into all construction and repair projects. The Army's Sustainable Project Rating Tool (Spirit) is an adaptation of industry U. S. Green Building Council's Leadership in Energy and Environmental Design Building Rating System (LEED). The goal is to achieve a minimum Spirit rating of Bronze. The Contractor shall rate all construction and repair projects with the goal of achieving a Bronze sustainability rating. See FAR 23.203

IAW with Executive Order 13123, all projects shall have a Life-Cycle Cost Analysis (see Section 401, EO 13123) and use ENERGY STAR and other energy efficient products.

2.10.14.3 Training Requirements: The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected persons

2.10.15. NATURAL RESOURCES.

The purpose of the Natural Resources program is to protect all the natural resources at the USAG-S. The USAG-S is not required to have a Natural Resource Management Plan. However, there are compliance requirements in the following areas.

2.10.15.1. Invasive Species. The Contractor shall not use plants other than native plants unless specifically directed by the EC. The Contractor shall inspect the grounds monthly from April through October to determine if invasive plants are on the installation. If any are found, the Contractor shall eradicate IAW the Garrison’s Integrated Pest Management Plan.

2.10.15.2. Migratory Birds. The Contractor shall control migratory bird species identified by the EC on the USAG-S IAW with Michigan Department of Natural Resource guidance.

2.10.15.3 Training Requirements. The Contractor will be required to implement and conduct all required and best management practice training, also see 2.10.23.

2.10.16. SOLID WASTE

The purpose of Solid Waste Management is to:

1. Reduce the amount of Solid Waste generated on this installation.
2. Increase the amount of solid waste sent out for recycling. The goal for solid waste is to divert 40% of the total solid waste generated on the USAG-S from landfills.
3. Ensure no hazardous waste materials, prohibited wastes or recyclable commodities are mixed in with the solid waste. The lists of items restricted and those permitted in the installation dumpsters are contained in the Installation Integrated Solid Waste Management Plan.

2.10.16.1. The Contractor shall follow shall follow the requirements of the USAG-S Solid Waste Management Plan for all USAG-S activities. The Contractor shall maintain and update the plan annually. Submit first update of the plan to the EC 60 days after the start of the contract for review and approval, allow 60 days for comments. The Contractor shall participate in the installations recycling, donation, re-use, or source reduction programs as identified in the Installation Integrated Solid Waste Management Plan. The Contractor is encouraged to recycle where economically feasible and will report any voluntary recycling to the EC, also see 2.19.3.1.

2.10.16.2. In order to meet the diversion goal the Contractor shall track the amount of solid waste generated in all areas and projects. The Contractor shall inspect dumpsters to assure no pollutants enter the storm drain. The Contractor shall manage the Solid Waste Annual Reporting System (SWARS) for the garrison and submit quarterly reports to the EC for approval and submittal to the Region.

2.10.16.3. The State of Michigan prohibits yard waste from being disposed of as solid waste. The Contractor must collect all yard waste and send it to an approved composting site off post, also see 2.19.4.6. Provide compost pounds by the 10^{th} workday after the end of each quarter to the EC, also see 2.19.9.1.

2.10.16.4. The Contractor shall appoint a Recycling Coordinator to work with the installation Environmental Coordinator on the recycling program.

2.10.16.5 Training Requirements. The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected persons

2.10.17. SPILL CONTROL/RESPONSE

The Contractor shall:

1. Assist the 127th Fire Department in containing all spills. The 127th Fire Department is the primary responder.
2. Clean up all spills that occur on the Garrison, this shall include going off the installation for those spills that migrate off the installation
3. Conduct operations to minimize the possibility of a spill of any hazardous material, chemical, substance or pollutant.

2.10.17.1. A spill is defined as the uncontrolled release of any hazardous material, chemical, substance or pollutant to the environment.

2.10.17.1 Contractor Operations.

a. The Contractor shall ensure that all storage sites with hazardous chemicals and regulated wastes on the Garrison shall be identified in the existing USAG-S Spill Prevention, Control and Countermeasure (SPCC) Plan. The Contractor shall be responsible for maintaining all aspects of the USAG-S SPCC Plan and the Installation Spill Contingency Plan (ISCP). Update these plans every year and submit to EC for review and approval, allow 60 days for comments. Submit first update within 60 days from contract start, with annual submissions thereafter.

b. Spill containment kits shall be placed near all the Contractor's hazardous Chemical sites and regulated waste accumulation points. The Contractor is responsible to ensure that there are adequate materials to contain the largest container and clean up incidental spills.
c. All trucks transporting hazardous chemicals in excess of 15 gallons total or 10 gallons in one container must have spill containment kits.
d. Procedural actions in case of a spill are in the Garrison SPCC/ISCP.
e. The Contractor is responsible to ensure that all their subcontractors have spill containment kits for their operations and that they are aware of the procedures for spill containment, clean up and reporting.

2.10.17.3. Contractor Support to the Garrison’s ISCP.

a. The Contractor shall provide HAZMAT support to the Senior Fire Department (FD) official on-scene and IAW the ISCP. At a minimum, this support consists of turning off of utilities and protecting the waters of the State of Michigan. The Contractor shall also conduct clean up of all spills, including hazardous material spills that occur on the Garrison at the request of the Senior FD Official on-scene. The Senior FD Official on-scene

shall have full authority to direct the Contractor during the emergency. The FD on-scene coordinator determines the incident action plan, the strategic goals and the tactical objectives. The Contractor shall perform all actions to contain, control and complete clean-up of all areas affected by the spill.
b. The Contractor shall have personnel available on an on-call basis, twenty-four (24) hours per day, seven days per week, to support the 127th Fire Department. During normal operational hours, the Contractor shall respond within 10 minutes. During off hours, weekends and holidays the Contractor shall have the capability to call in staff upon notification from the Senior FD Official on-scene. The Contractor shall have a 2 hour response time.
c. All spill clean up residue shall be properly packaged for disposal, including proper labeling of all containers and dispose of properly by the Contractor.
d. After a spill, the Contractor shall participate in the after action review IAW the ISCP. Additional information may be required to meet the reporting requirements of the State of Michigan General Water Permit.
e. The Contractor shall participate in all exercises IAW the SPCC Plan and ISCP.

2.10.17.4 Training Requirements: The Contractor shall sufficient staff trained to meet the requirements. The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected persons.

2.10.18. STORM WATER
The purpose of the Storm Water Management Program is to insure that no pollutants or hazardous substances enter the waters of the State of Michigan.

2.10.18.1 The USAG–S has one industrial activity which requires a permit. This is the Outdoor Recreation Center located at Building 903. This permit requires a Storm Water Pollution Prevention Plan (SWP3) and a certified Storm Water Operator. The USAG-S Certified Storm Water Operator is the EC. All Contractor operations shall conform to the requirements of the SWP3 and the Clean Water Act.

2.10.18.2. RESERVED

2.10.18.3. The Contractor shall conduct all operations to minimize or eliminate contribution to the pollution in any storm water system at USAG-S.

2.10.18.4. Within 60 days of the start of the contract affected personnel that may impact storm water discharges shall receive the required training. A trained individual must accompany

personnel that have not received training at all times when they are working in areas that can affect storm water pollution. Submit trained personnel names to the EC on an annual basis.

2.10.18.5. STORM WATER POLLUTION PREVENTION

a. The Contractor shall follow the existing USAG-S SWP3 in their normal operations. The Contractor shall inspect all storm drains, drainage ditches, retention ponds, and out-falls from all buildings at USAG-S. The SWP3 also requires indoor inspections and best management practices that are applicable to the operational areas. All inspection records shall be submitted to the EC IAW the SWP3 on an monthly basis. EC has 5 working days to approve.

b. A bi-annual comprehensive review and update of the SWP3 shall be accomplished by the Contractor and sent to the EC by 1 February and 1 August for review and approval, allow 60 days for comment.

c. The Contractor shall provide a schedule to the COFR of all storm water activities (inspections, maintenance or repair work), also see 2.2.7.

d. The Contractor shall assign an individual knowledgeable in construction site storm water management to be a member of the USAG-S SWP3 Team. It is not required that this individual be certified by the state in construction site storm water management.

e. The SWP3 identifies best management practices of storm water management. The Contractor will ensure that all USAG–S activities adhere to all of the SWP3 requirements.

2.10.18.6. SOIL EROSION

a. The Contractor shall prepare a Soil Erosion Operations Plan for the Garrison within 60 days after the start of the Contract and update annually, submit to the EC, allow 30 days for comment.

b. Under part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Act, 1994 PA 451, section 9116, soil erosion control must be maintained to reduce soil erosion or sedimentation. The State of Michigan's erosion control requirements are defined in Michigan Rule 323. Soil erosion control has been delegated to Macomb County by the State of Michigan. The Contractor shall prepare documentation and obtain a Soil Erosion permit from the County when any Garrison activity require one. It is anticipated that at least 3 weeks shall be necessary to obtain a permit.

c. There are exemptions from obtaining a permit. If the Contractor feels an exemption is suitable, they shall provide all pertinent information and rationale to the EC and only the EC may approve the exemption. A soil erosion plan is still required to the EC 7 calendar days prior to the start of work. The EC has 5 working days to approve.

d. In the case of an emergency, the Contractor shall still take

precautions to ensure that no pollutants or hazardous materials enter the storm drains. In the case of an emergency the Contractor will immediately notify the EC.

e. At areas that have received or were exempted from a Soil Erosion permit the Contractor will conduct weekly visually inspections of all storm drains and out falls to determine the presence of any sedimentation that entered the storm water throught the completion of the projects. The Contractor will notify the EC immediately if sedimentation is present in the storm drains or in the out-fall.

2.10.18.7 TRAINING REQUIREMENTS. The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected persons.

2.10.19. STORAGE TANK/OIL WATER SEPERATOR MANAGEMENT

The purpose of the Storage Tank/Oil Water Separator Management Program is to ensure that no pollutants or hazardous substance enter the waters of the state of Michigan through leaks to the tanks or piping of either Underground Storage Tanks (UST) or Above ground Storage Tanks (AST) and during off loading or removal of any product, also see 2.12.6. The Contractor shall prepare and maintain a Storage Tank/Oil Water Separator Management Program. The Contractor shall prepare a Tank/Oil Water Separator Operations Plan within 60 days after the start of the Contract and update annually, submit to the EC, allow 30 days for comment.

2.10.19.1 The Contractor shall maintain, repair and replace all oil water separators to prevent water pollution problems and to maintain clean and proper operation. The Contractor shall maintain readily available records of all inspections and remedial actions, also see 2.12.4.12.

2.10.19.2 The Contractor shall perform visual inspections, repair and replace all above ground fuel and gasoline tanks of the Garrison in order to maintain a leak free and operational system.

2.10.20. SANITARY WASTE WATER

The purpose of the Sanitary Waste Water Management Program is to ensure that no prohibited materials enter the waters of the POTW.

2.10.20.1. The Contractor shall not allow polluting materials to be disposed of into the sanitary sewers. Should the City, County or State ordinances change or increase the list of prohibited discharges, the Contractor shall comply with the updated requirements. Storm water discharges are not permitted to enter sanitary system. Sanitary waste water is not permitted to enter the storm water system.

2.10.20.2 Maintenance/Repair
All Grease Traps and Solid Waste Interceptors shall be maintained IAW with the manufactures recommended procedures to prevent break through to the sanitary sewers. Also see 2.12.4.10. The Contractor shall maintain all records of inspections and maintenance. If the equipment is modified, the Contractor should annotate the manufacturer's procedures to take into account the modifications. The Contractor shall maintain all manufacturer's procedures and modification to these procedures.

2.10.20.3 Training Requirements: The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23) for all affected persons.

2.10.21 WATER QUALITY/SAFE DRINKING WATER
The purpose of the Water Quality/Safe Drinking Water program is to ensure that:
1. The USAG-S provides safe drinking water.
2. The USAG-S protects the potable water system from possible contamination.

2.10.21.1. Maintain a log of all water quality complaints. The contractor shall investigate all calls as an urgent action and recommend corrective action to the EC within 5 working days (there may be no corrective action required) and also notify the complainant of their action. The EC shall have 5 working days to review and approve corrective actions. If the EC rejects the contractors recommended corrective action, the contractor shall continue working with the EC until resolution. Fifteen calendar days after the end of each quarter, evaluate all water quality calls, determine if there are any systemic problems and recommend corrective action for the systemic problems. The EC shall review and approve corrective actions with in 15 calendar days. If the EC rejects the contractors recommended corrective action, the contractor shall continue working with the EC until resolution. Also see 2.12.2.

2.10.21.2. Contractor shall maintain water quality IAW the AWWA, Federal, State and local standards.

2.10.21.3 Training Requirements: The Contractor shall include training for this part of the PWS in its Environmental Training Plan (2.10.23)for all affected persons.

2.10.22. Environmental Support The Contractor shall provide information, data and reports in order to complete environmental reports and assessments. The Contractor shall provide field support for environmental surveys and studies to other contractors and government personnel at USAG-S.

2.10.23. TRAINING
The Contractor shall prepare an Environmental Training Plan that defines and implements a centralized training program that will cover all required training that is specified in this PWS unless specified otherwise in the specific section. Submit to the EC within 60 days of the start of the contract, allow 30 days for review, then on a monthly basis, the Contractor will furnish a report to the EC regarding the status of the program. Persons in the training program will include the Contractor's employees, USAG-S employees, and USAG-S tenants. This centralized training will help to ensure that USAG-S is in compliance with all environmental training requirements (Federal, State, local, DOD, DA and USAG-S).

2.10.24. NOTIFICATION. The Contractor shall immediately notify the COFR, EC, QAE or DPW of environmental problems the affect the health or safety of people or problems that adversely affect the environment.

2.10.25. OTHER REQUIREMENTS. The Contractor shall be responsible for collection, recycling, disposal of waste streams at the garrison and for the Bridging Lab in hanger 1424 and the 75th EOD in buildings 1515 and 1522.

2 .11 MISCELLANEOUS SERVICES, APPLIANCES AND EQUIPMENT

2.11.0 **GENERAL:**
The Contractor shall develop and perform a total maintenance program for all the locking devices and systems. The Contractor shall perform Preventive and Recurring Maintenance on the locking devices and systems. The Contractor shall assure that all items and systems are safe and operating efficiently. Work performance shall comply with the NEC, NFPA, OSHA, environmental laws and directives, industry standards and manufacturers specifications and instructions, regulations, pamphlets, manuals and guide specs. The Contractor shall install, replace, inspect, test, remove, maintain, and repair appliances and equipment such as ranges, ovens, grilles, fryers, garbage disposals, dishwashers, refrigerators, freezers, exhaust fans, microwaves, ice machines, washers, dryers and exhaust hoods.
etc. Refrigerator and range outages shall be treated as an emergency repair request.

2.11.1 **APPLIANCES AND EQUIPMENT** The Contractor shall:

a. Troubleshoot inoperative appliances and equipment to assure the cost-effective repair by requiring only essential replacement parts. Contractor shall be responsible to perform basic troubleshooting to determine the cause of malfunction and

repair or replace the appliance and equipment as required. Replace parts, components or subassemblies as determined by troubleshooting to restore operational capability and obtain all special purpose replacement items from the equipment manufacturer. Common standard items shall be obtained from any source, as long as they are of quality equal to or better than the original equipment quality.

b. Remove lint, grease, dirt, etc., from appliances, equipment and air passages/ducts when responding to a repair request.

c. Assure that the appliances and equipment operates within the manufacturer's tolerances after installing or making repairs by operating and simulating a complete cycle in all modes of operation.

d. Replace equipment when it is not economically repairable.

e. Replace appliances that are uneconomically repairable. The Contractor shall disconnect, move and properly dispose of all appliances to be replaced. The Contractor shall transport the replacement to the building, install and test prior to releasing it to the resident. The work shall include scheduling appointments, hauling, traveling, modifying utilities to fit the new appliance, connecting the appliance, placing the appliance in position, clean up and performing test operations in accordance with the manufacturer’s specification. Replacement of inoperative appliances shall be completed within 24 hours with the same or equivalent appliances. Also see PWS 4 - 4.8.

f. Disconnect, remove and dispose of all appliances and equipment to be replaced.

g. Modify utilities (e.g., electrical receptacles) to accommodate the appliance hookup.

h. Inspect, clean and fireproof ventilation hoods and ductwork IAW National Fire Protection Association (NFPA). Also see 2.3.2.y & 2.12.7.

i. Seal all openings, which might permit leakage.

j. Perform shutdown services to protect equipment that is to be inactivated or replaced on standby use and to conserve critical materials.

k. Reclaim CFCs, halons and other ozone depleting substances from equipment, properly store and dispose.

l. Replace and repair equipment parts which are covered by a warranty. Communicate directly with manufacturers or their

representatives concerning equipment covered by warranty.

m. Test appliances when requires to comply with fire safety codes.

2.11.2 **MISCELLANEOUS SERVICES:** The Contractor shall inspect, test, install, maintain, and repair a wide variety of electrical fixtures and other types of miscellaneous services. The Contractor shall:

a. Inspect, repair and diagnose malfunctioning equipment.

b. Re-lamp interior light fixtures (mainly high bay areas) for those areas not covered by the DTA Custodial Contract. Replace ballasts, and hang lighting fixtures.

c. Inspect, test, repair and adjust electrical buzzer and bell circuits, light sockets, lighting fixtures, emergency lights and emergency lighting systems, fans, switches, thermostats, and accomplish electrical installation of equipment. Remove dirt and grease from switches and contacts from equipment, tighten nuts and bolts and check for leaks when responding to a repair request.

d. Install visqueen over the doors opposite the concession stand in Bldg. 230C each Fall and remove it in the Spring.

2.12 PLUMBING/PIPEFITTING, WATER, SEWAGE, FUEL, AND GAS DISTRIBUTION SYSTEMS

2.12.0 **GENERAL:** The Contractor shall develop and perform a total maintenance program for all equipment and systems. The Contractor shall perform Preventive and Recurring Maintenance on the equipment and systems. The Contractor shall assure that all equipment and systems are safe and operating efficiently. The Contractor shall inspect, install, test modify, maintenance, repair, replace and alter plumbing and piping systems interior/exterior to the buildings and to all systems to which plumbing and piping are attached. This work applies to all supply systems for water, sewage, steam, fuels, gases; installed fire protection systems; petroleum distribution systems; emergency eyewashes and showers; irrigation systems; water distribution systems; and drainage systems for all buildings, structures, and grounds as listed in the Real Property Inventory Appendix. The Contractor’s work shall be in conformance with the current National Plumbing Code, American National Standards Institute,

Uniform Plumbing Code, American Water Works Association, National Fire Protection Association, UFC 3-600 02, EPA Drinking Water regulations, manuals, pamphlets and guide specs, OSHA, applicable State and Federal standards and codes, environmental laws and directives, industry standards and manufacturer's specifications and instructions.

2.12.1 **TYPES OF SYSTEMS AND EQUIPMENT:** Examples of systems and equipment include: interior and exterior plumbing and piping systems, installed sprinkler systems, petroleum storage and distribution systems, emergency showers, heating, pumps, air conditioning, vacuum and compressed air systems, swimming pools, equipment, water and drains in all buildings, facilities, equipment and systems. Within these areas, specific system parts and fixtures requiring work include the following:

a. All valves (e.g., gate valves, motorized valves, altitude regulating valves).
b. Above and below ground petroleum waste water tanks.
c. Piping of all kinds and age.
d. Gas lines to gas heaters, stoves, and furnaces (natural or manufactured).
e. Air lines to all air compressor equipment.
f. Exterior and interior water, waste, and sewage lines and components.
g. Drain lines and wells.
h. Leaks or breaks in piping.
i. Irrigation and sprinkling systems.
j. Compressed air and vacuum systems.
k. Drinking water systems and filters.
l. Service water systems.
m. Plumbing and heating fixtures.
n. Steam traps.
o. Strainers, water filters and valve bodies.
p. Lines and fittings (e.g., water lines, interior or exterior).
q. Water meters and reading devices.
r Chlorinators.
s. Water heater and systems.
t. Appliances.
u. Commodes/hardware/seats.
v. Sinks/tubs/showers
w. Water heaters.
x. Clean grease traps.
y. Water coolers and fountains.
z. Equipment room drains.
aa. Faucets.
bb. Sluggish water flow.
cc. Water pressure regulators.
dd. Reservoirs.
ee. Flash tanks.

ff. Sewer systems.
gg. Vehicles and liquid fuel storage and dispensing pumps including distribution lines and systems.
hh. Condensate recovery systems including the condensate pits and pumps.
ii. Insulation work consisting of furnishing and installing new insulation for piping, equipment, duct work and in buildings walls, ceilings, floors, and the removal or repair of existing insulation.
jj. Convertors for hot water heating and domestic water heaters.
kk. Storage distribution systems.
ll. shower heads, doors, curtains.
mm. Fire suppression systems.
nn. Garbage disposals.
oo. Pumps.
pp. Fire hydrants.

2.12.2 **WATER DISTRIBUTION SYSTEMS** The Contractor shall inspect, install, test, maintain, modify, repair, replace and alter all water distribution system including associated pumping operations, impounding reservoirs, wells and all other equipment and appurtenances. The contractor shall immediately notify the COFR if any water distribution or related system fails to operate properly. The contractor shall maintain water quality IAW standards mentioned above. The Contractor shall conduct an annual test to determine if water quality is within the EPA prescribed regulation. Result of the test shall be immediately forwarded to the COFR. Also see 2.6.21, 2.10.21 & 2.12.2.f.

a**. BACK FLOW PREVENTERS**. The Contractor shall inspect and test annually the back flow preventers on water systems to ensure reliable and consistent operation. The Contractor shall maintain a record of the inspection and testing. These inspections and testing work shall be performed by personnel that are certified by the State of Michigan for back flow preventers. The Contractor shall provide the Environmental Coordinator (EC) copies of the inspections and test results on an annual basis. The Contractor shall provide the EC copies of the State certifications on an annual basis.

b. **FLUSHING.** The Contractor shall flush the water distribution system twice a year; in the spring and in the fall season for DTA. For USAG-S the Contractor shall flush water systems as required to ensure clear and potable water. The USAG-S flushing effort shall be in conjunction and in coordination with the 127th base wide flushing efforts and when needed for an isolated area. The Contractor shall develop and implement appropriate O&M Standard Operating Procedures (SOP) and work practices to ensure complete cleaning of the water distribution system, submit to COFR 60 days after contract award, update as required. Also see

APPENDIX " Flushing of Water Distribution System at Detroit Arsenal". The SOP shall include the following information:

1. Hydrants to be utilized.
2. Order of opening and closing of the hydrants.
3. A minimum flushing velocity of 2.5 feet per second as mandated by the TB MED 576.
4. Minimum length of time the hydrants will be opened.

b.1 Flush all domestic central hot water heaters serving multiple family quarters (i.e., the 700 and 900 housing areas) and OMA buildings to maintain clear potable water. All circulating pumps shall be maintained to provide uninterrupted service.

c. **EMERGENCY EYE WASH AND SHOWERS.** The Contractor shall inspect, clean and repair eyewash stations and deluge showers as necessary to maintain proper operation, signage, identification and cleanliness according to OSHA and environmental local, state and federal codes and regulations. The Contractor shall ensure that all areas requiring a eye wash or emergency shower are identified and brought to the COFR’s attention. This includes stations that are plumbed and stand alone units.

d. **WATER STOP BOXES**. The Contractor shall maintain and repair stop boxes to proper ground elevation. The stop box shall be replaced if broken or missing, and the valve in the box shall be repaired or replaced, as required.

e. **FIRE HYDRANTS AND GATE VALVES**. The Contractor shall maintain and repair fire hydrants and gate valves to ensure a proper flow and reliable water service from the hydrants. The Contractor shall replace fire hydrants and gate valves as required.

f. **WATER TESTING.** The Contractor shall schedule and perform bacteriological tests and check chlorine residuals and PH on the domestic water systems. In housing areas these tests shall be performed monthly unless otherwise approved by the COFR. The Contractor shall randomly select one set of quarters from the housing areas from which to draw the samples for the tests and checks. A different housing area shall be selected each month. Test results shall be provided to the DPW office. All areas, the Contractor shall disinfect water systems IAW the AWWA standards following activities where contamination is suspected. The Contractor shall perform bacteriological water tests and checks after water mains are repaired or when it is suspected that the water system could have been contaminated. The Contractor shall schedule and perform tests for lead on the domestic water system in the family housing areas. The lead tests shall be performed at one set of quarters in each housing area per year or as requested

by the COFR. Also see 2.6.21 & 2.10.21.

g. EMERGENCY MAINTENANCE OF WATER SYSTEMS. In the event of a major disaster, breakdown, or gross contamination of the system, the Contractor shall terminate the source of water and immediately repair and restore the system. The Contractor shall immediately advise the Directorate of Public Works office of the situation. The Contractor shall provide emergency drinking water and distribute it from a central location and deliver the water to the affected facilities as determined by the COFR during such a situation.

h. The Contractor shall perform maintenance to control corrosion of the metallic water systems. The Contractor shall perform water distribution system inspections to observe, evaluate and record scale deposits and deterioration.

i. **MARINA, RV CAMPGROUND AND OTHERS (USAG-S).** The Contractor shall winterize the 700 Marina and 5 Flags RV Campground water lines and the golf course maintenance area water recycling lines. A sample of the work involved includes: shutting off water, draining lines, closing and locking up facilities and turning off lights by the end of October. The Contractor shall inspect the plumbing and turn the water on in April depending on the weather.

2.12.3 **SWIMMING POOLS (USAG-S).** The Contractor shall provide a maintenance and winterization program on the two outdoor pools and the indoor hot tub in bldg 780, appurtenances, and the bath house structures. The Contractor shall ensure that these pools are operational on or about 15 May through Labor Day or as requested by the COFR. The Contractor shall certify one individual in swimming pool operation and maintenance. The Contractor shall not be responsible for adding chemicals, daily cleaning or back washing filters. The Contractor shall perform the following tasks as part of the swimming pool maintenance program:

1. Order materials, such as chemicals, safety equipment, filter and filter chemicals, valves, pumps and other equipment pertinent to the operation of the pools.

2. Maintain and repair water heaters.

3. Repair and maintain above or underground plumbing systems for the pools.

4. Open and clean the pool filter system to keep pools operational when the pool is closed during non-operating hours.

5. Inspect the pool's operating system to resolve operating

problems and to keep operational.

2.12.4 **SEWAGE COLLECTION AND STORM SEWER SYSTEMS.** The Contractor shall inspect, install, test, maintain, modify, repair, replace and alter all storm and sanitary sewage systems and components (e.g., mains and lateral, all pumps and lift stations, separator tanks, and pits) for collecting and transporting sewage and wastes to the sewage systems of the city of Warren (DTA) and Harrison Township (USAG-S). Examples of work in this area include the following:

1. Maintain and repair main lines, laterals, manholes and clean outs.

2. Maintain and repair all sanitary sewer system components.

3. Clean the manholes and connecting lines to avoid clogging of main lines.

4. Inspect, excavate, and repair damaged sections of storm distribution systems, and backfill affected surfaces, such as road or grass areas. The Southerland Omega drain in Sebille Manor shall be cleaned to maintain unobstructed water flow and be free of debris.

5. Clean storm catch basins, manholes, pits, sumps, etc, to maintain an unobstructed system.

6. Examine manholes for odor of gasoline presence of oil slick on sewage surface.

7. Check for sand, mud and grit, which indicates broken or loose sewer joints or sewer pipe.

8. Check for sluggish flow or accumulation of sewage solids.

9. Provide materials and repair the piping associated with the sanitary sewer system including the ejector stations and ejection pumps.

10. Clean grease traps in the following buildings: 700, 701, 971 and golf course club house at USAG-s and in buildings 200B and 229 to maintain an unobstructed system. Also see 2.6.20.2 & 2.10.20.2.

11. Tanks shall be pumped out as required, and the contents shall be disposed of in accordance with Base, local, federal, and state environmental laws and regulations.

12. Maintain oil water separators in catch basins to prevent water pollution problems and to maintain clean and proper operation. Also see 2.6.19.2 & 2.10.19.1.

2.12.5 **WATER AND SEWAGE SYSTEMS EMERGENCIES** Inoperative or leaking water mains and service lines, and damaged fire hydrants are automatically classified as emergencies for repair. When technically possible and after consultation with the COFR, the Contractor shall provide and hook-up temporary water lines (including fabrication and installation of fittings and valves, to allow tap-in to supply lines). The Contractor shall isolate breaks by shutting off valves and back pressure the lines to provide as many buildings with water as is technically possible. In the event of a major interruption, breakdown, or gross contamination of the system, delivery of water shall be terminated and the COFR and appropriate Government personnel advised immediately. The COFR shall be notified immediately of any irregularities regarding water quality and shall be kept informed of all remedial activities taken by the Contractor. Water leaks shall be immediately controlled so as to preclude any damage to property or equipment. All sewage system problems that present a health or safety hazard are classified as emergencies. The Contractor shall correct all sewage system problems and restore the system to an operational condition.

2.12.6 **FUEL DISTRIBUTION, STORAGE SYSTEMS AND WASTE WATER TANKS:** The Contractor shall inspect, clean, test, calibrate, modify, install, maintain, repair, and perform preventive maintenance on all above ground and underground fuel distribution and storage systems (e.g. Bldg. 212 fuel distribution and pumping systems). These systems include all tanks, piping, valves, filters, gauges, hoses, control systems, security devices, cathodic protection systems, grounding systems, and leak detection systems, pumps, cut-off controls, and other related components. The Contractor shall maintain and repair all fuel distribution and storage systems to preclude fire, safety and environmental hazards. Tanks and lines shall be cleaned prior to a change in fuel types or when impurities or contaminants are found. Tanks shall be inspected as necessary to establish quality of fuel or the presence of contaminants. The Contractor shall not mix fuels. All fuel leaks shall be immediately reported to the COFR. Tanks shall be labeled in accordance with codes and regulations governing this work (e.g., product identification, safety and environmental warnings).

There are eight tanks on the USAG-S information as follows:

Location	Diesel	Size Gal	Gal/Gas	Size Gal	Notes
Bldg 104	Waste Oil			1000	Above Ground
Bldg 308	X	400			Above Ground
Bldg 571	X	500	X	500	Above Ground

Bldg 571	Waste Water			10000	Under Ground
Bldg 781			X	20000	Under Ground
Bldg 781	Waste Oil			500	Above Ground
Bldg 903	X	300	X	700	Above Ground
Bldg 972	X			800	Above Ground
Bldg 972			X	200	Above Ground

See 2.6.19 for DTA tank location information and also see 2.10.19.

2.12.7 **FIRE SUPRESSION SYSTEMS** Perform inspection, testing, installation, maintenance, repair, and replacement of various fire suppression systems, controls and other related systems equipment (chemical and water). Logs shall be maintained of all tests, inspections, and maintenance performed; parts and materials used; and system downtime. Recharge chemical systems on an annual basis or as required. Also see 2.3.2.y.

2.12.7.1 Immediately notify the building manager and fire department of any problems that may adversely impact the operation of the fire supression systems. Notify the fire building manager and department prior to starting work. The COFR shall also be notified of any problems with fire supression systems.

2.12.8 **CONTRACTOR SUPPORT** The Contractor shall disconnect utilities to Equipment in Place (EIP), Industrial Plant Equipment (IPE) and Other Plant Equipment (OPE). The Contractor shall reconnect utilities to this equipment once work has been completed.

2.13 PREVENTIVE MAINTENANCE (PM)

2.13.0 **GENERAL:** The Contractor shall be responsible to do all functions necessary to establish an effective and efficient preventive maintenance (PM) program. The Contractor shall assure that all equipment, building and infrastructure components are safe, protected from deterioration, adequately support the mission and operating efficiently. The Contractor shall develop and implement a Preventive Maintenance (PM) program, checklists to identify/describe the maintenance and schedule of the maintenance frequencies to assure safe, reliable, efficient and functional buildings, facilities, roads, surfaces, grounds, utilities, systems, equipment, etc, (equipment, building and infrastructure components) in accordance with the Performance Work Statement. Examples of PM frequencies include daily, weekly, monthly, quarterly, semi-annual, annual and other frequencies to inspect and maintain the post IAW RS Means

Preventive Maintenance recommendations, the suitable industry standards, codes, technical manuals, pamphlets and guide specs, manufacturer’s technical manuals/recommendations, life cycle analysis and other recommendations. The Contractor shall inspect, detect and correct operational problems and defects, hazardous or unsafe conditions (actual or potential) and make repairs. Work performance shall comply with the sections of this PWS under the specific discipline that applies. Develop, prepare and submit a Preventive Maintenance schedule for the equipment, building and infrastructure components as required by 2.2.7. In addition to the above requirements, PM for OMA (except as noted below) buildings and structures shall be accomplished on a 120-day cycle and as referenced in the Appendix (Historical). PM for family and bachelor housing buildings and structures shall be accomplished on an annual basis and as referenced in the Appendix (Historical). Between Occupancy Maintenance shall be accomplished when residents move from housing quarters to prepare the quarters for the next occupancy, also see PWS 3 - 3.10.d. PM for residential appliances can be accomplished at the time of Between Occupancy Maintenance. PM work will be performed during workdays or during scheduled shutdowns unless otherwise stated in the contract. When it is necessary to reschedule a PM or when a PM was initiated and cannot be completed on schedule, the Contractor shall telephonically or electronically advise the COFR with the reasons for the changes and the new schedule at least five working days prior to the originally scheduled PM date. Due to operational requirements, the schedule shall be subject to change or revision at any time during the contract as directed by the COFR. The Government shall notify the Contractor at least five working days prior to the change. In the event of an inconsistency between Government, manufacturer, or standard commercial practices and PM recommendations or suggested schedules, the most stringent shall apply.

2.13.1 **PREVENTIVE MAINTENANCE DATA:** The Contractor shall document the need for a repair identified during the course of PM in the Contractor's maintenance and repair schedules. In the event that the repair(s) required exceed the scope of this contract, the Contractor shall forward the documentation to the COFR. Also see 2.2.

2.13.2 **WORK ORDERS:** The Contractor shall initiate and perform work orders for those repairs beyond preventive maintenance requirements or that are not accomplished during PM.

2.13.3 **COORDINATION:** The Contractor shall coordinate with building managers and residents to avoid disruption of their operations. If the Contractor cannot gain access to a family-housing unit after making two attempts on consecutive days, the

Contractor shall schedule an appointment with the resident and notify the COFR.

2.13.4 **PM REPORTS**. Defects or deficiencies identified by the Contractor, which may result in risk to persons or property shall be reported to the COFR immediately via telephone. Also see 2.2.19.c.

2.14 ROADS, PAVEMENT, RAILROADS, APPURTENANCES, AND GROUNDSKEEPING.

2.14.0 GENERAL. The Contractor shall develop and perform a total maintenance program for the roads, pavement, grounds, and appurtenances. The Contractor shall perform Preventive and Recurring Maintenance on the items. The Contractor shall assure that all items are safe and operating efficiently. The Contractor shall inspect, install, test, modify, maintenance, repair, replace and alter the items. This work shall be performed IAW Manual of Traffic Engineering Studies, Department of Transportation Highway Safety Program Standards, Volumes 12, 13, and 14; Michigan State Highway Department Standard Specifications for Highways and Bridges; American Association of State Highway and Transportation Officials (AASHTO) Manual for Uniform Traffic Control Devices (MUTCD), American Railway Engineering Association (AREA), American Wood-Preserver's Association (AWPA), American Welding Society, Inc. (AWS), Federal Highway Administration (FHPA), Federal Highway Administration (FHWA), American Standard for Nursery Stock and National Arborist Association standards for Pruning and Maintaining Shade Trees, environmental laws and directives, regulations, technical manuals, pamphlets and guide specs, industry standards and manufacturers recommendations. All historically eligible grounds and landscaping shall be maintained in accordance with U.S. Department of the Interior, National Park Service historic preservation standards for wood, paint, masonry, concrete and 20th Century materials.

2.14.1 Examples of the items and equipment include: roads, shoulders, sidewalks, paved and unpaved surfaces, railroads (DTA), outdoor decks, recreational shelters, bus shelters, bridges, culverts, ditches, drains, ducts, barricades, force protection barriers, flag poles, signs, posts, fences, gates, curbs, parking blocks, fencing, athletic fields, gates, guard rails, handicapped ramps, playgrounds, park benches, score boards, electronic signs, outside cooking grilles, canopies, utility lines, meters, grounds and other appurtenances. The Contractor shall perform a wide variety of landscaping tasks on controlled grounds. Examples of grounds include: improved lawns, improved/unimproved fields and pavements.

a. Place, remove, relocate, reposition, maintain and store force protection barriers to comply with the Installations force protection barrier requirements.

2.14.2 **SURFACE AREAS, STRUCTURES AND APPURTENANCES**
The Contractor shall inspect all surfaced areas, related appurtenances and associated structures and ensure implementation of sound maintenance and engineering practices and proper planning and repair. The Contractor shall maintain and repair surfaced areas to meet Pavement Condition Index (PCI) rating. The Contractor shall provide reports on items requiring repair or replacement to the COFR. Inspections are required semiannually and shall be accomplished prior to spring thaw and winter season. Maintenance and repair of paved surfaces shall include paving or overlay, pothole/crack repair, sealing, seal coating, and other related activities. The Contractor shall have applied seal coatings to all the paved roads and parking areas in the installation prior to end of the contract. Maintain records showing description of the area, date of inspection, recommended maintenance and work accomplished. The Contractor shall maintain the free flow of traffic during pavement repairs of any other work. The Contractor shall sweep all pavement roads, paved shoulders, drives, aprons, walks, and parking areas or other structures on a monthly basis (for USAG-S sweep as required to keep debris from building up on the surfaces) and prior to special events, VIP visits, and whenever accumulated animal droppings become a nuisance or health/safety hazard. The Contractor shall remove debris such as salt, sand, silt, trash, vegetation and dead animals. The Contractor shall eliminate traffic hazards, ensure proper drainage and maintain a smooth riding surface. The Contractor shall maintain gravel or earth-surfaced roads and parking areas in a smooth and well-drained condition. Inspect unpaved roads frequently in cases of heavy use, heavy storms or extremely dry weather. The Contractor shall provide dust control.

2.14.2.1 **Surface Markings and Signs** Also see 2.4.5. The Contractor shall provide a total program for the maintenance, replacement, repair, fabrication, installation and relocation of traffic, parking, street and facility/room signs and markings. Traffic and parking control signs and markings shall be in conformance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD) for Streets and Highways published by the American Association of State Highway and Transportation officials and Installation Design Guide Standards.

a. The Contractor shall maintain, repair, replace and install markings, lines, stripes, symbols, number, etc., on roadways, parking lots, curbs, aprons and sidewalks as required

to keep visible, clear and legible. The inspection, fabrication, installation, maintenance, repair, modification and replacement of traffic/parking control signs, facility/room signs, markings, lines, devices, etc. is classified as Maintenance Work unless directly associated with a construction project or other New Work. The Contractor shall coordinate with the COFR prior to painting markings, lines, striping, symbols, installing signs etc, to avoid conflicts before areas are seal coated or repaired by other contractors. The Contractor shall:

b. Provide all roadways and parking lots and other areas with regulatory, warning and guidance signs and markings for the safe and effective movement of pedestrians and vehicles and for parking of vehicles.

c. Maintain, paint and repaint markings on all roadways, parking lots and paved area to keep the markings and signs visible and legible. Remove markings no longer needed. The Contractor shall modify, alter and make minor extensions or relocations of existing markings when requested by the COFR.

d. Keep traffic and parking signs in appropriate position, clean and legible. Replace as necessary. Install new signs when needed to promote safety, enforce speed limits, designate additional handicap parking, etc.

e. Repair/repaint pavement markings after making pavement repairs.

f. Repair and replace damaged traffic signs on an emergency basis or as requested by COFR.

g. Inspect and repaint all roadway, parking lots and paved area markings annually or as required to keep visible, clear and legible. Modifications, alterations, minor extensions or relocations of existing markings or signs requested by the COFR is also Maintenance Work.

h. Repair and replace damaged signs, etc.

i. The Contractor shall prepare a Sign Plan for the post using drawings to locate and identify locations of interior & exterior signs within 180 days after the start of the Contract and update annually, submit to the COFR.

2.14.2.2 The Contractor shall perform bridge maintenance, repair, and inspection services at a level which will prevent bodily injury, loss of life or property damage. The Contractor shall:

a. Perform an annual maintenance inspection and a biennial

technical inspection that is in compliance with the Federal Highway Administration requirement and Public Law for access bridges and the American Association of State Highway and Transportation Official (AASHTO) Manual for Maintenance and Inspection of Bridges. Submit inspection reports to COFR when requested.

b. Repair bridge as necessary to meet load and safety requirements.

c. Maintain records of bridge inspection and analysis.

d. Maintain safe load limit signs at bridge, culverts, and trestles.

2.14.3 **SNOW AND ICE REMOVAL** The Contractor shall perform snow and ice removal services for all roads, drives, sidewalks, parking lots, streets, railroad infrastructures, steps, entrance ways and handicapped ramps. The Contractor shall conduct inspections of all areas after removing snow and ice and remove any remaining snow and ice.

2.14.3.1 **SNOW AND ICE REMOVAL TIME CRITERIA**: During normal duty hours, the Contractor shall begin removal immediately if snowfall is expected to exceed one (1) inch as forecasted by the U.S. Weather Service. If a snowfall is forecast to be one inch or less in accumulation, the Contractor shall use his discretion as to when snow removal shall commence subject to the conditions contained herein. During non-duty hours, after one-inch accumulation of snow, the Contractor shall begin snow removal. During either duty or non-duty hours, the Contractor shall not allow small accumulations to become a safety hazard. The Contractor is responsible for monitoring the U.S. Weather Service Weather Channel on a 24-hour basis. The Contractor shall propose a backup forecast source through the COFR to the Contracting Officer for written approval. The Contractor shall remove snow less than or up to six inches continuously within a maximum period of eight (8) hours for each individual accumulation. The Contractor shall remove snow greater than six inches continuously within a maximum period of thirty-six (36) hours for each individual accumulation. Times shall be computed from the time the last snow has fallen. The Contractor shall clear all sidewalks, steps, ramps and handicapped ramps before 0530 hours if there is a nighttime snowfall and continuously clear during the day to preclude safety hazards. The Contractor shall remove ice and snow accumulated on the track to ensure the tracks are not impaired for use and to minimize the potential for loss of life and property damage.

2.14.3.2 **SNOW AND ICE REMOVAL PRIORITIES** The Contractor shall

remove snow and ice from roads, parking lots and other areas to bare pavement according to the priorities below. The Contractor is responsible for ensuring that sufficient personnel and equipment are on hand to meet contract criteria. The priorities of snow and ice removal are: (Note that priorities may be changed as deemed necessary by the COFR.)

1. Detroit Arsenal

a. Priority 1 - Main roadways (Tank Avenue in front of Bldg. 205, Arsenal Avenue and Center Avenue), Entrances to Parking Lots Y and Z, Circle Parking area fronting Bldg. 230, all handicapped ramps, handicapped parking areas and vehicle ramps, and all building entrance areas

b. Priority 2 - Other main roads and secondary roads

c. Priority 3 - Other parking lots

d. Priority 4 - All other sidewalks, steps, entrances, lanes, ramps, and walks

e. Priority 5 - All other miscellaneous surfaced areas and in a five foot radius around fire hydrants.

f. Priority 6 – Railroad infrastructures, including track and associated structures.

2. USAG-S Approximate delineation of the areas to receive snow removal is shown in the Appendix.

First Priority:
Bldg. 300 – Police Station
Bldg. 310 – Health Clinic
Bldg. 970 – Garrison HQ
Bldg 972 - Maintenance Shops
Bldg. 971 – Child Development Center
409 Lufberry – Commanding General’s Quarters (when occupied)
Streets and adjacent curb side parking in housing areas, includes 900 Area Lodging & Office Space Buildings streets and curb side parking.

Second Priority:
Bldg. 165 – Gymnasium
Bldg. 168 – Chapel
Bldg. 325 - Transient Housing
Bldg. 326 - Offices
Bldg. 328 – Conference Ctr
Bldg. 410 – Lufberry Hall - Lodging
Bldg. 700 – PX Office (side lot)

Bldg. 780 – Offices, Education Ctr, Sports & Fitness, Crafts
Bldg. 781 – Service Station
Bldg. 836 – Veterinary Clinic
Bldg 916 - Lodging
Bldg 922 – Offices (Sidewalks)
Bldg 923 - Lodging
Bldg 936 - Lodging
Bldg 942 - Lodging
Bldg 1060 - Lodging
Parking Lot & Adjacent Sidewalks east of Bldg 300.
Bus Shelters (13)
Lake Shore Drive and Observation Posts

Third Priority:
Bldg. 570 - Golf/Community Club
Bldg. 700 – Base Exchange (front lot)
Bldg. 701 – Commissary
Bldg 710 - Offices
Bldg. 714 – SATO Bldg
Bldg. 715 – Beverage Store
Bldg. 718 – Credit Union
Bldg. 826 – Bowling Center
Bldg. 835 – Thrift Shop/Four Seasons
Bldg. 903 – Outdoor Recreation Facility&Rec Dr North of Ashau Valley Rd
Bldg. 951 – Bayshore Hardware
Bldg. 2250 – Teen Center
Sidewalks (along Jefferson, George between Wagner and Jefferson and around bldg 165)

Fifth Priority:
Bldg. 104 – Auto Craft Shop
200 Area – Sidewalks
400 Area – Sidewalks
700 Area – Sidewalks
900 Area - Sidewalks
Sebille - Sidewalks
Bldg - 350
Vacant Family Housing Unit Sidewalks and driveways
Top 4 Area & Drive
5 Flags Camp Ground Road
Police and re-clean all areas previously serviced
1500 Area & Joy Rd RV Storage Yards/Driveways– when requested by COFR

2.14.3.3 **OTHER SNOW AND ICE REMOVAL TASKS**

2.14.3.3.1 The Contractor shall remove drifted snow from areas

previously cleaned. The Contractor shall return to remove snow and ice from areas which were obstructed when the area was originally cleaned and remove the snow from the previously obstructed areas. The Contractor shall provide all coordination necessary to remove obstructions to all snow and ice removal unless otherwise instructed in writing by the COFR. The Contractor shall remove snow and ice at intersections, entrances to parking lots and other areas that require traffic visibility. At the Detroit Arsenal excess snow and ice shall be dumped in the area North of the 206-baseball diamond and at USAG-S excess snow shall be dumped in the fields surrounding bldgs 970, 780 and in the Top 4 field. In no case will snow and ice be piled on paved or unpaved surfaces such as parking lots, sidewalks, streets, aprons, etc. unless specifically approved in writing by the COFR.

2.14.3.3.2 The Contractor shall salt all icy roads, drives, sidewalks, parking lots, streets, steps, gates, entrance ways, and handicapped ramps as needed. Sand may be used on non-critical areas with COFR approval. The Contractor shall apply abrasives or chemicals for ice control. The types of abrasives or chemicals (sand, potassium chloride and other types that are friendly to plants and the environment) are subject to review and written approval by the COFR.

2.14.3.3.3 The Contractor shall erect snow fences and markers to prevent snow drifts across roads and other access areas and erect markers for identifying culverts, fire hydrants and other obstructions to ensure that snow is cleared from these areas and to prevent damage of items by snow plows.

2.14.3.3.4. Keep fire hydrants clear and visible. Maintain a minimum of a 5’ radius clear of snow and ice around fire hydrants. Furnish, place, fill and re-fill barrels and material for melting snow/ice outside of entrances of buildings during the snow and ice season and remove in the spring.

2.14.3.3.5. Establish alternate sources for salt or sand supply in the event of availability problems.

2.14.3.3.6. At USAG-S, the Contractor shall share the 127th Wing salt storage facility and shall coordinate with the 127th for salt and co-use of the facility.

2.14.4 **GROUNDS KEEPING AND ARBOR ACTIVITIES** The Contractor shall perform a total program of inspection, testing, installation, modification, transplanting, irrigation, fertilization, maintenance and repair of grounds, structures, appurtenances, improvements, and vegetation. The Contractor shall provide a ground keeping and arbor activities Operations and Maintenance SOP plan which outlines the accomplishment of grounds keeping

work. Submit to COFR thirty (30) days after contract start, submit updates annually. The Contractor shall clean up all outdoor areas each spring (e.g., after the snow and before the growing season)and as required to maintain a clean and neat appearance by removing all litter and other debris, repairing damaged lawns and signs, etc. The Contractor shall be responsible for cleaning out cigarette butts and other debris near building entrances on a weekly basis (i.e. from lava rocks, by steps, landings, etc). In no case shall cigarette butts (also see 2.20.14) and other debris be allowed to accumulate and create an eyesore.

2.14.4.1 **GROUNDSKEEPING:** The Contractor shall provide a total groundskeeping program for grounds, improvements and appurtenances. Relevant information is shown in the appendices. Grounds maintenance shall be performed IAW the current American Standards for Nursery Stock (ASNI 260-1) and National Arborist Association Standards for Pruning and Maintaining Shade trees. The Contractor shall perform:

a. Inspection of all areas for hazards prior to mowing. Removal of all hazards, toys, bikes, other items and debris prior to each mowing and as otherwise requested by the COFR.

b. Cutting all grass to include all easements, the exterior of any perimeter fencing out to the roadway, to the Bear Creek drainage, to the edges of private property lines and between the fence and curb along East 11 Mile Road. Approximate delineation of areas to be moved are shown in the appendices.

c. Cutting all fields, all right-of-ways (including all railroad, overhead electrical lines, telephone cables, steam lines and all underground water, sewer, gas and steam lines) and areas designated as "road shoulders" and slopes.

d. Cutting vegetation along ditches and channels as required for maintaining drainage and vegetation cover for erosion control.

e. Trimming and edging of grass shall be accomplished concurrently with mowing along buildings, curbs, sidewalks, walks, driveways, around trees, shrubs, water outlets, signs, valve boxes, roadways and other structures and appurtenances in the respective area. A clear line of demarcation shall be maintained between lawns, shrubbery and trees.

f. Remove or prevent vegetation from growing in cracks and expansion joints in sidewalks, pavements, aprons, parking lots, curbs and gutters.

g. Remove all cuttings, grass, weeds, and leaves and other debris the same working day from sidewalks, curbs, gutters, and streets after each mowing. Clean leaves, paper, and other debris from around shrubs and flowers. Leaves and other natural vegetation may be mulched on grassy areas so long as it is not detrimental to the grass, shrubs or vegetation, does not harbor an organism harmful to other trees, and does not create an unsightly appearance (e.g., clumping of long or wet grass clippings).

h. Inspect all grass areas for bald spots, yellowing, dead or damaged grass. Add soil, fertilizers, insecticides, or other treatments as necessary to allow new growth. Sow grass seed or lay sod as required to establish growth or as requested in writing by the COFR. Irrigate seeded or sodded areas until the grass is capable of survival naturally.

i. Inspect grounds after each heavy storm (wind, rain, hail, snow, etc). Damaged trees, part of trees, shrubs, etc., shall be removed. Repair or replace damaged trees, shrubs, and plants as necessary.

j. Ensure all grounds are drained to prevent disease outbreaks from mosquito infestations. Notify the government pest management coordinator of any standing water observed immediately outside the installation fence line.

k. Removal of vegetation, shrubs, reeds, weeds, dead or dying trees, downed trees, fallen limbs and other debris (e.g. stones, sticks, wire glass, metal lumber, etc).

l. For occupied Family Housing units and in common areas: Cut all grass beyond 50 feet from quarters. Mow all areas in the 900 Housing areas up to the buildings/shrubs. Mow all areas in the 700 Housing area up to the buildings/shrubs or up to the resident’s fences.

m. For unoccupied Family Housing units and hardship cases: Cut and trim all grass and shrubs and remove weeds from shrubbery beds. Hardship cases shall be designated by the COFR.

g. Remove all cuttings, grass, weeds, and leaves and other debris the same working day from sidewalks, curbs, gutters, and streets after each mowing. Clean leaves, paper, and other debris from around shrubs and flowers. Leaves and other natural vegetation may be mulched on grassy areas so long as it is not detrimental to the grass, does not harbor an organism harmful to other trees, shrubs or vegetation and does not create an

unsightly appearance (e.g., clumping of long or wet grass clippings).

h. Visits by dignitaries and special occasions: prior to and during: 1.) Cut, trim, and edge grass and trim/prune shrubs and trees, weed flower beds and pick up all debris at any family housing unit identified by the COFR. 2.) Inspect all other areas covered by this contract to determine if the areas need any work and perform such work (e.g., and remove debris, cut trim and edge grass, weed gardens, trim trees and shrubs).

2.14.4.1.1 **CUTTING LEVELS** The Contractor shall provide a clean, even cutting level to prevent scalping, uneven mowing and rutting for improved lawns, improved fields, and unimproved fields. These areas shall be cut to the following levels:

a. **Improved Lawns**: All grass shall be maintained at a height of between three and five inches unless cutting is delayed by excessive rain. Examples of improved lawn include the Detroit Arsenal lawns adjacent to buildings, and grass adjacent to the exterior of the perimeter fencing along 11 Mile Road. At USAG-S examples of improved lawns include: the 400, 700, 900 areas, Sebille Manor and playgrounds, park areas, sports fields and campground. Army commercial areas include grounds around Buildings: 104, 165, 168, 300 (including parking area between Buildings 300 and 305), 310, 325, 326, 328, 330, 333, 340, 350, 410, 700, 701, 710, 712, 714, 715, 826, 835, 836, 903, 951, 970, 971 and 1060.

b. **Improved Fields**: All grass shall be maintained at a height between five and eight inches unless cutting is delayed by excessive rain. Examples of improved fields include everything on property not mentioned above in the Improved Lawns paragraph, fence lines and other perimeters.

c. **Unimproved Fields**: All grass shall be maintained at a height of ten inches or less, unless cutting is delayed by excessive rain. The contractor shall also maintain an unobstructed view and hazard free unimproved fields. Examples of unimproved fields include the area between the Detroit Arsenal fence and the Conrail railroad tracks including the railroad easement and the high berms between the perimeter fence and Bear Creek, the areas adjacent to Bear Creek, and between Bear Creek and Mound Road.

d. **Sebille Manor:** The Contractor shall perform ground maintenance and grass cutting within the legal boundaries of the Sebille Manor Housing areas. The legal boundaries of Sebille Manor are from the center of Sugarbush Road on the west, to

center of Donner Road, in the Southwest the property line then to a point 10 feet west of the northwest corner of the present fence. The north/south boundary includes the land up to the fences. Cut all grass, including fields, easements, right-of-ways and on the exterior of any perimeter fencing extending to the roadway.

2.14.4.1.2 **Base Chapel USAG-S:** The Contractor shall maintain a clean and neat appearance for the Base Chapel. The Contractor shall perform the following:

a. Weed and thin flower beds.
b. Keep area free of paper and other debris.
c. Transplant trees and bushes.
d. Water flower beds as required.
e. Fertilize lawns, flowerbeds, shrubs and trees.
f. Maintain grass at a height of between two and four
g. Plant and remove flowers and bulbs as required.
h. Winterize plants, plant and prune roses as required.
i. Trim bushes and trees.
j. Install borders along flower gardens.
k. Maintain trees, bushes and flowers.
l. Apply weed killer and insecticide to lawns.

2.14.4.2 **ARBOR ACTIVITIES** The Contractor shall provide a total Arbor Activities Program for trees, shrubs, flower and decorative plants and other ground cover and decorations including planting, transplanting, trimming, pruning, inspection, treatment for harmful organisms, cultivation, fertilization, edging, raking, and irrigation. These activities shall be IAW the National Arborist Association Standards, American Standards for Nursery Stock (ANSI 260-1) and other applicable laws, regulations and standards.

2.14.4.2.1 The Contractor shall transplant and plant trees, shrubs and other vegetation as required or as requested in writing by the COFR. New and transplanted vegetation shall be planted within a reasonable time to prevent damage. Types and location of vegetation to be planted or transplanted shall be subject to written COFR approval. Only plants listed as being native to Michigan shall be used for landscape improvement, renovation or replacement.

2.14.4.2.2 The Contractor shall maintain all flowerbeds, shrubbery beds, watering basins around freestanding trees, decorative plants, other ground cover beds, etc. as necessary to promote growth and provide an aesthetically pleasing appearance (e.g., remove weeds, grass, leaves and other debris, provide

mulch, cultivate soil, provide healthy plants, etc.). The Contractor shall select and plant the annuals in flowerbeds and other selected locations. The selection of material requires written COFR approval.

2.14.4.2.3 Trees and shrubs shall be pruned and trimmed to present an aesthetically pleasing appearance or to remove dead, diseased or broken branches. Trees and shrubs shall be pruned to prevent any interference with power lines, equipment, or pedestrian and vehicle traffic. All cutting, pruning or other treatment shall be IAW the National Arborist Association Standards. Remove trees, branches, shrubs and other vegetation that interfere with the line of sight with the TV monitoring cameras and security patrols along the shoreline, perimeters and in other areas on the posts.

2.14.4.2.4 Contractor shall take appropriate action to preclude the spread of vegetation infestations and diseases (e.g. Dutch Elm disease, rust, aphids, gypsy moths, etc.). The Contractor shall notify the COFR of any intended tree or shrub removal to determine if the vegetation should be replaced and what it should be replaced with. Changes in types of vegetation or location are Maintenance Work.

2.14.4.2.4 Remove trees and stumps when buildings, roads, drives, walks, utility lines etc. are threatened by their presence or when dead, dying or diseased. Trees shall only be removed with COFR concurrence. Backfill holes and disturbed areas from stump removal or grinding with soil of a like nature to that adjacent to the hole. Compact the backfill and seed if in a turf area.

2.14.4.2.5 Trees and shrubs less than 6’ in height adjacent to the quarters in the 200, 400 and Sebille housing areas are maintained by the residents, all others shall be maintained by the Contractor on others areas of the Post. The Contractor shall trim all trees and shrubs in vacant quarters in the 200, 400 and Sebille housing areas or as requested by the COFR.

2.14.4.2.6 Rake, collect and dispose of fallen leaves from improved lawns, vacant and hardship quarters, areas which are not the responsibility of residents and the housing area streets. Collect and dispose of leaves raked to the curbs in the Family Housing areas by the residents in the fall.

2.14.4.3 **OTHER FACILITIES USAG-S**

a. **Marina**: The Contractor shall control aquatic weed growth in the three boat basins to allow free access for boats without

tangling propellers. Comply with State of Michigan environmental laws.

b. Seawall & Shoreline. The Contractor shall maintain and repair the seawall and dikes adjacent the shoreline.

c. Maintain the recreational vehicle storage areas and fencing in the 1500 area and at Joy Road.

2.14.5 **FERTILIZATION AND IRRIGATION**

2.14.5.1 The Contractor shall fertilize and treat trees, shrubs, flowers, ground cover, etc. three times per year to promote optimum growth and an aesthetically pleasing appearance with a minimum of weeds, less that which is the responsibility of family housing residents in the housing areas) The Contractor shall apply fertilizers and weed killers to all grass areas. The types of application may be adjusted with written COFR approval. See the environmental sections of this PWS for information regarding the use of herbicides, pesticides, etc.

2.14.5.2 The contractor shall water grass areas, trees, shrubs, flowers, ground cover, all new sod, newly seeded areas, newly planted flowers, shrubs, outdoor planters and other vegetation as required to promote optimum growth and appearence. The contractor shall avoid over watering during periods of excessive rains. The Contractor’s operation, maintenance and repair of irrigation systems includes such actions as:

a. Cleaning and straightening of heads,
b. Adjusting and regulating the direction and amount of spray to cover intended area,
c. Timing the automatic on/off functions,
d. Turning manual systems on and off,
e. Cleaning grass and debris out of sprinkler heads.

Operation, maintenance, inspection, adjustment, and repair shall be done in a manner that will preclude water damage to government property, personal property, and vehicles and will not interfere with special events, displays, etc.

2.14.6 **DRAINAGE SYSTEMS**

2.14.6.1 The Contractor shall inspect, install, modify, maintain, or repair a wide variety of drainage systems including, but not limited to storm sewers, drains, culverts, ditches, manholes, pipes, sluices, diverters, erosion control cover, exits, gutters, curbs, catch basins, dikes, headwalks, curbs, dissipaters and inlets. The work shall include the following:

a. Maintain roads, shoulders, parking lots, and other areas

to allow proper surface drainage and to protect the road edge.

b. Ensure proper drainage around playing fields and courts by maintaining ditches, drainage systems, etc. to direct water flow, etc.

c. Repair/replace broken or damaged manholes as required.

d. Clear clogged storm sewers and manholes.

e. Remove leaves and debris from all drainage systems.

f. Clean, repair or replace damaged, broken, collapsed and clogged drainage systems.

g. Excavate pavement to gain access to sewer or drainage facilities for repair work. Repair pavement upon completion.

h. Sweep gutters and curbs to prevent accumulation of sediment and debris.

i. Maintain records of location of drainage facilities and nature and date of maintenance and repair performed on drainage systems.

j. Clear ditches of weeds, brush, sediment and other accumulations that obstruct the water flow. Maintain ditch line and grade, correct sags and minor washouts, and dispose of sediment, weeds, brush, etc.

k. Inspect and clean catch basins, drop inlets, manholes and similar structures on a regular schedule based on the rate of silting or clogging with debris to ensure proper run-off.

l. Install curbs, gutters, dikes, culverts, drains, piping etc., when required, for adequate drainage and to control road shoulder erosion.

m. Install, repair or replace headwalls to prevent erosion or scouring of the embankment adjacent to culvert inlets.

n. Install energy dissipators, crib structures, vegetation covers and dust palliative to control dust and prevent erosion.

2.14.6.2 The Contractor shall maintain, repair and replace drainage systems and erosion control devices to protect established grades, road shoulders, ditches, athletic/recreational areas and utility line covers from erosion. The contractor shall inspect all drainage systems and erosion control devices annually, after severe storms and as requested by

the COFR and initiate corrective action where problems are found. The Contractor shall look for erosion, sediment, washouts, debris, cave-ins, stoppages, and, during storms, adequacy in drainage systems.

2.14.7 **IMPROVEMENTS**

The Contractor shall install, maintain, repair and replace improvement items. Improvement items include, but are not limited to, patios, screen walls, entrances, grandstands, bleachers, picnic tables, concession stands, clothes lines and poles/trees, grills, plaques, monuments, flagpoles, backstops, signs, billboards, scoreboards etc.

2.14.7.1 The Contractor shall install, modify, maintain and repair outdoor athletic and recreational facilities including, but not limited to, exercise stations for joggers, running tracks, football fields and baseball diamonds, picnic tables, horizontal ladders, benches, horseshoe pits, tennis courts, volleyball nets and courts, jogging route markers, etc. Store exterior equipment in the off season. Baseball diamonds shall be laid out IAW American Softball Association (ASA) rules or as otherwise directed in writing by the COFR. Maintenance of ball diamonds and football fields includes, but is not limited to: supply, installation, and replacement of safety-approved base bags and home plates; chalking of foul lines and yard lines on a weekly basis during the appropriate season, dragging of ball diamonds twice monthly during the appropriate season; maintenance of ball diamond drainage; addition or removal of appropriate fill IAW ASA standards to maintain a smooth, firm playing surfaces; edging of grass around ball diamonds to maintain a uniform appearance. Repainting or refinishing for preservation shall be IAW the manufacturer's instructions.

2.14.8 **FENCING** The Contractor shall install, inspect, maintain and repair all fencing and gates IAW applicable security and safety regulations and laws. All perimeter fencing and gates shall be inspected monthly and repaired as an emergency as required to maintain a secure enclosure. Report fencing breaches immediately to the installation police and the COFR. Supported items, include, but are not limited to: fencing including fence fabric, poles, turnbuckles, supports, top rails, line posts, corner posts and caps: privacy and wind screens; gates and related equipment; and other security items such as crash cabling, anchors, barbed wire, standoffs, latches and chains.

2.14.8.1 All damaged, broken, bent or corroded parts shall be repaired or replaced as required. Loose wire fabric and barbed wire strands shall be tightened and secured. Missing or loosened

parts shall be replaced and/or secured. Fencing areas shall be refinished as required to prevent deterioration. Areas of fences that are repaired shall be painted to match the adjacent area.

2.14.9 **RAILROADS (DTA)** The Contractor shall perform maintenance, repair, and inspection services at a level which will minimize the potential for loss of life or major property damage to all railroad infrastructure, including track and associated structures. These actions shall be in compliance with the AREA, AWPA, FHWA, ASTM and the AWS standards. The Contractor shall maintain as necessary to prevent track deterioration or to correct minor defects. The Contractor shall repair as necessary to restore the track segments to a safe and efficient operating condition consistent with category of track and traffic carried. The Contractor shall maintain and repair railroads areas to meet Railroad Condition Level (RCL) rating. The Contractor shall maintain records of railroad inspection and analysis.

2.14.10 **PLAYGROUNDS (USAG-S)** The Contractor shall inspect, install, maintain, repair, repaint, refinish, preserve and replace a variety of the playgrounds and equipment. Items include see-saws, slides, ladders, swings, benches, basket ball rims, poles and nets, soccer goals, horseshoe pits, four tennis courts, volleyball nets and courts. The Contractor shall perform an annual inspection by 15 April to document and correct deficiencies. Submit results of the inspection by 30 April to the COFR and safety office. All repair and installation work shall be IAW the manufacturer's instructions. The Contractor shall remove and replace sand or woodchips to playgrounds as needed to maintain complete cover over all concrete piers and to the top of perimeter curbs and to maintain a sanitary condition. Keep the area within playground perimeters free of vegetation.

2.14.11 **CONTRACTOR SUPPORT** The Contractor shall provide support services for other contractors and Government personnel. The Contractor shall provide the support services to the following:

a. Locate and, when requested by the COFR, excavate telephone cables, high voltage cables, water and sewer lines for the installation or new service or for the repair of existing lines by contractors. Restore grounds to original condition. Shut-off, disconnection, reconnection, and turn-on of appropriate utilities shall also be provided by the Contractor.

b. Contain, clean, and dispose of spilled oil or other contaminants in all affected catch basins and sewage collection and storm drainage lines.

c. Excavate for water shut-off, sewer disconnects, gas or oil line shut-offs prior to building demolition or other

projects.

d. Support other jobs, as required, with major and minor miscellaneous heavy equipment.

e. Grade roads and dirt, place barricades and ramps.

f. Excavate to foundation footings and for grading and leveling.

g. Dig trenches for water, sewer, gas, air, steam, electric and telephone lines.

h. Pump water and sediment from manholes, catch basins, basements and tunnels.

i. Remove covers, open doors, etc. to steam trenches, substations, equipment, manholes, etc.

j. Clean accident debris from roads and grounds on an urgent basis upon request from the Security Police or the COFR.

k. Barricade areas in support of security or fire investigations and activities or as otherwise requested by the COFR. Additional barricades, barrier walls and similar items deployed in support of Force Protection shall be Government-Furnished Property (GFP) only.

2.14.12. **Miscellaneous** Place, move, maintain, and repair exterior ash and trash receptacles, and other miscellaneous outdoor equipment in areas designated in writing by the COFR. Store exterior equipment in the off-season. These receptacles are primarily stone faced and located at building entrances and smoking shelters. Emptying these receptacles is not a contract requirement at Detroit Arsenal and is a contract requirement at USAG-S.

m. The Contractor shall empty all their dumpsters used to support their work efforts within one workday of becoming full. The Contractor shall maintain the areas around the dumpsters free of fallen debris and prevent any windblown debris from the dumpsters. All exterior trash receptacles (including but not limited to, trash cans, garbage bags, and bins), shall be emptied and the trash disposed of properly. The Contractor shall clean up any fallen or windblown debris from around the trash receptacles at the same time the trash pick-up is accomplished. Trash receptacles shall be placed back in their normal location with covers, if any, in place. This requirement is primarily for the baseball diamond areas and for Special Activities. This requirement does not include emptying receptacles indoors, at

building entrances and the containers owned by the Detroit Arsenal custodial contractor, refuse collection contractor, or other Government Contractors. The Contractor shall relocate receptacles as requested by the COFR in writing. The Contractor shall pick-up windblown trash and debris regardless of source.

2.14.14 The Contractor shall:

a. Pump water and sediment from flooded manholes, catch basins, and tunnels. Provide clean up and sanitation resulting from basement flooding.

b. Clean accident debris and remove animal road kill from roads and grounds immediately upon request from the Security Police or the COFR.

c. Provide barricades, warning tapes, etc., in support of security or fire investigations and activities or as otherwise requested by the COFR. Additional barricades, barrier walls and similar items deployed in support of Force Protection shall be GFP only.

d. Place picnic tables, benches, and receptacles, trash barrels, and other miscellaneous outdoor equipment in areas designated by the COFR. Relocate equipment when requested by the COFR. Store equipment in the winter. Maintain and repair all of the above equipment

2.15 SPECIAL ACTIVITIES

2.15.0 **GENERAL:** The Contractor shall be responsible for providing support for Special Activities. The type of support that will be expected normally require moving, setting up/removing of chairs, tables, bleachers, platforms, reviewing stands, temporary shelters/fencing, sanitation facilities, grass cutting, tree and shrub trimming, litter and trash pickup, etc.

2.15.1 **APPRECIATION DAY (DTA)**: The Appreciation Day is an annual event normally conducted on a Friday in early summer and is generally the largest, routine special event. Physical set-up is normally accomplished the day prior to and the morning of the event. Shutdown operations are accomplished the evening of the event. A "rain day", if needed, is scheduled for the following Monday. The Contractor shall provide the following:

2.15.1.1 A knowledgeable Facility Engineering representative to the Appreciation Day Planning Committee to advise on such matters as:

a. Roads and grounds condition and use,
b. Anticipated work that could have an impact on the outing such as construction, power outages, etc.,
c. Availability of utilities and their accessibility, and
d. Building and grounds limitation.

2.15.1.2 Truck(s), drivers and laborers to move and set-up tables, chairs, etc. prior to and the day of the event.

2.15.1.3 Necessary labor and material to assist event activities set-up, disassemble and/or removal of items such as the following:

a. Snow fencing for crowd and vehicle control,
b. Band Stand/Stage, bleachers,
c. Trash and ash containers, including trash disposal. (The containers may be relocated from their usual locations with COFR approval and returned to their original locations. The Contractor shall clean up and dispose of any debris during and following the Special Activity.)
d. A banner at a designated entrance gate and the mid-way entrance,
e. Saw horse barriers or barricades for crowd and vehicle control,
f. Picnic tables, assorted tables, chairs, booths, displays, canopy(ies), tent(s), portable restrooms (regular and for the physically challenged), etc.,
g. Signs, markings, stakes, posts, etc., for various events and features.
h. Electrical materials, power and activity hookup and
i. Assistance the day of the event for a period of about 12 hours from Roads and Grounds, Electrical and carpentry areas. Plumbing assistance shall be required for a period of about 9 hours.

2.15.2 SPECIAL KIDS DAY: The Special Kids Day activities are normally held on the day after Appreciation Day. Removal of equipment used in the Appreciation Day shall be accomplished without interfering with the Special Kids Day activities.

2.15.3 AFTER ACTION SUMMARY: The Contractor shall prepare and submit an after action summary to the COFR. The summary shall provide such narrative information as labor and material costs expended, problems encountered, etc.

2.15.4 OTHER SPECIAL EVENTS: The titles of other Special Events include, but are not limited to, Black History Month, Arbor Day, Earth Day, Change of Command ceremonies, Armed Forces Week, holiday decorations and displays, and various conferences.

2.15.5 **SPECIAL EVENTS (USAG-S):** The Contractor shall support special events. Special events include, for example: the biannual Selfridge Air National Guard Base Air Show, Independence Day events, Change of Command Ceremonies, Military Ceremonies, VIP Visits, Award Ceremonies; Arbor Day Ceremonies and Plantings, miscellaneous cultural events, dedications, Octoberfest, training sessions, sidewalk or tent sales, Army Communities of Excellence visits, Lodging Operation of the Year visits, town hall meetings, child care facility inspections and other similar activities. The Contractor shall provide, set up, operate and remove materials and equipment needed to support special events. The type of materials and equipment include: barricades; temporary fencing and screens; electrical generators and power lines; electrical extensions from buildings or poles; water lines and fixtures; podiums; lighting; displays; benches; bleachers; tables; chairs; stands/risers; tents; and other miscellaneous furniture and equipment. The Contractor shall design, fabricate, erect and remove signs, banners, placards, etc., related to special events if requested. The Contractor shall remove and store all equipment and materials from special events for reuse at future events. Also see 2.20.17 for clean-up. The Contractor shall police the Army areas prior to and during visits of dignitaries and during special events. An estimate of 12 events per year are required, 6 during access hours and 6 outside of the access hours.

2.16 PREVENTIVE MAINTENANCE BUILDING 212

2.16.0 GENERAL: The Contractor shall perform the preventive maintenance in accordance with this section of the PWS and “Schedule of Tasks, Bldg. 212” Appendix.

2.16.1 NORMAL ACCESS HOURS: The Contractor shall perform work during the following hours: Monday through Friday, 7:00 AM to 4:30 PM.

2.16.2 PRIORITIES: The definitions of the different priorities and time standards in the Resource Management Section of this PWS apply here.

2.16.3 **ENGINEERING TESTS**

2.16.3.1 The Contractor shall inspect the oil, water, and electrical distribution systems of test cells 1-9 no later than

five (5) working days prior to the operation of these test cells for engineering tests. The COFR or a TARDEC representative will provide a 10-day advance notice when the tests will commence. The Contractor shall correct any deficiencies found during the inspection, prior to the start of the engineering test. The Contractor shall immediately notify the COFR and the TARDEC representative if any deficiencies cannot be corrected prior to the start of the engineering test.

2.16.3.2 The Contractor shall provide on-call service during the startup and initial operation of a test. The Contractor shall correct any building system and associated real property equipment failures or deficiencies, which constitute an immediate threat to personnel, the building, or the equipment, or which may invalidate the test data, on an emergency basis.

2.16.4 **DYNAMOMETERS** The Contractor shall perform repair work on the Dynamometers at different locations in Bldg.212. The Contractor shall be responsible for the repair of the following:

DYNAMOMETERS IN BLDG. 212

MAKE	MODEL	SERIAL NO	LOCATION
GE	1G356	6916472	CELL # 1
GE	26G206	2394866	CELL # 2
EATON DYNOMATIC	1519DG	1735	CELL # 2
GE	26G377	7178852	CELL # 3
EATON DYNOMATIC	1014WIG	676371	BASEMENT
MID WEST	3027	1669	BASEMENT
GE	26G377	7178971	BASEMENT
MIDWEST	1014	1556	BASEMENT
MIDWEST		1583	BASEMENT
GE	37G151	7178888	BASEMENT
MIDWEST	2025A	1521	BASEMENT
GE	26G374	7178551	BASEMENT
GE	1G392	8089983	BASEMENT
EATON	1519WIG	675331	BASEMENT
N/A	N/A	2BF49309/3	BASEMENT
MID WEST	2025A	2034	BASEMENT
EATON DYNOMATIC	1014	1576	BASEMENT
WESTINGHOUSE	N/A	1S8B3446	BASEMENT
EATON	1519WIG	675341	BASEMENT
GE	1G414	8090091	BASEMENT
GE	1G414	8090122	BASEMENT
GE	1G412	8090166	CELL # 5
GE	1G391	8090064	CELL # 6
GE	26G373	7178797	CELL # 6
MEDSKER ELEC	N/A	9407-266	CELL # 7

GE	1G392	8089991	CELL # 8
GE	26G374	7178583	CELL # 8
GE	CD1556Y	7017202	BASEMENT
GE	CD1448Y	2435056	BASEMENT

2.16.5 **TEST CELLS PREVENTIVE MAINTENANCE**

2.16.5.1 The Contractor shall perform preventive maintenance on the equipment listed in Appendix “Schedule of Tasks, Building 212, Annual CPM Schedule”. The list includes installed equipment such as dynamometers and motor generators with associated hardware and controls. Preventive Maintenance tasks shall be performed in accordance with manufacturer’s recommendations and best commercial practices. The Contractor shall sample the dynamometer coolant loop solution for measurement of pH level and nitrites (ppm) on a bi-monthly basis. The pH level shall be maintained above 9.0 and the nitrite concentration shall be maintained between 600-900 ppm through the addition of necessary additives on a bi-monthly basis. The test sample readings shall be recorded before and after adjustments. The recorded readings shall be provided to the COFR on a bi-monthly basis. The Contractor shall inspect the main heat exchanger filter which supports all dynamometers on a semi-annual basis. This filter is located on the dyno water coolant circuit side of the heat exchanger situated in the building’s basement. The Contractor shall install dynamometer coolant loop on-line scavenge filter for continuous removal of harmful contaminants.

2.16.5.2 The Contractor shall operate safety equipment to test operability. Examples of this equipment include eyewashes, emergency showers, blowers and motors on battery ventilation blowers, motors and pumps in parts cleaning booth, and fuel pumps.

2.16.5.3 The Contractor shall report all emergency or unusual conditions to the Contracting Officer or technical representative.

2.16.5.4 REPAIR PARTS. The Contractor shall provide equipment repair parts or supplies equal in quality to replacement parts supplied by the original equipment manufacturer.

2.16.5.4.1 Commercially purchased rebuilt or Contractor rebuilt parts may be used if they equal or exceed the quality of the original parts and are certified as such by the Contractor or supplying manufacturer. Used parts may be utilized only on an exception basis when other sources have been exhausted and with approval of the COTR.

2.16.5.4.2 Invoices for all equipment repair parts or supplies purchased by the Contractor from any source shall be maintained for the duration of the contract.

2.16.5.5 TESTING. The Contractor shall perform pre-test operational check-out of major test systems prior to commencement of the test cycle. This will be done at customer request (customer funded work order).

2.16.5.5.1 Prior to the start of the engineering test, the Contractor shall correct any deficiencies that could result in equipment failure or reduced equipment efficiency found during the inspection.

2.16.5.5.2 To preclude any damage the Contractor shall preserve and pack any equipment that requires transportation for repairs outside of Detroit Arsenal.

2.16.5.5.3 Upon completion of the preventative maintenance tasks in this paragraph, the Contractor shall clean-up the work area.

2.16.5.6 ADMINISTRATIVE TASKS. The Contractor shall obtain any commercial maintenance manuals (beyond existing government resources) necessary to maintain and repair supported equipment.

2.16.5.6.1 All PM checks shall be recorded on a Contractor-prepared signature sheet affixed on or near each piece of equipment that requires PM. Each time PM is performed the Contractor shall initial and date the record, write a brief description of the service or inspection accomplished and corrective action taken.

2.16.5.6.2 The Contractor shall prepare an Annual PM schedule which identifies the equipment to be serviced by building and location for the upcoming fiscal year. The APMP shall be provided to the COTR for information within 30 days after the start of the Base Contract Period and subsequently not later than 1 Sep annually.

2.17 EMERGENCY VEHICLES

2.17.0 **GENERAL** The Contractor shall maintain and repair Detroit Arsenal Installation owned fire fighting vehicles, and specialized equipment and auxiliary systems attached to the vehicles. The Contractor shall perform preventive maintenance in accordance with the Table “Preventive Maintenance For Emergency Vehicles”. The functions and frequencies stated in the Table are

used as a minimum guideline. The applicable manufacturer's specification, the National Fire Protection Association, and the Occupational Safety and Health Association standards take precedence and shall be adhered to by the Contractor. The Contractor shall maintain records of all work performed on emergency vehicles and equipment including inspections.

2.17.1 **TYPES OF EMERGENCY VEHICLES AND EQUIPMENT** The Contractor is responsible for the Preventive Maintenance and major repairs of the following:

VEHICLE DESCRIPTION	MANUFACTURER	QTY	REG.NO.	YEAR
FIRE TRUCK, PUMPER	AMERTECH INC	1	CN4702	1989
FIRE TRUCK, LADDER	PIERCE AERIAL	1	CT0294	1999
FIRE TRUCK, ENGINE	DODGE	1	CH4202	1979
AMBULANCE EMS	FORD WHEELED COACH	1	G31-11546	2002
AMBULANCE EMS	FORD WHEELED COACH	1	G31-11545	2002

The vehicles listed above are subject to change or update without notice; however, the quantity will remain the same unless otherwise negotiated.

2.17.2 **MAJOR REPAIRS** The Contractor shall perform major repairs to the emergency vehicles. Major repairs are defined as any non-scheduled work:

a. Requiring more than $2,500 in material, or
b. Requiring over eighty (80) man-hours of labor, or
c. Requiring restoration of equipment to mission capable status, or
d. Requiring elimination of a safety problem.

The Contractor shall immediately inform the COFR when any of the emergency vehicles identified in the paragraph entitled "Types of Emergency Vehicles and Equipment", require major repairs. With written COFR approval the Contractor shall perform the required work. Section B of the contract contains a CLIN for Major Repairs, which reflect the ceiling amount. The Contractor shall document the expenditures with receipts when invoicing for major repairs. The repairs will be prioritized as follows:

2.17.2.1 **EMERGENCY** Priority No.1 - When equipment is non-mission capable or a safety problem exists. Initial response time shall be within one (1) hour during normal access hours and within (4)

four hours during off-duty hours. Within one (1) workday after notification, the contractor shall provide, to the COFR, a complete description of the problem, estimated cost, the contractor's plan to repair and the estimated return date to mission capable status. All emergency repairs shall be completed within three (3) calendar days from date of COFR written approval of the work order. The COFR may grant an exception to the three - day (3) limit based on unusual circumstances (e.g., the purchase of long lead-time items, etc.). Priority 1 repairs shall take precedence over any other contract requirements under this section of the PWS.

2.17.2.2 **URGENT** Priority No.2 - All other major repairs when the vehicle is mission capable, there are no safety problems and the repairs are not cosmetic in nature. Initial response shall be on the same workday, unless the notification is received in the afternoon and workload prohibits a response. On those occasions where a response is delayed, the contractor shall respond within the morning of the next workday. Within three (3) work days of notification, the Contractor shall provide, to the COFR, a complete description of the problem, estimated cost, a recommendation for repair and an estimated amount of time the equipment will be out of service once repairs commence.

2.17.2.3 **ROUTINE** Priority No.3 - Repairs that are cosmetic in nature but fall into the Major Repair category based on cost and labor hours. Initial response shall be within two (2) workdays of notification. Within (7) seven calendar days of notification, the contractor shall provide, to the COFR, a complete description of the problem, estimated cost, a recommendation for repair and an estimated amount of time the equipment will be out of service once repairs commence.

2.17.3 **PREVENTIVE MAINTENANCE** The Contractor shall perform preventive maintenance for emergency vehicles in accordance with the following functions and frequencies:

TABLE "PREVENTIVE MAINTENANCE FOR EMERGENCY VEHICLES"

	FUNCTION	**FREQUENCY**
GENERAL	Inspect and Adjust Brakes	Annually
	Inspect Tires and Rims	Annually
	Inspect Suspension	Semi-Annually
	Inspect and Lubricate Chassis	Semi-Annually
	Change Engine Oil	Annually
	Tune Engine	Annually
	Change Air Filters	Annually
	Change Transmission Fluid	Annually
	Change Hydraulic Filters	Annually

	Flush and Replace Antifreeze	Annually
	Replace Radiator Hoses	As Required
	Change Drive Axle Oil	As Required
	Repack Wheel Bearings	As Required
	Other Maintenance Services	As Required
PUMPER TRUCK	Inspect, Test and Adjust Electrical System	Annually
	Inspect, Test and Adjust Hydraulic System	Annually
	Lubricate All Moving Parts	Semi-Annually
	Change Pump Transmission Oil	Annually
	Flush and Drain Pump	Annually
	Inspect and Adjust Pump Gauges and Controls	Annually
	Lubricate Pump Packings, Bearings, Discharge Gate Valve Threads, etc.	As Required
	Repack Pump	As Required
	All Other Services	As Required
LADDER TRUCK	Inspect, Test and Adjust Electrical System	Annually
	Inspect, Test and Adjust Hydraulic System	Annually
	Lubricate All Sliding Parts (Ladder)	Annually
	Change Pump Transmission Oil	Annually
	Sample Test Hydraulic Oil	Annually
	Change Hydraulic Oil	Annually
	Flush and Drain Pump	Annually
	Clean Sediment Bowl Cover Screen	Annually
	Calibrate Ladder Controls, Gauges and Dials	As Required
	Lubricate Pump Packings, Bearings, Discharge Gate Valve Threads, etc.	As Required
	Repack Pump	As Required
	All Other Services	As Required

2.17.4 The Contractor shall participate in monthly Emergency Equipment status meetings with the Detroit Arsenal Fire Department. When a piece of equipment is out of service, a daily electronic progress report will be required. The report shall be provided to the COFR and the Fire Department and shall include a target date that equipment will be returned to service.

2.17.5 The Contractor shall establish and maintain bench stock of commonly used expendable items as well as critical emergency parts, for the emergency vehicles identified in the paragraph entitled “Types of Emergency Vehicles and Equipment”. The objective is to minimize downtime for emergency vehicles.

2.18 INDUSTRIAL MACHINE REPAIR AND MAINTENANCE (DTA)

2.18.0 GENERAL: The Contractor shall perform all repairs and maintenance on Industrial Plant Equipment (IPE) and Other Plant Equipment (OPE) to include servicing all fluid oils and lubrications above operator’s maintenance. IPE and OPE includes a wide variety of industrial type machines, some numerically or electronically controlled, such as metal working, wood working, flame cutting, heat treating, foundry and testing equipment. Appendix “IPE/OPE Supported Equipment List” contains the current list of the Detroit Arsenal’s IPE and OPE.

2.18.1 OPERATING HOURS: The Contractor shall operate the Industrial Machine Repair operation from 0600 to 1430, Monday through Friday to support customer's schedule of operations. The Contractor shall provide operational support on weekends in the event of critical need and as directed by the COFR. This shall be considered as work outside the Contractor normal duty hours and shall be treated as Repairs.

2.18.2 MAINTENANCE AND REPAIR PROGRAM: The Contractor shall establish and perform a preventive maintenance and repair program per the following:

IPE/OPE: Contractor shall perform Cyclic Preventive Maintenance (CPM) Work Order per Manufacturer's technical manuals. The Contractor shall perform all repairs defined, as work orders up to $10,000 per occurrence for labor and materials required restoring the equipment. The Contractor shall restore the equipment to operating condition consistent with the definitions of the different priorities and time standards in the Resource Management Section of this PWS.

OPE/IPE that cost less than $200.00 will not be supported. The maintenance policy will be repair by replacement. This is a customer responsibility.

2.18.3 RECORDS MAINTENANCE. The Contractor shall establish and maintain a database of machines and their respective maintenance requirements that is independent of machine manuals. The Contractor shall provide the database information and the

maintenance schedule to those areas utilizing the listed machines. The Contractor shall maintain records of all PM and repair maintenance and shall be kept in the database. The Contractor shall make all records and files applicable to this contract available for review by any agency or individual with authorized access by the Contracting Officer or representative. The Contractor shall provide a database report to the COFR on a quarterly basis. All lubrication services performed on machines shall be recorded, immediately upon completion of task, on a Lubrication Record and affixed to the machine.

2.18.4 REPAIR PARTS. The Contractor shall provide Industrial Machine and equipment repair parts or supplies equal in quality to replacement parts supplied by the original equipment manufacturer. Fabrication of parts will only be done when a commercial replacement part cannot be obtained and a critical mission equipment item is out of service.

2.18.4.1 Commercially purchased rebuilt or Contractor rebuilt parts may be used if they equal or exceed the quality of the original parts and are certified as such by the Contractor or supplying manufacturer. Used parts may be utilized only on an exception basis when other sources have been exhausted and with prior written approval of the COTR.

2.18.4.2 Invoices for all machine and equipment repair parts or supplies purchased by the Contractor from any source shall be maintained for a minimum of two (2) years from the date of purchase.

2.18.5 MACHINE SET-UP. The Contractor shall perform new machinery installation at the option and written approval of the COFR prior to commencement of work. The New equipment installation of Industrial Plant Equipment (IPE) and Other Plant Equipment (OPE) shall be classified as New Work. When IPE or OPE on the supported equipment list is relocated, the Contractor shall verify the availability of the appropriate electrical, water and other service at the new location. If necessary, the Contractor shall submit a New Work work order for additional/revised service to the COFR to review and approved. In addition, the Contractor shall check the lubrication level, electrical, electronic, mechanical, pneumatic and hydraulic functions to ensure operability, and perform an operational check with the user.

2.18.6 WARRANTY REPAIRS. The Contractor shall maintain all warranty records or agreements provided by the Customer, request and coordinate any necessary warranty repairs for supported equipment and maintain all files. Prior to any repairs the Contractor shall determine if the IPE is under warranty. The

Contractor shall notify the COFR of requests for repairs to equipment that appears to be under warranty.

2.18.7 TECHNICAL INSPECTION FOR DAMAGE AND CLASSIFICATION The Contractor shall conduct technical inspections for damage and classification upon receipt of new equipment. The Contractor shall document all technical inspections in a format comparable to a DA Form 2407 or equivalent COTS. The Contractor shall complete technical inspections with documentation within three (3) workdays of receipt of equipment. The Contractor will notify the requesting activity or organization when the technical inspection has been completed.

2.18.8 ADMINISTRATION. The Contractor shall provide weekly information to the COFR regarding the maintenance status (e.g., awaiting parts, and estimated downtime) for IPE/OPE repairs or maintenance. The contractor will provide an "Out of Service List" with a target date for the repair and return to service of all supported equipment to the COR on a weekly basis (by COB Friday).

2.18.9 COST AND PERFORMANCE REPORTING. The Contractor shall maintain all data pertaining to IPE/OPE cost (e.g., operations, maintenance, administration and support) and performance. The Contractor shall provide the Government with access to these records for audit or COFR inspections.

2.19 REFUSE COLLECTION (USAG-S)

2.19.1 **GENERAL**. The Contractor shall perform refuse collection for areas under the responsibility of Garrison in accordance with the Performance Work Statement. The areas are identified in the Appendix, "Refuse Pick-up Locations, Capacities And Frequencies", along with pickup locations, capacities, and frequencies. Work performance shall comply with OSHA, MDOT, applicable local, State and Federal codes and regulations, industry standards, environmental laws and regulations, regulations, technical manuals, pamphlets and guide specs.

2.19.2 **HOURS OF OPERATION.** The Contractor shall confine hours of operation between daylight and 7:30 p.m. and, if necessary, may use four hours starting at daylight the following day to complete work left from previous day. The Contractor shall submit a schedule of operations to the COFR for approval prior to starting this portion of the contract.

2.19.3 **PERFORMANCE OF WORK**. Refuse collection shall be made with minimum divergence from schedules once established. The

Contractor shall minimize all inconveniences to the residents and building personnel. Every means to protect property shall be incorporated by the Contractor.

2.19.3.1 **Recycling Program**. Curbside recycling services shall be accomplished in conjunction with normal refuse pick-up. Each household shall be issued one 18 gallon container for recyclable household items such as metals, cans, glass/plastic containers, cardboard, paperboard, brown paper grocery bags, newspapers, magazines, household batteries, etc . No item segregation will be required by the residents, also see 2.10.16.1.

2.19.3.2 **Yard Waste Program**. Curbside pick-up of yard waste shall be accomplished in conjunction with normal refuse pickup. The yard waste bags will be obtained by the residents, also see 2.10.16.3.

2.19.4 **PROCEDURE**. The Contractor shall empty the dumpsters and yard containers and shall pick up all refuse around the dumpsters and yard containers. Containers shall be put back in upright position and in the proper location. Containers shall be maintained and replaced when containers become damaged.

2.19.4.1 **Abnormal Quantities of Refuse**. Excess refuse or refuse beyond the normal daily quantities resulting from holidays or recognized customs shall be disposed of by the Contractor. Bulk pick-up shall be conducted on the last Monday of each month. In addition, there shall be three special pick-ups, one during the last week of May, one during the first week of October, and one during mid-January. The Contractor shall make additional trips if necessary with minimum interference to the regularly scheduled collections during these special pick-ups.

2.19.4.2 **Safety and Noise Prevention.** The Contractor shall ensure that all equipment is equipped with proper safety and noise limiting devices and be in a safe operating condition. Vehicle maintenance inspection and driver records shall be maintained.

2.19.4.3 The Contractor shall provide customers with information and instructions on schedules, items which can be disposed of, etc.

2.19.4.4 RESERVED

2.19.4.5 **Transportation.** The Contractor shall transport all refuse from the collection point to the disposal area off base in closed or packer-type bodies mounted on suitable trucks approved for hauling refuse. Transportation equipment shall not be overloaded and all doors or other openings in the body containing refuse to be hauled shall be closed in transit.

2.19.4.6 **Disposal of Refuse.** The Contractor shall dispose of all refuse collected under this contract at an approved disposal site other than Selfridge ANG Base and Sebille Manor Housing Area, also see 2.10.16.3.

2.19.4.7 **Emptying Containers.** The Contractor shall ensure that each container is completely emptied during collection. Containers shall shall be returned to their proper station in an upright position with lids securely in place after emptying. The Contractor shall not collect a group of containers from their collection points and then return them later in the day.

2.19.4.8 **Unconfined Excess Refuse**. Each collection station and the immediate adjacent area shall be left free of loose refuse at the end of each collection. The Contractor shall remove all refuse placed at the collection station whether in sacks, cartons, cans, boxes, or loose as if it were placed in the regularly provided containers.

2.19.4.9 **Spilled Refuse**. The Contractor shall carry a broom, yard rake and scoop on each vehicle to facilitate immediate pick-up of spilled refuse.

2.19.4.10 **Collection of Christmas Trees**. The Contractor shall collect and dispose of all Christmas trees no later than mid January.

2.19.5 **VEHICLES**. The Contractor shall only use trucks designed for collecting refuse. Collection vehicles shall be kept closed when moving or when not actually engaged in collecting refuse. Vehicles shall be operated in accordance with Base rules and regulations while in the Base area.

2.19.5.1 **Equipment.** All bodies of the packer-type trucks shall be leak proof and fully enclosed, equipped with a mechanical compacting or packing apparatus.

2.19.5.2 **Maintenance, Operation and Repair of Vehicles**. The Contractor shall maintain all vehicular equipment used under this PWS in a clean, presentable and safe to operate condition.

2.19.6 **SANITATION REQUIREMENTS.** The Contractor shall ensure that all phases of refuse collection and disposal service is conducted to comply with health department regulations.

2.19.7 **SPILLAGE.** Spillage at collection sites shall be recovered before the collecting vehicle moves from the site.

2.19.7.1 Spillage enroute shall be immediately recovered.

2.19.7.2 The Contractor shall pick-up and haul away all paper, boxes, cans, bottles, rags, garbage, or other refuse from the collection sites within the immediate areas of the containers at the time when pick-ups of refuse are made. The Contractor shall accomplish all collections in accordance with the schedule. The Contractor shall be required to make special trips to collect refuse missed.

2.19.8 **SALVAGE OPERATIONS.** The Contractor shall not salvage any material unless designated as "refuse" by the Contracting Officer's Representative. If the Contractor discover materials which they believe to have salvage value, the Contractor shall immediately notify the COFR for disposition instructions of the items. The Contractor shall also comply with Garrison’s recycling programs (e.g., paper, cans, glass).

2.19.9 **REPORTS**.

2.19.9.1 The Contractor shall submit a monthly report in pounds, "Daily Log of Refuse and Salvage Collections", covering each calendar month’s operation. Each day’s operation shall be recorded at the end of the work period. The report shall be submitted to the Environmental Coordinator, no later than the third day of the month following the month covered in the report, also see 2.10.16.3.

2.19.9.2. The Contractor shall provide and maintain an inspection system covering the services performed. Records of all inspection work by the Contractor shall be kept complete and available to the Government during the term of this contract. A monthly report shall be prepared tracking the inspections. Discrepancies and other deviations from the Contract shall be listed to include date, time, location, description, proposed and actual resolution and date of resolution. The report shall be submitted to the COFR, not later than the third day of the month following the month covered in the report.

2.20 CUSTODIAL SERVICES (USAG-S)

2.20.1 **GENERAL.** The Contractor shall perform custodial services to keep the facilities in a clean state for areas under the responsibility of the Garrison in accordance with the Performance Work Statement. Work performance shall comply with environmental laws and directives, OSHA and industry standards. Clean: As used generally means removal of dirt or impurities, as used for acceptance of work means gleaming, bright, free from dirt, dust,

contamination or impurities, unsoiled, fresh, unused, neat and tidy having no flaws or roughness, clear, regular, having few corrections.

2.20.1.1 TYPES OF CUSTODIAL SERVICES: Examples of custodial services include: exterior washing, floor cleaning and preservation, toilet room cleaning, light fixture cleaning, wall cleaning, glass cleaning, venetian blind cleaning, special custodial services, fan cleaning and miscellaneous cleaning and policing. The Contractor shall provide paper towels, toilet paper, liquid soap, etc at the facilities and maintain the dispensers. The Contractor shall manage the activities to accompany such requests.

2.20.2 **INSPECTION:** The Contractor shall, during normal work activities, inspect of each building in which he has performed custodial work to identify and immediately report probable fire hazards to the Contractor’s work control for correction.

2.20.3 **MATERIALS** The Contractor shall only use materials and supplies that conform to the requirements of the applicable codes, specifications, environmental regulations and laws. Materials which do not fully comply with the Fire Regulations or any materials bearing ICC (Interstate Commerce Commission) Red Label (acids) shall not be used or permitted in any building or area covered by this contract. The Contractor shall obtain and retain MSDS sheets on file for all chemical products utilized. The Contractor shall furnish copies of MSDS sheets to any building occupant upon request.

2.20.4 **STOCK SUPPLY.** The Contractor shall maintain an adequate level of supply items. Supply items shall be neatly stored within janitor closets, storage cabinets or designated storage closets.

2.20.5 **HOLIDAYS:** Custodial services shall not be required on Federal holidays or announced Base closures. Any exceptions for specific buildings shall be annotated in the "Custodial Services Schedule And Frequency" Appendix.

2.20.6 **WORK SCHEDULE.** The Contractor shall furnish the COFR a complete itemized schedule of custodial efforts. The work schedule shall be submitted forty-five (45) days after contract award and then annually thereafter. Also see 2.2.7. It shall contain the following information for each frequency of service: the day, hours and building number. The Contractor shall submit a revised schedule within 7 days after a building is added or deleted from the contract or a frequency is changed.
The Contractor shall coordinate special access hours with the building manager and COFR for the following buildings.

	BLDG
Clinic	310
Community Center	780 Gym, Rms 18 & 20 & locker rooms
Bowling Alley	826
Child Development Center	971
Dental Clinic	1409
Youth Center	2250

2.20.6.1 The Contractor shall not schedule the performance of any tasks on Federal holidays unless it is for work specifically noted in the "Schedule And Frequency Of Custodial Services" Appendix. The Contractor shall reschedule work when affected by an announced Base closure and provide the schedule change to the COFR.

2.20.6.2 The Contractor shall inform the COFR when it is considered prudent to deviate from the schedule.

2.20.7 RESERVED

2.20.8 **ARRANGEMENT OF FURNITURE AND EQUIPMENT:** The Contractor shall return any items moved to the approximate original locations prior to leaving the area. The Contractor shall not disturb papers on desks, opening desk drawers or cabinets, or use Government telephones or office equipment, except when necessary for contract performance.

2.20.9 **PROTECTION OF WALLS, BASEBOARDS, AND EQUIPMENT:** The Contractor shall protect all Government property (e.g., walls, floors, desks) from damage.

2.20.10 **GENERAL.** The Contractor shall sweep, wet mop, scrub, remove wax, wax, buff and vacuum floors; clean toilet rooms, toilet bowls, urinals, sinks, walls, ceilings, woodwork, disinfect, fill dispensers, drinking fountains, glass, mirrors, window screens, light fixtures and covers; dust high and low areas, polish metal, chalkboards, coat racks, shelves, telephone booths, venetian blinds, radiators and trash removal, exterior building washing, butt can maintenance and emptying. See tasks in the "Custodial Services Schedule and Frequency Appendix and see below for additional requirements.

2.20.10.1 **Windows and Screens.** The Contractor shall be responsible for the exterior window washing and removal and cleaning of screens to enable the windows to be cleaned. Damaged screens found while cleaning shall be reported to the work control area to be scheduled for repair/ replacement. Windows

shall not be washed during inclement weather. Schedules shall be rearranged to accommodate delays.

2.20.11 **LIGHT FIXTURES.** Accumulations of dust shall be removed. Glass bowls/ globes of incandescent fixtures shall be removed and cleaned and dried. Care shall be taken not to damage fixture and bulb. Bulbs shall be properly and securely replaced.

2.20.12 **SERVICING DISPENSERS.** Toilet rooms shall be serviced to ensure that supplies of towels, toilet tissue, toilet seat covers, and soap are on hand at all times. Dispensers shall be wiped clean after filling. Waste containers for paper towels shall be emptied and washed. The Contractor shall clean soap dispenser nozzles and check to make sure they operate properly.

2.20.13 **TRASH REMOVAL.** The Contractor shall collect and deposit trash and rubbish in pick-up containers in such a manner as to ensure that all waste is removed from the building and is available for pick up. The Contractor shall be responsible for clean up stations. Waste baskets shall be washed when needed to maintain a clean and sanitary condition. The Contractor shall install plastic liners in all waste baskets.

2.20.14 **ASH TRAY SAND URNS.** The Contractor shall place and empty ash tray sand urns located outside the buildings. Sand urns located outside the buildings shall be serviced daily. All debris shall be removed from the sand urns and soiled sand shall be removed and replaced with clean sand by the Contractor. Also see 2.14.4.

2.20.15 **FACILITY ENTRANCES, PLATFORMS AND AWNINGS/CANOPIES.** Platforms, awnings, canopies, porches, ramps and steps of entrances shall be cleaned as required to maintain a clean appearance.

2.20.16 **POLICING BUILDING EXTERIORS.** The Contractor shall police building exteriors and grounds by removing paper, trash, bottles, and other debris on lawns, parking lots and walkways as required to keep a clean appearance.

2.20.17 **EMERGENCY AND SPECIAL EVENTS/ACTIVITIES.** In the event that an emergency situation occurs (e.g., flooding, backups in basements, water leaks, glass breakage, spillage of liquids) the Contractor shall be required to provide clean up services during or after normal working hours. The Contractor shall provide clean-up after Special Events see 2.15.

2.20.18 **FAN CLEANING.** The Contractor shall clean and lubricate all ventilation equipment (e.g., gravity ventilators, power

ventilators, roof and wall fans, pedestal fans) in all facilities included in this Contract. The Contractor shall lubricate where required, reassemble and install in original position.

2.20.18.1 **OTHER CLEANING.** Remove bugs, spider webs, bird nest debris & other debris from exterior walls, soffits, fascias, exteriors of gutters & downspouts to maintain a clean appearance on AFH bldgs in the 200, 400, 700 & 900 Areas. Also see 2.4.2.6.a & Appendix 17 “D & F” Descriptions.

2.20.19 **CHILD DEVELOPMENT CENTER-BLDG.#971, YOUTH CENTER-2250 & BLDG 780 ROOMS 18 & 20.** These facilities are highly regulated and must pass annual inspections to assure that a DOD certification is maintained. The Contractor shall perform all work in this facility to those high standards. Work in this building shall be performed prior to normal operating hours.

2.20.19.1 All custodial equipment, supplies and materials shall be approved by the TACOM Safety Office and shall comply with all federal specifications and fire regulations, environmental regulations and laws. No materials bearing Interstate Commerce Commission (ICC) red labels shall be used or permitted in any Child Development Services building or area.

2.20.19.2 The Contractor shall not disturb CDC operations. All custodial supplies and equipment shall be properly stored in the locked closet or removed from the building.

2.20.19.3 All lights and equipment shall be turned off and all doors secured when custodial personnel leave the building.

2.20.20 **VACANT QUARTERS.** The Contractor shall clean vacant housing quarters immediately after Between Occupancy Maintenance (BOM) work is completed. The Contractor shall: sweep the floors, dust, clean the sinks and toilets. This cleaning shall be performed again immediately prior to assignment if the quarters remain vacant longer than one month or as required to keep clean.

2.21 INACTIVATION PROCEDURES (USAG-S)

2.21.1 **GENERAL**. The Contractor shall perform all or part of the following procedures as requested by the COFR for the inactivation of a building under the responsibility of the Garrison. Work performance shall be in accordance with applicable codes and regulations, environmental laws and directives. This work applies to inactive or vacant buildings.

2.21.2 **INACTIVATION OF BUILDING(S).**

2.21.2.1 Upon notification of a building being inactivated by the Government, the Contractor shall be responsible for the following tasks when directed by the COFR.

a. Prepare a work order and provide to the COFR for approval.

b. The Contractor shall unplug, open, and block door of refrigerator.

c. Remove appliances, furniture and equipment from building.

d. The Contractor shall set and maintain the thermostat for heat on the following settings: (a) Summer - 55 degrees Fahrenheit and (b) Winter - 60 degrees Fahrenheit.

e. All storm windows shall be placed in storm doors and storm windows shall be lowered in place.

f. The Contractor shall open doors under sinks.

g. The Contractor shall install and maintain heat warning lights in each building. The lights shall be visible from outside and self activate during no heat periods. Buildings shall be checked for proper heat operation daily during very cold weather and weekly visits during cold weather.

h. Units shall be inspected and tasks shall be accomplished per preventive maintenance schedule.

i. Entomologist shall perform pest control as required.

j. The Contractor shall secure doors, windows, hatches, etc.

k. Grass cutting and snow removal shall be continued as normal or as directed by COFR.

l. Disconnect utilities and drain water from system when requested by COFR.

m. Prepare a work order listing the required repairs needed to maintain the unit for future reference. A statement shall be made in the remarks section that this unit is to be inactivated.

APPENDIXES FOR PWS-2
TABLE OF CONTENTS

APPENDIX #	INSTALLATION APPLICABILITY	APPENDIX TITLE	No. of Pages
1	**BOTH**	PUBLICATIONS, LAWS, CODES, STANDARDS	12
2		DEFINITIONS	7
7			
3	**DTA**	CRITICAL SYSTEM	3
4		HISTORICAL WORKLOAD	21
5		PROPERTY INVENTORY	84
6		SCHEDULE OF TASKS (INSTALLED BLDG EQUIP), BLDG 212	23
7		BASIC INFORMATION MAPS	1
8		IPE/OPE SUPPORTED EQUIPMENT LIST	11
9		SCHEDULE OF TASKS, B212, ANNUAL CPM SCHEDULE	8
10		FLUSHING OF WATER DISTRIBUTION SYSTEM	4
11		DETROIT ARSENAL ENVIRONMENTAL PROTECTION PERMITS	1
12		DETROIT ARSENAL CHEMICAL INVENTORY	59
13		DETROIT ARSENAL ENVIRONMENTAL FORMS	10
14	**USAG-S**	BUILDING LIST	7
15		PROPERTY INVENTORY	161
16		REFUSE PICK-UP, LOCATIONS, CAPACITIES, AND FREQUENCIES	4
17		CUSTODIAL SERVICES SCHEDULE AND FREQUENCY	7
18		INTERSERVICE SUPPORT AGREEMENT	8
19		WORKLOAD DATA	22
20		GENERAL SITE PLANS	1
21		LANDSCAPING	1
22		SNOW AND ICE CONTROL	1
23		CUSTODIAL FLOOR PLANS	1
24	**BOTH**	ROOF SYSTEM INSPECTIONS SCHEDULE (DTA & USAG-S)	1
25	**USAG-S**	HISTORICAL BUILDING/DISTRICT MAINTENANCE	93
TOTAL APPENDIXES PAGES			**551**
ABBREVIATIONS		**DTA = Detroit Arsenal**	
		USAG-S- = US Army Garrison Selfridge	

APPENDIX 1 of PWS-2
REGULATIONS, PUBLICATIONS, STANDARDS, LAWS AND EXECUTIVE ORDERS

APPLICABLE PUBLICATIONS

Federal Laws, Executive Orders, Federal & State Regulations/Publications

Clean Air Act of 1970, as amended
Clean Water Act of 1977 (33USC), as amended
Michigan Safe Drinking Water Act (Act 399) of 1976Safe Drinking Water Act of 1974 (42 USC)
Resource Conservation and Recovery Act (RCRA) of 1976, as amended
National Historic Preservation Act of 1966
National Environmental Policy Act (NEPA)
Noise Control Act of 1972
Residential Lead-Based Hazard Reduction Act of 1992 (LPERA)
Toxic Substances Control Act (TSCA)
Occupational Safety and Health Act of 1970 (OSHA), as amended
Archeological & Historic Preservation Act of 1974
Federal Environmental Pesticide Control Act of 1972, as amended
Federal Water Pollution Control Act Amendments of 1972
John F. Kennedy Center Act, as amended
Endangered Species Action of 1973
Executive Order 12856, EPCRA
Executive Order 11593, Protection and Enhancement of the Cultural Environment
Executive Order 12088, Federal compliance with Pollution Control Standards
29 CFR OSHA, Part 1910, 1920
40 CFR EPA
49 CFR, TRANSPORTATION, Part 171-178
Federal Register, Volume 44, No. 188, Emergency Building Temperature Restrictions (EBTR) (9/26/79)
Federal Register, Volume 45, No. 98, Hazardous Waste and Consolidated Permit Regulations
US EPA National Interim Primary Drinking Water Regulations
US EPA National Interim Secondary Drinking Water Regulations
Federal Register, Volume 44, Nos. 233 and 244
Department of Transportation Highway Safety Program Standards, Volume 12 Highway Design, Construction and Maintenance; Volume 13, Traffic Engineering and Services: and Volume 14, Pedestrian Safety
Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD)
Water Pollution Control Federation Manuals 7 and MOP/11
Michigan State Highway Department Standard Specifications for Highways and Bridges
Michigan State Board of Health Regulations Governing Public Water

Supplies
Federal Emergency Management Agency (FEMA) Fire Service Emergency Management Handbook
FEMA CPG 1-8, Local Government Emergency Planning
National Response Team (NRT) Hazardous Material Emergency Planning
Technical Bulletin, TB MED 576

INDUSTRY STANDARDS AND CODES

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

Manual for Maintenance Inspection of Bridges

AMERICAN INSURANCE ASSOCIATION (AIA) PUBLICATION

National Building Code

AMERICAN HEALTH ASSOCIATION

Standard Methods for the Examination of Water and Waste Water

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) STANDARDS

A17.1	Safety Code for Elevators, Dumb Waiters, Escalators and Moving Walks
A17.2ANS	Practice for the Inspection of Elevators, Escalators and Moving Walks
A17.2A	Supplement to A17.2
260.1	American Standard for Nursery Stock
Section	Emergency Eyewash and Showers

AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE)

Guide and Data Books

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) CODE

Boiler and Pressure Vessel Code and Interpretations

Section I	Power Boiler
Section II	Material Specifications
Section IV	Heating Boilers
Section V	Nondestructive Examination
Section VI	Recommended Rules for Care and Operation of Heating Boilers
Section VII	Recommended Rules for Power Boilers
Section VIII	Pressure Vessels
Section IX	Welding and Brazing Qualification
Section X	Fiberglass Reinforced Plastic Pressure Vessels

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

AMERICAN WELDING SOCIETY (AWS) STANDARD

B3.0	Welding Procedure and Performance Qualification

AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARD

C601	Standard for Disinfecting Water Mains
M3	Safety Manual
M18	Basic Water Treatment Operator's Manual
M20	Water Chlorination Principles and Practices

FACTORY MUTUAL ENGINEERING AND RESEARCH (FM)

INSTITUTE OF TRAFFIC ENGINEERS

Manual of Traffic Engineering Studies

NATIONAL ARBORIST ASSOCIATION

Standards for Pruning and Maintaining Shade Trees

NATIONAL ASSOCIATION OF PLUMBING - HEATING - COOLING CONTRACTORS (NAPHCC) STANDARD

National Standard Plumbing Code
Uniform Plumbing Code

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS

No. 30	Flammable and Combustible Liquids Code
No. 31	Installation of Oil Burning Equipment
No. 70	National Electric Code
No. 70 B	Electrical Equipment Maintenance
No. 96	Cooking Equipment Vapor Removal

SHEET METAL & AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION, INC (SMACNA)

SINGLE-PLY ROOFING INSTITUTE (SPRI)

UNDERWRITERS LABORATORIES (UL) STANDARDS

State of Michigan Code, Public Act 227, Elevator Laws and Rules

NATIONAL CODES

Latest Edition	National Fire Code
Latest Edition	National Electrical Code
Latest Edition	Manual of Uniform Traffic Control Devices

NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA)

DEPARTMENT OF DEFENSE (DOD)

UNIFIED FACILITIES CRITERIA (UFC),
UFC 3-230-02, OPERATION AND MAINTENANCE: WATER SUPPLY SYSTEMS &
UFC 3-600-02 OPERATION & MAINTENANCE: FIRE PROTECTION SYSTEMS

ARMY REGULATIONS (AR)

AR 420-10, MGT OF INSTALLATION DIRECTORATES OF PUBLIC WORKS
AR 420-70, BUILDING AND STRUCTURES
AR 420-72, TRANSPORTATTION AND INFRASTRUCTURE AND DAMS
AR 420-18, FACILITIES ENGINEERING MATERIALS, EQUIP, AND BLDG MGT
AR 608-10 CHILD DEVELOPMENT SERVICES
AR 210-50 HOUSING MANAGEMENT
ARMY INSTALLATION DESIGN GUIDE/CRITERIA

ARMY PAMPHLETS (PAM)

PAM 420-6, DIRECTORATE OF PUBLIC WORKS RESOURCE MANAGEMENT SYSTEM
PAM 420-11, PROJECT DEFINITION AND WORK CLASSIFICATION

ARMY TECHNICAL MANUALS (TM)

TM 5-600, BRIDGE INSPECTION, MAINTENANCE AND REPAIR
TM 5-608, CONTRACTING FOR CUSTODIAL SVCS AT ARMY FACILITIES
TM 5-609, MILITARY CUSTODIAL SERVICES MANUAL
TM 5-610, PREVENTIVE MAINTENANCE FOR FE, BLDGS & STRUCTURES
TM 5-617, FE: MAINTENANCE AND REPAIR OF ROOFS
TM 5-620, FE M&R OF ARCHITECTURAL AND STRUCTURAL ELEMENTS OF BLDGS AND STRUCTURES
TM 5-623, PAVEMENT MAINTENANCE MANAGEMENT
TM 5-624, MAINTENANCE AND REPAIR OF SURFACE AREAS
TM 5-636, KITCHEN EQUIPMENT: REPAIRS AND UTILITIES
TM 5-626, UNSURFACED ROAD MAINTENANCE MANAGEMENT
TM 5-663, CHILD DEVELOPMENT CENTER PLAY AREA INSPECTION AND MAINTENANCE PROGRAM
TM 5-803-11, CHILDREN'S OUTDOOR PLAY AREAS
TM 5-805-14, ROOFING AND WATERPROOFING
TM 5-815-3, HVAC CONTROL SYSTEM

ENVIRONMENTAL PROTECTION LAWS & REGULATIONS

Pollution Prevention

Affirmative Procurement

AR 200-1, Chapter 10

DA Pam 200-1
DFAR Part 223.4
Executive Order 12844-Federal Use of Alternative Fueled Vehicles (April 21, 1993)
Executive Order 12845-Purchasing Energy Efficient Computer Equipment (April 21, 1993)
Executive Order 12856-"Federal Compliance with Right-to-Know Laws and Pollution Prevention," (August 3, 1993)
Executive Order 12898-Federal Actions to Address Environmental Justice
Executive Order 12902-Energy Efficiency and Water Conservation (March 8, 1994)
Executive Order 12843-Procurement Requirements and Policies for Federal Agencies for Ozone-Depleting Substances (April 21, 1993)
Executive Order 12969-Federal Acquisition and Community Right-to-Know'' (August 10, 1995)
Executive Order 13101- "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition," September 14, 1998,
Executive Order 13148-Greening the Government Through Leadership in Environmental Manangement

Fact Sheet, TI 0305, August 1998.

FAR Part 23
Pollution Prevention Act of 1990 (PPA).

Pollution Prevention: Requirements, Practices, and Guidance on NEPA Implementation,"

RCRA Section 6002

Resource Conservation and Recovery Act of 1976, Title 42 United States Code 6962, "Federal Procurement."

Air Quality:
CAA
ODS
NSPS
NSR
NAAQS
NESHAPS
BACT/MACT

MI PA 451 part 55

AR 200-1
DA Pam 200-1
AR 200-2

Natural Resources:
ESA, 16 USC 1531-1547
NEPA, 42 USC 4321-4370c
Sikes Act, 16 USC 670a-670f
WSRA, 16 USC 1271-1287
MBTA, 16 USC 703-711
FNWA, 7 USC 2803 and 2809

50 CFR 222
50 CFR 227
50 CFR 402

EO 11514
EO 11988
EO 11990
EO 12088
EO 13112
EO 13148
EO 13186

AR 200-3
AR 200-2

Cultural Resources:

NHPA, 16 USC 470-470w
NEPA, 42 USC 4321-4370c
AIRFA, 42 USC 1996-1996a
NAGPRA, 25 USC 3001-3013
ARPA, 16 USC 470aa-470ll
AHPA, 16 USC 469-469c

32 CFR 229
36 CFR 60
36 CFR 63
36 CFR 65
36 CFR 70
36 CFR 79
36 CFR 800
40 CFR 1500-1508
43 CFR 3
43 CFR 7.2
43 CFR 10

EO 11593
EO 13007

AR 200-2
AR 200-4
DA Pam 200-4

USAG-S CULTURAL RESOURCE MANAGEMENT PLAN
USAG-S HISTORICAL MAINTENANCE PLAN

Pest Management:

FIFRA

DOD/EPA MOA
DODI 4150.7

AR 200-5
AR 200-2
USAG-S PEST MANAGEMENT PLAN

STORM WATER Laws, Regulations & Permits

Federal

Section 402(p) of Clean Water Act of 1987
Federal Water Pollution Act

State

Natural Resources & Environmental Protection PA 451
Water Resources Protection Act 451 of 1994, Part 31
Soil Erosion and Sedimentation Control Act 451 of 1994, Part 91
Non-point Pollution Sources Act 451 of 1994, Part 81, 87 & 88
Surface Water Quality, Act 451 of 1994, Part 31
Sediment Act, 30 Mar 95

Macomb County

Resolution 1273, dated 26 Jun 74
Soil Erosion and Sedimentation Control Act 451 of 1994, Part 91

MDEQ Regulatory Permit

General Permit MIS 119000, Certificate of Coverage MIS1110277

City of Warren

Chapter 41, Water and Sewer Ordinance*
City of Warren Significant Industrial User Permit 401204*
(*Sanitary Sewer regulations, both have storm water related provisions)

CHESTERFIELD TOWNSHIP

Storm Water Permit

HARRISON TOWNSHIP

Storm Water Permit

Detroit Arsenal & USAG-S

Storm Water Pollution Prevention Plan (SWP3)

SAFE DRINKING WATER

Federal

Safe Drinking Water Act of 1974 with amendments in 1977, 1979, 1980, and reauthorization in 1986.

State

Michigan Safe Drinking Water Act 399, P.A. 1976 as amended.
MDEQ Michigan Cross Connection Rules Manual, Third Edition

City of Warren -

Water and Sewer Ordinance

City of Mt Clemens

Water Ordinance

Army Regulations, Technical Manuals, Technical Medical Bulletins

CHPPM Technical Guide 179.
AR 40-5
AR 200-1
AR 420-76
TB MED 576 and 577
TM 5-660
TM 5-810-5
TM 5-813-1 through 5-813-8
CHPPM TG 179

OTHER

AWWA Manual M14, Recommended Practice for Backflow Prevention and Cross-Connection Control

Disinfection of Repaired Water Mains
TB MED 576

Cross Connection Control

The City of Warren and the Michigan Safe Drinking Water Act 399, PA 176,

Solid Waste Management & Recycling

Federal

Federal Facilities Compliance Act, 6 October 1992.
Pollution Prevention Act of 1990, Public Law 101-508, 5 November 1990.
Resources Conservation and Recovery Act (RCRA), Public Law 94-580, 21 October 1976, Section 6002; Part 243; Part 246; Part 247; Part 257; and Part 261.

EO 13101, Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition, 14 September 1998.
EO 13148, Greening the Government Through Leadership In Environmental Management, 22 April 2000.

State

Solid Waste Management Act, Part 115 of the Natural Resources and Environmental Protection Act (NREP) 1994 PA 451, As Amended.

Part 115 has both Statutes and Administrative Rules.

Scrap Tires, Part 169 of the Natural Resources and Environmental Protection Act (NREP) 1994 PA 451, As Amended

Battery Disposal, Part 171 of the Natural Resources and Environmental Protection Act (NREP) 1994 PA 451, As Amended.
Bodies of Dead Animals, Act 239 of 1982.

Used Oil Recycling, Part 167 of the Natural Resources and Environmental Protection Act (NREP) 1994 PA 451, As Amended.

Macomb County

Macomb County Integrated Solid Waste Management Plan, Approved 3/2000.

Department of Defense

DOD Instruction (DODI) 4715.4, Pollution Prevention, 18 June 1996.
Memorandum, Office of the Under Secretary of Defense, 13 May 1998, subject: New DOD Pollution Prevention Measure of Merit.

Army

Detroit Arsenal Pollution Prevention Plan (P2) dtd Dec 00
Detroit Arsenal Solid Waste Management Plan (SWMP) dtd Dec 00
USAG-S Pollution Prevention Plan
USAG-S Solid Waste Management Plan (SWMP)

ASBESTOS REGULATIONS

1 40 CFR 61
40 CFR 745, Subpart L
40 CFR 763
40 CFR 763 (MAP)
40 CFR 302
40 CFR 763.120
40 CFR 763.134

MiDEQ: NESHAP's Act 451; Part 201

49 CFR 171-178

29 CFR 1926.1101 (Asbestos Construction Standard)
29 CFR 1910.1001 (General Industry)
29 CFR 1926.20 through 1926.32
29 CFR 1926.62

AHERA
ASHERA
NESHAP's
CERCLA
DOT
MiDCIS
MiDEQ

LEAD-BASED PAINT

40 CFR 745
40 CFR 261-265
40 CFR 260-270

24 CFR 35 Subparts B-R

29 CFR 1910
29 CFR 1926

Title X
Michigan Disclosure Law
Michigan Department of Community Health
Lead Hazard Remediation/Abatement Regulations
HUD Grant/EPA Training/Accreditation

MiCIS-DOH

HAZARDOUS WASTE MGT

40 CFR 172.301
40 CFR 265.16
40 CFR Parts 260 to 299
40 CFR 34
40 CFR 262.23 (d)
40 CFR 273.14
40 CFR 273.34
40 CFR 279.10 (a) (ii)

49 CFR 101-179 P.L 102-386; 106 STAT 1505
49 CFR 172.704(a)(12)

29 CFR 1910

32 CFR 178

HAZARDOUS MATERIAL MGT.

40 CFR 116-117, 264 B,I & J

49 CFR 101-179, 195; EO 13148
49 CFR 173.120 (b) (2)
49 CFR 173.150 (b) (2)
49 CFR 179.70 (c)
49 CFR 179.120 (b) (2)
49 CFR 172.404 (a)

29 CFR 1910

STORAGE TANK MGT. (UST & AST)

40 CFR 254, 264 I & J, 265 I & J, 280
49 CFR 173, 178

PCB MGT.

40 CFR 760-761

EMERGENCY RESPONSE

33 CFR 150,154
40 CFR 100-140, 265 C & D, 401-471, 600
29 CFR 1910
33 USC 2701

PLANNING MGT & SPCCP/ISCP

32 CFR 775
40 CFR 110
40 CFR 112
40 CFR 100-140
40 CFR 300
40 CFR 302
40 CFR 310
40 CFR 350-372
40 CFR 401-471
67 Fr 47074
Environmental Protection Act PA 451 1994
R 324.3101
R 324.2001 through R 324.2009
EO 12088
EO 12856
EO 12873
29 CFR 1910
CERCLA
SARA
EPCRA or SARA Title III

RADON MGT

Department of Public Health

EPCRA/TRI MGT

EPCRA/TRI REPORTING

Section 311 and 312 of the Emergency Planning and Community Right-to-Know of 1986
EPCRA 302 and 303
EPCRA 304
EPCRA 313
Executive Order 12856
Executive Order 13148
Clean Air Act
Clean Water Act
40 CFR 372.38(b)

NOTE:

The codes, industry standards, and state and federal regulations listed are typical of the types and level of those required in specific task areas of this PWS. This list is representative; it is in no way complete for the variety of facility services provided by this contract. It is the responsibility of the Contractor to identify by title, identifying number and latest applicable date, the codes and industry standards required to satisfy each specific task areas as well as to obtain copies for the Contractor's use under this contract.

APPENDIX 2 of PWS 2

ABBREVIATIONS/DEFINITIONS

2.1 Air Conditioning Systems: The Air Conditioning systems consist of all the refrigeration plants, air handling equipment, and controls required to provide the low temperature of air needed to maintain the room temperature at a given temperature and humidity (where humidity control is required). Preheaters, heater coils, humidifiers and dehumidifiers are considered to be part of the air conditioning system when installed, so as to operate in conjunction with Refrigeration and Air-handling equipment.

2.2 Air Cooled Condensers: The Air-cooled condensers are outdoor units; roof or ground mounted, and can be horizontal or vertical with single or multiple banks of coils, fans, and casings. Fan drives are constant, variable, or intermittent cycle-type with special screens and damper provisions added for cold weather operation. Air condenser units contain liquid refrigerant or water within coils with fans located to drive ambient air over coil surfaces or accomplish cooling of coil contents.

2.3 Appurtenances: Appurtenances include all features associated with the pavement, such as ditches, culverts, traffic signs, signals and markings, rights of way, shoulders, curbs, guardrails and supporting embankments.

2.4 Building: A facility with occupiable space, usually with flooring, covered by a roof, enclosed by walls, and sited on a tract of land. Maintenance, storage, production, administration, health care, family housing, and unaccompanied personnel housing are examples of buildings.

2.5 Biweekly: One time each two- (2) weeks.

2.6 Breakdown: The stoppage or collapse of equipment of a facility, or a component thereof, that requires immediate corrective action to restore it to an operating condition.

2.7 Cantonment: The developed portion (city-like area) or the built-up area of a permanent military installation.

2.8 Cold Storage Facilities and Refrigeration Equipment: The cold storage facilities and refrigeration systems covered by this PWS are reach-in and walk-in type coolers, or freezers, with associated direct expansion evaporators, reciprocating or barometric compressors, interconnecting piping and condensers.

2.9 Cooling Towers: The cooling tower units covered by this PWS are outdoor units, roof or ground mounted, with single or multiple cells or compartments into which heat from water is dissipated by the evaporation of some of the water sprayed into the air/circulated through the tower cell or cells.

2.10 Critical Equipment and Facilities: Items of equipment or facilities that must operate continuously or throughout the respective season in order to support critical missions. Failure of equipment of facilities in meeting design output requirements may affect the health and welfare of personnel or damage Government equipment or properties. Emergency or urgent service calls are often required to restore the critical equipment to optimum operating condition and provide the output required. The Appendix "Critical Systems List" contains items considered critical by the Government.

2.11 Cyclic Services are those activities, which are accomplished on a scheduled or recurring basis.

2.12 Equipment-in-Place (EIP): non-expendable equipment of a moveable nature affixed to real property, but able to be removed without destroying or reducing the usefulness of the facility. It does not include installed building equipment. Equipment-in-place items are not considered real property.

2.13 Evaporator Coils: The evaporator coil(s) covered by these requirements are direct expansion (DX) type which consists of piping, and expansion valve or similar devices, and the coil within which a liquid refrigerant is converted to vapor caused by the sudden pressure release provided by the expansion valve and heat absorbed from air being cooled.

2.14 Evaporative Cooled Condensers: Evaporative cooled condensers operate on the same principle as a cooling tower except that in some instances vapor or water is condensed or cooled within tubes that are cooled by the evaporation of water flowing outside of tubes. Evaporative condensers can be mounted indoors as well as out doors.

2.15 Excavation: Removal of earth from its natural position.

2.16 Excess Non-Expendable: Government property or items in possession of the Contractor, which exceeds the quantity, authorized for use under the contract.

2.17 Expendables: Property or items that may be consumed in use or loses its identity in use and may be dropped from stock record accounts when it is issued or used. Expendable items include certain repair parts of low intrinsic value or items unworthy of full accounting procedures, e.g.: supplies such as paint, fuel, cleaning and preserving materials, or those which lose their identity (such as spare parts, etc., which are sometimes referred to as "consumable supplies and material").

2.18 Facility: Any interest in land, structure, or complex of structures together with supporting road and utility improvements necessary to support the functions of an Army activity or mission. A facility includes the occupiable space it contains.

2.19 Facility Replacement: The replacement of an entire facility when it is more economical than to perform major repair. This includes installed equipment.

2.20 Food Service Equipment: Food service equipment includes mechanical, cooking, and other equipment (excluding utensils) used in preparing, processing, and serving foods. Food packaging and processing equipment used in commissaries is not considered food service equipment.

2.21 Furnishings: Movable articles in an office such as pictures, bulleting boards, TV mounts or brackets, coat hangers, wall clocks, etc.

2.22 Improved Grounds: Acreage on which intensive maintenance activities must be planned and performed annually as fixed requirements. This category normally applies to areas within the build-up section of an installation, which contains lawns, landscaping, parade grounds, athletic facilities, and other areas such as perimeter/boundary zones and fields. Activities include mowing, irrigation, fertilization, cultivation, aeration, seeding, sodding, spraying, pruning, and trimming; weed, dust, and erosion control; drainage; and planting for landscape effect; wind and grounds abatement, and other intensive clear zones and picnic areas.

2.23 Insecticides: Are specialized forms of pesticides used only against insects and related arthropods. Contractors shall comply with Federal/State laws and regulations. Any environmental impact from use, misuse, etc., shall be the responsibility of the Contractor.

2.24 Installation: Army installation is an aggregation of contiguous or near contiguous, common mission supporting real property holdings under the jurisdiction of the Department of Defense, or possession, controlled by and at which as Army unit or activity is permanently assigned.

2.25 Installed Building Equipment (IBE): Items of equipment or furnishings, including materials used for installation, which are required to make the facility usable and are affixed as a permanent part of the structure; these items include plumbing fixtures and equipment, fixed heating, ventilating, cooling, air conditioning, electrical and fixed fire protection systems, elevators and escalators, overhead-crane runways, lavatory counters, cabinets, and similar fixed equipment.

2.26 Integrated Pest Management Program (IPM): A program to assure effective preventive and corrective measures. Insure that surveillance and control activities prevent excess pest population from developing. The Program minimizes the impact on the environment.

2.27 Irrigation Cycle: The application of water per acre within a 7-day period.

2.28 Liquid Chillers: The liquid Chillers covered by these requirements are both absorption chiller units and conventional chiller units (powered by reciprocating, centrifugal or screw compressors).

2.29 Non-Expendables: Property or supplies which are not consumed in use and which retain their original identity during the period of use, such as machines, tools, and equipment furnished to the Contractor and for which he must account.

2.30 Operator Equipment Maintenance: The basic daily services performed by the equipment operator includes visual inspection for damage and pilferage, leaks, instrument operation, brakes, transmission (clutch), steering, engine operation, lights, reflectors and other safety devices and appropriate reporting for correction or repair.

2.31 Personal Property: Consists of fixed movable items. Fixed personal property consists of capital equipment and other equipment of a movable nature that has been affixed in place or attached to real property, but may be severed or removed from buildings without destroying the usefulness of the facilities. Movable personal property consists of equipment that is movable and affixed as an integral part of the facility.

2.32 Pest Control Services: Includes the accomplishment of pest surveys, applications of pest control treatments and removal of the carcasses with the objective of controlling common pests, including, but not limited to: roaches, ants, silver fish, bed bugs, fleas, crickets, beetles, stored products pests, spiders, mites (including bird mites), bees, wasps, centipedes, millipedes, pecoids (book lice), birds, lice, clothes moths, earwigs, drain flies (psychodids), flies, termites, ticks, chiggers, rats, mice, snakes and birds, and other miscellaneous vertebrate pests. In addition, as well as tree and shrub pests such as scale insects, aphids, slugs, snails, tent caterpillars, and other lepidopterous larvae, leaf miners, scales, Dutch Elm Disease, as well as other turf diseases. Pest Control Services also include adequate week control and turn vegetation control.

2.33 Pesticides are defined as any chemical substance or mixture of substances intended for preventing, destroying, repelling or mitigating aerosol spray form, or other forms.

2.34 Petroleum, Oils, and Lubricants (POL) Facilities: Groundsadjacent to structures and/or tanks that store or dispense petroleum, oils, and lubricants.

2.35 Policing Grounds: The pickup and disposal of paper, bottles, cans, cardboard, plastic, rags, and other litter on grounds and other areas.

2.36 Preservation: The process of maintaining a structure in its present condition and arresting further deterioration.

2.37 Preventive Maintenance (PM): Preventive maintenance is the planned inspection, testing, cleaning, adjustment, calibration, and other minor repairs and corrections of facilities, structures, and equipment on a cyclical basis, as well as reporting of deficiencies beyond the scope of preventive maintenances.

2.38 Rodenticide: Are specialized forms of pesticides used only against rodents.

2.39 Unit Air Conditioners: The unit air conditioners contain major components and unit sections to make up definable system, or air handling units with remote compressor, condenser, or heating sections.

2.40 Structure: A facility other than a building, such as bridges, locks and dams, fences, flagpoles, swimming pools, tent frames and floors, permanent grandstands and bleachers, historical monuments, free standing walls, and underground storage facilities.

2.41 Surfaced Areas: Include all roads, streets, drives, walks, parking lots, open storage areas, aprons, bridges, and other outside areas which are paved or stabilized and used for vehicular, aircraft or pedestrian traffic and parking, storage or athletic areas. Activities include paving, pothole/crack repair, bridge maintenance and inspection, sealing, painting, and other related activities.

2.42 Survey is defined as the process of inspecting in or around facilities and grounds before and after treatment to locate and determine the exact type and extent of any pest infestation and adequacy of control measures.

2.43 System: A system, as used in this contract, includes all mechanical and electrical equipment; supporting structures; pneumatic electrical and mechanical types of controls; and all auxiliary equipment required to provide a specific function and output requirements.

2.44 Industrial Plant Equipment (IPE): Federal Supply Class (FSC) of 3400 Series and acquisition cost over $15000.00.

2.45 Other Plant Equipment (OPE): Every thing else from desks and chairs to machinery/vehicles.

2.46 DTA: DETROIT ARSENAL, WARREN MICHIGAN

2.47 USAG-S: US ARMY GARRISON - SELFRIDGE, HARRISON TOWNSHIP

DEFINITIONS - Preventive Maintenance, Bldg. 212

NOTE: The following definitions are only for that portion of PWS covering Preventive Maintenance in Bldg. 212 only.

Checks: Determination of the serviceability of an item done by comparing physical, mechanical and/or electrical characteristics with established standards through examination by sight, sound, or feel.

Emergency: Any condition determined to be an emergency by the Contracting Officer or COFR on the basis of its endangering life, property, or equipment, creating a health hazard, or impairing the operation of test equipment to the extent that test data is or will be invalidated.

Preventive Maintenance: The systematic prevention, inspection, detection, and correction of the incipient failures before they occur or before they develop into major defects. This includes such activities as servicing, checks, repair, oil analysis, and preservation and packing.

Services: Operations required periodically to keep an item in proper operating condition, e.g., to clean, drain, or replenish fuel, lubricants, or fluids.

DEFINITION - ENVIRONMENTAL PROTECTION

1. Environmental Enforcement Action-An ENF is a written notification of any violation of an environmental law or regulation by the EPA, or another authorized federal, state, or local regulatory agency, requesting compliance with the alleged violated provision. The following notices typically constitute an ENF

Administrative Order (AO):
Compliance Order (CO):
Field Citation (FC):
Finding Of Alleged Violation (FOAV):
Finding Of Violation (FOV):
Notice of Deficiency (NOD):
Notice of Noncompliance (NON):
Proposed Order Of Consent (POOC):
Report Of Violation (ROV):
Violation Letter (VL):

2. Spill- an un-permitted release of oil or a hazardous substance to the environment.

3. Interiorscape-plants located and maintained indoors

4. Commensal-a pest that shares a man’s habitat and food

5. Arthropod(s) – Insects in general, having three distinct segmented body regions and paired appendages.

6. Pesticide(s) - This umbrella word includes herbicides, algaecides, rodenticides, apicides, miticides, etc

7. Alagecides- a pesticide that specifically targets algeas

8. Rodenticides-that type of pesticide specifically targets the rodent family

9 Apicides-a pesticide that specifically targets bees and wasps

10. Miticides- a pesticide that specifically targets mites

11. Nonattainment – Areas, identified by the NAAQS, which fail to meet national standards for criteria pollutants. The Federal Government can impose sanctions on those areas to gain compliance.

12. NAAQS – See National Ambient Air Quality Standards

See National Ambient Air Quality Standards – A part of the Clean Air Act that sets standards for the criteria pollutants in outside air

throughout the country.

13. Pollutant - Generally, any substance introduced into the environment that adversely affects the usefulness of the resource.

14. Pollution – Generally, the presence of matter or energy whose nature, location, or quantity produces undesired environmental effects.

15. Material Safety Data Sheet – MSDS; chemical information sheets provided by the chemical manufacture that includes information such as: chemical and physical characteristics; long and short term health hazards, spill control procedures, personal protective equipment to be used when handling the chemical; reactivity with other chemicals; and manufactures name, address and phone number.

APPENDIX 3 of PWS-2

FACILITIES ENGINEERING - WARREN
CRITICAL SYSTEMS

PROPRIETARY CRITICAL SYSTEMS

1. Simplex Fire Alarms

2. Energy Management Center Systems (EMCS)

3. ADT Control Systems

4. Motorola Camera Systems

5 Lardner Elevator

CRITICAL SYSTEMS RELIABILITY RATES

Heating & Air conditioning

LOCATION	**OPERATION TIME FRAME (OTF)**	**REQUIREMNTS**
All ADP areas - Bldgs 200A, 200D, 215, 229, 230, 231	Hrs/7 days per week	70-74 degrees Fahrenheit Relative humidity 45-50%
Bldg. 200C Photolab	8 Hrs/5 Days per week	75 degrees water for B/W film processing
Bldg. 212 test cells	During Test Operations	70-74 degrees
Bldg. 200C	Hrs/7 days per week	-30 to -40 degrees during Tests in Battery Lab 70 - 74 in Vetronics Lab -30 to -60 in Electrical Lab

Reliability rate (ALLOWED Downtime) The air conditioning systems supports the ADP operation which functions on a 24 hour a day, seven days a week. The allowed downtime for normal maintenance and repair requiring total system shutdown is a maximum of ten hours on Labor Day, on a yearly basis. This allotted time is utilized for the

inspection, adjustment and repair of the air conditioning equipment. During the months of January and February, scheduled downtime is permitted on a two-week period to overhaul all air conditioning equipment in direct support of the ADP equipment located in B230. No more than one system of the three (refrigeration compressors) can be shut down at a time for its annual maintenance during this two-week period. The associated equipment (e.g., condensers, evaporation coolers, cooling towers, etc.) must be maintained within the same two week period. For minor maintenance problems during other periods, a schedule of two weeks in advance must be made with ADP personnel to avoid interference with their normal ADP processing. The computers located in Bldgs. 200A, 215, 229 & 231 are not as critical as the equipment in Bldg. 230 main computer. Scheduled shutdown of 48 hours is permitted when scheduled two weeks in advance with the operators of the equipment. This shutdown normally takes place during the early spring and late fall when the temperature and humidity conditions are not of a critical nature to the equipment. All other locations require notice prior to shutdown.

UPS SYSTEMS

LOCATION	**OPERATION TIME FRAME (OTF)**	**REQUIREMENTS**
Bldgs 230, 215, 229, 231, 200A, 200C	24 Hrs/7 days a week	75 - 80 degrees

Reliability Rate (ALLOWED DOWNTIME): When there is a necessity for a complete shutdown of the Bldg. 230 UPS (Uninterrupted Power Systems) this can only be accomplished in conjunction with the Labor Day electrical power shutdown. Maintenance on the UPS portion of the power supply can be accomplished when absolutely necessary to maintain its integrity when scheduled with the ADP personnel. During the downtime, the electrical service will be provided straight through commercially (Detroit Edison). The other UPS systems may be shut down after coordination with the user.

SPECIAL SECURITY SYSTEMS

LOCATION	**OPERATION TIME FRAME (OTF)**	**REQUIREMENTS**

Bldg. 233	24 hrs/7 Days per week	68-72 degrees 45-50% Rel. Humidity

Reliability Rate (ALLOWED DOWNTIME): Maintenance and repair of the security system and in heating and cooling systems within the building should be scheduled during the three day Labor Day weekend when the building can be shut down on a scheduled basis. Maintenance and repair necessitated by possible breakdown of equipment must be scheduled with the Special Security Office personnel.

COMMUNICATIONS

LOCATION	**OPERATION TIME FRAME (OTF)**	**REQUIREMENTS**
Bldg 230	24 Hrs/7 days a week	70 +/- 2 degrees 43-47% Rel. Humidity

Reliability Rate (ALLOWED DOWNTIME): The air conditioning and heating associated with this activity can be scheduled for shutdown for a period not to exceed eight hours on Labor Day in conjunction with the ADP shutdown. Required maintenance during other periods of time must be scheduled 48 hours in advance.

APPENDIX 4 of PWS-2

FACILITIES ENGINEERING - WARREN

HISTORICAL WORKLOAD DATA
(FOR INFORMATIONAL USE ONLY)

(Maintenance & Repair Service Orders)
FY 99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC	51	47	47.5	33.5	81.0	105.04	1,802.53	4	2	
Asbestos Work	48	29	90.5	44.0	134.5		1,802.76	20	1	
Carpentry	601	545	2,202.0	7.5	2209.5	680.00	23,354.15	53	66	
Electrical	824	764	2,556.5	64.0	2620.5	5,205.00	30,694.12	79	35	
Entomology	151	148	212.2	5.5	217.7			6	9	
Environmental Tasks	20	12	25.5		25.5	47.80	548.36	8	1	
HVAC	863	777	2,624.2	128.5	2752.7		18,216.21	61	67	
Locksmith	248	241	497.0	7.0	504.0		716.84	20	16	
Machine Repair	84	71	1,095.0	11.0	1106.0	1,764.00	6,186.19	13	12	
Pipefitting	195	161	1,520.5	74.5	1595.0		5,218.34	17	18	
Plumbing	663	630	1,128.5	10.5	1139.0		6,210.71	45	42	
Roads & Grounds	74	66	421.0	4.0	425.0		242.52	11		
Totals	3,822	3,491	12,420.4	390.0	12,810.4	$ 7,801.84	$ 94,992.73	337	269	0

(Scheduled Preventive Maintenance & SOOs)
FY 99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC	8	8	5,613.7	379.9	5,993.6		4,596.88			
Asbestos Work	1	1	63.0		63.0					
Carpentry	6	6	2,386.0	53.5	2,439.5		446.98			
Electrical	18	18	2,136.9	538.0	2,674.9	65,629.09	16,283.82			
Entomology	6	6	652.5		652.5	1,418.00	2,626.68			
Environmental Tasks	4	4	1.0		1.0		1.87			
HVAC	16	16	4,979.0	70.0	5,049.0	78,188.50	23,020.18			
Locksmith	1	1	630.0		630.0					
Machine Repair	12	12	2,872.0		2,872.0	5,208.90				
Paint	2	2	69.5							
Pipefitting	17	17	3,075.5		3,075.5		2,467.27			
Plumbing	20	20	2,107.8	237.5	2,345.3	464.20	874.92			
Roads & Grounds	12	12	8,280.1	3,013.0	11,293.1	2,500.80	65,301.16			
Totals	123	123	32,867.0	4,291.9	37,089.4	$ 153,409.49	$ 115,619.76	0	0	0

(Unscheduled Maintenance IJOs)
FY 99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC				5.0	5.0					
Asbestos Work					0.0		285.97			
Carpentry	9	14	293.5	16.0	309.5			1	2	
Electrical	14	6	69.5	10.0	79.5	1,333.80	7,748.66	6	5	1
Entomology			1.0		1.0					
Environmental Tasks	5	4	17.5		17.5	1,178.50	2,742.00	2		1
HVAC	14	11	204.5	148.0	352.5		12,341.39	1	5	
Locksmith	92	73	133.5		133.5		239.60	12	8	
Machine Repair	1		18.0		18.0					
Pipefitting	4	3	23.5		23.5		2,442.47	4	1	
Plumbing	5	2	23.0	35.0	58.0	504.20		3	1	
Roads & Grounds	24	15	282.0	126.5	408.5		12,504.70	7	3	
Totals	168	128	1,066.0	340.5	1,406.5	$ 3,016.50	$ 38,304.79	36	25	2

(Repair Work)
FY 99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Asbestos Work	6	4	2.0	100.0	102.0	1,300.30	1,701.20	1	16	
Carpentry	50	20	1,866.5	226.0	2,092.5	2,006.80	75,222.92	5	30	7
Electrical	31	12	1,714.5	122.0	1,836.5	48,064.00	39,980.43	3	15	2
Environmental Tasks	4	3		45.0	45.0	4,964.30	328.84	1		
HVAC	49	36	2,283.6	1,059.0	3,342.6	36,030.81	68,386.68	8	25	7
Locksmith	1		23.0		23.0			1		
Machine Repair	5	3	152.0	19.0	171.0	11,469.35	26,119.52		1	
Paint	18	8	371.5	38.5	410.0		457.67	3	12	4
Pipefitting	42	35	1,942.5	782.0	2,724.5	19,208.70	49,175.41	1	12	
Plumbing	18	6	579.5	44.0	623.5	2,231.10	14,977.55	2	8	
Roads & Grounds	9	2	772.0	111.0	883.0	11,670.10	6,775.51	1	6	2
Totals	233	129	9,707.1	2,546.5	12,253.6	$ 136,945.46	$ 283,125.73	26	125	22

(New Work)
FY 99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Asbestos Work	4	5	3.0	252.5	255.5	1,254.36	1,202.21			
Carpentry	236	137	1,901.0	447.0	2,348.0	1,982.93	30,939.60	62	108	23
Electrical	211	105	2,108.0	430.0	2,538.0	15,937.22	29,304.70	14	80	21
Environmental Tasks	16	7	3.5	33.0	36.5	50,401.68	691.27	2	6	2
HVAC	40	12	233.5	190.0	423.5		8,973.28	6	22	3
Locksmith	44	40	685.0	28.0	713.0		4,453.84	4	11	
Machine Repair	10	7	225.0		225.0	61.50	3,135.88	3	2	
Paint	7	3	102.0	14.0	116.0		950.00	1	4	3
Pipefitting	23	9	579.5	72.0	651.5		4,675.11	14	3	8
Plumbing	27	8	50.5		50.5		1,596.83	2	20	
Roads & Grounds	11	3	79.5	3.0	82.5		2,419.56	3	2	5
Totals	629	336	5,970.5	1,469.5	7,440.0	$ 69,637.69	$ 88,342.28	111	258	65

(Maintenance & Repair Service Orders)
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC	41	43	38.5	27.0	65.5					
Asbestos Work	14	9	10.0	8.0	18.0	20.00		4	2	
Carpentry	612	526	1,821.0	9.0	1,830.0		17,654.66	54	99	
Electrical	845	809	2,628.2	22.0	2,650.2	1,358.50	33,516.97	44	32	
Entomology	208	188	288.5		288.5		34.47	16	13	
Environmental Tasks	11	11	605.0	4.0	609.0	150.00	1,391.05			
HVAC	815	793	2,597.1	39.5	2,636.6	1,320.00	31,886.74	71	20	
Locksmith	201	209	319.5	1.0	320.5		1,615.91	3	5	
Machine Repair	60	52	472.0	10.5	482.5	670.00	4,073.31	10	12	
Pipefitting	182	150	1,592.0	21.0	1,613.0	750.00	18,124.76	35	17	
Plumbing	667	621	1,115.9	5.5	1,121.4	175.00	15,382.02	43	47	
Roads & Grounds	44	35	73.5	3.0	76.5		1,606.88	4	5	
Totals	3,700	3,446	11,561.2	150.5	11,711.7	$ 4,443.50	$ 125,286.77	284	252	0

(Scheduled Preventive Maintenance & SOOs)
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC	4	4	5,371.1	479.2	5,850.3		5,804.81			
Asbestos Work	1	1	38.0	431.0	469.0		80.02			
Carpentry	4	4	1,957.5	21.5	1,979.0		11,799.21			
Electrical	20	20	2,462.7	636.5	3,099.2	82,045.53	21,048.72			
Entomology	6	6	792.0	74.5	866.5	1,500.00	9,011.43			
Environmental Tasks	4	4	212.5	13.0	225.5	7,735.60				
HVAC	13	13	4,000.2	52.0	4,052.2	30,634.50	23,505.52			
Locksmith	1	1	180.0		180.0					
Machine Repair	12	12	2,438.6	80.0	2,518.6	606.00	3,177.75			
Paint	3	3	226.5	131.0	357.5					
Pipefitting	16	16	1,142.5		1,142.5	11,180.00	179.01			
Plumbing	21	21	1,842.0	120.0	1,962.0		646.15			
Roads & Grounds	13	13	9,306.0	1,409.1	10,715.1	3,324.00	31,891.02			
Totals	118	118	29,969.6	3,447.8	33,417.4	$ 137,025.63	$ 107,143.64	0	0	0

(Unscheduled Maintenance IJOs)
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC			1.0	1.0	2.0					
Asbestos Work					0.0					
Carpentry	10	6	220.5	4.5	225.0	432.00	826.35	1	5	
Electrical	18	12	606.0	61.0	667.0	1,260.00	12,453.67	4	5	
Entomology					0.0		600.00			
Environmental Tasks	7	4	10.0		10.0			1		2
HVAC	12	12	181.5	99.0	280.5	12,125.00	4,522.41	1	4	
Locksmith	121	115	215.0	2.0	217.0		2,971.29	6	9	
Machine Repair	4	3	22.5		22.5	1,284.00	5,967.74	2		
Pipefitting	1	4	50.0	52.5	102.5	375.00	2,373.32		1	
Plumbing	4	3	22.0	12.5	34.5	2,044.00	1,106.64			
Roads & Grounds	19	14	325.5	155.5	481.0	3,860.00	30,450.44	2	6	
Totals	196	173	1,654.0	388.0	2,042.0	$ 21,380.00	$ 61,271.86	17	30	2

(Repair Work)
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Asbestos Work	4	2	35.0	208.0	243.0	3,965.00	634.53	11	6	1
Carpentry	33	31	2,698.0	173.5	2,871.5	15,332.15	78,329.83	13	15	9
Electrical	23	27	1,151.5	104.5	1,256.0	17,694.57	29,666.98	9	1	1
Environmental Tasks					0.0					
HVAC	39	57	2,884.1	1,827.0	4,711.1	50,832.75	124,678.43	5	10	
Locksmith			28.0		28.0					
Machine Repair	7	5	487.5	78.5	566.0	26,025.00	29,491.12		2	
Paint	24	10	383.0	138.5	521.5		9,147.48	6	6	7
Pipefitting	50	44	2,033.5	1,261.5	3,295.0	34,161.12	86,168.00		15	1
Plumbing	14	10	30.0	38.0	68.0	4,128.50	8,150.20		1	3
Roads & Grounds	14	7	540.5	117.5	658.0	12,374.53	12,305.61	2	4	8
Totals	208	193	10,271.1	3,947.0	14,218.1	$ 164,513.62	$ 378,572.18	46	60	30

(New Work)
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Asbestos Work	4	1	54.5	82.0	136.5	576.00	536.40		1	1
Carpentry	202	175	2,889.5	561.5	3,451.0	10,123.80	95,100.13	59	58	32
Electrical	154	116	2,962.0	427.0	3,389.0	8,957.10	31,085.01	55	34	19
Environmental Tasks	2	5	4.0		4.0	13.90			3	2
HVAC	43	36	1,110.2	573.5	1,683.7	24,812.24	25,982.59	10	14	4
Locksmith	43	47	585.0	2.5	587.5		7,060.02	7		
Machine Repair	4	5	236.0	8.0	244.0		4,715.37	1	1	
Paint		2	274.5	12.0	286.5		52.23		4	1
Pipefitting	5	6	173.0	84.0	257.0	443.00	3,327.41		2	
Plumbing	9	15	194.0	42.0	236.0		4,060.08	5	5	1
Roads & Grounds	12	3	142.0	81.0	223.0	523.80		2	2	1
Totals	478	411	8,624.7	1,873.5	10,498.2	$ 45,449.84	$ 171,919.24	139	124	61

(Maintenance & Repair Service Orders)
FY 01

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC	43	41	53.0	3.5	56.5			1	1	
Asbestos Work	15	14	9.0	30.0	39.0	474.60		2	1	
Carpentry	614	598	2,530.3	15.0	2,545.3	1,919.00	32,569.85	59	58	
Electrical	822	779	3,092.5	28.0	3,120.5	5,861.76	41,797.48	56	18	
Entomology	239	228	432.0		432.0	139.00	5.08	11	13	
Environmental Tasks	13	12	5.0	2.0	7.0	587.60	409.69	2		1
HVAC	814	723	2,748.5	69.5	2,818.0		28,655.51	98	14	
Locksmith	283	278	647.0	2.0	649.0		7,927.03	7	3	
Machine Repair	158	139	1,496.5	8.5	1,505.0	1,252.50	19,053.93	17	14	
Pipefitting	182	156	1,307.0	54.0	1,361.0	120.00	14,522.26	34	9	
Plumbing	603	567	732.5	29.0	761.5	3,178.00	14,800.97	67	16	
Roads & Grounds	53	40	86.5	3.0	89.5	1,687.50	435.88	13	5	
Totals	3,839	3,575	13,139.8	244.5	13,384.3	$ 15,219.96	$ 160,177.68	367	152	1

(Scheduled Preventive Maintenance & SOOs)
FY 01

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC	4	4	5,570.7	393.8	5,964.5		3,742.99			
Asbestos Work	1	1	41.5	110.5	152.0					
Carpentry	4	4	2,464.7	100.0	2,564.7	477.01	2,368.33			
Electrical	20	20	2,879.5	582.0	3,461.5	28,966.34	16,058.14			
Entomology	6	6	872.0	2.5	874.5	950.00	12,453.46			
Environmental Tasks	4	4	9.0		9.0					
HVAC	13	13	4,705.1	65.5	4,770.6	60,000.00	22,960.90			
Locksmith	1	1	141.5		141.5					
Machine Repair	13	13	6,165.0	278.0	6,443.0	1,800.00	5,711.61			
Paint	3	3	435.5	30.0	465.5					
Pipefitting	16	16	939.5		939.5	12,694.02	7.31			
Plumbing	21	21	1,664.6	4.0	1,668.6	3,138.00	1,093.80			
Roads & Grounds	13	13	9,181.8	1,174.5	10,356.3	7,492.55	40,038.19			
Totals	119	119	35,070.4	2,740.8	37,811.2	$ 115,517.92	$ 104,434.73	0	0	0

(Unscheduled Maintenance IJOs)
FY 01

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC			2.0	9.0	11.0					
Asbestos Work					0.0					
Carpentry	7	9	332.5	62.5	395.0		1,077.73	5	4	
Electrical	19	15	644.5	99.0	743.5		5,874.34	2	6	
Entomology					0.0					
Environmental Tasks	1				0.0					
HVAC	6	7	195.0	83.5	278.5	9,187.74	2,485.60	3		
Locksmith	114	116	368.5		368.5		4,744.77	5	1	
Machine Repair	5	3	148.0	3.5	151.5	1,449.46	2,140.10		3	
Pipefitting	2	3	52.5	48.0	100.5				2	
Plumbing	6	2	58.0	23.0	81.0	2,500.00	157.61		3	
Roads & Grounds	19	17	379.0	333.3	712.3		41,561.80	2	5	
Totals	179	172	2,180.0	661.8	2,841.8	$ 13,137.20	$ 58,041.95	17	24	0

(Repair Work)
FY 01

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Asbestos Work	15	2	45.0	256.5	301.5	4,876.00	2,578.75	5	2	14
Carpentry	33	29	2,114.5	17.0	2,131.5	12,690.00	70,148.71	4	7	10
Electrical	33	18	1,089.0	325.0	1,414.0	2,071.88	13,775.11	2	13	1
Environmental Tasks	3		6.0		6.0					2
HVAC	50	50	2,651.5	1,010.5	3,662.0	1,945.00	76,887.91	2	17	
Locksmith			14.0		14.0					
Machine Repair	9	6	273.4	32.5	305.9	4,477.00	11,952.75	3	2	
Paint	24	13	298.5		298.5	5,600.00	2,887.75	7	5	6
Pipefitting	78	61	1,745.0	2,649.0	4,394.0	100,850.41	180,163.14	2	19	1
Plumbing	25	13	565.0	39.0	604.0	25,290.00	32,322.14	2	6	
Roads & Grounds	6	6	552.0	204.0	756.0	66,851.00	42,488.98		2	5
Totals	276	198	9,353.9	4,533.5	13,887.4	$ 224,651.29	$ 433,205.24	27	73	39

(New Work)
FY 01

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Asbestos Work	2	2	7.0	10.5	17.5		81.33	1		
Carpentry	194	156	2,142.5	12.0	2,154.5	20,067.30	91,384.63	44	52	9
Electrical	149	121	2,951.0	28.0	2,979.0	9,882.00	32,426.89	25	28	12
Environmental Tasks	1	1			0.0			1	2	
HVAC	48	30	765.5	721.0	1,486.5		25,588.83	10	13	7
Locksmith	8		10.0		10.0			2	2	
Machine Repair	14	4	98.0		98.0	1,650.00	6,101.43	2	4	1
Paint	3	1	281.5		281.5				2	
Pipefitting	8	3	84.0	36.0	120.0		3,254.10	1		3
Plumbing	12	7	185.0		185.0	1,900.00	1,151.84	7		5
Roads & Grounds	14	8	227.0	8.0	235.0		3,145.90	2	1	2
Totals	453	333	6,751.5	815.5	7,567.0	$ 33,499.30	$ 163,134.95	95	104	39

(Maintenance & Repair Service Orders)
FY 02

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC	40	36	49.9	6.0	55.9	1,219.00	1,542.47	2	3	
Asbestos Work	26	24	34.5	73.0	107.5	2,280.20	258.33	1	2	
Carpentry	565	503	1,729.0	11.0	1,740.0	1,894.75	19,327.20	40	80	
Electrical	757	711	2,436.5	26.0	2,462.5	1,476.25	38,157.48	35	29	
Entomology	246	212	514.5	21.0	535.5	184.80		23	24	
Environmental Tasks	32	28	2.0		2.0	3,107.40	110.00	3	1	
HVAC	768	663	4,611.5	106.5	4,718.0	2,088.05	26,739.10	96	23	
Locksmith	314	298	493.0		493.0		8,437.15	12	7	
Machine Repair	194	187	1,452.0	12.5	1,464.5	2,225.00	21,665.02	10	11	
Pipefitting	149	124	1,219.0	33.0	1,252.0	815.10	9,869.87	24	10	
Plumbing	572	516	843.5	7.5	851.0	9,252.00	19,991.58	39	33	
Roads & Grounds	51	50	98.5	4.0	102.5	1,020.00	839.33	4	2	
Totals	3,714	3,352	13,483.9	300.5	13,784.4	$ 25,562.55	$ 146,937.53	289	225	0

(Scheduled Preventive Maintenance & SOOs)
FY 02

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC	4	4	5,564.0	402.4	5,966.4		7,753.39			
Asbestos Work	1	1	52.0	94.0	146.0		169.90			
Carpentry	4	4	736.0	11.5	747.5		24,184.84			
Electrical	21	21	1,721.0	658.0	2,379.0	49,191.54	14,499.88			
Entomology	6	6	871.0	16.0	887.0	425.00	13,155.73			
Environmental Tasks	4	4	401.5	16.0	417.5					
HVAC	19	19	3,351.5	73.5	3,425.0	69,055.00	32,183.04			
Locksmith	2	2	74.5		74.5					
Machine Repair	16	16	5,964.5	9.0	5,973.5		8,019.84			
Paint	3	3	375.5	87.0	462.5					
Pipefitting	16	16	1,132.0		1,132.0	15,834.00	275.05			
Plumbing	22	22	883.1	48.0	931.1	5,843.50	6,744.47			
Roads & Grounds	13	13	7,975.5	794.0	8,769.5	8,428.14	47,276.85			
Totals	131	131	29,102.1	2,209.4	31,311.5	$ 148,777.18	$ 154,262.99	0	0	0

(Unscheduled Maintenance IJOs)
FY 02

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
ACOC			0.5	11.0	11.5					
Asbestos Work	1		5.0		5.0			1		
Carpentry	7	11	206.0	59.5	265.5	1,969.40	4,526.47		2	
Electrical	9	10	228.0	112.0	340.0	1,825.00	12,281.42	1	3	
Entomology					0.0	797.80	860.16			
Environmental Tasks	7	3			0.0			1		3
HVAC	6	2	57.5	40.5	98.0	6,850.00		1	2	
Locksmith	92	80	326.0	9.0	335.0		2,201.19	3	6	
Machine Repair	2	5	387.5	13.0	400.5	1,750.00	5,924.83	1	3	
Pipefitting	3	2	28.0		28.0			1	1	
Plumbing	9	11	70.5	9.5	80.0	899.20	1,180.66			
Roads & Grounds	25	25	368.0	185.5	553.5	4,346.72	15,363.20	1	4	
Totals	161	149	1,677.0	440.0	2,117.0	$ 18,438.12	$ 42,337.93	10	21	3

(Repair Work)
FY 02

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Asbestos Work	2	1	52.0	459.0	511.0	1,260.00	4,580.31	1	2	
Carpentry	36	19	1,598.5	13.5	1,612.0	4,877.52	43,326.31	6	20	3
Electrical	25	29	1,500.0	290.0	1,790.0	20,434.44	39,710.32	5	4	1
Environmental Tasks	1	1	2.0		2.0	1,990.00			13	
HVAC	53	58	2,890.3	1,135.0	4,025.3	16,948.23	114,205.63			
Locksmith					0.0					
Machine Repair	7	5	504.0	131.0	635.0	243.00	1,516.28	1	2	1
Paint	17	13	643.5		643.5	11,500.00	6,817.22	3	5	
Pipefitting	49	55	1,827.5	2,079.5	3,907.0	23,124.30	122,961.57	4	12	
Plumbing	10	18	380.5	364.0	744.5	71,430.91	44,594.25		2	
Roads & Grounds	4	6	1,137.0	220.0	1,357.0	58,463.51	35,949.29	2	2	
Totals	204	205	10,535.3	4,692.0	15,227.3	$ 210,271.91	$ 413,661.18	22	62	5

(New Work)
FY 02

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Asbestos Work	3	3	8.0	70.0	78.0		704.94			
Carpentry	160	116	1,743.5	30.0	1,773.5	400.00	61,712.00	40	53	27
Electrical	117	97	2,392.0	36.0	2,428.0	6,940.55	39,190.96	28	21	8
Environmental Tasks	5	4			0.0	11,975.00			3	
HVAC	50	37	737.5	290.5	1,028.0		13,172.95	11	14	
Locksmith	1		17.0		17.0			3		
Machine Repair	7	3	47.5		47.5		569.49	6		2
Paint		1	104.0		104.0			3		
Pipefitting	3	1	124.0	91.0	215.0		221.86	2		5
Plumbing	11	4	170.5		170.5	2,600.00	4,836.48	7		2
Roads & Grounds	5	3	237.0		237.0		546.68	4		1
Totals	362	269	5,581.0	517.5	6,098.5	$ 21,915.55	$ 120,955.36	104	91	45

WORK ORDER ESTIMATING ACTIVITY

	FY 99	FY 00	FY 01	FY 02
No. Jobs Estimated	1066	924	1,332	1,210

EMERGENCY VEHICLE/CONSTRUCTION EQUIPMENT MAINTENANCE SUPPORT

Year	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)
99	858.0	144.0	1,002.0		
00	1,741.5	102.5	1,844.0	12,802.79	15,862.21
01	1,255.5	222.0	1,477.5	34,805.67	9,879.52
02	1,267.5	248.5	1,516.0	37,640.84	13,173.98

APPENDIX 5 of PWS-2

FACILITY ENGINEERING - WARREN
PROPERTY INVENTORY LIST

PREFACE

The real property listings in the appendices do not list each and every real property item affixed to the buildings and facilities.

If any materials, equipment or systems are integral parts of the buildings, facilities or grounds but are not listed in the real property inventory they are still to be considered included in the scope of work.

Examples of materials, equipment and systems that are considered to be integral parts of the buildings, facilities and grounds, but may not be listed are as follows:

STRUCTURE - foundation systems, columns, beams, joists and other structural support systems, walls, floors, ceiling and roof systems, porches, insulation, moldings, base coves, chair rails, facias, soffits, cornices, gables and parapets, gutters, downspouts splash blocks, stairways, rails, ramps, loading docks, bumpers, chimneys, vents, doors, windows, chutes, hatches, paint and other wall and ceiling coverings, carpeting and other floor coverings, locks, signage, toilet partitions, toilet paper holders, soap dispensers, associated hardware, and other components.

MECHANICAL - heating, ventilation, air conditioning, refrigeration, plumbing, piping, faucets, sinks, toilets, urinals, drinking fountains and pneumatic systems, lifts, elevators, overhead cranes, pumps, sumps, and pits, compressors, automated door systems, fire suppression systems, associated hardware and other components.

ELECTRICAL - lighting systems, fixtures, switches, fuses, receptacles, covers, wiring, and conduit systems, junction and splice boxes, grounding systems, timer and photo cell systems, breakers, panels, transformers, meters, intrusion, duress and fire alarm systems, emergency lighting and other components.

ROADS & GROUNDS - storm and sanitary sewer systems, water and electrical systems, natural and propane gas systems, utility poles, roads, sidewalks, pavement surfaces and systems, pavement markings, signs, poles, parking blocks, smoking and bus shelters, fencing and compounds, dumpster pads and enclosures, associated hardware, trees, bushes and shrubs, other components and appurtenances.

BLDG: 7 (58,234 S.F.)

BLDG 7						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 4800V	WESTINGHOUSE	112.5KVA	T83010134	SUB-STATION	5132
	TRANSFORMER 4800V	FAYETTEVILLE	1000KVA	92049-02	SUB-STATION	5133
	SECONDARY BREAKERS (13 EA)	ITE	MULUMITE	50-20163	SUB-STATION	5134
	PRIMARY SWITCH 4800V	WESTINGHOUSE	LOADBREAK	7274A62633	SUB-STATION	5135
	TRANSFORMER 1000 KVA	SORGEL	1000KVA	80513	SUB-STATION	5136
	PRIMARY SWITCH 4800V	SORGEL			SUB-STATION	5137
	SECONDARY BREAKERS 480 (5 EA)	ITE	KC		SUB-STATION	5138
	O.L. SWITCHES 4800V (2 EA)	ALLIS-CHALMERS	DZ-60B	274214-2742B	SUB-STATION	5139
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	E01218TH	EAST END	5168
HR	WINDOW A/C	CARRIER			TIRE LAB	AC2
	AIR COMPRESSOR		2540E10	30T752040	E. SIDE OF BLDG	A1
	CASCADE COLD BOX	RUSSELS	WM76821010	0587508	BATTERY LAB	10146
	CASCADE COLD BOX	RUSSELS	RB6455	03951674	BATTERY LAB	10147
	CASCADE COLD BOX	THERMOTRON	FM35CHM55810C	21-9358	BATTERY LAB	10148
	A/C UNIT	CARRIER	07EA022-620	2994J07756	AIR FLOW LAB	AC1
	VENTILATOR FAN	AMERICAN	75663-A	270-3	OFFICE	V1
	VENTILATOR FAN	AMERICAN	75663-B	270-4	OFFICE	V2
	WINDOW A/C	CARRIER			TIRE LAB	AC3
	INDUSTRIAL AIR CLEANER, AIRMATION	BIOLOGICAL CONT	AMAR-302D			10225
	INDUSTRIAL AIR CLEANER, AIRMATION	BIOLOGICAL CONT	AMAR-302D			10226
	COLD BOX (CB4)	A.ENVIRON SYST	2HD-233	6341		10149
	ROTARY SCREW COMPRESSORS	CEC	EBE99M			5118038
	SCREW COMPRESSOR	CEC	EBE99M	010602515		5118039
	ROOF UNIT	TRANE	NJ0102189D			AC4
PL	CONDENSATE PUMP	DOMESTIC	37REZ	AY-1647	WEST BSMT	0073
	CONDENSATE PUMP	DOMESTIC	37REZ	AY-1647	WEST BSMT	0074
	CONDENSATE PUMP	BELL GOSSETT	23CB-15-40	ODF690-214674	WEST BSMT	0077
	CONDENSATE PUMP	BELL GOSSETT	23CB-15-40	ODF690-214674	WEST BSMT	0078
	CONDENSATE PUMP	BELL GOSSETT	3BB8 3/8BF	118459	BATTERY LAB	0101
	CONDENSATE PUMP	BELL GOSSETT	3BB8 3/8BF	NO TAG	BATTERY LAB	0102

BLDG 7						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	DRINKING FOUNTAIN	SUNROC	NSF14	910738830	AIR FLOW LAB	0080
	DRINKING FOUNTAIN	WESTINGHOUSE	W11D	WA126534	TIRE LAB	0093
	DRINKING FOUNTAIN				BATTERY LAB	0107
	EYE WASHER	SPEAKMAN			BATTERY LAB	0112
	EYE WASHER	HAWS			BATTERY LAB	0113
	HEAT EXCHANGER				CENTER NORTH	0097
	HOT WATER CIRC PUMP	TACO	VI-2508		TUNNEL	0115
	STEAM SPACE HEATER				AIR FLOW LAB	0087
	STEAM STATION	SPENCE			WEST BSMT	0076
	STEAM STATION	SPENCE			WEST BSMT	0079
	STEAM STATION	SPENCE			AIR FLOW LAB	0082
	STEAM STATION	SPENCE			TIRE LAB	0091
	STEAM STATION	SPENCE			CENTER NORTH	0098
	SUMP PUMP	ZOELLER	M137C	SP1	WEST BSMT	0075
	SUMP PUMP				BATTERY LAB	0110
	SUMP PUMP				BATTERY LAB	0111
	UNIT HEATER	JANITROL			AIR FLOW LAB	0083
PL	UNIT HEATER	JANITROL			AIR FLOW LAB	0084
	UNIT HEATER				AIR FLOW LAB	0085
	UNIT HEATER				AIR FLOW LAB	0086
	UNIT HEATER	MODINE			TIRE LAB	0088
	UNIT HEATER	MODINE			TIRE LAB	0089
	UNIT HEATER	MODINE			TIRE LAB	0090
	UNIT HEATER				TIRE LAB	0094
	UNIT HEATER				TIE LAB	0095
	UNIT HEATER	MODINE			BATTERY LAB	0099
	UNIT HEATER	MODINE			BATTERY LAB	0100
	UNIT HEATER				BATTERY LAB	0103
	UNIT HEATER				BATTERY LAB	0104
	UNIT HEATER				BATTERY LAB	0105
	UNIT HEATER				BATTERY LAB	0106
	UNIT HEATER	MODINE			TIRE LAB	0116
	UNIT HEATER	TRANE			TIRELAB	0117
	WATER HEATER	LOCHINVAR	JRC01ZE	CL5787229	AIR FLOW LAB	0081
	WATER HEATER	LOCHINVAR	JRC030E	CA5203661	TIRE LAB	0092
	WATER HEATER	MOR-FLO	ER420	J864515113	TIRE LAB	0096

BLDG 7						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	WATER HEATER	PV1	MDT 6000	077115663	BATTERY LAB	0108
	WATER HEATER	PV1	MDT 6000	077115662	BATTERY LAB	0109

BLDG 7						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
MR	SAW BAND	DO ALL			AIRFLOW LAB	15337
	PUNCH HAND	L/BLACK SMITH			AIRFLOW LAB	15338
	GRINDER BENCH	ROBERTS			AIRFLOW LAB	15339
	GRINDER PEDESTAL	B-LINE			AIRFLOW LAB	15340
	WELDER ARC	AIRCO			AIRFLOW LAB	15341
	LATHE	LODGE/SHIPLEY			AIRFLOW LAB	15342
	MILL	VAN NORMAN			AIRFLOW LAB	15343
	PRESS ARBOR	WILSON			AIRFLOW LAB	15344
	SAW RADIAL	DEWALT			AIRFLOW LAB	15345
	SAW BAND	DO ALL			AIRFLOW LAB	15346
	SANDER BELT	DELTA			AIRFLOW LAB	15347
	CRIMPER	PERTO			AIRFLOW LAB	15348
	DRILL PRESS BENCH	H/SPEED HAMMER			AIRFLOW LAB	15349
	DRILL PRESS BENCH	DELTA			AIRFLOW LAB	15351
	BLOWER	AMERICAN STRND			AIRFLOW LAB	15352
	BLOWER	CHICAGO			AIRFLOW LAB	15354
	BLOWER	ROOTS			AIRFLOW LAB	15355
	BLOWER	AMERICAN			AIRFLOW LAB	15356
	HOIST 1000 LBS	AMERICAN			AIRFLOW LAB	15357
	HOIST 2000 LBS	C&M			AIRFLOW LAB	15358
	BLOWER	AMERICAN			AIRFLOW LAB	15359
	FORMING ROLLS	TENNSMITH			AIRFLOW LAB	15360
	SHEAR	TENNSMITH			AIR FLOW LAB	15901
	HAND BRAKE	TENNSMITH			AIR FLOW LAB	15902
	DYNO TIRE	STRD TESTING LAB			TIRE LAB	15265
	DYNO TIRE	STRD TESTING LAB			TIRE LAB	15266
MR	CRANE 5 TON	SHAW BOX			TIRE LAB	15268
	TESTER PLUNGE	INTERFACE			TIRE LAB	15270
	SAW BAND VERTICAL	MARVEL			TIRE LAB	15271
	CHANGER TIRE	COATS			TIRE LAB	15272
	SPREADER TIRE	BRANICK			TIRE LAB	15273
	CUTTER BEAD	NTL RUBBER MAC			TIRE LAB	15274
	CHANGER TIRE	COATS			TIRE LAB	15276
	GENERATOR	ELEC. PRDCTS			TIRE LAB	15275
	MOTOR GENERATOR	ELEC. PRDCTS			BATT. LAB	15277
	OVEN				BATT. LAB	15278

BLDG 7						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	OVEN				BATT. LAB	15279
	BLAST CLEAN SYSTEM				BATT. LAB	15280

BLDG 8 (14,343 S.F.)

BLDG 8						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
PL	CONDENSATE PUMP	TACO	FM1207		BASEMENT	0137
	CONDENSATE PUMP	TACO	FM1207		BASEMENT	0138
	DRINKING FOUNTAIN	SUNROC	NSF 14	RR76510L	CLEANING	0121
	DRINKING FOUNTAIN	GENERAL ELEC.			JA JONES	0122
	STEAM STATION	SPENCE			BASEMENT	0135
	SUMP PUMP				BASEMENT	0136
	UNIT HEATER				CLEANING	0118
	UNIT HEATER	TRANE			CLEANING	0120
	UNIT HEATER				CENTER	0123
	UNIT HEATER	TRANE			FIRE DEPT	0124
	UNIT HEATER				FIRE DEPT	0125
	UNIT HEATER	TRANE			FIRE DEPT	0126
	UNIT HEATER	TRANE			FIRE DEPT	0127
	UNIT HEATER	TRANE			FIRE DEPT	0128
	UNIT HEATER	TRANE			FIRE DEPT	0129
	UNIT HEATER				FIRE DEPT	0130
	UNIT HEATER	TRANE			POLICE	0131
	UNIT HEATER				CENTER	0132
	UNIT HEATER				CENTER	0133
	UNIT HEATER				CENTER	0134

BLDG 200A (126,433 S.F.)

BLDG 200A						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 750 KVA	SORGEL	750 DRY	91292-2	SUB-STATION	5064
	TRANSFORMER 150 KVA	SORGEL	150 DRY	X14137	SUB-STATION	5065
	SWITCH GEAR W/26 BREAKERS	ITE	750 KVA	1527	SUB-STATION	5066
	MAIN BREAKERS (2 EA)	ITE	KB		SUB-STATION	5067
	SECONDARY BREAKERS (24 EA)	ITE	KB		SUB-STATION	5068
	4800V DISCONNECT	R & IC	400A	35722	SUB-STATION	5069
	4800V DISCONNECT	S/C	600A	34211	SUB-STATION	5070
	ADT SECURITY PANEL	ADT	FOCUS 45		ROOM 1118	5197
	FIRE ALARM PANEL	NATIONAL TIME			ROOM 1175	5198
	SECURITY ALARM	KELTRON	DGP		ROOM 1175	5199
	UPS SYSTEM				UPS ROOM	UP1
HR	EXHAUST FAN	GREENHECK	CBH-36-10	103646	ROOF	11991
	EXHAUST FAN	GREENHECK	CBH-36-10	103643	ROOF	11992
	EXHAUST FAN	GREENHECK	CBH-36-10	103647	ROOF	11993
	EXHAUST FAN	GREENHECK	CBH-36-10	103644	ROOF	11994
	EXHAUST FAN	GREENHECK	CBH-36-10	103640	ROOF	11995
	EXHAUST FAN	GREENHECK	CBH-36-10	103641	ROOF	11996
	EXHAUST FAN	GREENHECK	CBH-36-10	103649	ROOF	11997
	EXHAUST FAN	GREENHECK	CBH-36-10	103642	ROOF	11998
	EXHAUST FAN	GREENHECK	CBH-36-10	103639	ROOF	11999
	A/C ROOF TOP	CARRIER	50DP012600DA	N496476	ROOF	12001
	EXHAUST FAN	LOREN COOK	150AC1-B		ROOF	12002
	EXHAUST FAN	GREENHECK	GB104XQD4A	95682	ROOF	12003
	EXHAUST FAN	GREENBECK	CB804XQD	93801876	ROOF	12005
	EXHAUST FAN	CENTRIMASTER	PRN1100	TMWH-4239	ROOF	12006
	EXHAUST FAN	NUTONE	RF-IN		ROOF	12007
	EXHAUST FAN	GREENHECK	CBH-24-5	103650	ROOF	12011
	EXHAUST FAN	GREENHECK	CBH-36-10	103645	ROOF	12013
	EXHAUST FAN	GREENHECK	CBH-36-10	103648	ROOF	12014
	EXHAUST FAN	GREENHECK	CBH-36-10	103638	ROOF	12015
	EXHAUST FAN	LOREN COOK	165-ACE-8		ROOF	12016
	BARBER COLMAN CONTROLS	BARBER COLMAN	CP8161-333-2		A1017	12113
	A/C BLOWER COIL	TRANE	5RUB-C106C	583F10511	A1017	12114
	A/C CONDENSING UNIT	TRANE	CAUC-C102-B	C83D-07921	S/OUTSIDE	12115
	HVAC UNIT HEATING CONTROLS	GENRL BLOWER	7 B.B.	9695-A	A-1134	12119
	AIR COMPRESSOR	BALDOR	L1304		A-1134	12120
	EXHAUST FAN	UNIMOUNT	A907P10P224R	044F	A-1134	12121
	A/C BLOWER COIL	CARRIER	50BB028300	B914626	A-1161	12123
	AIR COMPRESSOR	EMGLO	B134B5	082284073	A-1161	12124
HR	A/C BLOWER COIL	SANYO	KS2422	0045624	A-1119	12125
	A/C BLOWER COIL	SANYO	KS2422	0045724	1118	12127

BLDG 200A						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	A/C BLOWER COIL	CONTEMPO ENGIN.	CEMW-0532UP	18795	1167B	12130
	A/C BLOWER COIL	CONTEMPO ENGIN.	CEMW-0532UP	18794	1167A	12130
	A/C BLOWER COIL	COMFRT MAKER	H42U22	R914500047	CEILING HLWY BY 1075	12131
	ILG EXHUAST FAN	ILG	83	E0867	COPIER RM 1049	12133
	WINDOW A/C	COMFRT AIR	R-121	0A144B671	A-1123	12148
	AIR COND HEATING CONTROLS	BARBER COLMAN	CP8102-0-1		A-2160	12154
	HVAC UNIT	TRANE	2-18	82385	A-2160	12155
	50 TON CHILLER	TRANE	CGWBC806R/BNJJ42K	L8H21672	A-2139	12156
	AIR HANDLER	GENERAL BLOWER	9 B.B.	19695B	RM 2139	12157
	RADIATION CONTROL PANEL	BARBER COLMAN	CP-8102		A-2139	12158
	EXHAUST FAN	ILG	18SIAM	16600118	A-2139	12159
	A/C HEATING CONTROLS	BARBER COLMAN	CP-8102		A-2160	12160
	AIR HANDLER	TRANE	2-15A	82384	ETEC AREA	12161
	A/C				SNACK SHOP	12162
	WINDOW A/C	W/WESTINGHOUSE	AH124K2T1	AKE027398	A-1006	12164
	A/C BLOWER COIL	SANYO	KS2422	0034142	2ND FLR E/OFC	12166
	WINDOW A/C	WHIRLPOOL	ACQ254XXO	QR4616007	2ND FLR E/OFC	12167
	KITCHEN REFRIGERATOR	KENMORE			1056	12183
	AHU				AUD MECH RM	12182
	REFRIGERATOR	GIBSON	RT14F3W1		A-1095	12184
	REFRIGERATOR	AVANTI	28	D93001632	A-1017	12185
	REFRIGERATOR	AVANTI	28	D93001323	A-1017	12186
	REFRIGERATOR	GIBSON		US TAG J3534	2ND FLR N CTR	12187
	REFRIGERATOR	NORGE	RTF1542B		2175	12188
	CHILL WATER PUMP	AURORA	K-089572-A		CHILLER RM	0379
	CONDENSATE PUMP	WEIL	71-08944-001	R095869	SW CORNER	0350
	CONDENSATE PUMP	WEIL	71-08944-001	R095869	SW CORNER	0351
	CONDENSATE PUMP	HOFFMAN	HCD-4-20-17	C-28433	1161	0361
	CONDENSATE PUMP	HOFFMAN	HCD-4-20-17	C-28433	1161	0362
	COOLING WATER PUMP	BELL GOSSETT	4AB6BF	5791438	2139	0380
	CONDENSOR	TRANE	CAUCC80E2H13	C99B02657	ROOF S/W SIDE	
	CHILLER 50 TON	TRANE	CGWBC806R	12156		13908
	EXHAUST FAN	NUTONE			1119	
	EXHAUST FAN	NUTONE			1120	
	EXHAUST FAN	NUTONE			1121A	
	EXHAUST FAN	NUTONE			1121	
	EXHAUST FAN	NUTONE			1122	
	SANYO SPLIT SYSTEM	SANYO			2ND FL WEST	
	EXHAUST FAN	NUTONE			2ND FL WEST	
	EXHAUST FAN	NUTONE			2ND FL WEST	
	EXHAUST FAN	NUTONE			2148	

BLDG 200A						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
HR	EXHAUST FAN	NUTONE			ELEC DATA INTERCHG	
	EXHAUST FAN	NUTONE			2099	
	EXHAUST FAN	NUTONE			NORTHWEST SIDE	
	EXHAUST FAN	NUTONE			NORTH CENTER SIDE	
	WATER FOUNTAIN (COMPRESSOR)				BY 1158	0373
	WATER FOUNTAIN (COMPRESSOR)				BY 1121	0371
	WATER FOUNTAIN (COMPRESSOR)				BY 1183	0370
	WATER FOUNTAIN (COMPRESSOR)		NSF 14	93246781	BY 2183	0375
	WATER FOUNTAIN (COMPRESSOR)		NSF 14	920604203	BY NE CORNER	0376
	WATER FOUNTAIN (COMPRESSOR)				2136	
	WATER FOUNTAIN (COMPRESSOR)				BY SW CORNER	0374
	WATER FOUNTAIN (COMPRESSOR)		FD700-10-1	820485845	BY 1130	0355
	WATER FOUNTAIN (COMPRESSOR)				BY 1095	0372
	WATER COOLER	ELKAY	EHFA81A	940315970		
	A/C	UNITARY PRODUCTS	N1AHB1206A	ECK8094161	NEW CAVE	10248
	A/C	SANYO	KS3032	0037013	NEW CAVE	10247
	A/C	SANYO	KS1232	0041712	NEW CAVE	10246
	A/C	SANYO	KS1232	0050512	NEW CAVE	10245
	A/C	SANYO	KS3032	0037913	NEW CAVE	10249
	A/C	TRANE	BU-7A	78D-4254	DECKER CONF RM	12111
	A/C	TRANE	MCCA014GAU0BB	K98K15068A	NAC AREA	10236
	A/C	SANYO	KS1211W	0162962	RM1119	10239
	A/C	SANYO	KHS1822	0054274	RM1149	10250
	A/C	SANYO	KHS1822	0053674	RM1150	10234
	A/C	SANYO	KHS1822	0055174	RM1151	10235
	A/C	SANYO	KMS0912	0132994	RM1190	10238
	A/C	SANYO	KMS0912	0132294	RM1191	10237
	A/C	MULTI AQUA	MAC03601N	MAC036F1400049	NAC POWER WALL	10253
	A/C	SANYO	KS1822	0132594	RM2175	10252
	A/C	SANYO	KS2422	0034142	2ND FL E CONF RM	12166
	A/C	SANYO	KS1251	0089801	2ND FL NW	10244
	A/C	SANYO	KS1251	0010694	2ND FL E	10254
	CENTRIFUGAL PUMP W/MOTOR	KERR/BALDOR	02487923-F02	K-114232A1		
PL	DRINKING FOUNTAIN	SUNROC	NSF 14	NN46872D	LOBBY	0353
	DRINKING FOUNTAIN	ELKAY	FD700-10-1	820485845	BY 1130	0355
	DRINKING FOUNTAIN	ELKAY			BY 1183	0370
	DRINKING FOUNTAIN	SUNROC	TYPE 1	A175206H	BY 1121	0371
	DRINKING FOUNTAIN	SUNROC			BY 1095	0372
	DRINKING FOUNTAIN	ELKAY			BY 1158	0373
	DRINKING FOUNTAIN	SUNROC			BY SW CORNER	0374
	DRINKING FOUNTAIN	SUNROC	NSF 14	93246781	BY 2183	0375
	DRINKING FOUNTAIN	SUNROC	NSF 14	920604203	BY NE CORNER	0376
	DRY PIPE TRIP VALVE	UNITED	B		1161	0363

BLDG 200A						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	DRY PIPE TRIP VALVE	UNITED	B		1161	0364
	EYE WASHER	BRADLEY			UPS BATTERY	0365
	EYE WASHER	BRADLEY			REPROGRAPHICS	0377
	HEAT EXCHANGER				1134	0356
	HEAT EXCHANGER	KAM THERMAL		7776	1134	0358
	HEAT EXCHANGER				2139	0389
	HOT WATER CIRC PUMP	BELL GOSSETT	189101		1134	0357
	HYDRONIC CIRC PUMP	BELL GOSSETT	#100	106189	1134	0359
	HYDRONIC CIRC PUMP	RL DEPPMANN	60 11/2A6 3/4BF	RLD1087L	2139	0381
	HYDRONIC CIRC PUMP	RL DEPPMANN	60 11/2A678BF	RLD1783LU	2139	0382
	HYDRONIC CIRC PUMP	RL DEPPMANN	60-1.5A-7BF	D11573K39	2139	0383
	HYDRONIC CIRC PUMP	RL DEPPMANN	60 11/2A6 3/48?	RLD1088LU	2139	0384
	HYDRONIC CIRC PUMP	RL DEPPMANN	60-1.6A	RLD 12258A59	2139	0385
	HYDRONIC CIRC PUMP	RL DEPPMANN	60 11/2A63/4 BF	RLD1065LU	2139	0386
	HYDRONIC CIRC PUMP	RL DEPPMANN	60-1 1/2 A	RLD6460L98	2139	0387
	HYDRONIC CIRC PUMP	RL DEPPMANN	60-1 1/2 A 6 3/4B	RLD1086LU	2139	0388
	STEAM STATION	SPENCE			NORTH	0352
	STEAM STATION	SPENCE			1134	0360
	SUMP PUMP				SW SIDE	0354
	SUMP PUMP				ELEVATOR RM	0366
	SUMP PUMP	CHICAGO	E-7382-2		ELEVATOR RM	0367
	UNIT HEATER	DUNHAM-BUSH			LOADING DOCK	0368
	UNIT HEATER				ELEVATOR RM	0369
	WATER HEATER	AO SMITH	DRE 52	ME93-0274220-916	REPROGRAPHICS	0378

BLDG 200A						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 750 KVA	SORGEL	750 DRY	91292-2	SUB-STATION	5064
	TRANSFORMER 150 KVA	SORGEL	150 DRY	X14137	SUB-STATION	5065
	SWITCH GEAR W/26 BREAKERS	ITE	750 KVA	1527	SUB-STATION	5066
	MAIN BREAKERS (2 EA)	ITE	KB		SUB-STATION	5067
	SECONDARY BREAKERS (24 EA)	ITE	KB		SUB-STATION	5068
	4800V DISCONNECT	R & IC	400A	35722	SUB-STATION	5069
	4800V DISCONNECT	S/C	600A	34211	SUB-STATION	5070
	ADT SECURITY PANEL	ADT	FOCUS 45		ROOM 1118	5197
	FIRE ALARM PANEL	NATIONAL TIME			ROOM 1175	5198
	SECURITY ALARM	KELTRON	DGP		ROOM 1175	5199
	UPS SYSTEM				UPS ROOM	UP1
HR	EXHAUST FAN	GREENHECK	CBH-36-10	103646	ROOF	11991
	EXHAUST FAN	GREENHECK	CBH-36-10	103643	ROOF	11992
	EXHAUST FAN	GREENHECK	CBH-36-10	103647	ROOF	11993

BLDG 200A						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	EXHAUST FAN	GREENHECK	CBH-36-10	103644	ROOF	11994
	EXHAUST FAN	GREENHECK	CBH-36-10	103640	ROOF	11995
	EXHAUST FAN	GREENHECK	CBH-36-10	103641	ROOF	11996
	EXHAUST FAN	GREENHECK	CBH-36-10	103649	ROOF	11997
	EXHAUST FAN	GREENHECK	CBH-36-10	103642	ROOF	11998
	EXHAUST FAN	GREENHECK	CBH-36-10	103639	ROOF	11999
	A/C ROOF TOP	CARRIER	50DP012600DA	N496476	ROOF	12001
	EXHAUST FAN	LOREN COOK	150AC1-B		ROOF	12002
	EXHAUST FAN	GREENHECK	GB104XQD4A	95682	ROOF	12003
	EXHAUST FAN	GREENBECK	CB804XQD	93801876	ROOF	12005
	EXHAUST FAN	CENTRIMASTER	PRN1100	TMWH-4239	ROOF	12006
	EXHAUST FAN	NUTONE	RF-IN		ROOF	12007
	EXHAUST FAN	GREENHECK	CBH-24-5	103650	ROOF	12011
	EXHAUST FAN	GREENHECK	CBH-36-10	103645	ROOF	12013
	EXHAUST FAN	GREENHECK	CBH-36-10	103648	ROOF	12014
	EXHAUST FAN	GREENHECK	CBH-36-10	103638	ROOF	12015
	EXHAUST FAN	LOREN COOK	165-ACE-8		ROOF	12016
	BARBER COLMAN CONTROLS	BARBER COLMAN	CP8161-333-2		A1017	12113
	A/C BLOWER COIL	TRANE	5RUB-C106C	583F10511	A1017	12114
	A/C CONDENSING UNIT	TRANE	CAUC-C102-B	C83D-07921	S/OUTSIDE	12115
	HVAC UNIT HEATING CONTROLS	GENRL BLOWER	7 B.B.	9695-A	A-1134	12119
	AIR COMPRESSOR	BALDOR	L1304		A-1134	12120
	EXHAUST FAN	UNIMOUNT	A907P10P224R	044F	A-1134	12121
	A/C BLOWER COIL	CARRIER	50BB028300	B914626	A-1161	12123
	AIR COMPRESSOR	EMGLO	B134B5	082284073	A-1161	12124
HR	A/C BLOWER COIL	SANYO	KS2422	0045624	A-1119	12125
	A/C BLOWER COIL	SANYO	KS2422	0045724	1118	12127
	A/C BLOWER COIL	CONTEMPO ENGIN.	CEMW-0532UP	18795	1167B	12130
	A/C BLOWER COIL	CONTEMPO ENGIN.	CEMW-0532UP	18794	1167A	12130
	A/C BLOWER COIL	COMFRT MAKER	H42U22	R914500047	CEILING HLWY BY 1075	12131
	ILG EXHUAST FAN	ILG	83	E0867	COPIER RM 1049	12133
	WINDOW A/C	COMFRT AIR	R-121	0A144B671	A-1123	12148
	AIR COND HEATING CONTROLS	BARBER COLMAN	CP8102-0-1		A-2160	12154
	HVAC UNIT	TRANE	2-18	82385	A-2160	12155
	50 TON CHILLER	TRANE	CGWBC806R/BNJJ42K	L8H21672	A-2139	12156
	AIR HANDLER	GENERAL BLOWER	9 B.B.	19695B	RM 2139	12157
	RADIATION CONTROL PANEL	BARBER COLMAN	CP-8102		A-2139	12158
	EXHAUST FAN	ILG	18SIAM	16600118	A-2139	12159
	A/C HEATING CONTROLS	BARBER COLMAN	CP-8102		A-2160	12160
	AIR HANDLER	TRANE	2-15A	82384	ETEC AREA	12161
	A/C				SNACK SHOP	12162
	WINDOW A/C	W/WESTINGHOUSE	AH124K2T1	AKE027398	A-1006	12164

BLDG 200A						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	A/C BLOWER COIL	SANYO	KS2422	0034142	2ND FLR E/OFC	12166
	WINDOW A/C	WHIRLPOOL	ACQ254XXO	QR4616007	2ND FLR E/OFC	12167
	KITCHEN REFRIGERATOR	KENMORE			1056	12183
	AHU				AUD MECH RM	12182
	REFRIGERATOR	GIBSON	RT14F3W1		A-1095	12184
	REFRIGERATOR	AVANTI	28	D93001632	A-1017	12185
	REFRIGERATOR	AVANTI	28	D93001323	A-1017	12186
	REFRIGERATOR	GIBSON		US TAG J3534	2ND FLR N CTR	12187
	REFRIGERATOR	NORGE	RTF1542B		2175	12188
	CHILL WATER PUMP	AURORA	K-089572-A		CHILLER RM	0379
	CONDENSATE PUMP	WEIL	71-08944-001	R095869	SW CORNER	0350
	CONDENSATE PUMP	WEIL	71-08944-001	R095869	SW CORNER	0351
	CONDENSATE PUMP	HOFFMAN	HCD-4-20-17	C-28433	1161	0361
	CONDENSATE PUMP	HOFFMAN	HCD-4-20-17	C-28433	1161	0362
	COOLING WATER PUMP	BELL GOSSETT	4AB6BF	5791438	2139	0380
	CONDENSOR	TRANE	CAUCC80E2H13	C99B02657	ROOF S/W SIDE	
	CHILLER 50 TON	TRANE	CGWBC806R	12156		13908
	EXHAUST FAN	NUTONE			1119	
	EXHAUST FAN	NUTONE			1120	
	EXHAUST FAN	NUTONE			1121A	
	EXHAUST FAN	NUTONE			1121	
	EXHAUST FAN	NUTONE			1122	
	SANYO SPLIT SYSTEM	SANYO			2^{ND} FL WEST	
	EXHAUST FAN	NUTONE			2^{ND} FL WEST	
	EXHAUST FAN	NUTONE			2^{ND} FL WEST	
	EXHAUST FAN	NUTONE			2148	
HR	EXHAUST FAN	NUTONE			ELEC DATA INTERCHG	
	EXHAUST FAN	NUTONE			2099	
	EXHAUST FAN	NUTONE			NORTHWEST SIDE	
	EXHAUST FAN	NUTONE			NORTH CENTER SIDE	
	WATER FOUNTAIN (COMPRESSOR)				BY 1158	0373
	WATER FOUNTAIN (COMPRESSOR)				BY 1121	0371
	WATER FOUNTAIN (COMPRESSOR)				BY 1183	0370
	WATER FOUNTAIN (COMPRESSOR)		NSF 14	93246781	BY 2183	0375
	WATER FOUNTAIN (COMPRESSOR)		NSF 14	920604203	BY NE CORNER	0376
	WATER FOUNTAIN (COMPRESSOR)				2136	
	WATER FOUNTAIN (COMPRESSOR)				BY SW CORNER	0374
	WATER FOUNTAIN (COMPRESSOR)		FD700-10-1	820485845	BY 1130	0355
	WATER FOUNTAIN (COMPRESSOR)				BY 1095	0372
	WATER COOLER	ELKAY	EHFA81A	940315970		
	A/C	UNITARY PRODUCTS	N1AHB1206A	ECK8094161	NEW CAVE	10248

BLDG 200A						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	A/C	SANYO	KS3032	0037013	NEW CAVE	10247
	A/C	SANYO	KS1232	0041712	NEW CAVE	10246
	A/C	SANYO	KS1232	0050512	NEW CAVE	10245
	A/C	SANYO	KS3032	0037913	NEW CAVE	10249
	A/C	TRANE	BU-7A	78D-4254	DECKER CONF RM	12111
	A/C	TRANE	MCCA014GAU0BB	K98K15068A	NAC AREA	10236
	A/C	SANYO	KS1211W	0162962	RM1119	10239
	A/C	SANYO	KHS1822	0054274	RM1149	10250
	A/C	SANYO	KHS1822	0053674	RM1150	10234
	A/C	SANYO	KHS1822	0055174	RM1151	10235
	A/C	SANYO	KMS0912	0132994	RM1190	10238
	A/C	SANYO	KMS0912	0132294	RM1191	10237
	A/C	MULTI AQUA	MAC03601N	MAC036F1400049	NAC POWER WALL	10253
	A/C	SANYO	KS1822	0132594	RM2175	10252
	A/C	SANYO	KS2422	0034142	2ND FL E CONF RM	12166
	A/C	SANYO	KS1251	0089801	2ND FL NW	10244
	A/C	SANYO	KS1251	0010694	2ND FL E	10254
	CENTRIFUGAL PUMP W/MOTOR	KERR/BALDOR	02487923-F02	K-114232A1		
PL	DRINKING FOUNTAIN	SUNROC	NSF 14	NN46872D	LOBBY	0353
	DRINKING FOUNTAIN	ELKAY	FD700-10-1	820485845	BY 1130	0355
	DRINKING FOUNTAIN	ELKAY			BY 1183	0370
	DRINKING FOUNTAIN	SUNROC	TYPE 1	A175206H	BY 1121	0371
	DRINKING FOUNTAIN	SUNROC			BY 1095	0372
	DRINKING FOUNTAIN	ELKAY			BY 1158	0373
	DRINKING FOUNTAIN	SUNROC			BY SW CORNER	0374
	DRINKING FOUNTAIN	SUNROC	NSF 14	93246781	BY 2183	0375
	DRINKING FOUNTAIN	SUNROC	NSF 14	920604203	BY NE CORNER	0376
	DRY PIPE TRIP VALVE	UNITED	B		1161	0363
	DRY PIPE TRIP VALVE	UNITED	B		1161	0364
	EYE WASHER	BRADLEY			UPS BATTERY	0365
	EYE WASHER	BRADLEY			REPROGRAPHICS	0377
	HEAT EXCHANGER				1134	0356
	HEAT EXCHANGER	KAM THERMAL		7776	1134	0358
	HEAT EXCHANGER				2139	0389
	HOT WATER CIRC PUMP	BELL GOSSETT	189101		1134	0357
	HYDRONIC CIRC PUMP	BELL GOSSETT	#100	106189	1134	0359
	HYDRONIC CIRC PUMP	RL DEPPMANN	60 11/2A6 3/4BF	RLD1087L	2139	0381
	HYDRONIC CIRC PUMP	RL DEPPMANN	60 11/2A678BF	RLD1783LU	2139	0382
	HYDRONIC CIRC PUMP	RL DEPPMANN	60-1.5A-7BF	D11573K39	2139	0383
	HYDRONIC CIRC PUMP	RL DEPPMANN	60 11/2A6 3/48?	RLD1088LU	2139	0384
	HYDRONIC CIRC PUMP	RL DEPPMANN	60-1.6A	RLD 12258A59	2139	0385
	HYDRONIC CIRC PUMP	RL DEPPMANN	60 11/2A63/4 BF	RLD1065LU	2139	0386
	HYDRONIC CIRC PUMP	RL DEPPMANN	60-1 1/2 A	RLD6460L98	2139	0387
	HYDRONIC CIRC PUMP	RL DEPPMANN	60-1 1/2 A 6 3/4B	RLD1086LU	2139	0388

BLDG 200A						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	STEAM STATION	SPENCE			NORTH	0352
	STEAM STATION	SPENCE			1134	0360
	SUMP PUMP				SW SIDE	0354
	SUMP PUMP				ELEVATOR RM	0366
	SUMP PUMP	CHICAGO	E-7382-2		ELEVATOR RM	0367
	UNIT HEATER	DUNHAM-BUSH			LOADING DOCK	0368
	UNIT HEATER				ELEVATOR RM	0369
	WATER HEATER	AO SMITH	DRE 52	ME93-0274220-916	REPROGRAPHICS	0378

200B (50,591 S.F.)

BLDG 200B						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87636FG	HALLWAY	5191
	SIMPLEX SCC	SIMPLEX	2120		HALLWAY	5192
	SIMPEX FIRE ALARM PANEL	SIMPLEX	2120	X87637FG	HALLWAY	5193
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	G08179JJ	HALLWAY	5194
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	4100	J16914FN	HALLWAY	5195
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	4100	J16915FN	HALLWAY	5196
HR	EXHAUST FAN #1	LOREN COOK	18PR		CAFE ROOF	12069
	EXHAUST FAN #2	LOREN COOK	120AC		CAFE ROOF	12070
	EXHAUST FAN #3	LOREN COOK	150 ACR-B		CAFE ROOF	12071
	EXHAUST FAN #4	LOREN COOK	50 ACB		CAFE ROOF	12072

BLDG 200B						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	EXHAUST FAN #5	LOREN COOK	150 ACR-B		CAFE ROOF	12073
	EXHAUST FAN #6	LOREN COOK	175 ACE		CAFE ROOF	12074
	EXHAUST FAN #7	LOREN COOK	8 PR		CAFE ROOF	12075
	EXHAUST FAN #8	LOREN COOK	100 ACE-B		ADIT. ROOF	12076
	EXHAUST FAN #9	LOREN COOK	100 ACE-B		ADIT ROOF	12077
	A/C				SNACK SHOP	12162
	AIR HANDLER				AUD MECH RM	12181
	EXHAUST FAN	LOREN COOK	135 ACE-B		ROOF	12080
	EXHAUST FAN #10	LOREN COOK	CUB-200		ROOF	12081
	EXHAUST FAN #11	AMMERMAN	DRL 620	34031	ROOF	12082
	EXHAUST FAN #12	LOREN COOK	135 0100		ROOF	12083
	EXHAUST FAN #				ROOF	12084
	EXHAUST FAN #13	LOREN COOK	100 ACE-B		ROOF	12085
	EXHAUST FAN #14	LOREN COOK	90C 15 DL		ROOF	12086
	EXHAUST FAN #15				ROOF	12087
	EXHAUST FAN #16	LOREN COOK	135C10D		ROOF	12088
	EXHAUST FAN #17	LOREN COOK	135ACE-B		ROOF	12089
	EXHAUST FAN #18	LOREN COOK	135ACE-B		ROOF	12090
	A/C	SANYO	KS3032	0034093	SNACK SHOP	10264
	FREEZER	RAETONE	AF-47-S5	T-8411OR32	CAFÉ	12092
	REFRIGERATOR	RAETONE	AR-47-S5	G-8406R62	CAFÉ	12093
	ICE MACHINE	MANITOWOC	0400	86920295	CAFÉ	12094
	REFRIGERATOR	TRAUT-SEN	7RHT232WVRO	20965586	CAFÉ	12095
	WINDOW A/C UNIT	CARRIER	51CME112101K	0190V00715	CAFÉ	12096
	WINDOW A/C UNIT	CARRIER	51CME112101K	019OV00724	CAFÉ	12097
	REFRIGERATOR UNDER GRILLE		60426		CAFÉ	12098
	REFRIGERATOR SHOWCASE	CARTER	CC-45-RR	059497-37002	CAFÉ	12099
	REFRIGERATOR SALAD CASE	CARTER	CC-45-RR	402022013	CAFÉ	12100
	REFRIGERATOR CASE	JORDON	VWT-4-G	F4251084E	CAFÉ	12101
	REFRIGERATOR CASE (B00222D13)	NA	CC-7C-RO	05950137002	CAFÉ	12102
	A/C BLOWER COIL	TRANE	BU7A	78D14297	CAFÉ	12103
	A/C BLOWER COIL	TRANE	BU7A	78609850	CAFÉ	12104
	A/C BLOWER COIL	TRANE	BU7A	78B12644	CAFÉ	12105
	A/C BLOWER COIL	TRANE	BU7A	78D14292	CAFÉ	12106
	WINDOW A/C				CAFÉ KITCHEN	12096
HR	WINDOW A/C				CAFÉ KITCHEN	12097
	AIR HANDLER	TRANE			CAFÉ	12103
	AIR HANDLER	TRANE			CAFÉ	12104
	AIR HANDLER	TRANE			CAFÉ	12105
	AIR HANDLER	TRANE			CAFÉ	12106
	A/C BLOWER COIL	TRANE	BU7A	D14554	DECKER ROOM	12111
	H.V. UNIT	MARLO	F-59	45597	R-1009	12112
	REACH-IN FREEZER					10059
	COOLER REACH-IN					10060

BLDG 200B						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	A/C BLOWER COIL	BRYANT	505C048CVHFC	059C32825	B-1103	12117
	WINDOW A/C	CARRIER	51HKA333351	R90048727	B-1034	12136
	A/C BLOWER COIL	LIEBERT	CU66A	34368	B-1034	12137
	WINDOW A/C	EMERSON	24BD44-A	18C675868	B-1055	12138
	HOT WATER ZONE CONTROLS	HONEYWELL	W964F		B-1045	12139
	H.V.A.C UNIT	CARRIER	39H23492	67300425VL	B-1046	12140
	H.V.A.C. UNIT	MARLO	F7.7	45597	B-1046	12141
	WINDOW A/C	EMERSON	10BC12-B	19L481517	B-1061	12142
	WINDOW A/C	SIGNITURE			B-1042	12143
	BLOWER COIL	SANYO	K1211W	0078892	B-1041	12144
	A/C	SANYO	KMS0912	0121903	RMB1052	10264
	A/C	SANYO	KMS1212	0026412	RMB1053	10265
	A/C	SANYO	KMS1212	0026112	RMB1055	10266
	A/C	SANYO	KMS0912	0121803	RMB1056	10267
	A/C	SANYO	KMS0912	0122103	RMB1061	10268
	A/C	SANYO	KMS0912	0119303	RMB1060	10269
	A/C	SANYO	KMS0912	0122603	RMB1041	10270
	A/C	SANYO	KMS0912	01208/033	RMB1040	10271
	A/C	SANYO	KMS0912	0122003	RMB1042	10272
	A/C	SANYO	KMS0912	0125103	RMB1043	10273
	A/C	SANYO	KMS0912	0119203	RMB1056A	10274
	A/C	SANYO	KMS0912	0121703	RMB1052A	10275
	A/C	SANYO			SNACK SHOP	10276
	H.V UNIT CAFETERIA	GENR'L BLOWER	4.5 B.B.	19695C	BASEMENT	12146
	EXHAUST FAN	SWART OUT			STEAM TUNNEL	12147
	A/C BLOWER COIL	CARRIER	FB4ANF024	0794A01804	B-1031	12162
	A/C UNIT	FRIGIDAIRE	ASL-300T	B-242198	B-1063	12168
	WINDOW A/C	FRIEDRICH	SM13F10	GC4862	B-1067	12169
	WINDOW A/C	CARRIER	51HKA229301	U117218	B-1066	12170
	A/C BLOWER COIL	CARRIER	40RR08530	2391F62516	B-1098	12171
	HVAC UNIT	CARRIER	39AC9C97911	61371789	B-1094	12172
	PNEUMATIC CONTROL	HONEYWELL			B-1094	12173
	REFRIGERATOR	GENERAL ELECT	TB14SNB	FN591543	B-1090	12174
	REFRIGERATOR	FOSTER	B-1-65		B-1081	12175
	REFRIGERATOR	GENERAL ELECT	TBX18PG		B-1081	12176
	EXHAUST FAN	LOREN COOK	135ACE-B		AUDIT ROOF	12178
	EXHAUST FAN	LOREN COOK	150ACE-B		AUDIT ROOF	12179
	EXHAUST FAN	LOREN COOK	100ACE-B		AUDIT ROOF	12180
	A/C BLOWER	SANYO	KS2422	00115522	AUDIT CNTRL RM	12181
	HVAC UNIT	MARLO	F17.4	45597	AUDIT MECH RM	12182
	REFRIGERATOR	GERALD		TAG P3661	B-1050	12189
	WINDOW A/C UNIT	W/WESTINGHOUSE	AH107A1D1	AVL17424	GERMAN LIA OF	12190
	SANYO SPLIT SYSTEM	SANYO			BY B-1045	
PL	DRINKING FOUNTAIN	SUNROC			BY 1051	0407

BLDG 200B						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	DRINKING FOUNTAIN	ELKAY			CAFETERIA	0415
	DRINKING FOUNTAIN	ELKAY			CAFETERIA	0416
	EYE WASHER	HAWS			MEDIA CENTER	0403
	EYE WASHER	BRADLEY			MEDIA CENTER	0404
	EYE WASHER	HAWS			MEDIA CENTER	0405
	GREASE TRAP				BASEMENT	0400
	GREASE TRAP				BASEMENT	0401
	HEAT EXCHANGER				BASEMENT	0391
	HOT WATER CIRC PUMP	BELL GOSSETT	189101		BASEMENT	0392
PL	HOT WATER CIRC PUMP	BELL GOSSETT	S-25BF		1045	0410
	HOT WATER CIRC PUMP	BELL GOSSETT			1045	0411
	HOT WATER HEAT EXCHANGER				1045	0412
	HYDRONIC CIRC PUMP	BELL GOSSETT			MEDIA CENTER	0406
	HYDRONIC CIRC PUMP	BELL GOSSETT	186863		1045	0408
	HYDRONIC HEAT EXCHANGER				1045	0409
	LIQUID MOVER	JOHNSON	LMJ-A-22-L130	3515367	BASEMENT	0393
	LIQUID MOVER	JOHNSON	LMH-A-22-C1-30	8515367	BASEMENT	0394
	LIQUID MOVER	JOHNSON	LMH-A-22-C1-30	8515367	BASEMENT	0398
	STEAM STATION	SPENCE			BASEMENT	0390
	STEAM STATION	SPENCE			BASEMENT	0397
	STEAM STATION	SPENCE			BASEMENT	0399
	STEAM STATION	SPENCE			AUDITORIUM	0402
	STEAM STATION	SPENCE			1045	0413
	SUMP PUMP				BASEMENT	0395
	SUMP PUMP				BASEMENT	0396
	UNIT HEATER				AUDITORIUM	0414

200C (82,265 S.F.)

BLDG 200C						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 750 KVA	SORGEL	750 DRY	91292-1	SUB-STATION	5071
	TRANSFORMER 1000 KVA	SORGEL	1000 DRY	91291	SUB-STATION	5072
	SWITCH 4800V	R & IE	400A	35723	SUB-STATION	5073
	SWITCH 4800V	R & IE	400A	35721	SUB-STATION	5074
	SWITCH 4800V	FPE	600A	2658D2430	SUB-STATION	5075
	SECONDARY BREAKERS (28 EA)	ITE	KB		SUB-STATION	5076
	MAIN BREAKERS (2 EA)	ITE	KB		SUB-STATION	5077
	MOOSE SECURITY ALARM	MOOSE	Z1100		ROOM 1135	5200

BLDG 200C						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	MOOSE SECURITY ALARM	MOOSE	Z1100		ROOM 1044	5201
	ADT SECURITY SYSTEM	ADT	FOCUS 45		ROOM C1104	5202
	CHEMTRONIC FIRE ALARM	CHEMTRON	MICRO 1		ROOM C1104	5203
HR	WINDOW A/C	CARRIER	51HKA229301	U238143	C-1200	12135
	CV BOX W/3 WAY POWERS VALVE	TAG MISSING			C1222	12872
	EXHAUST FAN	LOREN COOK	13 ACE 8	150-81-00	ROOF	13816
	CHILLED WATER PUMP	B.L. DEPMAN	1531-4BO-8-625B1		C1223	13821
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC56X13	34640	ROOF	13822
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC72X24	34637	ROOF	13823
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC48X30	13825	ROOF	13825
	SANYO A/C CONDENSOR	SANYO	CLR822	001322	ROOF	13827
	ROOFTOP A/C	COMFORT MAKER	PAMAOZ461	B931133933	C1206	13829
	EXHAUST FAN	LOREN COOK	210 ACE 1	155081-00	ROOF	13830
	EXHAUST FAN	GREEN HECK	GB-14-5	87K05350	ROOF	13831
	EXHAUST FAN	LOREN COOK	10 ACE 13	15901-06	ROOF	13832
	EXHAUST FAN	LOREN COOK	15ACEB	159081-00	ROOF	13833
	EXHAUST FAN	LOREN COOK	150CLOD	531909600	ROOF	13834
	EXHAUST FAN	LOREN COOK	100 ACFB	515908100	ROOF	13835
	EXHAUST FAN	LOREN COOK	135 ACE 17	159081-00	ROOF	13836
	EXHAUST FAN	LOREN COOK	150CLOD	007538239V00	ROOF	13837
	EXHAUST FAN	LOREN COOK	210 ACE 8	1590 81-00	ROOF	13838
	EXHAUST FAN	LOREN COOK	70C10B	5174775-00	ROOF	13839
	EXHAUST FAN	LOREN COOK	15-ACE-8	15971-00	ROOF	13840
	EXHAUST FANS	LOREN COOK	15 ACE-B	1590810002184	ROOF	13841
	HERMETIC SCREW LIQUID CHILLER	CARRIER	10XB14000401	494514	C1223	13842
	AIR HANDLER H-V AS	DUNHAM BUSH	AHF5100	71257305A37M	C1223	13843
HR	AIR COMPRESSOR	HONEYWELL	Z1D61066	OBJ5501-1	C1223	13844
	QYGEN DEFICENCY MONITOR	SENTECH	102	00360	C1223	13845
	CHILLED WATER MOTOR	MARGTHON	WVL254TTP504		C1223	13847
	AIR HANDLER H.V.	DUNHAM BUSH			C1223	13848
	WINDOW A/C 9000 BTU	SANYO	SA91-1		C1137	13849
	AIR HANDLER H.V.A.C. UNIT	CARRIER			C1127	13852
	AIR HANDLER H.V.A.C. #3	DUNHAM BUSH			C1126	13853
	AIR HANDLER H.V.A.C. #4	DUNHAM BUSH			C1126	13854
	SANYO A/C	SANYO	K53012W	0001311	C1118	13855
	SANYO A/C	SANYO	KS03012W	0023304	C1118	13856
	AIR HANDLER H.V.A.C	DUNHAM BUSH			C1118	13857
	COMPUTER RM A/C	DATA AIR	DAGD-0834	87-0263B	C1104	13858
	COMPUTER RM A/C	DATA AIR	DAGD-0834	87-0264-B	C1104	13859
	SANYO A/C EVAPORATOR (SPLIT SYS)	SANYO	K3012W	0017604	C1212	13860
	COMPUTE RM A/C (SPLIT SYS)	LIEBERT	CU66A	61712-B	C1214	13861
	WINDOW A/C	CARRIER			C1213	13862
	AIR HANDLER H.V.7	DUNHAM BUSH			C1201	13863
	SANYO SPLIT SYSTEM A/C	SANYO	K51822		C1201	13864

BLDG 200C						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	A/C ROOFTOP	YORK	DZCE060A25B	NEWM277010	ROOF	13865
	WINDOW A/C	WESTINGHOUSE	AH104MIMZ	MNE195679	C1201	13866
	WINDOW A/C	SEARS	10670220	9F135514	C1206	13867
	CASCADE SYSTEM	RUSSEL	GD-8-105-105	12921259	C1206	13868
	SELF-CONT. RECIRCULATING CHILLER	NESLAB	336104040201	89JM507150-1	C1206	13869
	CV BOX W/3 WAY POWERS VALVE	TAG MISSING			C1222	13870
	CV BOX W/3 WAY POWERS VALVE	TAG MISSING			C1222	13871
	DATA AIR COMPUTER ROOM A/C	DATA-AIR	DAGD-0834	88-0894-B	VEGETRONICS	13873
	ROOFTOP	TRANE	BTC130G400DB	B42144001D	ROOF	13874
	COOLING TOWER	B.A.C.	15200	85400028	ROOF	13875
	FRESH AIR INTAKE W/DAMPERS	TAG MISSING			ROOF	13876
	PUMP ASSEMBLY	ACE	ACH200-TOP	118549	ROOF	13877
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC50X13	13878	ROOF	13878
	PUMP ASSEMBLY	ACE	ACH-200-TOP	126916	ROOF	13879
	SANYO A/C CONDENSOR	SANYO	C3012	0018104	SOUTH CORNER	13880
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC24X12	34643	ROOF	13881
	CONDENSOR	SANYO	CS3012	00269024	ROOF	13882
	CONDENSOR UNIT	SANYO	CS3012	0000411	ROOF	13883
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN			ROOF	13884
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC80X13	34629	ROOF	13886
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC60X20	34627	ROOF	13887
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC60X20	34632	ROOF	13888
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC-30003	34882	ROOF	13889
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN			ROOF	13890
HR	WINDOW AIR CONDITIONER	CARRIER	SIHKG224351	V605252	C1050	13891
	WINDOW AIR CONDITIONER	COMFORT AIR	R-81	QA1447693	C1049	13892
	SPLIT SYSTEM AIR CONDITIONER	DATA-AIR	DTGD-0334	87-1427-B	C1045	13893
	CONDENSING UNIT	BOHN			EAST END	13894
	GLYCOL PUMP	ACE	GH-75-3PH-TOP	119108	EAST END	13895
	ROOFTOP AIR CONDITIONER	YORK	BC3E060A46A	NBBM009932	ROOF	13897
	EXHAUST FAN	LORNE COOK	105AC-6		ROOF	13898
	CONDENSING UNIT	TRANE	RAUBC206AB101	J82F70260	TOP PENTHOUSE	13899
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC60X20	34620	ROOF	13900
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC60X20	34636	ROOF	13901
	CONDENSING UNIT	DATA-AIR	DAFC-17	J88R26127	ROOF	13903
	FRESH AIR INTAKE W/DAMPERS	AMMERMAN	RC80X13	34630	ROOF	13904
	EXHAUST FAN	TLG	221-030-GA		ROOF	13905
	AIR HANDLER H.V.A.C	TRANE	K82665628	CC8814CSICD	C1024	13906
	AIR HANDLER				C1024	13907
	CHILLER GO TON	TRANE	CGAEC604AAA1FC	JRW 09J93M83389	SOFTWARE LAB	13908
	AIR HANDLER FOR CHILLER	TRANE	CLCH-IM-15A		SOFTWARE LAB	13909
	PUMP MOTOR B&G	BELL GOSSETT	8075A	X02W347R118M	SOFTWARE LAB	13910
	CENTRIFUGAL PUMP	BELL GOSSETT	3X9 387737		SOFTWARE LAB	13911
	AIR COMPRESSOR	QUINCY	OC005035X1	5032911	SOFTWARE LAB	13912

BLDG 200C						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	COMPRESSED AIR DRYER	HANKISON	8005	0331-101-9312-1586N	SOFTWARE LAB	13913
	VAV BOX #5 OBSERVATION RM	TITUS	ESV3000		SOFTWARE LAB	13914
	VAV BOX #6 AUDITORIUM	TITUS	ESV3000		SOFTWARE LAB	13915
	VAV BOX #4 SIMULATION RM	TITUS	ESV3000		SOFTWARE LAB	13917
	VAV BOX #3 COMPUTER RM	TITUS	ESV3000		SOFTWARE LAB	13918
	VAV BOX #2 COMPUTER RM OFFICE	TITUS	ESV3000		SOFTWARE LAB	13919
	VAV BOX #1 GENERAL AREA	TITUS	ESV3000		SOFTWARE LAB	13920
	PNEUMATIC CONTROL BOX	JOHNSON CONTROLS	M-8100		SOFTWARE LAB	13921
	MODUTROL MOTOR	HONEYWELL	M734H1018		C1024	13922
	MODUTROL MOTOR	HONEYWELL	M734H1000		C1024	13923
	MODUTROL MOTOR	HONEYWELL	M734H1000		C2046	13924
	MODUTROL MOTOR	HONEYWELL	M734H1000		C1024	13925
	MODUTROL MOTOR	HONEYWELL			C1024	13926
	MODUTROL MOTOR	HONEYWELL			C1024	13927
	MODUTROL MOTOR	HONEYWELL			C1024	13928
	MODUTROL	HONEYWELL			C1024	13928
	PNEUMATIC ZONE CONTROLS	HONEYWELL			C1223	13930
	MODUTROL MOTOR	HONEYWELL	MN-Q5001-D1000		PRECEPT LAB CTR	
	MODUTROL MOTOR	HONEYWELL	MN-Q5001-D1000		PRECEPT LAB CTR	
	MODUTROL MOTOR	HONEYWELL	MN-Q5001-D1000		PRECEPT LAB CTR	
	MODUTROL MOTOR	HONEYWELL	MN-Q5001-D1000		PRECEPT LAB CTR	
	AIR HANDLER		MN-S1OUB-20-4-2		PRECEPT LAB UNIT 1	
	AIR HANDLER		MN-15--MB		PRECEPT LAB	
	CONTROL PANEL	HONEYWELL			PRECEPT LAB	
	PUMPOUT UNIT	CARRIER	MN-19X0B4280603	45745	C1223	
	RTU	YORK	D2CG180N24046ERCE	221101545L	ADVANCED CONCEPTS	10240
	RTU	TRANE	YSC072A3RHA0GC000	221101545L	VETRONICS LAB	10241
	RTU	TRANE	YSC090A3RHA0J000A	221101621L	RM 1044	10242
	EMI SPLIT UNIT				RM1136	10243
	PKG GAS/ELECTRIC 4 TON ROOF UNIT	TRANE			NORTH C-1042	10227
	PKG GAS/ELECTRIC 4 TON ROOF UNIT	TRANE			SOUTH	10228
	RTU	YORK			MOBILITY BAY AREA	10229
	RTU	YORK			MOBILITY OFFICE	10230
	RTU	YORK			ROBOTICS LAB	10231
	RTU	YORK			SURVIVABILITY WEST	10232
	HVAC SYSTEM				CAVE C-1010	10233
PL	CHILL WATER PUMP	RL DEPPMANN			C-1222	0433
	CONDENSATE PUMP	HOFFMAN	TYPE 6-20-A (1281)		C-1044	0419
	CONDENSATE PUMP	BELL GOSSETT	151-500	00776867622	C-1127	0421
	CONDENSATE PUMP	BELL GOSSETT	151-500	00776867622	C-1127	0422
	CONDENSATE PUMP	HOFFMAN	WC-8-2-B	160030	MEDIA CTR STO	0436
	COOLING WATER PUMP	BELL GOSSETT			C-1222	0432
	DRINKING FOUNTAIN	SUNROC			BY 1045	0418

BLDG 200C						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	DRINKING FOUNTAIN	ELKAY			BY C-1122	0420
	DRINKING FOUNTAIN	WESTINGHOUSE			C-1215	0435
	DRINKING FOUNTAIN	WESTINGHOUSE			BY C-1140	0437
	EYE WASHER	SPEAKMAN			C-1215	0434
	GAS REGULATOR	SPRAGUE	GRN/WT	B34IMRV	NW CORNER	0417
	HOT WATER CIRC PUMP	BELL GOSSETT	189101		C-1127	0425
	HOT WATER HEAT EXCHANGER				C-1127	0426
	HYDRONIC CIRC PUMP	BELL GOSSETT	186863		C-1127	0427
	HYDRONIC CIRC PUMP	BELL GOSSETT			C-1127	0428
	HYDRONIC HEAT EXCHANGER				C-1127	0429
	STEAM STATION	SPENCE			C-1127	0423
	STEAM STATION	SPENCE			C-1127	0424
	SUMP PUMP				C-1127	0430
	SUMP PUMP	ITT	1.5HP145CXB3	1-23918-1-1	C-1127	0431
MR	BANDSAW	ROCKWELL			COUNTERMSR	15193
	DRILL PRESS	ROCKWELL			COUNTERMSR	15194
	BELTSANDER	ROCKWELL			COUNTERMSR	15195
	CHAINFALL	YALE			COUNTERMSR	15196
	CHAINFALL	BUDGET			COUNTERMSR	15197
	HOIST-CABLE	ELECTROLIFT			COUNTERMSR	15198
	PRESS MANDREL	ATLAS			COUNTERMSR	15199
	PRESS DRILL	HAMMER			COUNTERMSR	15200
	BLASTER SAND	NA			COUNTERMSR	15201
	CUT OFF ABRASIVE	STEPHEN WERKE			COUNTERMSR	15202
	GRINDER BENCH	BEE LINE			COUNTERMSR	15203
	CUT OFF ABRASIVE	PISTORIUS			COUNTERMSR	15204
	CUT OFF GLASS	FELKER			COUNTERMSR	15205
	SHEAR HAND	D1			COUNTERMSR	15206
	SHAKER PAINT	RED DEVIL			COUNTERMSR	15207
	FORMER ROLL	D1			COUNTERMSR	15208
	HOIST CHAIN	BUDGET			COUNTERMSR	15209
	PRESS LABORATORY	CARVER			COUNTERMSR	15210

200D (112,461 S.F.)

BLDG 200D						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 300 KVA	WESTINGHOUSE	300 DRY	5696778	SUB-STATION	5078
	TRANSFORMER 750 KVA	WESTINGHOUSE	750 DRY	C7966	SUB-STATION	5079
	TRANSFORMER 750 KVA	WESTINGHOUSE	750 DRY	5696776	SUB-STATION	5080
	SECONDARY BREAKERS (35 EA)	WESTINGHOUSE			SUB-STATION	5081
	MAIN BREAKERS (2 EA)	WESTINGHOUSE			SUB-STATION	5082

BLDG 200D

SHOP	EQUIP DESCRIPTION	MAKE	MODEL	SERIAL #	LOCATION	SAI #
	TIE BREAKER (1 EA)	WESTINGHOUSE			SUB-STATION	5083
	EMERGENCY LIGHTING SYSTEM	DUAL/LITE	6500	XLAC-90	SUB-STATION	5098
	SWITCH 4800V	CHALLANGER	600A	701090-01	SUB-STATION	5099
	SWITCH 4800V	CHALLANGER	600A	701090-02	SUB-STATION	5100
	SWITCH 4800V	CHALLANGER	600A	701090-03	SUB-STATION	5101
	SWITCH 4800V	FPE	600A	2658D2430	SUB-STATION	5102
	TRANSFORMER W/PANEL 50 KVA	UNITED POWER	CDM2-F3-050-426	11491-01	SUB-STATION	5103
	POWER CONDITIONER	LIEBERT	SCA030C	130303A	SUB-STATION	5104
	CHEMTRONIC FIRE ALARM	CHEMTRON	MICRO 1		MEZZANINE	5204
	ADT SECURITY SYSTEM	ADT	FOCUS 45		MEZZANINE	5205
HR	EXHAUST FAN	LORNE COOK	MN-135C4B		CAD RM S. ROOF	
	EXHAUST FAN				MENS RM S. MEZZ	
	EXHAUST FAN				WOMENS RM S. MEZZ	
	EXHAUST FAN				WOMENS RM SOUTH	
	EXHAUST FAN				NORTH MEZZ	
	CONDENSOR	CARRIER	MN-09DK-044-600		SOUTH ROOF UNIT 1	
	CONDENSOR	CARRIER	09DK-034-600		SOUTH ROOF UNIT 2	
	AIR COMPRESSOR	DELIVBLISS	MN-RUGL-5034		SOUTH MEZZ	
	AIR DRIER	HANKISON	MN8010			
	AIR CONDITIONING UNIT	CARRIER	MN-50DP016600		ROOF	
	A/C WINDOW				SOUTH 120	12965
	A/C WINDOW				EAST 122	12971
	A/C WINDOW					12954
	A/C WINDOW				E/RMC ROOM	12974
	A/C WINDOW	FRIEDRICH	KM21J30-A	LBFR01875	LOM ROOM	10256
	A/C WINDOW	AMANA	9M32PCE	0106225145		10257
	AIR HANDLER	TRANE	MCCA006GAYOABA	K01C3716B	METAL MATRIX	10263
	CEILING AIR HANDLER	TRANE	HUVC0751BD0DHXZA	W01D81519		10258
	CEILING AIR HANDLER	TRANE	HUVCO751BD0HXZA	W01D81520		10259
	CEILING AIR HANDLER	TRANE	HUVCO751BD0HXZA	WD1D81521		10260
	CEILING AIR HANDLER	TRANE	HUVCO751BD0HXZA	W01D81523		10261
	CEILING AIR HANDLER	TRANE	HUVCO751BD0HXZA	W01D81522		10262
PL	CHILL WATER PUMP	AURORA	89-12853	321 BF	D-4	0505
	CHILL WATER PUMP	RL DEPPMANN	1521-315TB	RLD9699H09	D-4	0506
	CONDENSATE PUMP	HOFFMAN	WCD-12-20-B-FLTS	160004 D68	WASH RACK	0472
	CONDENSATE PUMP	HOFFMAN	WCD-12-20-B-FLB	160004 D68	WASH RACK	0473
	CONDENSATE PUMP	HOFFMAN			WASH RACK	0476
	CONDENSATE PUMP	HOFFMAN			WASH RACK	0477
	CONDENSATE PUMP	KERR			WEST OFFICES	0498
	CONDENSATE PUMP	KERR			WEST OFFICES	0499
	DRINKING FOUNTAIN	ELKAY	FD700-10-1	820485857	WELDING	0438
	DRINKING FOUNTAIN	HALSEY TAYLOR			SOUTH BAY	0463
	DRINKING FOUNTAIN	SUNROC	TYPE 1	F301838C	S. MEZZ	0485
	DRINKING FOUNTAIN	HALSEY TAYLOR			SE BAY	0490

BLDG 200D						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	DRINKING FOUNTAIN	ELKAY	EFA-8-3-	840428289	WEST OFFICES	0497
PL	DRINKING FOUNTAIN	ELKAY	EFA-8-3	840428290	CENTER MEZZ	0500
	EMERGENCY EYEWASH	HAWS			PAINT BOOTH	0439
	EMERGENCY SHOWER	BRADLEY			PAINT BOOTH	0440
	EYE WASHER	GUARDIAN			METALUGRY	0501
	EYEWASHER	BRADLEY			MACHINE RPR	0444
	HEAT EXCHANGER				WASH RACK	0478
	HEAT EXCHANGER DOMESTIC	ARMSTRONG	415	1543	N. MEZZ	0441
	SPACE HEATER				NORTH EAST	0445
	SPACE HEATER				NORTH EAST	0446
	SPACE HEATER				NORTH EAST	0447
	STEAM CLEANER	CLAYTON	SE-150		WASH RACK	0474
	STEAM CLEANER	CLAYTON	SE-150		WASH RACK	0479
	STEAM STATION	SPENCE			N. MEZZ	0443
	STEAM STATION	SPENCE			WASH RACK	0475
	STEAM STATION	SPENCE			PAINT BOOTH	0481
	STEAM STATION	SPENCE			PAINT BOOTH	0482
	STEAM STATION	SPENCE			PAINT BOOTH	0483
	STEAM STATION	SPENCE			PAINT BOOTH	0484
	UNIT HEATER				NORTH EAST	0448
	UNIT HEATER				NORTH EAST	0449
	UNIT HEATER				NORTH EAST	0450
	UNIT HEATER				NORTH EAST	0451
	UNIT HEATER				CENTRAL	0452
	UNIT HEATER				CENTRAL	0453
	UNIT HEATER				CENTRAL	0454
	UNIT HEATER				SOUTH BAY	0455
	UNIT HEATER				SOUTH BAY	0456
	UNIT HEATER				SOUTH BAY	0457
	UNIT HEATER				SOUTH BAY	0458
	UNIT HEATER				SOUTH BAY	0459
	UNIT HEATER				SOUTH BAY	0460
	UNIT HEATER				SOUTH BAY	0461
	UNIT HEATER				SOUTH BAY	0462
	UNIT HEATER				SOUTH BAY	0464
	UNIT HEATER				SOUTH BAY	0465
	UNIT HEATER				SOUTH BAY	0467
	UNIT HEATER				WASH RACK	0468
	UNIT HEATER				WASH RACK	0469
	UNIT HEATER				WASH RACK	0470
	UNIT HEATER				WASH RACK	0471
	UNIT HEATER				PAINT BOOTH	0480
	UNIT HEATER				SE BAY	0486
	UNIT HEATER				SE BAY	0487

BLDG 200D						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	UNIT HEATER				SE BAY	0488
PL	UNIT HEATER				SE BAY	0489
	UNIT HEATER	MODINE			SE SHOP	0491
	UNIT HEATER				SE OFFICES	0492
	UNIT HEATER	MODINE			SE SHOP	0493
	UNIT HEATER	MODINE			SW CAGE	0494
	UNIT HEATER				TOOL CRIB	0495
	UNIT HEATER	MODINE			TOOL CRIB	0496
	UNIT HEATER				D-4	0502
	UNIT HEATER				D-4	0503
	UNIT HEATER				D-4	0504
	UNIT HEATER				D-4	0507
	UNIT HEATER				D-4	0508
	UNIT HEATER				NE WELDING	0509
	WATER HEATER	CRAFTMASTER	CREFR52D	8745121882	N. MEZZ	0442

BLDG 200D						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
MR	ENGRAVER	GORTON			MACH SHOP	15030
	DRILL PRESS RADIAL	WALKER-TURNER			MACH SHOP	15031
	ARBOR PRESS	GREENARD			MACH SHOP	15032
	GRINDER BENCH	B-LINE			MACH SHOP	15033
	SANDER BELT	SUNSTRAND			MACH SHOP	15034
	GRINDER PEDESTAL	HAMMOND			MACH SHOP	15035
	DRILL PRESS	CINCINNATI			MACH SHOP	15036
	GRINDER	FOLEY			MACH SHOP	15037
	DRILL RADIAL 6’	CARLTON			MACH SHOP	15038
	DRILL RADIAL 4’	CARLTON			MACH SHOP	15039
	SAW BAND	DO-ALL			MACH SHOP	15040
	LATHE	REPUBLIC			MACH SHOP	15041
	LATHE 16”	LE BLOND			MACH SHOP	15042
	LATHE	LODGE & SHIPLEY			MACH SHOP	15043
	LATHE 13”	MONARCH			MACH SHOP	15044
	LATHE	MONARCH			MACH SHOP	15045
	LATHE	LODGE & SHIPLEY			MACH SHOP	15046
	MILL	KEARNEY/TRECKR			MACH SHOP	15047
	MILL TURRENT	SOUTH BEND			MACH SHOP	15048
	MILL	CINCINNATI			MACH SHOP	15049
	MILL	CINCINNATI			MACH SHOP	15050
	MILL	GRIDGEPORT			MACH SHOP	15051
	MILL	KEARNEY/TRECKR			MACH SHOP	15052
	VTL	BULLARD			MACH SHOP	15053
	SLOTTER	ROCKFORD			MACH SHOP	15054

BLDG 200D						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	MILL	CINCINNATI			MACH SHOP	15055
	MILL	KEARNEY/TRECKR			MACH SHOP	15056
	JIG BORER	PRATT WHITNEY			MACH SHOP	15057
	VTL	KING			MACH SHOP	15058
	MILL	GIDDIGS & LEWIS			MACH SHOP	15059
MR	MILL	GIDDIGS & LEWIS			MACH SHOP	15060
	JIG BORER	PRATT WHITNEY			MACH SHOP	15061
	JIG BORER	FOSDICK			MACH SHOP	15062
	MILL	LUCAS			MACH SHOP	15063
	MILL	BRIDGEPORT			MACH SHOP	15064
	MILL	KEARNEY/TRECKER			MACH SHOP	15065
	TOOL SETTER	DE VLIEG			MACH SHOP	15066
	GRINDER I.D.	HEALD			MACH SHOP	15067
	HACK SAW	PEERLESS			MACH SHOP	15068
	BAND SAW	PEERLESS			MACH SHOP	15069
	GRINDER O.D.	NORTON			MACH SHOP	15070
	GRINDER I.D.	PARKER/MAJECTIC			MACH SHOP	15071
	GRINDER O.D.	BROWN/SHARP			MACH SHOP	15072
	ELECTRON DRILL	MOORE			MACH SHOP	15073
	GRINDER	BLANCHARD			MACH SHOP	15074
	GRINDER SURFACE	MATTISON			MACH SHOP	15075
	GEAR GRINDER	EX CELLO			MACH SHOP	15076
	MILL	CINCINNATI			MACH SHOP	15077
	BLOWER	ROTO CLONE			MACH SHOP	15078
	SURFACE GRINDER	GALLMEYER			MACH SHOP	15079
	CRANE	LOAD LIFTER			MACH SHOP	15080
	GRINDER BENCH	BALDOR			MSGR	15001
	GRINDER TOOL	EX-CELL-O			MSGR	15002
	GRINDER TOOL	EX-CELL-O			MSGR	15003
	GRINDER PEDESTAL	HAMMOND			MSGR	15004
	OPTICAL COMPARATOR	JXL			MSGR	15005
	ELECTRON DRILL	ELOX			MSGR	15006
	GRINDER TOOL	CINCINNATI			MSGR	15007
	CUT OFF ABRASIVE	KALAMAZOO			MSGR	15008
	GRINDER TOOL	CINCINNATI			MSGR	15009
	GRINDER TOOL	DEVLIGE			MSGR	15010
	GRINDER TOOL	SELLERS			MSGR	15011
	GRINDER SURFACE	REID			MSGR	15012
	CHAIN FALL 1000 LB	UNIVERSAL			MSGR	15013
	DRILL PRESS	DELTA			MODEL SHOP	15014
	BAND SAW	CRESCENT			MODEL SHOP	15015
	GRINDER PEDESTAL	DELTA			MODEL SHOP	15016
	SANDER DISC	KINDT-COLLIN			MODEL SHOP	15017
	LATHE	SOUTH BEND			MODEL SHOP	15018

BLDG 200D						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	ROUTER	STANLEY			MODEL SHOP	15019
	SANDER DISC	STATE			MODEL SHOP	15020
	PLANER	DELTA			MODEL SHOP	15021
	JOINER	PORTER			MODEL SHOP	15022
	CUTTER CARDBOARD	BOX-O-MATI C			MODEL SHOP	15023
	SAW TABLE UNISAW	DELTA			MODEL SHOP	15024
MR	STAPLER	INTERLAKE			MODEL SHOP	15025
	CREASER	INTERNATIONAL			MODEL SHOP	15026
	SAW RADIAL	DEWALT			MODEL SHOP	15027
	GRINDER PEDISTAL	HAMMOND			MODEL SHOP	15028
	SANDER DRUM	KINT-COLLIN			MODEL SHOP	15029
	CRANE	P&H			AYSS AREA	15081
	DRILL RADIAL	KAURAUNA			AYSS AREA	15082
	BENDER TUBE	LEONARD			AYSS AREA	15083
	PRESS ARBOR	MANLEY			AYSS AREA	15084
	SANDER BELT	ROCKWELL			AYSS AREA	15085
	GRINDER BENCH	BLACK & DECKER			AYSS AREA	15086
	DRILL RADIAL	ROCKWELL			AYSS AREA	15087
	INSTALLER COUPLING	PARKER HANIFIN			AYSS AREA	15088
	DRY HONER VACUUM	VACU BLAST			AYSS AREA	15089
	BLASTER SAND	VACU BLAST			AYSS AREA	15090
	TRUCK PALLET	YALE			AYSS AREA	15091
	SHAKER PAINT	MIRACLE			AYSS AREA	15092
	SHAKER PAINT	RED DEVIL			AYSS AREA	15093
	SHAKER PAINT	MIRACLE			AYSS AREA	15094
	PAINT SHAKER	RED DEVIL			AYSS AREA	15095
	DEGREASER DETREX	BLAKESLEE			AYSS AREA	15096
	HOIST 2000 LBS	BUDGIT			AYSS AREA	15097
	CRANE 100,000 LBS	WHITING			AYSS AREA	15098
	HOIST 4,000 LBS	C&M			AYSS AREA	15099
	HOIST 2,000 LBS	C&M			AYSS AREA	15100
	HOIST 2,000 LBS	YALE			AYSS AREA	15101
	HOIST 2,000 LBS	YALE			AYSS AREA	15102
	HOIST 4,000 LBS	C&M			AYSS AREA	15103
	HOIST 4,000 LBS	C&M			AYSS AREA	15104
	COMPARITOR OPTICAL	SCHERR TUMICO			AYSS AREA	15105
	DRILL PRESS TABLE	ROCKWELL			AYSS AREA	15106
	WELDER	AIRCO			WELD/FAB SHP	15107
	BOOTH SPRAY	DE VILBLISS			WELD/FAB SHP	15108
	WELDER	HOBART			WELD/FAB SHP	15109
	HOIST 1500 LBS	BUDGET			WELD/FAB SHP	15110
	BLASTER SHOT	BLAST ALLOY			WELD/FAB SHP	15111
	CUT OFF STONE	STONE			WELD/FAB SHP	15112
	VIBRATOR	ROTO-FINISH			WELD/FAB SHP	15113

BLDG 200D						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	WELDER	LINDE			WELD/FAB SHP	15114
	WELDER	MILLER			WELD/FAB SHP	15115
	POSITIONER	ATLAS			WELD/FAB SHP	15116
	SAW RADIAL	DEWALT			WELD/FAB SHP	15117
	WELDER	MILLER			WELD/FAB SHP	15118
	WELDER	LINDE			WELD/FAB SHP	15119
	POSITIONER WELD	ARONSON			WELD/FAB SHP	15120
MR	GRINDER PEDESTAL	HAMMOND			WELD/FAB SHP	15121
	SANDER BELT	SUNSTRAND			WELD/FAB SHP	15122
	GRINDER PEDISTAL	CINCINNATI			WELD/FAB SHP	15123
	POSITIONEER	ARONSON			WELD/FAB SHP	15124
	OVERHEAD CRANE	LOADLIFTER			WELD/FAB SHP	15125
	SANDER BELT	KALAMAZOO			WELD/FAB SHP	15126
	PRESSBRAKE	CINCINNATI			WELD/FAB SHP	15127
	PRESSBRAKE	PACIFIC			WELD/FAB SHP	15128
	PRESSBRAKE	CHICAGO			WELD/FAB SHP	15129
	SHEAR	PACIFIC			WELD/FAB SHP	15130
	PRESSBRAKE	CHICAGO			WELD/FAB SHP	15131
	SHEAR	PEXTO			WELD/FAB SHP	15132
	OVEN	THERMCRAFT			WELD/FAB SHP	15133
	MARVEL BAND SAW	MARVEL			WELD/FAB SHP	15134
	PUNCH PRESS	VOO PRESS CO.			WELD/FAB SHP	15135
	HYDRAULIC PRESS	RODGERS			WELD/FAB SHP	15136
	METALWORKER	HILL-ACME			WELD/FAB SHP	15137
	ARBOR PRESS	RODGERS			WELD/FAB SHP	15138
	MARKING MACHINE	SCHMIDT			WELD/FAB SHP	15139
	DRILL PRESS	WILTON STRANDS			WELD/FAB SHP	15140
	BAND SAW	DO ALL			WELD/FAB SHP	15141
	BAND SAW	DO ALL			WELD/FAB SHP	15142
	TURRET PUNCH PRESS	WIEDEMANN			WELD/FAB SHP	15143
	MANUAL DUPLICATOR	WHITNEY			WELD/FAB SHP	15144
	FORMING ROLLS	NIAGARA			WELD/FAB SHP	15145
	FORMING ROLLS	NIAGARA			WELD/FAB SHP	15146
	HACK SAW	PEERLESS			WELD/FAB SHP	15147
	FORMING ROLLS	PECK			WELD/FAB SHP	15148
	FORMING ROLLS	PEXTO			WELD/FAB SHP	15149
	CUTOFF SAW	W.F. WELLS			WELD/FAB SHP	15150
	CHAIN FALL 1 TON				WELD/FAB SHP	15151
	WELDER	MILLER			WELD/FAB SHP	15152
	OVEN (PRECISION)	P.C.			WELD/FAB SHP	15153
	WELDER	L-TEC			WELD/FAB SHP	15154
	OVEN	DISPATCH			WELD/FAB SHP	15155
	HEATER	FOSECO			WELD/FAB SHP	15156
	AIRCO	AIRCO			WELD/FAB SHP	15157

BLDG 200D						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	POSITIONER WELD	WORHINGTON			WELD/FAB SHP	15158
	CLEANER AIR	SMOG HOG			WELD/FAB SHP	15159
	WELDER	AIRCO			WELD/FAB SHP	15160
	POSITIONER	WORTHINGTON			WELD/FAB SHP	15161
	WELDER	AIRCO			WELD/FAB SHP	15162
	WELDER	L-TEC			WELD/FAB SHP	15163
	WELDER SPOT	MILLER			WELD/FAB SHP	15164
	WELDER	MILLER			WELD/FAB SHP	15165
MR	WELDER	MILLER			WELD/FAB SHP	15166
	WELDER	MILLER			WELD/FAB SHP	15167
	WELDER	MILLER			WELD/FAB SHP	15168
	WELDER	MILLER			WELD/FAB SHP	15169
	BENDER	PLACO			WELD/FAB SHP	15170
	BENDER	D-ACRO			WELD/FAB SHP	15171
	WELDER	AIRCO			WELD/FAB SHP	15172
	WELDER	AIRCO			WELD/FAB SHP	15173
	WELDER	AIRCO			WELD/FAB SHP	15174
	WELDER	L-TEC			WELD/FAB SHP	15175
	WELDER	L-TEC			WELD/FAB SHP	15176
	WELDER	L-TEC			WELD/FAB SHP	15177
	WELDER	AIRCO			WELD/FAB SHP	15178
	WELDER	AIRCO			WELD/FAB SHP	15179
	WELDER	MILLER			WELD/FAB SHP	15180
	WELDER	MILLER			WELD/FAB SHP	15181
	BURNING MACH	AIRCO			WELD/FAB SHP	15182
	TABEL WATER	ANDERSON			WELD/FAB SHP	15183
	OVEN ROD	HENKEL			WELD/FAB SHP	15184
	OVEN ROD	HENKEL			WELD/FAB SHP	15185
	WELDER	L-TEC			WELD/FAB SHP	15186
	WELDER PLASMA	THERMO DYNAMIC			WELD/FAB SHP	15187
	WELDER #1	LINDE			WELD/FAB SHP	15188
	CUTTING SYSTEM	THERMO ARC			WELD/FAB SHP	15189
	WELDER ARC	HELIARC			WELD/FAB SHP	15190
	GRINDER PEDISTAL	WOLF			WELD/FAB SHP	15191
	WELDER ARC	MILLER			WELD/FAB SHP	15192
	CHAIN FALL 1-TON				WELD/FAB SHP	
	WELDER	MILLER			WELD/FAB SHP	
	OVEN	PRECISION SCIENTIFIC			WELD/FAB SHP	
	WELDER	L-TEC			WELD/FAB SHP	
	OVEN	DISPATCH			WELD/FAB SHP	
	HEATER	FOSECO			WELD/FAB SHP	
	AIRCO	AIRCO			WELD/FAB SHP	
	POSITIONER WELD	WORTHINGTON			WELD/FAB SHP	

BLDG 200D						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	CLEANER AIR	SMOG HOG			WELD/FAB SHP	
	WELDER	AIRCO			WELD/FAB SHP	
	POSITIONER	WORTHINGTON			WELD/FAB SHP	
	WELDER	AIRCO			WELD/FAB SHP	
	WELDER	L-TEC			WELD/FAB SHP	
	WELDER SPOT	MILLER			WELD/FAB SHP	
	WELDER	MILLER			WELD/FAB SHP	
	WELDER	MILLER			WELD/FAB SHP	
	WELDER	MILLER			WELD/FAB SHP	
	WELDER	MILLER			WELD/FAB SHP	
MR	WELDER	MILLER			WELD/FAB SHP	
	BENDER	PLACO			WELD/FAB SHP	
	BENDER	DI-AIRCO			WELD/FAB SHP	
	WELDER	AIRCO			WELD/FAB SHP	
	WELDER	AIRCO			WELD/FAB SHP	
	WELDER	AIRCO			WELD/FAB SHP	
	WELDER	L-TEC			WELD/FAB SHP	
	WELDER	L-TEC			WELD/FAB SHP	
	WELDER	L-TEC			WELD/FAB SHP	
	WELDER	AIRCO			WELD/FAB SHP	
	WELDER	AIRCO			WELD/FAB SHP	
	WELDER	MILLER			WELD/FAB SHP	
	WELDER	MILLER			WELD/FAB SHP	

BLDG 200E (11,000 S.F.)

Note: This is a funded project to be constructed starting in May 03. Completion date is anticipated to be in Jul 03.
This is a GSA metal storage facility on concrete flooring with heating and ventilation. This facility is going to be located adjacent to the east side of B200D. Final list of equipment will not be available until completion of project.

BLDG 201 (10,466 S.F.)

BLDG 201						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 4800V OIL	FATETTEVILLE			SUB-STATION	5154
HR	VAV BOXES				THROUGHOUT CEILING OFFICES	
	DDC CONTROL PANEL				MECHANICAL ROOM	CTP1
	AIR HANDLER				MECHANICAL ROOM	10158
	CONDENSOR				ROOF	10222
	LANDIS & GEAR MODUTROL MOTORS					MM1
	A/C UNIT - 10T	CONTEMPO		14678F81		AC1
PL	CONDENSATE PUMP	HOFFMAN	WC-8-20-B	160030 F29	NW CORNER	0767
	CONDENSATE PUMP	HOFFMAN	WC-8-20-B	1G000Z H68	PIT	0769
	DRINKING FOUNTAIN	ELKAY			RESTROOMS	0765
	DRINKING FOUNTAIN	ELKAY			RESTROOMS	0766
	EYE WASHER	BRADLEY			WEST CELL	0762
	EYE WASHER	BRADLEY			SOUTH CELL	0763
	STEAM STATION	SPENCE			MEZZAINE	0768
	SUMP PUMP				PIT	0770
	WATER HEATER	LOCHINVAR	HST18-082-1	D95-1007F	REST ROOMS	0764
	DRINKING FOUNTAIN			DF2013	ADMIN AREA	DFD3

BLDG T202 (2,450 S.F.)

BLDG T202						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
HR	A/C 2-1/2T	KENMORE		E70845841	WINDOW UNIT	
PL	DRINKING FOUNTAIN	SUNROC	TYPE 1	F301823C	LUNCH RM	0740
	STEAM STATION	SPENCE			CENTER	0745
	UNIT HEATER	TRANE			OFFICE	0736
	UNIT HEATER	MODINE			REST ROOM	0737
	UNIT HEATER	MODINE			SHOP	0738
	UNIT HEATER	MODINE			LUNCH RM	0739
	WATER HEATER				LUNCH RM	0741

BLDG 203 (83,967 S.F.)

BLDG 203						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 200 KVA	SORGEL	300 DRY	90548	SUB-STATION	5115
	TRANSFORMER 300 KVA	RTE	300 OIL	919002087	OUTSIDE	5116
	SWITCH 4800V	R & IE	400A	35107	SUB-STATION	5117
	SWITCH 4800V	S & C	PMH-5	55112R2	OUTSIDE	5118
	EMERGENCY LIGHTING SYSTEM	DUAL/LITE	3000XLAC	512950A	SUB-STATION	5119
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87638FG	SELF SERV AREA	5173
	SIMPLEX REPEATER PANEL	SIMPLEX	2100		HVAC AREA	5174
	STANDBY GENERATOR					
	STANDBY GENERATOR					
HR	A/C 5T	YORK		NCRM061653		AC4
	A/C 6100BTU (WINDOW UNIT)	COMFORT-AIRE		28709213022		11129
	A/C 2T	LIEBERT		22760		AC6
	A/C 1-1/2T	SANYO		53401		AC5
	A/C 2-1/2T	CARRIER		C77319		
	A/C 9200BTU	CARRIER		A534723		
	A/C 10000BTU	CARRIER		SICM		
	A/C 1-1/2T	COMFORT-AIRE		28711-237578		11122
	A/C 1-1/2T	YORK		D1C6060N10325		AC7
	A/C	BRYANT	SSSAPX048000AABG		ROOF	11126
PL	CONDENSATE PUMP				SOUTH UTILITY	0549
	CONDENSATE PUMP	DETROIT PUMP		108882	SOUTH UTILITY	0550
	CONDENSATE PUMP	HOFFMAN	41 HC	749-51892	SOUTH UTILITY	0551
	CONDENSATE PUMP	HOFFMAN	41 HC	749-51892	SOUTH UTILITY	0552
	CONDENSATE PUMP	HOFFMAN	WCD8-20-A	7712	NORTH UTILITY	0568
	CONDENSATE PUMP	HOFFMAN	WCD8-20-A	7712	NORTH UTILITY	0569
	DRINKING FOUNTAIN	SUNROC	TYPE 1	T 918830	FE AREA	0547
	DRINKING FOUNTAIN	SUNROC	NSF 14	920604223	NORTH OFFICES	0566
	EYE WASHER	BRADLEY			HVAC	0540
	HEAT EXCHANGER DOMESTIC				NORTH UTILITY	0570
	STEAM STATION	SPENCE			SOUTH UTILITY	0548
	STEAM STATION	SPENCE			SOUTH UTILITY	0553
	SUMP PUMP				ELEC. RM	0561
	SUMP PUMP				ELECT RM	0562
	UNIT HEATER				S. LOADING DK	0531
	UNIT HEATER				EAST SIDE	0532
	UNIT HEATER	MODINE			EAST SIDE	0533
	UNIT HEATER				EAST SIDE	0534
	UNIT HEATER				EAST SIDE	0535
	UNIT HEATER	TRANE			EAST SIDE	0536
	UNIT HEATER	TRANE			EAST SIDE	0537
	UNIT HEATER	TRANE			CARP SHOP	0538

BLDG 203						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	UNIT HEATER				HVAC	0539
PL	UNIT HEATER	TRANE			SUPPLY	541
	UNIT HEATER	TRANE			HAZMAT	0542
	UNIT HEATER				SUPPLY	0543
	UNIT HEATER	TRANE			SUPPLY	0544
	UNIT HEATER	TRANE			SUPPLY	0545
	UNIT HEATER	TRANE			SUPPLY	0546
	UNIT HEATER	TRANE			FE AREA	0554
	UNIT HEATER				FE AREA	0555
	UNIT HEATER	TRANE			FE AREA	0556
	UNIT HEATER	TRANE			FE AREA	0557
	UNIT HEATER	TRANE			FE AREA	0558
	UNIT HEATER	TRANE			NW DOCK	0559
	UNIT HEATER	TRANE			NW DOCK	0560
	UNIT HEATER	TRANE			SELF SERVE	0563
	UNIT HEATER	TRANE			MENS NORTH	0564
	UNIT HEATER	TRANE			LADIES NORTH	0565
	WATER HEATER	LOCHINVAR	ETA040KK-1	HG9671563	NORTH UTILITY	0567
	EYEWASH	GUARDIAN		EW2030	HAZMART	EW2
	DRINKING FOUNTAIN	SUNROC	NSF14	97501760	FE SHOPS	DF1
MR	SANDER DISC	STATE			CARP SHOP	15290
	SANDER BELT	DELTA			CARP SHOP	15291
	SAW RADIAL	DEWALT			CARP SHOP	15292
	SANDER DISC	STATE			CARP SHOP	15293
	GRINDER PEDISTAL	BLACK/DECKER			CARP SHOP	15294
	SANDER BELT	DELTA			CARP SHOP	15295
	SAW BAND	TANNEWITZ			CARP SHOP	15296
	DRILL PRESS PEDISTAL	DELTA			CARP SHOP	15297
	SAW TABLE	TANNEWITZ			CARP SHOP	15298
	SAW TABLE	ROCKWELL			CARP SHOP	15300
	SAW MITER	MAKITA			CARP SHOP	15302
	PLANER				CARP SHOP	15894
	SHEAR	LODGE/SHIPLEY			HVAC SHOP	15303
	SHEAR	PECK/STOW & WILCOX			HVAC SHOP	15304
	CLEAT DRIVE				HVAC SHOP	15305
	GRINDER BENCH	BLACK/DECKER			HVAC SHOP	15306
	DRILL PRESS PEDISTAL	WILTON			HVAC SHOP	15307
	GRINDER PEDISTAL	BALDOR			HVAC SHOP	15308
	IRON WORKER	BUFFALO			HVAC SHOP	15309
	BRAKE HAND	DON-G-JENNESS			HVAC SHOP	15310
	BRAKE	ROPER WHITNEY			HVAC SHOP	15311
	SAW HACK	RACINE			HVAC SHOP	15312
	BRAKE LEAF	PECK STOW & WILCOX			HVAC SHOP	15313
	PEXTO ROLL FORM	PECK STOW & WILCOX			HVAC SHOP	15314

BLDG 203						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	PEXTO ROLL FORM	PECK STOW & WILCOX			HVAC SHOP	15315
	PEXTO ROLL FORM	PECK STOW & WILCOX			HVAC SHOP	15316
	PUNCH HAND	WHITE METAL			HVAC SHOP	15317
MR	ROLL FORM HAND	EASY			HVAC SHOP	15318
	BEND ROLLER				HVAC SHOP	15319
	SAW BAND	DO ALL			FURN RPR	15284
	GRINDER BENCH	B-LINE			FURN RPR	15285
	DRILL PRESS BENCH	ATLAS			FURN RPR	15286
	SEWING MACHINE	SINGER			FURN RPR	15367
	SAND BLASTER	ECONOLINE			FURN RPR	15365
	SPOT WELDER	DAYTON			FURN RPR	15362
	THREADER PIPE	RIDGID			PIPE SHOP	15239
	GRINDER BENCH	CINCINNATI			PIPE SHOP	15241
	THREADER PIPE	RIDGID			PIPE SHOP	15242
	DRILL PRESS	ATLAS			PIPE SHOP	15243

BLDG 205 (14,291 S.F.)

BLDG 205						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 112.5 KVA	IN SERVICE			OUTSIDE-SOUTH	5120
	TRANSFORMER	IN SERVICE			OUTSIDE-SOUTH	5121
	SWITCH 4800V	WESTINGHOUSE		7274A62G33	OUTSIDE-SOUTH	5122
	GENERATOR 75 KVA	KOHLER	75KVA	44149616	OUTSIDE-SOUTH	5123
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87639FG	FIRE DEPT	5185
	SIMPLEX BMUX	SIMPLEX	2120		FIRE SEPT	5186
	SIMPLEX SCC	SIMPLEX	2120		FIRE DEPT	5187
	ADT FOCUS 45 RECEIVERS F/ALARM	ADT	FOCUS 45	GA-50	SECURITY	5188
	SIMPLEX FIRE ALARM POWER AMP	SIMPLEX	2120	X89375FG	FIRE DEPT	5189
	FLIP-FLOP RELAY RCVRS F/DURESS	ADVANCE SIGNAL	1	AC100	SECURITY	5190
HR	ZONE CONTROLLER W/8 ELECTRONIC VAV BOXES	YORK			BUNK ROOM	
	ZONE CONTROLLER W/2 ELECTRONIC VAV BOXES	YORK			CONTROL ROOM	
	FREEZER	TRUE	659739	T-49F	KITCHEN FD	F1
	REFRIGERATOR	McCALL	1045		KITCHEN FD	R1

BLDG 205						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	VEHICLE EXHAUST SYSTEM				GARAGE FD	VES2051
	EXHAUST FAN	LAUREN COOK	165C10D		FD	EF1
	EXHAUST FAN	LAUREN COOK	150C2BD		FD	EF2
	EXHAUST FAN	LAUREN COOK			FD	EF3
	A/C UNIT - 1.5T	SANYO	CL1822		ROOF	AC2054
	A/C UNIT - 10T	CARRIER	50DP016510DA		ROOF	13024
	A/C UNIT			AC2053	ROOF FD	13033
	A/C UNIT	CARRIER	YCD273D		WINDOW PD	13012
	A/C UNIT-WINDOW	SANYO	CL1822		FD DISP	13032
	COMPRESSOR DRINKING FOUNTAIN	SUNROC	NSF14		PASSAGEWAY	
	AIR COMPRESSOR	SPEED-AIRE	5F2121	22499D	FD EQUIP ROOM	ACP1
PL	CONDENSATE PUMP	HOFFMAN	152HC	840-50663	MEN'S UTILITY	0529
	CONDENSATE PUMP	HOFFMAN	152HC	840-50663	MEN'S UTILITY	0530
	DRINKING FOUNTAIN	SUNROC			HALLWAY	0518
	DRINKING FOUNTAIN	SUNROC	NSF 14	PP27691M	FIRE DEPT	0520
	HEAT EXCHANGER DOMESTIC				MEN'S UTILITY	0523
	HEAT EXCHANGER HYDRONIC				FIRE DEPT	0522
	HOT WATER CIRC PUMP	BELL GOSSETT			MEN'S UTILITY	0525
	HYDRONIC CIRC PUMP	ARMSTRONG	H52-1BF	0295	MEN'S UTILITY	0526
	HYDRONIC CIRC PUMP	ARMSTRONG	H52-1-BF	0295	MEN'S UTILITY	0527
	STEAM STATION	SPENCE			MEN'S UTILITY	0524
	SUMP PUMP				MEN'S UTILITY	0528
	UNIT HEATER				FIRE DEPT	0521
	WATER HEATER	MOR-FLO	EFR420	8831110561	FIRE DEPT	0519

FACILITY 206A/206B - SOFTBALL FIELDS (SOUTH OF BLDG 205)

BLDG T207 (160 S.F.) - ACCESS CONTROL FACILITY (AT GATE 38)

BLDG T207						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
HR	EXHAUST FAN	BROAN	712-C		RESTROOM	
	ELECTRIC HEATER		AWH3504C			
	ELECTRIC HEATER		CWH3504B			
	CEILING HEATER		2433			
	INFARED HEATER		RPH-208-A			
	ROOFTOP UNIT	DUO-THERM	A-0014784		ROOF	
	SPLIT SYSTEM CONDENSOR	SANYO	CH0922	0023572		
PL	WATER HEATER	VANGUARD	6P	2H2135K7		W1
	WATER TANK (50 GAL)		E21-064-015SV	98203395Z		
	DRINKING FOUNTAIN	SUNROC	NSF14	97501759		DF1

Note: There is a funded project to widen the 11 mile gate road (Gate 38) entrance that would increase the number of prefab structures (guard booth), additional security fences, sidewalks, increase of width of entrance road, etc. The project is slated for construction in April 03 with anticipated completion date of Aug 03. Details of additional facilities and structures will not be available until project has been completed.

BLDG T209 (360 SF)

DESCRIPTION: Metal storage shed on a concrete pad.

BLDG 208 (Bridge)

DESCRIPTION: 24′ wide x 38′ long having a 16-ton weight capacity. This bridge is made of reinforced concrete with an asphalt surface and a 3′ high concrete guard rail.

BLDG 210 - (41,366 SF)

Ground Transportation Equipment Bldg. (Fuels & Lubricants Facility)

BLDG 210						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	FIRE ALARM PANEL			2101		FA1
HR	BELT DRIVE CENTRIFUGAL ROOF	GREENHECK	GB 1004			EF-1
	BELT DRIVE CENTRIFUGAL ROOF	GREENHECK	GB1405			EF-2
	BELT DRIVE CENTRIFUGAL ROOF	GREENHECK	SWB1850			EF-3
	BELT DRIVE CENTRIFUGAL ROOF	GREENHECK	GB1603			EF-4
	FUME HOOD WALK-IN TYPE			FH10		11180
	FUME HOOD BENCH-TYPE			FH1		11181
	FUME HOOD BENCH-TYPE			FH2		11182
	FUME HOOD BENCH-TYPE			FH3		11183
	FUME HOOD BENCH-TYPE			FH4		11184
	FUME HOOD BENCH-TYPE			FH5		11185
	FUME HOOD BENCH-TYPE			FH6		11186
	FUME HOOD WALK-IN TYPE			FH7		11187
	FUME HOOD BENCH-TYPE			FH8		11188
	FUME HOOD BENCH-TYPE			FH9		11189
	FUME HOOD BENCH-TYPE			FH11		11190
	REFRIGERATOR, WALK-IN					11192
	CENTRIFUGAL FAN	GREENHECK	GB1805	EXHFAN-5		
	CENTRIFUGAL FAN	GREENHECK	CUBE18010	EXHFAN-6		
	CENTRIFUGAL FAN	GREENHECK	SWB105	EXHFAN-7		
	CENTRIFUGAL FAN	GREENHECK	24BISW21	EXHFAN-8		
	HVAC UNIT	MCQUAY	RDT090CLY	9624008010		HVAC1
	HVAC UNIT	MCQUAY	RDT090CLY	9625008010		HVAC2
PL	DRINKING FOUNTAIN					DF1
	DRINKING FOUNTAIN					DF2
	EYEWASH/SHOWER					EW1
	EYEWASH/SHOWER					EW2
	EYEWASH/SHOWER					EW3
	EYEWASH/SHOWER					EW4
	EYEWASH/SHOWER					EW5
	HEAT EXCHANGER HUMIDIFIER	MCQUAY	STS100C	103983		HU1
	HEAT EXCHANGER HUMIDIFIER	DRISTEAM	STS100C	103983		HU2

BLDG 212 (119,479 S.F.)

BLDG 212						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 4800V 1500 KVA	WESTINGHOUSE	DSL	DCV3297-0101	BASEMENT	5124
	TRANSFORMER 500 KVA	WESTINGHOUSE			BASEMENT	5125
	TRANSFORMER 500 KVA	WESTINGHOUSE			BASEMENT	5126
	DISCONNECT 4800V	WESTINGHOUSE		7275A44602	BASEMENT	5127
	DISCONNECT 4800V	WESTINGHOUSE		7274A62033	BASEMENT	5128
	DISCONNECT 4800V	WESTINGHOUSE		7275A44602	BASEMENT	5129
	SECONDARY BREAKERS (23 EA)	WESTINGHOUSE	POWER LINES		BASEMENT	5130
	BREAKERS 4800V	WESTINGHOUSE	8059A0608		1st FLOOR	5131
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87641FG	BY CELL 9	5175
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87640FG	BY CELL 9	5176
	CARDOX TANK 12 TON	CARDOX		3838	BASEMENT	5177
	CARDOX ALARM PANELS	CHEMETRON	MICRO 1 & 2 EV	39 PANELS	ENTIRE BLDG	5178
	SIMPLEX SCC	SIMPLEX	2120		BY CELL 9	5179
HR	A/C UNIT	CARRIER	1187C15646		ROOF	
	CHILLER 60T	CARRIER		4882J00901		
	A/C 4T	CARRIER		5182660262		
	A/C 10-1/2T	CARRIER		982637767		
	A/C 10-1/2T	CARRIER		6260720		
	A/C 12T	TRANE		685E-13280		ACU3
	CHILLER					C1
	CHILLER					C2
	CONDENSER				ROOF	13140
	CONDENSER				ROOF	13141
	CONDENSER				ROOF	13152
	CONDENSER				ROOF	13153
	AIR HANDLER				MECH RM	13148
	AIR HANDLER				MEZZANINE	13133
	AIR HANDLER				MEZZANINE	13131
	AIR HANDLER				MECH RM	13149
	AIR HANDLER				CELL #1	AH1
	AIR HANDLER				CELL #2	AH2
	AIR HANDLER				CELL #3	AH3
	AIR HANDLER				CELL #4	AH4
	AIR HANDLER				CELL #5	12891
	AIR HANDLER				CELL #6	AH6
	AIR HANDLER				CELL #7	AH7
	AIR HANDLER				CELL #8	AH8
	AIR HANDLER				UPPER FAN ROOM	13129
	HVAC				ROOF	13160

BLDG 212						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	WINDOW A/C				UPSTAIRS OFC	12889
PL	CONDENSATE PUMP				BASEMENT	0576
	CONDENSATE PUMP				BASEMENT	0577
	CONDENSATE PUMP	DELAVAL	1 4/3	258827	BASEMENT	0597
	CONDENSATE PUMP	DELAVAL	1 4/3		BASEMENT	0588
	CONDENSATE PUMP	DELAVAL	1 4/3	258825	BASEMENT	0590
	CONDENSATE PUMP	DELAVAL	1 4/3	258826	BASEMENT	0591
	DRINKING FOUNTAIN	SUNROC	NSF 14	94633816	NW BAY	0648
	DRINKING FOUNTAIN	ELKAY			EAST END	0664
	DRINKING FOUNTAIN	HALSEY TAYLOR			CELL 4 UPSTAIRS	0673
	DRINKING FOUNTAIN	HALSEY TAYLOR			WEST HALLWAY	0674
	DRINKING FOUNTAIN	SUNROC			CELL 9	0676
	DYNO COOLING CIRC PUMP	DELAVAL	G3/2-1/2	259808	BASEMENT	0602
	DYNO COOLING CIRC PUMP	DELAVAL	G3/2-1/2	259805	BASEMENT	0603
	DYNO COOLING CIRC PUMP	DELAVAL	G3/2-1/2	259809	BASEMENT	0604
	DYNO COOLING CIRC PUMP	DELAVAL	G3/2-1/2	259803	BASEMENT	0605
	DYNO COOLING CIRC PUMP	DELAVAL	G3/2-1/2	259802	BASEMENT	0606
	DYNO COOLING CIRC PUMP	DELAVAL	G3/2-1/2	259801	BASEMENT	0607
	DYNO COOLING CIRC PUMP	DELAVAL	G3/2-1/2	259806	BASEMENT	0608
	DYNO COOLING CIRC PUMP	DELAVAL	G3/2-1/2	259804	BASEMENT	0609
PL	DYNO COOLING CIRC PUMP	DELAVAL	G3/2-1/2	259807	BASEMENT	0610
	DYNO COOLING RETURN PUMP	DELAVAL	CP04-34	260837	BASEMENT	0581
	DYNO COOLING RETURN PUMP	DELAVAL	CP04-34	260836	BASEMENT	0582
	DYNO COOLING WTR HEAT EXCHGR				BASEMENT	0640
	DYNO CW HEAT EXCHANGER				BASEMENT	0614
	DYNO CW HEAT EXCHANGER				BASEMENT	0616
	DYNO CW HEAT EXCHANGER				BASEMENT	0619
	DYNO CW HEAT EXCHANGER				BASEMENT	0621
	DYNO OIL HEAT EXCHANGER				BASEMENT	0644
	DYNO OIL PUMP				BASEMENT	0615
	DYNO OIL PUMP				BASEMENT	0617
	DYNO OIL PUMP	JENNINGS	SQ- 1/4C	M1806	BASEMENT	0618
	DYNO OIL PUMP				BASEMENT	0620
	DYNO OIL PUMP				BASEMENT	0622
	DYNO OIL PUMP	DELTA	30800007		BASEMENT	0641
	DYNO OIL PUMP	DELTA	30800007		BASEMENT	0642
	DYNO OIL PUMP	NORTHERN		2469	BASEMENT	0643
	EMERGENCY SHOWER	SPEAKMAN			BASEMENT	0578
	EMERGENCY SHOWER				CELL CORRIDOR	0665
	EYE WASHER	BRADLEY			NEAR CELL 9	0589
	EYE WASHER	BRADLEY			MACHINE RPR	0645
	EYE WASHER	SPEAKMAN			NW BAY	0647
	FUEL PUMP				CELL 8	0650

BLDG 212						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	FUEL PUMP				CELL 7	0651
	FUEL PUMP				CELL 6	0654
	FUEL PUMP				CELL 5	0659
	FUEL PUMP				CELL 4	0660
	FUEL PUMP				CELL 3	0667
	FUEL PUMP				CELL 2	0669
	FUEL PUMP				CELL 1	0671
	GEAR BOX OIL HEAT EXCHANGER				BASEMENT	0583
	GEAR BOX OIL HEAT EXCHANGER				BASEMENT	0586
	GEAR BOX OIL HEAT EXCHANGER				BASEMENT	0625
	GEAR BOX OIL HEAT EXCHANGER				BASEMENT	0629
	GEAR BOX OIL HEAT EXCHANGER	ROSS	73M1314A18	19894-A2	BASEMENT	0631
	GEAR BOX OIL HEAT EXCHANGER	ROSS	73M1311A18	19894-C2	BASEMENT	0633
	GEAR BOX OIL HEAT EXCHANGER				BASEMENT	0635
	GEAR BOX OIL HEAT EXCHANGER				BASEMENT	0638
	GEAR BOX OIL HEAT EXCHANGER	ROSS	73M1311A18	19894-C1	BASEMENT	0639
	GEAR BOX OIL PUMP	DELAVAL	M75828		BASEMENT	0584
	GEAR BOX OIL PUMP	DELAVAL	M75828		BASEMENT	0585
	GEAR BOX OIL PUMP	WORTHINGTON	SGA		BASEMENT	0623
	GEAR BOX OIL PUMP	WORTHINGTON	SGA		BASEMENT	0624
	GEAR BOX OIL PUMP	DELAVAL	M75829		BASEMENT	0626
PL	GEAR BOX OIL PUMP				BASEMENT	0627
	GEAR BOX OIL PUMP				BASEMENT	0628
	GEAR BOX OIL PUMP	M75827			BASEMENT	0630
	GEAR BOX OIL PUMP	M75832			BASEMENT	0632
	GEAR BOX OIL PUMP				BASEMENT	0634
	GEAR BOX OIL PUMP				BASEMENT	0636
	GEAR BOX OIL PUMP	DELAVAL	M75831		BASEMENT	0637
	HEAT EXCHANGER DOMESTIC				BASEMENT	0597
	HEAT EXCHANGER DOMESTIC				BASEMENT	0598
	HEAT EXCHANGER DOMESTIC	ARMSTRONG	665	1438	BASEMENT	0599
	HOT WATER CIRC PUMP	BELL GOSSETT			BASEMENT	0600
	HOT WATER CIRC PUMP DELAVAL				BASEMENT	0601
	OIL WATER SEPERATOR				BASEMENT	0613
	STEAM STATION	SPENCE			BASEMENT	0594
	STEAM STATION	SPENCE			BASEMENT	0595
	STEAM STATION	SPENCE			BASEMENT	0596
	SUMP PUMP				BASEMENT	0579
	SUMP PUMP				BASEMENT	0580
	SUMP PUMP	ARMSTRONG	5400STD	168925	BASEMENT	0592
	SUMP PUMP	KERR	5220	K-067885-A1	BASEMENT	0593
	SUMP PUMP				BASEMENT	0611
	SUMP PUMP				BASEMENT	0612
	UNIT HEATER				MACHINE RPR	0571

BLDG 212						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	UNIT HEATER				MACHINE RPR	0572
	UNIT HEATER				EAST	0573
	UNIT HEATER	MODINE			WEST SOUTH	0574
	UNIT HEATER				LOWER MTR RM	0575
	UNIT HEATER				NW BAY	0646
	UNIT HEATER	TRANE			CELL 8	0649
	UNIT HEATER	TRANE			CELL 7	0652
	UNIT HEATER				CELL 6	0653
	UNIT HEATER	TRANE			CELL 5	0655
	UNIT HEATER	MODINE			CELL 5	0657
	UNIT HEATER				NE ENTRANCE	0658
	UNIT HEATER	TRANE			CELL 4	0661
	UNIT HEATER	TRANE			CELL 4	0662
	UNIT HEATER				CELL 4	0663
	UNIT HEATER				CELL 3	0666
	UNIT HEATER	MODINE			CELL 2	0668
	UNIT HEATER				CELL 1	0670
	UNIT HEATER	AMERICAN			STAIRWELL	0675
MR	ROCKWELL DELTA BELT SANDER	DELTA	NA	DO103	MACH SHOP	
	MILLER WELDER	MILLER	NA	JG100876	MACH SHOP	
	WESTINGHOUSE WELDER	WESTINGHOUSE	TA559	NA	MACH SHOP	
MR	TOLEDO PIPE THREADER	TOLEDO	TA978	NA	MACH SHOP	
	ABRASIVE CUT OFF MACHINE	TOLEDO	NA	C88002	MACH SHOP	
	BLAKESLEE PARTS WASHER	BLAKESLEE	NA	15687	MACH SHOP	
	WILSON HYD PRESS	WILSON	37F	1128	MACH SHOP	
	BLUE-M ELECTRIC OVEN	BLUE M	DL112A-Z	DA2580	MACH SHOP	
	GRAYMILLS PARTS WASHER	GRAY MILLS	500KE	NA	141	
	DRAKE ARBOR PRESS	DRAKE	1	NA	RM 141	
	CINCINNATI DRILL PRESS	CINCINNATTI	DA42422	NA	MACH SHOP	
	MARVEL DRAWCUT SAW	MARVEL	DA36675	NA	MACH SHOP	
	ROCKWELL DRILL PRESS	ROCKWELL	DA64255	NA	MACH SHOP	
	DO ALL BAND SAW	DO ALL	ML	5014728	MACH SHOP	
	BLACK\DECKER BENCH 10″ GRINDER	BLACK\DECKER	NA	33816	MACH SHOP	
	PEDISTAL GRINDER	NA	TA594	NA	MACH SHOP	
	OIL PUMP & MOTOR	WAGNER	53F82	NA	SER. RM #8	
	MOTOR 15 HP	GE	NA	DK14690	SER. RM #8	
	OIL PUMP & MOTOR	HOWELL	NA	8693B-20	SER. RM #8	
	OIL PUMP IMG	DE-LAVAL	NA	M75-831	SER. RM #8	
	MOTOR	GE	NA	UK1443	SER. RM #7	
	OIL PUMP	DE-LAVAL	NA	1775832	SER. RM #7	
	BELTED VENT SET	BUFFALO F	NA	NA	SER. RM #7	
	OIL PUMP	DE-LAVAL	NA	M75827	SER. RM #7	
	MOTOR 15 HP	GE	NA	5K326E31	SER. RM #7	
	BELTED VENT SET	BUFFALO F	NA	NA	SER. RM#7	

BLDG 212						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	BELTED VENT SET	BUFFALO F	NA	NA	SER. RM #6	
	OIL PUMP & MOTOR	WAGNER	53E89J997	8W2542	SER. RM #6	
	WAGNER PUMP & MOTOR	WAGNER ELEC	53E99J997	NA	SER. RM #6	
	ELE. MOTOR	GENERAL ELEC	5K32CE	UK14637	SER. RM #6	
	OIL PUMP	DE-LAVAL IMO	NA	M75829	SER. RM #6	
	ELEC MOTOR 125 HP	GENERAL ELEC	5K1505FE4L	PL8117472	SER. RM #9	
	CRAFTSMAN DRILL PRESS	CRAFTSMAN	TA1115	TA1116	RM 141	
	KR WILSON 60 TON HYD PRESS	KR WILSON	6071A	NA	RM 141	
	PEDISTAL GRINDER	BROWN\BROCK	TA1014	55596	RM 141	
	ROCKWELL BELT SANDER	DELTA	B\C 0845A	975618	RM 141	
	CRANE 20 TON	MICH.	NA	J-1434-20-1	BAY 1ST FLR	
	LIMIT LOAD FAN	BUFFALO F	NA	NA	2ND FLR CELL #8	
	GE AIR FAN MOTOR	GENERAL ELEC	NA	JK26326AF1	2ND FLR CELL#8	
	BAILEY METER CO VALVE	BAILEY	NA	97124	2ND FLR CELL#8	
	TYPE R-PRESSURE BLOWER	BUFFALO F	NA	NA	2ND FLR CELL#8	
	A.C. MOTOR	GENERAL ELEC	5K1444AEG-3	PN8281925	2ND FLR CELL#8	
	FAN & MOTOR	BUFFALO F	NA	NA	2ND FLR CELL#8	
	GE 186 HP MOTOR	GENERAL ELEC	5K26326AF1	NA	2ND FLR CELL#8	
	AIR FAN MOTOR	GENERAL ELEC	5K1444AEG3	PN8281692	2ND FLR CELL#7	
	BAILEY METER	BAILEY	NA	97183	2ND FLR CELL#7	
	TYPE R - PRESS BLOWER	BUFFALO F	NA	NA	2ND FLR CELL#7	
MR	FAN	BUFFALO F	NA	NA	2ND FLR CELL#6	
	MOTOR	GENERAL ELEC	NA	NA	2ND FLR CELL #6	
	AIR FAN	BUFFALO F	NA	NA	2ND FLR CELL#5	
	MOTOR	GENERAL ELEC	5K1444AEG3	PN8281924	2ND FLR CELL#5	
	CRANE 5 TON	ROBBINS/MEYERS	NA	J14343	CELL #7	
	OIL PUMP	BIJUR	NA	NA	CELL #6	
	UNIVERSAL DYNO	MEASKER ELEC	NA	9407-266	CELL #7	
	FUEL PUMP	WORLD ENERGY	80034FGF2A4	NA	CELL #7	
	FUEL PUMP	NA	NA	NA	CELL #7	
	AIR DAMPERS	NA	NA	NA	CELL #7	
	ABSORBING DYNO EATEN		10114WIG	67637-1	CELL #8	
	INDUCTOR DYNO	GENERAL ELEC	1G 392	808999-1	CELL #8	
	DC DYNO	GENERAL ELEC	2G G374	7178583	CELL #8	
	AIR DAMPERS	NA	NA	NA	CELL #8	
	CRANE 5 TON	ROBBINS/MEYERS	NA	J1434-11	CELL #8	
	DIRECT CURRENT GEN.	GENERAL ELEC	37 G 151	7178888	BSMT ROOM #9	
	BELTED VENT SET	BUFFALO F	NA	NA	SER. ROOM #9	
	DYNO OIL PUMP	NA	NA	NA	SER. ROOM #9	
	ELEC MOTOR HP 250	GENERAL ELEC	5K6335FYI	NL8116803	SER. ROOM #10	
	DC GEN.	GENERAL ELEC	37G 152	7178449	SER. ROOM #10	
	BELTED VENT SET	BUFFALO F	NA	14263	SER ROOM #10	
	DYNO OIL PUMP	NA	NA	NA	SER ROOM #10	
	ELEC MOTOR HP 250	GENERAL ELEC	5K6335FYI	XK8115724	SER BSMT RM #11	

BLDG 212						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	DC GEN.	GENERAL ELEC	37G 12	7178359	SER ROOM #11	
	BELTED BENT SET	BUFFALO F	NA	NA	SER ROOM #11	
	DYNO OIL PUMP	NA	NA	NA	SER ROOM #11	
	INDUCTOR DYNAMOMETER	MID-WEST	2025A	1521	BASEMENT	
	DC ELECTRIC DYNO	GEN-ELE	26G 374	7178551	BASEMENT	
	INDUCTOR DYNO	GENERAL ELEC	1 G 392	8089983	BASEMENT	
	ELEC. MOTOR VARIDRIVE	US MOTOR	NA	9301110-035	BASEMENT	
	ELEC. MOTOR	LIMA	A	P25729	BASEMENT	
	ELEC. MOTOR	LIMA	A	P25616	BASEMENT	
	OIL PUMP	WORTHINGTON	5GA	NA	BASEMENT	
	OIL PUMP	WORTHINGTON	5GA	NA	BASEMENT	
	DYNAMATIC DYNAMOMETER	EATON	1513IG	375531	BASEMENT	
	DYNO	NA	NA	2BF99309/3	BASEMENT	
	INDUCTOR DYNO	MID-WEST	2025A	2034	BASEMENT	
	DYNO	DYNA	1014	1576	BASEMENT	
	DYNAMOMETER	WESTINGHOUSE	NA	18833446	BASEMENT	
	DYNO	EATON	1519WIG	67534T	BASEMENT	
	ELEC MOTOR - CLOSED LOOP	IDEAL ELEC	204222	NA	BASEMENT	
	WATER PUMP CLOSED LOOP	DE-LAVAL	NA	259806	BASEMENT	
	MOTOR-CLOSED LOOP SYSTEM	IDEAL ELEC	A	204218	BASEMENT	
	WATER PUMP CLOSED LOOP	DE-LAVAL	NA	259864	BASEMENT	
MR	MOTOR CLOSED LOOP SYSTEM	IDEAL ELEC	A	204218	BASEMENT	
	WATER PUMP CLOSED LOOP	DE-LAVAL	NA	259807	BASEMENT	
	WATER PUMP	DE-LAVAL	NA	259508	BASEMENT	
	GEAR BOX DYNO	GE	NA	NA	"	
	GEAR BOX DYNO	GE	NA	107763	"	
	SPEED INCREASING	GE	NA	NA	"	
	SPEED INCREASING	GE	NA	NA	"	
	MOTOR 15 HP	GE	5K326E63	CK3107	BASEMENT	
	MOTOR 15 HP	GE	5KM61778100	716792ONL	BSMT/HALL	
	ALPLIDYNE	GE	15A718	7167922NL	"	
	MOTOR WATER COOLING RETURN	IDEAL ELEC	A TYPE	212449	"	
	PUMP WATER COOLING RETURN	DE-LAVEL	NA	260837	"	
	COOLING WATER MOTOR	IDEAL	TYPE A	212450	"	
	PUMP COOLING WATER	DE-LAVEL	NA	200836	"	
	MOTOR ELEC 50 HP	GE	5K1444AE	PN8281691	"	
	BLOWER AIR	BUFFALO FORGE	SIZE 44	R14201	"	
	DYNO OIL PUMP MOTOR	GE	5K204E7	P117210	"	
	SPEED INCREASING	GE	NA	NA	DYNO PIT	
	DYNO OIL PUMP	NORTHERN O.	NA	2436	DYNO PIT	
	DYNO INDUCTOR	GE	16414	8090122	"	
	SPEED INCREASING	GE	S-106	107737	"	
	MOTOR	GE	5K326E31	5K2071	"	
	PUMP OIL	DE-LAVAL	NA	M75828	BSMT/HALL	

BLDG 212						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	FAN BLOWER	BUFFALO FORGE	22 LLD	N69981	BSMT/FAN RM	
	GEAR BOX DRIVE ENCLOSURE	FALK	11GMO	5320-0572	“ROOM 119	
	CRANE 15 TON	MICHIGAN	NA	J1434-15-4	TEST CELL #5	
	FUEL PUMP & MOTOR	LELAND	NA	157941704133	TEST CELL #5	
	FUEL PUMP & MOTOR	BALDER	NA	V25-8403	TEST CELL #4C	
	MICHIGAN 15 TON CRANE	MICHIGAN	NA	J-1434-E	TEST CELL #4	
	LIMIT LOAD FAN	BUFFALO FORGE	NA	73R-14582	TEST CELL #4	
	A/C MOTOR	GENERAL ELEC	5K254AN205A	HJ	TEST CELL #4	
	SUPER LOAD LIMIT FAN	BUFFALO FORGE	NA	R14207	TEST CELL #4	
	CELL AIR FAN MOTOR	WESTINGHOUSE	NA	NA	TEST CELL #4	
	CELL AIR FAN LIMIT LOAD	BUFFALO FORGE	NA	NA	TEST CELL #5	
	CELL AIR FAN MOTOR	WESTINGHOUSE	NA	NA	TEST CELL #5	
	DYNO OIL PUMP & M-R SET	NA	NA	NA	CELL #5 RM 120	
	INDUCTOR DYNO ONE	GENERAL ELEC	1G 412	8090166	CELL #5 RM 120	
	SPEED INCREASING GEAR	GENERAL ELEC	NA	107733	CELL #5 RM 120	
	SPEED INCREASING GEAR	GENERAL ELEC	NA	107731	CELL #5 RM 120	
	INDUCTOR DYNOMOMETER	GENERAL ELEC	1G 391	8090064	CELL #6	
	DC ELEC. DYNO.	GENERAL ELEC	26G 373	7178797	CELL #6	
	CRANE 5 TON	ROBBINS/MEYERS	NA	J25665	CELL #6	
	AIR DAMPERS	NA	NA	NA	CELL #6	
	AIR DAMPERS	NA	NA	NA	CELL #4	
MR	AIR DAMPERS	NA	NA	NA	CELL #5	
	AMERICAN BLOWER FLUID DRIVE	TYPE-VS	NA	78-315-73		
	WORHINGTON OIL PUMP	WORTHINGTON	NA	NA		
	ALLAS CHALMERS MOTOR (ELEC)	ALLAS CHALMERS	TYPE APK	7E851652783		
	BUFFALO BLOWER SIZE 22	TYPE LLD	NA	N-6999	ROOM 148	
	FALK GEAR DRIVE	FALK	11GHO	NA	“	
	MASTER 3/4 ELECT MOTOR	MASTER	NA	X16928	“	
	GEAR REDUCER UNIT	NA	NA	NA	“	
	MASTER ELECT MOTOR	NA	NA	NA	“	
	GEAR REDUCER UNIT	LINK BELT	NA	W349018A	“	
	MASTER ELECT MOTOR	NA	NA	X12465	“	
	LINK BELT GEAR REDUCER	NA		W3490188	“	
	3 EMERGENCY CHUTES	NA	NA	NA	TEST CELL #9	
	15 TON CRANE	NA	NA	J-1434-0	“	
	DIRECTINAL VANES (C9)	NA	NA	NA	“	
	FIRE DAMPERS	NA	NA	NA	“	
	HARTZELL FAN (BLOWER)	HARTZELL	21124-NDD	85-53798	“	
	MIDWEST INDUCTOR DYNAMOMETER	TYPE 3027	NA	1669	BASEMENT	
	DC ELECTRIC DYNAMOMETER	NA	26G375	7178971	“	
	EATON DYNAMATIC	TYPE 2025	NA	3295	“	
	MIDWEST INDUCTOR DYNAMOMETER	TYPE 1040	NA	1556	“	
	IDAL ELECTRIC 40 HP MOTOR INDUCT.	TYPE A	NA	204214	“	
	DEVLAVAL PUMP	TYPE 1514	NA	259801	“	

BLDG 212						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	IDEAL INDUCTION 40 HP MOTOR	TYPE A	NA	204215	"	
	DEX-LAVAL PUMP	TYPE 15 1/4	NA	259602	"	
	DEY-LAVAL PUMP	TYPE 15 1/4	NA	259803	"	
	IDEAL ELECTRIC PUMP	TYPE A	NA	204216	"	
	PUMP	VIKING	G432BX	3005404	BASEMENT	
	ELECTRIC MOTOR	LELAND	4137	15294	"	
	PUMP	VIKING	CX499	NA	"	
	ELECTRIC MOTOR	RELIANCE	NA	C56E2505N	"	
	PUMP	VIKING	G432BX	2517359	"	
	ELECTRIC MOTOR	RELIANCE	NA	C56E2506N	"	
	VIKING PUMP & MOTOR UNIT	VIKING	GX499	07D92222	"	
	ELEC MOTOR & DUAL PUMP UNIT	ROCKWELL	NA	NA		
	ELEC MOTOR 15 HP	IDEAL	A	204219	BASEMENT	
	ELEC MOTOR 15 HP	IDEAL	A	204221	"	
	WATER PUMP POND WATER	DE-LAVAL	NA	252802	"	
	WATER PUMP COOLING POND	DE-LAVAL	NA	259804	"	
	OIL PUMP GV3	DE-LAVAL	NA	78830	CELL #9	
	ELEC MOTOR 15 HP	GE	K5326E31	UK14658	BSMT #9	
	DYNO INDUCTOR	GE	890091	1G414	BASE-DYNO PIT	
	MOTOR OIL PUMP DYNO	GE	5K204L7	PL16441	DYNO PIT	
	OIL PUMP DYNO 4500-07-10-B5	NORTHERNO	NA	2469	"	
	AMERICAN BLOWER SIZE 75M	AMERICAN BLWR		75A1M10173	CELL #3	
MR	AMERICAN BLOWER SIZE 75M	AMERICAN BLWR			CELL #3	
	INTAKE EXHAUST LOUVERS				CELL #3	
	DYNAMOMETER GE	GE	26G 371	7178852	CELL #3	
	FUEL PUMPS & MOTORS (2 UNITS)	NA	NA	NA	CELL #3	
	CRANE 5 TON	BOBBINS/MEYERS	NA	J-1434-9	CELL #3	
	OIL PUMP & MOTOR	BIJUR	TYPE BBC	H1		
	BUFFALOW BLOWER SIZE 9	BUFFALO	TYPE SLD	R14206	CELL #2 RM 203 2ND FLR	
	BUFFALO PRESSURE BLOWER SZ 40	BUFFALO	TYPE R	R14202	"	
	GE MOTOR 25 HP	GE	NA	NN8280092	CELL #2 R-203 2ND FLR	
	GE MOTOR 25 HP	GE	NA	NN8280091	"	
	BAILEY AIR CONTROL VALVE (CARB)	BAILEY	NA	97117	"	
	BAILEY AIR CONTROL VALVE (CARB)	BAILEY	NA	97118	"	
	BUFFALO BLOWER SIZE 9	BUFFALO	TYPE SLD	R14206	"	
	GE MOTOR 100 HP MOTOR	GE	NA	NA	"	
	DYNAMOMETER	GE	1G356	6916472	1ST FLR CELL #1	
	MOTOR GE 300 HP	GE	26G304	69167363	"	
	LOUVERS, AIR INTAKE & EXHAUST	NA	NA	NA	"	
	FUEL PUMPS & MOTORS	NA	NA	NA	"	
	CRANE ROBBINS & MEYERS 5 TON	ROBBINS/MEYERS			"	
	BAILEY AIR CONTROL VALVES -3	BAILEY		97119	2ND FLR CELL #1	
	GE MOTOR 50 HP	GE	5K1444AEG3		"	

BLDG 212						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	BUFFALO PRESSURE BLOWER SZ 44	BUFFALO	TYPE R	R14 201	"	
	BUFFALO BLOWER SIZE 2	BUFFALO	TYPE SSLD	414 205	"	
	GE 250 HP MOTOR	GE	NA	NA	"	
	BUFFALO PRESSURE BLOWER	BUFFALO	SIZE 55-S	R14211	ROOF	
	GE ELECTRIC MOTOR 40 HP	GE	5K1405CWI	NN8279893	"	
	ENGINE EXHAUST BLOWER	IAP	445HDB-ARRI	IAP87748-1	ROOF	
	100 HP ELECTRIC MOTOR	LINCOLN	NA	3295775	"	
	ENGINE EXHAUST BLOWER	IAP	445HDBARR1	IAP87748-1	"	
	100 HP ELECTRIC MOTOR	LINCOLN	NA	3295763	"	
	ENGINE EXHAUST BLOWER	IAP	455HDBARR1	87748-1	"	
	100 HP ELECTRIC MOTOR	LINCOLN	NA	331085	"	
	AND GEAR BOX UNIT	NA	NA	NA	"	
	FUEL PUMP	NA	NA	NA	ROOM 18	
	GE MOTOR	GE	5KC49UG38C	J389038	ROOM 18	
	GE 1000 HP MOTOR	GE	34G650	8089889	ROOM 149	
	AMERICAN BLOWER FLUID DRIVE	TYPE-VS	NA	78315-4-74	ROOM 149	
	WORTHINGTON OIL PUMP	WORTHINGTON	NA	NA	ROOM 149	
	ALLAS CHALMERS ELEC. MOTOR	ALLAS CHALMERS	TYPE APK	7E851652783	ROOM 149	
	GE 1000 HP MOTOR	GE	34G650	8089888		
	GE INDUCTION MOTOR	GE	5K6344GXI	086826231		
	GE DC GENERATOR	GE	TYPE-CD1556Y	7017202		
	BUFFALO BELTED VENT SET 250C	BUFFALO	NA	NA		
	DYNO OIL PUMP & MOTOR	OIL PUMP (NA)	NA	NA		
	GE SYNCHRONOUS MOTOR	TYPE TS	14G639	6806260		
MR	DC GENERATOR	CD1448Y	32-G14	2435056		
	BUFFALO BELTED VENT SET (175B)	BUFFALO	NA	NA		
	NASH HYTOR VACUUM PUMP	SIZE H10	TESTNOW4820	NA		
	EM-SYNCHRONOUS MOTOR	EM	NA	100420		
	JENNINGS PUMP SIZE 51 1/40	JENNINGS	NA	NA		
	GE MOTOR	GE	NA	10462		
	EM. INDUCTOR MOTOR	EM	25A51	58817-A6		
	EM DC GENERATOR	EM	14D41A	58817-T6		
	5 TON CRANE	ROBBINS/MEYERS		J-1434-9	1ST FLR CELL #2	
	DYNAMOMETER	GE	26-G-206	2394866	"	
	AIR INTAKE EXHAUST LOUVERS	NA	NA	NA	"	
	DYNAMOMETER	EATON DYNAMATIC	1519 DC	1735	"	
	FUEL PUMP E MOTOR (2 UNITS)	NA	NA	NA	"	
	AIR BLOWER (FAN)	HARTZELL	N 24 DUM	46510	"	
	GE MOTOR 50 HP	GE	NJ8280093	PN8281923	SR RM 1	
	BUFFALO PRESSURE BLOWER SZ. 44	BUFFALO	TYPE R	R14202	1ST FLR CELL #2	
	BAILEY AIR CONTROL VALVE (3 UNTS)	BAILEY	JAY	97116		
	GE 100 HP	GE	5K263245	NA		

FACILITY 213

DESCRIPTION: Fording Test Pit (4,026 SY) with concrete ramp and 4,800 SF concrete apron at north end

FACILITY 214 (COOLING POND 3,731,033 GAL.)

BLDG 214						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
PL	COOLING POND PUMP	PATTERSON	FOG	92L50078DF8	COOLING POND	0677
	COOLING POND STRAINER				COOLING POND	0679
	SUMP PUMP				COOLING POND	0678

BLDG 215 (45,268 S.F.)

BLDG 215						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 4800V	GE	2000KVA	G852683	NORTH SIDE	5155
	BREAKERS 4800V	GEC		AB70351	NORTH SIDE	7127
	BREAKERS 4800V	GE	2500KVA	AB70341	SOUTH SIDE	7128
	BREAKER 480V	GE	AK2-50-3		SOUTH SIDE	5158
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87624FG	W BACK DOOR	5180
	ADT SECURITY PANEL	ADT	FOCUS 45		COMPUTER ROOM	5181
	PYROTECHNICS FIRE PANEL HALON	PYROTRON	SYSTEM 3		COMPUTER ROOM	5182
HR	AC #1 AIR HANDLER				MECHANICAL ROOM	
	AC #2 AIR HANDLER				MECHANICAL ROOM	
	AIR COMPRESSOR	DAYTON	32583A	10091-427133	MECHANICAL ROOM	
	CONDENSOR UNIT #1 - 20T	LIEBERT			WEST SIDE BLDG	
	CONDENSOR UNIT #2 - 20T	LIEBERT			WEST SIDE BLDG	
	CONDENSOR UNIT #3 - 20T	LIEBERT			WEST SIDE BLDG	
	CONDENSOR UNIT #4 - 20T	LIEBERT			WEST SIDE BLDG	
	A/C UNIT #1 - 20T	LIEBERT	FH290AUA10	125884A	CRAY ROOM	
	A/C UNIT #2 - 20T	LIEBERT	FH290AUA10	125884B	CRAY ROOM	
	A/C UNIT #3 - 20T	LIEBERT	FH290AUA10	125884C	CRAY ROOM	
	A/C UNIT #4 - 20T	LIEBERT	FH290AUA10	125884C	CRAY ROOM	
	A/C UNIT #1 - 1T	CRAY RESEARCH	DCC-2A	128	CRAY ROOM	
	A/C UNIT #2 - 1T	CRAY RESEARCH	DCC-28	072	CRAY ROOM	
	A/C UNIT #1 - 40T	McQUAY	ALR040C	5SJ0709700	WEST SIDE BLDG	
	A/C UNIT #2 - 40T	McQUAY	AL4040C	5SJ0710600	WEST SIDE BLDG	
	A/C UNIT #3 - 40T	McQUAY	AL4040C	5SJ0705300	WEST SIDE BLDG	
	CONDENSOR UNIT #1 - 20T	LIEBERT	D-0260	23466-6	WEST SIDE BLDG	
	CONDENSOR UNIT #2 - 20T	LIEBERT	D-0260	23466-7	WEST SIDE BLDG	
	CONDENSOR UNIT #3 - 20T	LIEBERT	D-0260	23466-8	WEST SIDE BLDG	
	CONDENSOR UNIT #4 - 20T	LIEBERT	D-0260	23466-9	WEST SIDE BLDG	
	CONDENSOR UNIT #1 - 3T	LIEBERT	64R7	D26242	ROOF	
	CONDENSOR UNIT #2 - 3T	LIEBERT	64R7	D26243	ROOF	
	CONDENSOR UNIT #3 - 3T	LIEBERT	64R7	D26244	ROOF	
	VENTILATOR FAN	GREENHECK	CBX 18-4	191367	ROOF	
	VENTILATOR FAN	GREENHECK	CBX 18-4	191366	ROOF	
	VENTILATOR FAN	GREENHECK	ATS 12-24-DE	87J03495	ROOF	
	VENTILATOR FAN	GREENHECK	CBX 14-4	191364	ROOF	

BLDG 215						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	VENTILATOR FAN	GREENHECK	CBX 24-3	191365	ROOF	
	VENTILATOR FAN	GREENHECK	490C11B		ROOF	
	VENTILATOR FAN	GREENHECK	CBX 48-20	191363	ROOF	
	VENTILATOR FAN	GREENHECK	490C11B		ROOF	
	VENTILATOR FAN	GREENHECK	CBX 30-10	191361	ROOF	
	VENTILATOR FAN	GREENHECK			ROOF	
	VENTILATOR FAN	GREENHECK	CBX 18-4	191362	ROOF	
	VENTILATOR FAN	GREENHECK	CBX 30-10	191359	ROOF	
	VENTILATOR FAN	GREENHECK	CBX 30-10	191358	ROOF	
PL	CHILL WATER CIRC PUMP	WEINMAN	4L-2	194716	MECH ROOM	0727
	CONDENSATE PUMP	HEIL	4502.1		MECH ROOM	0722
PL	CONDENSATE PUMP	HEIL	4502.1		MECH ROOM	0723
	COOLING WATER CIRC PUMP				BY COOLING TWR	0695
	COOLING WATER CIRC PUMP	WEINMAN		194715	MECH ROOM	0726
	COOLING WATER STRAINER	KECKLEY			BY COOLING TWR	0694
	DOMESTIC HEAT EXCHANGER	BELL GOSSETT		9IU88067-01	MECH ROOM	0718
	DRINKING FOUNTAIN	HALSEY TAYLOR	SCWT14A-2	016573216E89	S. BAY	0709
	DRINKING FOUNTAIN	HALSEY TAYLOR	SCWT14A-2	016551465889	W BAY	0713
	DRINKING FOUNTAIN	ELKAY			EAST CORRIDOR	0728
	DRINKING FOUNTAIN	ELKAY			EAST CORRIDOR	0729
	DRINKING FOUNTAIN	HALSEY TAYLOR	GW 10A	741959	CENTER	0730
	DRINKING FOUNTAIN	HALSEY TAYLOR	GW 10A	741956	NE OFFICES	0731
	HOT WATER CIRC PUMP	BELL GOSSETT	189101		MECH ROOM	0719
	HYDRONIC CIRC PUMP	WEINMAN	2.5KB-2A	701704-2	MECH ROOM	0724
	HYDRONIC CIRC PUMP	BELL GOSSETT	35WT-K88	1499456	MECH ROOM	0725
	HYDRONIC HEAT EXCHANGER	BELL GOSSETT	SU-127-2	HSU00A-1207B	MECH ROOM	0721
	POND WATER PUMP	LAYNE		64716	MECH ROOM	0714
	POND WATER PUMP	LAYNE		64717	MECH ROOM	0715
	STEAM STATION	SPENCE			MECH ROOM	0716
	STEAM STATION	SPENCE			MECH ROOM	0717
	UNIT HEATER				S. BAY	0696
	UNIT HEATER				S. BAY	0697
	UNIT HEATER				S. BAY	0698
	UNIT HEATER				S. BAY	0699
	UNIT HEATER				S. BAY	0700
	UNIT HEATER				S. BAY	0701

BLDG 215						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	UNIT HEATER				S. BAY	0702
	UNIT HEATER				S. BAY	0703
	UNIT HEATER				S. BAY	0704
	UNIT HEATER				S. BAY	0705
	UNIT HEATER				S. BAY	0706
	UNIT HEATER				S. BAY	0707
	UNIT HEATER				S. BAY	0708
	UNIT HEATER	MODINE			SW BAY	0710
	UNIT HEATER	TRANE			W BAY	0711
	UNIT HEATER				W BAY	0712
	WATER HEATER	MOR-FLO	EFR420	8831110559	MECH ROOM	0720

BLDG 215						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 4800V	GE	2000KVA	G852683	NORTH SIDE	5155
	BREAKERS 4800V	GEC		AB70351	NORTH SIDE	7127
	BREAKERS 4800V	GE	2500KVA	AB70341	SOUTH SIDE	7128
	BREAKER 480V	GE	AK2-50-3		SOUTH SIDE	5158
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87624FG	W BACK DOOR	5180
	ADT SECURITY PANEL	ADT	FOCUS 45		COMPUTER ROOM	5181
	PYROTECHNICS FIRE PANEL HALON	PYROTRON	SYSTEM 3		COMPUTER ROOM	5182
	TRANSFORMER	ITE	1D1N015	K123878		
HR	AC #1 AIR HANDLER				MECHANICAL ROOM	AH1
	AC #2 AIR HANDLER				MECHANICAL ROOM	AH2
	AIR COMPRESSOR	DAYTON	32583A	10091-427133	MECHANICAL ROOM	AC1
	CONDENSOR UNIT #1 - 20T	LIEBERT			WEST SIDE BLDG	C1
	CONDENSOR UNIT #2 - 20T	LIEBERT			WEST SIDE BLDG	C4
	CONDENSOR UNIT #3 - 20T	LIEBERT			WEST SIDE BLDG	C10
	CONDENSOR UNIT #4 - 20T	LIEBERT			WEST SIDE BLDG	C7
	A/C UNIT #1 - 20T	LIEBERT	FH290AUA10	125884A	CRAY ROOM	ACU2
	A/C UNIT #2 - 20T	LIEBERT	FH290AUA10	125884B	CRAY ROOM	ACU5
	A/C UNIT #3 - 20T	LIEBERT	FH290AUA10	125884C	CRAY ROOM	ACU7
	A/C UNIT #4 - 20T	LIEBERT	FH290AUA10	125884C	CRAY ROOM	ACU9
	A/C UNIT #1 - 1T	CRAY RESEARCH	DCC-2A	128	CRAY ROOM	ACU1
	A/C UNIT #2 - 1T	CRAY RESEARCH	DCC-28	072	CRAY ROOM	ACU4
	A/C UNIT #1 - 40T	McQUAY	ALR040C	5SJ0709700	WEST SIDE BLDG	ACU3
	A/C UNIT #2 - 40T	McQUAY	AL4040C	5SJ0710600	WEST SIDE BLDG	ACU6
	A/C UNIT #3 - 40T	McQUAY	AL4040C	5SJ0705300	WEST SIDE BLDG	ACU8
	CONDENSOR UNIT #1 - 20T	LIEBERT	D-0260	23466-6	WEST SIDE BLDG	C2
	CONDENSOR UNIT #2 - 20T	LIEBERT	D-0260	23466-7	WEST SIDE BLDG	C5

BLDG 215

SHOP	EQUIP DESCRIPTION	MAKE	MODEL	SERIAL #	LOCATION	SAI #
	CONDENSOR UNIT #3 - 20T	LIEBERT	D-0260	23466-8	WEST SIDE BLDG	C8
	CONDENSOR UNIT #4 - 20T	LIEBERT	D-0260	23466-9	WEST SIDE BLDG	C11
	CONDENSOR UNIT #1 - 3T	LIEBERT	64R7	D26242	ROOF	C3
	CONDENSOR UNIT #2 - 3T	LIEBERT	64R7	D26243	ROOF	C6
	CONDENSOR UNIT #3 - 3T	LIEBERT	64R7	D26244	ROOF	C9
	VENTILATOR FAN	GREENHECK	CBX 18-4	191367	ROOF	V1
	VENTILATOR FAN	GREENHECK	CBX 18-4	191366	ROOF	V2
	VENTILATOR FAN	GREENHECK	ATS 12-24-DE	87J03495	ROOF	V3
	VENTILATOR FAN	GREENHECK	CBX 14-4	191364	ROOF	V4
	VENTILATOR FAN	GREENHECK	CBX 24-3	191365	ROOF	V5
	VENTILATOR FAN	GREENHECK	490C11B		ROOF	V6
	VENTILATOR FAN	GREENHECK	CBX 48-20	191363	ROOF	V7
	VENTILATOR FAN	GREENHECK	490C11B		ROOF	V8
	VENTILATOR FAN	GREENHECK	CBX 30-10	191361	ROOF	V9
	VENTILATOR FAN	GREENHECK			ROOF	V10
	VENTILATOR FAN	GREENHECK	CBX 18-4	191362	ROOF	V11
	VENTILATOR FAN	GREENHECK	CBX 30-10	191359	ROOF	V12
	WATER HEAT TRANSFER COILS	MARLO	1W14345608T	214091J		
PL	CHILL WATER CIRC PUMP	WEINMAN	4L-2	194716	MECH ROOM	0727
	CONDENSATE PUMP	HEIL	4502.1		MECH ROOM	0722
	CONDENSATE PUMP	HEIL	4502.1		MECH ROOM	0723
	COOLING WATER CIRC PUMP				BY COOLING TWR	0695
	COOLING WATER CIRC PUMP	WEINMAN		194715	MECH ROOM	0726
	COOLING WATER STRAINER	KECKLEY			BY COOLING TWR	0694
	DOMESTIC HEAT EXCHANGER	BELL GOSSETT		9IU88067-01	MECH ROOM	0718
	DRINKING FOUNTAIN	HALSEY TAYLOR	SCWT14A-2	016573216E89	S. BAY	0709
	DRINKING FOUNTAIN	HALSEY TAYLOR	SCWT14A-2	016551465889	W BAY	0713
	DRINKING FOUNTAIN	ELKAY			EAST CORRIDOR	0728
	DRINKING FOUNTAIN	ELKAY			EAST CORRIDOR	0729
	DRINKING FOUNTAIN	HALSEY TAYLOR	GW 10A	741959	CENTER	0730
	DRINKING FOUNTAIN	HALSEY TAYLOR	GW 10A	741956	NE OFFICES	0731
	HOT WATER CIRC PUMP	BELL GOSSETT	189101		MECH ROOM	0719
	HYDRONIC CIRC PUMP	WEINMAN	2.5KB-2A	701704-2	MECH ROOM	0724
	HYDRONIC CIRC PUMP	BELL GOSSETT	35WT-K88	1499456	MECH ROOM	0725
	HYDRONIC HEAT EXCHANGER	BELL GOSSETT	SU-127-2	HSU00A-1207B	MECH ROOM	0721
	POND WATER PUMP	LAYNE		64716	MECH ROOM	0714
	POND WATER PUMP	LAYNE		64717	MECH ROOM	0715
	STEAM STATION	SPENCE			MECH ROOM	0716
	STEAM STATION	SPENCE			MECH ROOM	0717
	UNIT HEATER				S. BAY	0696
	UNIT HEATER				S. BAY	0697
	UNIT HEATER				S. BAY	0698
	UNIT HEATER				S. BAY	0699
	UNIT HEATER				S. BAY	0700

BLDG 215						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	UNIT HEATER				S. BAY	0701
	UNIT HEATER				S. BAY	0702
	UNIT HEATER				S. BAY	0703
	UNIT HEATER				S. BAY	0704
	UNIT HEATER				S. BAY	0705
	UNIT HEATER				S. BAY	0706
	UNIT HEATER				S. BAY	0707
	UNIT HEATER				S. BAY	0708
	UNIT HEATER	MODINE			SW BAY	0710
	UNIT HEATER	TRANE			W BAY	0711
	UNIT HEATER				W BAY	0712
	WATER HEATER	MOR-FLO	EFR420	8831110559	MECH ROOM	0720

BLDG 217 (400 S.F.)

BLDG 217						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
HR	GAS FIRED HEAT/AC (HEAT 58320 BTU-A/C 18000 BTU)	BRYANT	588ANW030080ACBD	2696G11292	ROOF	
PL	DRINKING FOUNTAIN	SUNROC	NSF 14		INSIDE	0772
	WATER HEATER	AMERICAN			INSIDE	0771

BLDG 219 (30,400 S.F.)

BLDG 219						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 4800V	ITE	300KVA		SUB-STATION	5149
	TRANSFORMER 112.5 KVA	SORGEL	112.5KVA	24981	SUB-STATION	5150
	SECONDARY BREAKERS (7 EA)	ITE			SUB-STATION	5151
	PRIMARY SWITCH 4800V	SORGEL			SUB-STATION	5152
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	212	X87643	NE CORNER	5206
	ROOF SYS ABV NEW TRANSFORMER	FIRESTONE		K51378		
HR	AIR HANDLER	TRANE	CBDB12A0SC		ROOF	AH2191
	AIR HANDLER	TRANE	K82C52785		MEZZANINE	13088
	A/C UNIT - 20T	YORK	D3CE076A46EB		ROOF	13074
	AIR HANDLER	TRANE	1-9A		ROOF	AH2192
	A/C UNIT - 6.5T	YORK	D3CE076A46EB		ROOF	13075
	A/C UNIT - 7.5T	YORK	D3CE090A4QA		ROOF	13076
	AIR COMPRESSOR	INDUSTRIAL	C523E80U1		SHOP	A1
	WINDOW A/C(HEAT) - 1.5T 14500 BTU	WHIRLPOOL			OFFICE	AW1
	WINDOW A/C(HEAT) - 1.5T 14500 BTU	WHIRLPOOL			OFFICE	AW2
	WINDOW A/C(HEAT) - 1.5T 14500 BTU	WHIRLPOOL			OFFICE	AW3
	WINDOW A/C(HEAT) - 1.5T 14500 BTU	WHIRLPOOL			OFFICE	AW4
	EXHAUST FAN	LAUREN COOK			SHOP	EF1
	EXHAUST FAN	LAUREN COOK			SHOP	EF2
	COMPRESSOR-DRINKING FOUNTAIN	SUNROC			BREAK AREA	
	COMPRESSOR-DRINKING FOUNTAIN	SUNROC			BREAK AREA	
PL	DRINKING FOUNTAIN	SUNROC			CENTER	0337
	DRINKING FOUNTAIN	ELKAY			CENTER	0339
	DRINKING FOUNTAIN	SUNROC	NSF 14		SE CORNER	0349
	EYE WASHER	BRADLEY			NE CORNER	0332
	EYE WASHER	BRADLEY			NW CORNER	0340
	LIQUID MOVER	JOHNSON	LMH-A-22-C4-30	8307978	NE CORNER	0329
	LIQUID MOVER	JOHNSON	LMH-A-224-100	B713632	MEZZANINE	0346
	SPACE HEATER				NE CORNER	0331
	SPACE HEATER				SW CORNER	0342
	SPACE HEATER				SE CORNER	0348
	SPRINKLER CHECK	AUTOMATIC CO	A-2		CENTER	0334
	STEAM STATION	SPENCE			CATWALK	0327
	STEAM STATION	SPENCE			CATWALK	0328
	SUMP PUMP				NE CORNER	0330
	UNIT HEATER				CENTER	0333

BLDG 219						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	UNIT HEATER				CENTER	0335
	UNIT HEATER				CENTER	0338
	UNIT HEATER	DAYTON			NW CORNER	0341
	UNIT HEATER				SW CORNER	0343
	UNIT HEATER				CENTER	0344
	UNIT HEATER				SE CORNER	0345
	WATER HEATER	MOR-FLO	ER90-52DL	9049130876	CENTER	0336
	WATER HEATER	MOR-FLO	ER52DL	892603913	SE CORNER	0347
MR	CRANE 10 TON	OVERHEAD CRANE		NA37		15212
	CRANE 3 TON	R&M		NA38		15213
	HOIST 2 TON	P&H				15214
	PRESS ARBOR HAND	FA NUGIER				15215
	PRESS ARBOR HAND	O.T.C.				15216
	LATHE	STANDARD				15217
	GRINDER BENCH	BALDER				15218
	PRESS DRILL BENCH	WILTON				15219
	SAW HACK	KELLER				15220
	GRINDER PEDISTAL	BALDOR				15221
	WELDER	EUTECTIC				15222
	WELDER	HOBART				15223

BLDG T224 (3,920 S.F.)

BLDG &224						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
PL	STEAM STATION	SPENCE			CENTER	0743
	UNIT HEATER	MODINE			SOUTH	0742
	UNIT HEATER	TRANE			NORTH	0744

FACILITY 226 - ANTENNA TOWER (SOUTH OF BLDG 205)

BLDG T227 (12,000 S.F.)

EQUIPMENT LIST/LOCATION
BLDG T227 (12000 S.F.)

BLDG T227						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87625FG	NE AREA	5183
	ADT SECURITY ALARM PANEL	ADT	FOCUS 45		NE AREA	5184
HR	CHILLER 70T	CARRIER	Y217605			H1
PL	CONDENSATE PUMP	HOFFMAN	C17FF	QAZ953	UTILITY	0760
	CONDENSATE PUMP	HOFFMAN	C17FF	QRZ953	UTILITY	0761
	DRINKING FOUNTAIN	ELKAY	FD700-10-1	8204 85862	EAST	0751
	DRINKING FOUNTAIN	ELKAY			OFFICES	0754
	HOT WATER CIRC PUMP	BELL GOSSETT	189101		UTILITY	0755
	HOT WATER HEAT EXCHANGER	JOHNSON	HXCT1-WH-PS-252	063-W8-375-1	UTILITY	0756
	STEAM STATION	SPENCE			UTILITY	0758
	STEAM STATION	SARCO			UTILITY	0759
	UNIT HEATER	MODINE			NW	0746
	UNIT HEATER	MODINE			WEST	0747
	UNIT HEATER	MODINE			NORTH	0748
	UNIT HEATER	MODINE			NE	0749
	UNIT HEATER	MODINE			EAST	0750
	UNIT HEATER	MODINE			SOUTH	0752
	UNIT HEATER	MODINE			SOUTH	0753
	UNIT HEATER	MODINE	V161L01	05012199-2		
	UNIT HEATER	MODINE	V161L01	0501899-91		
	WATER HEATER	DAYTON	3E315L	9123102977	UTILITY	0757

BLDG 229 (198,583 S.F.)

BLDG 229						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 75 KVA DRY	FPE		50347-M	BASEMENT	5001
	TRANSFORMER 30 KVA DRY	ACME		T-1-53312-3	BASEMENT	5002
	TRANSFORMER 5 KVA DRY	GE	C4	9123-B-3873	BASEMENT	5003
	TRANSFORMER 9 KVA DRY	ITE	3F3R009TE	77032-0680	BASEMENT	5004
	TRANSFORMER 45 KVA DRY	WESTINGHOUSE		T83FC91C8	BASEMENT	5005
	TRANSFORMER 75 KVA DRY	SQUARE D	75T3H	34349-17212-041	1st FLOOR	5006
	TRANSFORMER 45 KVA DRY	GE	CY	9T23B3873	1st FLOOR	5007
	TRANSFORMER 75 KVA DRY	SQUARE D	75T3H	34349-17212-041	1st FLOOR	5008
	TRANSFORMER 75 KVA DRY	ITE	3F34075N	7667-0680	1st FLOOR	5009
	TRANSFORMER 75 KVA DRY	ITE	36B	3F3Y075ST	2nd FLOOR	5010
	TRANSFORMER 45 KVA DRY	GE	CY	9T223B3873	2nd FLOOR	5011
	TRANSFORMER 75 KVA DRY	ITE	IT-3	76669-0680	2nd FLOOR	5012
	TRANSFORMER 75 KVA DRY	ITE	36B	TX3A-B	3rd FLOOR	5013
	TRANSFORMER 45 KVA DRY	GE	C4	9T23B3873	3rd FLOOR	5014
	TRANSFORMER 75 KVA DRY	ITE	36B	3F3Y075ST	3rd FLOOR	5015
	TRANSFORMER 75 KVA DRY	ITE	3F34075N	76683-0680	4th FLOOR	5016
	TRANSFORMER 45 KVA DRY	GE	L6	9T23-B-3873	4th FLOOR	5017
	TRANSFORMER 45 KVA DRY	CHALLENGER	452-415	V45001CH	4th FLOOR	5018
	TRANSFORMER 45 KVA DRY	GE	C4	9T23-B-3873	4th FLOOR	5019
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-01	1st FLOOR	5020
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-02	1st FLOOR	5021
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-03	2nd FLOOR	5022
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-04	2nd FLOOR	5023
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-05	3rd FLOOR	5024
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-06	3rd FLOOR	5025
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-07	4th FLOOR	5026
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-08	4th FLOOR	5027
	TRANSFORMER MAIN 1500 KVA DRY	ITE	DRY	2428842	BASEMENT	5028
	PANEL BOARD 800A	ITE		84-7121B	BASEMENT	5029
	PANEL BOARD 3000A	ITE	FCII	84-71212B	BASEMENT	5030
	GENERATOR 200KW	GOVERNMENT	MEP0098	RZ00382	NW CORNER	5031
	SIMPLEX SECURITY PANEL	SIMPLEX	2100		NORTH LOBBY	5207
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87645FG	NORTH LOBBY	5208
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87646FG	NORTH LOBBY	5209
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	J16913FN	NORHT LOBBY	5210
	MOOSE SECURITY SYSTEM	MOOSE	Z100		ROOM 300	5211
	DURESS BUTTONS				ROOM W315	5212
	DURESS BUTTONS				SE CORNER	5213
	SECURITY ALARM	MOOSE	2122		BASEMENT	5214
HR	LIQUID CHILLER	CARRIER	19DK6531CM	0192J45145	PENTHOUSE	10024
	CHILLED WATER PUMP	PACO	11-50955746201	HY669167	PENTHOUSE	10025

BLDG 229						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	COOLING TOWER	B.A.C.	CFT2419C	802156D	PENTHOUSE	10026
	COOLING TOWER PUMP	PACO	11-50955-746201	HSMB59371	PENTHOUSE	10027
	AIR HANDLING UNIT	MCGILL	PAT 3-742-672		PENTHOUSE	10028
	A.H.U. SUPPLY FAN	TWIN CITY FAN	BAF-SWFI	80-27397-2-1	PENTHOUSE	10029
HR	A.H.U. RETURN FAN	TWIN CITY FAN	BAF-SWDI	80-27397-5-1	PENTHOUSE	10030
	PRIMARY AIR COMPRESSOR	QUINCY	325	0429494	PENTHOUSE	10031
	BACK UP AIR COMPRESSOR	DAYTON	32582	1120916388265	PENTHOUSE	10032
	AIR DRYER	HANKISON	8010	0302A-40-1180-383N	PENTHOUSE	10033
	EXHAUST FAN (TELEPHONE RMS)	LOREN COOK CO	210-CKV	5186653-00 12/85		10034
	EXHAUST FAN (RESTROOMS)	TWIN CITY FAN	BCV SWSI	80-27398-3-1		10035
	EXHAUST FAN (PENTHOUSE)	GREEN HECK	SDP 243154	610456	PENTHOUSE	10036
	D.X A/C UNIT (CAFETERIA)	TRANE	SLHA3004LI10A35DDO	E/BB0G02170	ROOF	10037
	MAKE-UP AIR UNIT (CAFETERIA)	TRANE	PCCA-2114-18-DAHA1B1AOAOA	B80J02818	ROOF	10038
	DX A/C UNIT (TELEPHONE RMS)	SNYDER GENERAL	CUROB6FYYY	5VM84173-01	ROOF	10039
	OUTDOOR UNIT (GLYCOL)	BOHN	DFC0103F	BGK 8161	ROOF	10040
	INDOOR UNIT (OPERATIONS CENTER)	CONTEMPO	CEMW-0534-SU	14357 B81	BASEMENT	10041
	#2 INDOOR UNIT (COMPUTER OFFICE)	LIEBERT	FH11OGUAID	141826 A	W151	10042
	#1 INDOOR UNIT (COMPUTER RM.)	LIEBERT	FH110GUAID	141828 B	W162	10043
	OUTDOOR UNIT (CONDENSOR)	LIEBERT	D0080	338144100512	N. W. PAD	10044
	OUTDOOR UNIT (CONDENSOR)	LIEBERT	D0070	83381471001	N.W PAD	10045
	#2 OUTDOOR UNIT (CONDENSOR)	LIEBERT	DD0350A	89030575	S.W. PAD	10046
	#1 OUTDOOR UNIT (CONDENSOR)	LIEBERT	DD0174A	80930611	S.W. PAD	10047
	REACH-IN REFRIGERATOR	HOWARD	WC-45	35311	CAFETERIA	10048
	REACH-THRU REFRIGERATOR	VICTORY	R1S-2D-53-PT	B-8104V33	CAFETERIA	10049
	ICE-MAKER	SCOTSMAN	MF700AE-1A	093905-07W	CAFETERIA	10050
	ICE-MAKER	MANITOWAC	BD0603W	930761949	CAFETERIA	10051
	WALK-IN COOLER	COPELAND	KAKL-0100-TAC	CTC80J11399	CAFETERIA	10052
	WALK-IN COOLER	COPELAND	KAH-0100-TAC	CTC80J113917	CAFETERIA	10053
	WALK-IN COOLER	TECUMSEH	94600	LR32645H	CAFETERIA	10054
	REACH-IN REFRIGERATOR	COPELAND	RSN4-0050-18A	222-BM	CAFETERIA	10055
	V.A.V. BOXES (368 EA.)	ANEMOSTAT			1-4 FLRS	10056
	A/C SPLIT SYSTEM	SANYO	MN-C1211		ROOF	
	BOOSTER FAN	GREENHECK			CEILING 3rd FL	
	EXHAUST FAN	GREENHECK	MN-C5P-50		CEILING 3rd FL	
	AIR HANDLER	MINI-MITE			CEILING CAFÉ MGR OFF	
	EXHAUST FAN	E.O. SMITH			ELEC RM BASEMENT	
	REFRIGERATOR	COPELAND	MN-KAEZ-00501AA-800		CAFETERIA GRILL AREA	
	REFRIGERATOR	VICTORY	MN-MS-1D53		CAFETERIA	
	EXHAUST FAN				RESTROOMS LOBBY	
	COMPRESSOR DRINKING FOUNTAIN				BASEMENT	
	COMPRESSOR DRINKING FOUNTAIN				1st FL	
	COMPRESSOR DRINKING FOUNTAIN				3rd FL	

BLDG 229						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	COMPRESSOR DRINKING FOUNTAIN				3rd FL	
	COMPRESSOR DRINKING FOUNTAIN				4th FL	
	A/C 20T	LIEBERT		66871B		
	A/C 40T	TRANE		SLHA4004LK10A		
	A/C 10T	LIEBERT		66871A		
	A/C 10T	CONTEMPO		14357-B81		
	CHILLER 350T	YORK		MCDK009		
	A/C 25T	LIEBERT		141826B		
	A/C 10T	LIEBERT		141826A		
	CAFETERIA EQUIPMENT					10065
	FREEZER REACH-IN	VICTORY	F1S1DS3			10066
	REACH-IN COOLER					10137
	REACH-IN COOLER					10138
	WALK-IN FREEZER					10139
	FREEZER REACH-IN					10061
	AIR HANDLER	LIEBERT				10058
	AIR HANDLER	LIEBERT				10057
	AIR HANDLER UNIT	TRANE	TCD151C40BAA	226102870D		10284
PL	GREASE TRAP					GT1
	UNIT HEATER	GRINNELL	98FR16T12	681781		193
	UNIT HEATER	TRT				262
	HEAT EXCHANGER					185
	HEAT EXCHANGER	BELL GOSSETT				167
	SUMP PUMP					192
	SUMP PUMP					182
	SUMP PUMP					183
	WATER HEATER	LOCHINVAR	JRC006E			1
	WATER HEATER	LOCHINVAR	ETK120PP	WK2086158		
	WATER HEATER	LOCHINVAR	ETK120PP1	KB1243828		173
	WATER HEATER	LOCHINVAR	ETK120PP1	DF1737858		176
	WATER HEATER	MOR FLO	ER6STR	C1128003		174
	WATER HEATER					179
	WATER HEATER	RUUDGLAS	PACEMAKER			171
	DRINKING FOUNTAIN	HALSEY TAYLOR				191
	DRINKING FOUNTAIN	ELKAY				177
	DRINKING FOUNTAIN	ELKAY				175
	DRINKING FOUNTAIN	ELKAY				178
	DRINKING FOUNTAIN	ELKAY				172
	DRINKING FOUNTAIN	ELKAY				170
	WATER COOLER	ELKAY	020217331			0778
	DRINKING FOUNTAIN	ELKAY				189
	DRINKING FOUNTAIN	ELKAY				188

BLDG 229						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	DRINKING FOUNTAIN	ELKAY				190

BLDG 230 (265,754 S.F.)

BLDG 230						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	SWITCH 4800V	ALLIS-CHALMERS	LBS	335863	SUB-STATION	5062
	SWITCH 4800V	ALLIS-CHALMERS	LBS	335862	SUB-STATION	5063
	TRANSFORMER 750 KVA	ALLIS-CHALMERS	OIL	3451685	SUB-STATION	5084
	TRANSFORMER 750 KVA	ALLIS-CHALMERS	OIL	3451701	SUB-STATION	5085
	SECONDARY BREAKERS (3 EA)	SQUARE D	DS-206	8048452	MACHINE ROOM	5086
	SECONDARY BREAKERS (2 EA)	ITE	LA1600		MACHINE ROOM	5087
	SWITCH 4800V	ALLIS-CHALMERS	LBS	335858	SUB-STATION	5088
	SWITCH 4800V	ALLIS-CHALMERS	LBS	335861	SUB-STATION	5089
	TRANSFORMER 500 KVA	ALLIS-CHALMERS	OIL	3451717	SUB-STATION	5090
	TRANSFORMER 500 KVA	ALLIS-CHALMERS	OIL	6-854617	SUB-STATION	5091
	TRANSFORMER 750 KVA	ALLIS-CHALMERS	OIL	3452622	MACHINE ROOM	5092
	TRANSFORMER 750 KVA	SQUARE D	DRY	82844	MACHINE ROOM	5093
	SWITCH 4800V	SQUARE D	600A	44035-234-61	MACHINE ROOM	5094
	SWITCH 4800V	ALLIS-CHALMERS	LBS	335859	MACHINE ROOM	5095
	SECONDARY BREAKERS (48 EA)	ALLIS-CHALMERS	LA600		SUB-STATION	5096
	MAIN BREAKERS (4 EA)	ALLIS-CHALMERS	LA1600		SUB-STATION	5097
	TRANSFORMER 500 KVA	FAYETTEVILLE	OIL R TEMP	93105-01	SUB-STATION	5105
	TRANSFORMER 500 KVA	FAYETTEVILLE	OIL R TEMP	92048-01	SUB-STATION	5106
	SECONDARY BREAKERS (27 EA)	ALLIS-CHALMERS	LA600		SUB-STATION	5107
	MAIN BREAKERS (2 EA)	ALLIS-CHALMERS	LA1600		SUB-STATION	5108
	TIE BREAKERS (1 EA)	ALLIS-CHALMERS	LA 1600		SUB-STATION	5109
	UPS (2 EA)	GE	HIGH POWER	277AA1JA2A081	SUB-STATION	5110
	BATTERY SW	GE	POWER BREAK	150489	SUB-STATION	5111
	BATTERY SW	GE	POWER BREAK	150490	SUB-STATION	5112
	BATTERIES UPS (120)	ELTRA	C & D		SUB-STATION	5113
	GAS DETECTOR	GASTECH	1620	85290	SUB-STATION	5114
	ADT SECURITY ALARM	ADT	FOCUS 45		COM CENTER	5215
	DURESS BUTTONS				ROOM C204	5216
	DURESS BUTTONS				ROOM C216	5217
	DURESS BUTTONS				ROOM C220	5218
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87647FG	BY ROOM E130	5219

BLDG 230						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87648FG	BY ROOM E130	5220
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	4100	J16912FN	BY ROOM E130	5221
	SIMPLEX SCC	SIMPLEX	2120		BY ROOM E130	5222
	EMERGENCY GENERATOR					
HR	A/C 1-1/2T	SANYO		4961		
	A/C 1T	SANYO		61574		
	A/C 1T	SANYO		77392		
	A/C 1-1/2T	SANYO		10671		
	A/C 1-1/2T	SANYO		30061		
HR	A/C 1-1/2T	SANYO		1461		
	A/C 1T	SANYO		20574		
	A/C 1-1/2T	CARRIER		620709882		
	A/C 1-1/2T	CARRIER		2870500		
	A/C 3T	COMFORT-AIRE				
	A/C 1-1/2T	WESTINGHOUSE		A6064K7A1		
	A/C 6000BTU	WESTINGHOUSE		A673K7A1		
	A/C 6000BTU	WESTINGHOUSE		K0662		
	A/C 3T	CARRIER		V604932		
	A/C 1T	WHIRLPOOL		792461014		
	CHILLER 200T	TRANE		L90C00794		
	CHILLER 200T	TRANE		L90C00796		
	A/C 10T	LIEBERT		104163A		
	A/C 2-1/2T	CARRIER		V238395		
	A/C 3T	CARRIER		5581299		
	A/C 3T	CARRIER				
	A/C 3T	CARRIER				
	A/C 3T	CARRIER		V610121		
	A/C 3T	CARRIER		V609538		
	A/C 1-1/2T	SANYO		7971		
	A/C 1-1/2T	SANYO		1661		
	A/C 1-1/2T	SANYO		2361		
	A/C 1T	SANYO		41462		
	EXHAUST FAN		MN-150C2B	007S446714000018020996		
	EXHAUST FAN		MN-150C2B	0075446714000018010996		
	A/C	SANYO	MN-6C12AC	3602931	ROOM 231W	
	A/C	SANYO	MN-6C12AC	3602931	ROOM 215W	
PL	CHEMICAL INJECTOR PUMP	TOWER MATION	S31A-2-A02	27A0002	MACHINE RM	0227
	CHEMICAL INJECTOR PUMP	TOWER MATION	S31A-2-A02	27A0001	MACHINE RM	0228
	CHILL WATER PUMP	FEDERAL			MACHINE RM	0216
	CHILL WATER PUMP	BELL GOSSETT			MACHINE RM	0220
	CHILL WATER PUMP				MACHINE RM	0222

BLDG 230						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	CHILL WATER PUMP				MACHINE RM	0223
	CHILL WATER PUMP				MACHINE RM	0224
	CHILL WATER PUMP	TACO	CC2006319		MACHINE RM	0226
	CHILL WATER PUMP	PEERLESS			MACHINE RM	0231
	CONDENSATE PUMP				MACHINE RM	0217
	CONDENSATE PUMP				MACHINE RM	0218
	CONDENSATE PUMP	BELL GOSSETT	HOFFMAN	OR2484	MACHINE RM	0229
	CONDENSATE PUMP	BELL GOSSETT	HOFFMAN		MACHINE RM	0230
	CONDENSATE PUMP	ROTH	AVHL104SF	704864-2	COMPUTER RM	0243
PL	CONDENSATE PUMP	ROTH	AVHL104SF	704864-1	COMPUTER RM	0244
	CONDENSATE PUMP	ROTH	AVHL104SF	704864-4	COMPUTER RM	0245
	CONDENSATE PUMP	ROTH	AVHL104SF	704864-3	COMPUTER RM	0246
	CONDENSATE PUMP				WEIGHT RM	0292
	CONDENSATE PUMP				WEIGHT RM	0293
	CONDENSATE PUMPS	ARMSTRONG	524QSTD	158780	1ST FLR WEST	0253
	CONDENSATE PUMPS				1ST FLR WEST	0254
	COOLING WATER PUMP	PEERLESS			COOLING TOWER	0237
	COOLING WATER PUMP	VERTI-LINE	25CW10JK2	D01697A	COOLING TOWER	0238
	COOLING WATER PUMP	PEERLESS	IOMA	E1-42486	COOLING TOWER	0239
	COOLING WATER PUMP	PEERLESS		442028NO	COOLING TOWER	0240
	DRINKING FOUNTAIN	EATON-CORDLEY	CWA15	731006112	MACHINE RM	0215
	DRINKING FOUNTAIN	GENERAL ELEC.			COMPUTER RM	0250
	DRINKING FOUNTAIN	SUNROC	TYPE 1	R851209F	COMPUTER RM	0251
	DRINKING FOUNTAIN	HALSEY TAYLOR	GC10A(R)	62236982	CHAPEL	0256
	DRINKING FOUNTAIN	ELKAY			1ST FLR WEST	0257
	DRINKING FOUNTAIN	SUNROC	NSF 14	900137615	1ST FLR WEST	0258
	DRINKING FOUNTAIN	ELKAY			1ST FLR WEST	0259
	DRINKING FOUNTAIN	HALSEY TAYLOR			1ST FLR WEST	0260
	DRINKING FOUNTAIN	SUNROC	NSF 14	93174161	1ST FLR WEST	0261
	DRINKING FOUNTAIN	SUNROC	TYPE 1	H362957G	2ND FLR WEST	0263
	DRINKING FOUNTAIN	SUNROC	NSF 14	RR79394M	2ND FLR WEST	0264
	DRINKING FOUNTAIN	SUNROC	NSF 14		2ND FLR WEST	0265
	DRINKING FOUNTAIN	ELKAY			2ND FLR WEST	0266
	DRINKING FOUNTAIN	HALSEY TAYLOR			2ND FLR CENTER	0272
	DRINKING FOUNTAIN	SUNROC	NSF 14	RR79398M	2ND FLR CENTER	0278
	DRINKING FOUNTAIN	SUNROC	NSF 14		2ND FLR EAST	0279
	DRINKING FOUNTAIN	SUNROC			2ND FLR EAST	0285
	DRINKING FOUNTAIN	HALSEY TAYLOR	BFC7F2	016573531E89	2ND FLR EAST	0286
	DRINKING FOUNTAIN	SUNROC	NSF 14	NN46874D	2ND FLR EAST	0287
	DRINKING FOUNTAIN	ELKAY			1ST FLR CENTER	0288
	DRINKING FOUNTAIN	ELKAY			LOBBY	0289
	DRINKING FOUNTAIN	SUNROC			1ST FLR CENTER	0290
	DRINKING FOUNTAIN	SUNROC			WEIGHT RM	0291
	DRINKING FOUNTAIN				1ST FLR EAST	0295

BLDG 230						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	DRINKING FOUNTAIN	SUNROC	TYPE 1	H362960G	1ST FLR EAST	0296
	EYE WASHER	BRADLEY			MACHINE RM	0225
	EYE WASHER	WESTERN			BATTERY ROOM	0241
	HEAT EXCHANGER				MACHINE RM	0221
	HEAT EXCHANGER	ADSCO	V-TUBE	S-16984-3	2ND FLR EAST	0280
	HEAT EXCHANGER HYDRONIC	ADSCO	V-TUBE	S-16984-2	PENTHOUSE	0276
	HOT WATER CIRC PUMP	BELL GOSSETT	15101 1/2A	1239019	MACHINE RM	0219
	HYDRONIC CIRC PUMP	FEDERAL	BB85063	11/2 CGB3/4-4	2ND FLR WEST	0267
	HYDRONIC CIRC PUMP	AURORA	I0698 18-A	324	2ND FLR WEST	0268
PL	HYDRONIC CIRC PUMP	BURKS	SG-1-1 1/4	482883	2ND FLR WEST	0269
	HYDRONIC CIRC PUMP	BURKS	SG-1-1/4	621088	2ND FLR WEST	0270
	HYDRONIC CIRC PUMP	BURKS			PENTHOUSE	0273
	HYDRONIC CIRC PUMP	BURKS	5G5-1-1/4	782604	PENTHOUSE	0274
	HYDRONIC CIRC PUMP	BELL GOSSETT			PENTHOUSE	0275
	HYDRONIC CIRC PUMP	BELL GOSSETT	1714443	173080	2ND FLR EAST	0281
	HYDRONIC CIRC PUMP	SKIDMORE	52329-3SJ-401	126251	2ND FLR EAST	0282
	HYDRONIC CIRC PUMP	BURKS	5G5-1-1/4	800760	2ND FLR EAST	0283
	HYDRONIC CIRC PUMP	BELL GOSSETT	1 1/4 ABGBF	1058120	2ND FLR EAST	0284
	HYDRONIC HEAT EXCHANGER				2ND FLR WEST	0271
	STEAM STATION	SPENCE			MACHINE RM	0232
	STEAM STATION	SPENCE			MACHINE RM	0233
	STEAM STATION	SPENCE			MACHINE RM	0234
	STEAM STATION	SPENCE			MACHINE RM	0235
	STEAM STATION	SPENCE			MACHINE RM	0236
	SUMP PUMP				WEIGHT RM	0294
	UNIT HEATER	DUNHAM BUSH			BATTERY RM	0242
	UNIT HEATER	DUNHAM BUSH			COMPUTER RM	0247
	UNIT HEATER	REXNOR			COMPUTER RM	0248
	UNIT HEATER	REXNOR			COMPUTER RM	0249
	UNIT HEATER				E. LOADING	0252
	UNIT HEATER	DUNHAM BUSH			W. LOADING	0255
	UNIT HEATER	DUNHAM BUSH			PENTHOUSE	0277
ACO	AIR HANDLER #1	CARIER	39331054UA10	720609410	RM 114	25001
	RETURN AIR FAN #1	AMERICAN STANDARD	545-179-171	SEQ. NO 8110	RM 114	25002
	RETURN AIR FAN AC #1	NA	NA	NA	RM 114	25003
	AIR HANDLER #2	CARRIER	39BB1303UA10	720609411	RM 114	25004
	AIR HANDLER #3	CARRIER	39BB1302392U	720609412	RM 114	25005
	RETURN AIR FAN #3	NA	NA	NA	RM 108	25006
	AIR HANDLER #4	CARRIER	39BB130-2392U	720609413	RM 114	25007
	AIR HANDLER #5	CARRIER	39BA135-A4092U	720609414	RM 108	25008
	RETURN AIR FAN #4	NA	NA	NA	RM 114	25009
	AIR HANDLER #6	CARRIER	39BB1351TA10	720609415	RM 108	25010
	CENTRIFUGAL CHILLER #1	YORK	SSS7E-460	MCF-3619	RM 103	25011
	CENTRIFUGAL CHILLER #2	YORK	SSS7E-460	MCF-3617	RM 103	25012

BLDG 230						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	CENTRIFUGAL CHILLER #3	CARRIER	19DG5142CD	7L0417886	RM 103	25013
	CHILLED WATER PUMP #1	HOWELL	NA	NA	RM 103	25014
	CHILLED WATER PUMP #2	HOWELL	NA	NA	RM 103	25015
	CHILLED WATER PUMP #3	HOWELL	NA	NA	RM 103	25016
	CHILLED WATER PUMP #4	WACO	CC2006	NA	RM 103	25017
	TOWER CHEMICAL PUMP #1	HARTWEL//WILTON	531A-2-A02	27A0002	RM 103	25018
	TOWER CHEMICAL PUMP #2	HARTWL/WILTON	531A-2-A02	27A001	RM 103	25019
	TOWER CHEMICAL TIMER	CAMBRIDGE	TWRMATION	D7143424	RM 103	25020
	CHILLED WATER PUMP P-17	US ELECTRICAL	NA	NA	RM 103	25021
ACO	AIR COMPRESSOR	HONEYWELL	231CAZPOE	108-28-102095-L	RM 103	25022
	COMPRESSED AIR DRYER	HONEYWELL	8010	1302A-46-75-288	RM 103	25023
	REAM-A-MATIC (TUBE CLEANER)	GOODWAY	RAM-4	16091	RM 103	25024
	GRINDER	BALDOR	7306DP	W387	RM 103	25025
	REFRIGERATOR	NORGE	NA	NA	RM 103	25026
	DRINKING FOUNTAIN	EATON/CORDLEY	CWA15	731006112	RM 103/HVAC	25027
	CHILLED WATER PUMP A/C-4	BELL GOSSETT	185011	1207156 C48	RM 103	25028
	CHILLED WATER MOTOR A/C-4	BALDOR	M3613T	36A01W384	RM 103	25029
	CHILLED WATER MOTOR CP-15	NA	NA	NA	RM 103	25030
	CHILLED WATER POT TANK FEEDER	NEPTUNE	DBF-5	NA	RM 103	25031
	AIR HANDLER #7	NA	NA	NA	RM 103	25032
	WEST COOLING TOWER PUMP	GE	TRICIAD	AHJ119436	OUTSIDE	25033
	MIDDLE COOLING TOWER PUMP	GE	SK6234X65040	LXJ1128255	OUTSIDE	25034
	(STAND-BY) COOLING TOWER PUMP	US ELEC	26CW1DJK2	D01697B		25035
	MIDDLE COOLING TOWER PUMP	US ELEC	UP6HRUST	3385011	OUTSIDE	25036
	EAST COOLING TOWER PUMP	US ELEC	N10N2510247R-1		OUTSIDE	25037
	EAST COOLING TOWER	MARLEY	8609	21496-72A	OUTSIDE	25038
	WEST COOLING TOWER	MARLEY	348	21064-72	OUTSIDE	25039
	MIDDLE COOLING TOWER	MARLEY	8609	21496-72B	OUTSIDE	25040
	DELTA 1000					25041
	WINDOW A/C UNIT IN OFC.					25042
	EXHAUST FAN SW MECH RM				MACH RM SW	25043
	EXHAUST FAN NW MECH RM				MACH RM NW	25044
	EXHAUST FAN NE MECH RM				MACH RM NE	25045
	UPS PRINTER 3	CYBEREX			MECH RM OFC	25046
	UPS PRINTER 3A	CYBEREX			MECH RM OFC	25047

BLDG 231 (198,507 S.F.)

BLDG 231						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	TRANSFORMER 45 KVA DRY	GE	DY	9T23B3873	BASEMENT	5032
	TRANSFORMER 45 KVA DRY	CHALLENGER	452-415	9-89-23112	BASEMENT	5033
	TRANSFORMER 150 KVA DRY	ITE	3F3Y150N	77332-0680	BASEMENT	5034
	TRANSFORMER 75 KVA DRY	CHALLENGER	752-415	J92-10949	BASEMENT	5035
	TRANSFORMER 9 KVA DRY	ITE	3F3R009TE	77025-0680	BASEMENT	5036
	TRANSFORMER 75 KVA DRY	ITE		76670-0680	1st FLOOR	5037
	TRANSFORMER 45 KVA DRY	WESTINGHOUSE		T-19-6-06586	1st FLOOR	5038
	TRANSFORMER 30 KVA DRY	ITE			1st FLOOR	5039
	TRANSFORMER 45 KVA DRY	ITE			1st FLOOR	5040
	TRANSFORMER 112.5 KVA DRY	POWERTRAIN	36K	T4T112C-K4	1st FLOOR	5041
	TRANSFORMER 75 KVA DRY	ITE	POWER	76668-0680	2nd FLOOR	5042
	TRANSFORMER 30 KVA DRY	SQUARE D	30T3H	33349-17212-035	2nd FLOOR	5043
	TRANSFORMER 45 KVA DRY	GE		9T23-B-3873	2nd FLOOR	5044
	TRANSFORMER 75 KVA DRY	ITE	POWER	76664-0680	3rd FLOOR	5045
	TRANSFORMER 75 KVA DRY	GE	POWER	9T23B3874	3rd FLOOR	5046
	TRANSFORMER 45 KVA DRY	GE	POWER	9T23B3873	3rd FLOOR	5047
	TRANSFORMER 75 KVA DRY	ITE	POWER	766850-680	4th FLOOR	5048
	TRANSFORMER 45 KVA DRY	ITE	POWER	0320P05	4th FLOOR	5049
	TRANSFORMER 45 KVA DRY	GE	POWER	9T23B3875	4th FLOOR	5050
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-11	1st FLOOR	5051
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-12	1st FLOOR	5052
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-13	2nd FLOOR	5053
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-14	2nd FLOOR	5054
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-15	3rd FLOOR	5055
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-16	3rd FLOOR	5056
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-17	4th FLOOR	5057
	TRANSFORMER W/PANEL 75 KVA DRY	UNITED POWER	PDM2-B1-075-926	10618-18	4th FLOOR	5058
	TRANSFORMER MAIN 1500 KVA DRY	ITE	DRY	24-28841	BASEMENT	5059
	PANEL BOARD 800A	ITE		84-7121B	BASEMENT	5060
	PANEL BOARD 300A	ITE	FCII	84-71212B	BASEMENT	5061
	SIMPLEX SECURITY PANEL	SIMPLEX	2100		NORTH LOBBY	5223
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87649FG	NORTH LOBBY	5224
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120	X87650FG	NORTH LOBBY	5225
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	4100	J16911FN	NORTH LOBBY	5226
HR	TRANE CENTRIVAC LIQUID CHILLER	CVHE-036F-AL-2LB	2503EZA13ZA000	L87J04372	PENTHOUSE	10001
	CHILLED WATER PUMP	PACO	11-50955-746201	CTMF/14585A	PENTHOUSE	10002
	COOLING TOWER	B.A.C.	CFT2419C	802155D	ROOF	10003
	COOLING TOWER PUMP	PACO	11-50957-746201	JD89R1002501	PENTHOUSE	10004
	AIR HANDLING UNIT	MCGILL	PAT. 3-742-672		PENTHOUSE	10005
	A.H.V. SUPPLY FAN	TWIN CITY FAN	BAF SWST	80-27397-1	PENTHOUSE	10006
HR	A.H.V. RETURN FAN	TWIN CITY FAN	BAF DWDI	80-27397-8-1	PENTHOUSE	10007

BLDG 231

SHOP	EQUIP DESCRIPTION	MAKE	MODEL	SERIAL #	LOCATION	SAI #
	PRIMARY AIR COMPRESSOR	QUINCY	325	387391	PENTHOUSE	10008
	BACK UP AIR COMPRESSOR	DAYTON	32582	1120911388256	PENTHOUSE	10009
	AIR DRYER	HANKISON	8010	0302A-1-8404-1224N	PENTHOUSE	10010
	EXHAUST FAN (RESTROOMS)	TWIN CITY FAN	BCV SWSI	80-27398-2-1	PENTHOUSE	10011
	EXHAUST FAN (ELEC. RMS.)	LOREN COOK	210-CKV-1	5186653-00-12/85	PENTHOUSE	10012
	EXHAUST FAN (PENTHOUSE)	GREENHECK	SDP-233154	610459	PENTHOUSE	10013
	D.X. A/C UNIT (TELEPHONE RMS)	SNYDER GENERAL	CURO86FYYY	5VM84174-01	ROOF	10014
	D.X. A/C UNIT (PRINT PLANT)	TRANE SLHA-	3004LII0A35DDOE	B806-02170	ROOF	10015
	D.X. A/C UNIT (SPLY,TRG. RM)	COLEMAN	3300A9001	098465139	BASEMENT	10016
	CONDENSING UNIT (SPLY, TRG. RM)	BRYANT	590AP060-B	3591E17916	W OUTSIDE PAD	10017
	CADOOR UNIT (COMPUTER RM)	CONTEMPO	CEMG-753ZUPFCS	20900	2ND FLR NW	10018
	OUTDOOR UNIT	BOHN	DFS0173B164	BMB8227	W OUTSIDE PAD	10019
	INDOOR UNIT (COMPUTER RM)	LIEBERT	FD1103	46721A	1ST FLR	10020
	OUTDOOR UNIT	LIEBERT	D-0070	B36363C-9	W OUTSIDE PAD	10021
	INDOOR UNIT (COMPUTER RM)	LIEBERT	FD11CG	46721B	1ST FLR	10022
	OUTDOOR UNIT	LIEBERT	D-0070	B36363A-9	W OUTSIDE PAD	10023
	AIR HANDLER BOOSTER FAN				PENTHOUSE	
	CONTROL PANEL	SIEBE			PENTHOUSE	
	EXHAUST FAN	GREENHECK	C5P-50		RESTROOMS S. LOBBY	
	COMPRESSOR DRINKING FOUNTAIN				BASEMENT	
	COMPRESSOR DRINKING FOUNTAIN				1st FL	
	COMPRESSOR DRINKING FOUNTAIN				2nd FL	
	COMPRESSOR DRINKING FOUNTAIN				3rd FL	
	COMPRESSOR DRINKING FOUNTAIN				4th FL	
	V.A.V. BOXES (368 EA.)	ANEMOSTAT			1-4 FLRS	10057
	CHILLER 350T	TRANE		CVHE-M-3-286		
	A/C 20T	LIEBERT		46721A		
	A/C 20T	LIEBERT		46721B		
	A/C 20T	TRANE		B80G02170		
	A/C 15T	CONTEMPO		20900		
	A/C 5T	COLEMAN		88502694		
PL	CHILL WATER PUMP	PACO		KTMF14585A	PENTHOUSE	0316
	CONDENSATE PUMP	WEIL	3801J416972		BASEMENT	0302
	CONDENSATE PUMP	WEIL	3801K5001A		BASEMENT	0303
	COOLING WATER PUMP	PACO	11-50957-746201	JD89R1002501	PENTHOUSE	0321
	DRINKING FOUNTAIN	ELKAY			BASEMENT	0298
	DRINKING FOUNTAIN	ELKAY			LOBBY	0309
	DRINKING FOUNTAIN	ELKAY			1ST FLR	0310
	DRINKING FOUNTAIN	ELKAY			2ND FLR	0311
	DRINKING FOUNTAIN	ELKAY			3RD FLR	0313
	DRINKING FOUNTAIN	ELKAY			4TH FLR	0315
	EMERGENCY SHOWER	BRADLEY			BASEMENT	0307
	EYE WASHER	GENRL SCIENTIFIC	KLEEN EYES		BASEMENT	0306

BLDG 231						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
PL	HYDRONIC CIRC PUMP	RL DEPPMAN	80 2X2X9.5B7.625BF	RLD11236C39	PENTHOUSE	0317
	HYDRONIC CIRC PUMP	RL DEPPMAN	80 2X2X9.5B7.625BF		PENTHOUSE	0318
	HYDRONIC HEAT EXCHANGER	BELL GOSSETT	SU-87-2	125677	PENTHOUSE	0319
	PORTABLE EYEWASHER	BRADLEY			BASEMENT	0308
	SEWAGE PUMP				BASEMENT	0300
	SEWAGE PUMP				BASEMENT	0301
	STEAM STATION	SPENCE			PENTHOUSE	0320
	SUMP PUMP				LOADING DOCK	0305
	UNIT HEATER	TRT			BREEZWAY	0297
	UNIT HEATER	TRT			BASEMENT	0304
	WATER HEATER	LOCHINVAR	ETK120KK-1	KF1759064	BASEMENT	0299
	WATER HEATER	TITAN			2ND FLR	0312
	WATER HEATER	LOCHINVAR	ETK0120PP	GG8876666	3RD FLR	0314
MR	CHAIN FALL 1/2 TON	BUDGIT				15225
	TYING MACHINE	BUNN		38418	MAIL ROOM	15380
	PAPER CUTTER	CHALLENGE	MPC	12594	PRINT SHOP	15381
	OFFICE JOGGER	LECTROJOG	665	828071	PRINT SHOP	15382
	OFFICE JOGGER	"		828067	PRINT SHOP	15383
	OFFICE JOGGER	"		828066	PRINT SHOP	15384
	PAPER DRILL	LAWSON	N/A	B3029	PRINT SHOP	15385
	PAPER DRILL	CHALLENGE	EXH	10851	PRINT SHOP	15386
	WIRE STITCHER	BOSTITCH		766335	PRINT SHOP	15387
	WIRE STITCHER	INTERLAKE	S3A	4916	PRINT SHOP	15388
	OFFICE JOGGER	LECTROJOG	665	828076	PRINT SHOP	15389
	OFFICE JOGGER	"	665	828078	PRINT SHOP	15390

BLDG 232 (3,230 S.F.)

BLDG 232						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	GENERATOR 60 KVA	KOHLER	60R0Z281	217778	SECURITY BLDG	5160
	SIMPELX FIRE ALARM PANEL	SIMPLEX	2120	X87651FG	CAPT BEARD	5227
	SIMPLEX FIRE ALARM PANEL	SIMPLEX	2120		CPAT BEARD	5228
HR	ROOFTOP PACKAGE A/C HEAT	CARRIER	48DJE0125510	891G80346	CENTER-ROOF	12902
	EXHAUST FAN-DUCTED MENS/LADIES	LOREN COOK	100C10DH	017533666100039300 01	NORTH CENTER ROOF	12903
	EXHAUST FAN-ROOF CEILING CAVITY	CENTRI MASTER	PN135E4	SKB553403	EAST ROOF	12904
	EXHAUST FAN-ROOF-CEILING CAVITY	CENTRI MASTER	PN135E4	SKB558403	WEST ROOF	12905
	REFRIGERATOR - DOMESTIC	G/E	TB125BB	VG524122	N/BREAKROOM	12906
	WATER HEATER	AO SMITH	EE540913	MH940017414-913	UTILITY RM	0516

BLDG 232						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
PL	WATER HEATER	AO SMITH	EE540913	MH940017414-913	UTILITY RM	0516
	DRINKING FOUNTAIN			DF2321		DF1

BLDG 233 (5,500 S.F.)

SHOP	EQUIP DESCRIPTION	MAKE	MODEL	SERIAL #	LOCATION	SAI #
EL	TRANSFORMER 4800V OIL	VANTRAN	112.5KVA	68V8530	OUTSIDE	5153
	FIRE ALARM SYSTEM					
HR	ROOFTOP A/C W/STEAM HEAT COIL	CARRIER	50EE024330	1187C15646	ROOF	12863
	14 TON CONDENSING UNIT	CARRIER	38AE014500	4992F26-462	N/GROUND	12864
	REFRIGERATOR/DOMESTIC	GE	TB1455B	DV588959	E/STORAGE RM	12865
	RETURN AIR BLOWER	CARRIER	27CB-4-BC	A81681176-1	N/MECH. RM	12866
	AIR HANDLER W/STEAM REHEAT/A/C	CARRIER	39CA070139	68491834-VR	N/MECH. RM	12867
	DRINKING FOUNTAIN	SUNROC	NSF 14 SUNTAN	93373822	CENTRAL COFFEE RM	12868
	EXHAUST FANS - MENS RM	ILG-CARRIER	CWF-67	218-006AA	NORTH WALL	12869
	EXHAUST FANS - LADIES RM	ILG-CARRIER	CWF-67		NORTH WALL	12870
	AIR HANDLER	TRANE		N22101441D	ROOF	10159
PL	CONDENSATE PUMP	HOFFMAN	8-20A	8012	UTILITY ROOM	0324
	DRINKING FOUNTAIN	SUNROC	NSF 14	93373822	CENTER	0326
	STEAM STATION	SPENCE			UTILITY ROOM	0323
	SUMP PUMP				UTILITY ROOM	0322
	WATER HEATER	LOCHNIVAR	R30G	210660	UTILITY ROOM	0325

BLDG 234 (2130 S.F.)

BLDG 234						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
HR	A/C UNIT - 3T	BARD	VAG20B-A54C	132C094083245-4-1		
	A/C UNIT - 3T	BARD	VAG20B-A54C	132C94083245-3-1		
	A/C UNIT - 3T	BARD	VAG20B-A54C	132C94083245-5-1		
	EXHAUST FAN				LUNCH RM	
	EXHAUST FAN				RESTROOM	
	EXHAUST FAN				STOCKROOM	
	GAS-FIRED HEATING/AC UNIT					#1

BLDG 234						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	GAS-FIRED HEATING/AC UNIT					#2
	GAS-FIRED HEATING/AC UNIT					#3
PL	WATER HEATER	SATELLITE	SCI40NHMDT7	H94194009	UTILITY RM	0517

FACILITY 240 - FLAGPOLE

DESCRIPTION: 110 FT Steel Flagpole with rope and pulley (located South of Bldg 230)

BLDG 249 (50,000 S.F.)

BLDG 249						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	FIRE ALARM SYSTEM					
	SECURITY ALARM SYSTEM					
HR	MAKE-UP AIR UNIT		120FM			10179
	MAKE-UP AIR UNIT		120FM			10180
	HVAC SPLIT SYSTEM	YORK	P3HUC20N0920			10181
	HVAC SPLIT SYSTEM	YORK	P3HUC16N0920			10182
	HEAT PUMP, PACKAGE UNIT	TRANE	PTEC1201EAA			10183
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10184
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10186
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10187
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10188
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10189
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10190
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10191
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10192
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10193
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10194
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10195
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10196
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10197
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10198
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10199
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10200

BLDG 249						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	UNIT HEATER, GAS-FIRED	MODINE	PD125AE0130		WAREHOUSE	10201

BLDG 250

BLDG 250						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	FIRE ALARM SYSTEM					
HR	MAKE-UP AIR UNIT	MODINE	HCP150TMRHN2	CM5DDA00		10279
	HVAC	YORK	DINA018N0360	NAKM005162		10280
	HVAC	YORK	DINA018N0360	NBKM021757		10281
	CONDENSOR UNIT	YORK	H2RA060506D			10282
PL	EYEWASH/SHOWER					EW1

BLDG 251 (651 S.F.)

BLDG 251						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
HR	AIR COMPRESSOR					523
	GAS-FIRED UNIT HEATER	MODINE	PD100AE0130			UH1
	GAS-FIRED UNIT HEATER	MODINE	PD100AE0130			UH2

BLDG 252 (29,755 S.F.)

BLDG 252						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
EL	SPRINKLER ALARM SYSTEM	STAR	F			214
HR	HVAC ROOF	CARRIER			WEST SIDE	10218
	A/C HEAT COMBINATION	SNYDER GENERAL	MQS12A85WF			12909
	EXHAUST FAN	BRIEDERT	CX1533D			12912
	EXHAUST FAN	GREENHECK	GB804XQD			12913
	EXHAUST FAN	NUTONE	8110			12914
	EXHAUST FAN	NUTONE	WF111			12917
	CONDENSER	CARRIER	38AKD44500			12922
	AIR HANDLER	CARRIER	39ED29			12924
	AC UNIT	CARRIER	MN48TJE016	AC2522		AC2
	A/C SPLIT SYSTEM	SANYO	MNC52422	AC2523		AC3
	COOLING TOWER (DES, TYPE P)	RELIANCE ELECTRIC	P25G6591H	IMAF95583		
	VARIABLE AIR DAMPER	ANEMOSTAT	FJEDX1SCAAZX			12935
	VARIABLE AIR DAMPER	ANEMOSTAT	FDEDX1SCAAZX			12936
	VARIABLE AIR DAMPER	ANEMOSTAT	FHEDX1SCAAZX			12937
	VARIABLE AIR DAMPER	ANEMOSTAT	FFEDX1SCAAZX			12938
	VARIABLE AIR DAMPER	ANEMOSTAT				12939
	VARIABLE AIR DAMPER	ANEMOSTAT	FHEDX1SCAAZX			12940
	VARIABLE AIR DAMPER	ANEMOSTAT	FDEDX1SCAAZX			12941
	VARIABLE AIR DAMPER	ANEMOSTAT	FFEDX1SCAAZX			12942
	VARIABLE AIR DAMPER	ANEMOSTAT	FLEDX1SCAAZX			12943
	VARIABLE AIR DAMPER	ANEMOSTAT	FLEDX1SCAAZX			12944
	EXHAUST FAN	NUTONE	8110			12919
	UNIT HEATER-HOT WATER	REED NATIONAL	RC12002			12908
	UNIT HEATER-HOT WATER	REED NATIONAL	RC120021			12910

BLDG 252						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL #**	**LOCATION**	**SAI #**
	UNIT HEATER-HOT WATER	REED NATIONAL	RC12002			12911
	UNIT HEATER-HOT WATER	REED NATIONAL	RC120002			12915
	UNIT HEATER-HOT WATER	BEACON MORRIS	SF84 & W84			12918
	UNIT HEATER-HOT WATER	BEACON MORRIS	SF84 & W84			12920
	GAS-FIRED HOT WATER BOILER #1	WEIL-MCLAIN				12925
	GAS-FIRED HOT WATER BOILER #2	WEIL-MCLAIN	EGH105PIN			12926
	UNIT HEATER – GAS-FIRED	AIR EASE	KMS160			12927
	UNIT HEATER – GAS-FIRED	DAYTON	3E230A			12928
	UNIT HEATER – GAS-FIRED	DAYTON	3E230A			12929
	UNIT HEATER – GAS-FIRED	DAYTON	3E230A			12930
	UNIT HEATER – GAS-FIRED	DAYTON	3E230A			12931
	UNIT HEATER – GAS-FIRED	DAYTON	3E230A			12932
	UNIT HEATER – GAS-FIRED	DAYTON	3723A			12933
	UNIT HEATER – GAS-FIRED	AIR EASE	KMS160			12934
	UNIT HEATER	DAYTON	3E230A			201
	UNIT HEATER	DAYTON	3E230A			202
	UNIT HEATER	DAYTON	3E230A			204
	UNIT HEATER	DAYTON	3E230A			205
	UNIT HEATER	DAYTON	3E230A			206
	UNIT HEATER	DAYTON	3E230A			207
	UNIT HEATER	DAYTON	3E230A			208
	UNIT HEATER	AIR EASE				210
	UNIT HEATER	DAYTON	3E230A			211
	UNIT HEATER	MARKEL				212
	UNIT HEATER					213
	UNIT HEATER	MODINE				513
PL	DRINKING FOUNTAIN	ELKAY				12907
	DRINKING FOUNTAIN	ELKAY	EHF81			12916
	STEAM HUMIDIFIER	CARNES	HCGD			12923
	BOILER	WEIL-MCLAIN	EGH105PIN			196
	BOILER	WEIL-MCLAIN	EGH105PIN			197
	HYDRONIC CIRCULATING PUMP	BELL GOSSETT				198
	HYDRONIC CIRCULATING PUMP	TACO				199
	WATER HEATER	STATE	PRV40NOR56F			200
	HYDRONIC CIRCULATING PUMP	BELL GOSSETT	1AA4 1/2BF			203
	GAS PRESSURE REGULATOR	FISHER	S202			209
	DRINKING FOUNTAIN	ELKAY	EHF91			510
	DRINKING FOUNTAIN	ELKAY	EHF81			511
	WATER HEATER	STATE	PV3010M57FK			512
	DRINKING FOUNTAIN	ELKAY				514

BLDG. T-72 (680 S.F.)

BLDG T-272						
SHOP	**EQUIP DESCRIPTION**	**MAKE**	**MODEL**	**SERIAL#**	**LOCATION**	
PL	EYE WASHER	HAWS				
	UNIT HEATER	DUNHAM-BUSH				

BLDG. S-25

BLDG. S-25			
SHOP	**EQUIP DESCRIPTION**	**QUANTITY**	**LOCATION**
EL	BUS BARS, 2000A	2	Main Substation
	SWITCHGEARS	16	

FACILITY 521 - FENCE AND GATES

Perimeter Fence (West Site), Galvanized Steel Chain Link 13,471 LF
South Perimeter Fence (11 Mile Rd—East/West) 2,570 LF (7’ high)

West Border Fence (Mound Road Side) 3,315 LF (6’ high)
Barbed Wire Fence

Fence (Perimeter of Bldg 200) 2,845 LF (6’ high)

Fence (Cooling Pond Area)	2,876 LF (4’ high)
Fence (Tennis Court Area)	180 LF (10’ high)
Fence (Railroad Tracks)	4,000 LF (7’ high)
Fence (Surrounding Bldg 227)	285 LF (7’ high)
Fence (Surrounding Bldg 212)	420 LF (7’ high)
Fence (Surrounding Bldg 215)	1,420 LF (7’ high)
Fence (Surrounding Bldg 7 & 8)	2,000 LF (7’ high)
Gates (11 Mile Rd –East/West)	2 - 18’ gates on hinges
Gates (11 Mile Rd –East/West)	4 - 24’ rolling gates
Gates (11 Mile Rd –East/West)	4 - 12 ½’ gates on hinges

Automated Gate Operators	
B229, Ramp to Basement (Loading Dock)	Ea
B231, Ramp to Basement (Loading Dock)	Ea
Perimeter Gate #38 (11 Mile Road)	Ea

MISCELLANEOUS PAVEMENT

FACILITY NUMBER	DESCRIPTION	UNIT OF MEASURE	QTY
513	Non-Org Parking	SY	185553
514	Sidewalks	SY	11392
515	Pedestrian Bridge	SY	11
516	Above Ground Lubricant Storage (N of 201)	BL	100

MISCELLANEOUS

FACILITY NUMBER	DESCRIPTION	UNIT OF MEASURE	QTY
T211	Flammable Mat'l Storehouse	SF	3200
T216	Flammable Mat'l Storehouse	SF	360
T218	Flammable Mat'l Storehouse	SF	624
T225	Salt Storage Facility	SF	3920
T246	Oxygen Storage Facility	SF	384
T247	Oxygen Storage Facility	SF	384
T254	Oil Storage Facility	SF	624

T260	Water Metering Facility	SF	176
	Water Distribution (Potable)	LF	36
T261	Bus Station	SF	50
235	Cooling Tower (N of 230)	EA	1
237	Tennis Court	EA	1
517	Railroad Tracks	MI	.5
519	Retaining Wall	LF	315
524	Land (162 west/7 east)	AC	169

MONUMENTS-Cement pads for display of military vehicles

FACILITY NUMBER	LOCATION	UNIT OF MEASURE	QTY
MON01	South of Bldg 230 (center)	EA	1
MON02	South of Bldg 230 (center)	EA	1
MON03	South of Bldg 230 (center)	EA	1
MON04	South of Bldg 230 (center)	EA	1
MON05	Intersection of Arsenal Ave and Laboratory Lane	EA	1

MON06	North of 200C	EA	1
MON07	North of TACOM Insignia on Center Avenue	EA	1
MON08	South of TACOM Insignia on Center Avenue	EA	1

OPEN STORAGE AREAS

FACILITY NUMBER	DESCRIPTION	QTY	UNIT OF MEASURE
00223	Metal Scrap Bins	501	SY
00241	Open Storage Area (Near T202)	1,797	SY
00242	Open Storage Area (North West Corner of Installation)	11,293	SY
00243	Open Storage Area (NE of Bldg 201)	732	SY
00244	Open Storage Area (NE of Bldg 203)	1,069	SY

ROADS

FACILITY NUMBER	DESCRIPTION	UNIT OF MEASURE	QTY
511	Roads, Surfaced	SY	103782
512	Roads, Unsurfaced	SY	15237

MISCELLANEOUS (SIGNS)

FACILITY NUMBER	UNIT OF DESCRIPTION	MEASURE	QTY
203E	Facility Sign (located at 203)	EA	1
205E	Facility Sign (located at 205)	EA	1
207A	Facility Sign (located at 207)	EA	1
212A	Facility Sign (located at 212)	EA	1
215A	Facility Sign (located at 215)	EA	1
219A	Facility Sign (located at 219)	EA	1
232A	Facility Sign (located at 232)	EA	1
252A	Facility Sign (located at 252)	EA	1
SN200	Facility Sign (located at 200A)	EA	1
217A	Facility Sign (located at 217)	EA	1
262	Billboard (East of Gate 36)	EA	1
263	Billboard (North of Gate 38)	EA	1

MISCELLANEOUS (SMOKING SHELTERS)

FACILITY NUMBER	DESCRIPTION	UNIT OF MEASURE	QTY
SS20A	Smoke Shelter (E of 200A)	SF	83
SS20C	Smoke Shelter (S of 200C)	SF	83
SS215	Smoke Shelter (at Bldg 215)	SF	83
SS229	Smoke Shelter (N of 229)	SF	125
SS230	Smoke Shelter (N of 230)	SF	125
SS231	Smoke Shelter (N of 231)	SF	125

MISCELLANEOUS (UTILITIES)

FACILITY NUMBER	DESCRIPTION	UNIT OF MEASURE	QTY
501	UNINTERRUPTIBLE POWER SUPPLY SYSTEM (UPS)	KV	335
503	EXTERIOR LIGHTING	LF	2,970
504	ELECTRICAL DISTRIBUTION SYSTEM	LF	596,524

505	DISTRIBUTION TRANSFORMER	KV	21,315
506A	STEAM CONDENSATE LINES	LF	12,150
506B	STEAM LINES	LF	12,150
507	GAS PIPELINES	LF	580
508	FIRE PROTECTION SYSTEM (NON-POTABLE)	LF	14,140
509	SANITARY SEWER	LF	23,366
510	WATER DISTRIBUTION SYSTEM (POTABLE)	LF	26,542
518	STORM SEWER	LF	86,631
522	FIRE ALARM SYSTEM	BX	67
523	COMPRESSED AIR LINE	LF	4,580
525	IRRIGATION FACILITY	LF	6,131
526	FIRE HYDRANTS	EA	29
527	ELECTRICAL SUBSTATION	KV	4,500
528	CHILLED WATER DISTRIBUTION SYSTEM	LF	4,231
529	POL UNDERGROUND PIPE	MI	.4

MISCELLANEOUS (ELEVATORS)

MISCELLANEOUS (ELEVATORS)				
BUILDING	**ELEVATOR TYPE**	**STATE NUMBER**	**MANUFACTURER**	**ID NUMBER**
200 A	PASSENGER	22502	DOVER	80481
	FREIGHT	24819	DET. ELEVATOR CO.	NH-605P
200 D	PASSENGER	24820	DET. ELEVATOR CO.	
229	PASSENGER	19788	DET. ELEVATOR CO.	NH-2674-P
	PASSENGER	19789	DET. ELEVATOR CO.	NH-2672-P
	PASSENGER	19790	DET. ELEVATOR CO.	NH-2673-P
	PASSENGER	19791	DET. ELEVATOR CO.	NH-2671-P
230 W	FREIGHT	26759	DET. ELEVATOR CO.	NH-3405-P
230 E	FREIGHT	26760	DET. ELEVATOR CO.	NH-3404-P
231	PASSENGER	19949	DET. ELEVATOR CO.	NH-2677-P
	PASSENGER	19950	DET. ELEVATOR CO.	NH-2678-P
	PASSENGER	19951	DET. ELEVATOR CO.	NH-2675-P
	PASSENGER	19952	DET. ELEVATOR CO.	NH-2676-P

MISCELLANEOUS (CLOSED CIRCUIT TELEVISION SYSTEM)

MISCELLANEOUS (CLOSED CIRCUIT TELEVISION SYSTEM)		
#	**EQUIPMENT LIST**	**BUILDING**
2	DAY/NIGHT CYBERDOMES WITH POWER SUPPLY	7
2	WIRELESS VIDEO SYSTEMS	7
2	WIRELESS DATA SYSTEMS	7

MISCELLANEOUS (CLOSED CIRCUIT TELEVISION SYSTEM)		
#	**EQUIPMENT LIST**	**BUILDING**
1	DAY/NIGHT CYBERDOMES WITH POWER SUPPLY	203
1	FIBER TRANSMITTER	203
1	DAY/NIGHT CYBERDOME WITH POWER SUPPLY	205
1	KALATEL DIGITAL CAMERA CONTROLLER	205
1	17″ COLOR MONITOR	205
1	16 CAMERA COLOR MULTIPLEXER	205
1	DATA DISTRIBUTION AMP	205
1	MATRIX SERVER SOFTWARE	205
2	NETWORK SWITCH	205
1	MATRIX SWITCH – 64X4	205
1	16 CAMERA VIDEO AMP	205
3	LORONIX RECORDER – 16 CAMERA	205
1	LORONIX WORK STATION	205
1	LORONIX 20 TAPE JUKE BOX WITH TWO 25Gb DRIVES	205
1	LORONIX SOFTWARE	205
1	DAY/NIGHT CYBERDOME WITH POWER SUPPLY	215
1	WIRELESS VIDEO SYSTEM	215
1	WIRELESS DATA SYSTEM	215
1	WIRELESS RELAY SYSTEM (FOR BLDG #249 CAMS)	215
1	DAY/NIGHT CYBERDOME WITH POWER SUPPLY	219
1	WIRELESS VIDEO SYSTEM	219
1	WIRELESS DATA SYSTEM	219
4	DAY/NIGHT CYBERDOME WITH POWER SUPPLY	229, 230, 231
1	12″ B&W VIDEO MONITOR	229, 230, 231
1	DATA DISTRIBUTION AMP	229, 230, 231
1	4-POSITION VIDEO SWITCH	229, 230, 231
1	VIDEO RX-DATA TX FIBER UNIT	229, 230, 231
1	DAY/NIGHT CYBERDOME WITH POWER SUPPLY	232
1	WIRELESS VIDEO SYSTEM	232
1	WIRELESS DATA SYSTEM	232

MISCELLANEOUS (CLOSED CIRCUIT TELEVISION SYSTEM)		
#	**EQUIPMENT LIST**	**BUILDING**
2	DAY/NIGHT CYBERDOMES WITH POWER SUPPLY	249
2	WIRELESS VIDEO SYSTEM	249
2	WIRELESS DATA SYSTEM	249
1	B&W CYPERDOME WITH POWER SUPPLY	252
1	15″ B&W VIDEO MONITOR	252
1	FIBER VIDEO/DATA TRANSMITTER/RECEIVER	252

MISCELLANEOUS (FIRE SUPPRESSION SYSTEM)

MISCELLANEOUS (FIRE SUPPRESSION SYSTEM)					
BUILDING	**RISER LOCATION**	**RISER SIZE**	**TEST VALVE LOCATION**	**RISER TYPE**	**NOTE:**
7	NORTH CENTER	10″	EAST END	WET	ENTER FROM
	NORTH WEST	10″	NORTH CORNER	WET	WEST END
201	NORTH END	3″	NE END	WET	
		6″			
203	NORTH END	8″	NW BOILER RM	WET	
	CENTER	6″	SOUTH END	WET	
	SOUTH CENTER	8″	SW CORNER	WET	
210	SE CORNER	6″	SE CORNER	WET	
215	SOUTHWEST	4″	SAME AS RISER	WET	

MISCELLANEOUS (FIRE SUPPRESSION SYSTEM)					
BUILDING	**RISER LOCATION**	**RISER SIZE**	**TEST VALVE LOCATION**	**RISER TYPE**	**NOTE:**
219	NORTH CENTER	6″	WEST END CENTER	WET	
200-A	RM 1161A	3″	RM 1161A	DRY	
	RM 1161A	3″	RM 1161A	DRY	
200-D	SE END	4″	SPRAY BOOTH	WET	
	NORTH END	8″	MEZZANINE WEST CENTER	WET	
	WEST CENTER	3″	MEZZANINE WEST CENTER	WET	
229	BASEMENT NW	3″	BASEMENT NW	WET DELUGE-DRY ZONE	2 JOCKEY PUMPS
	BASEMENT SOUTH CENTER	8″	BASEMENT NW	WET OSY-4 WET ZONES	
231	SOUTH END PRINT SHOP	8″	SE LOADING DOCK	WET OSY	2 JOCKEY PUMPS
	SOUTH END PRINT SHOP	8″		WET OSY	
252	SW SIDE	6″	NW CORNER OFFICE	WET (STAR)	

MISCELLANEOUS (AUTOMATED DOOR OPENERS)

B200A, 2 RESTROOMS OUTSIDE OF TARDEC OFFICES
B215, FRONT LOBBY: TWO SETS OF DOUBLE DOORS
B229, 2ND FLOOR, MEN'S RESTROOM
B229, 2ND FLOOR, WOMEN'S RESTROOM
B229, 1st & 4th FLOOR MEN'S RESTROOMS
B229, 1st & 4th FLOOR WOMEN'S RESTROOMS
B230, FRONT L0BBY: 2 DOORS BETWEEN LOBBY AND HALLWAY AND 2 DOORS BETWEEN LOBBY AND OUTDOORS
B232 (SECURITY)
B231, LOBBY, 1ST & 2ND & 3RD & 4TH FLOOR MEN'S and WOMEN'S BATHROOMS
B205, DPW & FIRE DEPT MEN'S and WOMEN'S BATHROOMS
B200A, 1ST FLOOR
B229 BASEMENT MEN'S and WOMEN'S BATHROOMS
B230, 1ST & 2ND W.WEST MEN'S and WOMEN'S BATHROOMS
BREEZEWAY DOORS

CAFETERIA BLDG. 229

NOTE: THE CAFETERIA IS CURRENTLY BEING RENOVATED. ESTIMATED COMPLETION IS MAY 03. NEW EQUIPMENT LIST WILL NOT BE AVAILABLE UNTIL COMPLETION OF THE CAFETERIA RENOVATION.

1) Ansul model number R101-30, dry chemical, and 2 ea. 500 degree fuse links.
2) Ansul model number R101-30-20, dry chemical, and 1 ea. 360 degree fuse links, 1 ea. 500 degree fuse link, master cylinder size 30 lb., slave cylinder size 20 lb.

3) Ansul model number R101-30-20, dry chemical, and 2 ea. 500 degree fuse links, Master cylinder size 30 lb., slave cylinder size 20 lb.

CAFETERIA BLDG. 200B

1) Ansul model number R101-20, dual wet chemical, 3 ea. 360 degree fuse links, master cylinder size 20 lb., slave cylinder size 20 lb.

KITCHEN FIRE DEPARTMENT BLDG 205

1) Ansul model number R102-1, wet chemical, 1 ea 360 degree fuse link, With fuel shutoff.

APPENDIX 6 of PWS-2

FACILITIES ENGINEERING - WARREN

SCHEDULE OF TASKS (INSTALLED BUILDING EQUIPMENT), BLDG. 212

FIVE DAYS PER WEEK SCHEDULE OF TASKS, BUILDING 212

ITEM	PROCEDURE
1. CARDOX EMERGENCY SYSTEM	Check that all panels are marked “SAFE”. If any panel reads the code 24 meaning Power failure, reset it. If it has any other reading, check the Fire Department. Check the Cardox tank and compressor to ensure proper operational levels. Under no circumstance shall the system be allowed to fall below the 50% mark. Notify the Fire Department and the COR immediately of any changes. Failure to this shall be prioritized as emergencies. (There are no more five days per week checks)

WEEKLY SCHEDULE OF TASKS, BUILDING 212

ITEM	PROCEDURE
1. TEST CELL 9	
a. Auxiliary Heaters	Check all heaters in all rooms for proper operation (October through May). All auxiliary heaters must be operational at all times. Lights Repair all broken lights in all rooms throughout building. All lights in all rooms and hallways throughout building must be operational at all times.
b. Sump Pump	Check for proper operation.

MONTHLY SCHEDULE OF TASKS, BUILDING 212

ITEM	PROCEDURE
1. TEST CELL 1:	
a. Air Filter in Cubicle	Replace if necessary.
b. AC Air Handlers, Control Room	Check for frayed, broken or missing belts. Check belt adjustment Check for proper operation of handlers.
c. Control Room AC Filters	Replace if necessary.
d. Control Room Air Conditioning System when system is running.)	Check if operating properly (during season
2. TEST CELLS 2, 3, 5, 6, 7:	
a. Air Filter in Cubicle	Replace if necessary.
b. AC Control Room Belts, Filters	Check for frayed, broken or missing belts, damage, proper adjustment. Replace filters if necessary. Check for proper operation of air handlers.
c. Control Room Air Conditioning System	Check if operating properly (during season when system is running.)

MONTHLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
3. TEST CELL 4:	
a. Air Filter for Test Cell	Replace if necessary.
b. AC Control Room Belts, Filters	Check for frayed, broken or missing belts, damage, proper adjustment. Replace filters if necessary. Check for proper operation of air handlers.
c. Control Room Air Conditioning System	Check if operating properly (during season when system is running.)
4. TEST CELL 8:	
a. Air Filter in Cubicle	Replace if necessary.
b. AC Belts	Check for frayed, broken or missing belts, damage, proper adjustment.
c. Belts, Air Handlers for Control Room AC	Check for frayed, broken or missing belts. Check belt adjustment.
d. Control Room Air Conditioning System	Check if operating properly (during season when system is running.)
5. TEST CELL 9:	
Air Filter	Replace if necessary (7 locations).

QUARTERLY SCHEDULE OF TASKS, BUILDING 212

ITEM	PROCEDURE
1. TEST CELL 1:	
a. Fuel Pump	Lubricate, clean and check for proper operation. (Don't operate turn shaft manually.) Pump is in back of Control Room in Fuel Room.
b. Heat Banks	(On intake side of test cell). Check for proper operation.
c. Control Valves (Fuel Room, Test Cell Tower, etc.)	All air-controlled and self-contained valves must be checked for proper operation. Lubricate.
2. TEST CELL 2:	
a. Fuel Pump	Lubricate, clean and check for proper operation. (Don't operate, turn shaft manually.) Pump is in back of control room.
b. Heat Banks	(On intake side of test cell.) Check for proper operation.
c. Control Valves (Fuel Room)	All air-controlled and self-contained valves must be checked for proper operation. Lubricate.
3. TEST CELL 3:	
a. Fuel Pumps	Lubricate, clean and check for proper operation. (Don't operate turn shaft manually). Pump is in back of control room.
b. AC Condenser	(On roof). Check for proper operation. Maintain as needed.

QUARTERLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
c. Ventilating Fan for Equip Room (Fuel Room)	Check for proper operation during AC season.
d. Heat Banks	(On intake side of test cell.) Check for proper operation.
e. Control Valves (Fuel Room, Test Cell Tower, etc.) for proper operation.	All air-controlled and self-contained valves must be checked
4. TEST CELL 4:	
a. Fuel Pump	Lubricate, clean and check for proper operation. (Don't operate, turn manually.) Pump is beside test cell.
b. Heat Banks	(On intake side of test cell.) Check for proper operation.
c. Fuel Room Exhaust Fan	(On Roof). Check for proper operation.
d. Control Valves (Fuel Room, Test Cell Tower, etc.)	All air-controlled and self-contained valves must be checked for proper operation.
5. TEST CELL 5:	
a. Heat Banks	(On intake side of test cell.) Check for proper operation.
b. Fuel Room Exhaust Fan	(On Roof). Check for proper operation.

QUARTERLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
c. Control Valves (Fuel Room, Test Cell Tower, etc.)	All air-controlled and self-contained valves must be checked for proper operation. Lubricate.
6. TEST CELL 6:	
a. Fuel Pump	Lubricate, clean and check for proper operation.
b. Heat Banks	(On intake side of test cell.) Check for proper operation.
c. Control Valves (Fuel Room, Test Cell Tower, etc.)	All air-controlled and self-contained valves must be checked for proper operation. Lubricate.
7. TEST CELL 7:	
a. Fuel Pump	Lubricate and check for proper operation. Do not operate, turn manually. Pump is in back of control room.
b. Heat Banks	(On intake side of test cell.) Check for proper operation.
c. Control Valves (Fuel Room, Test Cell Tower, etc.)	All air-controlled and self-contained valves must be checked for proper operation. Lubricate.
8. TEST CELL 8:	
a. Fuel Pump	Lubricate, clean and check for proper operation. Don't operate, turn manually. Pump is in back of control room.

QUARTERLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
b. Heat Banks	(On intake side of test cell.) Check for proper operation.
c. Control Valves (Fuel Room, Test Cell Tower, etc.)	All air-controlled and self-contained valves must be checked for proper operation. Lubricate.
9. TEST CELL 9:	
a. Air Control Valves	Check for proper operation and lubricate during AC season.
b. Bulkhead Doors*	Check air seals for proper operation by inflating to proper pressure.
c. Fuel Pump	Lubricate, clean and check for proper operation.
d. Emergency Chute	Check for proper operation. Hatch must move immediately.
e. Blowers (Upstairs in #2 Service Room, Room #255).	Check for proper operation. Lubricate grease fittings.
f. Blower (Upper Fan Room)	Check for proper operation. Lubricate grease fittings.
g. Chain Drive Gears (Upper Fan Room)	Check all 3 for proper operation. Lubricate.
h. Coupling between Motor & Blower (Upper Fan Rm.)	Lubricate
i. Air Filter (Fan Rm. 219, on Auxiliary Heating Unit)	Check for proper operation. Lubricate both grease fittings on fan.
j. Blower (Room #148)	Lubricate both shaft bearing reservoirs.
k. Couplings (Room #148)	Lubricate both.

QUARTERLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
l. Grease Fittings on Shaft (Room #148)	Lubricate both.
m. Heating Unit - Fan Shaft (Room #149)	Check for proper operation. Lubricate grease fittings.
n. Blower, Fluid Drive (Room #149)	Lubricate.
o. 1000 HP Motor (Room #149)	Check for proper operation. Lubricate both oil cups and fan.
p. Coupling between Motor & Blower (Room #149)	Lubricate.
q. Blowers, #1 Service Room, Room #144)	Lubricate grease fittings.
r. Roof AC Units	Check both AC Condensers, both small #14 and #15 blower units, both larger #16 & #17 blower units and small blower unit for proper operation
s. Transmission Drive System (for fans)	Change magnetic plug. Flush with Scalex.
t. Heat Banks (On Roof)	Check for proper operation.
u. Control Room & Conference Room Air Conditioning	Check if operating properly (during season-Air Conditioning is System on). Check compressor in Test Cell 9 Control Room. Check AC Air Handlers in Room #220.
v. Air Conditioning Condensers	Check if operating properly (during season - Air conditioning is on). Both are on roof.
w. Dynamometer Water Return Pumps and associated	Check for proper operation. Grease and switching gear service motor bearings.

QUARTERLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
10. VALVES:	All air-actuated valves (steam, air, fuel, water and oil valves) must be checked for proper operation. Grease plugs and grease fittings should be lubricated. All valves including the following must be maintained:
a. Steam Valves	• Auxiliary heaters and cells • Main test cell heaters • Test cell control room auxiliary heaters • Main building heating.
b. Air Valves	• Air Conditioning • Individual air handles for control rooms • Series of operational valves on building air system open to supply heat In Winter - closed • Exhaust fan control valves for Cells 1-8 (one unit).
11. SHOP AREA:	Check eye wash next to battery booth. Must be operational at all times. Must have inspection tag. Check and lubricate battery charging ventilating booth in shop area. Check blower and motor on battery charging ventilating booth for proper operation and lubricate. Check overhead doors in shop room for proper operation. Check for frayed, broken or missing belts. Check belt adjustment. Check 4 ventilating fans on roof over shop area for proper operation.
12. STEAM CONDENSATE RETURNS:	Check for proper operation. Lubricate and clean. (There are 6 steam returns. Two are under Test Cell 9 by the steam banks; the other 4 are in Mechanical Equipment Room #7).

QUARTERLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
13. EMERGENCY SHOWER: Test Cell 9 in	Check for proper operation. All 3 must be operational at all times. Must have an inspection tag. (One is by Test Cell 3, one is by Test Cell 9, one under the basement).
14. ROOF VENTILATING UNITS:	(On roof between Test Cells 6 & 7). Check for proper operation.
15. AC COMPRESSOR FOR CONTROL ROOMS:	(In Equipment Room 202). Check for proper operation. Maintain when necessary.
16. AC CONDENSOR FOR ROOMS:	(On roof). Check for proper operation. Maintain Control as needed.
17. AC FILTER, AMSTA-TR-R:	Change filter if necessary.

SEMI-ANNUALLY SCHEDULE OF TASKS, BUILDING 212

ITEM	PROCEDURE
1. TEST CELL #1:	
a. Auxiliary Heater	Check, clean and lubricate.
b. Intake and Exhaust Louvers	(Above Steam Bank). Check for proper operation. Lubricate shaft assembly.
c. Exhaust System	(On Roof). Check deflectors for proper operation. Check motorized pipe for proper operation. Do maintenance as necessary.
2. TEST CELLS #2 & #3:	
a. Auxiliary Heater	Check, clean and lubricate.
b. Intake and Exhaust Louvers	(Above Steam Bank). Check for proper operation. Lubricate shaft assembly.
3. TEST CELL #4:	
a. Auxiliary Heater	Check, clean and lubricate.
b. Intake and Exhaust Louvers	(Above Steam Banks). Check for proper operation. Lubricate shaft assembly.

SEMI-ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
c. Gear Boxes	Check for proper operation. Check both heat exchangers by starting gear box and running water through heat exchangers.
d. Transmission Cell	Check the 3 heaters for proper operation. Check the heating and ventilating unit for proper operation.
4. TEST CELL #5:	
a. Auxiliary Heaters	Check, clean and lubricate both heaters.
b. Intake and Exhaust Louvers	Check louvers (above Steam Banks) for proper operation. Lubricate shaft assembly.
c. American Heating & Ventilating Unit Auxiliary Heater	Check for proper operation.
d. Gear Boxes	Check for proper operation. Check both heat exchangers for proper operation by starting gear box and running water through heat exchanger.
e. Transmission Cell	Check both heating fans for proper operation.
f. Heating and Ventilating Unit	Check for proper operation.
5. TEST CELLS #6, #7 and #8:	
a. Auxiliary Heaters	Check, clean and lubricate.

SEMI-ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
b. Intake and Exhaust Louvers	Check louvers (above Steam Banks) for proper operation. Lubricate shaft assembly.
6. TEST CELL #9:	
a. Air Circulation Louvers, Fire Damper	Check for proper operation. Lubricate.
b. Cell Air Fan Exhaust Louvers	Check for proper operation. Lubricate.
c. Air Motors and Air Exhaust in Intake and Re-circulating Louvers	Check for proper operation. Lubricate Exercise Linkages.
d. Engine Exhaust Fan	Check for proper operation.
e. Gear Boxes	Check for proper operation.
f. Heat Exchangers	Both should be checked for proper operation by starting gear box and running water through heat exchangers. Check pressure switches (for start-up purposes).
g. Gear Sets*	Check for proper operation.
h. Fast Couplings*	Check for proper operation.

*Only if Test Cell is operating.

6. TEST CELL #9 (Cont'd):	
i. Gear Box Oil, Variable Speed Fluid Drive	Do oil analysis.

SEMI-ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
j. Fire Damper Air Cylinders	Check for proper operation. Lubricate. Exercise linkages.
k. Air Motors on Directional Vanes	(Approximately 100 motors). Check for proper operation. Air Lubricate. Exercise linkages.
7. TEST CELL #9 - DYNAMOMETER(S):	
Heating & Ventilating Unit*	Check for proper operation.

*Only if Test Cell is operating

ANNUALLY SCHEDULE OF TASKS, BUILDING 212

ITEM	PROCEDURE
1. TEST CELL #1:	
a. Heater Banks	(On inside of outside walls). Check for proper operation each Fall. Insure pre-heater is open.
b. Crane	Check for proper operation by lifting proper load. Lubricate. Check gear housing, load brake, all electrical equipment and wiring.
c. Test Cell Doorways	Lubricate and adjust for good operation. Catches should operate easily. Check rubber seals in doorway. Must not be cracked or torn.
d. Air Intake Screen	Clean. (Screen is outside on roof).
e. Exhaust Stack and Motor	(On Roof). Check for proper operation.
f. Air Fan Stack	(On Roof). Check to be sure it is in good operating condition.
2. TEST CELL #2:	
a. Heater Banks	(On inside of outside walls). Check for proper operation each Fall. Insure pre-heater is open.
b. Crane	Check for proper operation by lifting proper load. Lubricate. Check gear housing, load brake, motor, all electrical equipment and wiring.

ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
c. Test Cell Doorways	Lubricate and adjust for good operation. Catches should operate easily. Check rubber seals in doorway. Must not be cracked or torn.
d. AC Belts	Replace.
e. Air Intake Screen	Clean. (Screen is outside.)
f. Air Fan Stack	(On Roof). Check to be sure it is in good operating condition.
3. TEST CELL #3:	
a. Heater Banks	(On inside of outside walls). Check for proper operation each Fall. Insure pre-heat valve is open.
b. Crane	Check for proper operation by lifting proper load. Lubricate. Check gear housing, load brake, motor, all electrical equipment and wiring.
c. Test Cell Doorways	Lubricate and adjust for good operation. Catches should operate easily. Check rubber seals in doorway. Must not be cracked or torn.
d. AC Air Handler Belts for Control Room	Replace.
e. Test Cell AC Belts	Replace.
f. Air Intake Screen	Clean. (Screen is outside.)
g. Air Fan Stack	(On Roof). Check to be sure it is in good operating condition.

ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
4. TEST CELL #4:	
a. Large Test Cell Blower	Check for proper operation and lubricate.
b. Smaller Blower	Check for proper operation and lubricate.
c. Test Cell Doorways	Lubricate and adjust for good operation. Catches should operate easily. Check rubber seals in doorway. Must not be cracked or torn.
d. Heater Banks	Check for proper operation each Fall. Insure pre-heat valve is open.
e. Crane	Check for proper operation by lifting proper load. Lubricate. Check wiring and electrical connection for damage. Inspect hook for cracks. Inspect safety latch.
f. Transmission Test Cell Heating & Ventilating Unit	Lubricate the grease fittings and clean the unit.
g. AC Air Handler Belts for Control Room	Replace.
h. Transmission Cell	Grease fittings. Lubricate fittings and clean unit.
i. Air Intake Screen	Clean. (Screen is outside.)
j. Air Fan Stack	(On Roof). Check to be sure it is in good operating condition.

ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
5. TEST CELL #5:	
a. Heater Banks	Check for proper operation each Fall. Insure pre-heat valve is open.
b. Heat Light Banks*	Check for proper operation.
c. Crane	Check by lifting proper load. Lubricate. Check wiring and electrical connection. Inspect hook for cracks. Inspect safety latch.
d. Test Cell Doorways	Lubricate and check for good operation. Catches must move easily. Check rubber seal in doorway. Must not be cracked or worn.
e. Belts, AC Air Handlers for Control Room*	Replace.
f. Air Intake Screen	Clean. (Screen is outside).
g. Carburetor Air Blower Motors (GE)	(Beside Control Room). Check for proper operation and lubricate grease fittings.
h. Air Fan Stack	(On Roof). Check to be sure it is in good operating condition.

*Only when Test Cell is in use.

ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
6. TEST CELL #6:	
a. Heater Banks	(On inside of outside walls). Check for proper operation each Fall. Insure pre-heat valve is open.
b. Crane	Check for proper operation by lifting proper load. Lubricate. Check gear housing, load brake, motor, all electrical equipment and wiring.
c. Test Cell Doorways	Lubricate and adjust for good operation. Catches should operate easily. Check rubber seals in doorway. Must not be cracked or torn.
d. AC Air Handler Belts for Control Room	Replace.
e. Test Cell AC Belts	Replace.
f. Air Intake Screen	Clean. (Screen is outside.)
g. Air Fan Stack	(On Roof). Check to be sure that it is in good operating condition.
7. TEST CELL #7:	
a. Heater Banks	(On inside of outside walls). Check for proper operation each Fall. Insure pre-heat valve is open.
b. Crane	Check for proper operation by lifting proper load. Lubricate. Check gear housing, load brake, motor, all electrical equipment and wiring.

ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
c. Test Cell Doorways	Lubricate and adjust for good operation. Catches should operate easily. Check rubber seals in doorway. Must not be cracked or torn.
d. AC Air Handler Belts for Control Room	Replace.
e. Test Cell AC Belts	Replace.
f. Air Intake Screen	Clean. (Screen is outside.)
g. Air Fan Stack	(On Roof). Check to be sure that it is in good operating condition.
8. TEST CELL #8:	
a. Heater Banks	(On inside of outside walls). Check for proper operation each Fall. Insure pre-heat valve is open.
b. Crane	Check for proper operation by lifting proper load. Lubricate. Check gear housing, load brake, motor, all electrical equipment and wiring.
c. Test Cell Doorways	Lubricate and adjust for good operation. Catches should operate easily. Check rubber seals in doorway. Must not be cracked or torn.
d. AC Air Handler Belts for Control Room	Replace.
e. Test Cell AC Belts	Replace.
f. Air Intake Screen	Clean. (Screen is outside.)
g. Air Fan Stack	(On Roof). Check to be sure it is in good operating condition.

ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
9. TEST CELL #9:	
a. Air Motors and Air Exhaust in Intake and Re-circulating Louvers	Check for proper operation. Lubricate. Exercise Linkage.
b. Track (Inner and Outer)*	Be sure nothing is lodged in track. Clean.
c. Heater Banks	(On inside of outside walls). Check for proper operation each Fall. Insure pre-heat valve is open.
d. Crane	Check for proper operation by lifting proper. Lubricate. Check gear housing, load brake, motor, all electrical equipment and wiring.
e. Fan Speed Reducer Oil Pump, Oil and Filter	Change if needed.
f. Turning Vane, Five Dampers*	Check for proper operation and lubricate.
g. Air Fan Stack	(On Roof). Check to be sure it is in good operating condition.
h. Heaters Bank Intake Filters	Check and replace if required.
10. TEST CELL #9 - DYNAMOMETER:	
Heating and Ventilating Unit	Clean and Lubricate

ANNUALLY SCHEDULE OF TASKS, BUILDING 212 (CONTINUED)

ITEM	PROCEDURE
11. CRANES:	Check 1-ton Crane in Equipment Room, Cell 5 South, by lifting proper load. Lubricate. • Check crane for stairway by lifting proper load. Lubricate. Check all wiring and electrical connections. • Check crane in Air Filter Room for Test Cell 9 by lifting proper load. Lubricate. • Check Mechanical crane in Shop area by lifting proper load. Lubricate. (Crane over Engineering offices is not used). • When applicable, check crane in new oil storage shed by lifting proper load. Lubricate. • Check hydraulic Crane in Shop area by lifting proper load. Lubricate. • Check all portable cranes, chains, ropes & slings (in basement or in supply crib) for proper operation by lifting proper load. Lubricate. • (For Dynamometer(s), Test Cells 4 and 5) test by lifting proper load. Lubricate.
*Only when Test Cell is in use	
12. EXTERIOR FUEL LINES:	Check that air bleeders operate properly. Maintain lines as necessary. Make sure there are no leaks.
13. FAN OIL PUMP (for all Test Cells):	Check filter. Conduct oil analysis.

APPENDIX 7
PWS 2

FACILITY ENGINEERING WARREN
BASIC INFORMATION MAPS

NOTE: Due to the Army's security requirements, the maps cannot be posted on the Internet. A compact disc Containing the map files will be mailed to all companies that have registered with the Contracting Officer.

APPENDIX 8 of PWS-2

FACILITY ENGINEERING WARREN PWS

IPE SUPPORTED EQUIPMENT LIST

B200D

B200D						
IPE Items $15k and Up						
	Nomenclature	**Serial Number**	**bar code**	**Location**	**HR #**	**Price**
	MAGNETIC PART TST SYS	682-17	D3040	BLDG 200 D	104	$ 21,288.00
1	SAW BAND METAL CUT	39990687	J3966	BLDG 200 D	270	$ 18,780.00
2	LATHE ENG HVY DTY	1CC85100135	L5080		270	$ 19,297.00
3	BORING MACHINE	503	R0073	BLDG 200 D	270	$ 22,386.00
4	MILLG MACH TOOL/DIE	Sep-85	R0076	BLDG 200 D	270	$ 26,962.00
5	MILL MCH VERT KNEE TY	Sep-75	R0080	BLDG 200 D	270	$ 38,667.00
6	LATHE ENGINE 20-25 HP	41557	R0082	BLDG 200 D	270	$ 15,763.00
7	BRG-DRG-MILLG MCH NC	3SP010128	R0090	BLDG 200 D	270	$ 83,892.00
8	BRG-DRG-MILL MACH NC	17481	R0090		270	$ 83,892.00
9	DRILL MCH RADIAL 125U	278	R0294	BLDG 200 D	270	$ 26,520.00
10	PROFILING ATTACHMENT	2348-1	R0337	BLDG 200 D	270	$ 25,800.00
11	BRG-DRLG-MILLG MACH	8890	R0428	BLDG 200 D	270	$165,539.00
12	GRIND MCH SUR VERT 42	15325	R0460	BLDG 200 D	270	$ 85,866.00
13	GRINDING MACHINE	4018ZM82	R9602	BLDG 200 D	270	$ 25,000.00

B200D

IPE Items $15k and Up

	Nomenclature	Serial Number	bar code	Location	HR #	Price
14	CUTTING SYS WATERJET	A511576	R9609	BLDG 200 D	270	$136,168.00
15	LATHE TURN CENTER		R9610	BLDG 200 D	270	$140,000
16	MILLING MAC VERT		R9611	BLDG 200 D	270	$109,000
17	MILLING MACHINE VERTICAL	EZ1CH472	R9613	BLDG 200 D	270	$ 24,000.00
18	SAW BAND AUTO FEEP PN	A1814	D3043	BLDG 200 D	274	$ 21,460.00
19	WELDER STUD	158712	E1826	BLDG 200 D	274	$ 16,600.00
20	WELDER STUD	158712	E1826		274	$ 16,600.00
21	PUNCHING TURRET	334	E3003	BLDG 200 D	274	$32,000
22	PRESS BRAKE MECH 175T	32912	R1944	BLDG 200 D	274	$ 15,555.00
23	SAW BAND	399-85582	R9161	BLDG 200 D	274	$ 17,903.00
24	SHEAR MCH SH MTL P6	085-37759	R9162	BLDG 200 D	274	$ 35,500.00
25	PRESS BRAKE	9165	R9163	BLDG 200 D	274	$115,271.00
26	SHRNG MCH MTL SQ 0610	S-11082	R9164	BLDG 200 D	274	$142,000.00
27	PEERLESS POWER HACK	M14-180	R1980		274	$ 15,000.00
28	OMAX JET MACHINING CENTER	MDL 55100		BLDG 200D	274	$135, 000
29	OMAX JET MACHINING CENTER	MDL 55100		BLDG 200D	274	$139,000.00
30	CUTOFF MACHINE, CARBIDE ABRASIVE WHEEL	3194	408BB	BLDG 200D	104	$ 19,235.00
31	WELDING MACHINE MILLER SYNCROWAVE351	351	E0073	BLDG 200D RM. 1021		

B200C

B200C					
ID #	Nomenclature	Bar Code	Local ID	Location	Manufacture
1	LATHE ENG 10HP 3PH	R4569	15342	BLDG 200 C	LODGE & SHIPLEY
2	MILL MCH KNEE TY VERT	R0077		BLDG 200 C	KEARNEY TRECKER

B210

B210					
ID #	Nomenclature	Bar Code	Local ID	Location	Manufacturer
1	Crane			B210 (Rm 135)	
2	Water Distillation Unit				
3	Walk-in Cooler			B210 (Rm 125)	

B227

B227			
INDUSTRIAL MACHINERY IN BUILDING 227			
NOMENCLATURE	**SERIAL NUMBER**	**BARCODE**	**LOCAL ID**
Welder, Heliarc	389C-05334	E1831	15186
Welder, DC Arc	900751-00-08940	E1837	
Break, Sheet Metal	327841-T	A15981	
Shear, Sheet Metal, Foot	720 11 78	D0344	15132
Roller, Sheet Metal	GC-1196	D0359	15208
Notcher, Sheet Metal	AB-1676	D0360	15206
Band Saw	1728236	D0363	15193
Belt Sander	JH2123	D0100	15195
Drill Press	1740022	D0362	15194
Paint Conditioner	607075	D0097	15207
Band Saw	40073	RR504	
Press, Arbor	TA212	R5214	15369
Unisaw	182686	A13834	
Press, Mandrill	44817	D0098	15199
Drill Press	TA508	D0071	15200
Grinder, Bench	1913022	D0075	15203
Saw, Panel, Wood	48743	A21081	
Dust Collector, Wood	1996-3	applied for	
Sandblast	None	applied for	15201
Dust Collector	G997	applied for	

OPE SUPPORTED EQUIPMENT LIST

B200D

B200D						
OPE EQUIPMENT $15K AND BELOW						
	Nomenclature	**Serial Number**	**Bar Code**	**Location**	**HR #**	**Price**
					M.Krueger	
1	HARDNESS TESTER MCH	BD58133	D5161	BLDG 200 D	104	$ 13,310.00
2	GRINDER/POLISHER	992000	D6587	BLDG 200 D	104	$ 9,945.00
3	SAW ISOMET PLUX	432	J4302	BLDG 200 D	104	$ 7,140.00
4	PRESS SPECIMEN	43IN3S331	L8496	BLDG 200 D	104	$ 5,375.00
5	WELDING MACHINE	D85K51949	R9230	BLDG 200 D	110	$ 6,075.00
					R.Riew	
6	HOIST CHAIN	W1179	R2004	BLDG 200 D	147	$ 918.00
7	HOIST ELECTRIC	K830	R2009	BLDG 200 D	147	$ 300.00
8	LIFT MOTOR VEHICLE	5782	R5942	BLDG 200 D	147	$ 6,385.00
9	HOIST TRUCK HYDRAULIC	5682	R5943	BLDG 200 D	147	$ 11,125.00
					R.Petrovich	
10	MILL MCH 220V 3PH 60C	4192	C3430	BLDG 200 D	270	$ 9,146.00
11	LATHE ENG FL 7-1/2 HP	38079	R0087	BLDG 200 D	270	$ 7,660.00
12	MILLING MACHINE	203174	R0132	BLDG 200 D	270	$ 9,807.00
13	LATHE ENG PRC NO 145C	NE6499	R0134	BLDG 200 D	270	$ 10,455.00
14	GRIND MCH TL-CTR UNIV	52513463	R0344	BLDG 200 D	270	$ 7,093.00
15	ROTARY TABLE 20IN TBL	24772	R0368	BLDG 200 D	270	$ 1,810.00
16	GRIND MCH CYL	1387-53	R0397	BLDG 200 D	270	$ 6,155.00
17	GRINDER-FINISH MCH	730SE	R0398	BLDG 200 D	270	$ 1,365.00

B200D

OPE EQUIPMENT $15K AND BELOW

	Nomenclature	Serial Number	Bar Code	Location	HR #	Price
18	GRINDG MACH SUR RECIP	11983	R0450	BLDG 200 D	270	$ 2,298.00
19	GRINDING MACHINE	4732	R0463	BLDG 200 D	270	$ 689.00
20	GRINDING MACHINE	4856	R0464	BLDG 200 D	270	$ 689.00
21	GRINDING MCHNE DRILL	E7064-4	R0467	BLDG 200 D	270	$ 1,821.00
22	ENGR MACH PANT ½ HP	42830	R0471	BLDG 200 D	270	$ 13,531.00
23	GRNDR TL DBL END EX44	1950	R0483	BLDG 200 D	270	$ 1,328.00
24	GRINDING MACH UTILITY	4700	R0484	BLDG 200 D	270	$ 270.00
25	GRIND MACH CARB TOOL	9919	R0486	BLDG 200 D	270	$ 2,526.00
26	GRNDG MACH CEN EXT	ID2T1Z740	R0488	BLDG 200 D	270	$ 4,008.00
					L.Di Laura	
27	THREADING MACHINE PIPE AND BOLT	311693	4045A	BLDG 200 D	272	$ 5,500.00
28	BOX /CARTON MARKING	28593	DD308	BLDG 200 D	272	$ 5,795.00
29	GRINDING MACH UTIL BN	37575	G0096	BLDG 200 D	272	$ 193.00
30	SANDER DRUM POWER FEEDER	19200	R0693	BLDG 200 D	272	$ 2,251.00
31	SAW BAND METAL CUT	386A	R0953	BLDG 200 D	272	$ 325.00
32	SANDER DRUM PWR FEED	19200	R0963	BLDG 200 D	272	$ 2,251.00
33	JOINTER INCLINED	5989	R0997	BLDG 200 D	272	$ 2,459.00
34	DRILLING MACHINE SINGLE SPINDLE	1092062	R5594	BLDG 200 D	272	$ 296.00
35	SAW CIRCULAR TABLE	110-4665	RO955	BLDG 200 D	272	$ 375.00
					G.Carter	
36	PRESS ARBOR HAND		4041A	BLDG 200 D	274	$ 2,500.00
37	PRESS BRAKING	15129	C1505	BLDG 200 D	274	$ 5,200.00
38	TABLE LIFT ELECTRIC 24X48	33740	D3081	BLDG 200 D	274	$ 350.00
39	GRINDER PEDESTAL TWIN	144764	D3085	BLDG 200 D	274	$ 1,334.00
40	WELDING MACHINE	B1-50	D3109	BLDG 200 D	274	$ 1,105.00
41	WELDING MACHINE ARC	468	D5110	BLDG 200 D	274	$ 2,500.00

B200D

OPE EQUIPMENT $15K AND BELOW

	Nomenclature	Serial Number	Bar Code	Location	HR #	Price
42	INVERTER ARC WELDER	KJ014988	E0067	BLDG 200 D	274	$ 2,300.00
43	WELDING MACHINE ARC	KJ055876	E0068	BLDG 200 D	274	$ 1,500.00
44	CTRL POLARITY REVERSING	KK140904	E0069	BLDG 200 D	274	$2,000
45	WIRE FEEDER ATTACHMENT	KJ010228	E0070	BLDG 200 D	274	$ 2,100.00
46	INVERTER ARC WELDER	KJ014990	E0071	BLDG 200 D	274	$ 2,300.00
47	WELDING MACHINE ARC	KF820564	E0072	BLDG 200 D	274	$8,000
48	WELDING MACHINE	C89C04763	E1829	BLDG 200 D	274	$ 4,500.00
49	WELDING MACHINE	C89C05334	E1831	BLDG 200 D	274	$ 4,500.00
50	WELDING MACHINE	JK719926	E1832	BLDG 200 D	274	$ 2,176.00
51	WELDING MACHINE	JK719923	E1834	BLDG 200 D	274	$ 2,176.00
52	WELDING MACHINE	JK719921	E1837	BLDG 200 D	274	$ 2,176.00
53	DRILLING MACHINE PRESS	89151	E1890	BLDG 200 D	274	$6,000
54	HEAT TREAT	0	MM007	BLDG 200 D	274	$ 7,775.00
55	EXTRACTOR	662	Q6111	BLDG 200 D	274	$ 3,895.00
56	WELDING MACHINE ARC	A92B2912	Q6112	BLDG 200 D	274	$ 8,100.00
57	OVEN CAB TY 650DEG F	RS3HD	R1037	BLDG 200 D	274	$ 1,690.00
58	FORMING MACHINE	56615	R1869	BLDG 200 D	274	$ 2,204.00
59	GRINDING MACHINE UTILITY	83789	R1918		274	$ 250.00
60	GRINDING MACH UTILITY	3073	R1919	BLDG 200 D	274	$ 255.00
61	LIFT MAGNETIC 500LBS	99868	R1921	BLDG 200 D	274	$ 1,100.00
62	POSITIONER WELDING	5646	R1941	BLDG 200 D	274	$ 1,095.00
63	PRESS HYD VT S200A14D	C32649	R1943	BLDG 200 D	274	$ 9,900.00
64	SAW BAND MTL CUTTING	822392-W	R1955	BLDG 200 D	274	$ 14,100.00
65	SAW FILE MCH 36IN THT	36525108	R1956	BLDG 200 D	274	$ 2,760.00
66	TABLE HYDRAULIC LIFT 2KLB CAP	DA43127	R1959	BLDG 200 D	274	$ 390.00

B200D

OPE EQUIPMENT $15K AND BELOW

	Nomenclature	Serial Number	Bar Code	Location	HR #	Price
67	TABLE HYDRAULIC LIFT 2KLB CAP	DA43128	R1960	BLDG 200 D	274	$ 390.00
68	WELDING MACHINE	HF853437	R1973	BLDG 200 D	274	$ 1,315.00
69	WELDING MACHINE	HJ184630	R1981	BLDG 200 D	274	$ 5,909.00
70	FORMING MACHINE	TACOM 80407	R1984	BLDG 200D	274	$ 320.00
71	GRINDER FLOOR TYPE	697SE	R2033	BLDG 200 D	274	$ 1,365.00
72	POSITIONER WELDING	5015	R2160	BLDG 200 D	274	$ 1,095.00
73	TORCH OUTFIT CUTTING	A17983	R2182	BLDG 200 D	274	$ 945.00
74	WELDING MACHINE	RHOO9053	R2183	BLDG 200 D	274	$ 1,000.00
75	BND MCH PIPE/TUBE A3	482A	R2797	BLDG 200 D	274	$ 2,840.00
76	DEBURRING MACHINE	ESBSB6A6	R8372	BLDG 200 D	274	$ 5,000.00
77	OSCILLATOR LINEAR	265350-CBG	R8376	BLDG 200 D	274	$ 8,050.00
78	WELDING MACHINE	JF943049	R9151	BLDG 200 D	274	$ 3,615.00
79	WELDING MACHINE	JE827296	R9152	BLDG 200 D	274	$ 2,127.00
80	WELDING MACHINE ARC	JD705344	R9155	BLDG 200 D	274	$ 1,852.00
81	WELDING MACHINE	JF93BB19	R9156	BLDG 200 D	274	$ 2,765.00
82	WELDING MACHINE	R9157	R9157	BLDG 200 D	274	$ 3,615.00
83	TABLE LIFT MANUAL OPERATED	407766	R9170	BLDG 200 D	274	$ 600.00
84	WELDING MACHINE	F85K53838	R9229	BLDG 200 D	274	$ 3,346.00
85	SANDER BELT VERT	3D684CC1HN	R9519	BLDG 200 D	274	$ 3,278.00
86	DRILL MACHINE	TA1134	R0406	BLDG 200 D	278	$ 469.00
					D.Leslie	
87	TANK SPRAY SINGLE REGULATOR		E1866	BLDG 200 D	406	$ 457.00
88	AGITATOR PAINT ¼-1G	2828	R5750	BLDG 200 D	406	$ 642.00
89	AGITATOR PAINT 1/4-1G	2828	R5750		406	$ 642.00
90	PAINT MIXER		R5751	BLDG 200 D	406	$ 2,625.00

B200D

OPE EQUIPMENT $15K AND BELOW

	Nomenclature	Serial Number	Bar Code	Location	HR #	Price
91	NATIONAL SHEAR	S11082	N/A	BLDG 200D	274	$ 14,563.00
92	BLAST CLEANING MACHINE		A11743	BLDG 200D	274	$ 13,590.00
93	GRINDER FINISH MCH		R2033	BLDG 200D	274	$ 1,365.00
94	GRINDER FINISH MCH		N/A	BLDG 200D	274	$ 1,365.00
					D. Ostberg	
95	PRESS HYDRAULIC ELEC		PP750	BLDG 200D	261	$ 13,125.00
96	ENVIRONMENTAL CHAMBER		Q6600		261	$ 6,000.00
97	DRILLING MACHINE		AO1903		261	$ 2,320.00
98	SAW, CONCRETE STONE		AO0593		261	$ 3,299.00
99	GTINDING MACHINE (TENSILCUT)		D5177		261	$ 4,000.00
100	FLOOR WASHER		A18618		261	$ 9,903.00
101	RESIN TRANSFER MOLDING MACHINE		JJ886		261	$ 8,000.00
					M. Krueger	
102	FURNACE HEAT-TREATING	561893121218B XS	C3237		104	$ 9,945.00
	WELDING MACHINE MILLER W/2 WIRE FEEDERS & BOOM INVISION 356P	MDL 356P	S/N KK004824			$ 4,500.00

BLDG (VARIOUS)

BLDG (VARIOUS)							
ID #	Nomenclature	Serial Number	Bar Code	Local ID	Location		
1	BEAD BREAKER	00302	R5211	15274	BLDG 7		
2	DRILL MACH U R FL 1 HP	106/22858	5414A		BLDG 200 C		
3	BRAKE MACH S/MTL HAND	1071	4100A	15310	BLDG 203		
4	LATHE BENCH	146078	R6310		BLDG 200 C		
5	DRILLING MACHINE	1740022	D0362	15194	BLDG 200 C		
6	SHEARING MACHINE	17954	865EE	15901	BLDG 7		
7	BRAKE MACHINE BOX/PAN	17954	866EE	15902	BLDG 7		
8	GRINDER	1923413	R3579	16298	BLDG 212		
9	DRILLING MCH UPRIGHT	23-2885	R4562	15351	BLDG 7		
10	GEN ST MEP-005A	2324	AB336		BLDG 210		
11	GEN ST MEP-005A	2403	AE832		BLDG 1424		
12	AMPLIFIER STRESS	2939	R8146		BLDG 212		
13	CUTOFF MACHINE	3194	408BB	15895			
14	HST ELEC WR RP 4TN CP	32169	D0076		BLDG 200 C		
15	DRILLING MACHINE	3387	H1816		BLDG 205		
16	BALANCE LAB 15000GRS	42030	R5140		BLDG 7		
17	BALANCE LAB 200000 GR	43032	R5193		BLDG 7		
18	BALANCE LAB 1000 GRAM	42195	R5139		BLDG 7		
19	SAW BAND	446956	R5595	15346	BLDG 7		
20	PRESS PUNCH	46-A	R4568	15338	BLDG 7		
21	SAW BAND MTL CTG W/E	4813672	0915A	15284	BLDG 203		
22	SAW BAND METAL CUT	4913829	R4564	15337	BLDG 7		
23	SAW BAND	5014728	R3528	15296	BLDG 212		
24	GRINDING MCH UTIL BN 1HP	5052103967	H1828	15379	BLDG 205		

BLDG (VARIOUS)							
ID #	Nomenclature	Serial Number	Bar Code	Local ID	Location		
25	SAW RAD O/A WDWK NPTB	511454	G0135	15345	BLDG 7		
26	COUNTER ELECTRONIC	51901588	R3350		BLDG 212		
27	CUTOFF MCH 8D HORIZ	5222353	R4574	15350	BLDG 7		
28	SPDR TIR PNEU FM14-36	538253	R5217	15273	BLDG 7		
29	GRIND MCH SURF HORZ	5722	R0487		BLDG 200 C		
30	SWEEPER BATT PWD	6191	R5522		BLDG 7		
31	COUNTER ELECTRONIC	64803259	R3348		BLDG 212		
32	GEN ST MEP 018A	FB00508661	0955A		BLDG 203		
33	GEN ST MEP 018A	FB00508662	0956A		BLDG 203		
34	COUNTER ELECTRONIC	IL4881	R4208		BLDG 200 C		
35	MULTICHARGE RATE	IL8786	R4632		BLDG 7		
36	GEN ST MEP-005A	KZ01532	D0291		BLDG 200 C		
37	COMPRESSOR	P0825256	G8463		BLDG 219		
38	WELDING MACHINE	R1980	R1980	15341	BLDG 7		
39	GEN ST MEP 009A	RZ00382			BLDG 229		
40	MILLING MACHINE	TA-438	R4563	15343	BLDG 7		
41	OSCILLOSCOPE	022056	C3234		BLDG 215		
42	TESTING UNIT BALLISTIC	90P141	J3172		BLDG 200 C		
43	SAW CIRC TABL FM 208V	10861	2401A	15298	BLDG 203		
44	MOUNTER DEMOUNTR PNU	1192253027			BLDG 203		
45	MOUNTER DEMOUNTR PHU	0692135548	P6166	15272	BLDG 7		

46 EYEWASHES B210

47 SAFETY SHOWERS B210

APPENDIX 9

PWS 2

FACILITY ENGINEERING – WARREN

SCHEDULE OF TASKS, B212, ANNUAL CPM SCHEDULE

GENERAL

1.	**Test Cells 1-9 inclusive**	
	a. Oil Pump (In basement)	**Check oil level. Also check oil level in motor-generator oil cups.**
	b. Fan Oil Pump	**Check oil level.**
2.	**Test Cell 9**	
	a. Fan Oil Pump	**Check oil level.**
3.	**Oil Pump, Cell Air Fans**	**Check for proper operation.**
4.	**Test Cell 1**	
	a. Carburetor Air Blower	**Check for proper operation.**
	b. Dynamometer Oil Pump	**(In basement) Change oil and filter.**

c. Carburetor Air Blower In Equipment Room above Control Motor (GE) Room.	**Check for proper operation and lube grease fittings.**
5. Test Cell 2 and 5	
a. Carburetor Air Blower	**Check for proper operation.**
b. Oil pump oil and filter	**Change.**
c. Carburetor Air Blower In Equipment Room above Control Motor (GE) Room.	**Check for proper operation and lube grease fittings.**
6. Test Cell 4	
a. Carburetor Air Blower	**Check for proper operation.**
b. Gear Box Filters	**Clean or change annually.**
c. Gear Boxes	**Do oil analysis of both gear boxes to see if oil needs to be flushed, changed or cleaned.**
d. Carburetor Air Blower Motor (Beside Control Room).	**Check for proper operation and lube grease fittings.**
7. Test Cell 5	
a. Carburetor Air Blower	**Check for proper operation.**
b. Gear Box Filters *	**Change if needed.**
c. Gear Boxes	**Do oil analysis of both gear boxes to see if oil needs to be flushed, changed or cleaned.**
d. Oil Pump Oil and Filter (In basement)	**Change when necessary.**

8. Test Cell 6

a. Carburetor Air Blower	**Check for proper operation.**
b. Oil Pump Oil and Filter	**Change.**
c. Mountings	**Inspect for loose hardware.**
d. Carburetor in Blower (In Equipment Room above Control Motors (GE) Room)	**Check blower for proper operation, lube grease fittings.**

9. Test Cell 7

a. Carburetor Air Blower	**Check for proper operation.**
b. Test cell Belts	**Replace.**
c. Oil Pump Oil and Filter	**Change.**

10. Test Cell 8

a. Carburetor Air Blower	**Check for Proper Operation.**

11. Test Cell 9

a. Gear Boxes	**Make oil analysis of both gear to see if oil needs to be flushed, changed or cleaned.**
b. Gear Box Filters	**Change unless oil analysis indicates differently.**
c. Dynamometer Oil Pump, Oil and Filter	**Change if needed.**
d. Variable Speed Fluid Drive*.	**Check for proper operation.**

DYNAMOMETERS

1. Test Cells 1-8, Dynamometers

a. Turning	**Must be operated and tagged with date of turn so bearings will not develop flat spots.**
b. Trunion Bearings	**Dynamometers with bearings that turn must be rotated ½ turn. Check mountings for loose hardware on all high usage items. Check for obvious damage on external body that will impair operation.**

2. Test Cell 5, Dynamometers

a. Turning	**Turn ½ turn and tag with date of turn so bearing will not get flat spots.**
b. Trunion Bearings	**Dynamometers with bearings that turn must be rotated ½ turn. Check mountings for loose hardware on all high usage items and tighten. Check for external body damage that will impair operation.**

3. Test Cell 9, Dynamometers

a. Turning	**Turn ½ turn and tag with date of turn so bearings will not get flat spots.**
b. Trunion Bearings	**Dynamometers with bearings that turn must be rotated ½ turn.**

4. Test Cells 1-3, 5-7

a. Dynamometer Blower	**Check for proper operation and Motor and Blower lubricate.**

5. Test Cells 4-5

a. Amplidynes	Check for proper operation.
6. Test Cell 7	
a. GE Motor and Generator Parts	Check for proper operation, Clean parts and lubricate cups (In service equipment Rooms 9, 10, and 11).
7. Equipment in Service Rooms 3-5	Check and lube 4 motors and couplings. Check and lube fan bearings. Check motor-generator set for proper operation and lube 3 oil cups. Check dynamometer oil pump for proper operation.
8. Equipment in Service Rooms 6 & 8	Check gear bearings for proper operations. Lube equipment bearing oil reserves. Check GE Electric Motor for proper operation and lube grease fittings. Check pump for proper operation. Check fan blower for proper operation.
9. Parts Cleaning Booth	Check recirculating sprayer, ventilating blower, motor and pump for proper operation.
10. Air Valves	All air-actuated valves (steam, air, fuel, water and oil valves) must be checked and proper operation. Grease plugs and grease fittings should be lubed. All valves including the following must be maintained.
11. Test Cell 5	
a. Oil Pump	Check for proper operation, clean and lube (Rm 120, 1st floor).
b. GE Gear Cases *	Check for proper operation, clean and lube (Rm 120, 1st floor).
12. Test Cell 4, Dynamometer(s)	
a. Gear Reducer *	Check for proper level while running.

b. Tachometer Drive * Gear Case* Couplings*	**Lubricate.**
c. Bijur System	**Check for proper operation**
13. Test Cell 5, Dynamometer(s)	
a. Sear Reducer *	**Check for proper level while running.**

***Only if test cell is in use.**

b. Tachometer Drive* Gear Case Couplings	**Lubricate.**
14. Test Cell 9, Dynamometer(s)	
a. Tachometer Drive * Gear Cases	**(One on each side of cell.) Lubricate.**
15. Test Cell 4, Motor-Generator	
a. Exciter*	**Check for proper operation.**
16. Test Cell 5, Motor-Generator	
a. Exciter *	**Check for proper operation.**
17. Corridor #19	**Check all 3 motors for proper operation and lube grease fittings. Check both electric motors and couplings for tank pump for proper operation and lubricate.**
18. Fan Oil Pump Oil	**Conduct oil analysis.**
19. Test Cell 1, Dynamometer	

a. Brushes	**(Unless self-adjusting). Check deteriorated or out of adjustment. Clean.**
b. Armatures	**Check if in good working condition, has no corrosion. Clean.**
c. Electrical Parts	**Check wiring, connectors and insulation for damage.**
d. Bijur System	**Lube, clean and change oil.**
e. Mountings	**Check for loose hardware and tighten.**

20. Test Cell 2-5, Dynamometer(s)

a. Brushes	**(Unless self-adjusting) Check if deteriorated or out-of-adjustment. Clean.**
b. Armatures	**Check if in good working condition, has no corrosion. Clean.**
c. Electrical Parts	**Check wiring, connectors and insulation for damage.**

21. Test Cell 6-8, Dynamometer(s)

a. Brushes	**(Unless self-adjusting). Check if deteriorated or out-of-adjustment. Clean.**
b. Armatures	**Check is in good working condition, has no corrosion. Clean.**
c. Electrical Parts	**Check wiring, connection and insulation for damage.**
d. Bijur System	**Lube, clean and change oil.**

22. Test Cell 9, Dynamometer(s)

a. Armatures	**Check if in good working condition, has no corrosion. Clean.**
b. Electrical Parts	**Check wiring, connectors and insulation for damage.**

c. Tachometer Drive Gear Cases	(One on each side of cell) Lube and clean.	
23. Test Cell 1-3, 6-7, Motor Generator		
a. Brushes	Check if deteriorated or out-of-adjustment. Clean.	
b. Armatures	Check if in good working condition, has no corrosion. Clean.	
c. Electrical Parts	Check wiring, connectors and insulation for damage.	
24. Test Cell 4-5	NOTE: Test Cell 4 is not now in use. Do the following if it becomes operable again.	
a. Brushes	Check if deteriorated or out-of-adjustment. Clean.	
b. Armatures	Check if in good working condition, has no corrosion. Clean.	
c. Electrical Parts	Check wiring, connectors and insulation for damage.	
d. Amplidynes *	Check for proper operation.	
25. Test Cell 8, Motor Generator		
a. Mountings	Inspect for loose hardware and tighten.	
b. Brushes	Check if deteriorated or out-of-adjustment. Clean.	
c. Armatures	Check if in good working condition, has no corrosion. Clean.	
d. Electrical Parts	Check wiring, connectors and insulation for damage.	
26. Oil Pressure Safeties on Test Equipment in Test Cells 1-9.	Calibrate.	

APPENDIX 10

PWS 2

FACILITIES ENGINEERING-WARREN

FLUSHING OF WATER DISTRIBUTION SYSTEM AT DETROIT ARSENAL

RECOMMENDED STEPS TO FOLLOW IN IMPLEMENTING AN EFFECTIVE FLUSHING PROGRAM:

1. Coordinate with water supplier first. They could have a nearby repair program that limits water use.

2. The sequence is one of several possible ways.

   a. Do not flush looped systems without closing a valve to eliminate bi-direction flow.

   b. The developer of procedure used a nominal flow rate of 1000 gpm from the hydrant based upon fire department test records to determine minimum flushing times.

   c. The minimum scouring velocity is 2.5 feet per second.

Flow rate required achieving minimum cleaning velocity through various sized mains:

Diameter	Area	Velocity	Q	Gallons/Min.
6"	0.196	2.5 fps	0.49 cfs	220
8 "	0.342	2.5 fps	0.86 cfs	386
10"	0.528	2.5 fps	1.32 cfs	593
12"	0.785	2.5 fps	1.96 cfs	880

Where,

Q= Area X Velocity fps= Feet per second

cfs=Cubic feet per second GPM = Gallons per minute

GPM = cfs X 60 X 7.48 GPM = 449 x cfs

So at 1000 gpm F.H. flow rate the minimum will be exceeded

d. The flushing time was increased by a minimum of 50% to allow for scour to dislodge biofilm on pipe walls and remove it via the fire hydrants.

e. Flushing sequence should start at the water source and work inward (basic).

f. Approximate number turns to close a valve:

6" = 20 1/4 10" = 33 1/2

8" = 27 12" = 39 l/4

DETROIT ARSENAL FLUSHING SEQUENCE

I. FLUSH HQ AREA:

I. FLUSH HQ AREA	
1, Close Valve #7	Water source will be from 11-Mile Warren's 16".
2. Close Valve #4	
3. Open F.H. #4	Steamer Connection, Flushing 12" & 8" holding 4,000 gallons flushing 6 minutes minimum.
4. Close F.H. #4	
5. Open F.H. #5	Flushing 10" holding 2500 gallons. Flush for 4 minutes minimum.
6. Close F.H. #5	
7. Open F.H. #7	Flush 6" holding 200 gallons for l/2 min.
8. Close F.H. #7	
9. Open F.H. #1	Flush 6" holding 200 gallons for 1/2 minute.
10. Close F.H. #1	

II. FLUSH 10" COMBINED MAIN ON ARSENAL AVE.

II. FLUSH 10" COMBINED MAIN ON ARSENAL AVE	
1. Valve #7 closed	
2. Open F.H. #18 Auxiliary Domestic	Flushing 10" holding 5800 gallons. Flush 8 minutes minimum.
3. Close F.H. #18	
4. Open Valve #7	

III. FLUSH 8" DOMESTIC BETWEEN HQ AREA AND ARSENAL AVE.

III. FLUSH 8" DOMESTIC BETWEEN HQ AREA AND ARSENAL AVE	
1, Close Valve #16	Water source will be from 11 Mile - Warren's 16".
2. Open F.H. #18 (Auxiliary Domestic)	Flush 8" holding 5.100 gallons. Flush for 8 minutes minimum.
3. Close F.H. #18	
4. Open Valve #16	

IV. FLUSH REMAINING DOMESTIC SYSTEM - CAST & north of 200 Block

IV. FLUSH REMAINING DOMESTIC SYSTEM - EAST & NORTH of 200 Block	
1. Install new F.H. (will be procured separately)	S.E. of Bldg. 202 on west side of post indicator valve (white).
2. Open F.H.	
3. Close F.H.	

APPENDIX 11
PWS 2

FACILITIES ENGINEERING – WARREN
ENVIRONMENTAL PROTECTION Detroit Arsenal Permits

Section	Law	Permit	Number	Regulator
2.6.4	Clean Air Act	Synthetic Minor	566-96A	State of Michigan
2.6.4.	Clean Air Act	B 203 Vent Hood Operating Permit	146-02	State of Michigan
2.6.18	Clean Water Act	Significant Industrial User	401204	City of Warren
2.6.20	Clean Water Act	Storm Water, Certificate of Coverage	MIS110277	State of Michigan

APPENDIX 12

PWS 2

FACILITIES ENGINEERING – WARREN

DETROIT ARSENAL CHEMICAL INVENTORY LIST

BRIDGING

Supported Items:

			Weight (Lbs)
ANTI-FREEZE COOLANT 1 GL		42 @ 1.00 GL BT	
107-21-1	ETHYLENE GLYCOL		98.92
1310-58-3	POTASSIUM HYDROXIDE		98.92
1310-73-2	SODIUM HYDROXIDE		98.92
7664-38-2	PHOSPHORIC ACID		98.92
OIL SUPER HPO MOTOR SAE 10W 16OZ.		3 @ 16.00 OZ BT	
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		2.55

STOP ## JVS

Supported Items:

			Weight (Lbs)	
BIG DISINFECTANT		10 @ 64.00 GL CO		
59157-25-0	"NOT HAZARDOUS"		5,170.27	
COMPUBLEND BASE A		1 @ 2.50 GL BT		
111-76-2	BUTOXYETHANOL		14.07	
141-43-5	ETHANOLAMINE		4.69	
COMPUBLEND BASE B		2 @ 2.50 GL BT		
64-17-5	ETHYL ALCOHOL		0.83	
32426-11-2	OCTYLDECYL DIMETHYL AMMONIUM CHLORIDE		2.71	
68391-01-5	ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE		1.81	
999999-99-9		INERT INGREDIENTS		37.16
COMPUBLEND BASE C		1 @ 2.50 GL BT		
111-76-2	BUTOXYETHANOL		1.69	
7732-18-5	WATER		12.19	
COMPUBLEND BASE D		2 @ 2.50 GL BT		
67-63-0	ISOPROPYL ALCOHOL		20.40	
111-76-2	BUTOXYETHANOL		7.74	
COMPUBLEND BASE E		1 @ 2.50 GL BT		
1000-58-6	CHEALATING AGENT		3.65	
1002-56-6	CARBOXYLIC ACID SALT		8.86	
7732-18-5	WATER		9.38	
COMPUBLEND BASE F		1 @ 2.50 GL BT		
67-63-0	ISOPROPYL ALCOHOL		2.06	
COMPUBLEND BASE G		1 @ 2.50 GL BT		
1310-73-2	SODIUM HYDROXIDE		1.46	
6834-92-0	SODIUM METASILICATE		0.73	
7732-18-5	WATER		1.04	
LEMON LUXURY SOAP		1 @ 55.00 GL DR		
59157-25-0	"NOT HAZARDOUS"		472.29	
MISTY FURNITURE POLISH		1 @ 18.00 OZ CN		
74-98-6	PROPANE		0.08	
75-28-5	ISOBUTANE		0.08	
68551-15-5	PETROLEUM DISTILLATES		0.14	
STA-BRIGHT BLEACH		1 @ 1.00 GL BT		
7681-52-9	SODIUM HYPOCHLORITE		0.47	

STOP 01 FURNITURE REPAIR

Supported Items:

			Weight (Lbs)
OLD ENGLISH SCRATCH COVER FOR DARK 8 OZ.		1 @ 8.00 OZ BT	
8042-47-5	WHITE MINERAL OIL (PETROLEUM)		0.45
PAINT SPRAY GLOSS BLACK		1 @ 11.00 OZ CN	
67-64-1	ACETONE		0.14
74-98-6	PROPANE		0.13
106-97-8	BUTANE		0.08
108-88-3	BENZENE, METHYL-		0.17
1330-20-7	BENZENE, DIMETHYL		0.01
1343-90-4	MAGNESIUM SILICATE		0.01
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.01
64742-94-5	AROMATIC 150		0.01
TRI-FLOW LUBRICANT AEROSOL W/TEFLON 6 OZ.		1 @ 6.00 OZ CN	
74-98-6	PROPANE		0.06
75-28-5	ISOBUTANE		0.02
106-97-8	BUTANE		0.04
34590-94-8	DIPROPYLENE GLYCOL METHYL ETHER		0.02
61790-48-5	BARIUM PETROLEUM SULFONATE NEUTRAL *95-2*		0.08
WOOD FINISH DARK WALNUT #2716		1 @ 1.00 GL CN	
8052-41-3	STODDARD SOLVENT		5.56
WOOD FINISH GOLDEN OAK #210B		1 @ 1.00 GL CN	
8052-41-3	STODDARD SOLVENT		5.69
64742-88-7	MINERAL SPIRITS		5.31
WOODFINISH RED MAHOGANY 1 GL.		1 @ 0.01 GL CN	
8052-41-3	STODDARD SOLVENT		0.01
64742-47-8	HYDROTREATED LIGHT PETROLEUM DISTILLATE		0.00
64742-88-7	MINERAL SPIRITS		0.05
64742-95-6	NAPHTHA, LIGHT AROMATIC		0.00

STOP 02 PAINTING (TARDEC)

Supported Items:

		Weight (Lbs)
WD-40 AEROSOL 12OZ	1 @ 12.00 OZ CN	
8012-95-1	OIL MIST-MINERAL	0.11
8052-41-3	STODDARD SOLVENT	0.38
68476-85-7	LIQUEFIED PETROLEUM GAS (L.P.G.)	0.19

STOP 03 CRIB 200D (TARDEC)

Supported Items:

		Weight (Lbs)	
AIR TOOL OIL 15 FLOZ	1 @ 15.00 FL BT		
64741-96-4	PETROLEUM OIL	0.78	
68649-42-3	ZINC ALKYL DITHIOPHOSPHATE	0.01	
CLEANER,LUBRICANT MIL-L-63460 1 GL	1 @ 1.00 GL BT		
71-55-6	ETHANE, 1,1,1-TRICHLORO-	1.25	
76-13-1	FREON 113 [ETHANE, 1,1,2-TRICHLORO-1,2,2-TRIFLUORO-]	1.25	
64742-57-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)	1.25	
68649-11-6	1-DECENE DIMER, HYDROGENATED	1.67	
FLUID,SILICONE BRAKE FLUID DOT #5 1 QT	1 @ 1.00 QT BT		
999999-99-9	INERT INGREDIENTS		0.02
LUBRICANT,MULTI-PURPOSE GEAR LUBRICANT SAE80W-90 1 QT	1 @ 1.00 QT BT		
64741-89-5	PETROLEUM OIL, THIS ING. IS A PART OF THE MIXTURE OF I	0.74	
64742-57-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)	0.74	
MERCON/DEXRON III	1 @ 32.00 OZ BT		
64742-53-6	MINERAL OIL/HYDROTREATED LIGHT NAPHTHENIC DISTIL	0.50	
64742-55-8	SOLVENT REFINED/SOLVENT REFINED LIGHT NAPHTHENIC	0.50	
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)	0.50	
OIL 15W-40 TEXACO 1 GALLON	1 @ 1.00 GL CN		
64741-88-4	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)	0.07	
REMOVEABLE THREADLOCKER 242 1.69 FL OZ	1 @ 1.69 OZ BT		
67-56-1	METHANOL	0.00	
80-15-9	CUMENE HYDROPEROXIDE	0.00	
81-07-2	SACCHARIN (MANUFACTURING NO SUPPLIER NOTIFICATION	0.00	
613-48-9	N,N-DIALKYLTOLUIDINES	0.01	
9004-96-0	POLYGLYCOL OLEATE	0.03	
13463-67-7	TITANIUM DIOXIDE	0.00	
25852-47-5	POLYGLYCOL DIMETHACRYLATE	0.06	
112945-52-5	FUMED SILICA		0.00
SEALANT FORM A GASKET R #2 12OZ.	1 @ 12.00 OZ TU		
67-63-0	ISOPROPYL ALCOHOL	0.09	
1332-58-7	KAOLIN	0.39	
8002-43-5	SOYBEAN DERIVATIVE *93/4*	0.02	
8050-09-7	ROSIN CORE SOLDER THERMAL DECOMPOSITION PRODUCTS	0.13	

68187-84-8	CASTOR OIL		0.13
SEALANT,GASKET NO.1 COMPOUND 2 OZ		1 @ 2.00 OZ TU	
67-63-0	ISOPROPYL ALCOHOL		0.01
1332-58-7	KAOLIN		0.06
8002-43-5	SOYBEAN DERIVATIVE *93/4*		0.00
8050-09-7	ROSIN CORE SOLDER THERMAL DECOMPOSITION PRODUCTS		0.03
68439-93-0	CASTOR OIL, POLYMD., OXIDIZED		0.01
SILICONE ULTRA BLUE 3.35OZ		1 @ 3.35 OZ TU	
96-29-7	METHYL ETHYL KETOXIME (VAPOR PRESSURE 15 MMHG @		0.00
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA		0.06
1333-86-4	CARBON BLACK		0.00
7429-90-5	ALUMINUM		0.00
63148-62-9	SILICON FLUID		0.03
68611-44-9	SILICA		0.01
70131-67-8	SILOXANES & SILICONES DI-ME HYDROY-TERMINATED *95		0.07
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.01
8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12

STOP 04 MACHINE (TARDEC)

Supported Items:

			Weight (Lbs)
CHLORINE TABLETS 9.63 LB PT 8023996		1 @ 9.63 LB BX	
1305-62-0	CALCIUM HYDROXIDE		0.58
1317-65-3	CALCIUM CARBONATE/MARBLE		0.48
7647-14-5	SODIUM CHLORIDE		1.44
7732-18-5	WATER		0.67
7778-54-3	CALCIUM HYPOCHLORITE		6.74
10043-52-4	CALCIUM CHLORIDE		0.48
COOLANT, FORMULA 77, 5 GL		1 @ 5.00 GL CN	
59157-25-0	"NOT HAZARDOUS"		42.52
WD-40 AEROSOL 12OZ		1 @ 12.00 OZ CN	
8012-95-1	OIL MIST-MINERAL		0.11
8052-41-3	STODDARD SOLVENT		0.38
68476-85-7	LIQUEFIED PETROLEUM GAS (L.P.G.)		0.19

STOP 05 WELDING SHEETMETAL (T)

Supported Items:

			Weight (Lbs)
ALCOHOL ISOPROPYL 1GL		1 @ 1.00 GL BT	
67-63-0	ISOPROPYL ALCOHOL		0.05
7732-18-5	WATER		0.02
CLEANER/REMOVER SKC-S SPOTCHECK 12 OZ		1 @ 12.00 OZ CN	
124-38-9	CARBON DIOXIDE		0.04
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.59
DYE, BLUE DYKEM LAYOUT 2 FL OZ		1 @ 2.00 FL CN	
64-17-5	ETHYL ALCOHOL		0.04
71-36-3	BUTANOL		0.01
123-86-4	BUTYL ACETATE		0.04
9004-70-0	NITROCELLULOSE (RESIN)		0.01
DYE, RED DYKEM LAYOUT MARKER		1 @ 1.00 FL CT	
64-17-5	ETHYL ALCOHOL		0.03
67-63-0	ISOPROPYL ALCOHOL		0.00
71-36-3	BUTANOL		0.00
123-86-4	BUTYL ACETATE		0.02
9004-35-7	CELLULOSE ACETATE		0.00
FLUID TAP MAGIC ALUMINUM CUTTING 16 OZ		1 @ 16.00 OZ CN	
8008-20-6	ALIPHATIC PETROLEUM SOLVENT/KEROSENE		0.60
FLUID TAPMATIC #1 CUTTING 16 OZ		1 @ 16.00 OZ CN	
71-55-6	ETHANE, 1,1,1-TRICHLORO-		0.85
75-65-0	BUTANOL		0.01
106-88-7	BUTYLENE OXIDE		0.05
109-87-5	METHYLAL		0.02
119-36-8	SALICYLIC ACID, METHYL ESTER		0.02
8016-28-2	ANIMAL FATTY OIL (GLYCERIDIC OIL)		0.03
63449-39-8	PARAFFIN AND HYDROCARBON WAXES, CHLORINATED		0.10
FLUID TAPPING ,TAP MAGIC ORIGINAL 16 FL OZ		1 @ 16.00 FL CN	
71-55-6	ETHANE, 1,1,1-TRICHLORO-		1.27
75-65-0	BUTANOL		0.04
104-55-2	VEGETABLE OIL, ESSENTIAL		0.04
106-88-7	BUTYLENE OXIDE		0.04
109-87-5	METHYLAL		0.04

68815-10-1	PETROLEUM OIL, ALIPHATIC		0.04
LPS-3 LUBRICANT/RUST INHIBITOR		1 @ 11.00 OZ CN	
124-38-9	CARBON DIOXIDE		0.11
34590-94-8	DIPROPYLENE GLYCOL METHYL ETHER		0.02
64742-52-5	HYDROTREATED HEAVY NAPHTHENIC DISTILLATE, PETROL		0.09
64742-88-7	MINERAL SPIRITS		0.52
NOZZLE 200 WELD SHIELD SPRAY 16 OZ		1 @ 16.00 OZ CN	
75-09-2	DICHLOROMETHANE {METHYLENE CHLORIDE}		0.90
OIL AIR TOOL 10W SG-CE 16 OZ		1 @ 1.00 PT CN	
64742-54-7	DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		0.45
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.01
8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12
WELDING ELECTRODE WIRE		1 @ 20.00 LB BX	
7439-89-6	IRON		0.17
ZYGLO DEVELOPER ZP-9F 12 OZ.		1 @ 12.00 OZ CN	
67-63-0	ISOPROPYL ALCOHOL		0.08
67-64-1	ACETONE		0.30
115-77-5	PENTAERYTHRITOL		0.08
124-38-9	CARBON DIOXIDE		0.05
ZYGLO PENETRANT ZL-27A 12 OZ.		1 @ 12.00 OZ CN	
75-28-5	ISOBUTANE		0.23
8001-79-4	CASTOR OIL		0.08
8042-47-5	WHITE MINERAL OIL (PETROLEUM)		0.23

STOP 06 RAPID PROTOTYPING (T)

Supported Items:

			Weight (Lbs)	
FLUID TAPPING ,EDGE LIQUID STEEL & ALUMINUM 16 FL OZ		1 @ 16.00 FL CN		
9016-45-9	NONYLPHENOL POLYETHOXATE		0.04	
FREE FLUX OFF 2000		1 @ 10.00 OZ CN		
64-17-5	ETHYL ALCOHOL		0.16	
67-56-1	METHANOL		0.06	
75-83-2	BUTANE, 2,2-DIMETHYL		0.16	
79-29-8	BUTANE, 2,3-DIMETHYL-		0.16	
96-14-0	3-METHYL PENTANE		0.16	
107-83-5	2-METHYL PENTANE, ISOHEXANE		0.29	
110-54-3	HEXANE (N-HEXANE)		0.16	
FREEZ IT 14 OZ		1 @ 14.00 OZ CN		
75-71-8	DICHLORODIFLUOROMETHANE {CFC-12}		0.88	
REMOVEABLE THREADLOCKER .34OZ.		1 @ 34.00 OZ BT		
67-56-1	METHANOL		0.02	
80-15-9	CUMENE HYDROPEROXIDE		0.02	
81-07-2	SACCHARIN (MANUFACTURING NO SUPPLIER NOTIFICATION		0.06	
613-48-9	N,N-DIALKYLTOLUIDINES		0.21	
9004-96-0	POLYGLYCOL OLEATE		0.53	
13463-67-7	TITANIUM DIOXIDE		0.02	
25852-47-5	POLYGLYCOL DIMETHACRYLATE		1.28	
112945-52-5		FUMED SILICA		0.02
SOLDER RESIN CORE #44 16 OZ		1 @ 16.00 OZ CN		
7439-92-1	LEAD		0.38	
7440-31-5	TIN OXIDE AND INORGANIC COMPOUNDS EXCEPT SNH4		0.62	
7440-36-0	ANTIMONY		0.50	
7440-50-8	COPPER		0.08	
7440-69-9	BISMUTH		0.25	
8050-09-7	ROSIN CORE SOLDER THERMAL DECOMPOSITION PRODUCTS		0.03	
SOLDERING PASTE FLUX 2 OZ.		1 @ 2.00 OZ JR		
8009-03-8	GREASE, PETROLEUM		0.05	
8050-09-7	ROSIN CORE SOLDER THERMAL DECOMPOSITION PRODUCTS		0.04	
TIP TINNER 7 OZ.		1 @ 0.07 OZ JR		
7440-31-5	TIN OXIDE AND INORGANIC COMPOUNDS EXCEPT SNH4		0.00	
7440-50-8	COPPER		0.00	
WD-40 11OZ		1 @ 11.00 FL CN		

124-38-9	CARBON DIOXIDE	0.01
8052-41-3	STODDARD SOLVENT	0.38
59157-25-0	"NOT HAZARDOUS"	0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)	0.12

STOP 07 METALLURGY (TARDEC)

Supported Items:

	Weight (Lbs)
LIQUID NITROGEN 55 LITERS	1 @ 55.00 LI CO
7727-37-9 NITROGEN	115.97

STOP 08 LASER PROTECTION (TAR)

Supported Items:

		Weight (Lbs)
HYDROGEN PEROXIDE	1 @ 4.00 LI BT	
7722-84-1 HYDROGEN PEROXIDE		5.29
7732-18-5 WATER		2.64

STOP 10 MOTOR POOL (ICI)

Supported Items:

			Weight (Lbs)
ANTI-FREEZE COOLANT		1 @ 1.00 GL CO	
107-21-1	ETHYLENE GLYCOL		8.64
111-46-6	DIETHYLENE GLYCOL		0.47
ANTI-SEIZE LUBRICANT 8OZ.		1 @ 8.00 OZ BT	
7429-90-5	ALUMINUM		0.03
7440-50-8	COPPER		0.05
7782-42-5	GRAPHITE (NATURAL)		0.01
67762-90-7	SILICA DERIVATIVES (NON HAZARDOUS INGREDIENT)		0.01
ANTIFREEZE GAS LINE (DRY GAS)		1 @ 12.00 OZ BT	
67-56-1	METHANOL		0.75
CLEANER HAND ORANGE WITH PUMIC		1 @ 16.00 OZ BT	
102-71-6	TRIETHANOLAMINE		0.01
7732-18-5	WATER		0.90
CLEANER,BATTERY AUTOMOTIVE 5.75 OZ CN		1 @ 15.00 OZ CN	
74-98-6	PROPANE		0.19
75-28-5	ISOBUTANE		0.19
64742-88-7	MINERAL SPIRITS		0.38
CLEANER,CARBURETOR AND CHOKE CLEANER 16OZ		1 @ 16.00 OZ CN	
67-63-0	ISOPROPYL ALCOHOL		0.10
78-93-3	METHYL ETHYL KETONE (MEK)		0.15
1330-20-7	BENZENE, DIMETHYL		0.63
FLUID,STARTING FLUID 11 OZ		1 @ 11.00 OZ CN	
60-29-7	ETHANE, 1,1'-OXYBIS-		0.22
124-38-9	CARBON DIOXIDE		0.04
142-82-5	HEPTANE (N-HEPTANE)		0.42
FUEL,DIESEL-TONE FUEL CONDITIONER 32 OZ		1 @ 32.00 FL BT	
8008-20-6	ALIPHATIC PETROLEUM SOLVENT/KEROSENE		1.75
GREASE MOBIL SPECIAL		1 @ 14.00 OZ TU	
7620-77-1	LITHIUM SOAP		0.07
64742-52-5	HYDROTREATED HEAVY NAPHTHENIC DISTILLATE, PETROL		0.01
64742-53-6	MINERAL OIL/HYDROTREATED LIGHT NAPHTHENIC DISTIL		0.02
64742-62-7	PETROLEUM HYDROCARBONS, SOLVENT DEWAXED RESIDU		0.70
GREASE WHITE LITHIUM 10OZ.		1 @ 10.00 OZ CN	

74-98-6	PROPANE		0.06
75-28-5	ISOBUTANE		0.06
107-83-5	2-METHYL PENTANE, ISOHEXANE		0.25
110-54-3	HEXANE (N-HEXANE)		0.03
1314-13-2	ZINC OXIDE		0.01
7620-77-1	LITHIUM SOAP		0.01
64742-18-3	DISTILLATES, ACID-TREATED HEAVY NAPHTHENIC		0.11
GREASE, TEXCLAD NO.2 12 OZ		1 @ 12.00 OZ TU	
1317-33-5	MOLYBDENUM DISULFIDE		0.02
7782-42-5	GRAPHITE (NATURAL)		0.15
64741-96-4	PETROLEUM OIL		0.38
HYSTER SPRAY YELLOW		1 @ 11.50 OZ CN	
8032-32-4	VM&P NAPHTHA		0.19
LPS-3 LUBRICANT/RUST INHIBITOR		1 @ 11.00 OZ CN	
124-38-9	CARBON DIOXIDE		0.11
34590-94-8	DIPROPYLENE GLYCOL METHYL ETHER		0.02
64742-52-5	HYDROTREATED HEAVY NAPHTHENIC DISTILLATE, PETROL		0.09
64742-88-7	MINERAL SPIRITS		0.52
LUBRICANT LPS GREASELESS 16OZ.		1 @ 12.00 OZ CN	
124-38-9	CARBON DIOXIDE		0.02
64742-30-9	ALIPHATIC PETROLEUM DISTILLATE		0.19
64742-96-7	ALIPHATIC PETROLEUM DISTILLATE		0.56
LUBRICANT,PETROLEUM AERO KROIL		1 @ 10.00 OZ CN	
78-92-2	BUTANOL		0.06
111-76-2	BUTOXYETHANOL		0.06
115-10-6	DIMETHYL ETHER		0.09
123-42-2	DIACETONE ALCOHOL		0.06
64742-46-7	PETROLEUM DISTALLATE		0.25
64742-47-8	HYDROTREATED LIGHT PETROLEUM DISTILLATE		0.13
64742-95-6	NAPHTHA, LIGHT AROMATIC		0.06
MERCON/DEXRON III		1 @ 32.00 OZ BT	
64742-53-6	MINERAL OIL/HYDROTREATED LIGHT NAPHTHENIC DISTIL		0.50
64742-55-8	SOLVENT REFINED/SOLVENT REFINED LIGHT NAPHTHENIC		0.50
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.50
OIL,GEAR LUBE OIL 80W-90 1 QT		1 @ 1.00 QT BT	
64742-54-7	DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		1.35
64742-57-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.28
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.04
PAINT SPRAY FLAT WHITE		1 @ 12.00 OZ CN	
999999-99-9		INERT INGREDIENTS	0.38

PRESTONE POWER STEERING FLUID		1 @ 16.00 OZ BT	
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)	1.00	
REMOVABLE THREADLOCKER 242 .		1 @ 3.00 OZ BT	
67-56-1	METHANOL	0.00	
80-15-9	CUMENE HYDROPEROXIDE	0.00	
81-07-2	SACCHARIN (MANUFACTURING NO SUPPLIER NOTIFICATION	0.01	
613-48-9	N,N-DIALKYLTOLUIDINES	0.02	
9004-96-0	POLYGLYCOL OLEATE	0.05	
13463-67-7	TITANIUM DIOXIDE	0.00	
25852-47-5	POLYGLYCOL DIMETHACRYLATE	0.11	
112945-52-5		FUMED SILICA	0.00
SEALANT FORM A GASKET R #2 12OZ.		1 @ 12.00 OZ TU	
67-63-0	ISOPROPYL ALCOHOL	0.09	
1332-58-7	KAOLIN	0.39	
8002-43-5	SOYBEAN DERIVATIVE *93/4*	0.02	
8050-09-7	ROSIN CORE SOLDER THERMAL DECOMPOSITION PRODUCTS	0.13	
68187-84-8	CASTOR OIL	0.13	
SEALANT THREAD W/TEFLON		1 @ 16.00 OZ CN	
67-63-0	ISOPROPYL ALCOHOL	0.20	
107-21-1	ETHYLENE GLYCOL	0.70	
SILICONE ULTRA BLUE 3.35OZ		1 @ 3.35 OZ TU	
96-29-7	METHYL ETHYL KETOXIME (VAPOR PRESSURE 15 MMHG @	0.00	
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA	0.06	
1333-86-4	CARBON BLACK	0.00	
7429-90-5	ALUMINUM	0.00	
63148-62-9	SILICON FLUID	0.03	
68611-44-9	SILICA	0.01	
70131-67-8	SILOXANES & SILICONES DI-ME HYDROY-TERMINATED *95	0.07	
SOLVENT GASKET REMOVER		1 @ 18.00 OZ CN	
67-56-1	METHANOL	0.08	
74-98-6	PROPANE	0.23	
75-09-2	DICHLOROMETHANE {METHYLENE CHLORIDE}	0.73	
75-28-5	ISOBUTANE	0.23	
106-97-8	BUTANE	0.23	
SUPER HEAVY DUTY BRAKE FLUID DOT 3		1 @ 15.00 OZ BT	
111-46-6	DIETHYLENE GLYCOL	0.75	
111-77-3	DIETHYLENE GLYCOL MONOMETHYL ETHER (SARA 313)	0.05	
111-90-0	DIETHYLENE GLYCOL MONOETHYL ETHER	0.09	
112-27-6	TRIETHYLENE GLYCOL	0.09	
112-34-5	BUTYL CARBITOL	0.09	

112-35-6	TRIETHYLENE GLYCOL MONOMETHYL ETHER		0.38
112-50-5	TRIETHYLENE GLYCOL ETHYL ETHER		0.66
143-22-6	TRIETHYLENE GLYCOL MONOBUTYL ETHER		0.66
6881-94-3	DIETHYLENE GLYCOL MONOPROPYL ETHER		0.05
25322-68-3	POLYETHYLENE GLYCOL		0.75
TRI-FLOW LUBRICANT AEROSOL W/TEFLON 6 OZ.		1 @ 6.00 OZ CN	
74-98-6	PROPANE		0.06
75-28-5	ISOBUTANE		0.02
106-97-8	BUTANE		0.04
34590-94-8	DIPROPYLENE GLYCOL METHYL ETHER		0.02
61790-48-5	BARIUM PETROLEUM SULFONATE NEUTRAL *95-2*		0.08
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.01
8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12

STOP 11 OIL LAB (TARDEC)

Supported Items:

			Weight (Lbs)
2-METHYLNAPHTHALENE, 98%		1 @ 1.00 GL BT	
91-57-6	2-METHYLNAPHTHALENE, 98%		8.17
ACID HYDROCHLORIC ACID CONCENTRATED		1 @ 2.50 LI BT	
7647-01-0	HYDROCHLORIC ACID		2.49
7732-18-5	WATER		4.06
ACID NITRIC		1 @ 100.00 ML BT	
7697-37-2	NITRIC ACID		0.23
7732-18-5	WATER		0.10
ACID SULFURIC		1 @ 500.00 ML BT	
7664-93-9	SULFURIC ACID		1.96
ALCOHOL ISOPROPYL / PROPANOL 2 1 GL		1 @ 1.00 GL CN	
67-63-0	ISOPROPYL ALCOHOL		4.94
ALCOHOL,ETHYL DENATURED A407-4		1 @ 4.00 LI BT	
64-17-5	ETHYL ALCOHOL		6.35
67-56-1	METHANOL		0.26
75-07-0	ACETALDEHYDE		0.04
108-10-1	METHYL ISOBUTYL KETONE		0.14
108-88-3	BENZENE, METHYL-		0.06
141-78-6	ACETIC ACID, ETHYL ESTER		0.09
7732-18-5	WATER		0.36
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		5.15
AQUASTAR COULOMAT A		1 @ 500.00 ML BT	
67-56-1	METHANOL		0.05
67-66-3	CHLOROFORM		0.04
7446-09-5	SULFUR DIOXIDE		0.01
7553-56-2	IODINE		0.00
AQUASTAR COULOMATIC AX1697C		1 @ 25.00 ML BT	
56-23-5	CARBON TETRACHLORIDE		0.00
67-56-1	METHANOL		0.00
111-42-2	DIETHANOLAMINE		0.00
7446-09-5	SULFUR DIOXIDE		0.00
CALCIUM NITRATE TETRAHYDRATE		1 @ 500.00 GM JR	
13477-34-4	CALCIUM NITRATE TETRAHYDRATE		1.10

HEXANE		1 @ 20.00 LI CN	
110-54-3	HEXANE (N-HEXANE)		16.47
110-82-7	BENZENE, HEXAHYDRO-		0.90
64742-49-0	NAPHTHA, HYDROTREATED LIGHT/LIGHT STRAIGHT RUN		0.30
HEXANE H292 4		1 @ 4.00 LI BT	
110-54-3	HEXANE (N-HEXANE)		5.10
IODINE		1 @ 100.00 GM BT	
7553-56-2	IODINE		0.22
ISO OCTANE #0299-4		1 @ 4.00 LI BT	
111-65-9	OCTANE		1.74
KEROSENE SOLVENT		1 @ 1.00 GL CN	
71-43-2	BENZENE		0.04
7704-34-9	SUBSTITUTED ALKYLPHOSPHITE		0.04
8008-20-6	ALIPHATIC PETROLEUM SOLVENT/KEROSENE		6.60
M-NITROPHENOL		1 @ 100.00 GM BT	
554-84-7	NITROPHENOL (MIXED)		0.22
METHANOL		1 @ 1.00 LI BT	
67-56-1	METHANOL		1.74
MINERAL SPIRITS, TYPE I		1 @ 4.00 LI BT	
8052-41-3	STODDARD SOLVENT		6.96
PROPANE BBQ		1 @ 30.00 LB CY	
74-98-6	PROPANE		30.00
REAGENT KARL FISCHER		1 @ 1.00 LI BT	
109-86-4	METHOXYETHANOL		1.15
110-86-1	PYRIDINE		0.55
7446-09-5	SULFUR DIOXIDE		0.17
7553-56-2	IODINE		0.33
STODDARD SOLVENT		1 @ 1.00 GL CO	
64742-88-7	MINERAL SPIRITS		6.42
TEST MIX P-40/P-2		1 @ 250.00 ML BT	
584-08-7	POTASSIUM CARBONATE, POTASH, PEARL ASH		0.00
7439-96-5	MANGANESE		0.00
7439-98-7	MOLYBDENUM-INSOLUBLE COMPOUNDS		0.00
7440-02-0	NICKEL		0.00
7440-09-7	POTASSIUM, METAL		0.00
7440-23-5	SODIUM		0.00
7440-38-2	ARSENIC		0.00
7647-01-0	HYDROCHLORIC ACID		0.01
7704-34-9	SUBSTITUTED ALKYLPHOSPHITE		0.00
7723-14-0	PHOSPHOROUS (YELLOW OR WHITE)		0.00

7783-20-2	AMMONIUM SULFATE (SOLUTION)		0.00
TOLUENE 2.5LT		1 @ 2.50 LI BT	
108-88-3	BENZENE, METHYL-		0.05
TRICHLOROETHANE,REAGENT,ANALYZE		1 @ 1.00 LI BT	
71-55-6	ETHANE, 1,1,1-TRICHLORO-		0.03
TRICHLOROETHYLENE		1 @ 1.00 LI BT	
79-01-6	ETHENE,TRICHLORO		3.24
VIS WAVECAL 2%		1 @ 500.00 ML BT	
7439-93-2	LITHIUM METAL		0.00
7439-96-5	MANGANESE		0.00
7440-09-7	POTASSIUM, METAL		0.00
7440-23-5	SODIUM		0.00
7440-39-3	BARIUM		0.00
7440-70-2	CALCIUM		0.00
7697-37-2	NITRIC ACID		0.02
XYLENES 500 ML X5-500		1 @ 500.00 ML BT	
1330-20-7	BENZENE, DIMETHYL		0.95

STOP 12 WATER LAB (TARDEC)

Supported Items:

		Weight (Lbs)
ACETONITRILE	1 @ 100.00 ML BT	
75-05-8 ACETONITRILE		0.20
ACID NITRIC	1 @ 100.00 ML BT	
7697-37-2 NITRIC ACID		0.23
7732-18-5 WATER		0.10
ACID SULFURIC	1 @ 500.00 ML BT	
7664-93-9 SULFURIC ACID		1.96
ALCOHOL,METHANOL A454-4	1 @ 4.00 LI BT	
67-56-1 METHANOL		6.90
CHLOROFORM BPC606SK-1 1 LI	1 @ 1.00 GL CN	
67-66-3 CHLOROFORM		12.37
CITRIC ACID ANHYDROUS A940-1	1 @ 500.00 GM BT	
77-92-9 CITRIC ACID		1.10
COAGULANT POLYMER CH-22 MIL-P-52947 2.5LB	1 @ 2.50 LB BT	
999999-99-9	INERT INGREDIENTS	0.03
ELECTRODE STORAGE SOLUTION 250 ML	1 @ 250.00 ML BT	
877-24-7 POTASSIUM HYDROGEN PHTHALATE		0.01
7732-18-5 WATER		0.54
GLYCEROL TECHNICAL 16 OZ	1 @ 16.00 OZ BT	
56-81-5 GLYCERIN MIST		0.99
HYDROCHLORIC ACID O.01N 1 LI	1 @ 1.00 LI BT	
7647-01-0 HYDROCHLORIC ACID		0.13
7732-18-5 WATER		2.03
SODIUM BISULFATE	1 @ 18.00 KG BT	
999999-99-9	INERT INGREDIENTS	19.84
SODIUM CARBONATE	1 @ 500.00 GM BT	
479-19-8 SODIUM CARBONATE		1.10
SODIUM CHLORIDE	1 @ 100.00 GM BT	
999999-99-9	INERT INGREDIENTS	0.11
SODIUM HYDROXIDE	1 @ 100.00 GM CN	
1310-73-2 SODIUM HYDROXIDE		0.22

STOP 13 SIMULATION LAB (TAR)

Supported Items:

		Weight (Lbs)	
ADHESIVE LIQUID F-88 16 OZ.	1 @ 16.00 OZ CN		
80-62-6 METHYL METHACRYLATE		1.00	
84-74-2 DI-N-BUTYL PHTHALATE		0.05	
ADHESIVE POWDER F88- 5 LB.	1 @ 5.00 LB JR		
94-36-0 BENZOYL PEROXIDE		0.25	
ALCOHOL RUBBING 16 OZ.	1 @ 16.00 OZ BT		
67-63-0 ISOPROPYL ALCOHOL		0.70	
7732-18-5 WATER		0.30	
CLEANER/REMOVER SKC-S SPOTCHECK 12 OZ	1 @ 12.00 OZ CN		
124-38-9 CARBON DIOXIDE		0.04	
64742-89-8 LACOLENE (ALIPHATIC HYDROCARBON)		0.59	
CLEANING AND LUBRICATING COMPOUND ELECTRICAL CONTACT 16 OZ.	1 @ 16.00 OZ CN		
71-55-6 ETHANE, 1,1,1-TRICHLORO-		0.65	
75-71-8 DICHLORODIFLUOROMETHANE {CFC-12}		0.35	
93148-62-9 SILICONE FLUID		0.05	
CLOROX BLEACH	1 @ 1.00 GL CO		
7681-52-9 SODIUM HYPOCHLORITE		0.44	
ENAMEL ALKYD GLOSS LOW VOC CONTENT 1 GL.	1 @ 1.00 GL CN		
100-41-4 ETHYLBENZENE		0.08	
123-86-4 BUTYL ACETATE		0.08	
147-14-8 BLUE PIGMENT		0.08	
7727-43-7 BARIUM SULFATE		0.50	
8052-41-3 STODDARD SOLVENT		0.08	
13463-67-7 TITANIUM DIOXIDE		0.08	
22464-99-9 ZIRCONIUM COMPOUNDS (SARA 313)		0.08	
FRH HYDRAULIC OIL	1 @ 5.00 GL CN		
25619-56-1 BARIUM DINONYLNAPHTHALENE SULFONATE		1.08	
GREASE,AUTO & ARTILLERY 40 LB.	1 @ 40.00 LB CN		
999999-99-9	INERT INGREDIENTS		40.00
GREASE,MULTIFAK EP2 14 OZ	1 @ 14.00 OZ TU		
7620-77-1 LITHIUM SOAP		0.03	
64742-57-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.31	
64742-65-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.31	

NORSIL RTV 138 10.0 OZ		1 @ 10.00 OZ TU		
59157-25-0	"NOT HAZARDOUS"		0.63	
OIL,HYDRAULIC DTE-25 55 GALLON		1 @ 55.00 GL DR		
128-37-0	DITERT. BUTYL-P-CRESOL		4.08	
7440-66-6	ZINC		45.85	
64741-88-4	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		4.08	
68457-79-4	ZINC DIALKYL DITHIOPHOSPHATE		4.08	
68649-42-3	ZINC ALKYL DITHIOPHOSPHATE		307.22	
PAINT SPRAY GLOSSY WHITE 12 OZ.		1 @ 12.00 OZ CN		
67-64-1	ACETONE		0.28	
78-93-3	METHYL ETHYL KETONE (MEK)		0.06	
108-10-1	METHYL ISOBUTYL KETONE		0.02	
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		0.06	
108-88-3	BENZENE, METHYL-		0.01	
1330-20-7	BENZENE, DIMETHYL		0.08	
PAINT SPRAY OLIVE GREEN 14OZ		1 @ 11.00 OZ CN		
67-64-1	ACETONE		0.10	
74-98-6	PROPANE		0.13	
75-28-5	ISOBUTANE		0.03	
106-97-8	BUTANE		0.05	
108-88-3	BENZENE, METHYL-		0.17	
13463-67-7	TITANIUM DIOXIDE		0.02	
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.01	
64742-94-5	AROMATIC 150		0.01	
PAINT SPRAY ULTRA FLAT BLACK 12 OZ.		1 @ 12.00 OZ CN		
67-64-1	ACETONE		0.24	
74-98-6	PROPANE		0.11	
106-97-8	BUTANE		0.05	
108-88-3	BENZENE, METHYL-		0.25	
1333-86-4	CARBON BLACK		0.02	
112926-00-8		SILICA, GEL		0.02
PAINT,RESIN-HIGH GLOSS ENAMEL SAFETY YELLOW 1 GL.		1 @ 1.00 GL CN		
8052-41-3	STODDARD SOLVENT		2.29	
PAINT,RUST INHIBITOR 1 GL.		1 @ 1.00 GL CN		
100-41-4	ETHYLBENZENE		7.89	
1330-20-7	BENZENE, DIMETHYL		0.63	
13530-65-9	ZINC CHROMATE		0.43	
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		1.25	
PAINT,SAFETY YELLOW 15 OZ.		1 @ 15.00 OZ CN		
71-23-8	PROPYL ALCOHOL		0.01	

78-93-3	METHYL ETHYL KETONE (MEK)		0.03	
100-41-4	ETHYLBENZENE		0.01	
108-88-3	BENZENE, METHYL-		0.09	
111-76-2	BUTOXYETHANOL		0.09	
1330-20-7	BENZENE, DIMETHYL		0.14	
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.05	
68476-86-8	PROPANE-ISOBUTANE		0.23	
REMOVEABLE THREADLOCKER 242 1.69 FL OZ		1 @ 1.69 OZ BT		
67-56-1	METHANOL		0.00	
80-15-9	CUMENE HYDROPEROXIDE		0.00	
81-07-2	SACCHARIN (MANUFACTURING NO SUPPLIER NOTIFICATION		0.00	
613-48-9	N,N-DIALKYLTOLUIDINES		0.01	
9004-96-0	POLYGLYCOL OLEATE		0.03	
13463-67-7	TITANIUM DIOXIDE		0.00	
25852-47-5	POLYGLYCOL DIMETHACRYLATE		0.06	
112945-52-5		FUMED SILICA		0.00
SIMPLE GREEN 1 GL.		1 @ 1.00 GL JR		
111-76-2	BUTOXYETHANOL		2.14	
SO-SURE LACQUER GLOSS BLACK 17038 12 OZ.		1 @ 16.00 OZ CN		
67-64-1	ACETONE		0.20	
74-98-6	PROPANE		0.19	
75-28-5	ISOBUTANE		0.04	
106-97-8	BUTANE		0.07	
108-88-3	BENZENE, METHYL-		0.25	
1330-20-7	BENZENE, DIMETHYL		0.02	
1333-86-4	CARBON BLACK		0.02	
1343-90-4	MAGNESIUM SILICATE		0.02	
8030-30-6	NAPHTHA (COAL TAR)		0.01	
64742-94-5	AROMATIC 150		0.01	
SPOTCHECK DEVELOPER SKD-S2		1 @ 12.00 OZ CN		
67-63-0	ISOPROPYL ALCOHOL		0.41	
67-64-1	ACETONE		0.15	
75-28-5	ISOBUTANE		0.23	
SPOTCHECK PENETRANT SKL-SP		1 @ 12.00 OZ CN		
75-28-5	ISOBUTANE		0.23	
84-74-2	DI-N-BUTYL PHTHALATE		0.08	
8042-47-5	WHITE MINERAL OIL (PETROLEUM)		0.45	
SUNSHINE YELLOW		1 @ 10.00 OZ CN		
67-64-1	ACETONE		0.16	
74-98-6	PROPANE		0.09	

100-41-4	ETHYLBENZENE		0.03
106-97-8	BUTANE		0.08
1330-20-7	BENZENE, DIMETHYL		0.14
13463-67-7	TITANIUM DIOXIDE		0.01
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.01
8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12

STOP 14 PROPULSION (TARDEC)

Supported Items:

		Weight (Lbs)	
CLEANER HAND ORANGE WITH PUMIC	1 @ 16.00 OZ BT		
102-71-6	TRIETHANOLAMINE	0.01	
7732-18-5	WATER	0.90	
CLEANER POWER 5 GALLON	1 @ 5.00 GL CN		
59157-25-0	"NOT HAZARDOUS"	47.52	
FLUID CUTTING AQUA CUT 16 OZ.	1 @ 16.00 OZ CN		
64742-96-7	ALIPHATIC PETROLEUM DISTILLATE	0.70	
FLUID THREAD-EZY CLEAR CUTTING 1 GALLON	1 @ 1.00 GL BT		
64742-54-7	DISTILLATES, HYDROTREATED HEAVY PARAFFINIC	0.69	
999999-99-9	INERT INGREDIENTS		0.69
FUEL ISOBUTANE BUTANE 5.1OZ	1 @ 5.10 OZ CN		
75-28-5	ISOBUTANE	0.26	
GOJO ORANGE WITH PUMICE	1 @ 64.00 FL CN		
5989-27-5	D-LIMONENE	0.49	
7732-18-5	WATER	2.34	
8042-47-5	WHITE MINERAL OIL (PETROLEUM)	0.00	
LOCTITE	1 @ 0.20 OZ CN		
81-07-2	SACCHARIN (MANUFACTURING NO SUPPLIER NOTIFICATION	0.00	
613-48-9	N,N-DIALKYLTOLUIDINES	0.00	
25852-47-5	POLYGLYCOL DIMETHACRYLATE	0.01	
LPS COLD GALVANIZE	1 @ 14.00 OZ CN		
67-64-1	ACETONE	0.30	
1330-20-7	BENZENE, DIMETHYL	0.15	
7440-66-6	ZINC	0.60	
59157-25-0	"NOT HAZARDOUS"	0.03	
68476-85-7	LIQUEFIED PETROLEUM GAS (L.P.G.)	0.15	
POWER COOL 2000 16FLOZ	1 @ 16.00 OZ BT		
2492-26-4	SODIUM MERCAPTOBENZOTHIAZOLE	0.01	
7631-99-4	SODIUM NITRATE; CAS #7631-99-4	0.01	
7632-00-0	SODIUM NITRITE	0.01	
PROPANE FORKLIFT 33 LBS.	1 @ 33.00 LB CY		
74-98-6	PROPANE	32.67	
RAPID TAP 16OZ	1 @ 16.00 OZ CN		
71-55-6	ETHANE, 1,1,1-TRICHLORO-	0.80	
646-06-0	GLYCOL METHYLENE ETHER	0.02	

RO-32 URETHANE 45		1 @ 1.00 GL CN	
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		0.25
1330-20-7	BENZENE, DIMETHYL		5.21
SEALANT PIPE WITH TEFLON 920 8.45OZ		1 @ 8.45 OZ TU	
80-15-9	CUMENE HYDROPEROXIDE		0.01
7631-89-9	SILICA		0.05
12001-26-2	MICA		0.01
13463-67-7	TITANIUM DIOXIDE		0.01
14808-57-0	SILICON DIOXIDE		0.01
25852-47-5	POLYGLYCOL DIMETHACRYLATE		0.06
39382-25-7	BISPHENOL A FUMARATE RESIN		0.14
68515-40-2	PLASTICIZERS		0.05
SEMI-FLAT BLACK 1613		1 @ 12.00 OZ CN	
67-64-1	ACETONE		0.26
74-98-6	PROPANE		0.10
78-93-3	METHYL ETHYL KETONE (MEK)		0.08
100-41-4	ETHYLBENZENE		0.02
106-97-8	BUTANE		0.05
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		0.05
1330-20-7	BENZENE, DIMETHYL		0.10
1333-86-4	CARBON BLACK		0.01
SILICONE ULTRA BLUE 3.35OZ		1 @ 3.35 OZ TU	
96-29-7	METHYL ETHYL KETOXIME (VAPOR PRESSURE 15 MMHG @		0.00
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA		0.06
1333-86-4	CARBON BLACK		0.00
7429-90-5	ALUMINUM		0.00
63148-62-9	SILICON FLUID		0.03
68611-44-9	SILICA		0.01
70131-67-8	SILOXANES & SILICONES DI-ME HYDROY-TERMINATED *95		0.07
SILICONE ULTRA COPPER 3.35OZ		1 @ 3.35 OZ TU	
96-29-7	METHYL ETHYL KETOXIME (VAPOR PRESSURE 15 MMHG @		0.00
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA		0.06
63148-62-9	SILICON FLUID		0.03
68611-44-9	SILICA		0.01
70131-67-8	SILOXANES & SILICONES DI-ME HYDROY-TERMINATED *95		0.07
ULTRA BLUE SILICONE		1 @ 2.50 FL TU	
96-29-7	METHYL ETHYL KETOXIME (VAPOR PRESSURE 15 MMHG @		0.00
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA		0.07
2224-33-1	VINYL OXIMINOSILANE		0.01
63148-62-9	SILICON FLUID		0.04

68611-44-9	SILICA		0.02
70131-67-8	SILOXANES & SILICONES DI-ME HYDROY-TERMINATED *95		0.08
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.01
8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12

STOP 15 BATTERY LAB (TARDEC)

Supported Items:

			Weight (Lbs)
PROPANE 33 LB FORKLIFT		1 @ 40.00 LB CY	
74-98-6	PROPANE		40.00
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.01
8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12

STOP 16 TIRE TEST & RESEARCH(T

Supported Items:

		Weight (Lbs)
ACE DENATURED ALCOHOL		1 @ 1.00 GL CN
64-17-5	ETHYL ALCOHOL	5.90
67-56-1	METHANOL	0.27
108-10-1	METHYL ISOBUTYL KETONE	0.14
141-78-6	ACETIC ACID, ETHYL ESTER	0.07
7732-18-5	WATER	0.34
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)	0.07

STOP 17 AIR FLOW (TARDEC)

Supported Items:

			Weight (Lbs)
ADHESIVE SPRAY 3M SUPER 77 24OZ.		3 @ 24.00 OZ CN	
75-83-2	BUTANE, 2,2-DIMETHYL		0.05
79-29-8	BUTANE, 2,3-DIMETHYL-		0.05
96-14-0	3-METHYL PENTANE		0.05
107-83-5	2-METHYL PENTANE, ISOHEXANE		0.23
110-54-3	HEXANE (N-HEXANE)		0.05
110-82-7	BENZENE, HEXAHYDRO-		0.90
115-10-6	DIMETHYL ETHER		0.23
CLR		3 @ 28.00 FL BL	
68-11-1	THIOGLYCOLIC ACID		0.60
5329-14-6	SULFAMIC ACID		0.93
FLUID RED 295		3 @ 1.00 PT BT	
79-27-6	ACETYLENE TETRABROMIDE		1.72
FLUID TAPMATIC #1 CUTTING 16 OZ		3 @ 16.00 OZ CN	
71-55-6	ETHANE, 1,1,1-TRICHLORO-		2.54
75-65-0	BUTANOL		0.03
106-88-7	BUTYLENE OXIDE		0.15
109-87-5	METHYLAL		0.06
119-36-8	SALICYLIC ACID, METHYL ESTER		0.06
8016-28-2	ANIMAL FATTY OIL (GLYCERIDIC OIL)		0.09
63449-39-8	PARAFFIN AND HYDROCARBON WAXES, CHLORINATED		0.29
LOCTITE		3 @ 0.20 OZ CN	
81-07-2	SACCHARIN (MANUFACTURING NO SUPPLIER NOTIFICATION		0.00
613-48-9	N,N-DIALKYLTOLUIDINES		0.00
25852-47-5	POLYGLYCOL DIMETHACRYLATE		0.03
OIL MOBIL DTE 25 5 GALLON		3 @ 5.00 GL CO	
7440-66-6	ZINC		12.51
68649-42-3	ZINC ALKYL DITHIOPHOSPHATE		83.79
OIL RIDGID DARK THREAD CUTTING 1GL.		3 @ 1.00 GL BT	
64742-53-6	MINERAL OIL/HYDROTREATED LIGHT NAPHTHENIC DISTIL		1.13
PAINT SPRAY CHERRY RED 12 OZ.		3 @ 12.00 OZ CN	
67-64-1	ACETONE		0.77
74-98-6	PROPANE		0.11

78-93-3	METHYL ETHYL KETONE (MEK)		0.20
100-41-4	ETHYLBENZENE		0.05
106-97-8	BUTANE		0.14
108-10-1	METHYL ISOBUTYL KETONE		0.07
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		0.18
1330-20-7	BENZENE, DIMETHYL		0.23
7439-96-5	MANGANESE		0.02
PAINT SPRAY SAFETY YELLOW 12OZ.		3 @ 12.00 OZ CN	
67-64-1	ACETONE		0.79
71-36-3	BUTANOL		0.02
74-98-6	PROPANE		0.29
78-93-3	METHYL ETHYL KETONE (MEK)		0.20
100-41-4	ETHYLBENZENE		0.02
106-97-8	BUTANE		0.16
108-10-1	METHYL ISOBUTYL KETONE		0.23
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		0.11
1330-20-7	BENZENE, DIMETHYL		0.16
13463-67-7	TITANIUM DIOXIDE		0.02
PERMATEX (R) PIPE JOINTS COMPOUND 16OZ		3 @ 12.00 OZ BT	
67-63-0	ISOPROPYL ALCOHOL		0.34
1332-58-7	KAOLIN		0.68
61790-51-0	MODIFIED NATURAL RESINS		0.90
SEALANT FORM A GASKET R #2 12OZ.		3 @ 12.00 OZ TU	
67-63-0	ISOPROPYL ALCOHOL		0.28
1332-58-7	KAOLIN		1.18
8002-43-5	SOYBEAN DERIVATIVE *93/4*		0.05
8050-09-7	ROSIN CORE SOLDER THERMAL DECOMPOSITION PRODUCTS		0.39
68187-84-8	CASTOR OIL		0.39
SILICONE SEALANT WHITE 683 10.1OZ.		3 @ 16.00 OZ TU	
4253-34-3	METHYLTRIACETOXYSILANE		0.06
7631-86-9	SILICA, CRYSTALLINE		0.24
17689-77-9	ETHYLTRIACETOXYSILANE (OSHA PEL,ACGIH TLV,STEL 15		0.06
SILICONE ULTRA BLUE 3.35OZ		3 @ 3.35 OZ TU	
96-29-7	METHYL ETHYL KETOXIME (VAPOR PRESSURE 15 MMHG @		0.01
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA		0.19
1333-86-4	CARBON BLACK		0.01
7429-90-5	ALUMINUM		0.01
63148-62-9	SILICON FLUID		0.09
68611-44-9	SILICA		0.03
70131-67-8	SILOXANES & SILICONES DI-ME HYDROY-TERMINATED *95		0.22

WD-40 11OZ		3 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.04
8052-41-3	STODDARD SOLVENT		1.14
59157-25-0	"NOT HAZARDOUS"		0.10
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.35

STOP 18 COMBAT VT (TARDEC)

Supported Items:

			Weight (Lbs)
44S RESIN CORE SOLDER 1 LB.		1 @ 1.00 LB SP	
8050-09-7	ROSIN CORE SOLDER THERMAL DECOMPOSITION PRODUCTS		0.95
ADHESIVE OB-200 OMEGABOND EPOXY RESIN 1 QT		1 @ 1.00 QT CO	
1344-28-1	ALUMINUM OXIDE		2.13
25068-38-6	BISPHENOL A DIGLYCIDYL ETHER RESIN		1.06
ADHESIVE SPRAY 3M SUPER 77 24OZ.		1 @ 24.00 OZ CN	
75-83-2	BUTANE, 2,2-DIMETHYL		0.02
79-29-8	BUTANE, 2,3-DIMETHYL-		0.02
96-14-0	3-METHYL PENTANE		0.02
107-83-5	2-METHYL PENTANE, ISOHEXANE		0.08
110-54-3	HEXANE (N-HEXANE)		0.02
110-82-7	BENZENE, HEXAHYDRO-		0.30
115-10-6	DIMETHYL ETHER		0.08
ANTI-FREEZE COOLANT		1 @ 1.00 GL CO	
107-21-1	ETHYLENE GLYCOL		8.64
111-46-6	DIETHYLENE GLYCOL		0.47
BRAKE CLEANER		1 @ 14.00 OZ CN	
67-56-1	METHANOL		0.03
74-98-6	PROPANE		0.13
142-82-5	HEPTANE (N-HEPTANE)		0.44
1330-20-7	BENZENE, DIMETHYL		0.26
CLEANER HIGH SURFACTANT ARGO SCIENTIFIC AESSIO #25 AES510		1 @ 3.00 GL CO	
999999-99-9		INERT INGREDIENTS	0.25
FLUID TAP MAGIC ALUMINUM CUTTING 16 OZ		1 @ 16.00 OZ CN	
8008-20-6	ALIPHATIC PETROLEUM SOLVENT/KEROSENE		0.60
FLUID TAPPING ,EDGE LIQUID STEEL & ALUMINUM 16 FL OZ		1 @ 16.00 FL CN	
9016-45-9	NONYLPHENOL POLYETHOXATE		0.04
LITHIUM GREASE		1 @ 14.00 OZ TU	
69430-33-7	PETROLEUM HYDROCARBONS		0.01
PAINT AEROSOL SPRAY SAFETY YELLOW		1 @ 12.00 OZ CN	
71-23-8	PROPYL ALCOHOL		0.01
78-93-3	METHYL ETHYL KETONE (MEK)		0.02
100-41-4	ETHYLBENZENE		0.01

108-88-3	BENZENE, METHYL-		0.08
111-76-2	BUTOXYETHANOL		0.08
1330-20-7	BENZENE, DIMETHYL		0.11
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.04
68476-86-8	PROPANE-ISOBUTANE		0.19
PAINT, SPRAY FLOURESCENT GREEN # 3106	11 OZ	1 @ 11.00 OZ CN	
74-98-6	PROPANE		0.10
75-28-5	ISOBUTANE		0.07
108-88-3	BENZENE, METHYL-		0.11
110-54-3	HEXANE (N-HEXANE)		0.07
142-82-5	HEPTANE (N-HEPTANE)		0.07
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.07
SOLVENT,CLEANING ULD CS-100	27 OZ	1 @ 27.00 OZ BT	
71-55-6	ETHANE, 1,1,1-TRICHLORO-		0.58
111-76-2	BUTOXYETHANOL		0.05
8030-30-6	NAPHTHA (COAL TAR)		1.04
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.01
8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12

STOP 19 CART (TARDEC)

Supported Items:

		Weight (Lbs)
ANTI-FREEZE COOLANT	1 @ 1.00 GL CO	
107-21-1 ETHYLENE GLYCOL		8.64
111-46-6 DIETHYLENE GLYCOL		0.47
BREAK FREE CLP LIQUID	1 @ 16.00 OZ BT	
999999-99-9	INERT INGREDIENTS	1.00
MERCON/DEXRON III	1 @ 32.00 OZ BT	
64742-53-6 MINERAL OIL/HYDROTREATED LIGHT NAPHTHENIC DISTIL		0.50
64742-55-8 SOLVENT REFINED/SOLVENT REFINED LIGHT NAPHTHENIC		0.50
64742-65-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.50
OIL 15W-40 TEXACO 1 GALLON	1 @ 1.00 GL CN	
64741-88-4 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.07
OIL, MOBILUBE HD 80W-90 1QT	1 @ 1.00 QT CN	
999999-99-9	INERT INGREDIENTS	0.02
OIL,GEAR LUBE OIL 80W-90 1 QT	1 @ 1.00 QT BT	
64742-54-7 DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		1.35
64742-57-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.28
64742-65-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.04

STOP 20 MOP SHOP (IMMC)

Supported Items:

		Weight (Lbs)	
ANTI-SEIZE LUBRICANT 8OZ.	1 @ 8.00 OZ BT		
7429-90-5 ALUMINUM		0.03	
7440-50-8 COPPER		0.05	
7782-42-5 GRAPHITE (NATURAL)		0.01	
67762-90-7 SILICA DERIVATIVES (NON HAZARDOUS INGREDIENT)		0.01	
ANTIFREEZE TEXACO	1 @ 5.00 GL CN		
107-21-1 ETHYLENE GLYCOL		44.12	
34590-94-8 DIPROPYLENE GLYCOL METHYL ETHER		2.32	
BREAK FREE CLP LIQUID	1 @ 16.00 OZ BT		
999999-99-9	INERT INGREDIENTS		1.00
CLEANER,LUBRICANT AND PRESERVATIVE	1 @ 1.00 PT BT		
57855-77-3 CALCIUM DINONYLNAPHTHALENESULFONATE		0.05	
999999-99-9	INERT INGREDIENTS		0.86
CLEANING COMPOUND WINDSHIELD	1 @ 16.00 PT BT		
67-56-1 METHANOL		10.49	
OIL, DELVAC MOBIL 15W-40 1GL.	1 @ 1.00 GL CN		
64742-54-7 DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		5.50	
64742-65-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		1.14	
68649-42-3 ZINC ALKYL DITHIOPHOSPHATE		1.14	
OIL, GEAR LUBE OIL HD80W-90 GL	1 @ 5.00 GL CN		
999999-99-9	INERT INGREDIENTS		0.42
OIL,AIRCRAFT TURBINE ENGINE,SYNTHETIC	1 @ 1.00 QT CN		
67762-64-5 TRIMETHYLOLPROPANE ESTER OF VALERIC AND HEPTANO		0.10	
68130-53-0 TRIMETHYLOLPROPANE ESTER OF HEPTANOIC AND CAPRY		0.10	
70693-32-2 NEOPENTYL GLYCOL ESTER OF PELARGONIC, CAPRYLIC A		0.10	
OIL,URSA SUPER PLUS SAE 10W 26412 5 GL	1 @ 5.00 GL CN		
64742-54-7 DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		27.50	
64742-65-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		5.69	
68649-42-3 ZINC ALKYL DITHIOPHOSPHATE		5.69	
WD-40 11OZ	1 @ 11.00 FL CN		
124-38-9 CARBON DIOXIDE		0.01	
8052-41-3 STODDARD SOLVENT		0.38	
59157-25-0 "NOT HAZARDOUS"		0.03	
64742-65-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12	

STOP 21 ACOC

Supported Items:

		Weight (Lbs)
SCALE CONTROL #239 5GL.	2 @ 5.00 GL CN	
1310-58-3 POTASSIUM HYDROXIDE		27.79
2492-26-4 SODIUM MERCAPTOBENZOTHIAZOLE		27.79
7778-53-2 TRIPOTASSIUM PHOSPHATE		27.79
VINYL CONCRETE PATCH	1 @ 6.50 LB BX	
1305-62-0 CALCIUM HYDROXIDE		0.07
14808-60-7 SILICA QUARTZ		0.07
65997-15-1 PORTLAND CEMENT		0.07

STOP 22 MEDIA CENTER

Supported Items:

		Weight (Lbs)
1301 ACRYLIC CRYSTAL CLEAR	1 @ 11.00 FL CN	
74-98-6 PROPANE		0.09
75-28-5 ISOBUTANE		0.09
ARTIST ADHESIVE	2 @ 11.00 OZ CN	
75-28-5 ISOBUTANE		0.34
109-66-0 PENTANE		0.34
142-82-5 HEPTANE (N-HEPTANE)		0.21

STOP 23 CARPENTER SHOP

Supported Items:

			Weight (Lbs)	
1306 WORKABLE		8 @ 10.00 OZ CN		
67-63-0	ISOPROPYL ALCOHOL		0.25	
67-64-1	ACETONE		2.50	
75-28-5	ISOBUTANE		1.00	
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		1.00	
111-76-2	BUTOXYETHANOL		0.50	
ADHESIVE 3M BLUE GLUE NF CARPET 1 GL.		1 @ 1.00 GL CN		
1336-21-6	AMMONIUM HYDROXIDE		0.09	
7732-18-5	WATER		4.77	
9011-14-7	POLY (METHYL METHACRYLATE)		0.09	
9011-15-8	ACRYLIC POLYMER		3.03	
25155-30-0	SODIUM DODECYLBENZENE SULFONATE		0.43	
ADHESIVE COVEBASE 30 OZ.		1 @ 30.00 OZ TU		
107-21-1	ETHYLENE GLYCOL		0.03	
8030-30-6	NAPHTHA (COAL TAR)		0.10	
64742-46-7	PETROLEUM DISTALLATE		0.08	
ADHESIVE,HENRY 430 CLEAR THIN FLOOR TILE 4 GL.		1 @ 4.00 GL CN		
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		1.00	
CAULK ACRYLIC LAYTEX PLUS SILICONE BLACK (10.1 OZ)		1 @ 10.10 OZ CN		
999999-99-9		INERT INGREDIENTS		0.63
CAULK GE SILPURF BRONZE 10.5 OZ.		1 @ 10.50 OZ TU		
1185-55-3	METHYLTRIMETHOXYSILANE		0.11	
1309-37-1	IRON OXIDE FUME (FE203)		0.11	
1317-65-3	CALCIUM CARBONATE/MARBLE		0.11	
63148-62-9	SILICON FLUID		0.11	
68611-44-9	SILICA		0.11	
70131-67-8	SILOXANES & SILICONES DI-ME HYDROY-TERMINATED *95		0.11	
CAULK LEXEL WHITE		1 @ 10.10 OZ CT		
108-88-3	BENZENE, METHYL-		0.06	
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.21	
CEMENT CAULK ROOF BLACK ASPHALT 10.5 OZ.		1 @ 10.50 OZ TU		
999999-99-9		INERT INGREDIENTS		0.33
CEMENT CONTACT 1 GL.		1 @ 1.00 GL CN		

67-64-1	ACETONE		5.84	
108-88-3	BENZENE, METHYL-		5.84	
110-54-3	HEXANE (N-HEXANE)		5.84	
FAST DRYING POLYCRYLIC CLEAR SATIN		1 @ 32.00 OZ CN		
107-21-1	ETHYLENE GLYCOL		0.06	
7732-18-5	WATER		1.00	
34590-94-8	DIPROPYLENE GLYCOL METHYL ETHER		0.03	
FAST SET UNDERLAYMENT 1248		1 @ 25.00 LB BG		
1305-62-0	CALCIUM HYDROXIDE		0.75	
1317-65-3	CALCIUM CARBONATE/MARBLE		0.75	
1332-58-7	KAOLIN		0.75	
10101-41-4	GYPSUM		0.75	
14808-60-7	SILICA QUARTZ		0.75	
65997-15-1	PORTLAND CEMENT		0.75	
112945-52-5		FUMED SILICA		0.75
INTERIOR SPACKLING PASTE		1 @ 1.00 QT CO		
107-21-1	ETHYLENE GLYCOL		0.03	
1317-65-3	CALCIUM CARBONATE/MARBLE		0.03	
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.03	
LEXEL CLEAR CAULK		1 @ 10.10 OZ CT		
108-88-3	BENZENE, METHYL-		0.08	
LIQUID NAIL 10.5 OZ.		1 @ 10.50 OZ TU		
75-83-2	BUTANE, 2,2-DIMETHYL		0.01	
79-29-8	BUTANE, 2,3-DIMETHYL-		0.01	
96-14-0	3-METHYL PENTANE		0.01	
107-83-5	2-METHYL PENTANE, ISOHEXANE		0.01	
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA		0.07	
14808-60-7	SILICA QUARTZ		0.01	
26471-45-4	BUTADIENE, STYRENE, DIVINYLBENZENE POLYMER		0.01	
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.07	
999999-99-9		INERT INGREDIENTS		0.03
LIQUID NAILS 29 OZ.		1 @ 29.00 OZ TU		
75-83-2	BUTANE, 2,2-DIMETHYL		0.02	
79-29-8	BUTANE, 2,3-DIMETHYL-		0.02	
96-14-0	3-METHYL PENTANE		0.02	
107-83-5	2-METHYL PENTANE, ISOHEXANE		0.02	
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA		0.18	
14808-60-7	SILICA QUARTZ		0.02	
26471-45-4	BUTADIENE, STYRENE, DIVINYLBENZENE POLYMER		0.02	
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.18	

999999-99-9		INERT INGREDIENTS	0.09
PAINT SPRAY FLAT WHITE		1 @ 12.00 OZ CN	
999999-99-9		INERT INGREDIENTS	0.38
PAINT THINNER TYPE 1 GL		1 @ 1.00 GL BT	
8052-41-3	STODDARD SOLVENT	6.50	
PRIMER, KILZ STAIN BLKING 1 GL		1 @ 1.00 GL CN	
67-64-1	ACETONE	1.29	
108-03-2	NITROPROPANE	0.25	
13463-67-7	TITANIUM DIOXIDE	0.83	
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)	1.43	
68459-31-4	ALKYD RESIN SOLUTION	0.83	
68476-86-8	PROPANE-ISOBUTANE	2.00	
SEALANT EUCOLASTIC SELF-LEVELING LIMESTONE GRAY		1 @ 30.00 OZ TU	
9016-87-9	POLYMETHYLENE POLYPHENYL ISOCYANATE (POLYMERIC	0.01	
64742-95-6	NAPHTHA, LIGHT AROMATIC	0.19	
SEALANT LAP SEAM 10.1 OZ.		1 @ 10.50 OZ TU	
1317-65-3	CALCIUM CARBONATE/MARBLE	0.26	
1333-86-4	CARBON BLACK	0.05	
14808-60-7	SILICA QUARTZ	0.01	
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)	0.30	
SEALER, SANDING WATER-BASE CLEAR 1 QT.		1 @ 32.00 OZ CN	
57-55-6	PROPYLENE GLYCOL	0.12	
107-21-1	ETHYLENE GLYCOL	0.04	
112-34-5	BUTYL CARBITOL	0.04	
1336-21-6	AMMONIUM HYDROXIDE	0.06	
SILICONE SEALANT CLEAR 10.1 OZ.		1 @ 10.10 OZ TU	
1185-55-3	METHYLTRIMETHOXYSILANE	0.01	
4253-34-3	METHYLTRIACETOXYSILANE	0.01	
7631-89-9	SILICA	0.05	
17689-77-9	ETHYLTRIACETOXYSILANE (OSHA PEL,ACGIH TLV,STEL 15	0.01	
SILICONE SEALANT WHITE 10.1 OZ.		1 @ 10.10 OZ TU	
4253-34-3	METHYLTRIACETOXYSILANE	0.01	
17689-77-9	ETHYLTRIACETOXYSILANE (OSHA PEL,ACGIH TLV,STEL 15	0.01	
112945-52-5		FUMED SILICA	0.05
TITEBOND WOOD GLUE		1 @ 16.00 OZ BT	
999999-99-9		INERT INGREDIENTS	0.50
WALLBOARD JOINT COMPOUND 1GL.		1 @ 1.00 GL CO	
12001-26-2	MICA	1.00	
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE	0.01	

8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12
WET STICK PLASTIC ROOF CEMENT		1 @ 1.00 GL CN	
8052-42-4	ASPHALT		0.00
64742-48-9	MINERAL SPIRITS		0.00
65996-61-4	FIBER, NATURAL ORGANIC, CELLULOSE & OTHER CARBO		0.00
68476-30-2	ALIPHATIC PETROLEUM DISTILLATE		0.00

STOP 24 LOCKSMITH

Supported Items:

			Weight (Lbs)
CLEANER HAND ORANGE WITH PUMIC		1 @ 16.00 OZ BT	
102-71-6	TRIETHANOLAMINE		0.01
7732-18-5	WATER		0.90
LUBRICANT LPS GREASELESS 16OZ.		1 @ 12.00 OZ CN	
124-38-9	CARBON DIOXIDE		0.02
64742-30-9	ALIPHATIC PETROLEUM DISTILLATE		0.19
64742-96-7	ALIPHATIC PETROLEUM DISTILLATE		0.56
TRI-FLOW LUBRICANT AEROSOL		1 @ 12.00 OZ CN	
74-98-6	PROPANE		0.11
75-28-5	ISOBUTANE		0.04
106-97-8	BUTANE		0.08
628-63-7	AMYL ACETATE		0.02
34590-94-8	DIPROPYLENE GLYCOL METHYL ETHER		0.04
61790-48-5	BARIUM PETROLEUM SULFONATE NEUTRAL *95-2*		0.02

STOP 25 PAINT SHOP

Supported Items:

	Weight (Lbs)
PAINT SPRAY FLAT WHITE	1 @ 12.00 OZ CN
999999-99-9	INERT INGREDIENTS 0.38

STOP 26 ROADS & GROUNDS

Supported Items:

		Weight (Lbs)
01516 LPS HD SILICONE LUB.	1 @ 13.00 OZ CN	
64742-48-9 MINERAL SPIRITS		0.14
68476-85-7 LIQUEFIED PETROLEUM GAS (L.P.G.)		0.12
ANTIFREEZE TEXACO	1 @ 5.00 GL CN	
107-21-1 ETHYLENE GLYCOL		44.12
34590-94-8 DIPROPYLENE GLYCOL METHYL ETHER		2.32
FLUID,HYDRAULIC FLUID PART 15134 MEYER ELECTRO-TOUCH 1 QT	1 @ 1.00 QT BT	
64742-53-6 MINERAL OIL/HYDROTREATED LIGHT NAPHTHENIC DISTIL		1.93
MINERAL SPIRITS 5 GL	1 @ 5.00 GL CN	
64742-88-7 MINERAL SPIRITS		31.68
OIL 10W-30 MOTOR 1QT.	2 @ 1.00 QT BT	
7440-66-6 ZINC		0.27
OIL, 1893 TDH FLUID MULTI/HYDRAULIC/TRANS 5 GL	1 @ 5.00 GL CO	
64742-54-7 DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		29.77
68649-42-3 ZINC ALKYL DITHIOPHOSPHATE		0.37
PAINT, FLAT BLACK 7776 OIL BASE ENAMEL 1 GL	1 @ 1.00 GL CN	
95-63-6 TRIMETHYL BENZENE		1.00
1317-65-3 CALCIUM CARBONATE/MARBLE		5.57
8052-41-3 STODDARD SOLVENT		2.79
POWER STEERING FLUID	1 @ 12.00 OZ BT	
64742-65-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.73
PREMIUM 2 CYCLE ENGINE OIL	1 @ 16.00 OZ CO	
8052-41-3 STODDARD SOLVENT		0.13
68551-18-8 BASE OIL		0.63
SUPER HEAVY DUTY BRAKE FLUID DOT 3	1 @ 15.00 OZ BT	
111-46-6 DIETHYLENE GLYCOL		0.75
111-77-3 DIETHYLENE GLYCOL MONOMETHYL ETHER (SARA 313)		0.05
111-90-0 DIETHYLENE GLYCOL MONOETHYL ETHER		0.09
112-27-6 TRIETHYLENE GLYCOL		0.09
112-34-5 BUTYL CARBITOL		0.09
112-35-6 TRIETHYLENE GLYCOL MONOMETHYL ETHER		0.38
112-50-5 TRIETHYLENE GLYCOL ETHYL ETHER		0.66
143-22-6 TRIETHYLENE GLYCOL MONOBUTYL ETHER		0.66
6881-94-3 DIETHYLENE GLYCOL MONOPROPYL ETHER		0.05
25322-68-3 POLYETHYLENE GLYCOL		0.75

STOP 27 ENTOMOLOGY T202

Supported Items:

		Weight (Lbs)	
ACID SULFURIC		1 @ 500.00 ML BT	
7664-93-9	SULFURIC ACID	1.96	
BAIT PACK TALON-G RODENTICIDE #200 PER BX.		1 @ 100.00 OZ BG	
999999-99-9		INERT INGREDIENTS	3.13
BLEACH 1 GL.		1 @ 1.00 GL BT	
7681-52-9	SODIUM HYPOCHLORITE	0.48	
CLEANER, EXPEDITE		1 @ 2.50 QT BX	
999999-99-9		INERT INGREDIENTS	7.74
DF 5000 DRAIN FLY TREATMENT		1 @ 1.00 QT PG	
57-55-6	PROPYLENE GLYCOL	0.43	
7732-18-5	WATER	0.06	
EXHALT 800		1 @ 1.00 GL CN	
72623-83-7	MINERAL OIL	4.17	
MAXFORCE ROACH CONTROL #72 PER BOX		1 @ 72.00 OZ BX	
67485-29-4	HYDRAMETHYLNON [TETRAHYDRO-5,5-DIMETHYL-2(1H)-PYR	0.09	
PESTICIDE, WHITMIRE PT 170A X-CLUDE 16 OZ. MICRO-CARE		1 @ 12.00 OZ CN	
999999-99-9		INERT INGREDIENTS	0.74
SOLVENT,CLEANING ULD CS-100 27 OZ		1 @ 27.00 OZ BT	
71-55-6	ETHANE, 1,1,1-TRICHLORO-	0.58	
111-76-2	BUTOXYETHANOL	0.05	
8030-30-6	NAPHTHA (COAL TAR)	1.04	
WHITMIRE PT 400 ULTRABAN		1 @ 16.00 OZ CN	
67-63-0	ISOPROPYL ALCOHOL	0.01	
74-98-6	PROPANE	0.78	
2921-88-2	CHLORPYRIFOS	0.01	
72490-01-8	FENOXYCARB [2-(4-PHENOXYPHENOXY)ETHYL]CARBAMIC	0.01	

STOP 27B SEASONAL ENTOMOLOGY

Supported Items:

		Weight (Lbs)
MICROCARE PRESSURIZED	1 @ 20.00 OZ CN	
51-03-6	PIPERONYL BUTOXIDE	0.03
8003-34-7	PYRETHRINS	0.00

STOP 28 MOTOR POOL OPERATIONS

Supported Items:

			Weight (Lbs)
ADHESIVE MIRROR REAR VIEW 1 OZ TU		1 @ 0.01 OZ TU	
79-10-7	ACRYLIC ACID		0.00
80-15-9	CUMENE HYDROPEROXIDE		0.00
102-82-9	TRIALKYLAMINE, TRIBUTYLAMINE		0.00
2530-85-0	SUBSTITUTED SILANE		0.00
27813-02-1	HYDROXYALKYL METHACRYLATE		0.00
ANTI-SEIZE LUBRICANT 8OZ.		1 @ 8.00 OZ BT	
7429-90-5	ALUMINUM		0.03
7440-50-8	COPPER		0.05
7782-42-5	GRAPHITE (NATURAL)		0.01
67762-90-7	SILICA DERIVATIVES (NON HAZARDOUS INGREDIENT)		0.01
BATTERY CLEANER SPRAY		1 @ 32.00 GM CN	
75-28-5	ISOBUTANE		0.01
144-55-8	SODIUM BICARBONATE (1:1)		0.00
7732-18-5	WATER		0.06
BRAKE FLUID DOT #3 1 QT		1 @ 1.00 QT BT	
111-77-3	DIETHYLENE GLYCOL MONOMETHYL ETHER (SARA 313)		0.05
111-90-0	DIETHYLENE GLYCOL MONOETHYL ETHER		0.05
112-34-5	BUTYL CARBITOL		0.07
112-35-6	TRIETHYLENE GLYCOL MONOMETHYL ETHER		0.37
112-50-5	TRIETHYLENE GLYCOL ETHYL ETHER		0.29
143-22-6	TRIETHYLENE GLYCOL MONOBUTYL ETHER		0.78
CLEANER GLASS WINDEX 22FL		1 @ 22.00 FL BT	
999999-99-9		INERT INGREDIENTS	1.43
CLEANER,BATTERY AUTOMOTIVE 5.75 OZ CN		1 @ 15.00 OZ CN	
74-98-6	PROPANE		0.19
75-28-5	ISOBUTANE		0.19
64742-88-7	MINERAL SPIRITS		0.38
FLUID,AUTOMATIC TRANSMISSION 1 GL		1 @ 1.00 QT BT	
64791-97-5	LUBRICATING OIL BASE STOCK		2.02
FLUID,HYDRAULIC FLUID PART 15134 MEYER ELECTRO-TOUCH 1 QT		1 @ 1.00 QT BT	
64742-53-6	MINERAL OIL/HYDROTREATED LIGHT NAPHTHENIC DISTIL		1.93
FLUID,POWER STEERING 1 GL BT		1 @ 1.00 QT BT	

64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		2.01
FLUID,SILICONE BRAKE FLUID DOT #5 1 QT		1 @ 1.00 QT BT	
999999-99-9		INERT INGREDIENTS	0.02
GREASE MOBIL SPECIAL 14 OZ.		1 @ 14.00 OZ TU	
7620-77-1	LITHIUM SOAP		0.06
64742-62-7	PETROLEUM HYDROCARBONS, SOLVENT DEWAXED RESIDU		0.70
MOBIL 1 SYNTHETIC GREASE 12.5		5 @ 12.50 OZ CT	
68037-01-4	POLYALPHAOLEFINS		3.42
OIL 15W-40 TEXACO 1 GALLON		2 @ 1.00 GL CN	
64741-88-4	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.17
OIL HYDRAULIC SNOW PLOW #3034 MEYERS 5 GL		1 @ 5.00 GL CN	
999999-99-9		INERT INGREDIENTS	35.72
OIL, 1893 TDH FLUID MULTI/HYDRAULIC/TRANS 5 GL		1 @ 5.00 GL CO	
64742-54-7	DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		29.77
68649-42-3	ZINC ALKYL DITHIOPHOSPHATE		0.37
OIL, DELVAC MOBIL 15W-40 1GL.		1 @ 1.00 GL CN	
64742-54-7	DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		5.50
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		1.14
68649-42-3	ZINC ALKYL DITHIOPHOSPHATE		1.14
OIL, GEAR LUBE OIL HD80W-90 GL		1 @ 5.00 GL CN	
999999-99-9		INERT INGREDIENTS	0.42
OIL, MOBILUBE HD 80W-90 1QT		1 @ 1.00 QT CN	
999999-99-9		INERT INGREDIENTS	0.02
OIL, SAE 30 SUPER PLUS HEAVY DUTY ENGINE 1 GL		3 @ 1.00 GL CN	
64741-88-4	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		16.56
OIL,15W-50		1 @ 1.00 QT BT	
85-68-7	BUTYL BENZYL PHTHALATE		0.01
7440-66-6	ZINC		0.00
68649-42-3	ZINC ALKYL DITHIOPHOSPHATE		0.02
OIL,SAE 5W-30		1 @ 55.00 GL DR	
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		496.06
68649-42-3	ZINC ALKYL DITHIOPHOSPHATE		11.29
PAINT OLIVE DRAB GREEN ENAMAL		1 @ 1.00 GL CN	
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA		1.33
64742-88-7	MINERAL SPIRITS		3.58
PAINT SPRAY HUNTER GREEN		1 @ 12.00 OZ CN	
999999-99-9		INERT INGREDIENTS	0.38
PAINT SPRAY OLIVE GREEN 14OZ		1 @ 11.00 OZ CN	
67-64-1	ACETONE		0.10
74-98-6	PROPANE		0.13

75-28-5	ISOBUTANE		0.03
106-97-8	BUTANE		0.05
108-88-3	BENZENE, METHYL-		0.17
13463-67-7	TITANIUM DIOXIDE		0.02
64742-89-8	LACOLENE (ALIPHATIC HYDROCARBON)		0.01
64742-94-5	AROMATIC 150		0.01
PAINT SPRAY SAFETY YELLOW 12OZ.		1 @ 12.00 OZ CN	
67-64-1	ACETONE		0.26
71-36-3	BUTANOL		0.01
74-98-6	PROPANE		0.10
78-93-3	METHYL ETHYL KETONE (MEK)		0.07
100-41-4	ETHYLBENZENE		0.01
106-97-8	BUTANE		0.05
108-10-1	METHYL ISOBUTYL KETONE		0.08
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		0.04
1330-20-7	BENZENE, DIMETHYL		0.05
13463-67-7	TITANIUM DIOXIDE		0.01
PAINT SPRAY ULTRA FLAT BLACK 12 OZ.		1 @ 12.00 OZ CN	
67-64-1	ACETONE		0.24
74-98-6	PROPANE		0.11
106-97-8	BUTANE		0.05
108-88-3	BENZENE, METHYL-		0.25
1333-86-4	CARBON BLACK		0.02
112926-00-8		SILICA, GEL	0.02
PAINT, FLAT BLACK 7776 OIL BASE ENAMEL 1 GL		1 @ 1.00 GL CN	
95-63-6	TRIMETHYL BENZENE		1.00
1317-65-3	CALCIUM CARBONATE/MARBLE		5.57
8052-41-3	STODDARD SOLVENT		2.79
PAINT, GLOSS BLACK 7779 OIL BASE ENAMEL 1 GL		1 @ 1.00 GL CN	
1333-86-4	CARBON BLACK		0.29
8052-41-3	STODDARD SOLVENT		2.74
64742-47-8	HYDROTREATED LIGHT PETROLEUM DISTILLATE		0.58
PAINT, HUNTER GREEN 7738 1 GL		1 @ 1.00 GL CN	
136-52-7	COBALT OCTOATE (SARA III)		0.77
8052-41-3	STODDARD SOLVENT		4.24
PAINT, SPRAY GLOSS BLACK 12 OZ..		1 @ 12.00 OZ CN	
67-64-1	ACETONE		0.26
74-98-6	PROPANE		0.06
75-28-5	ISOBUTANE		0.06
78-93-3	METHYL ETHYL KETONE (MEK)		0.09

100-41-4	ETHYLBENZENE		0.02
108-10-1	METHYL ISOBUTYL KETONE		0.01
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		0.06
108-88-3	BENZENE, METHYL-		0.02
1330-20-7	BENZENE, DIMETHYL		0.06
PB BLASTER PLUMBER TORCH 12OZ.		1 @ 12.00 OZ CN	
67-63-0	ISOPROPYL ALCOHOL		0.02
1330-20-7	BENZENE, DIMETHYL		0.03
64742-94-5	AROMATIC 150		0.22
SEALANT THREAD W/TEFLON		1 @ 16.00 OZ CN	
67-63-0	ISOPROPYL ALCOHOL		0.20
107-21-1	ETHYLENE GLYCOL		0.70
SILICONE ULTRA BLUE 3.35OZ		1 @ 3.35 OZ TU	
96-29-7	METHYL ETHYL KETOXIME (VAPOR PRESSURE 15 MMHG @		0.00
471-34-1	CARBONIC ACID, CALCIUM SALT (1:1), CALCIUM CARBONA		0.06
1333-86-4	CARBON BLACK		0.00
7429-90-5	ALUMINUM		0.00
63148-62-9	SILICON FLUID		0.03
68611-44-9	SILICA		0.01
70131-67-8	SILOXANES & SILICONES DI-ME HYDROY-TERMINATED *95		0.07
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.01
8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12
WINDSHIELD WASHER SOLVENT 1GL.		1 @ 1.00 GL BT	
67-56-1	METHANOL		6.59

STOP 29 PLUMBING

Supported Items:

			Weight (Lbs)
ANTI-SEIZE LUBRICANT 133A		1 @ 1.00 OZ TU	
74-98-6	PROPANE		0.01
106-97-8	BUTANE		0.01
142-82-5	HEPTANE (N-HEPTANE)		0.02
7429-90-5	ALUMINUM		0.00
7440-50-8	COPPER		0.00
7782-42-5	GRAPHITE (NATURAL)		0.00
64742-54-7	DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		0.01
FLUX-TYTE SOLDER FLUX PASTE		1 @ 1.00 LB CN	
7646-85-7	ZINC CHLORIDE		0.01
GAS LEAK DETECTOR 8OZ.		1 @ 8.00 OZ BT	
999999-99-9		INERT INGREDIENTS	0.50
LEWIS RED DEVIL LYE DRAIN OPENER 12OZ.		1 @ 12.00 OZ CN	
1310-73-2	SODIUM HYDROXIDE		0.01
OIL RIDGID DARK THREAD CUTTING 1GL.		1 @ 1.00 GL BT	
64742-53-6	MINERAL OIL/HYDROTREATED LIGHT NAPHTHENIC DISTIL		0.38
PB BLASTER PLUMBER TORCH 12OZ.		1 @ 12.00 OZ CN	
67-63-0	ISOPROPYL ALCOHOL		0.02
1330-20-7	BENZENE, DIMETHYL		0.03
64742-94-5	AROMATIC 150		0.22
RED DEVIL LYE 18 OZ		1 @ 18.00 OZ CN	
1310-73-2	SODIUM HYDROXIDE		0.01
WD-40 AEROSOL 12OZ		1 @ 12.00 OZ CN	
8012-95-1	OIL MIST-MINERAL		0.11
8052-41-3	STODDARD SOLVENT		0.38
68476-85-7	LIQUEFIED PETROLEUM GAS (L.P.G.)		0.19

STOP 30 ELECTRICAL BASEOP

Supported Items:

	Weight (Lbs)
BATTERY 12V 7AH NP7-12 YUASA	1 @ 1.00 LB CO
71888-91-0 ALKYLAMINE SALTS OF PHOSPHORIC ACID ESTERS	0.01

STOP 31 HVAC (BASEOPS)

Supported Items:

			Weight (Lbs)
FREON 22		1 @ 30.00 LB CY	
75-45-6	CHLORODIFLUOROMETHANE {HCFC-22}		30.00
GREASE,MULTIFAK EP2 14 OZ		1 @ 14.00 OZ TU	
7620-77-1	LITHIUM SOAP		0.03
64742-57-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.31
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.31
PROPOLENE GLYCOL 5GL		1 @ 5.00 GL CN	
57-55-6	PROPYLENE GLYCOL		35.43
WD-40 AEROSOL (8 OZ)		1 @ 8.00 OZ CN	
8012-95-1	OIL MIST-MINERAL		0.08
8052-41-3	STODDARD SOLVENT		0.25
68476-85-7	LIQUEFIED PETROLEUM GAS (L.P.G.)		0.13

STOP 32 MACHINE REPAIR BLD 212

Supported Items:

			Weight (Lbs)
ADHESIVE,LOCTITE RC 609 1.69 OZ		1 @ 1.69 FL CO	
80-15-9	CUMENE HYDROPEROXIDE		0.00
81-07-2	SACCHARIN (MANUFACTURING NO SUPPLIER NOTIFICATION		0.00
613-48-9	N,N-DIALKYLTOLUIDINES		0.00
868-77-9	HYDROXETHYL METHACRYLATE		0.02
25852-47-5	POLYGLYCOL DIMETHACRYLATE		0.08
ANTI-SPLATTER COMPOUND		1 @ 4.00 OZ CN	
9016-00-6	POLYDIMETHYL SILOXANE (IN RESIN SOLUTION)		0.25
CLEANER CONTACT 2000 15 OZ		1 @ 15.00 OZ CN	
76-13-1	FREON 113 [ETHANE, 1,1,2-TRICHLORO-1,2,2-TRIFLUORO-]		0.70
CLEANER DEGREASER F-104 FAST DRY #3223K1		1 @ 15.00 OZ CN	
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		0.05
124-38-9	CARBON DIOXIDE		0.02
1569-01-3	PROPOXYPROPANOL (VAPOR PRESSURE 1.7 MM HG @ 20C)		0.05
5989-27-5	D-LIMONENE		0.01
64742-88-7	MINERAL SPIRITS		0.66
CLEANER HAND ORANGE WITH PUMIC		1 @ 16.00 OZ BT	
102-71-6	TRIETHANOLAMINE		0.01
7732-18-5	WATER		0.90
COMPOUND, SAF-T-EZE COPPER ANTI-SEIZE 4 OZ		1 @ 4.00 OZ CN	
7429-90-5	ALUMINUM		0.01
7440-50-8	COPPER		0.03
7782-42-5	GRAPHITE (NATURAL)		0.00
67762-90-7	SILICA DERIVATIVES (NON HAZARDOUS INGREDIENT)		0.00
FLUID TAP MAGIC ALUMINUM CUTTING 16 OZ		1 @ 16.00 OZ CN	
8008-20-6	ALIPHATIC PETROLEUM SOLVENT/KEROSENE		0.60
GREASE, SOLAR 11 OZ		1 @ 11.00 OZ CN	
64742-48-9	MINERAL SPIRITS		0.62
GREASE,MULTIFAK EP2 14 OZ		1 @ 14.00 OZ TU	
7620-77-1	LITHIUM SOAP		0.03
64742-57-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.31
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.31
LPS-3 LUBRICANT/RUST INHIBITOR		1 @ 11.00 OZ CN	

124-38-9	CARBON DIOXIDE		0.11
34590-94-8	DIPROPYLENE GLYCOL METHYL ETHER		0.02
64742-52-5	HYDROTREATED HEAVY NAPHTHENIC DISTILLATE, PETROL		0.09
64742-88-7	MINERAL SPIRITS		0.52
LUBRICANT, ANTI-SEIZE THREAD LUBRICANT 10 OZ		1 @ 10.00 OZ BT	
999999-99-9		INERT INGREDIENTS	0.01
LUBRICANT,PETROLEUM AERO KROIL		1 @ 10.00 OZ CN	
78-92-2	BUTANOL		0.06
111-76-2	BUTOXYETHANOL		0.06
115-10-6	DIMETHYL ETHER		0.09
123-42-2	DIACETONE ALCOHOL		0.06
64742-46-7	PETROLEUM DISTALLATE		0.25
64742-47-8	HYDROTREATED LIGHT PETROLEUM DISTILLATE		0.13
64742-95-6	NAPHTHA, LIGHT AROMATIC		0.06
OIL, MEROPA 680		1 @ 5.00 GL CN	
108-88-3	BENZENE, METHYL-		0.10
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		84.39
72623-83-7	MINERAL OIL		37.50
PAINT SPRAY GLOSSY WHITE 12 OZ.		1 @ 12.00 OZ CN	
67-64-1	ACETONE		0.28
78-93-3	METHYL ETHYL KETONE (MEK)		0.06
108-10-1	METHYL ISOBUTYL KETONE		0.02
108-65-6	PMGE ACETATE (VAPOR PRESSURE: 3.8 MM HG)		0.06
108-88-3	BENZENE, METHYL-		0.01
1330-20-7	BENZENE, DIMETHYL		0.08
PB BLASTER PLUMBER TORCH 12OZ.		1 @ 12.00 OZ CN	
67-63-0	ISOPROPYL ALCOHOL		0.02
1330-20-7	BENZENE, DIMETHYL		0.03
64742-94-5	AROMATIC 150		0.22
PERMATEX ANTI-SEIZE LUBRICANT		1 @ 8.00 FL JR	
7440-50-8	COPPER		0.14
7631-86-9	SILICA, CRYSTALLINE		0.02
7782-42-5	GRAPHITE (NATURAL)		0.02
RAPID TAP 16OZ		1 @ 16.00 OZ CN	
71-55-6	ETHANE, 1,1,1-TRICHLORO-		0.80
646-06-0	GLYCOL METHYLENE ETHER		0.02
SEALANT, BEARING MOUNT GRADE B 1.69 BTL		1 @ 1.69 OZ BT	
80-15-9	CUMENE HYDROPEROXIDE		0.00
81-07-2	SACCHARIN (MANUFACTURING NO SUPPLIER NOTIFICATION		0.00
109-16-0	POLYGLYCOL DIMETHACRYLATE		0.08

SOLVENT GASKET REMOVER		1 @ 18.00 OZ CN	
67-56-1	METHANOL		0.08
74-98-6	PROPANE		0.23
75-09-2	DICHLOROMETHANE {METHYLENE CHLORIDE}		0.73
75-28-5	ISOBUTANE		0.23
106-97-8	BUTANE		0.23
STENCIL INK		1 @ 12.00 OZ CN	
67-64-1	ACETONE		0.25
74-98-6	PROPANE		0.11
84-74-2	DI-N-BUTYL PHTHALATE		0.02
106-97-8	BUTANE		0.11
108-88-3	BENZENE, METHYL-		0.11
123-86-4	BUTYL ACETATE		0.05
14807-96-6	TALC (FIBROUS)		0.05
TAP MAGIC EP-XTRA FORMULA		1 @ 16.00 FL CN	
61788-76-9	CHLORINATED PARAFFIN		0.10
64742-53-6	MINERAL OIL/HYDROTREATED LIGHT NAPHTHENIC DISTIL		0.40
64742-54-7	DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		0.05
68608-26-4	PETROLEUM SULFONIC ACID SALT,/SODIUM PETROLEUM		0.03
WAY LUBRICANT 220		1 @ 1.00 GL CN	
64742-54-7	DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		5.40
WAY LUBRICANTS 68		1 @ 5.00 GL CN	
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		36.45
WD-40 11OZ		1 @ 11.00 FL CN	
124-38-9	CARBON DIOXIDE		0.01
8052-41-3	STODDARD SOLVENT		0.38
59157-25-0	"NOT HAZARDOUS"		0.03
64742-65-0	PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12

STOP 42 BRIDGING

Supported Items:

		Weight (Lbs)
ANTI-FREEZE COOLANT 1 GL	1 @ 1.00 GL BT	
107-21-1 ETHYLENE GLYCOL		2.36
1310-58-3 POTASSIUM HYDROXIDE		2.36
1310-73-2 SODIUM HYDROXIDE		2.36
7664-38-2 PHOSPHORIC ACID		2.36
OIL 10W-30 5GL	1 @ 5.00 GL CN	
7440-66-6 ZINC		2.71
OIL 10W-30 MOTOR 1QT.	1 @ 1.00 QT BT	
7440-66-6 ZINC		0.14
OIL SAE 15W 40 5GL.	1 @ 5.00 GL CN	
64741-88-4 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.37
OIL, ROTELLA (R) T 15W-40 5 GL	1 @ 5.00 GL CO	
64741-96-4 PETROLEUM OIL		25.79
WD-40 11OZ	1 @ 11.00 FL CN	
124-38-9 CARBON DIOXIDE		0.01
8052-41-3 STODDARD SOLVENT		0.38
59157-25-0 "NOT HAZARDOUS"		0.03
64742-65-0 PARAFFINIC OIL (HYDROTREATED AND DEWAXED)		0.12

APPENDIX 13
OF PWS-2

ENVIRONMENTAL FORMS
DETROIT ARSENAL

Figure A DETROIT ARSENAL AIR QUALITY COMPLAINT FORM

PWS SECTION 2.6.4.4

COMPLAINT

Date: _____

Name: _____

Phone Number: _____

Location of Complaint: *(i.e. building/floor/office/bathroom)*

_____

_____

_____

_____

What is the complaint? *(circle any that apply)*

QUALITY TEMPERATURE AIR FLOW ODOR

OTHER_____

If Quality: Why? *(circle any that apply)*

STUFFINESS SMOKEY DAMP DRY DUSTY

PARTICULATES

OTHER_____

If Temperature: Why? *(circle any that apply)*

EXTREAMLY HOT EXTREAMLY COLD

HOT WARM COLD

OTHER_____

If Air Flow: Why? *(circle any that apply)*

TOO MUCH FLOW NOT ENOUGH FLOW

If Odor: What kind? *(circle any that apply)*

MUSKY MOLDY GASSY PAINT

OUTSIDE ODORS CHEMICAL

OTHER_____

When does the problem occur (time of day, day of week, related to certain activities/events)?

_____

_____

INVESTIGATION

Contributing Factor: _____
(dates & times) _____
_____
_____

Remarks: _____
_____
_____
_____

Actions Taken: _____
(names, _____
dates & times) _____
_____

Figure B Asbestos Permit Entry Form

PWS Section 2.6.5.5

1. Exact Location of area involved (including building number, room number, location within room, etc.)

   _____
   _____
   _____
   _____
   _____

2. Description of work involved (specific)

   _____
   _____
   _____
   _____
   _____

3. Starting Date _____ Anticipated Completion Date _____

4. ***Notification of abatement to the STATE DATE SENT_____**

5. ***Approximate amount of Asbestos present (square feet, size of tank, etc.)**

   _____
   _____
   _____

6. ***Asbestos control methods to be used (i.e., HEPA vacuum, wet methods, etc.)**

   _____
   _____
   _____
   _____
   _____
   _____

7. ***Protective equipment to be used (respirator, coveralls, etc.)**

   _____
   _____
   _____
   _____

8. Personnel performing work – Name/phone number of Supervisor

   _____

* **Note: These items must be filled out by Facility Designated Person**

_____

_____

TO BE FILLED OUT BY FACILITY DESIGNATED PERSON:

Permit **_____ Accepted _____ Rejected**

Permit Number **_____**

Signed _____

Print _____

Emergency Contact _____

Please return to:

Detroit Arsenal
Asbestos Control Officer
Work control Desk
Bldg 203

[**NOTE**: Appropriate training requirements/accreditation will be verified for all Class I, II, III and IV work performed.]

NOTE: Form MUST be submitted three (3) work days prior to beginning project

Figure C LBP Permit Entry Form

PWS Section 2.6.11.4

1. Exact Location of area involved (including building number, room number, location within room, etc.)

_____
_____
_____
_____

2. Description of work involved (specific)

_____
_____
_____
_____
_____

3. Starting Date _____ Anticipated Completion Date _____

4. [*]Approximate amount of Lead-based paint present (square feet, size of tank, etc.)

_____
_____
_____

5. [*]Lead-based paint control methods to be used (i.e., HEPA vacuum, wet methods, etc.)

_____
_____
_____
_____
_____

[*]6. Protective equipment to be used (respirator, coveralls, etc.)

_____
_____
_____

7. Personnel performing work

_____
_____
_____

8. Name/phone number of Supervisor

[*] **Note: These items must be filled out by Facility Designated Person**

TO BE FILLED OUT BY FACILITY DESIGNATED PERSON:

Permit _____ Accepted _____ Rejected

Permit Number _____

Signed _____

Print _____

Emergency Contact _____

Please return to:

Detroit Arsenal
Lead-Based Paint Control Officer
Work control Desk
Bldg 203

[**NOTE**: Appropriate training requirements/accreditation will be verified for all Lead-based paint abatement performed.]

NOTE: Form MUST be submitted three (3) work days prior to beginning project

Figure D Detroit Arsenal Water Quality Complaint Form

PWS Section 2.6.21.1

COMPLAINT

Date: _____

Name: _____

Phone Number: _____

Location of Complaint: *(i.e. building/floor/drinking fountain/bathroom)*

_____

_____

_____

Type of Complaint: *(circle any that apply)*

TASTE ODOR COLOR FOREIGN OBJECTS
OTHER_____

If Taste: What Kind? *(circle any that apply)*

GRASSY CHLORINE IODINE SWEET SOUR

FISHY MUSTY MOLDY EARTHY

OTHER_____

If Odor: What Kind? **(***circle any that apply)*

GRASSY CHLORINE IODINE SWEET SOUR

FISHY MUSTY MOLDY EARTHY ROTTEN EGGS

OTHER_____

If Color: What Kind? *(circle any that apply)*

BROWN YELLOW MILKY BLUE ORANGE

GREEN BLACK VIOLET RED

OTHER_____

If Foreign Object What Kind?: *(circle any that apply)*

MUD SAND RUST OIL GRASS STRAW

INSECT WORM

OTHER_____

When does the problem occur? *(circle any that apply)*

CONTINUOUSLY IN THE MORNING IN THE AFTERNOON

SPORATICALLY ON MONDAY MORNINGS AFTER HOLIDAYS

OTHER_____

INVESTIGATION

Contributing Factor:

_____

(dates & times)

_____

_____

_____

Remarks:

_____

_____

_____

_____

Actions Taken:

_____

(names,

_____

dates & times)

_____

_____

APPENDIX 14 of PWS 2

BUILDING LIST
FACILITY ENGINEERING – USAG-S

BLDG No./ ADDRESS	AREA (SF)	TYPE	FUNCTION
0104	6,600	OMA	Automotive Crafts Shop Services
0165	12,968	OMA	Gymnasium
0168	12,198	OMA	Chapel
0227A/B George	2,980	AFH	NCO Quarters
0229A/B George	2,980	AFH	NCO Quarters
0231A/B George	2,980	AFH	NCO Quarters
0233A/B George	2,980	AFH	NCO Quarters
0235A/B George	2,980	AFH	NCO Quarters
0256A/B Mitchell	2,251	AFH	NCO Quarters
0257A/B Mitchell	2,251	AFH	NCO Quarters
0258A/B Mitchell	2,251	AFH	NCO Quarters
0259A/B Mitchell	2,146	AFH	NCO Quarters
0260A/B Mitchell	2,251	AFH	NCO Quarters
0261A/B Mitchell	2,146	AFH	NCO Quarters
0262A/B Mitchell	2,251	AFH	NCO Quarters
0263A/B Mitchell	2,146	AFH	NCO Quarters
0264A/B Mitchell	2,251	AFH	NCO Quarters
0265A/B Mitchell	2,146	AFH	NCO Quarters
0266A/B Mitchell	2,251	AFH	NCO Quarters
0267A/B Mitchell	2,146	AFH	NCO Quarters
0268A/B Mitchell	2,146	AFH	NCO Quarters
0269A/B Mitchell	2,146	AFH	NCO Quarters
0270A/B Mitchell	2,146	AFH	NCO Quarters
0271	20	OMA	Sanitary Sewage Pump Station
0298	86	OMA	Switch Station
0300	9,628	OMA	Police/Security Station
0300Storage Shed	120		West side of Police station
0308	115	OMA	Diesel Backup Generator House
0310	25,388	OMA	Health Clinic
0325	25,259	OMA	Bachelor Housing
0326	25,259	OMA	Administrative
0327	16,500	OMA	Conference Center
0328	16,524	OMA	Vandenburg Community Center
0330	3,276	OMA	Storage Garage
0333	1,622	OMA	Swimmers' Bathhouse
0334	327	OMA	Swimming Pool Water Treatment Bldg.
0350	14,600	OMA	ROWPU Lab
0403 Lufberry	2,624	AFH	Senior Officer's Quarters
0404 Lufberry	2,624	AFH	Senior Officer's Quarters
0405 Lufberry	2,624	AFH	Senior Officer's Quarters
0406 Lufberry	2,624	AFH	Senior Officer's Quarters
0407 Lufberry	2,624	AFH	Senior Officer's Quarters
0408 Lufberry	2,624	AFH	Senior Officer's Quarters
0409 Lufberry	3,187	AFH	General Officer's Quarters
0410 George	36,730	AFH	Lufberry Hall Lodging Quarters
0411 Boyle	86	AFH	Switch Station
0412 Strauble	86	AFH	Switch Station
0413 Boyle	86	AFH	Switch Station
0414 Kelly	86	AFH	Switch Station
0415 Lufberry	400	AFH	Garage

BLDG No./ ADDRESS	AREA (SF)	TYPE	FUNCTION
0422 George	3,363	AFH	Senior Officer's Quarters
0423 George	3,363	AFH	Senior Officer's Quarters
0424 George	3,872	AFH	General Officer's Quarters
0425 George	400	AFH	Garage
0426 George	3,872	AFH	TACOM SGM Quarters
0427 George	3,363	AFH	Senior Officer's Quarters
0428 George	3,363	AFH	Senior Officer's Quarters
0429 George	400	AFH	Garage
0434 Skeel	3,898	AFH	Senior Officer's Quarters
0435 Skeel	3,898	AFH	Senior Officer's Quarters
0436 Skeel	3,898	AFH	Senior Officer's Quarters
0437 Skeel	3,898	AFH	Senior Officer's Quarters
0438 Skeel	3,898	AFH	Senior Officer's Quarters
0439 Skeel	3,898	AFH	Senior Officer's Quarters
0440 Skeel	3,898	AFH	Senior Officer's Quarters
0441 Skeel	3,898	AFH	Senior Officer's Quarters
0442 Skeel	3,898	AFH	Senior Officer's Quarters
0443 Skeel	3,898	AFH	Senior Officer's Quarters
0444 Skeel	3,898	AFH	Senior Officer's Quarters
0445 Skeel	3,898	AFH	Senior Officer's Quarters
0447 Skeel	2,686	AFH	Senior Officer's Quarters
0448 Skeel	3,898	AFH	Senior Officer's Quarters
0449 Skeel	3,898	AFH	Senior Officer's Quarters
0450 Skeel	3,898	AFH	Senior Officer's Quarters
0451 Skeel	3,898	AFH	Senior Officer's Quarters
0452 Skeel	3,898	AFH	Senior Officer's Quarters
0453 Skeel	3,898	AFH	Senior Officer's Quarters
0454 Skeel	3,898	AFH	Senior Officer's Quarters
0455 Skeel	3,898	AFH	Senior Officer's Quarters
0456 Skeel	3,898	AFH	Senior Officer's Quarters
0457 Skeel	3,898	AFH	Senior Officer's Quarters
0458 Skeel	3,898	AFH	Senior Officer's Quarters
0459 Skeel	3,898	AFH	Senior Officer's Quarters
0460 Kelly	3,898	AFH	Senior Officer's Quarters
0461 Kelly	3,378	AFH	Senior Officer's Quarters
0462 Kelly	3,898	AFH	Senior Officer's Quarters
0463 Kelly	3,378	AFH	Senior Officer's Quarters
0464 Kelly	3,898	AFH	Senior Officer's Quarters
0465 Kelly	3,378	AFH	Senior Officer's Quarters
0466 Kelly	3,898	AFH	Senior Officer's Quarters
0467 Kelly	3,378	AFH	Senior Officer's Quarters
0468 Kelly	3,898	AFH	Senior Officer's Quarters
0469 Kelly	3,378	AFH	Senior Officer's Quarters
0470 Kelly	3,898	AFH	Senior Officer's Quarters
0471 Kelly	3,378	AFH	Senior Officer's Quarters
0472 Strauble	3,898	AFH	Senior Officer's Quarters
0473 Strauble	400	AFH	Garage
0474 Strauble	4,825	AFH	Senior Officer's Quarters
0475 Strauble	400	AFH	Garage
0477 Strauble	400	AFH	Garage
0480 Strauble	3,898	AFH	Senior Officer's Quarters
0482 Strauble	2,898	AFH	Senior Officer's Quarters
0484 Strauble	3,898	AFH	Senior Officer's Quarters
0486 Wold	3,898	AFH	Senior Officer's Quarters
0488 Wold	3,898	AFH	Senior Officer's Quarters
0490 Wold	3,898	AFH	Senior Officer's Quarters
0492 Wold	3,898	AFH	Senior Officer's Quarters
0494 Wold	3,898	AFH	Senior Officer's Quarters
0496 Wold	3,898	AFH	Senior Officer's Quarters
0570	10,600	OMA	Golf Club House/Mulligans
0571	7,750	OMA	Golf Cart Storage & Maint. Facility
0572	750	OMA	Fertilizer/Pesticide Storage
0596	103	OMA	Sanitary Latrine
0672	808	OMA	Swimmers' Bathhouse

BLDG No./ ADDRESS	AREA (SF)	TYPE	FUNCTION
0673	336	OMA	Swimming Pool Water Treatment
0673OP	100	OMA	Observation Post
0697	684	OAM	Irrigation Pump House
0700	45,370	OMA	AAFES Main Store
0701	75,772	OMA	Commissary
0710	1,843	OMA	Administrative
0714	1,843	OMA	Sato
0715	4,184	OMA	Packaged Alcoholic Beverage
0748	120	OMA	Sanitary Sewage Pump Station
0769A-H Willow	11,864	AFH	NCO Quarters
0770A-H Willow	11,864	AFH	NCO Quarters
0774A-H Oak	11,864	AFH	NCO Quarters
0775A-H Oak	11,864	AFH	NCO Quarters
700Area	32 Each	OMA	Storage Sheds
0773	1,600	OMA	Storage
0780	62,600	OMA	Community/Multi Services/Admin
0780OP	100	OMA	Observation Post
0780SSS	100	OMA	Sports Storage Shed
0781	3,410	OMA	AAFES Gas Station/Shopette
0826	12,527	OMA	Bowling Center
0835	15,010	OMA	Thrift Store/AAFES Four Seasons
0836	1,895	OMA	Medical Food Inspection/Veterinarian
0903	5,717	OMA	Outdoor Recreation Facility
0903OP	100	OMA	Observation Posts
0904	579	OMA	Bath House
0905 Wurtsmith	20,630	AFH	NCO Quarters
S0905	700	AFH	Storage Units
0907 Whitehead	11,500	AFH	NCO Quarters
SO907	1,000	AFH	Storage Units
0908 Whitehead	20,630	AFH	NCO Quarters
S0908	1,000	AFH	Storage Units
0909 Whitehead	20,630	AFH	NCO Quarters
S0909	1,000	AFH	Storage Units
S0910	1,200	OMA	Storage Units
S0911	1,000	OMA	Storage Units
0912 Partridge	10,735	OMA	Bachelor Quarters
S0912	1,200	OMA	Storage Units
S0915	1,000	OMA	Storage Units
0916 Wurtsmith	13,445	AFH	Lodging Quarters
S0917	1,000	OMA	Storage Units
S0918	1,000	OMA	Storage Units
S0919	1,000	OMA	Storage Units
0922 Wurtsmith	20,630	OMA	Administrative
S0922	700	OMA	Storage Units
0923 Wurtsmith	11,980	OMA	Lodging Quarters
S0923	400	OMA	Storage Units
0924 Wurtsmith	11,980	OMA	Lodging Quarters
0929 Arnold	17,950	OMA	Bachelor Quarters
0930 Arnold	20,630	OMA	Administrative
0931 Arnold	20,630	OMA	Administrative
0935 Arnold	10,735	OMA	Administrative
0936 Arnold	11,980	OMA	Lodging Quarters
0942 Arnold	20,630	OMA	Lodging Quarters
0944 Arnold	17,950	OMA	Administrative
0945 Arnold	17,950	OMA	Administrative
0951	3,374	OMA	Bayshore Self Help Store
0951PB	2,880	OMA	Pole Barn
0970	34,199	OMA	Admin/Shop/USAG-S Headquarters
0971	11,383	OMA	Child Development Center
0972	8,825	OMA	Maintenance/Shop Facility
1060	17,286	OMA	Lodging Quarters
2001	1,851	AFH	Family Housing
2002	1,851	AFH	Family Housing
2003	1,851	AFH	Family Housing

BLDG No./ ADDRESS	AREA (SF)	TYPE	FUNCTION
2004	1,851	AFH	Family Housing
2005	1,851	AFH	Family Housing
2006	1,851	AFH	Family Housing
2007	1,838	AFH	Family Housing
2008	1,838	AFH	Family Housing
2009	1,838	AFH	Family Housing
2010	1,851	AFH	Family Housing
2012	1,851	AFH	Family Housing
2013	1,851	AFH	Family Housing
2014	1,838	AFH	Family Housing
2015	1,851	AFH	Family Housing
2016	1,851	AFH	Family Housing
2018	1,851	AFH	Family Housing
2019	1,851	AFH	Family Housing
2020	1,838	AFH	Family Housing
2021	1,851	AFH	Family Housing
2022	1,851	AFH	Family Housing
2023	1,851	AFH	Family Housing
2024	1,851	AFH	Family Housing
2025	1,851	AFH	Family Housing
2026	1,851	AFH	Family Housing
2027	1,851	AFH	Family Housing
2028	1,851	AFH	Family Housing
2029	1,851	AFH	Family Housing
2030	1,851	AFH	Family Housing
2031	1,838	AFH	Family Housing
2032	1,851	AFH	Family Housing
2033	1,851	AFH	Family Housing
2034	1,851	AFH	Family Housing
2036	1,851	AFH	Family Housing
2037	1,838	AFH	Family Housing
2038	1,851	AFH	Family Housing
2039	1,851	AFH	Family Housing
2040	1,838	AFH	Family Housing
2041	1,851	AFH	Family Housing
2042	1,851	AFH	Family Housing
2043	3,462	AFH	Family Housing
2046	1,851	AFH	Family Housing
2047	1,838	AFH	Family Housing
2048	1,851	AFH	Family Housing
2049	1,851	AFH	Family Housing
2050	1,851	AFH	Family Housing
2051	1,838	AFH	Family Housing
2052	1,851	AFH	Family Housing
2053	1,851	AFH	Family Housing
2054	1,851	AFH	Family Housing
2055	3,462	AFH	Family Housing
2056	3,462	AFH	Family Housing
2057	1,838	AFH	Family Housing
2058	1,851	AFH	Family Housing
2059	3,508	AFH	Family Housing
2060	3,508	AFH	Family Housing
2061	3,462	AFH	Family Housing
2062	3,462	AFH	Family Housing
2063	3,581	AFH	Family Housing
2064	3,462	AFH	Family Housing
2065	3,462	AFH	Family Housing
2067	3,581	AFH	Family Housing
2068	3,462	AFH	Family Housing
2069	1,851	AFH	Family Housing
2070	1,851	AFH	Family Housing
2071	3,462	AFH	Family Housing
2072	1,851	AFH	Family Housing
2073	1,851	AFH	Family Housing

BLDG No./ ADDRESS	AREA (SF)	TYPE	FUNCTION
2074	3,462	AFH	Family Housing
2075	1,838	AFH	Family Housing
2076	3,462	AFH	Family Housing
2077	1,851	AFH	Family Housing
2078	3,462	AFH	Family Housing
2079	1,838	AFH	Family Housing
2080	3,462	AFH	Family Housing
2081	3,462	AFH	Family Housing
2082	1,851	AFH	Family Housing
2083	3,462	AFH	Family Housing
2084	3,407	AFH	Family Housing
2085	3,462	AFH	Family Housing
2086	3,462	AFH	Family Housing
2087	1,838	AFH	Family Housing
2088	1,851	AFH	Family Housing
2089	3,462	AFH	Family Housing
2090	3,508	AFH	Family Housing
2091	3,462	AFH	Family Housing
2092	3,407	AFH	Family Housing
2093	3,462	AFH	Family Housing
2094	3,508	AFH	Family Housing
2095	3,581	AFH	Family Housing
2096	3,462	AFH	Family Housing
2097	1,838	AFH	Family Housing
2098	1,851	AFH	Family Housing
2099	1,851	AFH	Family Housing
2100	1,851	AFH	Family Housing
2101	3,462	AFH	Family Housing
2102	3,462	AFH	Family Housing
2103	1,851	AFH	Family Housing
2104	1,838	AFH	Family Housing
2105	1,851	AFH	Family Housing
2106	1,851	AFH	Family Housing
2107	1,851	AFH	Family Housing
2108	3,581	AFH	Family Housing
2109	1,851	AFH	Family Housing
2110	3,462	AFH	Family Housing
2111	3,462	AFH	Family Housing
2112	3,462	AFH	Family Housing
2113	1,838	AFH	Family Housing
2114	1,851	AFH	Family Housing
2115	1,851	AFH	Family Housing
2116	1,838	AFH	Family Housing
2117	3,462	AFH	Family Housing
2118	3,462	AFH	Family Housing
2119	3,462	AFH	Family Housing
2120	3,462	AFH	Family Housing
2121	3,462	AFH	Family Housing
2122	3,462	AFH	Family Housing
2123	3,462	AFH	Family Housing
2124	3,462	AFH	Family Housing
2125	3,462	AFH	Family Housing
2126	1,838	AFH	Family Housing
2127	3,508	AFH	Family Housing
2128	1,851	AFH	Family Housing
2129	1,851	AFH	Family Housing
2130	1,838	AFH	Family Housing
2131	3,462	AFH	Family Housing
2132	3,462	AFH	Family Housing
2133	3,508	AFH	Family Housing
2134	3,581	AFH	Family Housing
2135	1,851	AFH	Family Housing
2136	1,851	AFH	Family Housing
2137	1,851	AFH	Family Housing

BLDG No./ ADDRESS	AREA (SF)	TYPE	FUNCTION
2138	3,462	AFH	Family Housing
2139	3,462	AFH	Family Housing
2140	1,838	AFH	Family Housing
2141	3,462	AFH	Family Housing
2142	1,851	AFH	Family Housing
2143	3,462	AFH	Family Housing
2144	3,407	AFH	Family Housing
2145	3,462	AFH	Family Housing
2146	3,581	AFH	Family Housing
2147	3,462	AFH	Family Housing
2148	1,838	AFH	Family Housing
2149	3,581	AFH	Family Housing
2150	3,462	AFH	Family Housing
2151	3,462	AFH	Family Housing
2152	3,462	AFH	Family Housing
2153	3,581	AFH	Family Housing
2154	3,462	AFH	Family Housing
2155	3,462	AFH	Family Housing
2156	1,851	AFH	Family Housing
2157	3,407	AFH	Family Housing
2158	3,462	AFH	Family Housing
2159	3,462	AFH	Family Housing
2160	1,838	AFH	Family Housing
2161	3,462	AFH	Family Housing
2162	3,581	AFH	Family Housing
2163	3,462	AFH	Family Housing
2164	1,851	AFH	Family Housing
2165	3,462	AFH	Family Housing
2166	3,462	AFH	Family Housing
2167	3,407	AFH	Family Housing
2168	3,581	AFH	Family Housing
2169	1,851	AFH	Family Housing
2170	3,407	AFH	Family Housing
2171	3,462	AFH	Family Housing
2172	3,462	AFH	Family Housing
2173	3,462	AFH	Family Housing
2174	3,462	AFH	Family Housing
2175	3,581	AFH	Family Housing
2176	3,462	AFH	Family Housing
2177	3,462	AFH	Family Housing
2178	3,581	AFH	Family Housing
2179	3,462	AFH	Family Housing
2180	3,462	AFH	Family Housing
2181	3,462	AFH	Family Housing
2182	3,581	AFH	Family Housing
2183	3,407	AFH	Family Housing
2184	3,508	AFH	Family Housing
2185	3,462	AFH	Family Housing
2186	3,462	AFH	Family Housing
2187	3,581	AFH	Family Housing
2188	3,462	AFH	Family Housing
2189	3,462	AFH	Family Housing
2190	3,462	AFH	Family Housing
2191	3,581	AFH	Family Housing
2192	1,851	AFH	Family Housing
2193	3,581	AFH	Family Housing
2194	3,407	AFH	Family Housing
2195	1,851	AFH	Family Housing
2196	3,462	AFH	Family Housing
2197	3,462	AFH	Family Housing
2198	1,838	AFH	Family Housing
2199	1,851	AFH	Family Housing
2200	3,462	AFH	Family Housing
2201	3,462	AFH	Family Housing

BLDG No./ ADDRESS	AREA (SF)	TYPE	FUNCTION
2202	1,851	AFH	Family Housing
2203	3,508	AFH	Family Housing
2204	3,462	AFH	Family Housing
2205	3,581	AFH	Family Housing
2206	3,462	AFH	Family Housing
2207	3,407	AFH	Family Housing
2208	3,462	AFH	Family Housing
2209	1,851	AFH	Family Housing
2210	1,851	AFH	Family Housing
2211	3,407	AFH	Family Housing
2212	3,462	AFH	Family Housing
2213	3,407	AFH	Family Housing
2214	3,462	AFH	Family Housing
2215	1,838	AFH	Family Housing
2216	3,462	AFH	Family Housing
2217	3,407	AFH	Family Housing
2218	3,462	AFH	Family Housing
2219	1,851	AFH	Family Housing
2221	1,851	AFH	Family Housing
2222	3,407	AFH	Family Housing
2223	3,462	AFH	Family Housing
2224	3,462	AFH	Family Housing
2225	1,851	AFH	Family Housing
2226	3,462	AFH	Family Housing
2227	3,462	AFH	Family Housing
2228	3,508	AFH	Family Housing
2229	3,407	AFH	Family Housing
2230	1,851	AFH	Family Housing
2231	3,462	AFH	Family Housing
2232	1,851	AFH	Family Housing
2233	3,508	AFH	Family Housing
2234	3,462	AFH	Family Housing
2235	3,462	AFH	Family Housing
2236	3,462	AFH	Family Housing
2237	3,462	AFH	Family Housing
2238	3,462	AFH	Family Housing
2239	3,462	AFH	Family Housing
2240	3,508	AFH	Family Housing
2241	3,581	AFH	Family Housing
2242	3,407	AFH	Family Housing
2243	3,462	OMA	Police Mini-Station/Scouts
2245	544	AFH	Water Pump Station
2250	5,300	OMA	Youth Center

APPENDIX 15 of PWS-2

PROPERTY INVENTORY

FACILITY ENGINEERING – USAG-S

PREFACE:

The real property listings in the appendices do not list each and every property item affixed to or at the buildings and facilities.

If any materials, equipment or systems are integral parts of the buildings, facilities or grounds but are not listed in the real property inventory they are still to be considered included in the scope of work.

Examples of materials, equipment and systems that are considered to be integral parts of the buildings, facilities and grounds, but may not be listed are as follows:

STRUCTURE - foundation systems, columns, beams, joists and other structural support systems, walls, floors, ceiling and roof systems, porches, insulation, moldings, base coves, chair rails, facias, soffits, cornices, gables and parapets, gutters, downspouts splash blocks, stairways, rails, ramps, loading docks, bumpers, chimneys, vents, doors, windows, chutes, hatches, paint and other wall and ceiling coverings, carpeting and other floor coverings, locks, signage, toilet partitions, toilet paper holders, soap dispensers, associated hardware, and other components.

MECHANICAL - heating, ventilation, air conditioning, refrigeration, plumbing, piping, faucets, sinks, toilets, urinals, drinking fountains and pneumatic systems, lifts, elevators, overhead cranes, pumps, sumps, and pits, compressors, automated door systems, fire suppression systems, associated hardware and other components.

ELECTRICAL - lighting systems, fixtures, switches, fuses, receptacles, covers, wiring, and conduit systems, junction and splice boxes, grounding systems, timer and photo cell systems, breakers, panels, transformers, meters, intrusion,

duress and fire alarm systems, emergency lighting and other components.

ROADS & GROUNDS - storm and sanitary sewer systems, water and electrical systems, natural and propane gas systems, utility poles, roads, sidewalks, pavement surfaces and systems, pavement markings, signs, poles, parking blocks, smoking and bus shelters, fencing and compounds, dumpster pads and enclosures, associated hardware, trees, bushes and shrubs, other components and appurtenances.

PROPERTY INVENTORY:

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
104	6600						
		1	Furnace		550,000	MECH ROOM	NATURAL GAS
		1	Heater, Water		65 GL	LATRINE	ELECTRIC
		3	Lavatories, (sinks)			LATRINE	
		2	Urinals			LATRINE	
		2	Water Closets			LATRINE	
		1	Stall, Shower			LATRINE	
		1	Refrigerator			OUTSIDE OFFICE	
		1	Compressor, Air				
		1	Fountain, Drinking				ELECTRIC
		3	Eye Wash				
		9	Opener, Garage Door		1/2 H.P.	Overhead Doors	
		3	Light, Security			BUILDING	H.P. SODIUM
		4	Light, Security			BUILDING	
		8	Hoist		12,000 LB	AUTO BAY	Vehicle Lifts
		6	Lockers			INSIDE LATRINE	
		1	Detection System, Fire			WEST WALL	
		1	Fan, Exhaust			ROOF	
		1	Fan, Exhaust			SHOP WINDOW	
		2	Hoist		7,000 lbs	AUTO BAY	
		1	Pressure Washer			Wash Bay	
165	12968						
		1	Furnace		1,500,000	MECH ROOM	NATURAL GAS
			Heater, Water, Gas		75 GL	MECH ROOM	NATURAL GAS
		1	Fountain, Drinking			WOMEN'S LATRINE	
		1	Drinking, Drinking			MEN'S LATRINE	
		6	Fan, Exhaust			THRU-OUT BLDG	VARIOUS SIZES
		8	Light, EMERG.			THRU-OUT	
		1	COURT, HANDBALL			E. END OF GYM	
		1	Fountain, Drinking			MEN'S LOCKER RM	
		1	Sauna			MEN'S LOCKER RM	
		1	Sauna			LADIES LCK ROOM	ELECTRIC
		1	SCOREBOARD				ELECTRIC
		10	SHOWER				
		1	SINK, MOP				
		4	WATER CLOSETS				2-BACKBOARDS
		6	LAV'S				1/RACQ BALL CRT DR
		3	URINALS				EXH FNS IN SHR/LKR
		3	BLEACHERS				
		1	WASHER, CLOTHES			MEN'S LOCKER RM	
		1	DRYER, CLOTHES			MEN'S LOCKER RM	
		1	Refrigerator			STORE ROOM	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	LIGHT, SECURITY			BLDG EXTERIOR	
		2	DRYER, HAND			MEN'S LOCKER RM	ELECTRIC
		1	FOUNTAIN DRINKING			Ladies Locker Rm	
		1	HEATER, UNIT			MEN'S LOCKER RM	ELECTRIC
			WINDOW AC UNIT			THRU-OUT	
168	12198						
		1	HEATER, WATER		80 GL	MECH ROOM	
		1	COMPRESSOR, AIR			MECH ROOM	
		2	PUMP, CIRCULATING			MECH ROOM	FOR HEAT
		1	CENTRAL A/C		20 TON	BLDG EXTERIOR	
		1	CENTRAL A/C		25 TON	Mech rm roof	
		2	A/C UNIT, WINDOW		5000 BTU	CHAPLAIN'S OFFC	
		7	Water Closets			THRU-OUT	
		2	URINALS			MEN'S LATRINE	
		8	LAV'S			LATRINES	
		1	FOUNTAIN, DRINKING			FOYER	ELECTRIC
		1	SINK, DOUBLE SS			KITCHEN	
		1	SINK			KITCHEN	PART OF DISHWASHER
		1	DISHWASHER			KITCHEN	
		1	SINK, MOP			HALLWAY	
		2	BOILER			MECH ROOM	
		1	RPZ			MECH ROOM	
		46	PEWS			CHAPEL	
		2	ALTARS			CHAPEL	
		1	REFRIG, REACH-IN			KITCHEN	
		1	ICE MACHINE			KITCHEN	
		1	FREEZER, UPRIGHT		16 CU.FT.	KITCHEN	
		1	HEATER, WATER			KITCHEN	BOOSTER, ON DISHWASHER
		1	RANGE, ELECTRIC		40"	KITCHEN	
		1	GRILL			KITCHEN	
		1	DETECTION SYSTEM, FIRE			MECH ROOM	
		1	FAN, EXHAUST			KITCHEN	
		1	FAN, EXHAUST			CHOIR LOFT	
		1	GAZEBO			OUTSIDE BLDG	
		2	HEATER, UNIT			VESTIBULE	
		3	FAN, CEILING			CHAPEL	
		3	LIGHTS, SECURITY			OUTSIDE BLDG	MERCURY VAPOR
		2	SIGN, SVC ANNOUNCEM'T			OUTSIDE BLDG	ELECTRIC
271	20		Sanitary Lift Pumps & Equipt				
298	86		Electrical Switch Gear				
300	9628						
		1	BOILER, WATER		560,000	BASEMENT	
		1	BURNER, POWER			BASEMENT	
		1	PUMP, CIRCULATING		3/4 H.P.	BASEMENT	
		11	LIGHT, SECURITY			ROOF	
		1	LIGHT, SECURITY			OUTSIDE MECH RM	
		12	LIGHT, EMERG.			THRU-OUT	
		1	TOWER, COOLING			S. END BLDG	
		5	FAN, EXHAUST			ROOF & WALL	
		1	HEATER		300W	RESTROOM	240V
		1	HEATER		300W	OFFICE	240V
		1	HEATER		300W	HOLDING CELL	240V
		2	URINALS			LATRINES	
		3	WATER CLOSETS			LATRINES	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		2	LAV'S			LATRINES	
		1	SINK, S/S			KITCHEN	
		1	SHOWERS				
		1	WALK-IN FREEZER		1 TON	STORE ROOM	
		1	HEATER, UNIT			STORE ROOM	ELECTRIC
		1	SHED, STORAGE		19' X 10'	PARKING LOT	WOOD,SHLD HAVE FAC #
		1	SECURITY SYSTEM			OFFICE	
		1	Heater, Elect. Water				
		1	HEATER, WATER		75 GAL	MECH ROOM	
		1	FIRE DETECTION SYSTEM			OFFICE AREA	
		11	EXIT SIGNS			THRU-OUT	
		1	PUMP, SUMP			BASEMENT	
		1	Generator Emergency				
		1	Cyclone Fence		16 x 16 x 8		
		1	Storage shed		10 x 12	West Side of B300	
308	115						
		1	GENERATOR		50 KU	GEN RM	EMERG POWER FOR 310
		1	LIGHT, EMERGENCY			GEN ROOM	
		1	CHARGER, BATTERY			GEN RM	
		1	VENTILATION SYSEM		M436A1090		3 MOTORS-2 LOUVERS
		1	HEATER, BASEBOARD		24"	GEN ROOM	ELECTRIC
310	25388						
		1	BOILER		1,496,000	MECH ROOM	NATURAL GAS
		1	BOILER		1,601,000	MECH ROOM	NATURAL GAS
		1	HEATER, WATER		75 GL	MECH ROOM	
		1	FOUNTAIN, DRINKING			MAIN LOBBY	
		1	A/C UNIT, WINDOW		12000	BASEMENT	
		1	ELEVATOR		3500 LB		
		1	EYE WASH, EMERG.			LAB	
		1	LIGHT, EMERG			BASEMENT	
		6	FAN, EXHAUST			THRU-OUT	
		1	PUMP, SUMP			MECH ROOM	
		1	PUMP, SUMP			Rec Rm Basement	TUNNEL
		1	PUMP, SUMP			RAMP AREA	
		3	SHOWER STALL			X-Ray, Lab & Admin	
		13	LAV'S			LATRINES	
		2	SINK, UTILITY			BASEMENT	NOT IN USE-Janitors Closet
		2	SINK, DEEP LAB			X-RAY	
		5	WATER CLOSET			THRU-OUT	
		1	PUMP, CIRC		3/4 H.P.	BOILER #1	HEAT SYSTEM
		1	PUMP, CIRC		1/2 H.P.	BOILER #2	HEAT SYSTEM
		1	PUMP, CIRC		1/6 H.P.	BASEMENT	BY PASS SYSTEM
		1	SWITCH GEAR, ELECT.			BASEMENT	EMERGENCY POWER
		1	SWITCH GEAR, ELECT.			BASEMENT	EMERGENCY POWER
		1	REFRIGERATOR		14 CU.FT.	LAB	
		1	REFRIG, REACH-IN			LAB	
		1	Refrigerator		14 CU.FT.	BASEMENT	
		2	SINK, S/S		1 COMP	CASTING ROOM	
		1	PUMP, WASTE			CASTING ROOM	
		1	TRAP, PLASTER			CASTING ROOM	
		1	Refrigerator		14 CU.FT.	BREAK ROOM	
		1	SINK, S/S		1 COMP	BREAK ROOM	
		1	PUMP, WASTE			BREAK ROOM	
		1	A/C UNIT, PACKAGE		3 TON	BASEMENT	
		1	CONDENSING UNIT		3 TON	OUTSIDE BLDG	
		1	SIGN, BLDG ID		4' X 5'	FRONT OF BLDG	ELECTRIC
		1	LIGHTS, SECURITY			BLDG EXT, REAR	
		14	LIGHTS, EXIT			THRU-OUT	
		1	CANOPY ASSY			Over H'Cap Ramp	
		1	EXTROL TANK			BASEMENT	
		1	HEATER, UNIT			BASEMENT	HOT WATER

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	Refrigerator			BASEMENT	
		1	Refrigerator			BASEMENT	
		1	Refrigerator			BASEMENT	
		1	A/C UNIT, WINDOW			THRU-OUT	
		6	A/C UNIT, WINDOW		12,500	THRU-OUT	
		10	A/C UNIT, WINDOW		12,000	THRU-OUT	
		2	A/C UNIT, WINDOW		12,000	THRU-OUT	
		1	A/C UNIT, WINDOW		8,000	THRU-OUT	
		1	A/C UNIT, WINDOW		5800	THRU-OUT	
		13	A/C UNIT, WINDOW		10,000	THRU-OUT	
		1	A/C UNIT, WINDOW		9,600	THRU-OUT	
		1	A/C UNIT, WINDOW		8,000	THRU-OUT	
		3	A/C UNIT, WINDOW		14,000	THRU-OUT	
		1	A/C UNIT, WINDOW		5900	THRU-OUT	
		1	A/C UNIT, WINDOW		6100	THRU-OUT	
		1	A/C UNIT, WINDOW		10500	THRU-OUT	
		1	A/C UNIT, WINDOW		8000	THRU-OUT	
		5	A/C UNIT, WINDOW		9500	THRU-OUT	
		1	A/C UNIT, WINDOW		4700	THRU-OUT	
		1	A/C UNIT, WINDOW		9600	THRU-OUT	
		1	A/C UNIT, WINDOW		4900	THRU-OUT	
		2	A/C UNIT, WINDOW		12500	THRU-OUT	
		3	A/C UNIT, WINDOW		12000	THRU-OUT	
		1	A/C UNIT, WINDOW			THRU-OUT	
		1	A/C UNIT, WINDOW			THRU-OUT	
		2	A/C UNIT, WINDOW		5900	THRU-OUT	
		1	A/C UNIT, WINDOW		12500	THRU-OUT	
325	25259						
		40	Bath Sink				
		38	Kitchen Sink				
		38	Bathtub				
		38	Refrigerator				
		38	Microwave Oven				
		76	Ceiling Fans				
		1	Urinal				
		40	Toilets				
		38	Kitchen Exhaust Fan				
		9	Clothes Washer				
		9	Clothes Dryer				
		1	Sprinkler System				
		1	Fire Detection System				
		1	Water Heater				
		1	Hot Water Storage Tank			500 Gal	
		1	Boiler			Heating System	
		1	Closed Circuit Evap Cooler				
		38	Water Source Heat Pump				
		2	Circulating Pump				
326	25259						
		1	FOUNTAIN, DRINKING			1ST FLOOR HALL	
		1	SINK, PORCELAIN			IST FLOOR WAIT	
		1	A/C UNIT, WINDOW			1ST FLOOR WAIT	
		1	KITCHEN CABINETS			1ST FLOOR WAIT	
		1	FOUNTAIN, DRINKING			1ST FLOOR HALL	
		1	Refrigerator			1ST FL KITCHEN	
		1	VENTILATOR, POWER			MECH ROOM	
		18	URINALS			Throughout Bldg.	
		24	WATER CLOSET			Throughout Bldg	
		1	WATER FILTER ASS'Y			MECH ROOM	
		1	EXCH, SHELL/TUBE			MECH ROOM	STM/POTABLE HOT WTR

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	EXCH, SHELL/TUBE			MECH ROOM	STM/POTABLE HOT WTR
		1	PUMP, CIRC.			MECH ROOM	
		1	PUMP, COND.			MECH ROOM	
		6	MOP SINKS			THRU-OUT	
		1	DETECTION SYSTEM, FIRE			1st Floor Lobby	
		11	LIGHT, EXIT			Throughout	
		2	TUB, LAUNDRY			1ST FL LAUNDRY	
		11	FAN, EXHAUST			THRU-OUT BLDG	WALL MOUNT
		2	FAN, EXHAUST			ROOF	
		18	SHOWERS			LATRINES	
		24	LAVS			LATRINES	
		3	LIGHT, EMERG.			1 EA FLOOR	
		2	SINK, S/S DOUBLE			THRU-OUT BLDG	
		41	Window AC Units			Thru out	
327	16502	1	Heating & AC Systems				
		1	Fire Detection System				
		1	Fire Suppression System			Kitchen Hood	
		3	Exhaust Fan				
		1	Oven				
		1	Grille				
		1	Dish Washer				
		2	Refrigerator				
		1	Freezer				
		1	Walk –in Freezer				
		1	Exhaust Hood				
			Misc Kitchen Equipt				
		1	Garbage dispsoal				
		2	Sets of Rest Rooms				
		1	Ice Machine				
		1	Fryer				
328	16524						
		1	Heater, Water Elect.		65 GAL	MECH RM	
		5	LIGHTS, SECURITY			ROOF	H. P. SODIUM
		2	FOUNTAIN, DRINKING			1ST FLR/2ND FLR	ELECTRIC
		1	PUMP, CIRC		1/4 H.P.	MECH ROOM	POTABLE WATER
		1	PUMP, SUMP			MECH ROOM	
		6	LIGHTS, EMERG.			THRU-OUT BLDG	
		8	SINK,			THRU-OUT BLDG	
		1	REACH-IN REFRIG.			LOBBY	
		12	WATER CLOSET			THRU-OUT BLDG	
		4	URINALS			THRU-OUT BLDG	
		15	LAV'S			THRU-OUT BLDG	
		1	MOP SINK			MAIN LOBBY	
		2	REFRIGERATOR				
		1	BOILER		186,000	MECH ROOM	
		2	PUMP, CIRC		5 H.P.	MECH ROOM	
		1	WATER CONTROL SYST.			MECH ROOM	
		1	FIRE DETECTION SYSTEM			MECH ROOM	
		1	COOLING TOWER			MECH ROOM	
		1	FAN, EXHAUST			MECH ROOM	
		2	HEAT PUMPS		EHW49	STAGE AREA	
		43	HEAT PUMPS			THRU-OUT BLDG	
		1	HOOD, EXHAUST S/S		4' X 9'		
		1	HOOD, EXHAUST S/S		30" X 52"		
		1	LIGHT SYSTEM, STAGE			STAGE WINGS	
		1	CURTAIN SYSTEM, STAGE			STAGE AREA	
		1	SIGN, BLDG ID			FRT OF BLDG	
		1	FAN, EXHAUST			ROOF	SERVES GYM
		1	FAN, EXHAUST		1/3 H.P.	ROOF	SERVES GYM

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	FAN, EXHAUST		1/4 H.P.	ROOF	SERVES PHOTO LAB
		1	FAN, EXHAUST		1/6 H.P.	ROOF	SERVES 2ND FL OFFICE
		1	FAN, EXHAUST		1/15 H.P.	ROOF	SERVES WOMEN LATRINE
		1	FAN, EXHAUST		1/15 H.P.	ROOF	SERVES MENS LATRINE
		1	FAN, EXHAUST		3/4 H.P.	ROOF	SERVES KILN AREA
		1	FAN, EXHAUST		1/2 H.P.	ROOF	SERVES KILN HD AREA
		1	FAN, EXHAUST		1/6 H.P.	ROOF	SERVES CERAMIC AREA
		1	FAN, EXHAUST		1/6 H.P.	ROOF	SERVES CERAMIC AREA
		13	Auto Eye Controls				
		49	4-Tube Flour Fixtures				
		9	Paddle Fans				
		1	Dishwasher				
		1	Ice Maker				
		1	Sink				
		8	Chandiliers				
		1	Canopy Exterior			Main Entry	
330	3276		Storage Garage				
333	1622						
		1	SWIMMING POOL				
		4	LAV'S				
		2	URINALS				
		4	SHOWERS				
		4	WATER CLOSET				
		2	FAN, EXHAUST			1 EA LATRINE	
			HEATER, POOL		990000	HEATER HOUSE	SHELL AND TUBE TYPE
334	327						
		1	HEATER, UNIT			PUMP ROOM	ELECTRIC
		1	Heater, Water		65 GAL	FILTER ROOM	ELECT-POTABLE WATER
		1	PUMP, CIRC		7.5 H.P.	PUMP ROOM	ELECT-POOL WATER
		1	FAN, EXHAUST			PUMP ROOM	
		4	FILTER ASSEMBLY			PUMP ROOM	FILTERS POOL WATER
		1	EYE WASH			PUMP ROOM	
		1	FOUNTAIN, DRINKING			OUTSIDE BLDG	
		2	PUMP, CHEMICAL			FILTER ROOM	
		1	CONTROLLER, PH			FILTER ROOM	
		1	Controller, Chlorine			FILTER ROOM	
350	14600						
		1	Boiler & System				
		2	Exhaust Fan				
		2	Toilets				
		2	Sinks				
		1	Eyewash				
		1	Fire Detection System				
410	36730						
		1	BOILER, HOT WATER		2,500,000	MECH RM	
		1	BOILER, HOT WATER		1,750,000	MECH RM	
		1	PUMP, CIRC			MECH RM	HEAT
		1	PUMP, CIRC			MECH RM	
		1	PUMP, CIRC			MECH RM	POTABLE WATER
		1	TANK, EXPANSION			MECH RM	
		1	FAN, CABINET TYPE			MECH RM	
		2	FAN, EXHAUST			REAR NORTH SIDE	
		1	TOWER, COOLING			N. SIDE OF BLDG	FOR GOLD ROOM A/C'S
		1	CONDENSING UNIT		5 T	N. SIDE OF BLDG	FOR LOBBY A/C

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	PUMP, SUMP			CRAWL SPACE	
		10	LIGHTS, EMERG.			THRU-OUT	
		1	A/C UNIT, PACKAGED			GOLD ROOM	
		1	A/C UNIT, PACKAGED		5 T	MAIN LOBBY	
		1	A/C UNIT, PACKAGED			GOLD ROOM	
		1	SINK, SS		2 COMP	KITCHEN	
		1	FOUNTAIN, DRINKING			HALLWAY	
		1	FOUNTAIN, DRINKING			KITCHEN	
		1	FAN, RANGE EXHAUST			KITCHEN	
		1	ICE MACHINE			BREAK ROOM	
		1	ICE MACHINE			ACROSS ROOM 109	
		3	SINK, JANITOR			THRU-OUT	
		4	KITCHEN UNIT			KITCHINETTE	
		31	FAN, EXHAUST			THRU-OUT	
		2	URINAL			LATRINE	
		32	WATER CLOSET			LATRINES	
		32	LAV'S			LATRINES	
			HEATER, HOT WATER			BASEMENT	
			WASHER, CLOTHES			LAUNDRY ROOM	
			WASHER, CLOTHES			LAUNDRY ROOM	
			DRYER, CLOTHES			LAUNDRY ROOM	
			DRYER, CLOTHES			LAUNDRY ROOM	
		1	WASHER, CLOTHES			2nd Flr Laundry Rm	
		1	DRYER, CLOTHES			LAUNDRY ROOM	
			Tub, Laundry, 2-Comp't			LAUNDRY ROOM	
			FREEZER, UPRIGHT			KITCHEN	
			Refrigerator			KITCHEN	
		33	A/C UNIT, WINDOW			IN ROOMS	
			FAN, EXHAUST			Wall above rear doors	
		1	Handicap Ramp				
		1	CANOPY EXTERIOR				
411	86		Electrical Switch Gear				
412	86		Electrical Switch Gear				
413	86		Electrical Switch Gear				
414	86		Electrical Switch Gear				
570	10,600						
		1	Fire Suppression Syst.			KITCHEN	
		1	RANGE, GAS			KITCHEN	
		1	FREEZER, WALK-IN			KITCHEN	
		2	COOLER, WALK-IN			KITCHEN	
		1	REFRIGERATOR			KITCHEN	
		1	ICE MAKER			KITCHEN	
		1	SINK			KITCHEN	
		1	DISPOSAL, WASTE			KITCHEN	
		1	DISH WASHER			KITCHEN	
		1	FAN, EXHAUST			KITCHEN	
		1	M/U AIR UNIT, GAS			KITCHEN	
		1	A/C UNIT, DX				
		1	HEATING SYSTEM			THRU-OUT	Gas, AHU, duct, grilles, diffusers
		4	WATER CLOSET			BATHROOMS	
		3	WATER CLOSET (HC)			BATHROOMS	
		3	SHOWER (HC)			BATHROOMS	
		1	SINK, SERVICE			JANITOR	
		1	MOP SINK			JANITOR	
		1	URINAL			MENS LOCKER	
		1	URINAL (HC)			MENS LOCKER	
		1	SINK, FLOOR			LOUNGE	
		1	TRAP, GREASE			FOOD SERVICE	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	Fire Detection System				
		1	Cooler, Water Elect.				
		4	FIRE HYDRANTS				
		2	HOT WATER TANKS				
		3	TRANSFORMERS				
		1	Lighting Protection System				
			LIGHTING				
			ELECTRICAL SYSTEM				
		40	FIXTURE, LIGHT 2x4			THRU-OUT	
		116	LIGHTS, RECESSED			THRU-OUT	
		12	HEAT/SMOKE DETECOTRS			THRU-OUT	
		24	FIXTURE LIGHT 4'			THRU-OUT	
		6	FIRE PULL STATION			THRU-OUT	
		10	LIGHT EXIT			THRU-OUT	
		83	LOCKERS			BATHROOMS	
		2	DRINKING FOUNTAINS			FRONT ENTRANCE	
		5	LIGHT, WALL			ENTRANCE	
		1	FIXTURE CEILING			ENTRANCE	
		1	PUMP CIRCULATING			JAN ROOM	
		13	LIGHTS TRACK			PRO SHOP	
		1	REFRIGERATOR 2 DOOR			PRO SHOP	
		1	ROOM DIVIDER 10 PANEL			DINING ROOM	
		1	BEVERAGE COOLER 3 DOOR			BAR	
		1	FREEZER, GLASS 2 DOOR			BAR	
		1	COLLER, 2 DOOR			BAR	
		1	CONTAINER, ICE STORGAE			BAR	
		1	SINK, SINGLE BOWL			BAR	
		1	SINK, 3 BOWL			BAR	
		1	RACK, GLASS DRYING			BAR	
		1	RACK, PITCHER			BAR	
		8	FIXTURE LIGHT SURFACE			KITCHEN	
		4	SINK, SINGLE			KITCHEN	
		1	REFRIGERATOR, 2 DOOR			KITCHEN	
		1	PREP BAR, SALAD			KITCHEN	
		1	FREEZER, 2 DOOR W/SINK			KITCHEN	
		1	MOBILE ICE CART			KITCHEN	
		1	COOLER, 2 DOOR			KITCHEN	
		1	LOAD CENTER			KITCHEN	
		1	BUZZER, SERVICE			KITCHEN	
		1	REFRIGERATOR, 2 DOOR			KITCHEN	
		1	REFRIGERATOR, 2 DOOR			KITCHEN	
		2	CONDIMENT BAR			KITCHEN	
		1	REFRIGERATOR, 2 DOOR			KITCHEN	
		1	SINK 2 BOWL W/RINSE			KITCHEN	
		1	REFRIGERATOR, 2 DOOR			KITCHEN	
		1	FREEZER, 2 DOOR			KITCHEN	
		2	EXHAUST HOOD			KITCHEN	
		1	CLEANING SYSTEM, HOOD			KITCHEN	
		1	HOOD DISHWASHER			KITCHEN	
		1	HEATER, UNIT ELECTRIC			CART ROOM	
		1	SPRINKLER SYSTEM			CART ROOM	
		10	LIGHT, WALL EXTERIOR			OUTSIDE	
		3	AC UNIT 10 TON			OUTSIDE	
		3	CONDENSING UNIT 10 TON			OUTSIDE	
		1	BOILER, HOT WATER			MECH ROOM	
		1	BACKFLOW PREVENTER			MECH ROOM	
		1	FIRE ALARM PANEL			MECH ROOM	
		1	ELECT SWITCH GEAR			MECH ROOM	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		2	CIRCULATING PUMP HW			MECH ROOM	
		3	AIR HANDLER			MECH ROOM	
		4	MAKE-UP AIR UNIT			MECH ROOM	
		1	TIMER, DW HOOD			MECH ROOM	
		1	TIMER, BATH FANS			MECH ROOM	
		3	DUCT SMOKE DELECTOR			MECH ROOM	
		1	PUMP, CIRCULTION			MECH ROOM	
		1	EXHAUSTER INLINE			ROOF	
		5	SIGNS HANDICAP			PARKING LOT	
		9	LIGHTS PARKING LOT			PARKING LOT	
		5	VAV UNIT			MECH ROOM	
		1	Kitchen AC Unit				
571	7750						
		5	HYDRANTS, FIRE				
		4	HOSE BIBB				
		1	EYE WASH				
		1	SINK, HAND				
		1	Oil/ Water Separator				
		1	HEATER, Hot Water				
		2	FAN, EXHAUST				
		2	WATER CLOSET			BATHROOMS	
		10	FIXTURE, LIGHT			THRU-OUT	
		7	HEAT/SMOKE DETECTOR			THRU-OUT	
		24	FIXTURE LIGHT 4'			THRU-OUT	
		5	PULL STATION			THRU-OUT	
		4	EXIT LIGHTS			THRU-OUT	
		38	LOCKERS			BATHROOMS	
		4	OVERHEAD DOOR OPENER			THRU-OUT	
		20	FIXTURE HPS			THRU-OUT	
		1	HEAT/COOL UNIT			MECH ROOM	
		1	FIRE ALARM PANEL			MECH ROOM	
		1	TRANSFORMER 15 KUA			MECH ROOM	
		1	CHAIN FALL			MAINT BAY	
		2	SINK SINGLE BOWL			THRU-OUT	
		4	HEATER, RADIANT			MAINT BAY	
		1	AIR COMPRESSOR			COMP ROOM	
		1	AIR DRYER			COMP ROOM	
		1	LIGHT RECESSED			OFFICE HALL	
		2	WATER FOUNTAIN			BREAKROOM	
		1	SINK, UTILITY			UTILITY ROOM	
		1	BACKFLOW PREVENTER			UTILITY ROOM	
		1	CONDENSING UNIT			OUTSIDE BLDG	
		1	SINK SINGLE BOWL			CART STORAGE	
		1	ICE MACHINE			CART STORAGE	
		1	EXHAUST FAN			CART STORAGE	
		3	HEATER, RADIANT			CART STORAGE	
		10	LIGHT WALL PACK			EXTERIOR	
		1	WEATHER STATION			EXTERIOR	
		1	ABST DIESEL/GAS			EXTERIOR	
		1	WASH PIT CART			EXTERIOR	
		1	HEATER ELECTRIC			PARTS ROOM	
		1	TRANSFORMER 150KUA			EXTERIOR	
		1	WATER HEATER 50 GL			ROOM 106	
		1	EXHAUST FAN			BATHROOM	
		880FT	FENCE			EXTERIOR	
		3	GATES			EXTERIOR	
		7	LIGHTS 4"			THRU-OUT	
572	750						
		4	HYDRANTS, FIRE				

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	SINK				
		1	Cooler, Water Elect.				
		1	EYE WASH STATION			PESTICIDE ROOM	
		2	OVERHEAD DOOR OPENER			THRU-OUT	
		1	EXHAUST FAN			EXTERIOR	
		1	HEATER ELECTRIC 3KW			PESTICIDE ROOM	
		1	TIMER			PESTICIDE ROOM	
		1	LANDIS WATER SYSTEM			VEHICLE STORAGE	
		1	HEATER RADIANT			VEHICLE STORAGE	
		1	EXHAUST FAN			ROOF	
596	103						
		1	URINAL				
		2	LAV'S				
		2	TOILET				
672	808						
		4	TOILET				
		2	URINAL				
		2	LAV'S				
673	336						
		1	SWIMMING POOL				
			HEATER, WATER, Elect.		65 GAL	PUMP HOUSE	PORTABLE WATER
			HEATER, POOL		990000	HEATER HOUSE	POOL HEATER, NAT. GAS
		1	EYE WASH			PUMP HOUSE	
		4	FILTER ASS'Y, POOL			PUMP HOUSE	POOL FILTER
		1	HEATER, ELECT			PUMP HOUSE	
		1	PUMP, CIRC		7.5 H.P.	PUMP HOUSE	
		1	FAN, EXHAUST				
697	684						
		3	TRANSFORMER		37.5 KVA	OUTSIDE BLDG	
700	45370						
		1	CURTAIN, AIR			SNACK BAR EXIT	
		1	SIGN, EXIT			SNACK BAR EXIT	
		2	CURTAIN, AIR			SNACK BAR EXITS	
		1	SCREEN, ROLL-UP DOOR			SNACK BAR EXIT	
		1	DRYER, HAND			MENS LATRINE	
		1	DRYER, HAND			LADIES LATRINE	
		1	DRYER, HAND			Employee Latrine	
		1	DRYER, HAND			Employee Latrine	
		1	FOUNTAIN, DRINKING			Public Restroom	
		1	FOUNTAIN, DRINKING			Public Restroom	
		1	FOUNTAIN, DRINKING			OFFICE HALLWAY	
		19	LIGHT, EXIT			THRU-OUT	
		1	Detection System, Security			EPOS RM	
		1	Duress Alarm System				
		1	Detection System, Fire			EPOS RM	
		2	DOOR, OVERHEAD			WAREHOUSE	
		1	OPENER, DOOR			WAREHOUSE	
		1	OPENER, DOOR			WAREHOUSE	
		1	AIR HANDLER UNIT			SOUND CENTER	
		1	SAFE			CASHIERS OFFICE	
		1	DOOR, ROLL-UP SCREEN			MAIN ENTRANCE	
		1	CONDENSER UNIT			MEZZANINE	FOR ICE MACHINE

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	CONDENSER UNIT			MEZZANINE	FOR WALKIN REFER/FR
		1	CONDENSER UNIT		3/4 TON	MEZZANINE	FOR FREEZER
		1	AIR HANDLER UNIT			MEZZANINE	FOR SNACK BAR
		1	LIGHT, EMERG			JANITORS CLOSET	
		3	FAN, CEILING			Barber & Beauty Shp	
		1	FAN, CEILING			OPTICAL SHOP	
		1	SINK, S/S		2 COMP	PIZZA SHOP	
		1	AIR HANDLER UNIT			WareHouse, Mezz.	
		2	HEATER, UNIT			WAREHOUSE	
		1	Sprinkler System, Water			MECH ROOM	
		1	Pump, Sprinkler System				
		1	Suppression System, Fire			Range Hood, Kitchen	2456-00414
		1	Range Hood			Pizza	
		1	COMPRESSOR, AIR		3 H.P.	MECH ROOM	
		1	SENSOR, VENT'N DUCT			AIR HANDLER #1	
		2	SENSOR, SMOKE			AIR HANDLER #1	DUCT MOUNTED
		1	AIR HANDLER UNIT			MECH RM MEZZAN	AIR HANDLER #3
		1	BURNER, POWER			MECH ROOM	
		1	HEATER, UNIT			MECH ROOM	
		1	SINK S/S				
		1	FAN, EXHAUST			ROOF	EF-9 MECH ROOM
		1	FAN, EXHAUST			ROOF	EF-8 MECH ROOM
		1	FAN, EXHAUST			ROOF	EF-7 JANITORS CLST
		1	FAN, EXHAUST			ROOF	EF-6 BREAK ROOM
		1	FAN, EXHAUST			ROOF	EF-5 SIGN ROOM
		1	FAN, EXHAUST			ROOF	EF-1 SOUND ROOM
		1	FAN, EXHAUST			ROOF	EF-3 BARBER SHOP
		1	FAN, EXHAUST			ROOF	EF-11 BEAUTY SHOP
		1	FAN, EXHAUST			ROOF	SNACK BAR
		1	FAN, EXHAUST			ROOF	COOLER AREA
		1	FAN, EXHAUST			ROOF	MEN/LADIES LATRINE
		1	FREEZER, WALK-IN			E. SIDE OF BLDG	
		1	EVAPORATOR			E. SIDE OF BLDG	
		1	EVAPORATOR			E. SIDE OF BLDG.	
		1	CONDENSER		3/4 TON	E. SIDE OF BLDG.	
		1	CONDENSER		3/4 TON	E. SIDE OF BLDG.	
		2	DOOR, ROLL-UP				
		3 Sets	Automated Door & Support Equip			Main Entry	
		2	DOOR, OVERHEAD			PATIO	
		4	Compressor, Refrigerant		40 TON	MECH ROOM	CHILLED WATER
		1	TRANSFORMER			N. SIDE OF BLDG	
		1	FREEZER, WALK-IN		2 TON	KITCHEN	
		1	COOLER, WALK-IN		2 TON	KITCHEN	
		1	DISPOSAL, WASTE			KITCHEN	
		1	LAV			KITCHEN	
		1	HEATER, BOOSTER			KITCHEN	
		1	SINK, S/S		3 COMP	KITCHEN	
		5	SINK, BEAUTY SHOP			Beauty & Barber Shp	
		1	AIR HANDLER UNIT		45 TON	MEZZANINE N.W.	
		24	LIGHTS, EMERG			THRU-OUT BLDG	
		8	WATER CLOSET			THRU-OUT BLDG	
		3	URINALS			LATRINES	
		6	LAV'S			LATRINES	
		6	FAN, VENTILATOR			ROOF	
		1	HEATER, WATER		89GL	MECH ROOM	GAS
		2	PUMP, CIRCULATING			MECH ROOM	CHILLED WATER
		2	PUMP, CIRCULATING			MECH ROOM	HOT WATER
		1	PUMP, CIRCULATING		1/12 H.P.	MECH ROOM	POTABLE WATER
		2	SINK, UTILITY			Janitor's Closet	
		1	TANK, EXPANSION			MECH ROOM	CHILLED WATER
		1	TANK, EXPANSION			MECH ROOM	HOT WATER

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		11	LIGHTS, SECURITY			Bldg Perimeter	
		1	AIR HANDLER UNIT		7 TON	MEZZANINE S.E.	
		1	AIR HANDLER UNIT		5 TON	MEZZANINE S.E.	
		1	DRYER, HOT AIR		1/4 H.P.	MECH RM	
		1	BOILER		1,200,000	MECH RM	NATURAL GAS/HT WTR
		1	CONDENSER			N. SIDE BLDG	FOR CHILLER
		1	CONDENSER			N. SIDE BLDG	FOR CHILLER
		1	ROOF TOP HEAT/AC UNIT			ATRIUM	
		2	HEAT/COOL UNIT			4 SEASONS	
		1	KOLDWAVE AC			COMPUTER ROOM	
701	75772						
		1	TRAP, GREASE		1000 GL	BEHIND BLDG	
		1	HEATER, WATER		100 GL	WAREHOUSE	GAS
		1	HEATER, WATER		100 GL	WAREHOUSE	GAS
		1	HEATER, WATER		100 GL	MEZZ BRK'RM	GAS
		1	HEATER, WATER		20 GL	JANITORS CLOSET	ELECTRIC
		1	HEATER, WATER		20 GL	Above Salvage Rm	ELECTRIC
		1	HEATER, WATER		20 GL	VETS OFFICE	ELECTRIC
		1	ELEVATOR ASSY		.75 HP		
		1	GENERATOR			BACK DOOR	Emergency back up power
		1	TRANSFORMER		1000 KVA	Pad Rear of Bldg	
		1	TRANSFORMER		45 KVA	TRAPEZE	Interior, Dry type
		1	TRANSFORMER		15 KVA	FLOOD	Interior, Dry type
		1	TRANSFORMER		75 KVA	TRAPEZE	Interior, Dry type
		1	TRANSFORMER		15 KVA	TRAPEZE	Interior, Dry type
		1	TRANSFORMER		15 KVA	TRAPEZE	Interior, Dry type
		1	TRANSFORMER		30 KVA	TRAPEZE	Interior, Dry type
		1	TRANSFORMER		30 KVA	TRAPEZE	Interior, Dry type
		1	TRANSFORMER		45 KVA	TRAPEZE	Interior, Dry type
		1	TRANSFORMER		75 KVA	TRAPEZE	Interior, Dry type
		1	TRANSFORMER				Pad Mount
		8	LIGHTS, SECURITY			ON BLDG	
		1	HEATED RAMP			REAR OF BLDG	
		5	DOORS, OVERHEAD			WAREHOUSE	
		5	OPENER, DOOR				ELECTRIC
		39	LIGHT, AREA			WAREHOUSE	H.P. SODIUM
		27	LIGHT, SPOT			PRODUCE	
		6	LIGHT, DISPLAY			MEAT DEPT	
		3	LIGHT ASSY		96"	MEAT DEPT	
		4	LIGHT, AREA			WAREHOUSE DOCK	
		5	POLE, LIGHT			PARKING LOT	
		10	LIGHTS, SECURITY			PARKING LOT	
		1	BOARD, DIRECTORY			MAIN ENTRANCE	
		6	Automated Doors & Support Equip				
		8	WATER CLOSET			THRU-OUT	
		8	LAV'S			THRU-OUT	
		3	URINALS			THRU-OUT	
		39	LIGHT, EMERG			SALES AREA	
		9	LIGHT, EMERG			OFFICE AREA	
		1	Detection System, Fire			THRU-OUT	
		1	Detection System ,Security				
		1	Duress Alarm System				
		1	SINK, S/S		3 COMP	PRODUCE	
		1	SINK, SS HAND			MEAT DEPT	
		1	SINK, MEAT TRAY			MEAT DEPT	
		12	COUNTER, CHECK-OUT		4	CHECK-OUT AREA	
		12	LIGHT, LANE			CHECK-OUT AREA	
		1	SIGN, ("COMMISARY")			FRONT OF BLDG	
		1	SINK, S/S		3 COMP	DELI	
		1	SINK, HAND S/S			DELI	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	SINK, HAND S/S			BAKERY	
		20	LIGHTS, EXTERIOR			FRONT AWNING	
		117	FIXTURE, LIGHT		2' X 4'	THRU-OUT	
		80	FIXTURE, LIGHT			OVER FREEZERS	
		184	FIXTURE, FLOOR		48"	PERIMETER	
		7	FIXTURE, FLOOR		36"	PERIMETER	
		1	Sprinkler System, Water			Thru-out	
		1	Pump, Sprinkler System			Mech. Rm, N Side	
		1	Pump, Sp'kler Syst, Jockey		84.Z00005	Mech Rm, N Side	
		1	Canopy Exterior			Exterior	
710	1843						
		1	Lav				
		1	Toilet				
714	1843	1	Lav				
		1	Toilet				
715	4184						
		1	OPENER, AUTO DOOR			LOADING DOCK	
		1	OPENER, AUTO DOOR			LOADING DOCK	
		2	DOOR, ROLL-UP		6' X 8'	LOADING DOCK	
		1	BIN, ICE MACHINE			STORE ROOM	
		1	ICE MACHINE			STORE ROOM	
		2	HEATER, ELECTRIC		1350 WT		
		2	HEATER, UNIT			Stg/Bottle Room	GAS
		1	HEATER, DUCT			ABOVE WALK-IN	
		1	AIR HANDLER UNIT			ABOVE WALK-IN	
		1	Security Detection System				
		1	Duress Alarm System				
		1	FIRE DETECTION SYSTEM			OFFICE	
		1	SUPPRESSOR, SURGE			OFFICE	
		1	DISPENSER, WATER			BREAK ROOM	
		1	SINK, S/S			BREAK ROOM	
		1	WATER CLOSET			LATRINE	
		1	LAV			LATRINE	
		1	EVAPORATOR			BEER COOLER	
		1	EVAPORATOR			BEER COOLER	
		1	COOLER, WALK-IN			BEER COOLER	
		1	FREEZER, WALK-IN			ICE STORAGE	
		1	EVAPORATOR			ICE STORAGE	
		1	FILTER SYSTEM, WATER			Behind Ice Machine	
		5	SIGN, EXIT			THRU-OUT	
		1	ENCLOSURE, CHAIN LINK		18' X 7'	INSIDE STORAGE	
		1	HEATER, WATER		12 GL	CLOSET	
		1	SINK, MOP			CLOSET	
		1	FOUNTAIN, DRINKING				
		1	HEATER, WALL		4000 WT		
		1	CURTAIN, AIR			W. SIDE DOOR	
		1	CURTAIN, AIR			LOADING DOOR	
		1	CONDENSER UNIT			ENCLOSURE	FOR A/C UNIT
		1	CONDENSER			ENCLOSURE	R-22
		1	CONDENSER			ENCLOSURE	R-502
		1	CONDENSER			ENCLOSURE	
		1	TRANSFORMER			ENCLOSURE	
		5	LIGHT, EXT. SECURITY			PARKING LOT	H.P. SODIUM
		1	RPZ		1	Bottle Return, S Wall	
748	120		Sanitary Lift Pumps & Equipt				
		1	Wall Exhaust Fan				
773	1600	1	Building				

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
700A	Marina						
		1	Lights, Security			AREA	
		42	DOCK ASS'Y, BOAT			MARINA	
		84	SLIPS, BOAT			MARINA	
		1	LIGHT, NAVIGATION			MARINA	
			RPZ		1 1/2"		
			TRANSFORMER				
780	62600						
		1	BURNER, GAS		4000000	MECH ROOM	
		1	Panel, Pneumatic Control			MECH ROOM	
		1	AIR DRYER, REFRIG.			MECH ROOM	
		1	COMPRESSOR, AIR			MECH ROOM	
		1	RPZ		3/4"	MECH ROOM	BEHIND #1 BOILER
		1	Detection System, Fire			MECH ROOM	
		1	A/C, WINDOW			RM 11	
		1	FAN, EXHAUST			LATRINE	
		1	A/C, WINDOW			RM 13	
		2	FAN, EXHAUST			GYM ROOF	
		3	FAN, EXHAUST			WEST WING	
		1	FAN, EXHAUST			EAST WING	
		1	A/C, WINDOW			RM 15	
		2	A/C, WINDOW			RM 17	
		1	BOILER		2,000,000	MECH RM	NATURAL GAS
		1	BOILER		500,000	MECH RM	NATURAL GAS
		1	BOILER		500,000	MECH RM	NATURAL GAS
		5	SINK, SLOP			THRU-OUT	
		1	HEATER, WATER		75 GL	MECH RM	NATURAL GAS
		4	PUMP, CIRCULATING			MECH RM	
		4	A/C, WINDOW		10300	PHOTOLAB	
		2	HEATER, UNIT			WEST HALLWAY	
		17	LAV'S			THRU-OUT	
		18	WATER CLOSET			THRU-OUT	
		5	SINK, Fiberglass			PHOTOLAB	
		1	HEATER, UNIT			FRONT LOBBY	
		1	WATER CLOSET			PHOTOLAB	
		1	LAV			PHOTOLAB	
		1	REFRIGERATOR			PHOTOLAB	
		1	EYEWASH			PHOTOLAB	
		22	FOUNTAIN, DRINKING			EAST WING	
		4	A/C, WINDOW		10300	CERAMIC SHOP	
		12	SINK, PORCELAIN			EAST WING	
		2	WATER CLOSET			CERAMIC SHOP	
		4	SINK, SLOP			CERAMIC SHOP	
		1	SINK, MOP			EAST WING	
		20	LIGHT, EXIT			THRU-OUT	
		6	LIGHT, EXT. SECURITY			ROOF	
		2	LIGHT, EXT. SECURITY			GYM ROOF	
		26	LIGHT, MERCURY VAPOR			GYM	
		1	ANTENNA			OUTSIDE MECH RM	
		1	A/C, WINDOW		11,500	RM 24 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 24 LEFT SIDE	
		1	A/C, WINDOW		11,500	RM 26 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 26 LEFT SIDE	
		1	A/C, WINDOW		11,500	RM 28 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 28 LEFT SIDE	
		1	A/C, WINDOW		11,500	RM 32 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 30 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 30 LEFT SIDE	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	A/C, WINDOW		11,500	RM 32 LEFT SIDE	
		1	A/C, WINDOW		11,500	RM 33 LEFT SIDE	
		1	A/C, WINDOW		11,500	RM 33 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 31 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 31 LEFT SIDE	
		1	A/C, WINDOW		11,500	RM 29 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 29 LEFT SIDE	
		1	A/C, WINDOW		11,500	RM 27 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 27 LEFT SIDE	
		1	A/C, WINDOW		11,500	RM 25 RIGHT SIDE	
		1	A/C, WINDOW		11,500	RM 25 LEFT SIDE	
		1	A/C, WINDOW			THRU-OUT	
		1	A/C, WINDOW			THRU-OUT	
		33	A/C, WINDOW		10,300	THRU-OUT	
		1	ADDITION, 10' X 30'				Metal w/Concrete Floor
		4	FAN, EXHAUST			OVER KILNS	
		1	KILN, ELECTRIC				
		1	KILN, ELECTRIC				
		1	KILN, ELECTRIC				
		1	KILN, ELECTRIC				
		1	KILN, ELECTRIC				
		1	KILN, ELECTRIC				
		1	KILN, ELECTRIC				
		1	KILN, ELECTRIC				
		1	KILN, ELECTRIC				
		1	FAN, PEDESTAL			OVER KILNS	
		1	REFRIGERATOR				
		1	FOUNTAIN, DRINKING			FITNESS CENTER	LOBBY
		1	SPA, 10' X 5'			FITNESS CENTER	
		1	SAUNA, DRY			FITNESS CENTER	
		1	SAUNA, STEAM			FITNESS CENTER	
		1	FILTER, FOR SPA			EQUIP RM, OFFICE	
		1	PUMP, SPA		1 H.P.	EQUIP RM, OFFICE	
		1	PANEL, SPA CONTROL			EQUIP RM, OFFICE	
		1	STEAM GENERATOR			EQUIP RM, OFFICE	
		1	PUMP, CHLORINE			EQUIP RM, OFFICE	
		1	FAN, EXHAUST			EQUIP RM, OFFICE	
		1	SINK, SLOP			EQUIP RM, OFFICE	
		1	CONTROLLER			EQUIP RM, OFFICE	
		70	LOCKERS, PERSONAL			LOCKER RM, M/W	
		1	URINAL			LOCKER RM, M/W	
		4	WATER CLOSET			LOCKER RM, M/W	
		4	SHOWERS			LOCKER RM, M/W	
		3	DRYER, HAND			LOCKER RM, M/W	
		5	FAN, EXHAUST			LOCKER RM, M/W	
		5	SINK			LOCKER RM, M/W	
		1	A/C UNIT			Roof, Fitness Center	
		3	Automated Entry Door & Support Equip				
781	3410						
		2	FURNACE			MECH RM	NATURAL GAS
		1	EVAPORATOR COIL, A/C			MECH RM	
		1	CONDENSER UNIT, A/C			OUTSIDE BLDG	
		1	ICE MACHINE		761	X	
		1	CONDENSING UNIT			OUTSIDE BLDG	FOR ICE MACHINE
		1	SINK, MOP			STORE ROOM	
		1	WATER CLOSET			LATRINES	
		1	COOLER, WALK/REACH-IN			SALES AREA	
		1	EVAPORATOR			SALES AREA	INSIDE WALK-IN COOL
		1	FREEZER, WALK/REACHIN			SALES AREA	
		1	EVAPORATOR			SALES AREA	INSIDE WALKIN FREEZ

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	FREEZER, REACH-IN		1.5 T	SALES AREA	
		1	REFRIG, REACH-IN		1.5 T	SALES AREA	
		1	LIFT, AUTOMOBILE		9000 LB	BAY	
		1	COMPRESSOR, AIR			MECH RM	
		1	HEATER, WATER		65 GL	MECH RM	ELECTRIC
		1	CONDENSING UNIT		3.0 T	OUTSIDE BLDG	FOR REACHIN REF/FREZ
		1	CONDENSING UNIT		3.0 T	OUTSIDE BLDG	FOR REACHIN COOLER
		1	CONDENSING UNIT		1.5 T	OUTSIDE BLDG	FOR REACHIN FREEZ
		1	CONDENSING UNIT		1.5 T	OUTSIDE BLDG	FOR REACHIN FREEZ
		3	CONTAINER, ENVIRON		5' X 3'	BEHIND 781	FOR WASTE OIL
		1	SAFE			OFFICE	
		1	PAGER SYSTEM			OFFICE	
		4	PUMP, FUEL				
		1	VACUUM SYSTEM		1.62 H.P.	REAR OF BLDG	
		1	FAN, EXHAUST			Latrine Break rm	
		1	CANOPY ASSY		40'X50'	GAS PUMP AREA	
		1	CONDENSING UNIT		1.5 T	OUTSIDE BLDG	REACHIN REFER
		330	GUARD RAIL, STEEL			Pkg Lot Perimeter	
		1	CANOPY ASSY			GAS SALES AREA	Structural Steel
		7	BUMPERS, PRECAST			PARKING LOT	
		1	SHED, STORAGE			BEHIND BLDG	BOTTLE STORAGE
		1	TRANSFORMER		75 KVA	BEHIND BLDG	
		8	LIGHTS, SECURITY			ON BLDG	
		5	LIGHT, EXT. SPOT			REAR OF BLDG	
		1	Detection System, Fire		ZANS400	MECH RM	
		1	Detection System, Security				
		1	Duress Alarm System				
		1	FAN, EXHAUST		2' X 2'	BAY AREA	
		1	HEATER, RADIANT		750 WT	BREAKRM LATRINE	
		1	HEATER, UNIT			GARAGE	
		1	REGISTER, FUEL DISPENS			GARAGE	
		1	COOLER, BEVERAGE			SALES AREA	
		1	ALARM, PROCESS CTRL.			MECH RM	
		1	COOLER, REACH-IN		1/3 HP	SALES AREA	
		1	Automated Entry Door & Support Equip				
		1	CHAIN LINK COMPOUND			EAST SIDE	
826	12527						
		1	FURNACE		525,000	MECH RM	NATURAL GAS
		1	BURNER, POWER			MECH RM	
		1	HEATER, WATER		65 GL	MECH RM	ELECTRIC
		1	CONDENSER, A/C		20 T	W. END OF BLDG	
		1	AIR HANDLER			MECH RM	
		1	FIRE DETECTION SYSTEM			MECH RM	
		8	LANE, BOWLING				
		1	FOUNTAIN, DRINKING			HALLWAY	
		5	FAN, EXHAUST			THRU-OUT	
		1	SINK, MOP			JANITORS CLOSET	
		1	SINK			BAR AREA	
		1	COOLER, WALK-IN			BAR AREA	
		4	WATER CLOSET			LATRINES	
		4	LAV'S			LATRINES	
		2	URINALS			LATRINES	
		1	FREEZER, UPRIGHT		5.1 CU.FT.	BAR AREA	
		2	FAN, CEILING				
		8	LIGHT, INT. SECURITY			THRU-OUT	
		1	FREEZER, UPRIGHT		19.5 Cu.Ft	STORAGE RM	
		12	LIGHT, EXT. SECURITY			ON BLDG	
		8	PINSETTER				
		1	FREEZER, CHEST			STORE ROOM	
		1	FREEZER, UPRIGHT			STORE ROOM	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	DRYER, HAND			LATRINE	
		1	HEATER, WALL			ENTRANCE	
		1	CANOPY, CANVAS			MAIN ENTRANCE	
		1	EVAPORATOR			WALK-IN COOLER	NEW ADDITION
		1	COOLER, WALK-IN			WALK-IN COOLER	NEW ADDITION
		1	EVAPORATOR			BEER COOLER	
		1	MICROWAVE			BAR AREA	
		1	MICROWAVE			BAR AREA	
		1	Security System, Audible			BAR AREA	
		1	TABLE, SCORING				
		1	TABLE, SCORING				
		1	TABLE, SCORING				
		1	TABLE, SCORING				
		1	DRYER, HAND			WOMEN'S LATRINE	
		1	SINK, S/S		3 COMP	BAR AREA	NEW ADDITION
		1	HVAC UNIT			Roof, New Add'n	
		1	COOLER, REACH-IN		12'	BAR	
		1	TAPPER, BEER		6'	BAR	
		1	A/C unit, Packaged		2 Ton	Roof mounted	
		5	AIR CLEANER				Smoke Eaters
835	15010						
		1	BOILER			MECH RM	HOT WATER PROPANE
		1	BURNER		1,150,000	MECH RM	
		2	Pump, CIRCULATING			MECH RM	HEAT
		2	PUMP, SANITARY			MECH RM	SEWAGE EJECTORS
		15	HEATER, UNIT		VARIOUS	THRU-OUT	
		1	AIR CURTAIN			REAR EXIT	
		10	LIGHT, EMERG			THRU-OUT	
		1	A/C, WINDOW		15,000	THRIFT SHOP OFF	
		1	FOUNTAIN, DRINKING			HALLWAY	ELECTRIC
		3	LAV'S			LATRINES	
		3	WATER CLOSET			LATRINES	
		1	SINK, MOP			JANITORS CLOSET	
		1	URINAL			LATRINE	
		6	DOOR, ROLL-UP			Rear Load Dock	
		6	LIGHT, EXT. SECURITY			ROOF	
		4	LIGHT, EXT. SECURITY			OUTSIDE BLDG	H.P. SODIUM
		3	LIGHT, EXT. SECURITY			PARKING LOT	H.P. SODIUM ON POLE
		1	A/C, WINDOW		5100	FRONT WINDOW	THRIFT SHOP
		1	A/C, WINDOW		5100	FRONT WINDOW	THRIFT SHOP
		1	A/C, WINDOW		5100	FRONT WINDOW	THRIFT SHOP
		8	SIGN, EXIT			THRU-OUT	
		1	HEATER, RADIANT			N.E. FRONT DOOR	QUARTZ
		1	DOOR, ROLL-UP			N.E. FRNT STOR R	
		1	REFRIGERATOR		12 CU.FT.	BREAK ROOM	
		1	FOUNTAIN, DRINKING			LATRINE	
		1	TUB, UTILITY			LATRINE	
		1	MICROWAVE			BREAKROOM	
		1	PUMP, CIRCULATINIG		1/12 H.P.	LOWER MECH RM	
		1	Security Detection System				
		1	FIRE DETECTION SYSTEM			LOWER MECH RM	
		2	TANK, EXPANSION			LOWER MECH RM	
		4	FAN, EXHAUST		VARIOUS	ROOF	
		2	ANTENNAS			ROOF	ALARM SYSTEMS
		2	A/C WINDOW		12000		
			HEATER, WATER		65 GAL		
		12	PADDLE FANS			4 SEASONS	
		4	AC UNIT PACKAGE			ROOF TOP	
836	1895						
		1	FURNACE		132,000	MECH RM	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	FURNACE		6.25 TON	MECH RM	
		1	HEATER, WATER		65 GL	MECH RM	
		1	A/C, CENTRAL			OUTSIDE BLDG	
		1	REFRIG., DOMESTIC			OFFICE	
		1	FREEZER, CHEST			OFFICE	
		1	SINK, SS			OFFICE	
		1	CABINETS, SS			OFFICE	
		1	SINK, SS		DOUBLE	EXAM ROOM	
		1	CABINET, ASSY			EXAM ROOM	
		1	SINK, DEEP			EXAM ROOM	
		1	CABINET			EXAM ROOM	
		1	SHOWER			LATRINE	
		1	WATER CLOSET			LATRINE	
		1	URINAL			URINAL	
		1	LAV			LATRINE	
		1	FAN, EXHAUST			HOLDING ROOM	
		1	FLUSHING SYSTEM			HOLDING ROOM	
		3	FAN, EXHAUST			ROOF	
		1	FAN, EXHAUST		1/40 H.P.	KENNEL ROOF	
		1	INCUBATOR			EXAM RM	
		1	FAN, EXHAUST		1/40 H.P.	EXAM ROOM	
		1	REFRIG, DOMESTIC			KITCHEN	
		1	COPY MACHINE			KITCHEN	
		1	MICROWAVE			KITCHEN	
903	5360						
		2	LAV'S			LATRINES	
		2	WC'S			LATRINES	
		1	LAUNDRY TRAY			FRONT OFFICE	
		2	FAN, EXHAUST			LATRINES	
		2	LIGHT, EMERG			THRU-OUT	
		6	HEATER, UNIT			WAREHOUSE	NATURAL GAS
		9	FIXTURE, LIGHT			WAREHOUSE	H.P. SODIUM
		1	SINK, S/S, SINGLE			UPSTAIRS	
		6	LIGHT, EXT. SECURITY			OUTSIDE BLDG	
		1	HEATER, WATER		30 GL	MECH RM	NATURAL GAS
		1	FURNACE		137,500	MECH RM	NATURAL GAS/FORCED
		1	PUMP, FUEL				GAS STATION TYPE
		1	TANK, FUEL A/G				
		1	EYEWASH			WAREHOUSE	
		3	LIGHT, EXIT			FRONT OFFICE	
		1	MEZZANINE		24X32	WareHse Area	
		4	FILTER, CARTRIDGE			MECH ROOM	
			WINDOW AC UNIT			THRU-OUT	
		30	Pedistal Power				
		30	Hydrant, Water				
		2	Hydrant, Fire				
		1	Transformer		300KVA		
		8	Transformer, Stepdown				
904	579						
		7	Elect Heaters				
		6	Lav				
		6	Shower				
		2	Water Heater				
		6	Toilets				
912	10,735						
		13	Furnace, Gas Fired, FA				
		1	HEATER, WATER				
		1	PUMP, CIRCULATING				
		12	RANGE, GAS				

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		12	REFRIGERATOR				
		12	DISHWASHERS				
		1	Sprinkler System, Water			Storage Room	
		1	Fire Detection System				
916	13445						
		16	FURNACE		64,000	APTS	GAS FORCED AIR
		1	HEATER, WATER		75 GL	MECH ROOM	GAS FIRED
		1	Detection System, Fire			MECH ROOM	
		1	PUMP, CIRCULATING		3/4 "		POTABLE HOT WATER
		30	A/C UNIT, Window		5k BTUH	APT 139	
		15	WASHER				
		15	DRYER				
		15	Refrigerators				
		15	Range				
922	20,630						
		14	FURNACE W/ AC				
		1	WATER HEATER				
		1	FIRE DETECTION SYSTEM				
		1	CIRCULATING PUMP				
		1	Sprinkler System, Water				
923	11,980						
		8	Furnace w/AC				
		1	WATER HEATER				
		1	FIRE DETECTION SYSTEM				
		1	CIRCULATING PUMP				
		8	Washers				
		8	Dryers				
		1	Sprinkler System, Water				
		8	Refrigerators				
		8	Range				
		8	Dishwashers				
924	11980	14	Furnace w/AC				
		1	Heater, Water		75 Gal		
		11	Dishwasher				
		13	Refrigerator				
		13	Range, Gas				
		1 ea.	Washer/Dryer, Stacked				
		1	Detection System, Fire				
		1	Pump, HW Circulating				
		19	Light, Security				
		1	Sprinkler System, Water				Storage Room
929	17950						
		21	Furnace, Gas Fired, FA				
		1	HEATER, WATER				
		1	PUMP, CIRCULATING				
		3	WASHER				
		3	DRYER				
		20	RANGE, GAS				
		20	REFRIGERATOR				
		20	DISHWASHERS				
		1	Sprinkler System, Water				Strorage Room
		1	Fire Detection System				
		4	Microwave Oven				
930	20630						
		21	Furnace, Gas Fired, FA		64,000		
		1	HEATER, WATER		80 GAL		

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	PUMP, CIRCULATING				
		3	WASHER			LAUNDRY	
		3	DRYER			LAUNDRY	
		18	RANGE, GAS				Roper, Magic Chef, Vesta
		18	REFRIGERATOR				W'hs/Wlhlpool/Adm
		18	Dishwasher				
		1	Detection System, Fire				
		1	Sprinkler System, Water				Strorage Room
			Light, Security				
		4	Microwave Oven				
931	20630						
		21	Furnace, Gas Fired, FA		64,000		
		1	HEATER, WATER		80 GAL		
		1	RECIRC. PUMP				
		3	WASHER			LAUNDRY	
		3	DRYER			LAUNDRY	
		18	KITCHEN RANGES				Roper, Magic Chef, Vesta
		18	REFRIGERATOR				
		18	Dishwashers				
		1	Detection System, Fire				
		1	Sprinkler System, Water				Strorage Room
			Light, Security				
		4	Microwave Oven				
935	10735						
		12	Furnace, Gas Fired, FA		64,000		
		1	HEATER, WATER		80 GAL		
		1	PUMP, CIRCULATING				
		11	RANGE, GAS				Roper, Magic Chef, Vesta
		11	REFRIGERATOR				W'hs/Wlhlpool/Adm
		1	Detection System, Fire				
		1	Sprinkler System, Water				Strorage Room
		11	Dishwashers				
			Light, Security				
936	11980						
		12	Furnace w/AC				
		1	HEATER, WATER		80 GAL		
		1	PUMP, CIRCULATING				
		11	RANGE, GAS				Roper, Magic Chef, Vesta
		11	REFRIGERATOR				
		1	Detection System, Fire				
		1	Sprinkler System, Water				Strorage Room
			Light, Security				
		11	Washers				
		11	Dryers				
		11	Dishwashers Portable				
942	20630						
		21	Furnac w/AC				
		1	HEATER, WATER		80 GAL		
		1	PUMP, CIRCULATING				
		18	RANGE, GAS				Roper, Magic Chef, Vesta
		18	REFRIGERATOR				W'hs/Wlhlpool/Adm
		1	Detection System, Fire				
		1	Sprinkler System, Water				Storage Room
			Light, Security				
		18	Washers				
		18	Dryers				
		15	Portable Dishwashers				
944	17950						

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		21	Furnace, Gas Fired, FA		64,000		NATURAL GAS
		1	REFRIGERATOR				
		25	LIGHT, SECURITY				
		1	Detection System, Fire			MECH ROOM	
		1	RPZ			MECH ROOM	
		25	A/C Unit, Window				
		1	Heater, Water		75 GL	MECH ROOM	GAS
945	17950						
		21	Furnace, Gas Fired		64,000		
		10	Window A/C UNIT				
		4	REFRIGERATOR				
		1	HVAC Unit		64,000		
		1	Washer, Clothes				
		1	Dryer, Clothes				
		1	Fan, Exhaust				
		3	LAMP, HP Met Halide, Ext				
		1	Tub, Laundry				
		1	Fire Detection System				
		1	Water Heater				
951	3374						
		1	Light, Security Ext.				
		3	LAMP, HP Met Halide, Ext				
		1	Heater, Water		40 GL	MECH RM	NATURAL GAS
		1	CONDENSING UNIT		5 T	W. SIDE OF BLDG	A/C
		2	Sink, SS Double			KITCHEN AREA	
		1	HUMIDIFIER			ON FURNACE	ELEC. AUTO FEED
		1	LAV			RESTROOM	
		1	WATER CLOSET			RESTROOM	
		1	Sink, Mop				
		1	Sprinkler System, Fire			KITCHEN AREA	Abandoned in place
		1	REFRIGERATOR		14 CU.FT.		DOMESTIC MODEL
		1	Sink, SS Single				
		1	Disposal, Waste				DOMESTIC
		1	Heater, Aux. Hot Water			Kitchen (BACK RM)	
		1	SAFE			BACK RM	BUILT IN
		1	DISHWASHER			BACK RM	DISPLAY
		1	Panel, Emerg. Light Ctrl				
		3	Light, Emerg.				
		1	Fountain, Drinking			BACK RM	
			CONDENSER UNIT, A/C				
		1	SHADE MACHINE			BACK RM	
		3	LIGHT, EXIT			THRU-OUT	
		1	Storage Bldg.		60' X 48'	OPEN STORAGE	Bldg 950
		1	STOVE,WD BURNING				
		1	AWNING ASSY			MAIN ENTRANCE	
		290	Fence, cyclone		6' HIGH		
		1	Shed, Storage		4' X 8'	PARKING LOT	SHOULD HAVE FAC #
			FURNACE				NAT. GAS FORCED HT A
970	34199						
		1	BOILER		637,000	S. MECH RM	NATURAL GAS
		1	BOILER		637,000	S. MECH RM	NATURAL GAS
		2	Pump, Circulating			S. MECH RM	
		1	Heater, Unit			S. MECH RM	
		4	SHOWERS			THRU-OUT	
		19	Water, Closet			THRU-OUT	
		12	URINALS			THRU-OUT	
		16	LAV'S			THRU-OUT	
		2	Sink, Mop			THRU-OUT	
		6	Fountain, Drinking			THRU-OUT	ELECTRIC

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		6	FILTER ASSY, WATER			EA DRINK FOUNT	
		7	Heater, Unit			STAIRW/WHSE	VESTIBULES/SUPPLY
		2	HUMIDIFIERS			EA MECH RM	
		2	AIR HANDLER UNIT			EA MECH RM	
		1	PUMP, SUMP			MECH RM	
		2	SANITARY, PUMP			S. MECH RM	
		1	HEATER, WATER		75 GL	S. MECH RM	
		1	PUMP, CIRCULATING		1/12 H.P.	S. MECH RM	POTABLE WATER
		1	TANK, EXPANSION			S. MECH RM	
		1	FAN, EXHAUST			BLUEPRINT RM	
		18	Light, Emerg.			THRU-OUT	VARIOUS BRANDS
		1	CONDENSING UNIT			N. SIDE OF BLDG	
		1	CONDENSING UNIT			Roof, S. Mech Rm	
		6	LIGHT, EXT. SECURITY			ROOF	
		4	LIGHT, EXT. SECURITY			PARKING LOT	
		1	OPENER, DOOR			Supply Warehouse	
		1	FAN, EXHAUST			W. FRT VESTIBULE	
		1	LIGHT, FLIGHT			MECH RM ROOF	FOR ICE RINK
		2	REFRIGERATOR			SUPPLY HALLWAY	
		1	DISHWASHER			UPPER LADIES RM	SOUTH END
		1	Detection System, Fire			MAIN LOBBY	
		1	A/C UNIT, WINDOW			PAPER STRG RM	
		1	REFRIGERATOR		12 CU.FT.	2ND FLR STORAGE	
		1	FAN, EXHAUST			2ND FLR COPY RM	
		1	A/C UNIT, WINDOW			PASSPORT	
		2	LIGHT, EXT. SECURITY			W.SIDE OF BLDG	FOR FLAG POLE
		1	FLAG POLE		80'	W.SIDE OF BLDG	NEEDS OWN #
		1	REFRIGERATOR			LOWER LUNCH RM	
		1	RANGE, ELECT.			LOWER LUNCH RM	
		1	SINK, SS DBL			LOWER LUNCH RM	
		1	MICROWAVE			LOWER LUNCH RM	
		1	MICROWAVE			LOWER LUNCH RM	
		18	LOCKER, PERSONAL			LUNCH RM HALL	
		14	EXIT SIGN, LIGHTED			THRU-OUT	
		4	CHAIR, EVACUATION			THRU-OUT	
		1	ELEVATOR, PERSONNEL		750 lb Cap.	1st Floor., Main Bldg	
		1	ANTENNA, RADIO		90' HIGH	Exterior, S Side	
		2	FAN, EXHAUST			Maint. Shop, S. Wall	
		1	A/C UNIT			FOR RM 223a	
		1	Ice Rink Shelter		8' x 6'	Ext., SW of Bldg.	
		1	Automated Door Main Entry & Support Equip				
		1	Exhaust fan			Lunch Room	
		1	Duress Alarm System				
971	11383						
		1	FAN, EXHAUST		200CFM	HOURLY ROOM	EF-2
		1	FAN, EXHAUST		200CFM	PRE TODDLER RM	
		1	FAN, EXHAUST		200CFM	TODDLER ROOM	
		1	FAN, EXHAUST		200CFM	PRE-SCHOOL	
		1	FAN, EXHAUST		50 CFM	WOMENS LATRINE	
		1	FAN, EXHAUST			JANITORS CLOSET	
		1	FAN, EXHAUST			ISOLATION ROOM	
		1	FAN, EXHAUST		1800 CFM	KITCHEN HOOD	
		1	FAN, EXHAUST		750 CFM	KITCHEN HOOD	
		1	FAN, EXHAUST		1800 CFM	KITCHEN	
		1	FAN, EXHAUST		750 CFM	KITCHEN HOOD	
		1	FAN, EXHAUST		50 CFM	MENS LATRINE	
		1	FAN, EXHAUST		50 CFM	INFANT ROOM	
		1	FAN, EXHAUST		50 CFM	INFANT ROOM	
		1	FAN, EXHAUST		50 CFM	K'GARTEN RM	
		1	FAN, EXHAUST		50 CFM	K'GARTEN RM	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	Fire Suppression System		1.5 GL	KITCHEN	
		1	Ventilator, Sidewall Exhaust		2800 CFM	MECH RM	
		1	HUMIDIFIER		16 G/D	MECH RM	
		1	HUMIDIFIER		16 G/D	MECH RM	
		1	HUMIDIFIER		16 G/D	MECH RM	
		1	HUMIDIFIER		16 G/D	MECH RM	
		1	HUMIDIFIER		16 G/D	MECH RM	
		1	HUMIDIFIER		16 G/D	MECH RM	
		1	Furnace, Gas		115,000	MECH RM	
		1	Furnace, Gas		115,000	MECH RM	
		1	Furnace, Gas		115,000	MECH RM	
		1	Furnace, Gas		115,000	MECH RM	
		1	Furnace, Gas		115,000	MECH RM	
		1	Furnace, Gas		115,000	MECH RM	
		1	CONDENSING UNIT		4 T	ROOF	
		1	CONDENSING UNIT		4 T	ROOF	
		1	CONDENSING UNIT		4 T	ROOF	
		1	CONDENSING UNIT		4 T	ROOF	
		1	CONDENSING UNIT		5 T	ROOF	
		1	CONDENSING UNIT		5 T	ROOF	
		1	Detection System, Fire				
		1	Security Camera System		30 DB	RM 13 CLOSET	
		1	INTERCOM SYSTEM			OFFICE	
		1	HEATER, WATER, GAS		50 GL	MECH RM	
		1	HEATER, WATER, GAS		50 GL	MECH RM	
		1	HEATER, WATER, GAS		50 GL	MECH RM	
		2	PUMP, SANITARY EJECT			MECH RM	
		1	INTERCEPTOR, GREASE			MECH RM	
		1	ANTENNA, T.V.			ROOF	
		1	FREEZER, REACH-IN		2-DOOR	KITCHEN	
		1	RANGE, GAS		6 Burner	KITCHEN	
		1	STEAM TABLE		1500 WT	KITCHEN	Going to turn-in NAF property
		1	SINK, S/S			KITCHEN	
		1	FIRE SUPPRES SYSTEM			KITCHEN	
		1	SINK, MOP		3 COMP	KITCHEN	
		1	MICROWAVE		700 WT	KITCHEN	
		1	SINK, PREP		2 COMP	KITCHEN	
		1	REFRIGERATOR		14 CU.FT.	KITCHEN	
		1	REFRIGERATOR			KITCHEN	
		1	DISHWASHER			KITCHEN	
		1	DISPOSAL, WASTE			KITCHEN	
		1	HEATER, BOOSTER WTR			KITCHEN	
		1	TABLE, PREP			KITCHEN	
		1	Trap, Grease		4' x 5' x 3'	Kitchen	
		1	SHED, STORAGE		8'X10'	N. SIDE OF BLDG	WOOD
		1	SHED, STORAGE		8'X10'	S. SIDE OF BLDG	WOOD
		1	SHED, STORAGE		4'X10'	E. SIDE OF BLDG	WOOD
		2	CHAINLINK FENCE CONPOUNDS			NORTH/SOUTH SIDES	
			WOOD FENCE PARTITIONS			IN PLAYGROUND AREAS	
		1	TRANSFORMER		300 KV	N. SIDE OF BLDG	
		1	Video Surveilance System				
		1	Sprinkler System, Water				
		1	Shelter		8 x 10		
			Playground Equip/Wsynthetic Surfaces				MULTI
		1	Duress Alarm System				
972	9125						
		1	Compressor, air		3 HP	Shop (1572)	Mod# 3Z745, TF114326
		1	Refigerator			Shop	Mod#TB14SSB, SNTY588958

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
		1	Washer, Pressure			Bay #3	Mod#340, SN3405A
		1	Exhaust System		1.5 HP		Mod# B105, SN545900-00
		7	Heater, Gas Infra-Red				
		1	PUMP, San. EJECTOR				
		1	HEATER, WATER, GAS				
		3	FAN, EXHAUST				
		1	HEATER, GAS SPACE				
		1	WATER CLOSET				
		1	URINALS				
		1	LAV'S				
		3	LIGHT, EXT. SECURITY				
		4	LIGHT, EMERG.				
		1	Detection System, Fire				
		1	Hoist, Vehicle		12000 lb	Bay #2	Mod#805-529-3625, SN
		9	DOOR, OVERHEAD				
		1	Eye Wash			Bay #1	
1060	17286						
		4	WASHER, CLOTHES				
		4	DRYER, CLOTHES				
		1	LAUNDRY TRAY, DBL				
		1	TRAP, GREASE		30" x 30"		
		1	HEATER, WATER		10 GAL		
		1	TANK, HOT WATER STG		60 GAL		
		2	FAN, EXHAUST			ROOF MTD.	
		1	PUMP, CIRCULATING		½"		
		1	PUMP, CIRCULATING		2"		
		1	BOILER, WATER, HTG.				
		1	REFRIGERATOR		14.2 cu ft		
		1	DISPOSAL, WASTE				
		1	SINK, SS, DBL				
		1	RANGE, ELECT.				
		1	FAN, EXHAUST			KITCHEN	
		4	FOUNTAIN, DRINKING				
		8	LIGHT, EXIT				
		4	SINK, SLOP				
		42	REFRIGERATOR				
		16	WATER CLOSET				
		9	URINAL				
		16	SINK				
		4	SHOWER				
		1	FIRE DETECTION SYSTEM				
		2	A/C Unit, Split System				
2245	544						
		1	HEATER, UNIT			STORE	ELECTRIC
		1	LAV			LATRINE	
		1	WATER CLOSET			LATRINE	
		1	FAN, EXHAUST			SALES AREA	
		1	HEATER, WATER		6 GL	LATRINE	
		95'	FENCE, CYCLONE		6' HIGH	PERIMETER	
		1	GATE		8' X 36"	PERIMETER	
		25'	FENCE, CYCLONE		8' HIGH	PERIMETER	
		96'	FENCE, CYCLONE		4' HIGH	PERIMETER	
		1	CONDENSER UNIT, A/C		3T38EN03	X	
		1	AIR HANDLER UNIT		1/3 H.P.	SALES AREA	
		1	LIGHT, EMERG		8 WATT	SALES AREA	
		1	SIGN, LIGHTED EXIT			SALES AREA	
		2	LIGHT, SECURITY			OUTSIDE BLDG	
		1	SHED, STORAGE		8'-12'	BEHIND BLDG	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
2250	5300						
		1	FURNACE		137,000	MECH RM	
		1	FURNACE		137,000	MECH RM	
		1	CONDENSER UNIT			OUTSIDE	
		1	CONDENSER UNIT			OUTSIDE	
		1	HVAC UNIT		270,000	OUTSIDE	
		1	HEATER, WATER		30 GL	MECH RM	
		1	SINK, MOP			MECH ROOM	
		1	SINK, SS			SNACK BAR	
		2	LAV'S			LATRINES	
		1	URINAL			LATRINES	
		3	WATER CLOSET			LATRINES	
		2	WC, BARRIER FREE			LATRINES	
		1	FAN, EXHAUST		250CFM	MEN'S LATRINE	
		1	FAN, EXHAUST		250CFM	LADIES LATRINES	
		1	FAN/HOOD, EXHAUST			GRILLE AREA	
		5	LIGHT, EMERG		4 VOLT	THRU-OUT BLDG	
		5	SIGN, LIGHTED EXIT			THRU-OUT BLDG	
		5	LIGHT, SECURITY			OUTSIDE BLDG	
		1	Detection System, Fire			MECH RM	
		1	DETECT'N SYST, PEOPLE			MECH ROOM	
		1	DIALER SYSTEM			MECH RM	
		1	TRANSFORMER		13.2X208	N. SIDE OF BLDG	
		640	FENCE, CEDAR		6' HIGH		
		1	FOUNTAIN, DRINKING		8.1 GL		
		1	RACK, BICYCLE			BASKETBALL CRT	
		1	FREEZER, UPRIGHT			STORE ROOM	
		1	REFRIGERATOR			SNACK BAR	
		1	ICE MACHINE			SNACK BAR	
			GENERAL FACILITY SECTION				
		1	SANYO COOLING UNIT			COMPUTER LAB	
05002		1	Flag pole			Bldg 970	
04905	12,305	2	Tennis Courts			400 Area, Lufberry	
SS310	27	1	Smoking Shelters			310 Mitchell	
SS701	27	1	Smoking Shelters			701 George	
SS780	27	1	Smoking Shelters			780 Johnson	
SS970	27	1	Smoking Shelters			970 Jefferson	
SB165		1	Electronic Score Board			Bldg 165	
SB780		1	Electronic Score Board			Bldg 780	
SB900		1	Electronic Score Board			B – Field 900 Area	
002-CF		74	Res Ceiling Fan, (5) Blade		52"	200 Area	
004-CF		150	Res Ceiling Fan, (5) Blade		52"	400 Area	
007-CF		58	Res Ceiling Fan, (5) Blade		52"	700 Area	
009-CF		746	Res Ceiling Fan, (5) Blade		52"	900 Area	
0BQCF		17	Res Ceiling Fan, (5) Blade		52"	Bachelor Qtrs	
0SMCF		1099	Res Ceiling Fan, (5) Blade		52"	Sebille Manor	
00FNC	12,600LF		Resident Fence			Sebille Manor	
00RVS		2	Rec Veh Storage compound			1500 area / Joy Rd	W/fencing
0RGC		1	Roads & Grnds compound			Bldg 972	W/fencing
0MPC		1	Motor Pool Compound			Bldg 970	W/fencing

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
FENCE	3500 LF		Wood Fencing			Selfridge	
FENCE	29000 LF		Chain Link Fencing			Selfridge	Perimeter/Interior W/ & W/O Barb Wire
GATES	342 LF		Chain Link Gates			Selfridge	
02304	13563 LF		Chain Link Fencing			Sebille Manor	Perimeter/Interior W/ & W/O Barb Wire
02304	420 LF	11	Chain Link Gates			Sebille Manor	
DO905		1	Refuse Collection Fac.			905 Wurtsmith	
DO907		1	Refuse Collection Fac.			907 Whitehead	
DO908		2	Refuse Collection Fac			908 Ashau Valley	
DO909		1	Refuse Collection Fac.			909 Whitehead	
DO912		1	Refuse Collection Fac.			912 Partridge	
DO919		1	Refuse Collection Fac.			919 Spaatz	
DO922		1	Refuse Collection Fac.			922 Ashau Valley	
DO923		1	Refuse Collection Fac.			923 Wurtsmith	
DO928		1	Refuse Collection Fac.			928 Brett	
DO929		2	Refuse Collection Fac.			929 Arnold Ct.	
DO930		2	Refuse Collection Fac.			930 Arnold Ct.	
DO936		1	Refuse Collection Fac.			936 Arnold Ct.	
DO942		1	Refuse Collection Fac.			942 Arnold Ct.	
DO769		1	Refuse Collection Fac.			769 Willow	
DO770		1	Refuse Collection Fac.			770 Willow	
DO774		1	Refuse Collection Fac.			774 Oak	Double Size
DO776		1	Refuse Collection Fac.			776 Johnson	Double Size
		1	Refuse Collection Fac			Top 4	Double Size
		1	Porta John Shield			Top 4	Wood Fencing
00324		1	Recreation Shelter			200 Area, Mitchell	Between bldgs326/327
00420		1	Recreation Shelter			400 Area, George	For 424 George
00483		1	Recreation Shelter			400 Area, Strauble	For 482 Strauble
00A03		1	Recreation Shelter			903 Area/RV Camp	
00A19		1	Recreation Shelter			903 Area/RV Camp	
00A20		1	Recreation Shelter			903 Area/RV Camp	
00A21		1	Recreation Shelter			903 Area/RV Camp	
00A22		1	Recreation Shelter			903 Area/RV Camp	
00673		1	Recreation Shelter			Top 4	
00674		1	Recreation Shelter			Top 4	
00675		1	Recreation Shelter			Top 4	
00676		1	Recreation Shelter			Top 4	
00700A		1	Recreation Shelter			700 Soccer Field	
WS268		1	Bus Stop		8' x 10'	200 Area, Mitchell	Not used
WS444		1	Bus Stop		8' x 10'	400 Area, Skeel	
WS769		1	Bus Stop		8' x 10'	700 Area, Willow	
WS775		1	Bus Stop		8' x 10'	700 Area, Luke	
WS909		1	Bus Stop		8' x 10'	900 Area, Wurtsmith	By Whitehead
WS919		1	Bus Stop		8' x 10'	900 Area, Wurtsmith	By Spatz
WS925		1	Bus Stop		8' x 10'	900 Area, Brett	
WS935		1	Bus Stop		8' x 10'	900 Area, Arnold	Not Used
WS001		1	Bus Stop		8' x 10'	SEB. Doug./Brat	
WS002		1	Bus Stop		8' x 10'	SEB. Doug./Craw	
WS003		1	Bus Stop		8' x 10'	SEB. Hibbs./Pearl	
WS004		1	Bus Stop		8' x 10'	SEB. Pearl / Brault	
WS005		1	Bus Stop		8' x 10'	SEB. Pearl / Baker	
PG001			Playground & Equipt -				
			Sebille Manor				
100		1	Playground & Equipment		Custom	Baker/Sugarbush	
101		1	Playground & Equipment		Custom	Baker/Bek	
102		1	Playground & Equipment		Custom	Bek/Brault	

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
104		1	Playground & Equipment		Custom	Brault/Pearson	
105		1	Playground & Equipment			Pearson/Hibbs	
106		1	Playground & Equipment			Saltrnik/Hawk	
107		1	Playground & Equipment			Craw Circle	
A08		1	Playground & Equipment			Craw/Douglas	
B08		1	Playground & Equipment			Craw/Wright	
109		1	Playground & Equipment			Douglas/Hohenshell	
110		1	Playground & Equipment			Hohenshell/Pearl	
111		1	Playground & Equipment			Pearl/Bialias	
112		1	Playground & Equipment			Bialias/Brooks	
113		1	Playground & Equipment			N.Brooks/S.Brooks	
114		1	Playground & Equipment			Pearl, Brault, Bek	
115		1	Playground & Equipment			Pearl, Baker, Bek	
116		1	Playground & Equipment			Baker,Bek,Pearl,Dou	
117		1	Playground & Equipment			Bek,Brault,Pearl,Dou	
118		1	Playground & Equipment			Brault,Pearl,Pearson	
			Selfridge				
2P2		1	Playground & Equipment			200 Wooten/Birch	
4P1		1	Playground & Equipment			400 Boyle/Strauble	
4P3		1	Playground Equipment			Top 4	
7P1		1	Playground & Equipment			700 Jefferson/Oak	
7P2		1	Playground & Equipment			700 Johnson/Wilow	
901		1	Playground & Equipment			905/907	
92F		1	Playground & Equipment			909/912	
905		1	Playground & Equipment			916/923	
906		1	Playground & Equipment			915 Jefferson	
907		1	Playground & Equipment			911 Jefferson	
908		1	Playground & Equipment			910/924	
909		1	Playground & Equipment			927 Jefferson	
910		1	Playground & Equipment			929/931	
911		1	Playground & Equipment			931/935	
912		1	Playground & Equipment			930/936	
913		1	Playground & Equipment			936	
914		1	Playground & Equipment			936/942	
915		1	Playground & Equipment			939/943	
917		1	Playground & Equipment			928/944	
04002	90,000	1	Field, Baseball		300X300	Jefferson & Rec. Dr.	W/Backstop w/Light Systems
A4002	39,100	1	Field, Baseball		230X170	Jefferson & Rec. Dr.	W/Backstop
B4002	62,500	1	Field, Baseball		250X250	Jefferson & Rec. Dr.	W/Backstop
04003	110,550	1	Field, Baseball		330X335	Jefferson & Fish Pd	W/Backstop w/Light Systems
BC919	11,200	1	Court, Basketball		70X160	Jefferson & Rec. Dr.	Backboard, Hoop & Net
BCA19	3,350	1/2	Court, Basketball		50X87	Jefferson & Rec. Dr.	Backboard, Hoop & Net
BCB19	11,200	1	Court, Basketball		70X160	Sebille / Youth Center	Backboard, Hoop & Net
HC780	11,200	1	Court, Handball		70X160	780 Johnson	
SF769	51,800	1	Field, Soccer & Goal			700 Soccer Field	
SF780	8,800	1	Soccer Field & Goal			700 Soccer Field	
		1	Sports Storage Shed		8' x 10'	700 Soccer Field	
		1	Foot Bridge		Wood	700 Soccer Field	
		3	Observation Posts w/HVAC		10 X 10	903, 700A, Top 4	
		199	Sign, Traffic			Garrison Wide	.080 Alum & Reflective Text
		145	Sign, Parking			Garrison Wide	.080 Alum & Reflective Text
		10	Sign, Directional		42" x 22"	Garrison Wide	Vinyl Reflective Tape on Alum.
		40	Sign, Bldg ID		36" x 42"	Garrison Wide	Vinyl Reflective Tape on Alum.
		71	Sign, Street Name			Resident Entry	
		1	Sign, Garrison – Selfridge		60" x 168"	ANGB Entry	Wd & Brk, Ext. Alum. Text,

BLDG FAC #	AREA (SF)	QTY	DESCRIPTION		SIZE	LOCATION	REMARKS
							logo
		1	Sign, Garrison Command		60" x 168"	Bldg 970	Wd & Brk, Ext. Alum. Text, logo
		1	Electronic Sign/Base				Gen Andrews & S.Perimeter
		1	Tank, AST		500	781 Jefferson	Waste Oil
07052		1	Tank/ UST		20000 gal.	781 Jefferson	Gas
FS308		1	Tank, AST		400 gal.	308 Mitchell	Diesel
FS572		1	Tank, AST		1000 gal.	571 N.Perimeter	Gas / diesel Golf Course
		1	Tank UST		10000 gal	571 N.Perimeter	Non-Petroleum/ Waste Water
FS903		1	Tank, AST		1000 gal.	903 Recreation Dr.	Gas / diesel
FS972		1	Tank, AST		200 gal.	972 Jefferson	Gas
FS972		1	Tank, AST		800gal.	972 Jefferson	Diesel
WO104		1	Tank, AST		1000 gal.	104 George	Waste Oil
			WATER LINE		81,317LF		
			GAS LINE		5,570LF		
			SANITARY SEWER		97,428LF		
			STORM SEWER		96,560LF		
			OVERHEAD ELECTRICAL		100,584LF		
			UNDERGRD ELECTRICAL		27,970LF		
			PAVED SURFACES				
			ROADS		119,080SY		
			PARKING		89,874SY		
			DRIVEWAYS		34,253SY		
			SIDEWALKS		41,066SY		
			UNPAVED SURFACES		39,017SY		
			FIRE DETECTION SYSTEM				IN ALL HOUSING QUARTERS
		2	BOAT RAMP				BLDG 903 / 328
		13	STORAGE BLDGS				900 AREA
		32	STORAGE SHEDS				700 AREA
		4	BULLETIN BOARDS		EXTERIOR	WOOD	200, 400, SEBILLE
			TV CAMERAS & RECEIVING EQUIP SYSTEM				12 CAMERAS – Post wide/Sebille Receiving & Monitoring System – Bldg 300
		1	Seawall & Dike system		shoreline		

TRANSFORMERS – Main Post

Pole #	Location	Size
Pad	Bldg 410	750 KVA
280	Marina	50 KVA
Pad	Campground	300 KVA
084	Bldg 902 Bathhouse	50 KVA
087	Bldg 903 Fuel Tank	10 KVA
092	Bldg 903 Marina	112 KVA
042	Bldg 907	167 KVA
045	Bldg 908	75 KVA
049	Bldg 909	167 KVA
070	Bldg 911	167 KVA
057	Bldg 910/919	100 KVA
061	Bldg 922	167 KVA
092	Bldg 923	167 KVA
014	Bldg 929/931	25 KVA
A35	Bldg 935	25 KVA
031	Bldg 936	38 KVA
009	Bldg 939	25 KVA
004	Bldg 943/945	25 KVA
C26	Bldg 944	50 KVA
001	Bldg 951	10 and 25 KVA
A70 & D70	Bldg 970	100 KVA (3ea)
077	Bldg 915	10 KVA
Pad	Bldg 971	300KVA
Pad	Bldg 972	50 KVA
Pole	700 Marina	50 KVA
280	769/770 Willow	50 KVA & 75 KVA
PAD	# 309	50 KVA (3) & 75 KVA (1)
PAD	# 298	300 KVA
PAD	# 411	167 KVA
PAD	# 412	167 KVA
PAD	# 413	167 KVA
PAD	#414	100 KVA
334	775 Oak	75 KVA (1) & 50 KVA (1)
Pad	Bldg 570	500 KVA
Pad	Bldg 571	150 KVA
Pad	Bldg 410	750 KVA
Pole	Top 4 Pool	75 KVA (3)
Pad	Bldg 350	75 KVA
Pad	Bldg 328	225 KVA
Pad	Bldg 325/326	150 KVA
Pad	Bldg 165	150 KVA
Pad	Bldg 168	225 KVA
Pad	Bldg 700	500 KVA
Pad	Bldg 710/714	37.5 KVA
Pad	Bldg 715	150 KVA
Pad	Bldg 104	150 KVA
Pad	Bldg 826	15 KVA (2) & 50 KVA (1)
Pad	Bldg 701	300KVA
Pad	Bldg 781	75 KVA
Pole	Bldg748	25 KVA (3)
617	Bldg 780	50 KVA (3)
4	Bldg 826	25 KVA (3)
Pad	Bldg 780	500 KVA

TRANSFORMERS – Main Post

Pole #	Location	Size
Pad	Bldg 2250	150 KVA
Pad	Bldg 697	37.5 KVA

TRANSFORMERS – Sebille – 64 ea Pole Mount

Bldg	#Address	Description	Quantity
2160	29040 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S S	1
		RANGE ELECT	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	9
2161	29058 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2161	29072 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2162	29100 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFR W/ICEMAKER 20.6	1
		HEATER ELECT. BASEBOARD	9
2163	29112 BEK	BATHTUB	1

Bldg	#Address	Description	Quantity
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2163	29130 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2164	29144 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE 30 INCH 1	
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2165	29125 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2165	29139 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1

Bldg	#Address	Description	Quantity
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	9
2166	29093 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2166	29111 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2167	29065 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	10
2167	29079 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2

Bldg	#Address	Description	Quantity
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	10
2168	29035 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	9
2168	29053 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2173	29417 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2173	29435 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2

Bldg	#Address	Description	Quantity
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	9
2174	29445 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2174	29455 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2175	29465 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2175	29481 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1

Bldg	#Address	Description	Quantity
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2176	29499 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2176	29519 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2177	29498 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2177	29518 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1

Bldg	#Address	Description	Quantity
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2178	29464 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2178	29480 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2179	29444 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2179	29454 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1

Bldg	#Address	Description	Quantity
		HEATER ELECT. BASEBOARD	9
2180	29416 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2180	29434 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2197	29624 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	9
2197	29640 BEK	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	9

Bldg	#Address	Description	Quantity
2198	29660 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2199	29670 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIG W/ ICEMAKER 17 CU	1
2199	29686 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	10
		REFRIG W/ ICEMAKER 20.6	1
2200	29700 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2200	29710 BEK	BASIN BATHROOM	2
		BATHTUB	1

Bldg	#Address	Description	Quantity
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2201	29701 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2201	29711 BEK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2202	29665 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	9
2203	29649 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	10
2203	29665 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	10
2204	29623 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	9
2204	29637 BEK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2133	29503 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1

Bldg	#Address	Description	Quantity
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
2133	29521 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	10
		WATERHEATER ELECT. 40GAL.	1
2149	29028 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2149	29044 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2150	29050 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.5 CU FT	1

Bldg	#Address	Description	Quantity
2150	29068 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	9
2151	29078 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2151	29094 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 IN.	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2152	29106 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2152	29111 BAKER	BATHTUB	1

Bldg	#Address	Description	Quantity
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	10
2152	29128 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2153	29136 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2153	29152 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	9
2154	29160 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1

Bldg	#Address	Description	Quantity
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2154	29178 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	9
2155	29141 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2155	29165 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2156	29136 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2157	29095 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	10
2158	29065 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2158	29083 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2159	29037 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2

Bldg	#Address	Description	Quantity
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2159	29055 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	9
2181	29415 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2181	29433 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2182	29443 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1

Bldg	#Address	Description	Quantity
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2182	29453 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2183	29463 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIG W/ ICEMAKER 20.6	1
2183	29479 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2184	29497 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1

Bldg	#Address	Description	Quantity
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 16.5 CU FT	1
		HEATER ELECT. BASEBOARD	10
2184	29517 BAKER	GEO-THERMO HEAT PUMP	1
		BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2185	29422 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2185	29438 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2186	29446 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9

Bldg	#Address	Description	Quantity
2186	29458 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	9
2187	29470 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT 30 INCH	1
		REFRIG W/ICE MAKER 17 C	1
		HEATER ELECT. BASEBOARD	9
2187	29482 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2188	29496 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2188	29522 BAKER	BATHTUB	1

Bldg	#Address	Description	Quantity
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	9
2189	29626 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	9
2189	29648 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2190	29664 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2190	29680 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1

Bldg	#Address	Description	Quantity
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2191	29696 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2191	29708 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2192	29724 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2193	29721 BAKER	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2193	29725 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2194	29671 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 16.4 CU FT	1
2194	29687 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2195	29659 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1

Bldg	#Address	Description	Quantity
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2196	29625 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2196	29641 BAKER	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2094	48305 BIALAS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	10
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2094	48327 BIALAS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1

Bldg	#Address	Description	Quantity
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2095	48237 BIALAS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2095	49249 BIALAS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
2096	48207 BIALAS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2096	48221 BIALAS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9

Bldg	#Address	Description	Quantity
		REFRIGERATOR 16.5 CU FT	1
2097	48145 BIALAS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2098	48133 BIALAS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2099	48136 BIALAS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2100	48154 BIALAS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 14 CU FT	1

Bldg	#Address	Description	Quantity
2101	48212 BIALAS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2101	48222 BIALAS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECT SELF CLEAN 30	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2102	48250 BIALAS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2102	49236 BIALAS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
2103	48300 BIALAS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1

Bldg	#Address	Description	Quantity
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2104	48330 BIALAS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2130	29421 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2131	29439 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2131	29459 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2132	29467 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2132	29489 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2133	29503 BRAULT	GEO-THERMO HEAT PUMP	1
		BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	9
2134	29500 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECT SELF CLEAN 30	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2134	29520 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2135	29478 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2136	29462 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	12
2137	29448 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2

Bldg	#Address	Description	Quantity
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
2138	29418 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2138	29436 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2139	29115 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2139	29127 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1

Bldg	#Address	Description	Quantity
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	9
2140	29099 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	12
2141	29063 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.5 CU FT	1
		HEATER ELECT. BASEBOARD	9
2141	29081 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2142	29061 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1

Bldg	#Address	Description	Quantity
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2143	29021 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	9
2143	29039 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2169	29042 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2170	29062 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1

Bldg	#Address	Description	Quantity
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	10
2170	29078 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2171	29092 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	9
2171	29110 BRAULT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2172	29118 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1

Bldg	#Address	Description	Quantity
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	9
2172	29134 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2205	29622 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2205	29634 BRAULT	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2206	29644 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1

Bldg	#Address	Description	Quantity
2206	29660 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	9
2207	29676 BRAULT	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2207	29690 BRAULT	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	10
2208	29702 BRAULT	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2208	29714 BRAULT	BASIN BATHROOM	2

Bldg	#Address	Description	Quantity
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT 30 INCH	1
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	9
2210	29703 BRAULT	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2211	29677 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIG W/ ICEMAKER 20.6	1
		HEATER ELECT. BASEBOARD	10
2211	29691 BRAULT	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU.FT.	1
2212	29645 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1

Bldg	#Address	Description	Quantity
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2212	29661 BRAULT	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2213	29621 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2213	29635 BRAULT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	10
2001	29302 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2002	29320 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2003	29328 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2004	29346 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
2005	29364 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1

Bldg	#Address	Description	Quantity
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2006	29380 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17.0 CU FT	1
2007	29394 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2008	29402 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2009	29410 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1

Bldg	#Address	Description	Quantity
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2010	29426 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2011	29444 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
2012	29460 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2013	29476 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1

Bldg	#Address	Description	Quantity
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2014	29492 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2015	29510 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2016	29532 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 14 CU FT	1
2018	29491 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1

Bldg	#Address	Description	Quantity
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2019	29475 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ICE MAKER 17 C	1
2020	29459 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2021	29441 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2022	29425 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1

Bldg	#Address	Description	Quantity
		REFRIGERATOR 17 CU FT	1
2023	29365 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2024	29345 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2025	29325 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2039	29705 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECT SELF CLEAN 30	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1

Bldg	#Address	Description	Quantity
2040	29721 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 20.6 CU FT	1
2041	29735 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2042	29751 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2043	29765 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 IN.	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2043	29771 CRAW	BASIN BATHROOM	2
		BATHTUB	1

Bldg	#Address	Description	Quantity
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2046	29651 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2055	29614 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ICE MAKER 17 C	1
2055	29628 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2056	29636 CRAW	BATHTUB	1
		BASIN BATHROOM	2

Bldg	#Address	Description	Quantity
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2056	29652 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2057	29672 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2058	29696 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2059	29710 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2

Bldg	#Address	Description	Quantity
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2059	29724 CRAW	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	10
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2060	29742 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2060	29758 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU. FT.	1
2061	29766 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2

Bldg	#Address	Description	Quantity
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2061	29778 CRAW	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2026	48695 DOUGLAS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN S/S	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2027	49675 DOUGLAS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
2028	48665 DOUGLAS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1

Bldg	#Address	Description	Quantity
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2029	48740 DOUGLAS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2029	49740 DOUGLAS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
2052	48660 DOUGLAS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2053	48644 DOUGLAS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECT SELF CLEAN 30	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1

Bldg	#Address	Description	Quantity
2054	48625 DOUGLAS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.5 CU FT	1
2123	48421 DOUGLAS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	12
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.5 CU FT	1
2123	48405 DOUGLAS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	12
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.5 CU FT	1
2124	48321 DOUGLAS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9

Bldg	#Address	Description	Quantity
		REFRIGERATOR 17 CU FT	1
2124	49339 DOUGLAS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
2062	29819 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2062	29835 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2063	29767 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2063	29781 HIBBS	BASIN BATHROOM	2
		BATHTUB	1

Bldg	#Address	Description	Quantity
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2064	29735 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE 30 INCH 1	
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ICE MAKER 17 C	1
2064	29747 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2067	29637 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2067	29653 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1

Bldg	#Address	Description	Quantity
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2068	29611 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
2068	29625 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2069	29539 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2070	29523 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2071	29443 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2071	29505 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2072	29431 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
2073	29415 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1

Bldg	#Address	Description	Quantity
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2074	29337 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2074	29353 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2076	29251 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2076	29309 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1

Bldg	#Address	Description	Quantity
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2077	29267 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2078	29221 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ICE MAKER 17 C	1
2122	29522 HIBBS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2122	29537 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9

Bldg	#Address	Description	Quantity
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2223	29608 HIBBS	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
2223	29620 HIBBS	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2224	29626 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2224	29648 HIBBS	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2225	29660 HIBBS	BASIN BATHROOM	2

Bldg	#Address	Description	Quantity
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE 30 INCH 1	
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2231	29746 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2231	29768 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2965	29703 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT 30 INCH	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	9
2965	29717 HIBBS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1

Bldg	#Address	Description	Quantity
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2115	48347 HOENSHELL	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2116	48327 HOENSHELL	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2117	48251 HOENSHELL	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2117	48315 HOENSHELL	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2120	48308 HOENSHELL	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2120	48326 HOENSHELL	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2121	48342 HOENSHELL	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
2121	48354 HOENSHELL	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2

Bldg	#Address	Description	Quantity
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2209	48437 HAWK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	9
2232	48497 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2233	48493 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	10
2233	49475 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1

Bldg	#Address	Description	Quantity
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
2234	48453 HAWK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	9
2234	48461 HAWK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.5 CU FT	1
2235	48628 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	9
2235	48634 HAWK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9

Bldg	#Address	Description	Quantity
		REFRIGERATOR 16.4 CU FT	1
2236	48596 HAWK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	9
2236	48604 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2237	48562 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2237	48574 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1

Bldg	#Address	Description	Quantity
2238	48548 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 IN. 1	
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2238	48552 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2239	48538 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	9
2239	48542 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2240	48532 HAWK	BASIN BATHROOM	2
		SHOWER	1

Bldg	#Address	Description	Quantity
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2240	48534 HAWK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2241	48526 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	9
2241	48528 HAWK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2242	48518 HAWK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 16.5 CU FT	1
		HEATER ELECT. BASEBOARD	10
2242	48522 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
		HEATER ELECT. BASEBOARD	10
2243	48502 HAWK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2243	48512 HAWK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2079	48281 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2

Bldg	#Address	Description	Quantity
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2080	48251 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2080	48265 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2082	48205 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
2083	48141 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1

Bldg	#Address	Description	Quantity
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2083	48157 N. BROOKS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2084	48111 N. BROOKS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIG W/ ICEMAKER 20.6	1
2084	48131 N. BROOKS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	10
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
2090	48128 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1

Bldg	#Address	Description	Quantity
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIG W/ICE MAKER 17 C	1
2090	48144 N. BROOKS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2091	48156 N. BROOKS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2091	49208 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
2092	48222 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	10
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1

Bldg	#Address	Description	Quantity
2093	48370 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
2093	49252 N. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
2105	48339 PEARL	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
2106	48319 PEARL	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2107	48301 PEARL	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
2108	48227 PEARL	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2108	48243 PEARL	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2109	48211 PEARL	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.5 CU FT	1
2110	48135 PEARL	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2

Bldg	#Address	Description	Quantity
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2110	48151 PEARL	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2111	48214 PEARL	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2111	48230 PEARL	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2112	48244 PEARL	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1

Bldg	#Address	Description	Quantity
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2112	48304 PEARL	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ICE MAKER 17 C	1
2113	48324 PEARL	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2114	48342 PEARL	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2085	29016 PEARSON	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1

Bldg	#Address	Description	Quantity
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
2085	29034 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 20.6 CU FT	1
2086	29046 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2086	29064 PEARSON	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2087	29076 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9

Bldg	#Address	Description	Quantity
		REFRIGERATOR 17 CU FT	1
2088	29094 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECT SELF CLEAN 30	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
2089	29108 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
2089	29124 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECT 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2118	29443 PEARSON	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1

Bldg	#Address	Description	Quantity
2118	29461 PEARSON	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2119	29521 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2119	29533 PEARSON	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 16.4 CU FT	1
2125	29526 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2125	29540 PEARSON	BASIN BATHROOM	2
		BATHTUB	1

Bldg	#Address	Description	Quantity
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2126	29512 PEARSON	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
2127	29452 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	10
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2127	29468 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2128	29440 PEARSON	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1

Bldg	#Address	Description	Quantity
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2129	29420 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		RANGE ELECTRIC 30 INCH	1
		DISWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2214	29618 PEARSON	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2214	29632 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2215	29646 PEARSON	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1

Bldg	#Address	Description	Quantity
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2216	29662 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2216	29678 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2217	29694 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU.FT.	1
2217	29706 PEARSON	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1

Bldg	#Address	Description	Quantity
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU. FT.	1
2218	29716 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN S/S	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2218	29726 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 16.4 CU FT	1
		HEATER ELECT. BASEBOARD	9
2219	29683 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN S/S	1
		DISPOSAL GARBAGE	1
		DISWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	9
2221	29647 PEARSON	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1

Bldg	#Address	Description	Quantity
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2222	29625 PEARSON	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		DISHWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2222	29635 PEARSON	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2030	29515 SALITRNIK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		SINK KITCHEN	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
2226	48477 SALITRNIK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN	1
		DISHWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9

Bldg	#Address	Description	Quantity
2226	48483 SALITRNIK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISHWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2227	48451 SALITRNIK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	9
2227	48465 SALITRNIK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISHWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2228	48448 SALITRNIK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIG W/ ICEMAKER 17 CU	1
		HEATER ELECT. BASEBOARD	10
2228	48462 SALITRNIK	BASIN BATHROOM	2

Bldg	#Address	Description	Quantity
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU.FT.	1
2229	48468 SALITRNIK	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		RANGE ELECT SELF CLEAN 30	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU FT	1
2229	48474 SALITRNIK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISHWASHER BUILTIN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ICE MAKER 17 C	1
		HEATER ELECT. BASEBOARD	10
2230	48494 SALITRNIK	BASIN BATHROOM	2
		SHOWER	1
		BATHTUB	1
		HEATER ELECT. SPACE	2
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	9
2144	47941 S. BROOKS	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1

Bldg	#Address	Description	Quantity
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
		HEATER ELECT. BASEBOARD	10
2144	47955 S. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		RANGE 30 INCH	1
		DISHWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	10
		REFRIGERATOR 17 CU.FT.	1
2145	47911 S. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2145	47931 S. BROOKS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
		HEATER ELECT. BASEBOARD	9
2146	47861 S. BROOKS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2

Bldg	#Address	Description	Quantity
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		DISHWASHER BUILTIN	1
		RANGE ELECT SELF CLEAN 30	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU.FT.	1
2146	47901 S. BROOKS	BATHTUB	1
		BASIN BATHROOM	2
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU. FT.	1
2147	47833 S. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2147	47851 S. BROOKS	GEO-THERMO HEAT PUMP	1
		BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		RANGE HOOD W/ EXHAUST FAN	1
		FAN EXHAUST	2
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		WATERHEATER ELECT. 40GAL.	1
		REFRIG W/ ICEMAKER 17 CU	1
2148	47821 S. BROOKS	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1

Bldg	#Address	Description	Quantity
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISHWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2031	29525 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
2032	29541 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		SINK KITCHEN	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISHWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 17 CU FT	1
2033	29561 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		SINK KITCHEN	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		RANGE ELECT 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2034	29579 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		COMMODE	2
		SHOWER	1
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECT SELF CLEAN 30	1

Bldg	#Address	Description	Quantity
		DISHWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU. FT.	1
2036	29623 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		RANGE 30 INCH	1
		DISHWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
2037	29641 WRIGHT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISHWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2038	29659 WRIGHT	BATHTUB	1
		BASIN BATHROOM	2
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		SINK KITCHEN	1
		RANGE HOOD W/ EXHAUST FAN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISHWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2047	29650 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		DISHWASHER BUILTIN	1

Bldg	#Address	Description	Quantity
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIG W/ ICEMAKER 17 CU	1
2048	29626 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISHWASHER BUILTIN	1
		WATERHEATER ELECT. 40GAL.	1
		HEATER ELECT. BASEBOARD	9
		REFRIGERATOR 16.4 CU FT	1
2049	29604 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		HEATER ELECT. SPACE	2
		FAN EXHAUST	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		DISHWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU.FT.	1
2050	29580 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		DISHWASHER BUILTIN	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1
		REFRIGERATOR 17 CU FT	1
2051	29558 WRIGHT	BASIN BATHROOM	2
		BATHTUB	1
		SHOWER	1
		COMMODE	2
		FAN EXHAUST	2
		HEATER ELECT. SPACE	2
		RANGE HOOD W/ EXHAUST FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		DISHWASHER BUILTIN	1
		RANGE ELECTRIC 30 INCH	1
		HEATER ELECT. BASEBOARD	9
		WATERHEATER ELECT. 40GAL.	1

Bldg	#Address	Description	Quantity
		REFRIGERATOR 16.4 CU FT	1
227	227A GEORGE	SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		DIPOSAL GARBAGE	1
		TUB LAUNDRY	1
		DOORS EXTERIOR, BILCO	1
		RANGE ELECT SELF CLEAN 30	1
		BASIN BATHROOM	1
		FAN ATTIC	1
		WATER HEATER, GAS 30 GAL.	1
		REFRIGERATOR 17 CU FT	1
		BATHTUB	1
		RADIATOR, HOT WATER	9
		COMMODE	1
227	227B GEORGE	DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		DOORS EXTERIOR, BILCO	1
		RADIATOR, HOT WATER	9
		COMMODE	1
		TUB LAUNDRY	1
		BASIN BATHROOM	1
		REFRIGERATOR 17 CU FT	1
		RANGE ELECT 30 INCH	1
		FAN ATTIC	1
		WATER HEATER, GAS 30 GAL.	1
		BATHTUB	1
229	229A GEORGE	DISHWASHER	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		REFRIGERATOR 17 CU FT	1
		BASIN BATHROOM	1
		RADIATOR, HOT WATER	9
		TUB LAUNDRY	1
		RANGE ELECTRIC 30 INCH	1
		BATHTUB	1
		WATER HEATER, GAS 30 GAL.	1
		FAN ATTIC	1
		DOORS EXTERIOR, BILCO	1
		COMMODE	1
229	229B GEORGE	SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		DISHWASHER	1
		DOORS EXTERIOR, BILCO	1
		BASIN BATHROOM	1
		TUB LAUNDRY	1
		REFRIGERATOR 17 CU FT	1
		RANGE ELECTRIC 30 INCH	1
		COMMODE	1
		FAN ATTIC	1
		WATER HEATER, GAS 30 GAL.	1
		BATHTUB	1
		RADIATOR, HOT WATER	9
231	231A GEORGE	SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		DISPOSAL GARBAGE	1
		DOORS EXTERIOR, BILCO	1

Bldg	#Address	Description	Quantity
		WATER HEATER, GAS 30 GAL.	1
		TUB LAUNDRY	1
		RANGE ELECTRIC 30 INCH	1
		BATHTUB	1
		REFRIGERATOR 17 CU. FT.	1
		BASIN BATHROOM	1
		COMMODE	1
		RADIATOR, HOT WATER	9
		FAN ATTIC	1
231	231B GEORGE	DISPOSAL GARBAGE	1
		DISHWASHER	1
		SINK KITCHEN STAINLESS	1
		WATER HEATER, GAS 30 GAL.	1
		DOORS EXTERIOR, BILCO	1
		RANGE ELECTRIC 30 INCH	1
		FAN ATTIC	1
		BASIN BATHROOM	1
		REFRIGERATOR 17 CU. FT.	1
		BATHTUB	1
		RADIATOR, HOT WATER	9
		TUB LAUNDRY	1
		COMMODE	1
233	233A GEORGE	DISPOSAL GARBAGE	1
		DISHWASHER	1
		SINK KITCHEN STAINLESS	1
		TUB LAUNDRY	1
		COMMODE	1
		BATHTUB	1
		FAN ATTIC	1
		DOORS EXTERIOR, BILCO	1
		BASIN BATHROOM	1
		REFRIGERATOR 17 CU FT	1
		WATER HEATER, GAS 30 GAL.	1
		RANGE ELECTRIC 30 INCH	1
		RADIATOR, HOT WATER	9
233	233B GEORGE	DISHWASHER	1
		SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		DOORS EXTERIOR, BILCO	1
		RANGE ELECTRIC 30 INCH	1
		COMMODE	1
		RADIATOR, HOT WATER	9
		FAN ATTIC	1
		REFRIGERATOR 16.4 CU FT	1
		BATHTUB	1
		WATER HEATER, GAS 30 GAL.	1
		BASIN BATHROOM	1
		TUB LAUNDRY	1
235	235A GEORGE	SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		DISPOSAL GARBAGE	1
		BASIN BATHROOM	1
		WATER HEATER, GAS 30 GAL.	1
		FAN ATTIC	1
		RANGE ELECTRIC 30 INCH	1
		DOORS EXTERIOR, BILCO	1
		TUB LAUNDRY	1
		BATHTUB	1

Bldg	#Address	Description	Quantity
		RADIATOR, HOT WATER	9
		COMMODE	1
		REFRIGERATOR 17 CU FT	1
235	235B GEORGE	SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		DISPOSAL GARBAGE	1
		BASIN BATHROOM	1
		RADIATOR, HOT WATER	9
		WATER HEATER, GAS 30 GAL.	1
		RANGE ELECT 30 INCH	1
		COMMODE	1
		TUB LAUNDRY	1
		BATHTUB	1
		DOORS EXTERIOR, BILCO	1
		REFRIGERATOR 16.4	1
		FAN ATTIC	1
256	256A MITCHELL	DISHWASHER	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		TUB LAUNDRY	1
		COMMODE	1
		BATHTUB	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		WATER HEATER, GAS 30 GAL.	1
		FAN ATTIC	1
		RADIATOR, HOT WATER	7
		BASIN BATHROOM	1
256	256B MITCHELL	DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		BATHTUB	1
		RANGE ELECT SELF CLEAN 30	1
		WATER HEATER, GAS 30 GAL.	1
		RADIATOR, HOT WATER	7
		BASIN BATHROOM	1
		FAN ATTIC	1
		TUB LAUNDRY	1
		REFRIG W/ICE MAKER 17 C	1
		COMMODE	1
257	257A MITCHELL	DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		BASIN BATHROOM	1
		COMMODE	1
		FAN ATTIC	1
		RANGE ELECTRIC 30 INCH	1
		WATER HEATER, GAS 30 GAL.	1
		TUB LAUNDRY	1
		RADIATOR, HOT WATER	7
		BATHTUB	1
		REFRIGERATOR 17 CU.FT.	1
257	257B MITCHELL	DISHWASHER	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		COMMODE	1
		FAN ATTIC	1

Bldg	#Address	Description	Quantity
		BASIN BATHROOM	1
		BATHTUB	1
		RADIATOR, HOT WATER	7
		REFRIGERATOR 17 CU FT	1
		RANGE ELECTRIC 30 INCH	1
		WATER HEATER, GAS 30 GAL.	1
		TUB LAUNDRY	1
258	258A MITCHELL	DISHWASHER	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		RANGE ELECTRIC 30 INCH	1
		TUB LAUNDRY	1
		RADIATOR, HOT WATER	7
		COMMODE	1
		REFRIG W/ ICEMAKER 17 CU	1
		BASIN BATHROOM	1
		BATHTUB	1
		FAN ATTIC	1
		WATER HEATER, GAS 30 GAL.	1
258	258B MITCHELL	DISHWASHER	1
		SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		BASIN BATHROOM	1
		REFRIGERATOR 17 CU FT	1
		RADIATOR, HOT WATER	7
		COMMODE	1
		WATER HEATER, GAS 30 GAL.	1
		RANGE ELECTRIC 30 INCH	1
		FAN ATTIC	1
		TUB LAUNDRY	1
		BATHTUB	1
259	259A MITCHELL	SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		DISHWASHER	1
		RANGE ELECTRIC 30 INCH	1
		BASIN BATHROOM	1
		TUB LAUNDRY	1
		REFRIG W/ ICEMAKER 17 CU	1
		COMMODE	1
		WATER HEATER, GAS 30 GAL.	1
		FAN ATTIC	1
		BATHTUB	1
		RADIATOR, HOT WATER	7
259	259B MITCHELL	SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 17 CU FT	1
		RANGE ELECTRIC 30 INCH	1
		TUB LAUNDRY	1
		COMMODE	1
		BATHTUB	1
		WATER HEATER, GAS 30 GAL.	1
		RADIATOR, HOT WATER	7
		BASIN BATHROOM	1
		FAN ATTIC	1
260	260A MITCHELL	SINK KITCHEN STAINLESS	1
		DISHWASHER	1

Bldg	#Address	Description	Quantity
		DISPOSAL GARBAGE	1
		BATHTUB	1
		TUB LAUNDRY	1
		COMMODE	1
		REFRIGERATOR 16.4 CU FT	1
		BASIN BATHROOM	1
		FAN ATTIC	1
		WATER HEATER, GAS 30 GAL.	1
		RADIATOR, HOT WATER	7
		RANGE 30 INCH	1
260	260B MITCHELL	SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		DISPOSAL GARBAGE	1
		BATHTUB	1
		RADIATOR, HOT WATER	7
		BASIN BATHROOM	1
		REFRIGERATOR 17 CU. FT.	1
		TUB LAUNDRY	1
		FAN ATTIC	1
		RANGE ELECTRIC 30 INCH	1
		COMMODE	1
		WATER HEATER, GAS 30 GAL.	1
261	261A MITCHELL	DISHWASHER	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		FAN ATTIC	1
		BASIN BATHROOM	1
		RADIATOR, HOT WATER	7
		RANGE ELECTRIC 30 INCH	1
		WATER HEATER, GAS 30 GAL.	1
		COMMODE	1
		REFRIGERATOR 17 CU FT	1
		BATHTUB	1
		TUB LAUNDRY	1
261	261B MITCHELL	DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		RANGE ELECTRIC 30 INCH	1
		RADIATOR, HOT WATER	7
		FAN ATTIC	1
		REFRIG W/ICE MAKER 17 C	1
		WATER HEATER, GAS 30 GAL.	1
		COMMODE	1
		BASIN BATHROOM	1
		TUB LAUNDRY	1
		BATHTUB	1
262	262A MITCHELL	SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		DISPOSAL GARBAGE	1
		RANGE 30 INCH	1
		TUB LAUNDRY	1
		RADIATOR, HOT WATER	7
		WATER HEATER, GAS 30 GAL.	1
		COMMODE	1
		REFRIGERATOR 17 CU FT	1
		BASIN BATHROOM	1
		BATHTUB	1
		FAN ATTIC	1

Bldg	#Address	Description	Quantity
262	262B MITCHELL	DISPOSAL GARBAGE	1
		DISHWASHER	1
		SINK KITCHEN STAINLESS	1
		TUB LAUNDRY	1
		REFRIGERATOR 17 CU FT	1
		RADIATOR, HOT WATER	7
		RANGE ELECTRIC 30 INCH	1
		BASIN BATHROOM	1
		FAN ATTIC	1
		COMMODE	1
		BATHTUB	1
		WATER HEATER, GAS 30 GAL.	1
263	263A MITCHELL	DISPOSAL GARBAGE	1
		DISHWASHER	1
		SINK KITCHEN STAINLESS	1
		RADIATOR, HOT WATER	7
		WATER HEATER, GAS 30 GAL.	1
		BASIN BATHROOM	1
		BATHTUB	1
		REFRIG W/ICE MAKER 17 C	1
		FAN ATTIC	1
		RANGE ELECTRIC 30 INCH	1
		TUB LAUNDRY	1
		COMMODE	1
263	263B MITCHELL	SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		DISHWASHER	1
		BATHTUB	1
		REFRIGERATOR 17 CU FT	1
		TUB LAUNDRY	1
		COMMODE	1
		WATER HEATER, GAS 30 GAL.	1
		FAN ATTIC	1
		RANGE ELECTRIC 30 INCH	1
		BASIN BATHROOM	1
		RADIATOR, HOT WATER	7
264	264A MITCHELL	DISPOSAL GARBAGE	1
		SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		WATER HEATER, GAS 30 GAL.	1
		RANGE ELECT 30 INCH	1
		COMMODE	1
		BASIN BATHROOM	1
		RADIATOR, HOT WATER	7
		BATHTUB	1
		TUB LAUNDRY	1
		REFRIGERATOR 17 CU FT	1
		FAN ATTIC	1
264	264B MITCHELL	SINK KITCHEN STAINLESS	1
		DISHWASHER	1
		DISPOSAL GARBAGE	1
		WATER HEATER, GAS 30 GAL.	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		TUB LAUNDRY	1
		COMMODE	1
		RADIATOR, HOT WATER	7

Bldg	#Address	Description	Quantity
		FAN ATTIC	1
		BATHTUB	1
		BASIN BATHROOM	1
265	265A MITCHELL	DISHWASHER	1
		SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 16.4 CU FT	1
		RADIATOR, HOT WATER	7
		TUB LAUNDRY	1
		COMMODE	1
		BASIN BATHROOM	1
		RANGE ELECT 30 INCH	1
		FAN ATTIC	1
		WATER HEATER, GAS 30 GAL.	1
		BATHTUB	1
265	265B MITCHELL	SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		DISHWASHER	1
		RANGE ELECTRIC 30 INCH	1
		FAN ATTIC	1
		REFRIGERATOR 13.5 CU FT	1
		COMMODE	1
		BASIN BATHROOM	1
		TUB LAUNDRY	1
		WATER HEATER, GAS 30 GAL.	1
		RADIATOR, HOT WATER	7
		BATHTUB	1
266	266A MITCHELL	SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		DISHWASHER	1
		BASIN BATHROOM	1
		BATHTUB	1
		WATER HEATER, GAS 30 GAL.	1
		FAN ATTIC	1
		RANGE ELECT 30 INCH	1
		COMMODE	1
		TUB LAUNDRY	1
		REFRIGERATOR 17 CU FT	1
		RADIATOR, HOT WATER	7
266	266B MITCHELL	DISHWASHER	1
		SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		RADIATOR, HOT WATER	7
		BATHTUB	1
		REFRIGERATOR 17 CU. FT.	1
		BASIN BATHROOM	1
		COMMODE	1
		WATER HEATER, GAS 30 GAL.	1
		TUB LAUNDRY	1
		RANGE ELECTRIC 30 INCH	1
		FAN ATTIC	1
267	267A MITCHELL	SINK KITCHEN STAINLESS	1
		DISPOSAL GARBAGE	1
		DISHWASHER	1
		BATHTUB	1
		COMMODE	1
		WATER HEATER, GAS 30 GAL.	1

Bldg	#Address	Description	Quantity
		TUB LAUNDRY	1
		FAN ATTIC	1
		BASIN BATHROOM	1
		RADIATOR, HOT WATER	7
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU FT	1
267	267B MITCHELL	DISHWASHER	1
		DISPOSAL GARBAGE	1
		COMMODE	1
		BASIN BATHROOM	1
		REFRIGERATOR 17 CU FT	1
		BATHTUB	1
		RADIATOR, HOT WATER	7
		TUB LAUNDRY	1
		RANGE ELECT 30 INCH	1
		SINK KITCHEN STAINLESS	1
		FAN ATTIC	1
		WATER HEATER, GAS 30 GAL.	1
268	268A MITCHELL	DISPOSAL GARBAGE	1
		DISHWASHER	1
		RADIATOR, HOT WATER	7
		WATER HEATER, GAS 30 GAL.	1
		BASIN BATHROOM	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN STAINLESS	1
		TUB LAUNDRY	1
		BATHTUB	1
		FAN ATTIC	1
		COMMODE	1
		RANGE ELECT SELF CLEAN 30	1
268	268B MITCHELL	DISHWASHER	1
		DISPOSAL GARBAGE	1
		FAN ATTIC	1
		WATER HEATER, GAS 30 GAL.	1
		COMMODE	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN STAINLESS	1
		RANGE ELECT SELF CLEAN 30	1
		TUB LAUNDRY	1
		BATHTUB	1
		RADIATOR, HOT WATER	7
		BASIN BATHROOM	1
269	269A MITCHELL	DISPOSAL GARBAGE	1
		DISHWASHER	1
		RANGE ELEBTRIC 30 INCH	1
		WATER HEATER, GAS 30 GAL.	1
		BASIN BATHROOM	1
		RADIATOR, HOT WATER	7
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN STAINLESS	1
		TUB LAUNDRY	1
		COMMODE	1
		FAN ATTIC	1
		BATHTUB	1
269	269B MITCHELL	DISHWASHER	1
		DISPOSAL GARBAGE	1
		COMMODE	1

Bldg	#Address	Description	Quantity
		BASIN BATHROOM	1
		REFRIGERATOR 16.4 CU FT	1
		RADIATOR, HOT WATER	7
		RANGE ELECTRIC 30 INCH	1
		WATER HEATER, GAS 30 GAL.	1
		BATHTUB	1
		FAN ATTIC	1
		SINK KITCHEN STAINLESS	1
		TUB LAUNDRY	1
270	270A MITCHELL	DISPOSAL GARBAGE	1
		DISHWASHER	1
		TUB LAUNDRY	1
		COMMODE	1
		SINK KITCHEN STAINLESS	1
		BATHTUB	1
		FAN ATTIC	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU. FT.	1
		BASIN BATHROOM	1
		WATER HEATER, GAS 30 GAL.	1
		RADIATOR, HOT WATER	7
270	270B MITCHELL	DISPOSAL GARBAGE	1
		DISHWASHER	1
		FAN ATTIC	1
		COMMODE	1
		WATER HEATER, GAS 30 GAL.	1
		TUB LAUNDRY	1
		BASIN BATHROOM	1
		RANGE ELECTRIC 30 INCH	1
		SINK KITCHEN STAINLESS	1
		BATHTUB	1
		RADIATOR, HOT WATER	7
		REFRIGERATOR 17 CU.FT.	1
774	774A OAK	RANGE ELECTRIC 30 INCH	1
		RADIATOR HOT WATER	8
		HOOD RANGE W/ FAN	1
		SINK KITCHEN	1
		DISH WASHER	1
		REFRIGERATOR 17 CU.FT.	1
		DISPOSAL GARBAGE	1
		BATHTUB	1
		COMMODE	1
		SINK BATHROOM	1
774	774B OAK	HOOD RANGE W/ FAN	1
		SINK KITCHEN	1
		REFRIGERATOR 17 CU. FT.	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 30 INCH	1
		RADIATOR HOT WATER	8
		DISH WASHER	1
		COMMODE	1
		SINK BATHROOM	1
		BATHTUB	1
774	774C OAK	DISPOSAL GARBAGE	1
		DISH WASHER	1

Bldg	#Address	Description	Quantity
		REFRIGERATOR 17 CU FT	1
		RADIATOR HOT WATER	8
		RANGE ELECT SELF CLEAN 30	1
		HOOD RANGE W/ FAN	1
		SINK KITCHEN	1
		SINK BATHROOM	1
		COMMODE	1
		BATHTUB	1
774	774D OAK	SINK KITCHEN	1
		RANGE ELECT 30 INCH	1
		HOOD RANGE W/ FAN	1
		RADIATOR HOT WATER	8
		REFRIGERATOR 20.6 CU FT	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		COMMODE	1
		BATHTUB	1
		SINK BATHROOM	1
774	774E OAK	HOOD RANGE W/ FAN	1
		RANGE ELECTRIC 30 INCH	1
		RADIATOR HOT WATER	8
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 20.6 CU FT	1
		DISH WASHER	1
		BATHTUB	1
		COMMODE	1
		SINK BATHROOM	1
774	774F OAK	SINK KITCHEN	1
		RANGE ELECTRIC 30 INCH	1
		HOOD RANGE W/ FAN	1
		REFRIGERATOR 17 CU. FT.	1
		DISPOSAL GARBAGE	1
		RADIATOR HOT WATER	8
		DISH WASHER	1
		SINK BATHROOM	1
		COMMODE	1
		BATHTUB	1
774	774G OAK	DISH WASHER	1
		RANGE ELECTRIC 30 INCH	1
		HOOD RANGE W/ FAN	1
		RADIATOR HOT WATER	8
		REFRIG W/ICE MAKER 17 C	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		SINK BATHROOM	1
		BATHTUB	1
		COMMODE	1
774	774H OAK	REFRIGERATOR 16.4 CU FT	1
		HOOD RANGE W/ FAN	1
		RANGE ELECTRIC 30 INCH	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		RADIATOR HOT WATER	8
		SINK BATHROOM	1
		COMMODE	1

Bldg	#Address	Description	Quantity
		BATHTUB	1
775	775A OAK	REFRIGERATOR 17 CU.FT.	1
		DISPOSAL GARBAGE	1
		DISH WASHER	1
		RANGE ELECTRIC 30 INCH	1
		HOOD RANGE W/ FAN	1
		SINK KITCHEN	1
		RADIATOR HOT WATER	8
		COMMODE	1
		SINK BATHROOM	1
		BATHTUB	1
775	775B OAK	RANGE ELECT 30 INCH	1
		RADIATOR HOT WATER	8
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		HOOD RANGE W/ FAN	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		BATHTUB	1
		COMMODE	1
		SINK BATHROOM	1
775	775C OAK	DISPOSAL GARBAGE	1
		HOOD RANGE W/ FAN	1
		SINK KITCHEN	1
		REFRIGERATOR 17 CU FT	1
		RADIATOR HOT WATER	8
		RANGE ELECTRIC 30 INCH	1
		DISH WASHER	1
		SINK BATHROOM	1
		BATHTUB	1
		COMMODE	1
775	775D OAK	SINK KITCHEN	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 30 INCH	1
		RADIATOR HOT WATER	8
		REFRIGERATOR 17 CU.FT.	1
		HOOD RANGE W/ FAN	1
		COMMODE	1
		SINK BATHROOM	1
		BATHTUB	1
775	775E OAK	RADIATOR HOT WATER	8
		RANGE ELECTRIC 30 INCH	1
		SINK KITCHEN	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		HOOD RANGE W/ FAN	1
		DISPOSAL GARBAGE	1
		COMMODE	1
		BATHTUB	1
		SINK BATHROOM	1
775	775F OAK	REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		RADIATOR HOT WATER	8
		DISPOSAL GARBAGE	1
		HOOD RANGE W/ FAN	1

Bldg	#Address	Description	Quantity
		RANGE ELECTRIC 30 INCH	1
		DISH WASHER	1
		BATHTUB	1
		SINK BATHROOM	1
		COMMODE	1
775	775G OAK	SINK KITCHEN	1
		HOOD RANGE W/ FAN	1
		RANGE ELECTRIC 30 INCH	1
		DISPOSAL GARBAGE	1
		RADIATOR HOT WATER	8
		DISH WASHER	1
		REFRIGERATOR 17 CU.FT.	1
		BATHTUB	1
		COMMODE	1
		SINK BATHROOM	1
775	775H OAK	RADIATOR HOT WATER	8
		HOOD RANGE W/ FAN	1
		REFRIGERATOR 16.4 CU FT	1
		RANGE ELECT 30 INCH	1
		SINK KITCHEN	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		BATHTUB	1
		COMMODE	1
		SINK BATHROOM	1
769	769A WILLOW	DISPOSAL GARBAGE	1
		HOOD RANGE W/ FAN	1
		DISH WASHER	1
		SINK KITCHEN	1
		BATHTUB	1
		RADIATOR HOT WATER	8
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 17 CU.FT.	1
		SINK BATHROOM	1
		COMMODE	1
769	769B WILLOW	DISH WASHER	1
		DISPOSAL GARBAGE	1
		HOOD RANGE W/ FAN	1
		BATHTUB	1
		SINK KITCHEN	1
		REFRIGERATOR 17 CU FT	1
		RANGE ELECT 30 INCH	1
		RADIATOR HOT WATER	8
		COMMODE	1
		SINK BATHROOM	1
769	769C WILLOW	SINK KITCHEN	1
		DISH WASHER	1
		RANGE ELECTRIC 30 INCH	1
		REFRIGERATOR 16.4 CU FT	1
		RADIATOR HOT WATER	8
		HOOD RANGE W/ FAN	1
		DISPOSAL GARBAGE	1
		BATHTUB	1
		COMMODE	1
		SINK BATHROOM	1
769	769D WILLOW	RADIATOR HOT WATER	8

Bldg	#Address	Description	Quantity
		SINK KITCHEN	1
		HOOD RANGE W/ FAN	1
		RANGE ELECTRIC 30 INCH	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 16.4 CU FT	1
		COMMODE	1
		BATHTUB	1
		SINK BATHROOM	1
769	769E WILLOW	RADIATOR HOT WATER	8
		RANGE ELECTRIC 30 INCH	1
		DISH WASHER	1
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 16.4 CU FT	1
		HOOD RANGE W/ FAN	1
		SINK BATHROOM	1
		COMMODE	1
		BATHTUB	1
769	769F WILLOW	RANGE ELECTRIC 30 INCH	1
		DISH WASHER	1
		RADIATOR HOT WATER	8
		SINK KITCHEN	1
		REFRIGERATOR 17 CU FT	1
		HOOD RANGE W/ FAN	1
		DISPOSAL GARBAGE	1
		SINK BATHROOM	1
		COMMODE	1
		BATHTUB	1
769	769G WILLOW	DISPOSAL GARBAGE	1
		DISH WASHER	1
		REFRIGERATOR 17 CU FT	1
		HOOD RANGE W/ FAN	1
		RADIATOR HOT WATER	8
		SINK KITCHEN	1
		RANGE ELECTRIC 30 INCH	1
		SINK BATHROOM	1
		BATHTUB	1
		COMMODE	1
769	769H WILLOW	HOOD RANGE W/ FAN	1
		DISH WASHER	1
		RANGE ELECTRIC 30 INCH	1
		RADIATOR HOT WATER	8
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		REFRIGERATOR 16.4 CU FT	1
		BATHTUB	1
		COMMODE	1
		SINK BATHROOM	1
770	770A WILLOW	HOOD RANGE W/ FAN	1
		RADIATOR HOT WATER	8
		RANGE ELECTRIC 30 INCH	1
		DISH WASHER	1
		REFRIGERATOR 17 CU.FT.	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		SINK BATHROOM	1

Bldg	#Address	Description	Quantity
		COMMODE	1
		BATHTUB	1
770	770B WILLOW	REFRIGERATOR 17 CU FT	1
		RADIATOR HOT WATER	8
		SINK KITCHEN	1
		RANGE ELECTRIC 30 INCH	1
		HOOD RANGE W/ FAN	1
		DISPOSAL GARBAGE	1
		DISH WASHER	1
		BATHTUB	1
		SINK BATHROOM	1
		COMMODE	1
770	770C WILLOW	RANGE ELECTRIC 30 INCH	1
		DISH WASHER	1
		HOOD RANGE W/ FAN	1
		REFRIGERATOR 17 CU FT	1
		RADIATOR HOT WATER	8
		SINK KITCHEN	1
		DISPOSAL GARBAGE	1
		COMMODE	1
		SINK BATHROOM	1
		BATHTUB	1
770	770D WILLOW	HOOD RANGE W/ FAN	1
		RANGE ELECTRIC 30 INCH	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		REFRIGERATOR 17 CU. FT.	1
		RADIATOR HOT WATER	8
		SINK BATHROOM	1
		BATHTUB	1
		COMMODE	1
770	770E WILLOW	SINK KITCHEN	1
		REFRIGERATOR 17 CU.FT.	1
		RANGE ELECT SELF CLEAN 30	1
		HOOD RANGE W/ FAN	1
		DISPOSAL GARBAGE	1
		RADIATOR HOT WATER	8
		DISH WASHER	1
		COMMODE	1
		SINK BATHROOM	1
		BATHTUB	1
770	770F WILLOW	RADIATOR HOT WATER	8
		RANGE ELECTRIC 30 INCH	1
		DISPOSAL GARBAGE	1
		DISH WASHER	1
		SINK KITCHEN	1
		REFRIGERATOR 16.4 CU FT	1
		HOOD RANGE W/ FAN	1
		COMMODE	1
		SINK BATHROOM	1
		BATHTUB	1
770	770G WILLOW	DISH WASHER	1
		RADIATOR HOT WATER	8
		HOOD RANGE W/ FAN	1
		DISPOSAL GARBAGE	1

Bldg	#Address	Description	Quantity
		SINK KITCHEN	1
		REFRIGERATOR 17 CU FT	1
		RANGE ELECTRIC 30 INCH	1
		COMMODE	1
		SINK BATHROOM	1
		BATHTUB	1
770	770H WILLOW	REFRIGERATOR 17 CU FT	1
		RANGE ELECTRIC 30 INCH	1
		DISPOSAL GARBAGE	1
		SINK KITCHEN	1
		RADIATOR HOT WATER	8
		HOOD RANGE W/ FAN	1
		DISH WASHER	1
		BATHTUB	1
		SINK BATHROOM	1
		COMMODE	1
422	422 GEORGE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR EL. 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN (40 I)	1
		REFRIG 16.4 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	2
		COMMODE	2
		SINK BATHROOM	2
		SUMP PUMP	1
		RADIATOR HOT WATER 21	
423	423 GEORGE	BOILER HOT WATER	1
		REFRIG 20.6 CU FT	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 IN.	1
		FAN ATTIC	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	2
		COMMODE	2
		SINK BATHROOM	2
		SUMP PUMP	1
		RADIATOR HOT WATER 21	
424	424 GEORGE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	2
		DISPOSAL GARBAGE	1
		RANGE ELEC 40 IN.	1
		REFRIG W/ICEMAKER 20.6	1
		DISH WASHER	1
		SINK KITCHEN	1
		DOOR BASEMENT BILCO	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		HOOD RANGE	1
		RADIATOR HOT WATER 19	

Bldg	#Address	Description	Quantity
		SECURITY ALARM SYSTEM	1
425	GEORGE	2 CAR GARAGE FOR 422/423	
426	426 GEORGE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	2
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 IN.	1
		REFRIG,W/ICEMAKER 19.7	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	2
		DOOR BASEMENT BILCO	1
		RADIATOR HOT WATER	19
		SECURITY SYSTEM	1
427	427 GEORGE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE, ELECTRIC 40"	1
		REFRIG W/ICEMKER 17 CU	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	2
		COMMODE	2
		SINK BATHROOM	2
		SUMP PUMP	1
		RADIATOR HOT WATER	21
428	428 GEORGE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC. 40 I	1
		REFRIG, (16.4 CU FT)	1
		DISH WASHER	1
		SINK BATHROOM	2
		HOOD RANGE	1
		BATHTUB	2
		COMMODE	2
		SINK KITCHEN	1
		SUMP PUMP	1
		RADIATOR HOT WATER	21
429	GEORGE	2 CAR GARAGE FOR 427/428	
460	460 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		SUMP PUMP	1
		RANGE ELEC SELFCLEAN 40 I	1
		RADIATOR HOT WATER	15
		DISH WASHER	1

Bldg	#Address	Description	Quantity
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
461	461 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE, ELECTRIC 40"	1
		REFRIG 16.4 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	2
		COMMODE	2
		SINK BATHROOM	2
		SUMP PUMP	1
		RADIATOR HOT WATER	21
462	462 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		BATHTUB	3
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		REFRIGERATOR 17 CU FT	1
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
463	463 KELLY	BOILER HOT WATER	1
		COMMODE	2
		FAN ATTIC	1
		SINK BATHROOM	2
		DISPOSAL GARBAGE	1
		SUMP PUMP	1
		REFRIG W/ICEMAKER 17 CU	1
		RADIATOR HOT WATER	21
		SINK KITCHEN	1
		BATHTUB	2
		WATER HTR ELEC 40 GAL.	1
		RANGE, ELECTRIC 40"	1
		DISH WASHER	1
		HOOD RANGE	1
464	464 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE, ELECTRIC 40 INCH	1
		REFRIG 16.4 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1

Bldg	#Address	Description	Quantity
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
465	465 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIG W/ICEMAKER 17 CU	1
		WATER HTR ELEC 40 GAL.	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	2
		COMMODE	2
		SINK BATHROOM	2
		SUMP PUMP	1
		RADIATOR HOT WATER 21	
466	466 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIG 16.4 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		SUMP PUMP	1
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		BATHTUB	3
		RADIATOR HOT WATER	15
467	467 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIG W/ICEMAKER 17 CU	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	2
		COMMODE	2
		SINK BATHROOM	2
		SUMP PUMP	1
		RADIATOR HOT WATER	21
468	468 KELLY	BOILER HOT WATER	1
		REFRIG W/ICE MAKER 17 C	1
		WATER HEATER ELECT. 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 40 INCH	1
		FAN ATTIC	1
		DISH WASHER	1
		SINK KITCHEN	1

Bldg	#Address	Description	Quantity
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO 1	
		SUMP PUMP	1
		RADIATOR HOT WATER	15
469	469 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELECT. 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	2
		COMMODE	2
		SINK BATHROOM	2
		SUMP PUMP	1
		RADIATOR HOT WATER	21
470	470 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RANGE ELECT 40 INCH	1
		RADIATOR HOT WATER	15
		DISH WASHER	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DISPOSAL GARBAGE	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
471	471 KELLY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT SELF CLEAN 30	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	2
		COMMODE	2
		SINK BATHROOM	2
		SUMP PUMP	1
		RADIATOR HOT WATER	21
473	KELLY	2 CAR GARAGE FOR 461/463	
475	KELLY	2 CAR GARAGE FOR 465/467	
477	KELLY	2 CAR GARAGE FOR 469/471	
403	403 LUFBERRY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1

Bldg	#Address	Description	Quantity
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 17 CU.FT.	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		SUMP PUMP	1
		RADIATOR HOT WATER 18	
404	404 LUFBERRY	BOILER HOT WATER	1
		COMMODE	3
		SINK BATHROOM	3
		WATER HTR ELEC 40 GAL.	1
		SUMP PUMP	1
		RANGE ELECT 40 INCH	1
		RADIATOR HOT WATER	18
		DISH WASHER	1
		HOOD RANGE	1
		BATHTUB	3
		FAN ATTIC	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 17 CU.FT.	1
		SINK KITCHEN	1
405	405 LUFBERRY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		SUMP PUMP	1
		RADIATOR HOT WATER	18
406	406 LUFBERRY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 40 INCH	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		SUMP PUMP	1
		RADIATOR HOT WATER 18	
407	407 LUFBERRY	BATHTUB	3
		COMMODE	3
		FAN ATTIC	1
		SINK BATHROOM	3
		DISPOSAL GARBAGE	1
		SUMP PUMP	1

Bldg	#Address	Description	Quantity
		REFRIG. 20.6 CU FT	1
		RADIATOR HOT WATER	18
		SINK KITCHEN	1
		BOILER HOT WATER	1
		WATER HTR ELEC 40 GAL.	1
		RANGE ELECT 40 INCH	1
		DISH WASHER	1
		HOOD RANGE	1
408	408 LUFBERRY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		SUMP PUMP	1
		RADIATOR HOT WATER	18
409	409 LUFBERRY	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HTR ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		BATHTUB	4
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		REFRIGERATOR 14 CU FT	1
		COMMODE	4
		SINK BATHROOM	4
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	25
		SECURITY ALARM SYSTEM	1
415	LUFBERRY	2 CAR GARAGE FOR 409	
		W/AUTOMATED OPENER	2
434	434 SKEEL	BOILER HOT WATER	1
		COMMODE	3
		SINK BATHROOM	3
		WATER HEATER ELEC 40 GAL.	1
		DOOR BASEMENT BILCO	1
		RANGE ELEC SELFCLEAN 40 I	1
		SUMP PUMP	1
		DISH WASHER	1
		RADIATOR HOT WATER	15
		HOOD RANGE	1
		FAN ATTIC	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		BATHTUB	3
435	435 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1

Bldg	#Address	Description	Quantity
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 17 CU.FT.	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
436	436 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
437	437 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIG, W/ICEMAKER 17 C	1
		DISH WASHER	1
		SINK BATHROOM	3
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK KITCHEN	1
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
438	438 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DOOR BASEMENT BILCO	1
		DISPOSAL GARBAGE	1
		SUMP PUMP	1
		REFRIGERATOR 16.4 CU FT	1
		RADIATOR HOT WATER	15
		SINK KITCHEN	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		RANGE ELECT 40 INCH	1
		DISH WASHER	1
		HOOD RANGE	1

Bldg	#Address	Description	Quantity
439	439 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 17 CU.FT.	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
440	440 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		SINK KITCHEN	1
		RANGE, ELECTRIC 40 INCH	1
		REFRIG W/ ICEMAKER 20.6	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
441	441 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 40 INCH	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
442	442 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
		REFRIGERATOR 16.4 CU FT	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		RANGE ELEC SELFCLEAN 40 I	1

Bldg	#Address	Description	Quantity
		DISH WASHER	1
443	443 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
444	444 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		BATHTUB	3
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		REFRIGERATOR 17 CU FT	1
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
445	445 SKEEL	BOILER HOT WATER	1
		COMMODE	3
		SINK BATHROOM	3
		WATER HEATER ELEC 40 GAL.	1
		DOOR BASEMENT BILCO	1
		RANGE ELEC SELFCLEAN 40 I	1
		SUMP PUMP	1
		DISH WASHER	1
		RADIATOR HOT WATER	15
		HOOD RANGE	1
		FAN ATTIC	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		BATHTUB	3
447	447 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE, ELECTRIC 40"	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3

Bldg	#Address	Description	Quantity
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	16
448	448 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 17 CU. FT.	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
449	449 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK BATHROOM	3
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK KITCHEN	1
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
450	450 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DOOR BASEMENT BILCO	1
		DISPOSAL GARBAGE	1
		SUMP PUMP	1
		REFRIGERATOR 17 CU FT	1
		RADIATOR HOT WATER	15
		SINK KITCHEN	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		RANGE ELECT 40 INCH	1
		DISH WASHER	1
		HOOD RANGE	1
451	451 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3

Bldg	#Address	Description	Quantity
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
452	452 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		SINK KITCHEN	1
		RANGE, ELECTRIC 40 INCH	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
453	453 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECTRIC 40"	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
454	454 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
		REFRIG W/ICE MAKER 17 C	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		RANGE ELECT 40 INCH	1
		DISH WASHER	1
455	455 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1

Bldg	#Address	Description	Quantity
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
456	456 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		BATHTUB	3
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		REFRIG W/ ICEMAKER 20.6	1
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
457	457 SKEEL	BOILER HOT WATER	1
		COMMODE	3
		SINK BATHROOM	3
		WATER HEATER ELEC 40 GAL.	1
		DOOR BASEMENT BILCO	1
		RANGE ELEC SELFCLEAN 40 I	1
		SUMP PUMP	1
		DISH WASHER	1
		RADIATOR HOT WATER	15
		HOOD RANGE	1
		FAN ATTIC	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		BATHTUB	3
458	458 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE, ELECTRIC 40 INCH	1
		REFRIGERATOR 16.4 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
459	459 SKEEL	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 20.6 CU FT	1
		DISH WASHER	1

Bldg	#Address	Description	Quantity
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
473	SKEEL	2 CAR GARAGE	
472	472 STRAUBLE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELEC SELFCLEAN 40 I	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK BATHROOM	3
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK KITCHEN	1
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
474	474 STRAUBLE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DOOR BASEMENT BILCO	1
		DISPOSAL GARBAGE	1
		SUMP PUMP	1
		REFRIGERATOR 17 CU FT	1
		RADIATOR HOT WATER	16
		SINK KITCHEN	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		RANGE ELEC SELFCLEAN 40 I	1
		DISH WASHER	1
		HOOD RANGE	1
476	476 STRAUBLE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		REFRIG, W/ICEMAKER 17 C	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
480	480 STRAUBLE	BOILER HOT WATER	1
		FAN ATTIC	1

Bldg	#Address	Description	Quantity
		WATER HEATER ELEC 40 GAL.	1
		SINK KITCHEN	1
		RANGE ELECT 40 INCH	1
		REFRIGERATOR 16.4 CU FT	1
		DISH WASHER	1
		DISPOSAL GARBAGE	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
482	482 STRAUBLE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		REFRIG. 20.6 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO 1	
		SUMP PUMP	1
		RADIATOR HOT WATER	16
		SECURITY ALARM SYSTEM	1
484	484 STRAUBLE	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
		REFRIG W/ ICEMAKER 17 CU	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		RANGE ELECT 40 INCH	1
		DISH WASHER	1
486	486 WOLD	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15

Bldg	#Address	Description	Quantity
488	488 WOLD	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		BATHTUB	3
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		REFRIG W/ ICEMAKER 20.6	1
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
490	490 WOLD	BOILER HOT WATER	1
		COMMODE	3
		SINK BATHROOM	3
		WATER HEATER ELEC 40 GAL.	1
		DOOR BASEMENT BILCO	1
		RANGE ELECT 40 INCH	1
		SUMP PUMP	1
		DISH WASHER	1
		RADIATOR HOT WATER	15
		HOOD RANGE	1
		FAN ATTIC	1
		DISPOSAL GARBAGE	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		BATHTUB	3
492	492 WOLD	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		RANGE, ELECTRIC 40 INCH	1
		REFRIGERATOR 20.6 CU FT	1
		DISH WASHER	1
		DOOR BASEMENT BILCO	1
		SINK KITCHEN	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		HOOD RANGE	1
		SUMP PUMP	1
		RADIATOR HOT WATER	15
494	494 WOLD	BOILER HOT WATER	1
		FAN ATTIC	1
		WATER HEATER ELEC 40 GAL.	1
		DISPOSAL GARBAGE	1
		BATHTUB	3
		RANGE ELECT 40 INCH	1
		DISH WASHER	1
		SINK KITCHEN	1
		HOOD RANGE	1
		REFRIGERATOR 17 CU FT	1
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1

Bldg	#Address	Description	Quantity
		SUMP PUMP	1
		RADIATOR HOT WATER	15
496	496 WOLD	BOILER HOT WATER	1
		SUMP PUMP	1
		FAN ATTIC	1
		RADIATOR HOT WATER	15
		DISPOSAL GARBAGE	1
		RANGE ELECT 40 INCH	1
		DISH WASHER	1
		HOOD RANGE	1
		BATHTUB	3
		COMMODE	3
		SINK BATHROOM	3
		DOOR BASEMENT BILCO	1
		WATER HEATER ELEC 40 GAL.	1
		SINK KITCHEN	1
907	42 WHITEHEAD	BATH TUB	2
		COMMODE	2
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		HOOD RANGE	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER BUILT IN	1
907	44 WHITEHEAD	BATH TUB	1
		COMMODE	1
		HOOD RANGE	1
		SINK BATHROOM	1
		RANGE GAS 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
907	46 WHITEHEAD	BATH TUB	2
		COMMODE	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 17 CU.FT.	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
907	48 WHITEHEAD	BATH TUB	2
		COMMODE	2
		SINK BATHROOM	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
907	50 WHITEHEAD	BATH TUB	2
		COMMODE	2

Bldg	#Address	Description	Quantity
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		REFRIG W/ ICEMAKER 17 CU	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
907	52 WHITEHEAD	BATH TUB	2
		COMMODE	2
		SINK BATHROOM	2
		HOOD RANGE	1
		RANGE GAS 30 IN.	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		REFRIGERATOR 16.4 CU FT	1
		DISH WASHER BUILT IN	1
907	54 WHITEHEAD	COMMODE	1
		BATH TUB	1
		HOOD RANGE	1
		SINK BATHROOM	1
		RANGE GAS 30 IN.	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 16.4 CU FT	1
		DISH WASHER BUILT IN	1
907	56 WHITEHEAD	BATH TUB	2
		COMMODE	2
		SINK BATHROOM	2
		RANGE GAS 30 IN.	1
		HOOD RANGE	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER BUILT IN	1
907	58 WHITEHEAD	BATH TUB	1
		COMMODE	1
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	1
		REFRIGERATOR 20.6 CU FT	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
907	60 WHITEHEAD	BATH TUB	1
		COMMODE	1
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	1
		REFRIGERATOR 17 CU. FT.	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
907	62 WHITEHEAD	BATH TUB	1
		COMMODE	1
		HOOD RANGE	1
		SINK BATHROOM	1

Bldg	#Address	Description	Quantity
		RANGE GAS 30 INCH	1
		SINK KITCHEN	1
		REFRIGERATOR 17 CU FT	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
908	100 WHITEHEAD	BATH TUB	1
		COMMODE	1
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK BATHROOM	1
		REFRIGERATOR 17 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
908	102 WHITEHEAD	BATH TUB	1
		COMMODE	1
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 16.5 CU FT	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
908	104 WHITEHEAD	COMMODE	2
		BATH TUB	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		FURNACE GAS 64,000 BTU	1
		REFRIG W/ICE MAKER 17 C	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
908	106 WHITEHEAD	BATH TUB	1
		COMMODE	1
		HOOD RANGE	1
		SINK BATHROOM	1
		RANGE GAS 30 INCH	1
		REFRIGERATOR 14 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
908	108 WHITEHEAD	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		REFRIGERATOR 16.4 CU FT	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
908	110 WHITEHEAD	COMMODE	2
		BATH TUB	2
		SINK BATHROOM	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK KITCHEN	1

Bldg	#Address	Description	Quantity
		FURNACE GAS 64,000 BTU	1
		REFRIG W/ ICEMAKER 17 CU	1
		DISH WASHER BUILT IN	1
908	112 WHITEHEAD	BATH TUB	2
		COMMODE	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER BUILT IN	1
908	114 WHITEHEAD	BATH TUB	2
		COMMODE	2
		HOOD RANGE	1
		SINK BATHROOM	2
		RANGE GAS 30 INCH	1
		REFRIGERATOR 16.4 CU FT	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
908	116 WHITEHEAD	BATH TUB	1
		COMMODE	1
		HOOD RANGE	1
		SINK BATHROOM	1
		RANGE GAS 30 INCH	1
		REFRIGERATOR 17 CU.FT.	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
908	118 WHITEHEAD	BATH TUB	2
		COMMODE	2
		SINK BATHROOM	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 20.6 CU FT	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
908	82 WHITEHEAD	COMMODE	2
		BATH TUB	2
		HOOD RANGE	1
		SINK BATHROOM	2
		RANGE GAS 30 INCH	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 20.6 CU FT	1
		DISH WASHER BUILT IN	1
908	84 WHITEHEAD	COMMODE	1
		BATH TUB	1
		HOOD RANGE	1
		SINK BATHROOM	1
		RANGE GAS 30 INCH	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		REFRIG W/ICE MAKER 17 C	1

Bldg	#Address	Description	Quantity
		DISH WASHER BUILT IN	1
908	86 WHITEHEAD	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIG W/ ICEMAKER 17 CU	1
		DISH WASHER BUILT IN	1
908	88 WHITEHEAD	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		HOOD RANGE	1
		SINK KITCHEN	1
		REFRIGERATOR 16.4 CU FT	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
908	90 WHITEHEAD	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		REFRIGERATOR 16.4 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
908	92 WHITEHEAD	COMMODE	2
		BATH TUB	2
		SINK BATHROOM	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		REFRIGERATOR 16.4 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
908	94 WHITEHEAD	COMMODE	1
		BATH TUB	1
		HOOD RANGE	1
		SINK BATHROOM	1
		RANGE GAS 30 INCH	1
		REFRIGERATOR 17 CU.FT.	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
908	96 WHITEHEAD	COMMODE	2
		BATH TUB	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 16.4 CU FT	1
		DISH WASHER BUILT IN	1

Bldg	#Address	Description	Quantity
908	98 WHITEHEAD	BATH TUB	1
		COMMODE	1
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER BUILT IN	1
909	122 WHITEHEAD	BATH TUB	2
		COMMODE	2
		SINK BATHROOM	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 20.6 CU FT	1
		DISH WASHER BUILT IN	1
909	124 WHITEHEAD	BATH TUB	1
		COMMODE	1
		RANGE GAS 30 IN.	1
		HOOD RANGE	1
		SINK BATHROOM	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER BUILT IN	1
909	126 WHITEHEAD	BATH TUB	2
		COMMODE	2
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		HOOD RANGE	1
		REFRIG W/ ICEMAKER 17 CU	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
909	128 WHITEHEAD	BATH TUB	2
		COMMODE	2
		SINK BATHROOM	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		FURNACE GAS 64,000 BTU	1
		REFRIG W/ ICEMAKER 20.6	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
909	130 WHITEHEAD	COMMODE	2
		BATH TUB	2
		SINK BATHROOM	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		REFRIGERATOR 16.4 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
909	132 WHITEHEAD	COMMODE	2
		BATH TUB	2

Bldg	#Address	Description	Quantity
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
909	134 WHITEHEAD	COMMODE	1
		BATH TUB	1
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
909	136 WHITEHEAD	BATH TUB	2
		COMMODE	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 16.4 CU FT	1
		DISH WASHER BUILT IN	1
909	138 WHITEHEAD	COMMODE	1
		BATH TUB	1
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK BATHROOM	1
		REFRIGERATOR 16.4 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
909	140 WHITEHEAD	COMMODE	1
		BATH TUB	1
		RANGE GAS 30 INCH	1
		SINK BATHROOM	1
		HOOD RANGE	1
		SINK KITCHEN	1
		REFRIGERATOR 16.5 CU FT	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
909	142 WHITEHEAD	COMMODE	1
		BATH TUB	1
		SINK BATHROOM	1
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
909	144 WHITEHEAD	BATH TUB	2
		COMMODE	2
		SINK BATHROOM	2
		HOOD RANGE	1

Bldg	#Address	Description	Quantity
		RANGE GAS 30 INCH	1
		SINK KITCHEN	1
		REFRIGERATOR 16.4 CU FT	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
909	146 WHITEHEAD	BATH TUB	1
		COMMODE	1
		SINK BATHROOM	1
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 16.4 CU FT	1
		DISH WASHER BUILT IN	1
909	148 WHITEHEAD	BATH TUB	2
		COMMODE	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		REFRIGERATOR 17 CU FT	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
909	150 WHITEHEAD	BATH TUB	2
		COMMODE	2
		SINK BATHROOM	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 16.4 CU FT	1
		DISH WASHER BUILT IN	1
909	152 WHITEHEAD	BATH TUB	2
		COMMODE	2
		HOOD RANGE	1
		RANGE GAS 30 IN.	1
		SINK BATHROOM	2
		REFRIGERATOR 16.4 CU FT	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
909	154 WHITEHEAD	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		REFRIGERATOR 17 CU. FT.	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
909	156 WHITEHEAD	BATH TUB	1
		COMMODE	1
		RANGE GAS 30 IN.	1
		SINK BATHROOM	1
		HOOD RANGE	1
		FURNACE GAS 64,000 BTU	1

Bldg	#Address	Description	Quantity
		REFRIGERATOR 16.4 CU FT	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
909	158 WHITEHEAD	COMMODE	2
		BATH TUB	2
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		REFRIGERATOR 20.6 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
905	10 WURTSMITH	BATH TUB	2
		COMMODE	2
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		HOOD RANGE	1
		REFRIG W/ ICEMAKER 20.6	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
905	12 WURTSMITH	BATH TUB	2
		COMMODE	2
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		HOOD RANGE	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		REFRIGERATOR 20.6 CU FT	1
		DISH WASHER BUILT IN	1
905	14 WURTSMITH	COMMODE	2
		BATH TUB	2
		SINK BATHROOM	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK KITCHEN	1
		REFRIGERATOR 20.6 CU FT	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
905	16 WURTSMITH	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		REFRIGERATOR 20.6 CU FT	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1
905	18 WURTSMITH	BATH TUB	2
		COMMODE	2
		RANGE GAS 30 IN.	1
		SINK BATHROOM	2
		HOOD RANGE	1
		SINK KITCHEN	1
		REFRIGERATOR 20.6 CU FT	1
		FURNACE GAS 64,000 BTU	1

Bldg	#Address	Description	Quantity
		DISH WASHER BUILT IN	1
905	2 WURTSMITH	BATH TUB	2
		COMMODE	2
		SINK BATHROOM	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		REFRIGERATOR 20.6 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
905	20 WURTSMITH	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		REFRIGERATOR 17 CU FT	1
		DISH WASHER BUILT IN	1
905	22 WURTSMITH	BATH TUB	2
		COMMODE	2
		RANGE GAS 30 IN	1
		HOOD RANGE	1
		SINK BATHROOM	2
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 17 CU. FT.	1
		DISH WASHER BUILT IN	1
905	24 WURTSMITH	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		HOOD RANGE	1
		SINK KITCHEN	1
		FURNACE GAS 64,000 BTU	1
		REFRIGERATOR 20.6 CU FT	1
		DISH WASHER BUILT IN	1
905	26 WURTSMITH	COMMODE	1
		BATH TUB	1
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		SINK BATHROOM	1
		REFRIGERATOR 17 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
905	28 WURTSMITH	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		HOOD RANGE	1
		SINK BATHROOM	2
		SINK KITCHEN	1
		REFRIGERATOR 20.6 CU FT	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1

Bldg	#Address	Description	Quantity
905	4 WURTSMITH	COMMODE	1
		BATH TUB	1
		SINK BATHROOM	1
		HOOD RANGE	1
		RANGE GAS 30 INCH	1
		REFRIGERATOR 17 CU FT	1
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		DISH WASHER BUILT IN	1
905	6 WURTSMITH	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 IN.	1
		HOOD RANGE	1
		SINK BATHROOM	2
		FURNACE GAS 64,000 BTU	1
		SINK KITCHEN	1
		REFRIG W/ICE MAKER 17 C	1
		DISH WASHER BUILT IN	1
905	8 WURTSMITH	COMMODE	2
		BATH TUB	2
		RANGE GAS 30 INCH	1
		SINK BATHROOM	2
		HOOD RANGE	1
		SINK KITCHEN	1
		REFRIG W/ ICEMAKER 20.6	1
		FURNACE GAS 64,000 BTU	1
		DISH WASHER BUILT IN	1

APPENDIX 16 OF PWS-2

REFUSE PICK-UP LOCATIONS, CAPACITIES AND FREQUENCIES FACILITY ENGINEERING – USAG-S

The following is a listing of refuse pick-up locations and capacities and the frequency of refuse pick-up for each location:

BUILDINGS SERVICED	CAPACITY	FREQUENCY PER WEEK
104	4 Yard	3
165	4 Yard	3
168	4 Yard	2
300 (also see recycling)	4 Yard	3
310 (also see recycling)	4 Yard	2
325	6 Yard	3
326	4 Yard	3
327	6 Yard	2
328	4 Yard	2
350	4 Yard	1
410	4 Yard	3
570	6 Yard (two containers)	3
571	4 Yard	2
Top 4 Picnic Area	* 4 Yard (two containers)	3
	** 4 Yard (two containers)	1
	*16 Trash Receptacles	3
700 Area sports Field	* 4 Trash Receptacles	2

BUILDINGS SERVICED	CAPACITY	FREQUENCY PER WEEK
700 Area Marina	* 4 Yard	1
	* 7 Trash Receptacles	3
700	6 Yard (two containers)	5
	6 Yard (two containers)	3
	6 Yard	5
701	See Below	

The Contractor shall provide the following equipment for Building 701:

1 ea. 40 cubic yard container for compactor(serviced twice weekly)
2 ea. Six (6) cubic yard container (serviced 5 times weekly)
1 ea. Four (4) cubic yard container (serviced 5 times weekly)

The Contractor shall connect the compactor to a delivery chute at the existing opening in the building at the loading dock.

BUILDINGS SERVICED	CAPACITY	FREQUENCY PER WEEK
715	6 Yard	3
780 (also see recycling)	4 Yard (two containers)	3
781	6 Yard (two containers)	5
826	4 Yard	3
835	4 Yard	3
836	4 Yard	2
Ball Diamonds	* 6 Receptacles	2
903	4 Yard	3
Campground	*4 Yard (two containers)	3
	*22 Trash Receptacles	5
912	4 Yard	2
916	4 Yard	2

BUILDINGS SERVICED	CAPACITY	FREQUENCY PER WEEK
923	4 Yard	2
924	4 Yard	2
929	4 Yard	2
930	4 Yard(two containers)	2
931	4 Yard	2
936	4 Yard	2
942	4 Yard	2
944	4 Yard	2
945	4 Yard	2
951	6 Yard	3
	*6 Yard- yard waste	1
970 (also see recycling)	4 Yard (two containers)	3
971 (also see recycling)	4 Yard	2
972	30 Yard	1/month
	*30 Yard- yard waste	1/month
1060	6 yard	1
1424	6 yard	1
2250	6 Yard	3

* 1 April - 31 October
** 1 November - 31 March

HOUSING AREAS SERVICED (locations and capacities)

200 Area (curb side pick up at end of driveway at rear of each unit)

400 Area (curb side pick up at end of driveway at rear of each unit)

700 Area (four, 4-Yard containers)

900 Area (four, 4-Yard containers)Bldgs 905,907,908,909

Sebille Manor (curb side pick up by the end of the driveway of each unit) Yard Waste - 6 Yard dumpster, empty 2X/week-northeast corner of subdivision.

HOUSING AREAS FREQUENCY OF COLLECTION

Refuse shall be collected for the 200, 400, 700 and Sebille Manor housing areas once per week, on Tuesday (Wednesday, if Tuesday is a holiday). For the 900 housing area, the Contractor shall collect refuse three times per week according to the following schedule:once on either Monday or Tuesday, once on either Wednesday, Thursday or Friday, and once on Saturday.

RECYCLING

A recycling program for household and yardwaste waste shall be set up in the 200, 400, 700, 900 and Sebille Manor housing areas. Recyclable items shall be picked up in the 200, 400 Areas and Sebille Manor at the refuse collection points at the same time as curb side refuse pick up. Recyclable items in the 700 and 900 areas shall be picked up at the refuse collection points on the first scheduled day of the week.

Set up recycling routine for office papers to be picked up *1 per week in following buildings: B300, B310(1 st floor), B970, B971 and B780. Change frequency to suite need.

APPENDIX 17
PWS 2

CUSTODIAL SERVICES
SCHEDULE AND FREQUENCY
FACILITY ENGINEERING – USAG-S

SUMMARY OF BUILDINGS

BLDG NO.

104
165 *
168
300
310 *
325
326
328 *
410 *
701
710
714
780 *
826 *
835
836
900 Area Stairwells * 905, 907, 908, 909, 912, 916, 923, 924, 929, 936, 942
903
904 *
929
944
945
951
970
971 *
1060
1409 *
2250 *

* See Special Additional Requirements for these buildings.

SCHEDULE AND FREQUENCY MATRIX

X = A & B CLEANING TASKS
Y = A CLEANING TASKS

SEE CLEANING TASKS

BLDG.	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
104	Y	X		X		Y	X
165	X	Y	X	Y	X	Y	Y
168	X	Y		Y	X		X
300	X	Y	X	Y	X	Y	Y
310	X	X	X	X	X		
325	X	Y	Y	Y	X		
326	X		X		X		
328	X	Y	X	Y	X	Y	X
410	X	Y	X	Y	X	Y	Y
701	X	Y	X	Y	X	Y	X
710	X		X		X		
714	X		X		X		
780	Y	X	Y	X	Y		
Library		X	Y	X	Y	X	
826		X	X	X	X	X	X
835		X		X			
836	X	Y	X	Y	X		
903		X	Y	X	Y	X	
904							
1	Y	Y	Y	Y	Y	Y	Y
2	Y					Y	
929	X		X		X		
944	Y	X	Y	X	Y		
945	Y	X	Y	X	Y		

BLDG.	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
951	X	Y	X	Y	X		
970	Y	X	Y	X	Y		
971	X	X	X	X	X		
1060	X					Y	
1409	X	X	X	X	X		
2250	X	X	X	X	X	X	

CLEANING TASKS
GENERAL CUSTODIAL SERVICES :

A. DESCRIPTION OF WORK SEE MATRIX

1. Clean toilets
2. Clean urinals
3. Clean sinks
4. Clean mirrors
5. Clean drinking fountains
6. Clean and fill toilet tissue, paper towel and soap holders
7. Disinfect toilet bowls and urinals
8. Empty waste paper towels, waste can and napkin containers
9. Clean and sanitize floors in restrooms

B. DESCRIPTION OF WORK SEE MATRIX

1. Sweep or dust mop floor
2. Spot mopping, as required
3. Vacuum all carpeting
4. Empty butt cans
5. Wash chalk boards
6. Empty waste cans and install liners

C. DESCRIPTION OF WORK (WEEKLY) All Buildings.

1. Dust and clean phone booth
2. Wet mop building, entire area
3. Buff floors
4. Clean entrance doors and glass
5. Brush scrub restroom
6. Low/High dusting
7. Clean and mop interior stairways
8. Dust coat racks

D. DESCRIPTION OF WORK (MONTHLY) All Buildings.

1. Wax floors
2. Clean glass inside doors, sidelights and windows (interior walls)
3 Clear spider webs, bugs & other loose debris from building exteriors – OMA bldgs in APPENDIX 14 and as required during fish fly season in June /July to maintain a clean appearance.

E. DESCRIPTION OF WORK (QUARTERLY) All Buildings.

1. Strip and wax floors
2. Wash toilet room walls, ceilings, stalls, partitions, piping & woodwork
3. Replace sand in urns
4. Wall washing (Spot not to exceed 10% of wall area)
5. Damp wipe venetian blinds

F. DESCRIPTION OF WORK (TWICE YEARLY) All Buildings.

1. Clean all carpets with carpet cleaner
2. Polish metal in exterior doors
3. Wash waste containers
4. Clean glass and screens in building exterior window (both sides)
5. Wash coat rack
6. Light fixture/lense washing
7. Remove bugs, spider webs, bird nest debris, & other debris from exterior walls, soffits, fascias, exteriors of gutters & downspouts to maintain a clean appearance on AFH bldgs in the 200, 400, 700 & 900 Areas. Also see 2.4.2.6.a & 2.20.18.1.

G. DESCRIPTION OF WORK (YEARLY) All Buildings.

Wash venetian blinds

H. See 2.20 for additional requirements.

SPECIAL ADDITIONAL REQUIREMENTS:

Building 165, Base Gymnasium	Frequency
Shower and Locker Room requirements:	
a. Brush scrub all wall and floor areas.	Daily
b. Disinfect all wall and floor areas.	Daily
c. Scrub restroom floors	Twice Daily
(Dec thru May)	
d. Clean Toilets, Urinals, Lavatories and Sinks (Dec thru May)	Twice Daily
e. Dust tops of lockers.	Weekly
f. Clean lockers exterior.	Weekly
g. Brush scrub ceilings.	Quarterly
Equipment Workout Area. Clean Mirrors	3X/Week
Balcony - Dust wood trusses & components	Quarterly

Building 310, Health Clinic
[Note: All custodial tasks shall be performed prior to normal operating hours for this building]

a. Wet mop all floors with detergent	Daily
b. Wax and buff all floors and stairwells	Daily
c. Brush scrub restrooms (entire area)	Daily
d. Clean glass at entrance ways	Daily
e. Policing and cleaning of entrance ways and waiting	Daily
rooms as required during inclement weather	Daily
f. Wipe and clean furnishings and equipment	Daily
g. Steam clean carpets	Monthly
h. Spot clean carpets	Weekly
i. Wash and disinfect all waste containers (61)	Monthly
j. Wash all tiled walls and attached items	Quarterly
k. Clean all windows and screens, interior & exterior	Quarterly
l. Wash light fixtures	Quarterly

Building 328,
Shampoo Carpeting - quarterly
Spot clean carpeting w/ cleaner - weekly
Dust Light Fixtures in Ball Room - quarterly
Clean Canopy - Quarterly

Training Area 1st floor, see Drawing
Task A – 1X per week
Task B,C,D – monthly on the Monday after the training weekend
wax floors quarterly & strip & was floors twice yearly

Training Areas 2nd floor, see Drawing
Task B – 3X per week.

Bldg. 410.

a. Clean Canopy	Quarterly

Bldg 780

a. Fitness Center -A & B Tasks	7X per week
Exercise Room - B Task	5X per week
Office - B Task	3X per week
b. Gym – Shampoo Area Rugs (June-Aug)	Weekly
Empty waste cans	5X per week
Sweep/ Mop floors	5X per week
c. Rooms 18 & 20 - Shampoo Area Rugs	Weekly
Sweep/Mop floors	5X per week
d. Library -Empty waste cans	5X per week

Bldg. 826.

a Weekly tasks	On Friday
b. Wash carpet upper level	Quarterly

Bldg 912, 916, 923, 924, 929, 936 & 942

Vestibules and Stairways

a. Sweep and wet mop vestibules and stairways	3X per week
b. Clean low windows, entrance doors and glass	2X per week
c. Clean baseboards and lower walls (low dusting)	1X per week
d. Clean dirt and impurities from apartment doors	1X per week
e. Clean exterior windows (both sides)	Semi-Annually
f. High dusting	Monthly
g. Wash light fixture and clean window at top of stairs	Semi-Annually

Bldg 325 & 929

Laundry Rooms

h. Sweep and wet mop floors	3X per week
i. Spot wash walls	3X per week
j. Empty waste cans and install liners	3X per week
k. Clean appliances	3X per week
l. Clean counter	3X per week
m. Clean exterior windows (inside)	Quarterly
n. High dusting	Monthly
o. Wash light fixtures	Quarterly
p. Clean exterior windows (outside)	Semi-Annually

Bldg 970:

Clean bathrooms in office numbers 2XX and 2XX once per week.

Bldg 971, Child Development Center [Note: All custodial tasks shall be performed prior to normal operating hours for this building]	Frequency
a. Mop floors and entrance way	Daily
b. Dust furniture, equipment and surfaces reach of children	Daily
C. Clean entrance doors, room doors/frames light switches and towel dispensers	Daily
d. Wipe mirrors, bathroom & kitchen fixtures	Daily
e. Dust ledges, window sills, tops of cabinets,	Weekly
walls, woodwork, light fixtures and other areas that dust collects.	Weekly
f. Wash partitions and door windows	Weekly
g. Wash walls, woodwork/cabinets & partitions in bathrooms, child activity & food service area	Weekly
h. Shampoo area rugs	Weekly on weekends
Spot Clean area rugs	Daily
i. Move all kitchen appliances and wash those floor areas and clean unexposed areas.	Monthly
j. Clean all upholstered furniture	Monthly
k. Wash walls in hallways	Monthly
l. Wash light fixtures (change bulbs as required)	Quarterly
m. Wash all windows & screens inside/outside	Quarterly
n. Buff/ wax vinyl flooring	Monthly
o. Wash venetian blinds	Quarterly

p. Wash child toilets, walls, stalls, partitions, floor, piping & woodwork — Daily

900 Area Family Housing Stairwells (905, 907, 908, 909)

a. Wash walls	Annually
b. Wash steps and landings	Annually
c. Clean windows and glass in doors inside and outside	Annually
d. Wash exterior doors inside and outside	Annually
e. Clean light fixtures	Annually
f. High Dusting	Monthly
g. Wash outside porch	Annually

Bldg 904, Bath House
1 = Cleaning between Memorial – Labor Days
2 = Cleaning between Labor – Memorial Days

Bldg 1409, Dental clinic
[Note: All custodial tasks shall be performed prior to normal operating hours for this building]

a. Clean and sanitize shower daily.
b. Clean Operator, Laboratory and Radiology rooms daily.
c. Vacuum carpet in reception area daily.
d. Buff tile floors twice weekly.
e. Wash and disinfect waste containers monthly.
f. Wash light fixtures semi-annually.

Bldg 2250
[Note: All custodial tasks shall be performed prior to normal operating hours for this building]

Shampoo area rugs weekly

APPENDIX 18

PWS 2

INTERSERVICE SUPPORT AGREEMENT

FACILITY ENGINEERING – USAG-S

The following describes the areas of responsibility between the USAG and the 127th Air National Guard at Selfridge from an Interservice Support Agreement between the two organizations. The Contractor shall be responsible for USAG-S areas of responsibility.

AREAS OF RESPONSIBILITY FOR REAL PROPERTY MAINTENANCE

Note: All descriptions and locations are based on the Base Schematics drawings. Because of the unique situation where the Army and the 127th Air National Guard are responsible for different areas of the base and both services use facilities in each area, a general statement is necessary to help clarify this agreement. It is the general intent for the Army to maintain all facilities they occupy and to maintain all utility branches or secondary utility systems supplying facilities they occupy up to the 127th mains. In general, the main utilities are operated and maintained by the 127th. The purpose of the 127th maintaining the mains is to provide continuity to the entire system as the mains usually run through (into, then out of) Army areas (owned or leased). It is the Army's responsibility to provide services for their facilities from these 127th utilities.

I. 200 Housing Area

A. 127 WG will:

1) Maintain and repair all gas lines fed from Bldg 712 to the house stop valve, not including the valve before the pressure regulator.
2) Maintain and repair streets, adjacent parallel sidewalks, storm drains, catch basins, and manholes on George Avenue.
3) Maintain sidewalks on south side of George Avenue

B. Army Garrison will:

1) Maintain and repair primary and secondary electrical lines to and from the secondary load
side of the panels in Bldgs 298 and 309 to the housing units.

2) Maintain and repair all water lines north of George Avenue from and including valve south and east of Bldg 227 on 8" cross main and all fire hydrants to and include gateway valve south of George Avenue across from Bldg 235.
3) Maintain and repair all gas lines from and including the stop valve through the pressure regulator into the facility.
4) Maintain and repair sanitary sewer services, mains, and manholes to the northwest corner of George and Birch streets (sanitary installed during family housing infrastructure project).
5) Maintain and repair the storm drainage system including manholes in the area bounded as follows: from and including the manhole located northeast of Bldg 257 on Wooten Avenue; west on Wooten Avenue to Willow Street; south on Willow Street to the north side of George Avenue; east on George Avenue to the northwest corner of George and Wake Avenues, northeast to the northwest corner of Wake and Mitchell Avenues and west on Mitchell to Wagner Avenue, then north on Wagner to the manhole northwest of Bldg 309, then west along Wooten Avenue to the manhole northeast of Bldg 257.
6) Maintain and repair all structures, roads, curbs, sidewalks, driveways, alleys and lawns, including but not limited to grass cutting, snow removal, tree trimming and leaf pick-up in the area described in the storm drain boundaries above, excluding George Avenue and adjacent parallel sidewalks on George Avenue.
7) Maintain and repair all perimeter fence on Army Property.

II. 400 AREA AND THE "TOP 4" RECREATION AREA AND ITS FACILITIES

A. 127 WG will:

1) Maintain and repair all potable water mains on Air Force property to and including the 6" main gate valve located at the corner of George Avenue and Erie Street, to and including the 6" main gate valve at the northeast corner of George and Huron, and south from and including the two main 10" gate valve in the intersection of George Avenue and General Andrews Drive excluding all water services to Army facilities.
2) Maintain and repair 12" force main sanitary sewer main and lift station on the south side of George Avenue to Bldg 501.
3) Maintain and repair all storm sewers, 20" and 24", on the south side of George Avenue and west of manhole located at the corner of Skeel Avenue and George Avenue (northwest of Building 596), and the storm sewer that drains General Andrews Drive.
4) Maintain and repair streets, storm drains, catch basins and manholes on George Avenue and Huron Avenue from George Avenue, including manhole on the northeast corner of Huron and Kelly. Maintain and repair pump station 339..

B. Army Garrison will:

1) Maintain and repair all potable water systems within the housing area from and the 12" main gate valve located at the corner of George Avenue and Erie Street from, but not including, the 6" gate valve on the northeast corner of George and Huron Avenues, to the two 10" main gate valve at the intersection of George Avenue and General Andrews Drive and all water services to 400 area housing from the main. (Reference water main work done during family housing infrastructure project.)
2) Maintain and repair all fire hydrants. See Water Distribution Map Attached.
3) Underground gas lines belong to and are the responsibility of Consumers Energy Company. Maintain and repair all gas lines from and including the stop valve through the pressure regulator into the facility.

4) Maintain and repair all sanitary sewer lines and manholes within the 400 area, up to but not including the lift station located on the south side of George Avenue south of Bldg 410.
5) Maintain and repair all storm sewers, catch basins, and manholes in the area as follows: northwest on the north side of George Avenue from Wold Avenue to the east side of Huron Street, north on Huron Street to the lake, southeast along the lakefront and canal, and rejoin Wold Avenue along edge of golf course.
6) Maintain and repair all structures, roads, curbs, sidewalks, driveways, alleys and lawns, including but not limited to grass cutting, snow removal, tree trimming and leaf pick-up in the area described by the storm sewer boundaries above.

III. 700 HOUSING AREA

A. 127th WG will:

1) Maintain and repair the primary electrical power to where it branches off by mechanical jumper or disconnects to feed Army facilities in the 700 housing area.

B. Army Garrison will:

1) Maintain and repair all primary and secondary electrical distribution to the 700 housing area from where it branches off by disconnects or mechanical means

2) Maintain and repair water lines.
3) Underground gas lines belong to and are the responsibility of Consumers Energy Company. Maintain and repair all gas lines from and including the stop valve through the pressure regulator into the facility.
4) Maintain and repair sanitary sewer lines and manholes from the 700 housing area.

5) Maintain and repair all drainage ditches, storm sewers.
catch basins, and manholes in the area bounded by the sidewalk on the east side of Jefferson, east along Luke Avenue to Willow Avenue, south on Willow Avenue to Wooten Avenue, east on Wooten to the parking lot on the east side of Bldg 310, then northwest along the south side of Johnson Avenue to the sidewalk on the east side of Jefferson Avenue.
6) Maintain and repair all structures, roads, curbs, sidewalks, driveways,
alleys and lawns, including but not limited to grass cutting, snow removal, tree trimming and leaf pick-up in the area described in the storm drain boundaries above.
7) Maintain and repair fire hydrants.
8) Maintain and repair perimeter fencing at seawall that supports the
marina.

IV. WHERRY HOUSING AND 900 AREA

A. 127 WG will:

1) Maintain and repair primary electrical service from DTE Energy pole line on the west side of Jefferson Avenue to and including the primary meter pole on the east side by bldg. 997
2) Maintain and repair potable water mains to, and including, the valve
west of meter pit which is located west of Bldg 905, and to, and including, the valve west of meter pit which is located south of Bldg 927 and from, and including, the curb stop north of Recreation Drive to Bldg 900, to and including the 6"main valves on Jefferson Avenue to Bldg 970, including the 6" main valve on the west side of Jefferson Avenue for the Child Care Center.
3) Maintain and repair sanitary sewer from Bldg 900 to, but not including,
the manhole on the northwest corner of Bldg 922, and from, and including, the first manhole on the south side of Bldg 997 to, and including, the sewage lift pump station 997, and the force main discharge south from Bldg 997.
4) Maintain and repair the entire area from the fences on the north and
south sides of the Bldg 990 canal, storm drains, pump stations and manholes, and south from, but not including, the manhole southeast of Bldg 931.
5.) Maintain pump station 980.

B. Army Garrison will:

1) Maintain and repair all primary and secondary electrical lines, street
lights, transformers, and associated equipment from electrical pole northeast of Bldg 951 through the south portion of Wherry and from the primary branch feeders at Bldg 990, north through the north portion of Wherry and from load side of primary disconnects of Bldg 971.
2) Maintain and repair all potable water mains from, but not including the
valve west of meter pit which is located west of Bldg 905, and the valve west of meter pit

which is located south of Bldg 927, and the curb stop north of Recreation Drive to Bldg 900, including, the 6" main valves on Jefferson to Bldg 970, and including the 6" main valve west of Jefferson Avenue to the Child Care Center, Bldg 971.
3) Maintain and repair all fire hydrants.
4) Maintain and repair all sanitary sewers within the Wherry Housing area, including Bldgs 902 and 903, to the manhole on the southwest corner of Bldg 905 and to the first manhole south of Bldg 997, and the forced sewers from Bldgs 780 and 970 to the 8" forced main from Bldg 997.
5) Maintain and repair all drainage ditches, storm drains 18" and under, catch basins and manholes to, but not including, the manhole on the 30" main north of the pump station 990 canal; and to, but not including, the three manholes on the 30" main south of the pump station 990 canal; and to, and including, the manhole on Arnold Circle northeast of Bldg 931 as defined in paragraph 6, below.
6) Maintain and repair all structures (excluding dike) utilities, roads, perimeter fence, curbs, sidewalks, driveways, alleys and lawns including but not limited to grass cutting, snow removal, tree trimming and leaf pick- up in the area bounded as follows: east on Recreation Drive from the east side of Jefferson Avenue to the lake shoreline, south along the lake shoreline to the parking area on the east side of Bldg 310, then along the north side of Johnson Street to east side of Jefferson Avenue, and north along and including the sidewalk on the east side of Jefferson Avenue to Recreation Drive. Include the area north of Recreation Drive, not including the parking on the east side of Jefferson adjacent to the main gate. Cut grass and rake leaves between Jefferson and the railroad tracks from N. Perimeter Rd south to the south side of bldg 905.
7) Underground gas main along Jefferson Avenue and the gas mains and services in the housing area belong to and are the responsibility of Consumers Power Company. Maintain and repair all gas lines from and including the stop valve through the pressure regulator into the facility
8) Maintain and repair parking area west of pump station 990.

V. SEBILLE MANOR HOUSING AREA

A. 127 WG will:

The 127 WG will perform general maintenance on a reimbursable basis on the sanitary lift station, water main from the base to and including the water tower and pump station within their inhouse capability. Any and all contracts will be performed by the Army.

B. Army Garrison will:

Tenant has responsibility for all maintenance and repair of electrical, water mains, fire hydrants, storm drains, sewers, manholes, structures, roads, curbs, sidewalks, driveways, alleys, lawns and fences, etc., of Sebille Manor area, including the Teen Center and water service for the school up to and including the valve east of Sugarbush Drive and the sanitary sewer line from pump station to the Chesterfield manhole. Maintain underground gas line to the Teen Center from Sugarbush Drive to and including the building interior.

VI. BUILDINGS AND FACILITIES LISTED IN APPENDIX EXCEPT FAMILY HOUSING.

A. 127 WG will:

1) Maintain and repair street lights and primary electrical services to where it branches off DTE poles by disconnects or mechanical means to feed Army facilities. In those instances where the change of responsibility occurs at the disconnect, the 127th will have responsibility for maintenance and repair of the disconnect.
2) Maintain and repair water mains and laterals up to, but not including buildings stop valves except as otherwise noted throughout this agreement. Maintain and repair fire hydrants west of Jefferson Avenue and south of George Avenue to Wake Street, north on Wake Street to Mitchell Avenue, east along Mitchell to Huron, then south on Huron to George, east to Skeel Avenue, south around golf course to south Perimeter Road, west along south Perimeter Road to east side of Joy Gate, then south to south perimeter fence.
3) Maintain and repair gas mains and laterals to, and including, the building service stop.
4) Maintain and repair sanitary sewer main up to and including the manhole on the sewer main serving the tenant building, if one exists, unless tenant building is connecting to an already established tenant sewer or manhole on Air force Property.
5) Maintain and repair all storm drains, catch basins and manholes except as otherwise noted throughout this agreement.
6) Chapel Triangle. Maintain and repair the following portions of the Chapel triangle area:
a) Secondary electrical service, facility and grounds maintenance, and water service to Bldgs 160, 162, 167, 178 and the hydrant southeast of Bldg 160.
b) Sanitary sewer force main from Bldg 997 to 177, to 40, and hence to 501.
c) The 18" line and manhole east of Bldg 168 and the 6" line south from that manhole to Wilbur Wright Blvd.
d) Maintain and repair all grounds, paved areas, facilities and utilities in the Chapel triangle bounded by the east side of Wagner Street, north side of Wilbur Wright Blvd, and south side of George Avenue, not including grounds, paved areas and utilities supporting Bldgs 165,168 & tennis courts.

8) Maintain and repair primary electrical system from where it branches off from Air Force property by disconnects or mechanical means to feed Army facilities.
a) Bldg 712 and all gas lines feeding from Bldg 712 to the various building valves, but not including the valves.
b) The 10" sanitary sewer main and manholes on the north side of George Avenue to the manhole southwest of Bldg 227; south to, the manhole southwest of Bldg 228 south to Bldg 238

B. Army Garrison will:

1) Maintain and repair Primary and secondary electrical service and the transformer to each facility except 697, 700, 701, 715, and Bank.
2) Will maintain primary cable from load side of disconnects on cable pole feeding Bldgs 697, 700, 701, 715, and Bank, not including the pole.
3) Maintain secondary service drops from Bldgs 710 and 714 to the main secondary pole line connectors.
4) Maintain parking lot lighting and security lighting for Bldgs 700, 701, 715, and Bank.
5) Maintain and repair water service lines from and including building stop into the facility.
6) For facilities receiving gas from Bldg 712, maintain and repair gas service line from and including the building valves.
7) Maintain and repair sanitary sewer from, but not including, the nearest manhole downstream on the sewer main from the tenant facility, but including all manholes connecting to an already established tenant sewer or manhole.
8) Maintain and repair sanitary sewer, including manholes.
9) Maintain and repair security and interior fences within tenant defined areas and associated with tenant facility use.
10) Maintain and repair all structures, storm drains, catch basins, manholes, roads, curbs, sidewalks, driveways, and lawns, including but not limited to grass cutting, snow removal, tree trimming and leaf pick-up in the area surrounding each building and associated with the tenant facility use, except as specifically noted in other sections and paragraphs and except for areas surrounding buildings (Bldgs 710, 327, 350).
11) Remove debris (resulting from maintenance, construction, or clean-up) from the Base or to an area designed by host. Debris to be dumped on Base must be approved by the Environmental Engineer.

12) RESERVED.
13) Maintain and repair all facilities, utilities, roads and grounds in the recreation area north of Wherry housing from Recreation Drive to the north perimeter fence and east of Jefferson Avenue to the lake, including perimeter fencing.
14) Maintain and repair all grounds, paved areas, facilities and utilities in the Chapel triangle area supporting Bldgs 165, 168 and the tennis courts.
15) Maintain and repair all grounds, paved areas, facilities and utilities in the Base Exchange commercial area bounded by the sidewalk on the east side of

Jefferson Avenue, east on the north side of George Avenue, to the east side of Willow Street, north to the north side of Luke Street, west along the north side of Luke street to the east side of Jefferson Avenue, exclusive of area defined in A-8a, above. Maintain parking lot east side of Jefferson, south of Main Gate.

VII. OTHER AREAS

A. 127 WG will:

1) Maintain and repair main sanitary sewer from the southeast corner of Bldg 590 to the sewage plant 501.
2) Maintain and repair all interior & perimeter fencing on Air Force property.

B. Army Garrison will:

1) Maintain and repair interior & perimeter fencing on Army property.
2) Maintain and repair shoreline, seawall, berms and dykes.

Note: Where a utility service is on Army or Air force Property and the sole function is to service either entity, the entity the utility serves will be responsible for the maintenance and repair.

APPENDIX 19 of PWS-2

WORKLOAD DATA

FACILITY ENGINEERING – USAG-S

GARRISON EQUIPMENT MAINTENANCE SUPPORT

Year	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)
99	366.5	144.0	510.5	$10,182	$8,307
00	416.5	200.0	616.5	$8,095	$10,545
01	406.5	200.0	606.5	$28,280	$14,239
02	440.5	216.5	656.5	$9,254	$27,069

GARRISON ESTIMATING HISTORICAL WORKLOAD

	FY 99	FY 00	FY 01	FY 02
No. Jobs Estimated	618	602	589	650

ENVIRONMENTAL

	FY 99	FY 00	FY 01	FY 02
Waste Turn Ins Processed	20	55	39	27
Waste Pick Ups	11	15	15	9
Total Pounds of Waste Disposed	28547	61852	45786	44638
Pounds of Hazardous Waste	1167	5863	969	911

	FY 99	FY 00	FY 01	FY 02
Pounds of Non-Hazardous Waste	27380	55989	46041	43727
Pounds of Paint Waste	1662	6933	279	1291
Non-hazardous	1352	4222	0	923
Hazardous	310	2711	279	368
Gallons of Used Oil	3031	4605	4640	4271
Pounds of Used Oil	22793	37565	34896	32124
Gallons of Sludge	55	568	-	388
Pounds of Sludge	297	5873	-	4012
Gallons of Fuel Waste	60	30	400	-
Pounds of Fuel Waste	222	212	3008	-
Pounds of Lamps as HW	-	-	-	-
Pounds of Lamps as UW	1536	2638	2722	1842
Pounds of Batteries as UW	799	585	392	744
Pounds of EMCD as UW	1	11	2	-
Pounds of EMCD as HW	-	-	-	2
Pounds Asbestos	105	4508	584	869
Pounds of PCB Waste	247	68	202	1621
HW Containers	7	29	9	8
Non -HW Containers	8	64	44	37
UW Containers	97	92	123	85
HW Tanker Trucks	-	-	-	-
Non-HW Tanker Trucks	2	4	5	4

Note: This data is to be used for contract workload references only. This data does not reflect total wastes generated at USAG-S (outside contractors and MWR activities)

Service Orders (Maintenance & Repair)
FY 99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance	500	490	909.0	11.0	920.0	-	21,584.88	14	8	
Asbestos Work	3	3	8.0	-	8.0	-	77.60	0	0	
Carpentry	1194	1119	2,346.0	108.5	2,454.5	390.00	18,388.00	43	71	
Custodial	44	39	57.4	41.5	98.9	-	-	2	3	
Electrical	972	951	2,194.3	213.2	2,407.5	10,752.60	38,213.50	36	21	
Entomology	312	297	579.4	31.0	610.4	300.00	1,863.63	3	14	
Environmental Tasks	6	5	2.5	0.0	2.5	-	60.00	0	1	
HVAC	425	367	1,714.8	146.5	1,861.3	479.00	15,046.47	14	89	
Locksmith	307	295	549.0	24.0	573.0	-	1,611.91	11	5	
Pipefitting	539	510	1,580.7	494.3	2,075.0	435.00	14,892.11	12	17	
Plumbing	1152	1122	1,058.4	136.5	1,194.9	-	42,623.43	40	18	
Roads & Grounds	88	81	320.0	18.0	338.0	-	1,088.76	8	4	
Self Help	40	40	0.0	0.0	0.0	-	4,349.70	2	0	
Totals	5,582	5,319	11,319.5	1,224.5	12,544.0	12,356.6	159,799.99	185	251	0

Scheduled Preventive Maintenance & SOO's
FY99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance	5	5	522.5	19.0	541.5		382.27			
Asbestos Work					0.0					
BOM			1,187.3	73.5	1,260.8					
Carpentry	21	21	1,339.1	236.0	1,575.1	90,763.47	13,632.43			
Custodial	13	13	23,092.6	1117.3	24,209.9	14,326.00	86,465.92			
Electrical	35	35	1,324.7	93.8	1,418.5	7,772.82	4,456.50			
Entomology	7	7	1,028.1	223.5	1,251.6		5,258.62			
Environmental Tasks	1	1			0.0	728.01	4,228.50			
HVAC	29	29	2,665.8	503.0	3,168.8		9,208.81			
Locksmith	5	5	464.6		464.6		2.85			
Pipefitting	21	21	2,141.9	216.5	2,358.4	1,000.00				
Plumbing	14	14	398.2	132.7	530.9		3,853.71			
Roads & Grounds	46	45	9,575.6	1776.0	11,351.6	7,470.58	68,454.64	1		
Self Help					0.0					
Totals	197	196	43,740.4	4,391.3	48,131.7	12,060.88	195,944.25	1		0

REPAIR WORK
FY 99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance			292.3		292.3					
Asbestos Work					0.0					
BOM	233	189	2,234.9	203.0	2437.9		25,360.28	70	39	
Carpentry	40	22	1,336.0		1336.0		3,154.08	3	20	
Custodial	1		0.4		0.4				1	
Electrical	11	7	299.3		299.3	11,399.50	7,742.22		6	
Entomology	1		192.5		192.5				1	
Environmental Tasks					0.0					
HVAC	4	3	304.0		304.0		4,296.97		2	
Locksmith			50.5		50.5					
Pipefitting	7	6	37.0	18.0	55.0		16,712.72		1	
Plumbing			121.0		121.0				1	
Roads & Grounds	8	6	43.0	233.0	276.0			2		
Self Help	1	1			0.0		4,960.54			
Total	306	234	4,910.9	454.0	5,364.9	11,399.5	62,226.81	75	71	0

CLIN 3000 (Repair Work)
FY 99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance					0.0					
Asbestos Work					0.0					
BOM					0.0					
Carpentry	14	12	550.2	42.0	592.2	2,195.00	18,533.35		5	
Custodial					0.0					
Electrical	3	2	190.3	4.5	194.8	1,378.00	2,586.03		2	
Entomology					0.0					
Environmental Tasks					0.0					
HVAC	3	2	16.5		16.5	6,741.60	11,130.00	1	2	
Locksmith					0.0					
Pipefitting	14	9	314.8	13.0	327.8	2,483.43	7,117.06	1	4	
Plumbing		3	58.5		58.5	31.80	944.61		4	
Roads & Grounds	11	3	715.5	13.0	728.5	13,462.00	351.33	4	4	
Self Help					0.0					
Totals	45	31	1,845.8	72.5	1,918.3	26,291.83	40,662.38	6	21	0

CLIN 4000 (New Work)
FY 99

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance					0.0					
Asbestos Work					0.0					
BOM					0.0					
Carpentry	34	19	284.1	105.0	389.1	1,378.00	12,588.16	1	23	
Custodial	6	5	39.0	8.5	47.5	718.70			1	
Electrical	33	28	336.1	57.0	393.1	825.00	6,773.38	8	11	
Entomology					0.0					
Environmental Tasks					0.0					
HVAC	6	7	28.0	9.0	37.0		987.10	2		
Locksmith	15	10	15.0		15.0		264.38	2	3	
Pipefitting	9	8	127.0	93.0	220.0		2,052.57		1	
Plumbing	9	11	32.5	12.5	45.0	540.60	2,159.22	3	2	
Roads & Grounds	23	20	498.0	113.0	611.0	6,103.99	8,457.05	2	8	
Self Help					0.0					
Totals	135	108	1,359.7	398.0	1,757.7	9,566.29	33,281.86	18	49	0

Service Orders (Maintenance & Repair)
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance	497	447	765.5	21.0	786.5	-	17,924.06	28	30	0
Asbestos Work	7	5	7.0	6.0	13.0	-	11.05	1	1	0
Carpentry	1413	1247	3,260.5	313.7	3,574.2	2,026.00	24,490.67	69	168	0
Custodial	20	19	0.5	274.5	275.0	542.60	-	4	0	0
Electrical	1126	1012	2,134.5	238.0	2,372.5	14,244.69	39,736.58	65	71	0
Entomology	303	291	621.6	20.0	641.6	1,925.00	1,086.74	15	10	0
Environmental Tasks	10	8	0.0	8.5	8.5	240.00	47.04	1	2	0
HVAC	267	317	1,424.2	124.8	1,549.0	827.00	18,579.90	14	25	0
Locksmith	238	234	258.0	24.0	282.0	-	1,003.42	8	1	0
Pipefitting	531	526	1,816.0	620.8	2,436.8	150.00	14,948.21	6	16	0
Plumbing	1132	1095	1,331.4	139.0	1,470.4	144.00	53,864.06	40	15	0
Roads & Grounds	155	125	454.5	14.5	469.0	-	990.22	15	19	0
Self Help	38	38	0.0	0.0	0.0	-	7,422.82	0	0	0
	5,737	5,364	12,073.7	1,804.8	13,878.5	20,099.29	180,140.77	266	358	0

Scheduled Preventive Maintenance & SOO's
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance			91.0	8.0	99.0		104.61			
Asbestos Work					0.0					
BOM			1,401.5		1,401.5		12,053.75			
Carpentry	20	20	1,211.3	341.5	1,552.8	56,745.58	9,255.99			
Custodial	13	13	25,450.9	1,458.8	26,909.7	65,927.00	111,163.17			
Electrical	16	12	839.8	76.5	916.3	27,910.97	5,937.99	4		
Entomology	5	5	787.0	189.0	976.0	1,251.60	2,698.83			
Environmental Tasks					0.0	2,577.60	770.00			
HVAC	23	23	1,912.6	206.0	2,118.6	749.23	22,134.85			
Locksmith	5	5	93.1	84.5	177.6		1,673.99			
Pipefitting	20	20	2,089.8	207.7	2297.5	3,544.00	6,822.06			
Plumbing	10	10	498.7	66.5	565.2		5,306.88			
Roads & Grounds	55	55	10,706.5	550.2	11,256.7	228,610.49	85,848.66			
Self Help					0.0					
Totals	167	163	45,081.2	3,188.7	48,270.9	387,316.47	263,770.78	4		0

REPAIR WORK
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance	3	3	201.5		201.5		52.97		3	
Asbestos Work					0.0					
BOM	228	228	2,890.8	1.0	2,891.8		24,286.05	10	29	
Carpentry	27	19	1,323.5	356.9	1,680.4	397.50	5,794.52	15	12	
Custodial		1			0.0	260.00				
Electrical	5	8	173.3	10.5	183.8	2,927.50	2,797.58		3	
Entomology	1	1	293.1	12.0	305.1	1,240.20		1		
Environmental Tasks					0.0					
HVAC			53.0		53.0			1	1	
Locksmith	1	1	92.5		92.5		80.00			
Pipefitting	2	3	40.3		40.3		8,470.29			
Plumbing	1	1	243.9		243.9			1		
Roads & Grounds	2	1	198.5	76.0	274.5	583.00			1	
Self Help					0.0					
Totals	270	266	5,510.4	456.4	5,966.8	5,408.20	41,481.41	28	49	0

CLIN 3000 (Repair Work)
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance					0.0					
Asbestos Work	2	2	9.5	119.0	128.5		3,270.99			
BOM					0.0					
Carpentry	23	7	146.5	135.5	282.0	32,145.06	57,295.32	12	9	
Custodial				16.0	16.0					
Electrical	2	4	129.0	63.0	192.0	34,206.20	18,423.00			
Entomology	1	1			0.0					
Environmental Tasks			895.7	712.7	1608.4					
HVAC		2	1.5		1.5	1,908.00	24,424.00			
Locksmith	1				0.0		5,229.49	1		
Pipefitting	32	28	949.0	80.0	1029.0	27,368.93	46,907.91	1	7	
Plumbing	4	6	8.5	1.5	10.0	5,891.48	19,284.35	2		
Roads & Grounds	3	3	763.0	57.5	820.5	35,050.92	18,176.70	1	3	
Self Help					0.0					
Totals	68	53	2,902.7	1,185.2	4,087.9	136,570.59	193,011.76	17	19	0

CLIN 4000 (New Work)
FY 00

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance					0.0					
Asbestos Work					0.0					
BOM					0.0					
Carpentry	83	63	407.0	170.5	577.5		2,088.19	19	23	
Custodial	5	4	3.0	29.0	32.0	2,098.80		1	1	
Electrical	84	51	598.0	197.0	795.0	1,817.90	10,447.99	20	24	
Entomology					0.0					
Environmental Tasks					0.0					
HVAC	8	4	34.5	14.0	48.5		180.71	2	2	
Locksmith	8	9	22.0	24.0	46.0		826.79	1	1	
Pipefitting	11	9	17.5	10.5	28.0	212.00	4,224.67	1	2	
Plumbing	10	7	25.5	100.0	125.5		6,824.59	1	4	
Roads & Grounds	24	19	730.5	106.0	836.5	9,673.02	11,898.46	5	8	
Self Help					0.0					
Totals	233	166	1,838.0	651.0	2,489.0	13,801.72	36,491.40	50	65	0

Service Orders (Maintenance & Repair)
FY 01

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance	510	495	930.5	12.0	942.5	536.00	11,438.66	26	19	0
Asbestos Work	1	2	1.5	0.0	1.5	-	-	0	0	0
Carpentry	1295	1238	3,330.3	289.3	3,619.6	2,693.58	29,252.32	125	100	0
Custodial	54	51	15.5	333.3	348.8	-	550.00	3	0	0
Electrical	1156	1079	2,521.9	225.5	2,747.4	11,240.14	50,090.30	82	66	0
Entomology	339	310	717.0	17.0	734.0	373.80	906.10	10	29	0
Environmental Tasks	30	26	27.5	13.0	40.5	771.90	667.62	2	4	0
HVAC	318	312	1,077.3	105.6	1,182.9	2,300.00	28,695.76	17	14	0
Locksmith	259	237	234.5	16.5	251.0	-	1,939.67	17	6	0
Pipefitting	570	550	1,954.9	397.3	2,352.2	1,096.50	24,739.35	18	18	0
Plumbing	1319	1250	1,793.2	106.0	1,899.2	15.00	52,532.50	51	34	0
Roads & Grounds	182	164	593.0	7.5	600.5	-	2,271.97	19	17	0
Self Help	46	46	0.0	0.0	0.0	-	8,056.21	0	0	0
Totals	6,079	5,760	13,197.1	1,523.0	14,720.1	19,026.92	211,140.46	370	306	0

Scheduled Preventive Maintenance & SOO's
FY 01

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance	3	3	60.0	0.0	60.0		175.33			
Asbestos Work					0.0					
BOM			1,213.1	6.5	1,219.6		13,714.77			
Carpentry	19	19	1,508.9	141.4	1,650.3	12,593.00	5,678.38			
Custodial	13	13	23,972.8	809.7	24,782.5	41,247.00	15,807.53			
Electrical	18	17	876.9	24.0	900.9	17,049.90	5,808.75			
Entomology	6	6	872.9	147.0	1,019.9	1,339.73	3,228.30			
Environmental Tasks	1	1			0.0	1,390.30				
HVAC	25	25	1,946.2	48.0	1,994.2	440.00	150,108.81			
Locksmith	5	5	73.0		73.0		3,987.59			
Pipefitting	20	19	2,354.4	77.0	2,431.4	12,400.00	4,410.57	1		
Plumbing	8	8	473.2	33.5	506.7		3,384.77			
Roads & Grounds	41	41	10,772.1	1469.8	12,241.9	164,796.06	152,467.87			
Self Help					0.0					
Totals	159	158	44,123.5	2,756.9	46,880.4	251,255.99	358,772.67	1		0

REPAIR WORK
FY 01

SHOP/ACTIVITY	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance	2	1	298.5		298.5				1	
Asbestos Work	1				0.0			2		
BOM	205	192	3,758.0	462.3	4220.3		27,672.48	1	40	
Carpentry	27	25	922.1	123.0	1,045.1		5,687.58	9	6	
Custodial	1			35.0	35.0				1	
Electrical	1	3	337.6	3.0	340.6			1		
Entomology			229.8		229.8	8,350.00	750.00			
Environmental Tasks					0.0					
HVAC			121.0		121.0			1		
Locksmith	1	1	30.5		30.5		149.00			
Pipefitting			33.0		33.0					
Plumbing			224.8	5.5	230.3					
Roads & Grounds	2	1	248.0	12.0	260.0		10,002.12		2	
Self Help					0.0					
Totals	240	223	6,203.3	640.8	6,844.1	8,350.00	44,261.18	14	50	0

CLIN 3000 (Repair Work)
FY 01

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance					0.0					
Asbestos Work	1	1	39.5		39.5	16.00	123.12			
BOM					0.0					
Carpentry	24	15	440.5	4.0	444.5	33,205.59	14,709.22	1	11	
Custodial				14.0	14.0					
Electrical	14	8	220.6	62.0	282.6	30,043.16	12,380.32		6	
Entomology					0.0					
Environmental Tasks	1	1	17.0	12.0	29.0	8,660.00	365.17			
HVAC	2	1	42.0		42.0		2,995.00	1		
Locksmith			3.0		3.0					
Pipefitting	17	14	412.5	42.5	455.0	23,823.03	21,145.46	4	6	
Plumbing			15.0		15.0					
Roads & Grounds	10	5	643.5	7.0	650.5	292.50	2,737.83	4	4	
Self Help					0.0					
Totals	69	45	1,833.6	141.5	1,975.1	96,040.28	54,456.12	10	27	0

CLIN 4000 (New Work)
FY 01

SHOP/ACTIVITY	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance					0.0					
Asbestos Work					0.0					
BOM					0.0					
Carpentry	43	35	282.0		282.0	2,225.00	4,400.22	22	16	
Custodial	3	2			0.0	3,626.25		2		
Electrical	49	36	730.0		730.0	2,566.00	17,920.44	19	20	
Entomology					0.0					
Environmental Tasks	5	5			0.0	1,430.00	7,760.88			
HVAC	8	5	33.0		33.0		134.01	1	4	
Locksmith	2	3			0.0		315.48			
Pipefitting	2	2	15.5		15.5	8,500.00	936.22	1	1	
Plumbing	7	6	104.0		104.0	84.50	2,162.49	2	3	
Roads & Grounds	23	18	300.0	4.0	304.0	3,232.00	5,141.46	6	7	
Self Help										
Totals	142	112	1,464.5	4.0	1,468.5	21,663.75	38,771.20	53	51	0

Service Orders (Maintenance & Repair)
FY 02

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance	542	485	840.0	35.5	875.5	-	6,322.25	35	41	0
Asbestos Work	8	7	17.5	24.0	41.5	33.60	50.58	1	0	0
Carpentry	1565	1392	4,560.9	152.8	4,713.7	5,672.39	38,129.80	132	141	0
Custodial	18	18	46.5	65.0	111.5	1,231.68	-	0	0	0
Electrical	1209	1052	2,127.0	240.5	2,367.5	14,106.64	45,697.66	112	111	0
Entomology	397	397	759.3	47.5	806.8	4,123.16	943.00	10	19	0
Environmental Tasks	103	95	10.5	0.0	10.5	9,425.20	550.85	1	4	0
HVAC	251	241	892.2	90.0	982.2	2,783.00	9,540.77	15	9	0
Locksmith	315	296	332.6	16.0	348.6	-	5,490.07	18	7	0
Pipefitting	476	474	2,038.7	401.3	2,440.0	6,561.00	45,006.91	15	5	0
Plumbing	1364	1301	1,858.6	136.9	1,995.5	-	51,247.15	51	46	0
Roads & Grounds	252	211	665.5	106.0	771.5	645.00	3,920.85	40	18	0
Self Help	47	44	0.0	0.0	0.0	-	7,430.71	2	1	0
Totals	6,547	6,011	14,149.3	1,315.5	15,464.8	44,581.67	214,330.60	432	402	0

Scheduled Preventive Maintenance & SOO's
FY 02

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance	3	3	59.0		59.0		36.36			
Asbestos Work					0.0					
BOM			1,550.6		1,550.6		17,691.65			
Carpentry	24	24	2,093.0	79.7	2,172.7	5,907.00	19,448.49			
Custodial	13	13	23,870.5	883.9	24,754.4	11,186.00	171,376.31			
Electrical	17	17	855.3		855.3	17,205.00	10,981.45			
Entomology	5	5	817.5	68.0	885.5	1,434.91	4,919.76			
Environmental Tasks	1	1			0.0	620.00	342.00			
HVAC	24	24	1,896.4	33.0	1,929.4		10,745.69			
Locksmith	5	5	78.0		78.0		2,719.23			
Pipefitting	20	20	2,453.1	44.8	2,497.9	8,323.82	3,415.55			
Plumbing	1	1	560.1	13.1	573.2		10,992.93			
Roads & Grounds	35	31	10,765.3	1,065.6	11,830.9	235,204.15	215,262.39	4		
Self Help					0.0					
Totals	148	144	44,998.8	2,188.1	47,186.9	279,880.88	467,931.81	4		0

REPAIR WORK
FY 02

SHOP/ACTIVITY	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance		1	116.0		116.0		10.03			
Asbestos Work					0.0					
BOM	200	227	3,381.8	652.2	4034.0		37,759.44	2	11	
Carpentry	10	13	781.8	81.0	862.8		3,498.15	3		
Custodial					0.0					
Electrical	7	7	207.6	24.5	232.1		185.13			
Entomology			245.7	15.0	260.7					
Environmental Tasks					0.0					
HVAC			22.0		22.0			1		
Locksmith			22.0	3.0	25.0					
Pipefitting					0.0					
Plumbing			98.0	17.8	115.8					
Roads & Grounds	2	4	958.5	1.0	959.5		3,144.90			
Self Help					0.0					
Totals	219	252	5,833.4	794.5	6,627.9	0	44,597.65	6	11	0

CLIN 3000 (Repair Work)
FY 02

SHOP/ACTIVITY	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance					0.0					
Asbestos Work	1	1	34.5		34.5		12.93			
BOM					0.0					
Carpentry	26	15	206.9	43.0	249.9	35,780.00	102,249.43	5	16	
Custodial					0.0					
Electrical	7	6	44.5		44.5	55,565.00	10,152.00	1	6	
Entomology					0.0					
Environmental Tasks		1			0.0		1,098.80			
HVAC	3	2	8.0		8.0	2,915.00	1,896.80		1	
Locksmith					0.0					
Pipefitting	17	19	478.5	3.0	481.5	7,008.80	16,772.13	2	2	
Plumbing	1		31.0		31.0				1	
Roads & Grounds	6	5	745.5	3.0	748.5	18,208.14	7,445.20	3	2	
Self Help					0.0					
Totals	61	49	1,548.9	49.0	1,597.9	119,476.94	139,627.29	11	28	0

CLIN 4000 (New Work)
FY 02

Shop/Activity	Number Received	Number Completed	S/T Man-Hours	O/T Man-Hours	Total Man-Hours	Other Contract Labor Costs ($)	Total Material Cost ($)	Number Canceled/ Disapproved	Number Carried Over	Number to Gov't
Appliance					0.0					
Asbestos Work			1.0		1.0					
BOM					0.0					
Carpentry	65	32	377.0	119.0	496.0			15	32	
Custodial					0.0					
Electrical	50	36	886.0		886.0	577.00	14,897.30	10	24	
Entomology					0.0					
Environmental Tasks	1	1			0.0	400.00				
HVAC	6	4	23.5		23.5		1,154.06	1	5	
Locksmith	4	1			0.0		1,077.60	3		
Pipefitting	10	3	51.5		51.5		386.28	1	7	
Plumbing	2	3	8.0		8.0		1,059.66	1	1	
Roads & Grounds	31	14	369.0		369.0	1,382.00	8,541.70	3	20	
Self Help					0.0					
Totals	169	94	1,716.0	119.0	1,835.0	2,359.0	27,116.6	34	89	0

APPENDIX 20
PWS 2 - GENERAL SITE PLANS

FACILITY ENGINEERING – USAG-S

Note: Due to a TACOM Security Office ruling, drawings showing the physical layout of installations cannot be place on the Internet. A separate CD-ROM containing the drawings will be provided to all potential offerors who have registered with the Contracting Officer.

APPENDIX 21

PWS-2 - LANDSCAPE PLANS

FACILITY ENGINEERING – USAG-S

Note: Due to a TACOM Security Office ruling, drawings showing the physical layout of installations cannot be place on the Internet. A separate CD-ROM containing the drawings will be provided to all potential offerors who have registered with the Contracting Officer.

APPENDIX 22

PWS 2 - SNOW AND ICE CONTROL PLANS

FACILITY ENGINEERING – USAG-S

Note: Due to a TACOM Security Office ruling, drawings showing the physical layout of installations cannot be place on the Internet. A separate CD-ROM containing the drawings will be provided to all potential offerors who have registered with the Contracting Officer.

APPENDIX 23

PWS 2 - CUSTODIAL FLOOR PLANS

FACILITY ENGINEERING - USAG-S

Note: Due to a TACOM Security Office ruling, drawings showing the physical layout of installations cannot be place on the Internet. A separate CD-ROM containing the drawings will be provided to all potential offerors who have registered with the Contracting Officer.

APPENDIX 24
PWS 2

ROOFING SYSTEMS INSPECTION SCHEDULE

FACILITY ENGINEERING DTA & USAG-S

BLDG	INSPECTION FREQUENCY YEARS	NEXT INSPECTION REQUIRED (CY)
104	EVERY 5	2004
165	ANNUAL	ANNUAL
168	ANNUAL	ANNUAL
200 AREA*	EVERY 7	2004
300	EVERY 5	2006
310	EVERY 5	2005
325	EVERY 5	2006
326	EVERY 5	2006
327	EVERY 5	2004
328	EVERY 5	2006
333/334	EVERY 5	2004
350	EVERY 5	2007
400 AREA*	EVERY 7	2004
410	EVERY 2	2004
570	EVERY 5	2005
571	EVERY 5	2005
572	EVERY 5	2005
596	EVERY 5	2004
672/673	EVERY 5	2006
697	EVERY 5	2004
700 AREA*	EVERY 7	2004
700	EVERY 5	2006
701	EVERY 5	2006
710	EVERY 5	2004
714	EVERY 5	2004
715	EVERY 5	2004
773	EVERY 5	2004
780	EVERY 5	2004
781	EVERY 5	2004
781SteelCanopy	EVERY 5	2004
826	EVERY 2	2004
835	EVERY 5	2005
836	EVERY 5	2004
900 AREA*	EVERY 7	2004
903	EVERY 5	2006
951	EVERY 5	2004
970	EVERY 2	2005
971	EVERY 5	2004
972	EVERY 2	2004
1060	EVERY 2	2004
2250	EVERY 5	2008
SEBILLE*	EVERY 5	2004
DTA Bldgs	EVERY 5	2004

* Housing Style Buildings

NOTE – Bldgs & Areas listed are for USAG-S except as noted for DTA at bottom of list.

APPENDIX 25

HISTORICAL BUILDING/DISTRICT MAINTENANCE

The buildings and area districts listed in this appendix are considered Historical. The buildings require special provisional work over and above the requirements of PWS 2. The work is listed below in the tables. Appendix A at the end of this Appendix lists Army Standards for guidance for maintaining the buildings and districts. Appendix B at the end of this Appendix contains (Secretary of the Interior's Standards for Preservation) additional guidance on maintaining the buildings. The Contractor shall perform the work requirements as stated below in the tables and in Appendix A and B on the historical buildings and districts. The "Interior/Exterior" designation indicates that part of the building requiring the special provisional work of this appendix.

200 Area NCO Residential District - Interior/Exterior

(Type 3B)
Buildings 259, 261, 263, 265, 267, 268, 269, 270

(Type 4)
Buildings 256, 257, 258, 260, 262, 264, 266

Type B (Type 1)
Buildings 227, 229, 231, 233, 235

300 Area - Exterior
Buildings 300, 310, 350, 309

400 Area Officer's Housing District - Interior/Exterior
(Type 1) – Building 424

(Type 2)- Building 426

(Type 3)
Buildings 447, 474, 478, 482

(Type 4 - no pantry)

Buildings 434, 435, 436, 437, 439, 441, 443, 445, 449, 451, 453, 455, 456, 457, 458, 459, 460, 462, 464, 466, 468, 470, 486, 488, 490, 492, 494, 496,472, 480, 484

(Type 4 - with pantry)
Buildings 438, 440, 442, 444, 448, 450, 452, 454

(Type 7)
Buildings 461, 463, 465, 467, 469, 471, 422, 423, 427, 428

Other 400 Area District - Exterior
Garages 425, 429, 473, 475, 477
Switch Stations 411, 412, 413, 414

Lufberry District in the 400 Area
Type B (Type 5) Interior/Exterior
Buildings 403,404,405,406,407,408

Type B (Type 6) - Building 409 - Interior/Exterior

Garage 415 - Exterior

Building 410 – Interior/Exterior

700 Area
Buildings 780 – Interior/Exterior, 781 Exterior

700 Area Family Housing District
Buildings 769, 770, 774, 775 - Interior/Exterior

Building 951 - Exterior

Maintain the character-defining features of the site and landscape of the Districts IAW the Army Standards in Appendix A, paragraph D-2.

Maintain the following building exteriors IAW Appendix A and B as these buildings are not listed in the tables below.

- Back-up electrical generator facility - 308
- Switch Stations 411, 412, 413, 414
- Garages – 415, 425, 429, 473, 475, 477

BUILDING / DISTRICT TABULATIONS

TABLE 3-A. "STANDARD NCO QUARTERS" (TYPE 3B) RESIDENCE

EXTERIOR FEATURES	MATERIALS	FINISHES	ARMY STANDARDS	SECRETARY OF THE INTERIOR'S *STANDARDS*	MAINTENANCE
Foundation	Continuous foundation is poured-in-place, reinforced concrete	Exposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls	Brick and mortar laid in 6-course American Bond	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond (6-course American).
Cornice (altered)	Molded wood box cornice with returns, altered by application of aluminum trim and fascia.	White exterior paint on wood and aluminum.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Roof: replaced 1994	Asphalt shingle on side gable roof (main block) and on low-pitch hipped roofs (porches); metal flashing; aluminum gutters	Gray asphalt-shingle roofs; white enameled gutters (factory finish).	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes.
Chimneys (1)	Located on rear elevation, at center interior of side gable roof. Brick and mortar flu (1 double flu) with brick chimney cap.	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry flues according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and

TABLE 3-A. "STANDARD NCO QUARTERS" (TYPE 3B) RESIDENCE

EXTERIOR FEATURES	MATERIALS	FINISHES	ARMY STANDARDS	SECRETARY OF THE INTERIOR'S *STANDARDS*	MAINTENANCE
					bond.
Doors: replaced 1976	Rectangular brick door openings. All exterior doors are metal, and have metal storm doors. Primary entrance is at side of front porch: 6-panel door. Rear porch entrance to kitchen: paneled nine-light half-glass door. Side entrance to basement: six-panel door.	Cream-colored exterior paint on metal (factory finish).	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	All exterior doors are currently metal replacements and detract from architectural character of this building type and district. Replacement doors and storm units need to match originals per *Army Standards*. Consult original blueprints for door types and specifications. If current code requirements or budget restrictions prohibit replacement to original specifications, replacement doors and storms should be compatible in appearance with the original door types.
Windows: replaced 1976	Windows are all metal replacements: single and paired 1/1 sash (main block), and short sliding basement windows. Window openings on main block have flat brick arches (original) and stone sills (original). Original wood trim is covered by aluminum flashing.	White exterior enamel on metal windows (factory finish); exposed brick headers (flat arches); and exposed stone windowsills.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	All exterior windows are currently replacements and detract from architectural character of this building type and district. Replacement window units need to match originals per *Army Standards*. Consult original blueprints for window types and specifications. If current Army requirements or budget restrictions prohibit replacement to original specifications, replacement windows and storms should be compatible in appearance with original window types and energy-efficient.
Elliptical Windows (2 altered)	Elliptical window is highly significant and distinctive architectural feature of this building type. Two elliptical window openings (A) located on front elevation at second-floor level in two outer bays (ABBA). (The two inner bays (B) have rectangular window openings with paired 1/1 sash). The elliptical header-bond brick openings originally had molded wood window trim and radiating muntins. The original window treatment has been obscured by plywood window board, and vinyl trim.	Elliptical opening has exposed brick headers; white exterior paint on wood panel and vinyl trim.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	Repair, or if necessary replace elliptical windows to original specifications on the blueprints. Complete repair/replacement according to Army *Standards* in conjunction with the Secretary of the Interior's *Standards*.
Front Porch (addition: 1965)	Concrete-block foundation and walls (crawl space under porch); walls are faced with stretcher-bond brick; large 12-light rectangular window with stone sill; wood box cornice; low-pitch hipped roof (asphalt shingle); aluminum gutters.	Exposed brick walls; exposed stone windowsill; white exterior paint on wood cornice; gray asphalt-shingle roof; white enameled gutters (factory finish).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Front porch is later addition and detracts from the architectural character of the building type and district. Maintain existing fabric according to *Army Standards* until porches can be redesigned.

TABLE 3-A. "STANDARD NCO QUARTERS" (TYPE 3B) RESIDENCE

EXTERIOR FEATURES	MATERIALS	FINISHES	ARMY STANDARDS	SECRETARY OF THE INTERIOR'S *STANDARDS*	MAINTENANCE
Primary Entrance at Side of Front Porch (addition: 1965)	Concrete steps and landing; low brick wall (stretcher bond) with stone coping; metal handrail attached to brick wall. Steps lead to one-bay porch on landing. Porch has wood box cornice and two square wood posts; hipped asphalt-shingle roof; aluminum gutters; single door opening with metal six-panel door; storm door.	Exposed concrete steps; exposed brick wall; black exterior paint on metal handrail attached to wall on stairs; white exterior paint on wood (posts and cornice on entrance porch); gray shingles; white enameled gutters (factory finish); cream exterior paint on metal front door (factory finish); white enameled metal storm door (factory finish).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Side entrance to front porch is later addition and detracts from the architectural character of the building type and district. Maintain and existing fabric according to *Army Standards* until side porch can be redesigned. .
Rear Porch (altered)	Rear porch is highly significant distinctive feature for this building type, and is a key feature that contributes to the architectural character of the district along Wooten Street. One-bay rear porch shelters kitchen door. Concrete steps; metal handrails; wood floor on landing; wood lattice covers openings under porch; wood balustrade (rectangular balusters and rails); two square wood Tuscan columns; molded wood architrave cornice with aluminum flashing; low-pitch hipped roof. Single door opening has paneled nine-light, half-glass metal door (replacement).	Exposed concrete steps; gray exterior paint on metal handrail; white exterior paint on wood (lattice, columns, balustrade, architrave cornice) and aluminum flashing; gray exterior paint on wood floor (landing); gray shingle roof; white enameled gutters (factory finish); cream exterior paint on metal door (factory finish); white enameled metal storm door (factory finish).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Rear porch is similar in appearance to original porch, but has later repairs and alterations. Maintain and repair according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Side Basement Entrance (altered)	Flat header-bond brick arch; single-door opening with metal surround; metal 6-panel door.	Exposed brick flat arch; white exterior paint on metal door surround; cream exterior paint on metal door (factory finish).	APPENDIX A, D-6. Doors and Windows; and D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Basement entrance is similar in appearance to original entrance, but door has been replaced. Maintain door opening, replacement doors need to be IAW *Army Standards.* (See above, exterior doors).

TABLE 3-B. "STANDARD NCO QUARTERS" (TYPE 3B) RESIDENCE					
BASEMENT FEATURES		**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Floor	Poured-in-place reinforced concrete.	Interior paint (gray) on concrete. Floor finish is not important for defining historic character of building type.	DA PAM 200-4, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before patching concrete. Maintain and existing foundation and basement floor according to *Army Standards*. If necessary, apply most effective floor finish for protective purposes. Investigate and install appropriate structural consolidation methods when settling threatens structural integrity of building.
Outer walls	Continuous poured-in-place, reinforced concrete.	Interior paint (cream) on concrete. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing foundation and bearing walls according to *Army Standards*. If necessary, apply most effective interior wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Interior party wall (divides units)	Terra-cotta blocks and stretcher-bond brick.	Interior paint (cream) on masonry. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing interior party walls according to *Army Standards*. Apply most effective wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Interior supports	Free-standing steel I-beam post at center of basement supports steel I-beam joist which bisects the basement laterally and provides primary structural support for first floor.	Gray paint on steel post. Unfinished exposed steel joist. Finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Always remove source of deterioration before repairs are completed. Maintain existing structural system according to *Army Standards*. Apply most effective finish when necessary for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Staircase	Straight wood staircase from kitchen (first-floor) down to the basement level. Staircase located along interior wall of side elevation. The staircase has three	Gray interior paint on wood. Historically accurate finish is	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain woodwork of staircase according to *Army Standards.*

TABLE 3-B. "STANDARD NCO QUARTERS" (TYPE 3B) RESIDENCE					
	landings, at the top, mid-point, and bottom. The mid-stair landing is for a door opening from the basement to the side yard (basement floor is below grade). The utilitarian wood staircase has hand and side rails (without balusters) attached to vertical newel and baluster posts. The treads, risers and strings are also wood.	not important for defining architectural character of building type.			
Coal Bin	Coal bin located at rear outer corner of basement. Rectangular coal bin formed by construction of two interior brick (stretcher-bond) partition walls that create a small storage room in the basement which was originally used for coal, but now is used for general storage purposes.	Cream interior paint on brick. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-3. Concrete/Masonry, and D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain coal bin according to *Army Standards*.
Brick flue (altered)	Interior brick flue near center of party wall that divides the two units. Originally designed for coal furnace, later adapted for oil furnace, then in 1985 adapted for gas furnace.	Cream interior paint on brick. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-9 and D-10. Interiors and HVAC.	Building Interior: Spaces, Features & Finishes; and Mechanical Systems.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain brick flue according to *Army Standards*.
Ceiling	Ceiling is unfinished. It is composed of the exposed wood floor joists and floorboards for the first floor.	Unfinished exposed wood.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Maintain structural features according to *Army Standards*.

TABLE 3-C. "STANDARD NCO QUARTERS" (TYPE 3B) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
First Floor walls and ceiling (original)	Plaster and lathe.	Interior wall paint on plaster	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing plaster walls and ceilings according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Baseboards in living room, on second floor landing, and in bedrooms (original)	Two-part original wood baseboard (plain baseboard with attached molding on top). Quarter-round finish molding at base.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing baseboards according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Door and window surrounds (original)	The same door and window surrounds are used on both the first and second floors throughout the original rooms in the house, excluding the enclosed front porch addition. They are plain, squared wood surrounds without moldings. The windows have molded wood sills and plain aprons.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing door and window surrounds according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Doors (original)	Original doors are solid wood, 5-panel doors, including the kitchen door to the basement, and the bedroom doors and the bathroom door on the second floor.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing doors according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Living Room floor (original)	Heart pine flooring	Stained and varnished	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing wood floors according to *Army Standards*.
Living Room staircase (original)	Wood staircase located on sidewall (outer) of Living Room. It is a straight stair with corner-winder steps at the top. There is a two-part balustrade that starts at the bottom of the stairs, is interrupted by a wall, then continues on the second-floor landing. The balustrade has a two-part square newel and is topped by a round turned finial. The two baluster posts on the second-floor landing have molded caps. One of the baluster posts is freestanding, while the other is	Interior trim paint on wood staircase; stained and varnished treads.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing staircase according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).

TABLE 3-C. "STANDARD NCO QUARTERS" (TYPE 3B) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
	attached to the wall and has molded finish trim at its lower end on the wall. The balustrade has a molded handrail and rectangular balusters. The stairs have heart-pine treads that indicate the staircase is also built of heart pine. The wall panel under the stair is decorated with a triangular spandrel created by the application of the same trim molding that is used on top of the baseboards.				
Front Sun Room floor (addition)	Oak flooring. Compatible with historic character, but not important as character defining feature.	Stained and varnished	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain in manner compatible with overall historic character of building type.
Front Sun Room baseboard (addition)	One-part molded wood baseboard; quarter-round finish molding at base. Compatible with historic character, but not important as character defining feature.	Painted wood trim	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain in manner compatible with overall historic character of building type.
Front Sun Room door and window surrounds (addition)	The door and window surrounds are plain, one-part molded surrounds that match the baseboard molding. Compatible with historic character, but not important as character defining feature.	Painted wood trim	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes, Design for Missing Historic Features	Inspect periodically (1x/yr) to evaluate overall condition. Maintain in manner compatible with overall historic character of building type.
Front Sun Room window (addition)	Large, 12-light rectangular front window with fixed panes and sliding windows. The entire window is boxed with wood frames on the interior, along the lines of the window mullions. Incompatible feature detracts from architectural character of building type.	Painted metal window mullions and wood box trim.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes, Design for Missing Historic Features	Inspect periodically (1x/yr) to evaluate overall condition. Maintain in manner compatible with overall historic character of building type.
Front Sun Room closet (addition)	There is a coat closet in the corner between the entrance door and the front window. It is wood-framed with gypsum wallboard and a hollow-core wood closet door. Compatible with historic character, but not important as character defining feature.	Interior paint on wallboard and trim paint on closet door.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes, Design for Missing Historic Features	Inspect periodically (1x/yr) to evaluate overall condition. Maintain in manner compatible with overall historic character of building type.
Kitchen floor (altered)	Vinyl floor covering over wood floor	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Floor covering replacement material needs to be

TABLE 3-C. "STANDARD NCO QUARTERS" (TYPE 3B) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
					compatible with historic character of building type and district. .Maintain kitchen floor according to *Army Standards*.
Kitchen baseboard(altered)	Manufactured black vinyl baseboard; remains of tall original plain, squared wood baseboard still extant at NE corner of kitchen door to back porch.	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain baseboard according to *Army Standards*. Baseboard replacement material needs to match original wood kitchen baseboard per original specifications
Kitchen cornice molding	Wood cornice molding	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing molding according to *Army Standards*.
Kitchen cabinets and fixtures (altered)	"Youngstown Kitchens" metal cabinets (ca. 1950s). April 1976: kitchen repairs, 200 Area, including plastic laminate counter tops, dishwashers, disposals, and stainless-steel sinks.	Factory enamel and metal finishes.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing cabinetry and fixtures according to *Army Standards*. Refer to original blueprints as source for design for replacement of cabinetry/fixtures that are compatible with original architectural character of building type and district.
Second Floor bedroom closets (altered)	Metal bi-fold doors replace original wood closet doors.	Factory enamel finish	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to *Army Standards*. Replacement doors need to be more compatible with historic character of building type and district. Refer to original blueprints for appropriate door type.
Second Floor bathroom (altered)	1984: the baths in the 200 Area were renovated with new tile, new fixtures, new cabinets and sinks. Original features: bathroom door; door and window surrounds; bathtub; built-in bathroom linen closet.	Ceramic tile floors and wainscot; interior paint on plaster walls and ceiling; interior trim paint on window and door surround; replacement cabinet and sink; porcelain enameled metal bathtub; interior trim paint on built-in bathroom linen closet.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to *Army Standards*. Replacement fixtures and cabinets need to be more compatible with historic character of building type and district.
Second Floor: floor covering (altered)	Floor tile (asbestos) laid over original wood floor.	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to *Army Standards.*

TABLE 4-A. "N.C.O. DOUBLE QUARTERS " (TYPE 4) RESIDENCE					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Foundation	Continuous foundation is poured-in-place, reinforced concrete	Exposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls	Brick and mortar laid in 6-course American Bond	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond (6-course American).
Roof Overhang and Eaves (altered)	Wood-frame overhang and eaves featuring scroll-sawn wood rafter tails. Altered by installation of vinyl soffit and aluminum fascia, but leaving wood rafter tails still exposed.	White exterior paint on wood and aluminum; vinyl factory finish.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Roof: replaced 1994	Asphalt shingle on hipped roof (main block) and on low-pitch hipped roofs (porches); metal flashing; aluminum gutters	Gray asphalt-shingle roofs; white enameled gutters (factory finish).	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes.
Dormers (2)	Two hip-roofed dormers with exposed scroll-sawn wood rafter tails centered on the roof over the rear elevation (one dormer per unit). The windows are 1/1 metal sash. The siding and trim are vinyl.	Gray asphalt-shingle roofs; white (factory finish) vinyl siding and trim; white exterior paint on wood rafter tails and exposed wood; white exterior enamel on metal windows.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings. Altered features that are now covered/replaced by

TABLE 4-A. "N.C.O. DOUBLE QUARTERS " (TYPE 4) RESIDENCE					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
					aluminum/vinyl should be returned to the original wood, per specifications on original blueprints.
Chimneys (2)	Interior-end chimneys. Brick and mortar flu with brick chimney cap.	Exposed brick and mortar.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry flues according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Doors: replaced 1976	All exterior doors are metal, and have metal storm doors. Front door is 6-panel door; back door is paneled nine-light half-glass door.	Cream-colored exterior paint on metal (factory finish).	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	All exterior doors are currently metal replacements and detract from architectural character of this building type and district. Replacement door and storm units need to match originals per *Army Standards*. Consult original blueprints for door types and specifications. If current code requirements or budget restrictions prohibit replacement to original specifications, replacement doors and storms should be compatible in appearance with the original door types.
Windows: replaced 1976	Windows are all metal replacements: paired 1/1 sash (façade); tripled 1/1 sash (side porches); paired narrow 1/1 sash (2nd floor above front entrances); paired and single 1/1 sash (rear elevation). The basement has short rectangular sliding windows. Window openings on main block have flat brick arches (original) and stone sills (original). Original wood trim is covered by aluminum flashing.	White exterior enamel on metal windows (factory finish); exposed brick headers (flat arches); and exposed stone windowsills.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	All exterior windows are currently replacements and detract from architectural character of this building type and district. Replacement window units need to match originals per *Army Standards*. Consult original blueprints for window types and specifications. If current Army requirements or budget restrictions prohibit replacement to original specifications, replacement windows and storms should be compatible in appearance with original window types and energy efficient.
Front Entrance (altered)	Front porch is highly significant distinctive feature for this building type, and is a key feature that contributes to the architectural character of the district. Four concrete steps and concrete landing; metal stair rail. The front entrance (altered) features a wood Tuscan Doric frontispiece with	Exposed concrete; green painted metal stair rails; white exterior paint on frontispiece; cream exterior trim paint on door.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Front porch resembles its historic appearance, but has later repairs and alterations. Maintain and repair/replace according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.

TABLE 4-A. "N.C.O. DOUBLE QUARTERS " (TYPE 4) RESIDENCE					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
	paneled wood jambs: the decorative trim on the frontispiece was removed and aluminum trim and vinyl molding was installed, and aluminum flashing was applied 1/3 way up the face of the pilasters. Six-panel metal door. Metal storm door.				
Back Entrance (altered)	Concrete steps; concrete landing; rectangular single door opening with a flat brick arch; aluminum flashing covers original door trim; metal (nine-light) half-glass door; metal storm door.	Exposed concrete; green painted metal stair rails; white exterior paint door surround; cream exterior trim paint on door.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Maintain rear entrance according to *Army Standards*.
Basement Bulkhead (replaced)	The exterior of the bulkhead is covered by double metal hatch doors on top of a poured-concrete foundation. It is situated immediately adjacent to the back steps. A notation on the original drawing indicates the bulkhead was later replaced, which is confirmed by the existing architectural evidence.	Metal hatch doors painted green; exposed concrete.	APPENDIX A, D-4. Metals	Building Exterior: Architectural Metals	Inspect periodically (1x/yr) to evaluate overall condition. Maintain bulkhead according to *Army Standards*.
Side porches (2): built 1956.	The side porches are compatible later additions that do not detract from the architectural character of the type or district. Two symmetrical enclosed side porches (one for each unit) form one-story wings on the main block. The stretcher-bond brick veneer on the porches is lighter in color than the original brick used in the main block. The porches have poured-concrete footings; concrete-block foundation walls; and wood-frame construction. The windows are quadrupled (side) and tripled (front and rear) 1/1 sash. The porches have shed roofs and wood box cornices covered with aluminum fascia and flashing.	Exposed concrete; exposed brick; white exterior paint on wood and metal trim.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to *Army Standards.* If replacement of the side porches is considered in the future, consult original blueprints and design new porches that are compatible with building type and district.

TABLE 4-B. "N.C.O. DOUBLE QUARTERS " (TYPE 4) RESIDENCE					
BASEMENT FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Floor	Poured-in-place reinforced concrete.	Interior paint (gray) on concrete. Floor finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before patching concrete. Maintain and existing foundation and basement floor according to *Army Standards*. If necessary, apply most effective floor finish for protective purposes. Investigate and install appropriate structural consolidation methods when settling threatens structural integrity of building.
Outer walls	Continuous poured-in-place, reinforced concrete.	Interior paint (cream) on concrete. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing foundation and bearing walls according to *Army Standards*. If necessary, apply most effective interior wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Interior party wall (divides units)	Terra-cotta blocks.	Interior paint (cream) on masonry. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing interior party walls according to *Army Standards*. Apply most effective wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Interior supports	Free-standing steel I-beam post at center of basement supports steel I-beam joist which bisects the basement laterally and provides primary structural support for first floor.	Unfinished exposed steel I-beams. Finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Always remove source of deterioration before repairs are completed. Maintain existing structural system according to *Army Standards*. Apply most effective finish when necessary for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Staircase	Straight wood staircase from kitchen (first-floor) down to the basement level. Staircase located along interior wall (party wall). The utilitarian wood staircase has hand and side rails (without balusters) attached to vertical newel and	Gray interior paint on wood. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain woodwork of staircase according to *Army Standards.*

TABLE 4-B. "N.C.O. DOUBLE QUARTERS " (TYPE 4) RESIDENCE					
BASEMENT FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
	baluster posts. The treads, risers and strings are also wood.				
Coal Bin	Coal bin located at rear outer corner of basement. Rectangular coal bin formed by construction of two interior brick (stretcher-bond) partition walls that create a small storage room in the basement which was originally used for coal, but now is used for general storage purposes.	Cream interior paint on brick. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-3. Concrete/Masonry, and D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain coal bin according to *Army Standards*.
Brick flue (altered)	Interior-end brick flue near center of side elevation on each unit. Originally designed for coal furnace, later adapted for oil furnace, then in 1985 adapted for gas furnace.	Cream interior paint on brick. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-9 and D-10. Interiors and HVAC.	Building Interior: Spaces, Features & Finishes; and Mechanical Systems.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain brick flue according to *Army Standards*.
Basement Bulkhead (altered)	The basement bulkhead is located on the rear elevation of each unit, between the back steps (exterior) and the coal bin (interior). The interior of the bulkhead has wood ladder steps; there is no interior door, although it originally probably did have a wood door.	Exposed concrete; gray interior paint on wood. Finish is not important for defining architectural character of building type.	APPENDIX A, D-9.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain bulkhead according to *Army Standards*.
Ceiling	Ceiling is unfinished. It is composed of the exposed wood floor joists and floorboards for the first floor.	Unfinished exposed wood.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Maintain structural features according to *Army Standards*.

TABLE 4-C. "N.C.O. DOUBLE QUARTERS " (TYPE 4) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
Walls and Ceiling (original)	Plaster and lathe.	Interior wall paint on plaster	APPENDI X A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing walls according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Flooring (original)	Original oak flooring throughout the first and second floors, except in kitchen, bathroom and side porch.	Stained and varnished oak flooring.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing wood floors according to *Army Standards*.
Baseboards (original)	Tall original molded wood baseboard (plain baseboard with attached quarter-round molding on top) on first and second floors. Quarter-round finish molding at base.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing baseboards according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Door and window surrounds (original)	The same molded door and window surrounds are used on both the first and second floors throughout the original rooms in the house, excluding the side porch addition. They are squared wood surrounds with stepped (two steps), molded outer edges and a bead along the inner edge. There is also a bead along the bottom edge of the window aprons.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing door and window surrounds according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Doors (original)	Original doors are solid wood, 5-panel doors, including the kitchen door to the basement, and the bedroom, bathroom and closet doors on the second floor.	Interior trim paint on wood (kitchen door). The doors on the second floor are stained and varnished. They appear to retain an original finish, or have been refinished in a manner similar to the original appearance.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing doors according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Radiators (original)	Metal radiators are located underneath	Trim paint on metal.	APPENDIX A, D-4.	Building	Inspect periodically (1x/yr) to evaluate

TABLE 4-C. "N.C.O. DOUBLE QUARTERS " (TYPE 4) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
	many of the windows on the first and second floors.		Metals; D-9. Interiors; D-10. HVAC.	Interior: Spaces, Features & Finishes	overall condition. Maintain existing radiators according to *Army Standards*.
Living Room staircase (original)	Wood staircase located on sidewall (interior party wall) of Living Room. It is a straight stair with corner-winder steps at the top. The balustrade starts at the bottom of the stairs, then is interrupted by a wall about halfway up the staircase. The balustrade on the lower half of the staircase has square newel and a similar baluster post, both with molded caps; rectangular balusters; and a molded handrail. The wall below the staircase has a triangular spandrel panel with a beaded molding. The upper half of the staircase is contained within a small stairwell. The handrail for the upper portion of the staircase is attached to the wall of the stairhall. The staircase is built of oak.	Interior trim paint on wood staircase; stained and varnished natural oak treads.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing staircase according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Side Porch (addition)	Oak flooring laid in perpendicular direction to the original flooring in the main part of the house. Compatible with historic character, but not important as character defining feature.	Stained and varnished	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain in manner compatible with overall historic character of building type.
Side Porch baseboard (addition)	Medium height simple wood baseboard; quarter-round finish molding at base. Compatible with historic character, but not important as character defining feature.	Painted wood trim	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain in manner compatible with overall historic character of building type.
Side Porch door and window surrounds (addition)	The side porch has no door or window trim except for simple molded wood sills and window aprons. The original door opening from the Living Room to the side porch is still extant and retains the original molded door surround in the Living Room, but not on the side	Painted wood windowsills and window aprons.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain in manner compatible with overall historic character of building type.

TABLE 4-C. "N.C.O. DOUBLE QUARTERS " (TYPE 4) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
	porch. Compatible with historic character, but not important as character defining feature.				
Kitchen floor (altered)	Vinyl floor covering over wood floor	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain kitchen floor according to *Army Standards*. Floor covering replacement material needs to be compatible with historic character of building type and district.
Kitchen baseboard(altered)	Manufactured black vinyl baseboard. Marks on wall indicate the kitchen originally had a tall molded baseboard similar to the baseboard used in the rest of the house.	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain baseboard according to *Army Standards*. Baseboard replacement material needs to match original wood kitchen baseboard per original specifications.
Kitchen cornice molding (original)	Wood cornice molding.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing molding according to *Army Standards*.
Kitchen cabinets and fixtures (altered)	"Youngstown Kitchens" metal cabinets (ca. 1950s). April 1976: kitchen repairs, 200 Area, including plastic laminate counter tops, dishwashers, disposals, and stainless-steel sinks.	Factory enamel and metal finishes.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing cabinetry and fixtures according to *Army Standards*. Refer to the original blueprints as source for design for new replacement cabinetry/fixtures that are compatible with original architectural character of building type and district.
Second Floor master bedroom closet feature with paired window lights (original)	The master bedroom features a corner closet with the original pair of tall, narrow windows. One of the windows lights the closet, and the other lights the bedroom. The original closet door is attached on the jamb in the space between the two windows. The original 2/2 wood sash fenestration has been altered with 1/1 metal sash.	Interior trim paint on wood trim; stained and varnished wood door; interior paint on closet walls.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing window trim, closet, door and door trim according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Second Floor bathroom (altered)	1984: the baths in the 200 Area were renovated with new tile, new fixtures,	Ceramic tile floors and wainscot; interior paint	APPENDIX A, D-9. Interiors	Building Interior:	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to

TABLE 4-C. "N.C.O. DOUBLE QUARTERS " (TYPE 4) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
	new cabinets and sinks. Original features: bathroom door; door and window surrounds; porcelain enamel metal bathtub may also be original.	on plaster walls and ceiling; interior trim paint on window and door surround; replacement cabinet and sink; porcelain enameled metal bathtub.		Spaces, Features & Finishes	*Army Standards*. Replacement of bathroom fixtures and cabinets need to be more compatible with historic character of building type and district.

TABLE 5-A. "TYPE B " (TYPE 1) RESIDENCE					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Foundation	Continuous foundation is poured-in-place, reinforced concrete	Exposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls	Brick and mortar laid in 6-course American Bond	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond (6-course American).
Cornice (altered)	Molded cornice altered by installation of vinyl soffit and aluminum fascia.	White exterior paint on wood and aluminum/vinyl factory finish.	APPENDIX A, D-5. Wood	APPENDIX A, D-5. Wood	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings. Altered features that are now covered/replaced by aluminum/vinyl should be returned to the original wood, per specifications on original blueprints.
Roof (replaced 1994)	Wood-frame, hipped roof (asphalt shingle) on main block and porches. Metal flashing; aluminum gutters; molded wood cornice.	Gray asphalt-shingle roofs; white enameled gutters (factory finish).	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes.
Chimneys (2)	Interior-end chimneys. Brick and mortar flu with stone chimney cap.	Exposed brick and mortar; exposed stone.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry flues according to *Army*

TABLE 5-A. "TYPE B " (TYPE 1) RESIDENCE					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
					Standards. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Doors: replaced 1976	All exterior doors are metal, and have metal storm doors. Front door is 6-panel door; back door is paneled nine-light half-glass door.	Cream-colored exterior paint on metal (factory finish).	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	All exterior doors are currently metal replacements and detract from architectural character of this building type and district. Replacement door and storm units need to match originals per *Army Standards*. Consult original blueprints for door types and specifications. If current code requirements or budget restrictions prohibit replacement to original specifications; replacement doors and storms should be compatible in appearance with the original door types.
Windows: replaced 1976	Windows are all metal replacements: paired 1/1 sash (first-floor on façade) and single 1/1 sash. The basement has short rectangular sliding windows. Window openings on main block have flat brick arches (original) and stone sills (original). Original wood trim is covered by aluminum flashing.	White exterior enamel on metal windows (factory finish); exposed brick headers (flat arches); and exposed stone windowsills.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	All exterior windows are currently replacements and detract from architectural character of this building type and district. Replacement window units need to match originals per *Army Standards*. Consult original blueprints for window types and specifications. If current Army requirements or budget restrictions prohibit replacement to original specifications, replacement windows and storms should be compatible in appearance with original window types and energy efficient.
Front Entrance Vestibules (renovated 1965)	The pair of projecting front entrance vestibules are attached and centered on the front elevation. Each vestibule has concrete steps, a concrete landing, and metal stair rails. The walls of the vestibule and steps are covered by stretcher-bond brick veneer. The vestibules have a wood-frame structure and are constructed upon concrete footings that support a raised concrete slab floor. The front entrance (altered) features a wood Tuscan Doric frontispiece with paneled wood jambs, wood pilasters, and a wood entablature. There is a rectangular wood transom with a fanlight over the door opening. The decorative trim on the frontispiece	Exposed concrete; green painted metal stair rails; white exterior paint on frontispiece; cream exterior trim paint on door; exposed brick veneer; exposed stone window sill.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Front entrance vestibule is similar in appearance to original, but is later renovation. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings. Altered wood features as well as those that are now covered/replaced by aluminum/vinyl should be repaired/replaced per specifications on the blueprints.

TABLE 5-A. "TYPE B " (TYPE 1) RESIDENCE					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
	has been altered by the installation of aluminum and vinyl trim and flashing, and the application of aluminum flashing 1/3 way up the face of the pilasters. The door opening has a six-panel metal door and a metal storm door. The vestibules are lighted by small 1/1 metal sash window replacements on the side elevation (originally 2/4 wood sash).				
Back Porch (altered)	A one-story, two-bay back porch is centered on the rear elevation. It covers both back entrances to the double residence. The porch is built on a concrete foundation and has symmetrical concrete side steps and metal hand rails. The wood porch is covered by a low-pitched hipped roof. It has three square Tuscan Doric columns that support a wood entablature. The porch covers the two back entrances to the building which are centered on the rear elevation and are separated by a wood-frame partition wall that divide the two bays of the porch. The back porch ceiling is covered with vinyl; the divider between the two side of the porch has vinyl siding. The door openings have flat brick arches; aluminum flashing covers the original door trim; they each have a metal (nine-light) half-glass door; and a metal storm door.	Exposed concrete; green painted metal stair rails; white exterior paint on wood porch, trim and aluminum/vinyl fascia/flashing; cream exterior trim paint on door.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Back porch is similar in appearance to original, but has later alterations. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Basement Bulkheads	The pair of bulkheads provide service entrances to each basement in the double residence. The pair of projecting, attached bulkheads are located at the foot of the back porch, along the front of the back porch. The exterior opening of each bulkhead is covered by double metal hatch doors on top of a poured-concrete foundation.	Metal hatch doors painted gray; exposed concrete.	APPENDIX A, D-4. Metals	Building Exterior: Architectural Metals	Inspect periodically (1x/yr) to evaluate overall condition. Maintain bulkhead according to *Army Standards*.
Side porches	The side porches are highly significant	Exposed concrete;	APPENDIX A, D-8.	APPENDIX A, D-8.	The side porches resemble their historic

TABLE 5-A. "TYPE B " (TYPE 1) RESIDENCE					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
(altered)	distinctive feature for this building type, and are key features that contribute to the architectural character of the district. Two symmetrical, wood-frame, enclosed side porches (one for each unit) form one-story wings on the main block. Each porch has poured-concrete footings; concrete-block foundation walls; wood-frame structure; and vinyl weatherboard siding. The porch features Tuscan Doric pilasters and an entablature. The pilasters are partially covered with aluminum flashing. The windows are quintupled (side) and tripled (front and rear) 1/1 metal sash. The porches have low-pitched hipped roofs and molded cornices covered with aluminum fascia and flashing.	white exterior paint on wood and metal trim.	Porches/Entrances	Porches/Entrances	appearance, but have later repairs and alterations. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.

TABLE 5-B. "TYPE B " (TYPE 1) RESIDENCE					
BASEMENT FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
Floor	Poured-in-place reinforced concrete.	Interior paint (gray) on concrete. Floor finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before patching concrete. Maintain and existing foundation and basement floor according to *Army Standards*. If necessary, apply most effective floor finish for protective purposes. Investigate and install appropriate structural consolidation methods when settling threatens structural integrity of building.
Outer walls	Continuous poured-in-place, reinforced concrete.	Interior paint (cream) on concrete. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing foundation and bearing walls according to *Army Standards*. If necessary, apply most effective interior wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Interior party wall (divides units)	Terra-cotta blocks; brick masonry.	Interior paint (cream) on masonry. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing interior party walls according to *Army Standards*. Apply most effective wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Interior supports	Free-standing steel I-beam post at center of basement supports steel I-beam joist which bisects the basement laterally and provides primary structural support for first floor.	Exposed steel I-beams. Finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Always remove source of deterioration before repairs are completed. Maintain existing structural system according to *Army Standards*. Apply most effective finish when necessary for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Staircase	Straight wood staircase from kitchen (first-floor) down to the basement level. Staircase located along interior wall (party wall). The utilitarian wood staircase has hand and side rails (without balusters)	Gray interior paint on wood. Historically accurate finish is not important for defining architectural character of building	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain woodwork of staircase according to *Army Standards.*

TABLE 5-B. "TYPE B " (TYPE 1) RESIDENCE					
BASEMENT FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
	attached to vertical newel and baluster posts. The treads, risers and strings are also wood.	type.			
Coal Bin	Coal bin located at rear outer corner of basement. Rectangular coal bin formed by construction of two interior brick (stretcher-bond) partition walls that create a small storage room in the basement which was originally used for coal, but now is used for general storage purposes.	Cream interior paint on brick. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-3. Concrete/Masonry, and D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain coal bin according to *Army Standards*.
Brick flue (altered)	Interior-end brick flue near center of side elevation on each unit. Originally designed for coal furnace, later adapted for oil furnace, then in 1985 adapted for gas furnace.	Cream interior paint on brick. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-9 and D-10. Interiors and HVAC.	Building Interior: Spaces, Features & Finishes; and Mechanical Systems.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain brick flue according to *Army Standards.*
Basement Bulkhead (altered)	The basement bulkhead is located on the rear elevation of each unit, at the foot of the front porch, between the back steps (exterior) and the coal bin (interior). The interior of the bulkhead has wood ladder steps; there is no interior door, although originally it probably did have a wood door.	Exposed concrete; gray paint on wood.	APPENDIX A, D-9.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain bulkhead according to *Army Standards*.
Ceiling (original)	Ceiling is unfinished. It is composed of the exposed wood floor joists and floorboards for the first floor.	Unfinished exposed wood.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Maintain structural features according to *Army Standards*.

TABLE 5-C. "TYPE B " (TYPE 1) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
Walls and Ceiling (original)	Plaster and lathe.	Interior wall paint on plaster	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing walls according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Flooring (original and altered)	Original wood flooring throughout the first floor (including the side porch), except in the kitchen. The wood flooring on the second floor is covered with vinyl tile.	Stained and varnished wood flooring.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing wood floors according to *Army Standards*. Replacement floor materials on the 2nd floor need to be compatible with historic character of building type and district.
Baseboards (original)	Tall original molded wood baseboard (plain baseboard with attached molding on top) on first and second floors, and on the side porch. Quarter-round finish molding at base.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing baseboards according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Door and window surrounds (original)	The same molded door and window surrounds are used on both the first and second floors throughout the house, including the side porch. They are squared wood surrounds with recessed center panels and molded inner and outer edges.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing door and window surrounds according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Doors (original)	Original doors are solid wood, 6-panel doors, including the kitchen door to the basement, and the bedroom, bathroom and closet doors on the second floor.	Interior trim paint on wood (kitchen door). The doors on the second floor are stained and varnished. They appear to retain an original finish, or have been refinished in a manner similar to the original appearance.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing doors according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Radiators (original)	Metal radiators are located underneath many of the windows on the first and second floors.	Trim paint on metal.	APPENDIX A, D-4. Metals; D-9. Interiors; D-10. HVAC.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing radiators according to *Army Standards*.
Living Room staircase (original)	Wood staircase located on sidewall (interior party wall) of Living Room. It is a straight stair with corner-winder steps	Interior trim paint on wood staircase; stained and varnished natural oak	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features &	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing staircase according to *Army Standards*. Retain historic

TABLE 5-C. "TYPE B " (TYPE 1) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
	at the top. It has square newel and baluster posts, both with molded caps; rectangular balusters; and a molded handrail. The hall on the second floor has a balustrade that overlooks the staircase.	treads.		Finishes	finishes and color schemes (conduct paint analysis to determine original color schemes).
Side Porch (original)	The side porch has wood flooring, baseboards, and door and window trim similar to the molded wood trim in the main part of the house. The walls are plaster and lathe; the upper portion of the walls above the windows are covered with wood shiplap paneling. The rectangular door opening from the living room to the side porch has double, 10-light French doors.	Stained and varnished wood flooring; painted wood trim; interior paint on plaster walls; interior paint on wood paneling; stained and varnished French doors.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing side porch interior according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Kitchen floor (altered)	Vinyl floor covering over wood floor	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain kitchen floor according to *Army Standards*. Replacement floor covering need to be compatible with historic character of building type and district.
Kitchen baseboard(altered)	Manufactured black vinyl baseboard. Marks on wall indicate the kitchen originally had a tall molded baseboard similar to the baseboard used in the rest of the house.	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain baseboard according to *Army Standards*. Replacement of wood kitchen baseboard need to be per original specifications.
Kitchen cornice molding (original)	Wood cornice molding.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing molding according to *Army Standards*.
Kitchen cabinets and fixtures (altered)	"Youngstown Kitchens" metal cabinets (ca. 1950s). April 1976: kitchen repairs, 200 Area, including plastic laminate counter tops, dishwashers, disposals, and stainless-steel sinks.	Factory enamel and metal finishes.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing cabinetry and fixtures according to *Army Standards*. Refer to original blueprints as source for design for replacement of cabinetry/fixtures that are compatible with original architectural character of building type and district.
Second Floor bathroom (altered)	1984: the baths in the 200 Area were renovated with new tile, new fixtures, new cabinets and sinks. Original features: bathroom door; door and	Ceramic tile floors and wainscot; interior paint on plaster walls and ceiling; interior trim paint on	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain original features according to *Army Standards*. Replacement of sinks, fixtures and cabinets need to be

TABLE 5-C. "TYPE B " (TYPE 1) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
	window surrounds; original built-in linen cabinet; porcelain enamel metal bathtub may also be original.	window and door surrounds and on linen cabinet; replacement cabinet and sink; porcelain enameled metal bathtub.			more compatible with historic character of building type and district.

TABLE 6. SERVICE CLUB (POLICE STATION), BUILDING 300					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
Foundation (original, additions and alterations)	Continuous foundation is poured-in-place, reinforced concrete. Regularly spaced interior concrete footings under main block.	Exposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original with alterations)	Original walls are brick and mortar laid in 6-course American Bond. The addition on southeast corner is brick with a wood-frame window bay. The extension of the rear porch is wood-frame construction.	Exposed brick. Aluminum or vinyl siding.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond. Avoid vinyl, aluminum, or other artificial sidings. Refer to original blue prints and historic photographs for detail guidance.
Cornice (original with alterations)	The original molded cornice has been covered for the most part by the later additions and alterations. The original wood cornice is visible on each of the end gables, which have a raking cornice with returns.	White exterior paint on wood.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (1x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Avoid vinyl, aluminum, or other artificial flashing and fascia. Refer to original blue prints and historic photographs for detail guidance.
Roof (altered)	Main block has a side-gable roof. Wings have side-gable roofs. Remainder of roofs are flat or low pitched shed roofs. Original slate roof later replaced by gray asphalt shingles. Aluminum gutters and downspouts.	Gray asphalt-shingle roofs.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Retain roof shapes and maintain roof according to *Army Standards*.
2 Chimneys (original)	Two interior-end chimneys on main block with stone caps. Brick and mortar, stone.	Exposed brick, mortar, stone.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Inspect and clean chimneys periodically per fire code requirements. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing chimneys according to *Army Standards*. Repairs-in-kind and new brickwork should match

TABLE 6. SERVICE CLUB (POLICE STATION), BUILDING 300					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
					original stone and brick type/color, mortar type/color/pointing, and bond.
Doors (replaced and altered)	All exterior doors are later replacements.	N/A	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	Doors are all later replacements and they detract from the architectural character of the building and adjacent district. Replace exterior doors on prominent elevations with doors of similar style to the original door types and compatible with the architectural character of this building type and district. Maintain doors per *Army Standards*. Consult original blueprints and historic photographs for original door types to use as models for replacement doors.
Windows (original, replacement, and blocked/boarded)	The arched Palladian windows on the north and south gable ends are highly significant character-defining features. The Palladian window on the north end has been altered for a door. The window on the south end preserves its original appearance. Three original 6/6 sash windows are still extant on the front elevation of the dining room (north wing), and one paired 6/6 sash exists in the kitchen (covered by siding). The original window openings have flat brick arches and stone sills. The remainder of the original windows on the building have been covered with aluminum or vinyl siding.	Paint on wood; exposed brick headers (flat arches); and exposed stone sills.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	Repair/replacement work on original windows need to be consistent and compatible with the window types, fenestration patterns, and light sizes of the architectural character of this building type and adjacent district. Maintain windows per *Army Standards*. Consult original blueprints and historic photographs for original window types to use as models for repairs and replacements.
Front Entrance Porch (altered or replaced)	The front porch is a prominent, highly significant architectural feature. However, the present one-story, five-bay front porch is not original to the building (altered or replaced). Blueprints show a brick front porch with arched windows and stone pilasters. The front entrance was designed with paneled double doors and an arched transom. Historic photographs show that the porch was built of wood to the same design. It is likely that the original porch was removed for the construction of the present porch.	Aluminum or vinyl siding.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	The present porch is not original to the building. The design of the porch detracts from the architectural character of the 300 area building group and adjacent NCO Residential District.
Rear Entrance Porch (altered and	The rear entrance porch was extended when the Men's Locker Room was built,	Aluminum or vinyl siding.	APPENDIX A, D-8. Porches/Entrances	Building Exterior:	The original rear porch is not visible on the exterior of the building. The rear porch is not a prominent

TABLE 6. SERVICE CLUB (POLICE STATION), BUILDING 300					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
enclosed)	which covers the original porch. The original blueprints show a rear three-bay porch that was similar in design to the front porch. However, historic photographs from the 30s-40s show a utilitarian wood-frame enclosed porch. The original porch is still extant behind the later porch extension.			Entrances and Porches	feature, and its present appearance does not detract from the historic character of the building or district. Maintain porch according to Army *Standards*. Use color schemes compatible with the historic character of the building and adjacent district. Avoid vinyl, aluminum, or other artificial sidings.

TABLE 7. HOSPITAL BUILDING (HEALTH CLINIC), BUILDING 310					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
Foundation (original)	Continuous foundation is poured-in-place, reinforced concrete with wall footings. Regularly spaced interior structural columns with concrete footings.	Concrete painted white	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	Brick and mortar laid in 5-course American Bond.	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Cornices (original)	Molded horizontal wood cornice on hipped roofs. The center pavilion on the façade has raking cornices and a horizontal cornice that frames the triangular pediment. The pediment features a lunette window.	White exterior paint on wood.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (1x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Lunette Window (original)	The triangular pediment on the center pavilion on the façade features a lunette window. It is a semicircular window set in a brick arch opening and has a stone sill. Blueprints from 1962 show the window having three lights (obscure glass) with straight radiating mullions. The lunette window is a highly significant distinctive feature.	White paint on wood; glass; brick arch; stone sill.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows.	Inspect periodically to evaluate overall condition. Maintain lunette window per *Army Standards*. Repair/replace lunette window to specifications on blueprints and as shown in historic photos. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Roof (altered)	The main block, rear wing, and rear addition have hipped roofs. The front center pavilion has a front gable roof. The hyphen between the rear wing and rear addition has a gable roof. The original slate roof has been replaced by gray asphalt shingles. Aluminum gutters and downspouts are later replacements.	Gray concrete-shingle roof.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to Army *Standards*. Retain historic roof shapes. Maintain metal roofing, flashing, gutters and downspouts per original specifications.
3 Chimneys (original)	Three chimney flues with stone caps. Brick and mortar, stone.	Exposed brick, mortar, stone.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs

TABLE 7. HOSPITAL BUILDING (HEALTH CLINIC), BUILDING 310					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
					are completed. Maintain existing chimneys according to *Army Standards*. Repairs-in-kind and new brickwork and stone should match original stone type and finish, as well as brick type/color, mortar type/color/pointing and bond.
Elevator Tower (original)	The brick elevator tower is located on the rear elevation between the main block and the rear wing. The elevator lobby is located at the juncture of the main block and wing, just behind the main staircase. The tower projects above the height of the roof and feature three small rectangular window openings on the north elevation, and a stone band course above the windows.	Exposed brick and stone.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing elevator tower according to *Army Standards*. Repairs-in-kind and new brickwork and stone should match original stone type and finish, as well as brick type/color, mortar type/color/pointing and bond.
Doors (replaced)	The entrance door in the front vestibule was replaced in the fall of 1961 by a modern double glass door. The transom glass was also replaced, new light fixtures on the porch and in the vestibule were installed, and a heating unit was added to the vestibule. All other exterior doors are replacement metal doors or half-glass wood doors.	White/cream paint or enamel on modern replacement doors.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	Doors are all later replacements. Replacement of exterior doors need to be of similar style to the original door types, and compatible with the architectural character of this building type and district. Maintain doors per *Army Standards*. Consult original blueprints and historic photographs for original door types to use as models for replacement doors.
Windows (replaced)	In 1962, the original windows were replaced with similar double-hung single and paired sash with transoms. The original windows were mostly double-hung sash and some casements. Window openings have flat brick arches and stone sills.	White exterior paint on wood. Exposed brick headers (flat arches); and exposed stone sills.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	The existing replacement windows are compatible with the original window types, fenestration patterns and light sizes, and correspond to the windows in the historic photographs. Maintain windows per *Army Standards*.
Front Entrance Portico (renovated 1961)	The center front pavilion features a one-story, one-bay Tuscan Doric entrance portico built of wood. The portico features paired Tuscan Doric columns at the front corners that support a molded entablature, which is crowned by a roof balustrade. The portico has a concrete foundation and concrete steps. The front door opening has deep paneled jambs with raised panels. The portico is a highly significant character-defining feature for this building type.	Painted wood; exposed concrete.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future protection before repairs are completed. Maintain existing woodwork according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Remove and avoid vinyl, aluminum, or other artificial sidings.

TABLE 8. BOAT HOUSE, BUILDING 350					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
Foundation (original)	Reinforced-concrete slab with concrete footings.	Exposed concrete.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	Brick and mortar laid in 5-course American Bond. The east and west elevations on the main block have five corbelled brick rectangular arches. Between the arches are brick wall buttresses with stylized Art Deco brick and stone detailing. The brick buttresses and Art Deco details are highly significant, character-defining features.	Exposed brick and stone.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls and detailing according to *Army Standards*. Repairs-in-kind and new stone and brickwork should match original stone and brick type/color, mortar type/color/pointing, and bond.
Cornices (original)	The main block has a corbelled brick cornice. The two end pavilions have brick parapets with a raised brick band course near the top of the wall. The brickwork above the band course is laid in a decorative diamond pattern. Above the decorative brickwork is a corbelled brick cornice. The brick cornices on the end pavilions are covered with aluminum fascia.	Exposed brick and mortar. Aluminum fascia. The decorative brickwork is a highly significant character-defining feature.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain walls according to *Army Standards*. Repairs-in-kind should match original brickwork type/color, mortar type/color/pointing, and bond.
Roof (altered)	The roof is not visible from the ground, so it was difficult to determine its exact form and composition. Interior inspection revealed that it is a flat roof supported by metal trusses, and covered by a metal roof. The main block features partial shed roofs along the side elevations, which were originally covered in slate, and are now asphalt shingles. The original copper gutters and downspouts are still extant.	Metal flat roof; gray concrete-shingle shed roofs.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes. Replace roofing material on shed roofs (main block) with slate roofs. Maintain, repair and replace roofing, flashing, gutters and downspouts. Avoid use of aluminum or vinyl. Use appropriate type of metal flashing on cornices of end pavilions and paint an appropriate color to match the brick.
1 Chimneys (original)	One chimney flue with stone caps. Brick and mortar, stone.	Exposed brick, mortar, stone.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing chimney according to *Army Standards*. Repairs-in-kind and new brickwork and stone should match original stone type and finish, as well as

TABLE 8. BOAT HOUSE, BUILDING 350					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
					brick type/color, mortar type/color/pointing and bond.
Doors (replaced)	The original north end pavilion has a replacement metal overhead garage door on the west elevation. The door opening on west elevation of main block, second bay from left has tall double metal doors with an 8-light rectangular transom. The door opening is surrounded by the original stone architrave. The second door opening on the west elevation has tall metal double doors. The east elevation of the south end pavilion has a large rectangular door opening for the boat well with a later replacement overhead door. The two door openings on the east elevation have tall metal double doors in rectangular brick openings, one of which has a rectangular transom. The large rectangular door opening formerly on the east elevation of the north end pavilion has been closed with brick and presently contains a single-door opening with a metal door. Any door openings originally on the north elevation have been covered by the brick addition to the north end of the building, and are now incorporated as part of the building interior.	Rectangular brick openings with metal doors and metal transom windows. Contrasting stone architrave on west elevation is significant character-defining feature.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	Doors are later replacements. Replacement of exterior doors needs to be compatible with the architectural character of this building type and style. Maintain doors per *Army Standards*. Consult historic photographs for original door types to use as models for replacement doors. Repair/replace bricked door openings in keeping with architectural character of building type and style.
Windows (original or replaced)	The west elevation of the main block has metal 6-light over 3-light transom windows. The windows have steel lintels and are set into rectangular brick openings. The south elevation on the south end pavilion has four rectangular window openings with stone sills. The west opening is closed with red brick. The other three are closed with glass brick. The east elevation of the main block as metal 6-light over 3-light transom windows as well as one small 4-light window and one large multi-pane	Rectangular brick openings with steel lintels and stone or brick sills. Metal windows. Glass brick.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	The existing windows appear compatible with the architectural character of the building style and type, except for the glass brick. Maintain windows per *Army Standards*. Consult historic photographs for original window types to use as models for future replacement windows.

TABLE 8. BOAT HOUSE, BUILDING 350					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
	metal window. Any window openings originally on the north elevation have been covered by the brick addition to the north end of the building, and are now incorporated as part of the building interior.				

Table 9-A. FIELD OFFICERS QUARTERS (TYPE 1 and TYPE 2) RESIDENCES					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Foundation (original)	Continuous foundation is poured-in-place, reinforced concrete	Exposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	Brick and mortar laid in 6-course American Bond	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond (6-course American).
Cornice (original)	Molded wood box cornice with returns.	White exterior paint on wood.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Roof (altered)	Original slate replaced by gray concrete shingles on side gable roof (main block) and gabled side porch. Metal (copper) flashing on front portico; metal (copper) gutters and downspouts per original specifications. Rectangular vent on gable ends.	Gray concrete-shingle roofs; exposed copper flashing, gutters and downspouts.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes. o Maintain metal flashing gutters and downspouts per Army *Standards*.
Chimney (original)	Interior-end (east) chimney. Brick and mortar chimney with stone cap.	Exposed brick and stone.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing chimney according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and

Table 9-A. FIELD OFFICERS QUARTERS (TYPE 1 and TYPE 2) RESIDENCES					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
					bond.
Doors (replaced)	Rectangular door openings. All exterior doors are metal (6-panel front; half-glass rear) and have metal/glass storm doors.	Cream-colored exterior paint on metal (factory finish).	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	Exterior doors are metal replacements that are of similar style to the original door types, and compatible with the architectural character of this building type and district. Maintain doors per *Army Standards*.
Windows (replaced)	Windows are all metal replacements: single and paired 6/6 sash, and short sliding basement windows. Window openings on main block have flat brick arches (original) and stone sills (original). Original wood trim is covered by aluminum flashing.	White exterior enamel on metal windows (factory finish); exposed brick headers (flat arches); and exposed stone windowsills.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	Exterior windows are currently replacements of similar style to the original window types and compatible with the architectural character of this building type and district. Maintain windows per *Army Standards*.
Front Portico (original)	One-bay Roman Doric portico (triangular pediment) features two Doric columns; molded architrave; frieze with triglyphs, metope, and guttae; and denticulated cornice. Reinforced-concrete footings and steps; wrought-iron railing.	Architectural features are painted wood (white exterior trim). Painted concrete steps (white). Painted wrought iron railing (green).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Ensure adequate drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain existing portico (woodwork, roof, steps, railing) according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Primary Entrance (original)	Front entrance is sheltered by portico. Rectangular single-door opening (6-panel metal door and storm door). Features 5-light sidelights. Three-part, recessed wood panels above door.	Cream exterior paint on metal front door (factory finish); white enameled metal storm door (factory finish). White exterior trim paint on door surround, sidelights and wood paneling.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain existing woodwork around door (sidelights and paneling) according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Rear Porch (enclosed)	One-bay, shed-roofed enclosed porch. The original porch was one-bay (open) with two Doric columns supporting a shed roof (metal). It had concrete steps and a wrought-iron railing. Features and materials of original porch are still extant (columns, steps, railing, shed roof). Walls are enclosed with wood sheathing. Copper roof.	Exposed concrete steps; white exterior paint on wood; cream exterior paint on metal door (factory finish); white enameled metal storm door (factory finish); copper roof, flashing, gutter and down spout.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Rear porch is similar in appearance to original porch, but has later repairs and alterations. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Side Porch (original)	Two-story brick side porch on east elevation has gabled roof. Gable end has molded triangular pediment,	Exposed brick and mortar. Painted wood (white exterior trim,	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future

Table 9-A. FIELD OFFICERS QUARTERS (TYPE 1 and TYPE 2) RESIDENCES					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
	wood/aluminum siding and a rectangular vent. Walls have rows of paired (front and back) and quadrupled (side) 6/6 sash windows (metal replacements) on both floors. The windows are separated between the first and second floors by a horizontal band of wood paneling.	paneling, siding).		Porches	protection before repairs are completed. Maintain existing woodwork and masonry according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Basement Bulkhead (original) (Type 2 only)	The basement bulkhead is located on the rear elevation, to the east side of the rear porch. The exterior of the bulkhead is covered by double metal hatch doors on a poured-concrete foundation.	Metal hatch doors painted green; exposed concrete.	APPENDIX A, D-4. Metals	Building Exterior: Architectural Metals	Inspect periodically (1x/yr) to evaluate overall condition. Maintain bulkhead according to *Army Standards*.

TABLE 9-B. FIELD OFFICERS QUARTERS (TYPE 1 and TYPE 2) RESIDENCES					
BASEMENT FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Floor	Poured-in-place reinforced concrete.	Interior paint (gray) on concrete. Floor finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before patching concrete. Maintain and existing foundation and basement floor according to *Army Standards*. If necessary, apply most effective floor finish for protective purposes. Investigate and install appropriate structural consolidation methods when settling threatens structural integrity of building.
Outer Walls	Continuous poured-in-place, reinforced concrete.	Interior paint (cream) on concrete. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing foundation and bearing walls according to *Army Standards*. If necessary, apply most effective interior wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Interior supports (altered)	Four freestanding steel I-beam posts support two perpendicular steel I-beam joists, which provide primary structural support for first floor.	Framed-in (wood casing), and exposed steel I-beams. Finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Always remove source of deterioration before repairs are completed. Maintain existing structural system according to *Army Standards*. Apply most effective finish when necessary for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Staircase (altered)	Straight wood center staircase from kitchen (first-floor) down to the basement level. The utilitarian wood staircase is contained within a stairhall. A wood handrail is attached to one side of the stair hall. The treads, risers and strings are covered with vinyl.	Vinyl over wood stairs. Finish is not important for defining historic character of building type.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain staircase according to *Army Standards.*
Coal Bin (altered)	Coal bin located at rear outer corner of basement. Rectangular coal bin formed by construction of two interior brick (stretcher-bond) partition walls that create a small storage room in the basement which was originally used for coal, but now is used for general storage purposes. Upper portion of coal bin is framed with wood planking.	Cream interior paint on brick and wood. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-3. Concrete/Masonry, and D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain coal bin according to *Army Standards*.
Brick flue	Interior-end brick flue. Originally	Cream interior paint	APPENDIX A, D-9	Building Interior:	Inspect periodically (1x/yr) to evaluate overall

TABLE 9-B. FIELD OFFICERS QUARTERS (TYPE 1 and TYPE 2) RESIDENCES					
(altered)	designed for coal furnace, later adapted for oil furnace, then in 1985 adapted for gas furnace.	on brick. Historically accurate finish is not important for defining architectural character of building type.	and D-10. Interiors and HVAC.	Spaces, Features & Finishes; and Mechanical Systems.	condition. Clean flue per code regulations. Maintain brick chimney according to *Army Standards*.
Basement Bulkhead (altered)	The basement bulkhead is located on the rear elevation between the back steps (exterior) and the coal bin (interior). The interior of the bulkhead has an interior wood door.	Exposed concrete; cream interior paint on wood. Finish is not important for defining architectural character of building type.	APPENDIX A, D-9.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain bulkhead according to *Army Standards*.
Ceiling (partially altered)	Partially finished with a dropped ceiling. Unfinished portion is composed of the exposed wood floor joists and floorboards for the first floor.	Dropped ceiling. Unfinished exposed wood.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Maintain structural features according to *Army Standards*.

TABLE 9-C. FIELD OFFICERS QUARTERS (TYPE 1 and TYPE 2) RESIDENCES					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
Walls and Ceiling (original)	Plaster and lathe. Kitchen ceiling is covered with ceiling tiles (altered).	Interior wall paint on plaster	APPENDI X A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing walls according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Flooring (altered)	Original wood flooring throughout the first and second floors. Living and dining rooms are carpeted. Kitchen and maid's room have vinyl floor covering.	Stained and varnished oak flooring.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing wood floors according to *Army Standards*.
Baseboards (original)	Tall molded baseboards on first and second floors.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing baseboards according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Door and window surrounds (original)	Similar molded door and window surrounds are used on both the first and second floors.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing door and window surrounds according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Doors (original)	Original doors are solid wood, 6-panel doors. The doors to the side porch are half-glass, nine-light doors with a single raised panel on the lower half of the door.	Interior paint on wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing doors according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Radiators (original)	Metal radiators are located underneath many of the windows on the first and second floors.	Paint on metal.	APPENDIX A, D-4. Metals; D-9. Interiors; D-10. HVAC.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing radiators according to *Army Standards*.
Main Staircase (original)	Wood staircase located in the center hall. It is a straight stair with a second-floor balcony. The balustrade has square newel and baluster post, a molded handrail and rectangular balusters. The newel and baluster posts have molded caps. The edge of the floor below the second-floor balcony rail is finished with wood paneling.	Treads and risers are carpeted. The remainder of the staircase is painted, except for the handrail, which is stained and varnished wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing staircase according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Fireplace Mantel	Georgian Revival-style fireplace	Interior trim paint on	APPENDIX A, D-9.	Building	Inspect periodically (1x/yr) to evaluate

TABLE 9-C. FIELD OFFICERS QUARTERS (TYPE 1 and TYPE 2) RESIDENCES					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
and Bookshelves (original)	mantel with flanking built-in bookshelves.	wood.	Interiors	Interior: Spaces, Features & Finishes	overall condition. Maintain existing fireplace, mantel and bookshelves according to Army *Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes).
Rectangular arches (2) (original)	Rectangular arches with molded wood trim open off the center hall to the dining room and living room.	Interior trim paint on wood.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing arches according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes, if unknown.
Two-story Side Porch (original)	The two-story side porch provides first and second-floor sun rooms on the east side of the house. The porch off the living room has double French doors, a carpeted floor, painted brick walls, molded window surrounds and cornice (no baseboard); and ship-lapped wood ceiling. The second-floor porch has an oak floor, ship-lapped wood wainscot, brick walls, molded window surrounds, and ship-lapped wood ceiling.	Interior paint on wood and brick.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing porches according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes, if unknown.
Corner Cabinet in Kitchen (addition)	Corner cabinet in kitchen does not appear to be original to the house. It is not documented in the blueprints, and it is not attached to the wall. The sides of the cabinet overlap the adjacent window and door moldings slightly, and the cabinet does not fit the space properly. However, appears to be of sufficient age and built in a style that is compatible with the historic appearance of the kitchen.	Interior trim paint on wood.	N/A	N/A	The corner cabinet is a compatible addition to the kitchen, but does not appear to be an original architectural feature. It is not attached to the wall and appears to be a piece of kitchen furniture, not an architectural feature.
Kitchen floor (altered)	Vinyl floor covering over wood floor	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain kitchen floor according to *Army Standards*. Replacement of floor covering needs to be compatible with historic character of building type and district.
Kitchen baseboard(altered)	Manufactured vinyl baseboard.	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces,	Inspect periodically (1x/yr) to evaluate overall condition. Maintain baseboard according to *Army Standards*.

TABLE 9-C. FIELD OFFICERS QUARTERS (TYPE 1 and TYPE 2) RESIDENCES					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
				Features & Finishes	Replacement material for the wood kitchen baseboard needs to be per original specifications.
Kitchen cornice molding and chair rail (original)	Chair rail molding in breakfast area. Walls have molded cornice.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing molding according to *Army Standards*.
Kitchen cabinets and fixtures (altered)	"Youngstown Kitchens" metal cabinets (ca. 1950s). Other alterations include plastic laminate counter tops, dishwasher, disposal, and stainless-steel sink.	Factory enamel and metal finishes.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing cabinetry and fixtures according to *Army Standards*. Refer to original blueprints for replacement of cabinetry/fixtures that are compatible with original architectural character of building type and district.
Bathrooms (renovated)	The bathrooms are renovated with appropriate reproduction tile work, bathroom fixtures, and plumbing hardware.	Ceramic tile floors and wainscots; interior paint on plaster walls and ceiling; interior trim paint on window and door surrounds; porcelain pedestal sinks; enameled metal bathtubs; reproduction metal plumbing hardware and lighting fixtures.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to *Army Standards*.

Table 10-A. COMPANY OFFICERS QUARTERS (TYPE 3 and TYPE 4) RESIDENCES					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Foundation (original)	Continuous foundation is poured-in-place, reinforced concrete	Exposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	Brick and mortar laid in 5-course American Bond	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond (6-course American).
Cornice (original)	Molded wood box cornice with returns.	White exterior paint on wood.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Roof (altered)	Original slate replaced by gray concrete shingles on side gable roof (main block) and gabled side porch. Metal (copper) flashing on front portico; metal (copper) gutters and downspouts per original specifications. Rectangular vent on gable ends.	Gray concrete-shingle roofs; exposed copper flashing, gutters and downspouts.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes. Maintain metal flashing gutters and downspouts per original specifications.
Chimney (original)	Interior-end (east) chimney. Brick and mortar chimney with stone cap.	Exposed brick and stone.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing chimney according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Doors (replaced)	Rectangular door openings. All exterior doors are metal (6-panel front; half-glass rear) and have metal/glass storm doors.	Cream-colored exterior paint on metal (factory finish).	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and	Exterior doors are metal replacements that are of similar style to the original door types, and compatible with the architectural character of this

Table 10-A. COMPANY OFFICERS QUARTERS (TYPE 3 and TYPE 4) RESIDENCES					
				Porches	building type and district. Maintain doors per *Army Standards*.
Windows (replaced)	Windows are all metal replacements: single and paired 6/6 sash, and short sliding basement windows. Window openings on main block have flat brick arches (original) and stone sills (original). Original wood trim is covered by aluminum flashing.	White exterior enamel on metal windows (factory finish); exposed brick headers (flat arches); and exposed stone windowsills.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	Exterior windows are currently replacements of similar style to the original window types and compatible with the architectural character of this building type and district. Maintain windows per *Army Standards*.
Front Portico (original)	One-bay classical portico. Reinforced-concrete footings and steps; wrought-iron railing.	Architectural features are painted wood (white exterior trim). Painted concrete steps (white). Painted wrought iron railing (green).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Ensure adequate drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain existing portico (woodwork, roof, steps, railing) according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Remove and avoid vinyl, aluminum, or other artificial sidings. Repair/replace altered wood features that are now covered/replaced by aluminum/vinyl.
Primary Entrance (original)	Front entrance is sheltered by portico. Rectangular single-door opening (6-panel metal door and storm door). Features sidelights and/or transom, and paneled jamb.	Cream exterior paint on metal front door (factory finish); white enameled metal storm door (factory finish). White exterior trim paint on door surround, sidelights and wood paneling.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain existing woodwork around door (sidelights and paneling) according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Rear Porch (enclosed)	One-bay, shed-roofed enclosed porch. The original porch was one-bay (open) with two Doric columns supporting a shed roof (metal). It had concrete steps and a wrought-iron railing. Features and materials of original porch are still extant (columns, steps, railing, shed roof). Walls are enclosed with wood sheathing. Copper roof.	Exposed concrete steps; white exterior paint on wood; cream exterior paint on metal door (factory finish); white enameled metal storm door (factory finish); copper roof, flashing, gutter and down spout.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Rear porch is similar in appearance to original porch, but has later repairs and alterations. Maintain and preserve according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Side Porch (original)	Two-story brick side porch on east elevation has gabled roof. Gable end has molded triangular pediment, wood/aluminum siding and a rectangular vent. Walls have rows of paired (front and back) and quadrupled (side) 6/6 sash windows (metal replacements) on both	Exposed brick and mortar. Painted wood (white exterior trim, paneling, siding).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future protection before repairs are completed. Maintain existing woodwork and masonry according to *Army Standards*. Retain historic finishes and color schemes (conduct paint

Table 10-A. COMPANY OFFICERS QUARTERS (TYPE 3 and TYPE 4) RESIDENCES					
	floors. The windows are separated between the first and second floors by a horizontal band of wood paneling. Lower level of porch is garage (replacement garage door); upper level is sun porch.				analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Basement Bulkhead (original)	The basement bulkhead is located on the rear elevation, to the east side of the rear porch. The exterior of the bulkhead is covered by double metal hatch doors on a poured-concrete foundation.	Metal hatch doors painted green; exposed concrete.	APPENDIX A, D-4. Metals	Building Exterior: Architectural Metals	Inspect periodically (1x/yr) to evaluate overall condition. Maintain bulkhead according to *Army Standards*.

TABLE 10-B. COMPANY OFFICERS QUARTERS (TYPE 3 and TYPE 4) RESIDENCES					
BASEMENT FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Floor (original)	Poured-in-place reinforced concrete.	Interior paint (gray) on concrete. Floor finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before patching concrete. Maintain and existing foundation and basement floor according to *Army Standards*. If necessary, apply most effective floor finish for protective purposes. Investigate and install appropriate structural consolidation methods when settling threatens structural integrity of building.
Outer Walls (original)	Continuous poured-in-place, reinforced concrete.	Interior paint (cream) on concrete. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing foundation and bearing walls according to *Army Standards*. If necessary, apply most effective interior wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Interior supports (altered)	Four freestanding steel I-beam posts support two perpendicular steel I-beam joists, which provide primary structural support for first floor. I-beams have been cut and leveling jacks inserted.	Exposed steel I-beams. Finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Always remove source of deterioration before repairs are completed. Maintain existing structural system according to *Army Standards*. Apply most effective finish when necessary for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Staircase	Straight wood center staircase from kitchen (first-floor) down to the basement level. The utilitarian wood staircase has hand and side rails (without balusters) attached to vertical newel and baluster posts. The treads, risers and strings are also wood.	Gray interior paint on wood. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain staircase according to *Army Standards.*
Coal Bin (altered)	Coal bin located at rear outer corner of basement. Rectangular coal bin formed by construction of two interior brick (stretcher-bond) partition walls that create a small storage room in the basement which was originally used for coal, but now is used for general storage purposes. Upper portion of coal bin is framed with wood planking.	White interior paint on brick and wood. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-3. Concrete/Masonry, and D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain coal bin according to *Army Standards*.
Brick flue	Interior-end brick flue. Originally	Cream interior paint	APPENDIX A, D-9	Building Interior:	Inspect periodically (1x/yr) to evaluate overall

(altered)	designed for coal furnace, later adapted for oil furnace, then in 1985 adapted for gas furnace.	on brick. Historically accurate finish is not important for defining architectural character of building type.	and D-10. Interiors and HVAC.	Spaces, Features & Finishes; and Mechanical Systems.	condition. Maintain brick chimney according to *Army Standards*.
Basement Bulkhead (original)	The basement bulkhead is located on the rear elevation between the back steps (exterior) and the coal bin (interior). The bulkhead door opening preserves the original double wood doors.	Exposed concrete; brown interior paint on wood door, metal screening, old door hardware.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain bulkhead according to *Army Standards*. Preserve original doors and door hardware of bulkhead exit.
Ceiling (original)	Ceiling is unfinished. It is composed of the exposed wood floor joists and floorboards for the first floor.	Unfinished exposed wood.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Maintain structural features according to *Army Standards*.

TABLE 10-C. COMPANY OFFICERS QUARTERS (TYPE 3 and TYPE 4) RESIDENCE					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
Walls and Ceiling (original)	Plaster and lathe.	Interior wall paint on plaster	APPENDI X A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing walls according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Flooring (original)	Original wood flooring throughout the first and second floors. Kitchen, maid's room and back portion of center hall have vinyl floor covering.	Stained and varnished oak flooring.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing wood floors according to *Army Standards*.
Baseboards (original)	Tall molded baseboards on first and second floors.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing baseboards according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Door and window surrounds (original)	Similar (squared, stepped, beaded) molded door surrounds are used on both the first and second floors. No window surrounds. Wood windowsills.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing door and window surrounds according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Doors (original)	Original doors are solid wood, 6-panel doors. The side door to the garage is a solid wood door with an exterior metal fire resistant coating "Buhl solid coating, Fire door standard, H.R.G. Taylor Co." Second floor sun porch has half-glass, nine-light door with two raised panels on the lower half of the door.	Interior paint on wood. Dark stained and varnished wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing doors according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Radiators (original)	Metal radiators are located underneath many of the windows on the first and second floors.	Paint on metal.	APPENDIX A, D-4. Metals; D-9. Interiors; D-10. HVAC.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing radiators according to *Army Standards*.
Main Staircase (original)	Wood staircase located in the center hall. It is a straight stair with a second-floor balcony. The balustrade has square newel and baluster post, a molded handrail and rectangular balusters. The newel and baluster	Treads and risers are carpeted. The remainder of the staircase is painted, except for the handrail, which is stained and varnished wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing staircase according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).

TABLE 10-C. COMPANY OFFICERS QUARTERS (TYPE 3 and TYPE 4) RESIDENCE					
	posts have molded caps.				
Fireplace Mantel and Bookshelves (original)	Georgian Revival-style fireplace mantel with flanking built-in bookshelves.	Interior trim paint on wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing fireplace, mantel and bookshelves according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes).
Dining Room Hutch (original)	Built-in wood hutch is original and the matches the design shown on the blueprints for the Field Officers Quarters.	Interior trim paint on wood.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing fireplace, mantel and bookshelves according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes).
Two-story Side Porch (original)	The two-story side porch provides an enclosed garage on the ground level and a second-floor sunroom. The garage off the living room has wood plank steps down to the ground level (concrete floor); brick walls; stone windowsills; plaster and lathe ceiling. The second-floor porch has an oak floor, ship-lapped wood wainscot, brick walls, molded window surrounds, and ship-lapped wood ceiling.	Interior paint on wood and brick.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing porches according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes, if unknown.
Rectangular arches (2) (original)	Rectangular arches with molded wood trim open off the center hall to the dining room and living room.	Interior trim paint on wood.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing arches according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes, if unknown.
Kitchen floor (altered)	Vinyl floor covering over wood floor	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain kitchen floor according to *Army Standards*. Replacement materials for floor covering need to be compatible with historic character of building type and district.
Kitchen baseboard(altered)	Manufactured vinyl baseboard.	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain baseboard according to *Army Standards*. Replacement of wood kitchen baseboard needs to be per original specifications.
Kitchen cornice molding (original)	Chair rail molding in breakfast area. Walls have molded cornice.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior:	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing

TABLE 10-C. COMPANY OFFICERS QUARTERS (TYPE 3 and TYPE 4) RESIDENCE					
				Spaces, Features & Finishes	molding according to *Army Standards*.
Kitchen cabinets and fixtures (altered)	"Youngstown Kitchens" metal cabinets (ca. 1950s). Other alterations include plastic laminate counter tops, dishwasher, disposal, and stainless-steel sink.	Factory enamel and metal finishes.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing cabinetry and fixtures according to *Army Standards*. Refer to original blueprints for replacement of cabinetry/fixtures so they are compatible with original architectural character of building type and district.
Bathrooms (renovated)	The bathrooms are renovated with appropriate reproduction tile work, bathroom fixtures, and plumbing hardware.	Ceramic tile floors and wainscots; interior paint on plaster walls and ceiling; interior trim paint on window and door surrounds; porcelain pedestal sinks; enameled metal bathtubs; reproduction metal plumbing hardware and lighting fixtures.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to Army *Standards*.

TABLE 11-A. COMPANY OFFICERS QUARTERS (TYPE 7) RESIDENCES					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
Foundation (original)	Continuous foundation is poured-in-place, reinforced concrete	Exposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	Brick and mortar laid in 5-course American Bond	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond (6-course American).
Cornice (original)	Molded wood cornice.	White exterior paint on wood.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Roof (altered)	Original slate roofing replaced by gray concrete shingles. Metal (copper) flashing; metal (copper) gutters and downspouts per original specifications. Rectangular vents on gable ends replaced (aluminum). Two gabled dormers on front elevation; three-bay shed-roofed dormer on rear elevation. Side Wing: dining room has shed roof; kitchen has side-gable roof.	Gray concrete-shingle roofs; exposed copper flashing, gutters and downspouts.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes. Maintain metal flashing gutters and downspouts per *Army Standards*.
Chimney (original)	Interior-end (east) chimney. Brick and mortar chimney with stone cap.	Exposed brick and stone.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing chimney according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Doors (replaced)	Rectangular door openings. All exterior doors are metal (6-panel front; half-glass rear) and have metal/glass storm doors.	Cream-colored exterior paint on metal (factory finish).	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and	Exterior doors are metal replacements that are of similar style to the original door types, and compatible with the architectural character of this

TABLE 11-A. COMPANY OFFICERS QUARTERS (TYPE 7) RESIDENCES					
				Porches	building type and district. Maintain doors per *Army Standards*.
Windows (replaced)	Windows are metal replacements: single and paired 6/6 sash; dormers have 4/4 and 1/1 sash; front porch has 1/1 sash. Windows have stone sills (original). Original wood trim is covered by aluminum flashing. Windows have metal shutters.	White exterior enamel on metal windows (factory finish); exposed stone sills. Metal shutters are painted white.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	Exterior windows are currently replacements of similar style to the original window types and compatible with the architectural character of this building type and district. Maintain windows per *Army Standards*.
Front Porch (original)	Three-bay, wood-frame, enclosed front porch featuring Tuscan Doric pilasters. Porch has concrete foundation (brick veneer); concrete steps; and wrought-iron railing. The 1/1 sash windows are metal replacements. However, the enclosed porch appears original. Architectural features inside the porch include Tuscan pilasters; plaster-and-lathe wainscot; shiplap ceiling; 5-course bond brick; concrete floor.	Architectural features are painted wood (white). Painted concrete steps (white). Painted wrought iron railing (green).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Ensure adequate drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain existing portico (woodwork, roof, steps, railing) according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Remove and avoid vinyl, aluminum, or other artificial sidings. Repair/replace altered wood features that are now covered/replaced by aluminum/vinyl.
Primary Entrance (original)	Front entrance is sheltered by porch. There is a step up from the porch floor to the front door sill. Rectangular single-door opening (replacement half-glass metal door and storm door). Features original 4-light rectangular transom.	Cream exterior paint on metal front door (factory finish); white enameled metal storm door (factory finish). White exterior trim paint on door surround, sidelights and wood paneling.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain existing woodwork around door (sidelights and paneling) according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Rear Entrance (altered)	Rear kitchen entrance has single half-glass door (metal replacement) and similar rectangular transom (original). Concrete steps and wrought-iron railing,	Exposed concrete steps (painted); cream exterior paint on metal door (factory finish); metal storm door (factory finish); white trim paint on door and transom surrounds.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Maintain and preserve rear entrance according to Army *Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.

TABLE 11-B. COMPANY OFFICERS QUARTERS (TYPE 7) RESIDENCES					
BASEMENT FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Floor (original)	Poured-in-place reinforced concrete.	Interior paint (gray) on concrete. Floor finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before patching concrete. Maintain and existing foundation and basement floor according to *Army Standards*. If necessary, apply most effective floor finish for protective purposes. Investigate and install appropriate structural consolidation methods when settling threatens structural integrity of building.
Walls (original)	Continuous poured-in-place, reinforced concrete.	Interior paint (cream) on concrete. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing foundation and bearing walls according to *Army Standards*. If necessary, apply most effective interior wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Staircase	Straight wood center staircase from kitchen (first-floor) down to the basement level. The wood staircase is contained within two walls (finished with plaster and lathe), and has a wood handrail attached to one wall. The treads have molded edges.	Gray interior paint on wood steps. Cream interior paint on plaster walls. Historically accurate finish on basement stairs is not important for defining architectural character of building type.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain staircase according to *Army Standards.*
Coal Bin (altered)	Coal bin located under dining room. The partition between the coal bin and the laundry room is constructed of a brick lower portion and is framed with wood planking above the brick. It is now used for general storage purposes.	Cream interior paint on brick and wood. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-3. Concrete/Masonry, and D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain coal bin according to *Army Standards*.
Brick Fireplace (possibly later addition)	Interior-end brick fireplace. Originally may have been a brick flue designed for a coal furnace, later adapted for a fireplace.	Exposed brick and mortar. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-3. Concrete/Masonry; and D-10. HVAC.	Building Exterior: Masonry; and Building Interior: Mechanical Systems.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain brick chimney according to *Army Standards*.
Basement Service Entrance	The basement service entrance is off the laundry room and has a below-grade	Painted concrete; metal door and storm (factory finish).	APPENDIX A, D-3. Concrete/masonry; and D-8.	Building Exterior: Entrances and Porches.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain service entrance according to *Army Standards*.

TABLE 11-B. COMPANY OFFICERS QUARTERS (TYPE 7) RESIDENCES					
BASEMENT FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
	concrete stair well; metal door and storm.		Porches/Entrances.		
Ceiling (original)	Ceiling is finished with plaster and lathe.	Interior paint on plaster. Paint color in basement is not important for defining architectural character of building type.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain ceiling according to *Army Standards*.

TABLE 11-C. COMPANY OFFICERS QUARTERS (TYPE 7) RESIDENCES					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
Walls and Ceiling (original)	Plaster and lathe.	Interior wall paint on plaster	APPENDI X A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing walls according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Flooring (original)	Original oak flooring throughout the first and second floors. Kitchen has vinyl floor covering.	Stained and varnished oak flooring.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing wood floors according to *Army Standards*.
Baseboards and cornice moldings (original)	Molded baseboards on first and second floors. Cornice moldings in living room, parlor/study, and kitchen. Picture molding in bedrooms on gable end between windows.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing baseboards according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Door and window surrounds (original)	Similar Colonial Revival-style molded door and window surrounds are used on both the first and second floors.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing door and window surrounds according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Doors (original)	Original solid wood, 5-panel doors appear to retain original finish.	Stained and varnished wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing doors according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Radiators (original)	Metal radiators are located underneath many of the windows on the first and second floors.	Paint on metal.	APPENDIX A, D-4. Metals; D-9. Interiors; D-10. HVAC.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing radiators according to *Army Standards*.
Main Staircase (original)	Center wood staircase. It is a reversed dogleg stair that begins at the back cross-hall. It has a balcony rail on the first landing that overlooks the entrance foyer. The stair has Colonial Revival-style newel and baluster posts, a molded handrail and rectangular balusters.	The newel, baluster posts and handrail appear to retain their original finish (dark stained, varnished wood). The balusters and stair risers are painted (cream interior trim color); and the treads are stained and varnished oak	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing staircase according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Fireplace Mantel (original)	Federal-style fireplace mantel.	Interior trim paint on wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing fireplace, mantel and bookshelves according to *Army Standards*. Retain historic finished and color

TABLE 11-C. COMPANY OFFICERS QUARTERS (TYPE 7) RESIDENCES					
					schemes (conduct paint analysis to determine original color schemes).
Kitchen floor (altered)	Vinyl floor covering over wood floor	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain kitchen floor according to *Army Standards*. Replacement floor coverings need to be compatible with historic character of building type and district.
Kitchen baseboard(altered)	Manufactured vinyl baseboard.	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain baseboard according to *Army Standards*. When flooring is replaced in the future, replace wood kitchen baseboard.
Kitchen cornice molding (original)	Chair rail molding in breakfast area. Walls have molded cornice.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing molding according to *Army Standards*.
Kitchen cabinets and fixtures (altered)	"Youngstown Kitchens" metal cabinets (ca. 1950s). Other alterations include plastic laminate counter tops, dishwasher, disposal, and stainless-steel sink.	Factory enamel and metal finishes.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing cabinetry and fixtures according to *Army Standards*. Refer to original blueprints for replacement of cabinetry/fixtures so they are compatible with original architectural character of building type and district.
Bathrooms (renovated)	The bathrooms are renovated with contemporary tile, cabinets, bathroom fixtures and plumbing hardware.	Ceramic tile floors and walls; interior paint on plaster walls and ceiling; interior trim paint on window and door surrounds.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to *Army Standards*. Replacement fixtures and cabinets need to be more compatible with the historic character of the building type and district.
Air ventilation system (original)	Motorized air circulation system located in the ceiling above the staircase pulls air up through the roof .	Painted metal ceiling vent.	APPENDIX A, D-10. HVAC.	Building Interior: Mechanical Systems.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to *Army Standards*.

TABLE 12-A. COMPANY OFFICERS QUARTERS-TYPE "B" (TYPE 5 and TYPE 6), THE LUFBERRY DISTRICT					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
Foundation (original)	Continuous foundation is poured-in-place, reinforced concrete	Exposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	Brick and mortar laid in 5-course American Bond	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond (6-course American).
Cornice (original)	Tall molded wood, raking and horizontal cornice on main block frames gable-end pediments. Brick, block modillion, horizontal cornice on side wing.	White exterior paint on wood. Exposed brick and mortar.	APPENDIX A, D-5. Wood; D-3 Concrete/Masonry.	Building Exterior: Wood; Masonry.	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork and brickwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Roof (altered)	Original slate replaced by gray concrete shingles on intersecting gable room. Metal (copper) standing-seam roof on one one-story portions. Metal flashing. Some original copper gutters and downspouts are painted white; some replacement aluminum gutters and downspouts.	Gray concrete-shingle roofs; exposed copper flashing, painted copper (white) and factory finish (white) aluminum gutters and downspouts.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes. Maintain and repair/replace metal roofing, flashing, gutters and downspouts.
Chimneys (original)	Two interior-end chimneys. Brick and mortar chimneys with molded brick caps. One is a furnace flue, and the other is a chimney for the fireplace.	Exposed brick and mortar.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing chimneys according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Doors (original and replacements)	Rectangular front double-door openings with original paneled wood double doors (3 raised panels). Rear door replaced	White paint on original wood doors. Cream factory finish	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and	Maintain original front doors. Back doors are metal replacements that are of similar style to the original door types, and compatible with the

TABLE 12-A. COMPANY OFFICERS QUARTERS-TYPE "B" (TYPE 5 and TYPE 6), THE LUFBERRY DISTRICT					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
	with metal half-glass doors. Storm doors installed on front and rear.	on metal doors.		Porches	architectural character of this building type and district. Maintain doors per *Army Standards*.
Windows (replaced)	Windows are all metal replacements: single 6/6 sash and short sliding basement windows. First floor sun porch has 6/6 and 8/8 sash with 4-light side lights. Second floor sun porch has an arched fanlight over 4/4 sash and flanking 1/1 sash (Palladian window). Window openings on façade have contrasting flat stone arches with keystones (original) and stone sills (original), which are highly significant features of this type. The rest of the windows have flat brick arches and stone sills. Original wood trim is covered by aluminum flashing.	White exterior enamel on metal windows (factory finish); exposed brick headers (flat arches); and exposed stone flat arches and sills.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	Exterior windows are currently replacements of similar style to the original window types and compatible with the architectural character of this building type and district. Maintain windows per *Army Standards*.
Roundel Windows (altered)	The front and rear gable-end pediments each feature a roundel window, which is a highly significant feature of this type. The window opening is contrasting stone, and originally had pivoting nine-light windows with wood muntins. The roundel windows on Quarters One are altered (glazing replaced with solid glass); however, 403-408 appear to retain the original roundel windows	Exposed stone, wood or metal window trim, glazing.	APPENDIX A, D-6. Doors and Windows.	Building Exterior: Windows.	Maintain original roundel windows per *Army Standards*.
Frontispiece (original)	Double-door front entrance has a Georgian Revival-style frontispiece with a molded wood architrave; arched fanlight (altered and obscured); and stone arch with keystone. Reinforced-concrete and steps; and original wrought-iron railing. Frontispiece is highly significant architectural feature.	Architectural features are exposed stone, and painted wood (white exterior trim). Painted concrete steps (white). Painted wrought iron railing (green).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Ensure adequate drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork and glazing before repairs are completed. Maintain existing frontispiece according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings. Fanlight should also be repaired/replaced according to specifications on the original blueprints.
Side Porch (original)	Two-story brick side porch on east elevation has gabled roof. Porch features tri-partite and Palladian windows on first and second-floor levels, which are highly significant features for this type. Windows are set above paneled wainscot (exterior	Exposed brick and mortar. Painted wood (white exterior trim and paneling).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future protection before repairs are completed. Maintain existing woodwork and masonry according to *Army Standards*. Retain historic finishes and

TABLE 12-A. COMPANY OFFICERS QUARTERS-TYPE "B" (TYPE 5 and TYPE 6), THE LUFBERRY DISTRICT					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
	and interior).				color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.

TABLE 12-B. COMPANY OFFICERS QUARTERS-TYPE "B" (TYPE 5 and TYPE 6)DISTRICT					
BASEMENT FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Floor	Poured-in-place reinforced concrete.	Interior paint (gray) on concrete. Floor finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before patching concrete. Maintain and existing foundation and basement floor according to *Army Standards*. If necessary, apply most effective floor finish for protective purposes. Investigate and install appropriate structural consolidation methods when settling threatens structural integrity of building.
Walls	Continuous poured-in-place, reinforced concrete.	Interior paint (white) on concrete. Wall finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural	Building Interior: Structural Systems	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always determine and repair/remove source of deterioration before repairs are completed. Maintain existing foundation and bearing walls according to *Army Standards*. If necessary, apply most effective interior wall finishes for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Interior supports (original)	Two freestanding steel I-beam posts support perpendicular steel I-beam joist that provides primary structural support for first floor.	Painted (gray) steel I-beams. Finish is not important for defining historic character of building type.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Always remove source of deterioration before repairs are completed. Maintain existing structural system according to *Army Standards*. Apply most effective finish when necessary for protective purposes. Investigate and install appropriate structural consolidation methods when damage threatens structural integrity of building.
Staircase (altered)	Straight utilitarian wood staircase. Plywood attached to side of banister on lower portion.	Painted (gray) wood. Finish is not important for defining historic character of building type.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain staircase according to *Army Standards.*
Brick flue (altered)	Interior-end brick flue. Originally designed for coal furnace, later adapted for oil furnace, then in 1985 adapted for gas furnace.	White interior paint on brick. Historically accurate finish is not important for defining architectural character of building type.	APPENDIX A, D-9 and D-10. Interiors and HVAC.	Building Interior: Spaces, Features & Finishes; and Mechanical Systems.	Inspect periodically (1x/yr) to evaluate overall condition. Clean flue per code regulations. Maintain brick chimney according to *Army Standards*.
Basement Exit (original)	The below-grade concrete basement exit is located on the rear elevation adjacent to the rear porch. The exit has an original interior wood door.	Exposed concrete; gray interior paint on wood door. Finish is not important for defining architectural character of building type.	APPENDIX A, D-9.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain basement exit according to *Army Standards*.
Ceiling	Unfinished exposed wood floor joists and floorboards of the first floor.	Unfinished exposed wood.	APPENDIX A, D-12. Structural.	Building Interior: Structural Systems	Inspect periodically (1x/yr) to evaluate overall condition. Maintain structural features according to *Army Standards*.

Table 12-C. COMPANY OFFICERS QUARTERS-TYPE "B" (TYPE 5 AND TYPE 6)					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
Walls and Ceiling (original)	Plaster and lathe. Kitchen ceiling is covered with ceiling tiles (altered).	Interior wall paint on plaster	APPENDI X A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing walls according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Flooring (original/altered)	Original oak wood flooring throughout the first and second floors. Stair hall on both levels and living and dining rooms are carpeted. Kitchen has vinyl floor covering.	Stained and varnished oak flooring.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing wood floors according to *Army Standards*.
Baseboards, cornice and picture moldings (original)	Tall molded baseboards on first and second floors. Cornice moldings in living room and dining room. Picture moldings throughout second floor.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing baseboards according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Door and window surrounds (original)	The architectural hierarchy of the formal and private areas is expressed in the two different types of door and window surrounds in the house. The formal rooms on the first floor have squared, stepped surrounds. While the kitchen, first-floor bedrooms, and the second floor rooms all have a different type of less formal, molded surrounds that is also found in the 400 Area Type 3 and 4 residences.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing door and window surrounds according to Army Standards. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Doors (original)	Original doors are solid wood, 6-panel doors. The doors to the side porch are half-glass, nine-light doors with a single raised panel on the lower half of the door.	Interior paint on wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing doors according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Radiators (original)	Metal radiators are located underneath many of the windows on the first and second floors.	Paint on metal.	APPENDIX A, D-4. Metals; D-9. Interiors; D-10. HVAC.	Building Interior: Spaces, Features &	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing radiators according to *Army Standards*.

Table 12-C. COMPANY OFFICERS QUARTERS-TYPE "B" (TYPE 5 AND TYPE 6)					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
				Finishes	
Main Staircase (original)	Wood staircase located in the center hall. It is a straight stair with a second-floor balcony. The balustrade has a turned newel and post, a molded handrail and turned balusters.	Treads and risers are carpeted. The remainder of the staircase is painted, except for the handrail, which is stained and varnished wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing staircase according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Fireplace Mantel (original)	Georgian Revival-style fireplace mantel features a stepped, molded architrave, reeded panels on the frieze, and denticulated cornice.	Interior trim paint on wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing fireplace and mantel according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes).
Rectangular arches (2) (original)	Rectangular arches with squared, molded architraves open off each side of the stair hall to the dining room and living room.	Interior trim paint on wood.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing arches according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes, if unknown.
Telephone niches (2)	Arched wall niches are located on the wall of the stair hall on both the first and second floors. The niches are recessed into the plaster wall and have wood telephone trays.	Interior paint on plaster and wood.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing arches according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes, if unknown.
Two-story Side Porch (original)	The two-story side porch provides first and second-floor sun rooms on the east side of the house. On the first floor, door openings flank the fireplace and provide access to the sun porch. The porch floor is carpeted; the room has a paneled wainscot; above the wainscot are tri-partite windows; the space between the windows is filled by built-in bookshelves. The second-floor porch has an oak floor, painted brick walls, Palladian window, and gambrel-roofed	Interior paint on wood and brick.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing porches according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes, if unknown.

Table 12-C. COMPANY OFFICERS QUARTERS-TYPE "B" (TYPE 5 AND TYPE 6)					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
	ceiling with exposed roof beams.				
Kitchen floor (altered)	Vinyl floor covering over wood floor	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain kitchen floor according to *Army Standards*. Replacement of floor covering needs to be compatible with historic character of building type and district.
Kitchen baseboard(altered)	Manufactured vinyl baseboard.	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain baseboard according to *Army Standards*. Replacement of wood kitchen baseboard needs to be compatible with the original architectural character of building type and district.
Kitchen cornice molding (original)	Kitchen walls have molded cornice.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing molding according to *Army Standards*.
Kitchen cabinets and fixtures (altered)	"Youngstown Kitchens" metal cabinets (ca. 1950s). Other alterations include plastic laminate counter tops, dishwasher, disposal, and stainless-steel sink.	Factory enamel and metal finishes.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing cabinetry and fixtures according to *Army Standards*. Refer to original blueprints for replacement of cabinetry/fixtures so they are compatible with original architectural character of building type and district.
Bathrooms (replaced and partially renovated)	The bathrooms are renovated with modern and reproduction tile work, bathroom fixtures, and plumbing hardware.	Ceramic tile floors and wainscots; interior paint on plaster walls and ceiling; interior trim paint on window and door surrounds; porcelain pedestal sinks; enameled metal bathtubs; reproduction metal plumbing hardware and lighting fixtures.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to *Army Standards*. Replacement of bathrooms with appropriate tile, plumbing fixtures, cabinets, and lighting fixtures compatible with original architectural character of building type and district..
Built-in closet and	Paneled (recessed paneling) closet and	Interior trim pain on wood.	APPENDIX A, D-9.	Building	Inspect periodically (1x/yr) to evaluate

Table 12-C. COMPANY OFFICERS QUARTERS-TYPE "B" (TYPE 5 AND TYPE 6)					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
linen cabinets.	linen cabinets for Master Bedroom.		Interiors.	Interior: Spaces, Features & Finishes.	overall condition. Maintain existing cabinetry according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes).

Table 13-A. Bachelor Officers Quarters (Lufberry Hall) (BUILDING 410)					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Foundation (original)	Continuous foundation is poured-in-place, reinforced concrete with wall footings. Regularly spaced interior structural columns with concrete footings.	Exposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	Brick and mortar laid in 5-course American Bond.	Exposed brick	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond (6-course American).
Cornice (original)	Main section has tall, denticulated, horizontal wood cornice. End pavilions have denticulated raking wood cornice on front-gabled end pavilions. Cornice frames triangular pediments on end pavilions.	White exterior paint on wood.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (1x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
Roof (altered)	Main section has side-gable roof. End pavilions have front-gable roofs that intersect perpendicularly with the main roof. Original slate roof replaced by gray concrete shingles. Metal (copper) roof over rear one-story porch (fitness room). Metal flashing. Original copper gutters and downspouts.	Gray asphalt-shingle roofs; copper flashing, copper gutters and downspouts.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes. Maintain and repair/replace metal roofing, flashing, gutters and downspouts per original specifications.
10 Dormers (original)	Five dormers symmetrically located on front and rear elevations of main section. One-bay, hip-roofed (asphalt-shingle), wood-frame dormers with 6/6 double-hung sash windows. Wood and/or aluminum siding and window surrounds. Windows may be originals or replacements (not able to distinguish from distance).	Exterior paint (white) on wood and/or aluminum siding.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (1x/yr) to evaluate overall condition. Ensure proper drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings.
4 Chimneys	Four interior chimneys with stone caps.	Exposed brick,	APPENDIX A, D-3.	Building	Inspect periodically (1x/yr) to evaluate overall

Table 13-A. Bachelor Officers Quarters (Lufberry Hall) (BUILDING 410)					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
(original)	Brick and mortar, stone.	mortar, stone.	Concrete/Masonry	Exterior: Masonry	condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing chimneys according to *Army Standards*. Repairs-in-kind and new brickwork and stone should match original stone type and finish, as well as brick type/color, mortar type/color/pointing and bond.
Doors (replacements)	Main entrance on front porch has 12-light double glass doors (modern replacements). Front doors are fairly compatible with the original double 8-light wood doors, which had single raised panels at the bottom; although the fenestration pattern and size of the lights in the original doors matched the size of the lights in the porch windows. Rear entrance on vestibule addition of two-story porch has double six-light glass replacement (storm) doors flanked by fixed one-light rectangular sidelights. End pavilions have back entrances with replacement metal doors. The door openings have been altered to accommodate the modern doors; however, the original rectangular transoms are still extant.	White/cream paint or enamel factory finish on modern replacement doors.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	Doors are all later replacements. Replacement exterior doors need to be of similar style to the original door types, and compatible with the architectural character of this building type and district. Maintain doors per *Army Standards*. Consult original blueprints and historic photographs for original door types to use as models for replacement doors.
Windows (replaced)	Existing windows are aluminum with vinyl mullions and aluminum trim. Window openings have flat brick arches and stone sills. Wood trim is covered/replaced by aluminum flashing.	White exterior enamel on metal windows (factory finish); exposed brick headers (flat arches); and exposed stone sills.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	Replace/repair windows so that the window types, fenestration patterns, and light sizes are consistent and compatible with the architectural character of this building type and district. Maintain windows per *Army Standards*.
Lunette Windows (replaced)	There is a semi-circular lunette window on the center of each front and rear gable-end pediment of the end pavilions. The lunette windows are highly significant character-defining features. The window openings have brick arches and stone sills. The windows appear from a distance to be replacement plate glass with vinyl mullions.	Wood or metal window trim.	APPENDIX A, D-6. Doors and Windows.	Building Exterior: Windows.	Maintain lunette windows per *Army Standards*. Where lunette windows have been altered, repair/replace per specifications on original blueprints. Maintain according to *Army Standards*.
2 Tall arched windows (altered)	The two end pavilions have tall arched windows (altered fenestration) on the rear elevations at the second-floor level. The	Metal and vinyl windows and trim.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows.	Maintain windows per *Army Standards*. Replacement windows for windows that have been altered (fenestration pattern, light size)

Table 13-A. Bachelor Officers Quarters (Lufberry Hall) (BUILDING 410)					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
	window openings have brick arches with contrasting stone keystones.				need to be compatible with specifications on original blueprints and as shown on historic photographs.
Front Entrance Porch (enclosed and altered)	Brick 2-story, 5-bay front porch serves as main entrance. Porch is highly significant, character-defining feature. Porch has concrete foundation; 5-course American bond brick 2-story arched gallery; contrasting stone medallions; wood panels between first and second levels; metal balcony railings on second level; horizontal denticulated wood cornice; hipped roof. First level of porch later enclosed with four ranks of large, four-part panel windows. Each panel has 4/4 double-hung sash with 4-light square transom. Windows appear to be of type and design compatible with original windows under the porch. Windows have stone sills. Concrete stairs to front entrance. Concrete handicapped access ramp with metal railings. Entrance covered by canopy.	Brick and mortar (exposed); exposed stone; painted wood; painted metal; aluminum; vinyl; exposed and painted concrete.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future protection before repairs are completed. Maintain existing masonry and woodwork according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings. Replacement of all the windows and glass doors, including those on the second floor as well as those on the first, need to be repaired so that they are compatible with the original appearance (type and fenestration patterns). If code permits, the balcony railings should be replaced to the original specifications.
Rear Entrance Porch (altered)	Rear entrance porch is similar in appearance to the front porch, except it does not have the decorative stone medallions. The rear porch also has a one-story brick entrance vestibule and handicapped access ramp, which are later additions. The rear porch was once connected via a covered walkway to Building 400 (destroyed by fire). The original blueprints show a similar rear entrance, except that instead of steps, there was a semi-circular concrete patio with a balcony railing, and steps at each side.	Brick and mortar (exposed); exposed stone; painted wood; painted metal; aluminum; vinyl; exposed and painted concrete.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future protection before repairs are completed. Maintain existing masonry and woodwork according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial sidings. Repair of all the windows and glass doors, including those on the second floor as well as those on the first, need to be repaired so that they are compatible with the original appearance (type and fenestration patterns).
Rear 1-story Corner Porch (Fitness Room)	One-story, two-bay brick porch. Concrete foundation and steps. Metal handrail. Bays are defined by closed brick arches. Upper portion of arches filled by semi-circular lunette windows. Lunette windows have brick arched openings and stone sills. Small roundel windows located below lunettes. Molded wood cornice. Metal roof. Wood roof balustrade with square, paneled	Brick and mortar (exposed); exposed stone; painted wood; painted metal; exposed metal; exposed and painted concrete.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Inspect periodically (1x/yr) to evaluate overall condition. Determine cause of deterioration and take adequate measures to assure future protection before repairs are completed. Maintain existing masonry and woodwork according to *Army Standards*. Retain historic finishes, color schemes (conduct paint analysis to determine original color schemes). Avoid vinyl, aluminum, or other artificial materials.

Table 13-A. Bachelor Officers Quarters (Lufberry Hall) (BUILDING 410)					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
	baluster posts, turned balusters, and molded rail.				

Table 13-B. Bachelor Officers Quarters (Lufberry Hall) (Building 410)					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
Walls (original)	Plaster and lathe.	Interior paint on plaster	APPENDI X A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing walls according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Ceilings (original and altered)	Plaster and lathe (original) in hotel suites, reception hall and ballroom. Ceiling altered on enclosed portion of front porch, which has a dropped ceiling of acoustic tile and recessed spot lighting. First and second-floor hallways also have dropped ceilings and recessed spot lighting.	Interior paint on plaster. Acoustic tile.	APPENDI X A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain ceilings according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Floors (altered)	Reinforced concrete floors with cement floor base. Original floor treatments are shown on the 1930 blueprints: cement floor & base; tile floor & base: tile floor & wainscot; terrazzo floor & base; linoleum type floor & cement base..	Hotel rooms, hallways, staircases, reception hall and ballroom have carpeted floors. Bathrooms have tile floors with marble thresholds. Kitchen has tile floor. The second-floor balcony levels of the front and back porches have cement floors (original).	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing cement floor base according to *Army Standards*. Install flooring that is compatible with historic character of building and district, and is appropriate for present building function.
Baseboards, cornice and picture moldings (original)	Bedroom suites: tall molded wood baseboards. Public areas including entrance foyer, front porch, reception hall, ballroom, and hallways: tall concrete baseboards covered by carpeting. The walls and ceiling of the reception hall and ballroom are elaborately finished with wood moldings. The square columns are finished with molded bases and cornices. The walls have picture and cornice moldings. The bottom surfaces of the ceiling beams are paneled, and the coffers between the beams are finished with elaborate picture and cornice moldings.	Interior trim paint on wood. Painted cement.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing baseboards and moldings according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Mantel and built-in bookshelves (original)	Three-bedroom VIP suites have wood Georgian Revival-style mantels with flanking built-in bookshelves in living/sitting room. Two-bedroom suites	Paint on wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features &	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing mantels and built-in bookshelves according to *Army Standards*. Retain historic finishes and color schemes

Table 13-B. Bachelor Officers Quarters (Lufberry Hall) (Building 410)					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
	have built-in bookshelves (no mantel) in living/sitting room.			Finishes	(conduct paint analysis to determine original color schemes).
Main front entrance (altered)	Front porch enclosed and entrance altered.	N/A	N/A	N/A	Maintain front entrance, finishes and color schemes in condition that is compatible with historic character of building and district.
Main rear entrance (altered)	One-story brick entrance vestibule on rear porch is later addition. Interior entrance door feature appears original: double 10-light, half-glass doors with wood panels on lower portion; 10-light rectangular sidelights with panels on lower portion; tri-partite rectangular transom panels (10-light panel flanked by 4-light panels).	Paint on wood; and window glazing.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Maintain original interior entrance features according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). When front and rear main entrances are repaired in the future, use interior entrance feature as model for main front and rear entrances, per design shown on original blueprints.
Door and window surrounds (original and altered)	Bedroom suites: squared, stepped molded wood door and window surrounds and rectangular arches. Deep wood windowsills. Bottom edge of window apron has single bead molding. Hallways: exterior door surrounds are similar to interior of bedroom suites. The remainder of the door and window openings do not have surrounds, and are finished with plaster or with modern metal surrounds. End pavilions: The tall, arched windows appear to be reproduction replacements and appear to have original wood sills with beaded apron (no molded surround). The large windows in the ballroom retain their original molded wood surrounds, sills and aprons.	Interior paint on wood trim. Paint on plaster. Paint on metal trim.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing original door and window surrounds according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Doors (original and replacement)	Bedroom suites: original 18-light double French doors between living room and study/bedroom; replacement metal firedoors to hallway; interior six-panel wood doors. Original three-light rectangular transoms over doors of entrance foyer. End pavilions: rear entrance doors are metal replacements. Door openings have been altered to accommodate	Bedroom suites: original or restored stained and varnished wood finish on original interior doors in bedroom suites. Rectangular transoms are painted wood. Metal replacement doors are painted white. Telephone door: original	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing original doors according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Install replacement doors in public areas that are compatible with historic character of building and district.

Table 13-B. Bachelor Officers Quarters (Lufberry Hall) (Building 410)					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
	replacement doors. Hallways: metal fire doors at end of second-floor hallways are set into partition walls (fire walls) built of masonry, steel and glass brick. Main staircase: second-floor doors to main staircase are replacement metal fire doors. Porch balcony level on front and rear: original half-glass, nine-light wood doors with two lower recessed panels; and three-light rectangular transom. Modern screen/storm doors and transom screens. Reception hall telephone booth: original half-glass (plate-glass) wood door with one lower recessed panel. Partition between reception hall and ballroom: four sets of original double half-glass (six-light) wood doors with single recessed wood panel on lower portion. [Use these doors as model for original entrance doors on front and rear porches.] Interior basement door in kitchen: original six-panel wood door. Front and rear entrance foyers: double 15-light replacement wood doors.	or restored stained and varnished wood finish. Partition between reception hall and ballroom: original or restored stained and varnished wood finish on double glass doors. Interior basement door in kitchen is painted wood. Front and rear entrance foyers: painted wood doors.			
Radiators (original)	Metal radiators under windows.	Paint on metal.	APPENDIX A, D-4. Metals; D-9. Interiors; D-10. HVAC.	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing radiators according to *Army Standards*.
Main Staircase in reception hall (original with alterations)	Two half-turn staircases with landings. Staircases are situated on each side of reception hall. Balcony on second floor connects the two staircases and overlooks two-story atrium space (altered). Staircases are built of steel and concrete, and have cast stone or stone finish that may be later addition. Banister and newel are molded cast-iron (original).	Treads and risers are carpeted. Exposed cast stone or stone finish. Painted iron banister and newel.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing staircase according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).

Table 13-B. Bachelor Officers Quarters (Lufberry Hall) (Building 410)					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
Staircases in end pavilions (original)	Concrete and steel staircase from first to second floor. Features original molded, cast-iron newel and banister. Steel staircase from second floor to attic level has utilitarian still banister.	Painted concrete, steel and iron. Stairs are carpeted.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing staircases according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes).
Steps from reception hall to hallways (first floor) (original).	Carpeted concrete steps from reception hall up to level of first-floor hallways.	Carpet over concrete base.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing steps according to *Army Standards.*
Double Fireplace (original)	Massive double brick fireplace situated at center of partition between reception hall and ballroom. Built of stretcher-bond brick and features contrasting stone mantelshelf, and rectangular panel.	Exposed brick and stone masonry.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing fireplace and contrasting stone features according to *Army Standards*.
Partition between reception hall and ballroom (original)	Partition is highly significant original character-defining feature. Wood and glass partition features tri-partite panels that fill the spaces between the square structural columns. The lower portion of each tri-partite panel contains double six-light glass doors flanked by six-light side panels. The lower portion of the double doors and flanking side panels are paneled with wood. The upper portion of each tri-partite panel contains a center twelve-light window panel flanked by six-light window panels.	Paint on wood members, mullions and moldings of partition. Glazed windows. Stained and varnished doors.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing partition according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Woodwork, fenestration patterns and door types of original partition can be used as models for replacement of altered fenestration and doors on front and rear porches.
Interior archways (original)	Interior rounded archways exist in the reception hall under the main staircases, and on the second floor hall at the juncture of the hallways with the center pavilion.	Interior paint on plaster.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing arches according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes, if unknown.
Telephone booths (original)	Telephone booth/rooms are located under each of the two main staircases.	Carpeted floors, plaster walls, original half-glass doors.	APPENDIX A, D-9. Interiors.	Building Interior: Spaces, Features & Finishes.	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing telephone booths/rooms according to *Army Standards*. Retain historic finished and color schemes (conduct paint analysis to determine original color schemes).
Reception desk (addition)	Reception desk is later addition.	N/A	N/A	N/A	
Bathrooms (renovated)	The bathrooms are renovated with reproduction tile work, bathroom	Ceramic tile floors and walls; interior paint on	APPENDIX A, D-9. Interiors	Building Interior:	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to *Army*

Table 13-B. Bachelor Officers Quarters (Lufberry Hall) (Building 410)					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S** *STANDARDS*	**MAINTENANCE**
	fixtures, and plumbing hardware, and marble shower stalls.	plaster walls and ceiling; interior trim paint on window and door surrounds; porcelain sinks; marble shower stalls; reproduction metal plumbing hardware and lighting fixtures.		Spaces, Features & Finishes	*Standards*. Replacement fixtures and cabinets for bathrooms need to be compatible with the building style and district.

TABLE 14-A. 700 AREA FAMILY HOUSING					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
Foundation (original)	Poured-in-place, reinforced concrete slab.	Unexposed concrete	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	Brick and mortar laid in stretcher bond	Exposed brick and mortar.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Cornice (altered)	Molded wood cornice, altered by application of aluminum or vinyl fascia or flashing.	White exterior paint on wood and aluminum/vinyl.	APPENDIX A, D-5. Wood	Building Exterior: Wood	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of woodwork before repairs are completed. Maintain according to *Army Standards*. Retain historic finishes and color schemes (conduct paint analysis to determine original color schemes). Remove and avoid vinyl, aluminum, or other artificial sidings. Repair/replace wood features.
Roof (replaced)	Asphalt shingles on side-gable roofs and on shed-roofed porches and stoops. Aluminum or vinyl flashing and gutters	Brown asphalt-shingle roofs; white gutters and down spouts (factory finish).	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes.
Chimney (original)	Exterior-end brick flue located on one end of the row-house block. Brick and mortar flu with stone or concrete chimney cap.	Exposed brick; stone or concrete.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (1x/yr) to evaluate overall condition of masonry. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry flues according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Doors (replaced)	Rectangular brick door openings. All exterior doors are metal, and have metal storm doors. Primary entrance has 6-panel door. Rear entrance has paneled nine-light half-glass door.	Cream-colored exterior paint on metal (factory finish).	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	All exterior doors are currently metal replacements that do not detract from architectural character of this building type and district. Maintain doors per *Army Standards*.
Windows (replaced)	Windows are all metal replacements: single 1/1 sash; two-part sliding	White exterior enamel on metal windows (factory finish);	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	All exterior windows are currently replacements that do not detract from architectural character of this building type and district. Maintain windows per *Army Standards*.

TABLE 14-A. 700 AREA FAMILY HOUSING					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
	windows. Rectangular brick openings with steel lintels and brick sills.	exposed brick sills.			
Semicircular vent (original)	Semicircular vent on gable end has an arched brick opening and brick sill. Metal louvers fill the opening.	Semicircular opening has exposed brick headers and a brick sill.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	Maintain semicircular vent feature per *Army Standards*.
Front and back stoops (altered)	Front, back and side entrances have similar concrete steps and platforms that are sheltered by small one-bay, projecting shed-roofed stoops.	Exposed concrete; wood-frame stoops (asphalt shingles; vinyl or aluminum siding).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Maintain existing stoops according to *Army Standards.* Remove and avoid vinyl, aluminum, or other artificial sidings. Repair/replace wood features.
Front porches (altered)	The recessed front entrances have shared concrete patios between each pair of units that are covered by shed roofs.	Exposed concrete patio; wood-frame shed roof (asphalt shingles; vinyl or aluminum siding).	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Maintain and front porches according to *Army Standards*.

TABLE 14-B. 700 AREA FAMILY HOUSING					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
Walls and Ceiling (original)	Plaster and lathe.	Interior paint on plaster	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain according to *Army Standards*. Use historically compatible color schemes and paint colors.
Tongue-and-groove paneling	Wood tongue-and-groove paneling on wall around coat closet under staircase in entrance foyer.	Paint on wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain according to *Army Standards*. Use historically compatible color schemes and paint colors.
Flooring (original)	Original oak wood flooring throughout, except in the kitchen and bathroom.	Stained and varnished oak flooring.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain existing wood floors according to *Army Standards*. Replacement material of existing floor coverings in kitchen and bath need to be compatible with historic character of building type and district.
Baseboards (original)	Molded wood baseboard (plain baseboard with attached molding on top) on first and second floors. Quarter-round finish molding at base.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain existing baseboards according to *Army Standards*. Use historically compatible color schemes and paint colors.
Door surrounds and window trim (original)	The same molded door surrounds are used on both the first and second floors throughout the house. The window trim is limited to sills and aprons.	Interior trim paint on wood	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain existing door surrounds and window trim according to *Army Standards*. Use historically compatible color schemes and paint colors.
Doors (original)	Original interior doors are all solid wood, 2-panel doors. The closets have sliding doors.	Interior trim paint on wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain existing doors according to *Army Standards*. Use historically compatible color schemes and paint colors.
Staircase (original)	Wood half-turn staircase with landings, located at front corner of each unit. The front door opens into the stair hall, which also functions as the entrance foyer. It has a slim square newel and baluster posts with molded caps; rectangular balusters; and a molded handrail. The hall on the second floor has a balustrade that overlooks the staircase.	Interior trim paint on wood staircase; stained and varnished natural oak treads, newel, baluster posts, and hand rails.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain existing staircase according to *Army Standards*. Use historically compatible color schemes and paint colors.
Kitchen floor (altered)	Vinyl floor covering over wood floor	N/A	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain kitchen floor according to *Army Standards*.
Kitchen baseboard	Molded wood baseboard similar to the baseboard used in the rest of the house.	Interior trim paint on wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features	Inspect periodically 1x/yr to evaluate overall condition. Maintain baseboard according to

TABLE 14-B. 700 AREA FAMILY HOUSING					
INTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S STANDARDS**	**MAINTENANCE**
(original)				& Finishes	*Army Standards*.
Kitchen cabinets and fixtures (renovated)	"Youngstown Kitchens" metal cabinets (ca. 1950s) may be original. Kitchen updated in 1970s with plastic laminate counter tops, dishwashers, disposals, and stainless-steel sinks.	Factory enamel and metal finishes.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain existing cabinetry and fixtures according to *Army Standards*.
Second Floor bathroom (renovated)	The baths were renovated in the 1970s or 1980s with new tile, new fixtures, new cabinets and sinks.	Ceramic tile floors and wainscot; interior paint on plaster walls and ceiling; interior trim paint on window trim and door surrounds; replacement cabinet and sink.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically 1x/yr to evaluate overall condition. Maintain bathroom features according to *Army Standards*. Replacement of fixtures and cabinets in bathroom need to be more compatible with historic character of building type and district.

TABLE 15A. ELEMENTARY SCHOOL (COMMUNITY FAMILY SERVICES) BUILDING 780)					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Foundation (original)	Reinforced-concrete slab with concrete footings.	Reinforced concrete.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	The walls are constructed of solid concrete block faced with brick laid in 5-course American bond. The interior division of space is reflected on the exterior where the brick wall ends dividing the classrooms and defining the entrance halls project perpendicularly from the elevation walls.	Exposed brick.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically (2x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls and detailing according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond. The brick walls under the windows are stained from water drainage from the windows. Determine cause of deterioration and take adequate measures to protect the walls.
Eaves and cornice (altered)	Wide overhanging eaves originally with plywood soffit, and wood fascia cornice, replaced with aluminum fascia and soffits. Aluminum replacement gutters and down spouts.	Wood fascia with metal gutters attached.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (1x/yr) to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection before repairs are completed. Maintain according to *Army Standards*. Use color schemes compatible with the historic character of the building and adjacent districts.
Roof (altered)	Flat roof above the clerestory and a sloping roof below covered by replacement composition roof. Roof structure has steel I-beam vertical supports, steel joists, diagonal metal web members, and a metal deck with a composition roof. The sloping roof below the clerestory is secured to the wall of the clerestory with steel brackets. The vertical steel I-beam supports form wall columns that are contained in the concrete-block walls and anchored on the concrete slab. .	Metal deck covered by composition roof.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically (2x/yr) to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes and clerestory. Use color schemes for roofing compatible with the historic character of the building and adjacent districts.

TABLE 15A. ELEMENTARY SCHOOL (COMMUNITY FAMILY SERVICES) BUILDING 780)					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Main Entrance Porch (altered)	The main entrance porch is formed by the projection of the roof over the southwest corner. Four metal pipe columns provide additional support for the roof and define the four bays of the entrance porch. The floor of the porch is a concrete slab. The porch resembles the original shown on the blueprints. Ceiling of porch is probably replaced with aluminum.	Concrete floor. Metal pipe columns painted cream. Cream colored porch ceiling probably of aluminum.	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and Porches	Maintain porch according to *Army Standards*. Use color schemes compatible with the historic character of the building and adjacent districts.
Doors (original or replacements)	Metal half-glass doors lighted by three rectangular lights correspond with original door type shown on blueprints. Metal rectangular transom above each door also shown on blueprints. There are four doors on the main entrance. The side entrances have three doors.	Rectangular openings with metal doors and metal transom windows.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	Inspect periodically to evaluate condition. Maintain exterior doors per *Army Standards*. Use color schemes compatible with the historic character of the building and adjacent districts.
Windows (altered)	The exterior walls are lighted with metal-framed continuous sash plate-glass windows (windows replaced with metal-framed sash). Air conditioning units are inserted into the lower window openings. Glass brick fills rectangular window openings on clerestory.	Rectangular brick openings with stone sills. Metal window frames. Glass brick.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	The existing windows and glass brick appear compatible with the architectural character of the building style and type. Maintain per *Army Standards*. Use color schemes compatible with the historic character of the building and adjacent districts.

TABLE 15 B. ELEMENTARY SCHOOL (COMMUNITY FAMILY SERVICES) BUILDING 780					
INTERIOR FEATURES	MATERIALS	FINISHES	ARMY STANDARDS	SECRETARY OF THE INTERIOR'S STANDARDS	MAINTENANCE
Walls (original)	The hallways have painted concrete-block walls with facing tiles on the lower portion. Offices and classrooms have painted concrete-block walls.	Interior paint on concrete block.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing walls according to Army Standards. Use color schemes compatible with the historic character of the building.
Ceilings (original and altered)	Suspended acoustic tile (replaced). Original acoustic tile on rock lathe ceiling remains in representative classrooms.	Acoustic tile.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain ceilings according to Army Standards. Use color schemes compatible with the historic character of the building.
Floors (altered)	Concrete slab. Hallways and offices are carpeted. Day care classroom has vinyl floor covering. Bathrooms have tile floors. Entrance vestibules have tile floors.	Carpet, vinyl, and tile flooring.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain floors in public areas and representative classrooms according to Army Standards. Use flooring that is compatible with historic character of building and is appropriate for present building function.
Baseboards (altered)	Metal or vinyl baseboards exist only in the entrance lobby. There are no baseboards in the hallways. The Day Care classroom has vinyl baseboards.	Metal or vinyl baseboards.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Use color schemes compatible with the historic character of the building.
Entrance Lobby (altered)	The original entrance lobby is extant, and is a highly significant character-defining feature. The quarry tile floor is covered with carpeting. The walls are brick faced. The ceiling is suspended acoustic tile. The four original wood entrance doors provide access to the entrance hall from the front entrance vestibule. The windows in the waiting area preserve the original wood panels under the windows. The original display cabinet in the waiting area is also extant.	Brick wall facing. Wood panels under the windows. Glass display cabinet with wood frame and sliding glass panels.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Maintain entrance lobby according to Army Standards. Maintain extant original features and finishes.
Cabinetry (original)	Some original cabinetry is extant in the representative classrooms and in the renovated offices. The cabinetry is of Modern design and is a highly significant character-defining feature.	High-quality, custom wood cabinetry. Stained and varnished wood.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Maintain cabinetry according to Army Standards. Retain original wood finish.
Door and	The door and window openings are finished with	Paint on metal trim.	APPENDIX A, D-9.	Building Interior:	Inspect periodically (1x/yr) to

TABLE 15 B. ELEMENTARY SCHOOL (COMMUNITY FAMILY SERVICES) BUILDING 780					
INTERIOR FEATURES	MATERIALS	FINISHES	ARMY STANDARDS	SECRETARY OF THE INTERIOR'S STANDARDS	MAINTENANCE
window surrounds (original and altered)	modern metal surrounds.		Interiors	Spaces, Features & Finishes	evaluate overall condition. Maintain existing original door and window surrounds according to Army Standards. Use color schemes compatible with the historic character of the building.
Doors (original and replacement)	The interior high-quality solid wood doors in all the public areas are original. The doors in the renovated offices are new installations.	Stained and varnished wood doors.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain existing original doors according to Army Standards. Retain original wood finish.
Bathrooms (renovated)	The bathrooms are renovated, but preserve the original tile wall facing.	Ceramic tile wainscot.	APPENDIX A, D-9. Interiors	Building Interior: Spaces, Features & Finishes	Inspect periodically (1x/yr) to evaluate overall condition. Maintain according to Army Standards.

TABLE 16. PX GASOLINE SERVICE STATION, BUILDING 781					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Foundation (original and 1955 addition)	Reinforced-concrete slab with concrete footings.	Reinforced concrete.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically 1x/yr to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original and 1955 addition)	The walls are constructed of solid concrete block faced with stretcher-bond brick. Brick band course of header bond under cornice.	Exposed brick.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically 1x/yr to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls and detailing according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Cornice (original and 1955 addition)	Molded wood box cornice with returns. Aluminum gutters and down spouts.	Painted wood cornice (light yellow); metal gutters and down spouts painted brown.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically 1x/yr to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection before repairs are completed. Maintain cornices according to *Army Standards*. Remove and avoid aluminum/vinyl. Use color schemes compatible with the historic character of the building and adjacent districts.
Roof (original and 1955 addition)	Side gable roof with asphalt shingles.	Gray asphalt shingles.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically 1x/yr to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes. Use color schemes for roofing compatible with the historic character of the building and adjacent districts.
Semicircular vents (original and 1955 addition)	Semicircular vents on gable ends. Brick arch, stone sill, louvered opening.	Brick; painted wood or metal louvered vent.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically 1x/yr to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain vents according to *Army Standards*. Use color schemes for roofing compatible with the historic character of the building and adjacent districts.
Wood cornice moldings over door openings (original and 1955	The molded wood cornices over the original doors were preserved in the recent renovation of the building and	Painted wood cornices.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	Inspect periodically 1x/yr to evaluate condition. Maintain exterior cornices and door frames per *Army Standards*. Remove and avoid aluminum/vinyl. Use color schemes compatible with the historic character of the building and

TABLE 16. PX GASOLINE SERVICE STATION, BUILDING 781					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
addition).	are still extant. The garage bays and entrance doors were closed and boarded with aluminum or vinyl siding.				adjacent districts.

TABLE 17. PRE-SCHOOL CENTER (BAYSHORE HARDWARE) BUILDING 951					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Foundation (original)	Reinforced-concrete slab with concrete footings.	Reinforced concrete.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically 1x/yr to evaluate overall condition. Ensure proper drainage. Always remove source of deterioration before patching concrete. Maintain existing foundation according to *Army Standards*.
Walls (original)	The walls are constructed of solid concrete block faced with six-course American bond brick.	Exposed brick.	APPENDIX A, D-3. Concrete/Masonry	Building Exterior: Masonry	Inspect periodically 1x/yr to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection of exterior masonry before repairs are completed. Maintain existing exterior masonry walls and detailing according to *Army Standards*. Repairs-in-kind and new brickwork should match original brick type/color, mortar type/color/pointing, and bond.
Cornices (original)	Molded wood raking cornices and horizontal box cornices. Aluminum gutters and down spouts.	Painted wood cornices (white); white enameled metal gutters and down spouts.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically 1x/yr to evaluate overall condition. Ensure proper drainage. Determine cause of deterioration and take adequate measures to assure future protection before repairs are completed. Maintain cornices according to *Army Standards*. Remove and avoid aluminum/vinyl. Use color schemes compatible with the historic character of the building and adjacent districts.
Roof (original)	Intersecting gable roofs with asphalt shingles.	Gray asphalt shingles.	APPENDIX A, D-7. Roofing	Building Exterior: Roofs	Inspect periodically 1x/yr to evaluate overall condition. Provide adequate drainage and ventilation. Determine cause of deterioration and take adequate measures to assure future protection of roof. Maintain roofs according to *Army Standards*. Retain historic roof shapes. Use color schemes for roofing compatible with the historic character of the building and adjacent districts.
Doors (original and replaced)	Metal door lighted by three rectangular lights in south entrance porch may be original. The remaining doors are probably replacements. Double door on east elevation was installed 1984. The rest of the door openings are in their original locations.	Rectangular openings with metal doors.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Entrances and Porches	Inspect periodically 1x/yr to evaluate condition. Maintain exterior doors per *Army Standards*. Use color schemes compatible with the historic character of the building and adjacent districts.
Windows (altered)	The fenestration pattern of the existing metal replacement windows resembles the original windows. They are tripled and quadrupled continues 1/1 sash.	Rectangular brick openings with stone drip moldings and header brick sills. Metal window frames.	APPENDIX A, D-6. Doors and Windows	Building Exterior: Windows	The existing windows appear compatible with the architectural character of the building style and type. Maintain per *Army Standards*. Use color schemes compatible with the historic character of the building and adjacent districts.
South Entrance	One-bay brick entrance porch covered by a front-gable roof	Concrete floor; brick walls; wood-frame	APPENDIX A, D-8. Porches/Entrances	Building Exterior: Entrances and	Maintain porch according to *Army Standards*. Use color schemes compatible with the historic character of the

TABLE 17. PRE-SCHOOL CENTER (BAYSHORE HARDWARE) BUILDING 951					
EXTERIOR FEATURES	**MATERIALS**	**FINISHES**	**ARMY STANDARDS**	**SECRETARY OF THE INTERIOR'S *STANDARDS***	**MAINTENANCE**
Porch (original)	projects from the south elevation of the ell.	roof covered with gray shingles; raking cornice; aluminum siding on gable end.		Porches	building and adjacent districts.

APPENDIX A - Army Historic Building Management Standards

D–1. General

The Army Standards have been developed for application in the maintenance, and rehabilitation of historic buildings at installations and shall be applied. The Army Standards stress the importance of the repair, replacement, and rehabilitation of National Register eligible or listed buildings, structures, or site elements, while recognizing the need to accommodate current operation and fiscal responsibilities. In some instances, exterior and interior alterations to buildings may be needed to assure their continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, and finishes. The Army Standards identify certain character-defining attributes, and offer guidance as to their maintenance and rehabilitation. A least-cost, lifecycle economic analysis of major maintenance and rehabilitation projects should be conducted prior to initiation and include such factors as asbestos and lead paint abatement.

D–2. Site and Landscape

a. Preserve the relationship between buildings, historic military landscape elements, and open space. New construction shall be compatible with the architectural character of the Historic Property or District. Maintain grades by sloping away from historic buildings.

b. Retain site elements which are important in defining the overall character of the historic property. Retain and maintain structures, furnishings, and objects that remain from the period of significance.

c. New and replacement fencing enclosures need to be appropriate and enhancing, (that is, cast aluminum fencing, stockade fencing, hedges, and brick walls are more appropriate than chain link fencing which should be minimized and appropriately screened with planting).

d. Accommodate required parking including access for the physically disabled without intrusion to the buildings or to historically significant areas and spaces.

e. Landscape furnishings and objects need to be similar to those that existed in the landscape during the period of significance. New landscape furnishings and objects should match the original in size, materials, finishes, and placement within the site design.

h. Signage should be consistent with the character of historic properties.

D–3. Concrete/Masonry

a. Maintain concrete and masonry elements that are important in defining the overall historic character of each building or structure. When concrete needs to be replaced and it is inconsistent with the original concrete in color, texture and workmanship, replace with concrete to match the original. When masonry needs to be replaced and it is inconsistent with the original stone, brick and mortar, replace with masonry to match the original.

b. Analyze existing concrete and mortar so that a compatible mix can be made for repairs. New concrete should match the original in color, texture and workmanship. Replacement mortar should be of the same strength and composition as the original.

c. Masonry surfaces shall be protected and maintained consistent with the original design. When repair is no longer practical, replacement of elements will be done to match the original. Repair chimneys to match original designs.

d. Repaint where spalling has occurred at lintels. Repair or replace stone steps and stoops where damaged by rusting ironwork. Remove exterior carpeting and concrete overlayments from steps and stoops. Infill with masonry to match original and remove non-original materials.

e. Retain the extant texture and color of masonry surfaces. Where masonry has been inappropriately painted return it to its original painted color.

D–4. Metals

a. Metal elements that contribute to the architectural character of a building or structure should be retained and preserved. Also, retain and preserve the size, the shape, and the type of finish, its historic color, and accent scheme.

b. Copper and bronze should not be painted or coated. Other metals should be painted to protect them from the elements.

c. Retain, rather than replace, architectural metal elements when repair of the element and limited replacement of deteriorated or missing parts can be accomplished.

d. Reinstall copper or other metal gutters and downspouts to match the original design where an inappropriate replacement material now exists. Reconfigure non-original roof leaders.

e. Clean and paint steel lintels prior to repointing. Rework iron railings with fewer penetrations into stone masonry. Remove rust; repaint and reinstall railings.

D–5. Wood

a. Interior and exterior wood elements that contribute to the historic character of the building should be retained and preserved. Original cornices and brackets, architraves, door surrounds, pediments, newels, banisters, railings, moldings, casings, mantels, paneling, cabinetwork, and other wood elements should remain as original fabric with repairs. Replace in-kind only if the original cannot be repaired. Replace functional elements that were once a part of the original fabric and are now missing.

b. Retain historic finishes and color schemes to preserve the historic character of the exterior. Repaint wood only as needed with materials and colors that are appropriate to the historic building or district.

c. Remove paint build up from wood work, sand, prime, and repaint; reglaze windows and doors as required. Caulk as required.

d. Avoid vinyl, aluminum, or other artificial sidings.

e. Repairs shall match the original woodwork in design, size and shape.

f. When necessary, replace wooden porch flooring and steps with weather-treated, painted wood.

D–6. Doors and Windows

a. Doors and windows and associated trim that contribute to the historic character of the buildings or the district shall be retained and preserved. Replacement doors and windows need to match adjacent structures. Retain, repair, and maintain historic hardware where it exists. Replacement hardware should match the original in size, shape, and configuration.

b. Maintain the operating condition of doors and windows. Locate weather-stripping to facilitate operation.

c. Maintain the historic appearances of windows and doors and their frames through retention of designs, materials, finishes, and colors including the configuration of sashes and muntins, depth of reveals, molding profiles, and the reflectivity and color of the glazing.

d. Combination storm and screen doors shall be simple and discreet, of one panel or with glazing or screening divisions that are aligned with the door it protects and without ornamentation.

e. The check rail of storm windows shall align with the check rail of the historic window. Glazing divisions shall coincide with the window it protects.

f. Provide protective glazing where the weather demands it. Protective glazing should be as unobtrusive as possible and should be removable without damaging historic fabric. Replacement elements shall match the original, (If using the same kind of materials is not feasible, then a compatible substitute material which conveys the visual appearance and design of the surviving parts and is physically compatible may be considered).

g. Maintain appropriate existing storm windows Equip existing doors and windows with weather-stripping.

h. Maintain integrity of caulking and sealants at doors and windows.

D–7. Roofing

a. Retain character-defining roof shapes and roofing materials, rather than introducing incompatible materials and designs, or improper installation techniques. Retain the configuration of existing roofs without the addition of new elements that diminish the historic character.

b. Roofing material shall be appropriate to the style and period of the buildings or neighborhood. Retain original sound historic clay tile and historic slate roofing materials and architectural metal. Return nonconforming roofs to original when replacement is necessary.

c. All repairs shall match the original design and materials.

d. Retain roof ventilation to preserve elements of construction. Provide ventilation if it is nonexistent or adequate in an inconspicuous manner away from public view.

D–8. Porches/Entrances

a. Retain historic entrances and porches that are character defining elements of the building. Significant elements include doors, fanlights, sidelights, pilasters, entablatures, columns, brackets, rails, and stairs.

b. Where a porch has not been enclosed, it shall remain open. Where screening has been provided, paint the wood framing of the non-original porch screening a dark color to reduce visual impact of the framing.

c. Repair rather than replace an entire porch or entrance element when repair of the element and limited replacement of deteriorated or missing parts is appropriate.

d. When repair is no longer practical, replacement elements shall match the original. If using the same kind of material is not feasible, then a compatible substitute material which conveys the visual appearance and design of the surviving parts and is physically compatible may be considered.

e. In exception to the preceding standard, replace column bases with aluminum where deteriorated.

f. Provide barrier-free access where necessary through removable or portable, rather than permanent, ramps. Do not remove historic steps, but rather, ramp above them. Locate barrier-free access so as to minimize visual intrusion and impact on the structure.

D–9. Interiors

a. Retain and preserve interior elements and finishes that are important in defining the overall historic character of the buildings. These elements include but are not limited to columns, cornices, chair rails, baseboards, fireplaces and mantels, brick, stone, tile, light fixtures,

paneling, built-in cabinetry, hardware, flooring, plaster and may include plumbing fixtures.

b. Public spaces such as reception halls, entrance spaces, entrance halls, parlors, dining rooms, and libraries are important in defining the overall historic character of the building. Size, configuration, and proportion of these spaces should be maintained. Where alterations have occurred they should be removed to restore the plan to the original design.

c. Maintain character-defining interior spaces by not cutting through floors, lowering ceilings, removing walls, or installing new partitions.

d. Reuse decorative material or elements that were removed during rehabilitation work including wall and baseboard trim, door molding, paneled doors, and wainscoting.

e. Remove excessive paint build-up from character defining elements with due regard to disposition of hazardous materials. Prime and repaint from approved palette of colors.

f. Maintain the finishes or colors of historic woodwork. For example, do not paint a previously varnished wood element, or strip historically painted wood surfaces to bare wood to create a “natural look,” or remove historic plaster to expose brick.

g. New materials that obscure or damage character-defining interior elements shall not be installed. Likewise, paint, plaster, or other finishes on historically finished surfaces shall not be removed in an effort to create a new appearance.

h. Remove, clean, lacquer, and reinstall original hardware. Return original doors to designated openings.

i. Provide bathrooms with vanities, storage and modern plumbing only when necessary due to the deterioration of the original materials or fixtures. When replacement is necessary, bathroom fixtures should resemble the originals.

j. Provide kitchens with adequate cabinets, work surfaces and appliances. Provide closets and storage when necessary. Maintain consistency of design elements throughout. Historic cabinetry should be retained where feasible.

k. Encourage use of original wood floors with carpet as area rugs and stair runners.

l. Sand wooden floors only when it is absolutely necessary, rather than at the change of occupancy.

D–10. HVAC

a. Install mechanical systems and service equipment when required, that causes minimal alteration to the building’s floor plan and the principal exterior elevations, and the least damage to historic building materials and volume of principal rooms. Remove intrusive duct work from principal rooms and provide alternate sources of supply.

b. Install mechanical systems and service equipment so that character-defining structural or interior elements are not radically changed, damaged, or destroyed.

c. Exterior walls shall not be cut for installation of HVAC units. Remove units that have been cut through exterior walls.

d. De-emphasize presence of exterior HVAC units with screening or landscaping.

e. Conceal kitchen and bath exhaust pipes from public view.

D–11. Electrical

For new work, provide underground supply of power, phone and cable provided that such installation does not affect archeological resources. Internally wire for cable and phone, removing existing conduits and wiring from

exterior. Conceal all exposed conduits and ensure adequacy of outlets. Replace missing character-defining light fixtures with those appropriate to the character of the original exterior and interior. Where possible, replicate existing original fixtures or introduce fixtures appropriate to the period.

D–12. Structural
Verify structural loading of all floors to be occupied. Correct any structural deficiencies before rehabilitation or restoration.

D–13. Energy Conservation
Energy conservation will be achieved by appropriate insulation or other appropriate methods that do not radically change, damage or destroy character-defining features.

APPENDIX B The Secretary of the Interior's Standards Standards for Preservation:

PRESERVATION IS DEFINED as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.

2.The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3.Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.

4.Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5.Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6.The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive

feature, the new material will match the old in composition, design, color, and texture.

7.Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8.Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

PRESERVATION AS A TREATMENT. When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular period of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, Preservation may be considered as a treatment.

PERFORMANCE WORK STATEMENT 3
PWS-3

FAMILY HOUSING

3.0 FAMILY HOUSING MANAGEMENT

3.1 RESERVED

3.2 RESERVED

3.3 HOURS OF OPERATION

3.4 SPECIFIC TASKS

3.5 HOUSING MANAGEMENT

3.6 FINANCIAL MANAGEMENT

3.7 UNACCOMPANIED PERSONNEL HOUSING MANAGEMENT

3.8 FURNISHINGS MANAGEMENT

3.9 ASSIGNMENT/TERMINATION

3.10 INSPECTIONS

3.11 RESERVED

3.12 COMMUNITY HOMEFINDING, RELOCATION, AND REFERRAL SERVICES (CHRRS)

3.13 PREPARATION AND PROCESSING OF PAINT AND FLOOR COMMITMENT DOCUMENTS

3.14 RESIDENT QUARTERS CLEANING PRIVATE CUSTODIAL CONTRACTORS

3.15 REPORTS OF SURVEY/STATEMENT OF CHARGES

APPENDICES

I PUBLICATIONS AND REGULATIONS
II DEFINITIONS/ABBREVIATIONS
III HISTORICAL WORKLOAD
IV DESCRIPTION OF UNITS
V COMMANDER'S INSPECTION STANDARDS
VI SAMPLE CONTRACT FOR QUARTER'S CLEANING
VII PERMIT TO SOLICIT

3.0 FAMILY HOUSING MANAGEMENT: This performance work statement (PWS) covers housing functions for Family and Unaccompanied Housing for the US Army Garrison-Selfridge (USAGS).

3.0.1 The Contractor shall perform the work and manage housing operations IAW applicable laws, and regulations, publications in Appendix 1 of this PWS and furnish all labor, supplies, equipment (unless government supplied),

transportation, supervision, and administration to perform the family housing functions described in this PWS.

3.0.2 The Contractor shall be responsible for the following operations: administration; financial management; programs and studies; furnishings control to include local moving and handling; issue of furniture; maintenance; repair and replacement of household equipment and housing referral services.

3.0.3 The Contractor shall have all work covered by this PWS under the direct management of a single supervisor, with authority to interface with the COR, COFR, or Contracting Officer.

3.0.4 The Contractor shall be responsible for drafting, preparing, distributing (US Mail, door to door distribution and other) and maintaining all required records, reports, plans, flyers, notices, newsletters, standard operating procedures, regulations, memorandums, letters, surveys, approvals, other correspondence, etc as they apply to this PWS. A central record administrative file shall be maintained by the Contractor for these documents, cost records and work accomplish (See 3.5.12.1) for each family housing dwelling unit.

3.0.5 Manage the General Officer quarters and other quarters to keep costs within thresholds of the applicable laws.

3.1 RESERVED

3.2 RESERVED

3.3 HOURS OF OPERATION:
The Contractor shall perform work during the following hours: Monday through Friday 7:30 AM to 4:00 PM, unless otherwise specified in the individual tasks.

3.4 SPECIFIC TASKS:
Housing Management includes five (5) major functions:

a. Housing Management

b. Financial Management

c. Unaccompanied Personnel Housing Management (UPHM)

d. Furnishings Management

e. Family Housing Management

3.5 HOUSING MANAGEMENT:
The Contractor shall perform the following tasks:

3.5.1 Accept, evaluate, and process complaints of housing discrimination or mistreatment made by military and their dependents and by eligible DOD personnel and their dependents and provide recommendations for resolution of the complaints.

3.5.2 Receive, investigate and resolve complaints by housing residents about other residents, housing operations, Facilities Engineers, or any condition, which degrades the livability of the Post-Housing environment.

3.5.3 Interface with the various Military organizations on and off post to gather information and resolve issues, applying the necessary expertise and knowledge of DOD and Army regulations pertaining to housing.

3.5.4 Attend conferences, civil hearings, and negotiations with federal, state, or municipal agencies concerning military problems and proposals.

3.5.5 Perform administrative functions consisting of the following:

3.5.5.1 Receive, coordinate and dispatch correspondence pertaining to housing.

3.5.5.2 Obtain and correlate data to be used for the preparation of housing reports.

3.5.5.3 Participate and provide information, data and metrics to support presentations, the Garrison's Army Communities of Excellence, Residential Communities Initiative, Specialized Legislation, other privatizations and other similar programs.

3.5.5.4 Coordinate work efforts with organizations at the Garrison, and other organizations such as the Detroit Arsenal, IMA's, DA, EPA, COE, utility companies, contractors and other organizations at Selfridge, etc. to share and gather information to accomplish the work. Attend meetings organized by the above organizations and establish meetings to support the work effort.

3.5.5.5 Provide, each Tuesday to DPW, COFR, Command Group an information paper showing by housing area the occupancy rate, waiting list, projected incoming and outgoing residents and quarters not occupied for AFH and UPH.

3.5.5.6 Draft and prepare letters pertaining to Housing Management including letters for signature of the Commander, US Army Garrison-Selfridge and the Chief of Housing Programs.

3.5.5.7 Provide input to the Garrison Commander for replies to congressional inquiries.

3.5.5.8 Prepare and distribute survey data to customers and organizations (e.g. customer satisfaction survey of Contractor services provided) collect the data and prepare monthly summary reports of the data and provide to COFR. Route returning surveys to the COFR for review. Take action to resolve issues with the customers. (e.g. take action to correct recurring problems and evaluate suggestions for improvement).

3.5.5.9 Clean drapes, curtains and carpets every 18 months or at BOM or as requested by the COFR for GFOQ quarters.

3.5.5.10 Attend training classes and conferences associated with military housing (6 per year). Tuition for these classes are funded by head quarters, however, the contractor shall pay for lodging, transportation, meal and other costs associated with attending the classes. Such classes include PHMA, CHRRS, HOMES, GFOQ Management. This does not include mandatory training for safety or to maintain certifications, qualifications and current knowledge which is the Contractor's responsibility.

3.5.6 Recommend local housing policy changes, through the COFR, to the Commander, USAGS; Recommend policies/actions required to achieve a 98% occupancy rate; Draft and update the necessary local SOPs, regulations and policy changes.

3.5.7 Inspect the grounds of residential housing areas daily, and report any observed violations of applicable laws, regulations, and rules (including Conditions of Residency for Military Housing) to the COFR. The inspections may be combined with other required inspections. The Contractor shall implement the following programs and encourage resident compliance with applicable laws, regulations, and rules:

3.5.7.1 Pet Control Program - to remove any stray or unattended domesticated animals from the installation, including any animal roaming the housing areas. For purposes of this provision, any animal roaming outside its owner's property may be treated as a stray or unattended animal.

3.5.7.2 Grounds Appearance Monitoring Program - to remind residents that grounds around quarters must be maintained in proper condition (Refer to Housing SOP). Violators shall be reported to the COFR.

3.5.7.3 Snow Removal Monitoring Program - to remind residents not to allow snow on Quarters' sidewalks to become a safety hazard. Violators shall be reported to the COFR.

3.5.7.4 Yard-of-the-Month Award Program - to award residents who take extra care of their quarters and grounds. (May-Sept)

3.5.8 Recommend requirements and process requests for conversions, diversions, rehabilitation, redesignation, allocations, and disposal of Government-owned assets.

3.5.9 Coordinate with various on and off-post agencies (e.g., local schools, drain commission, etc.) relating to housing support.

3.5.10 Establish and maintain key control system of distribution and accountability.

3.5.11 Evaluate, make recommendations on and process requests for exceptions to housing policies.

3.5.12. Manage Family Housing maintenance, repair and improvement program.

3.5.12.1 Maintain a separate cost record for each family housing dwelling unit ensuring that cost does not exceed monetary limitations of laws and regulations. Maintain records by dwelling unit of work performed under this or any other contract. Also see 3.0.4.

3.5.12.2 Assign priorities to maintenance and repair projects.

3.5.12.3 Provide recommendations for work to be accomplished on the quarters.

3.5.12.4 Prepare and provide approval forms to housing customers who request to install additional items at their quarters such as window air conditioners, antennas, satellite dishes, swimming pools, fences, sheds, basketball hoops, etc. Coordinate with the Contractor's facility engineer to confirm conditions such as electrical circuit capacity, load capacity, maintenance problems, etc. The Contractor shall confirm that all resident installed items are IAW the respective codes, standards and other references in PWS 2. Receive the forms back from the customers, provide approval/disapproval and maintain in file. Coordinate with the DPW office as needed for the requests. These items must be removed by the residents prior to clearing from the quarters unless written approval is received from the DPW office.

3.5.12.5 Time spent by outside contractors on maintenance projects which delay the performance shall not be held against the contractor, provided the COFR has been notified.

3.5.12.6 Update the Standard Operating Procedure (SOP) for AFH and UPH operations, submit to COFR for review/comments/approval and provide approved copies to residents.

3.6 FINANCIAL MANAGEMENT

The Contractor shall plan, direct, administer and execute the Garrison's Housing Management Programs, according to the following tasks:

3.6.1 The Contractor shall develop and provide financial data for Government analysis and review of Housing operations.

3.6.2 The Contractor shall maintain records including, but not limited to the following areas:

a. Operations (1910)
   (1) Management
   (2) Services
   (3) Furnishings

b. Maintenance and Repair (1920)

3.6.2.1 The Contractor shall be responsible for verifying and tracking data for the purposes of providing feeder data input as it applies to the ISSA's (Inter-Service Support Agreements).

3.6.3 The Contractor shall prepare Coast Guard billings. The Contractor shall not have the responsibility for funding reimbursement authority (FRA), as it applies to ISSAs.

a. On behalf of the Government, the Contractor shall make collections within the Funded Reimbursable Authority (FRA) for Army Family Housing (AFH) units occupied by the Coast Guard and civilians. Contractor shall also make collections within OMA reimbursable accounts for Unaccompanied Personnel Housing (UPH) units at USAG-S. The Contractor shall forward these collections, along with Collection Vouchers (DD Form 1131) on which the Contractor shall list the Accounting Classification, MRRN, AMS, and JON(s) to which the actual amount of funds collected is to be debited. The Collection Vouchers and funds received shall be forwarded immediately by the Contractor to DFAS-OPLOC-SL, copy furnished to the USAGS Resource Management Office.

b. On a monthly basis, the Contractor shall prepare two SF1080 billings to the Coast Guard, depicting their occupancy status for AFH and UPH. The SF1080 will show total amount billed for the month specified, and reference the Symbol Number and Coast Guard MIPR Number appropriate to the month of billing. The Contractor shall attach to the SF1080s an occupancy listing. This listing will itemize Resident Name, Rank, Address, Dates Occupied, and Amount billed for each resident. The Contractor shall mail the original SF1080 to the Coast Guard Finance Center (Interagency Agreements Finance, PO Box 4116, Chesapeake VA 23327-4116), and provide copies to Ninth Coast Guard District Housing Manager (Commanding Officer, Coast Guard Integrated Support Command, 1240 East Ninth Street, Cleveland OH 44199), and USAG-S Resource Management office. The Contractor shall forward SF1080 billings and back-up documentation by the tenth day of the following month, unless otherwise specified by the Government. When payment is received by the Government (via US Treasury Check), the Contractor shall prepare Collection Voucher (DD Form 1131) as specified above.

3.6.4 The Contractor shall collect rents from civilians living in the Family and Unaccompanied quarters. Only certified checks and money orders shall be accepted. The Contractor shall prepare cash collection vouchers using DD Form

1131 and then send them along with the rents to DFAS-OPLOC-SL by the 20th of each month.

3.6.5 Reserved

3.6.6 Reserved

3.6.7 The Contractor shall perform the following tasks:

3.6.7.1 Carry out financial management policy and procedures in accordance with this PWS.

3.6.7.2 Prepare, develop and coordinate the annual and long range plans for Family Housing (DD 1379).

3.6.7.3 Plan, direct, and supervise the use of approved resources.

3.6.7.4 Operate, manage and utilize the Housing Operations Management (HOMES) System, an automated processing management information system and other automated systems. Assist in making updates to new versions of the system. Provide HOMES data to the COFR as requested. Provide to headquarters or verify information on a monthly basis (by the 4th working day after months end)for the Business Occupancy Report (BOP) from the HOMES system.

3.6.7.5 Ensure validity of charges and proper coding of costs.

3.6.7.6 Monitor expenditures to ensure that cost limits are not exceeded in accounts 1910 and 1920. The Contractor shall advise the COFR and the USAGS Budget Office when expenditures reach 70% or are expected to exceed the limit.

3.6.7.7 The Contractor shall maintain the following records:

3.6.7.7.1 Cost Data records shall be kept monthly on:

a. BAH forfeiture of Military occupants
b. Rent collections from Army civilians and non-DOD personnel
c. GFOQ cost report

3.6.7.7.2 Project files shall include copies of the contract (if contracted), purchase requests, technical approval and associated documents until completed or canceled, and the project approval document.

3.6.7.7.3 A separate cost data file shall be kept for each housing unit and general officer quarters.

3.6.7.7.4 Approval documents and cost records shall be kept on any maintenance & repair, incidental improvements (i.e. New Work, see PWS 5 for definition) and MCA projects.

3.6.7.7.5 Building records should show a cost that reflects all expenses attributable to that building including incidental improvements (i.e. New Work, see PWS 5 for definition) and other contractor work.

3.6.7.7.6 The contractor shall provide to the USAG budget office information as required for budget formulation such as review history/obligations and justification.

3.7 UNACCOMPANIED PERSONNEL HOUSING MANAGEMENT:

The Contractor shall be responsible for management of Unaccompanied Personnel Housing (UPH) quarters (Buildings 912, 924 and 325). The Contractor shall:

3.7.1 Interview personnel, maintain priority listing and roster of anticipated vacancies, assign and terminate occupancy in UPH and prepare appropriate documentation.

3.7.2 Inspect Quarters prior to assignment/termination to ensure overall acceptability of Quarters (see Appendix).

3.7.3 Prepare financial documents effecting the withholding and reinstatement of BAH (Basic Allowance for Housing) and coordinate these documents with the Garrison Resource Management Officer. Contractor shall prepare monthly billings (SF1080s) to the Coast Guard for payment of BAH for all bona fide bachelors and prepare financial documents for distribution to the Coast Guard's finance office.

3.7.4 Collect rent (monthly) from all geographical bachelors, issue a receipt, maintain records of all collections and coordinate as necessary with the Garrison Resource Management Office.

3.7.5 Maintain key control for all rooms, locked mailboxes and the UPH buildings.

3.7.6 Maintain a work order log for UPH Buildings; and follow up on status of any backlogged work. Prepare a long-range plan and an annual work plan/budget for each UPH facility. Act as facility custodian for inspection and maintenance requirements.

3.7.7 Update the Standard Operating Procedure (SOP) for UPH operations.

3.7.8 Reserved

3.7.9 Conduct monthly occupancy requirements surveys. Maintain and prepare all data and reports on the capacity and utilization of UPH units and provide to COFR.

3.7.10 Prepare requests (in coordination with the DPW, Government Housing Manager and the Garrison Resource Management Office) to accomplish conversions, diversions, rehabilitation, designation, allocation and disposal of Government assets.

3.8 FURNISHINGS MANAGEMENT:

The Contractor shall manage and be responsible for all inventories and movement of furniture, household equipment and appliances necessary to support UPH, and Army Family Housing. Persons assigned family housing units are not authorized receipt of furniture unless those Military personnel are the grade of 0-7 or above. Activities in this area are limited to management, installation, removal, repair, disposal, and replacement of furniture and appliance type items. All replaced furniture and appliances will be the property of the Government. However, the Contractor shall provide household appliances as directed by the COFR (using CLIN 6 funds), with the replaced appliances being turned in to the appliance vendor for credit. Refrigerator outages will receive a Priority 1 response (as defined in the Facilities Engineer PWS). Special cases may be directed by the COFR. Issue, maintain and manage individual hand receipt/inventories for each set of quarters. Appliance inventories shall be kept to a minimum as there is minimal ware house storage space for the appliances. The contractor shall utilize Just In Time methods to provide appliances. Contractor shall be guided by the following tasks:

3.8.1 Initiate the documentation through the COFR for the control, storage, handling, distribution, maintenance, repair and/or disposal of inventories.

3.8.2 Maintain records of inventory, conditions and utilization of furnishings.

3.8.3 RESERVED

3.8.4 Issue and receive household furnishings from residents.

3.8.5 Pick up or deliver household furnishings. Regular schedule should not delay issue/turn-in times beyond 72 hours.

3.8.6 Responsible for the general cleanliness of the furnishings' storage area.

3.8.7 Prepare requests for furnishings.

3.9 ASSIGNMENT/TERMINATION:
The Contractor shall operate an assignment and termination function for day-to-day arrivals and departures to include, but not limited to the following tasks:

3.9.1 Interview personnel, maintain priority listings and rosters of anticipated vacancies, assign and terminate occupancy in Family Housing spaces. Counsel prospective residents concerning rights, responsibilities to include initiating a monthly/lease agreement, liability insurance and maintenance and repair. Maintain an inventory of Family Housing dwelling units and utilization records. Ensure all assignments are made in writing and copies furnished to sponsor. Assign storage area with key, to sponsors of quarters within the 900 (Wherry) Family Housing area. Assign an individual storage bin, provide a padlock & key, and record issuance on DA Form 2062.

3.9.2 Prepare and distribute instructions, orientation/welcome packets, memorandums, official information and housing brochures to residents and applicants. Include the Lead Based Paint Disclosure Statement and other associated documentation.

3.9.3 Maintain an automated database file for each tenant with the following fields: Name, Rank, Duty Station, Number of Dependents, Housing Type/location, Social Security Numbers, and Telephone Numbers.

3.9.4 Prepare financial documents affecting the withholding and reinstatement of BAH. Coordinate these documents with Finance and Accounting.

3.10 INSPECTIONS:
The Contractor shall inspect Family Quarters to include, but not limited to, the following tasks:

3.10.1 The Contractor shall be responsible for three (3) major tenant inspections (In, Pre-Out, Out) and additional inspections as specified herein.

a. **In Inspection**: Performed at the time a tenant is assigned Quarters.

b. **Pre-Out Inspection**: Performed thirty (30) days prior to a tenant’s termination of Quarters. This inspection shall include:

(1) Collect data to determine required repair, maintenance or construction on the quarters on DA form 4283 for use during the BOM.

(2) Provide information to residents regarding Pre-Out inspection. This includes self-help repairs required prior to final inspection.

c. **Out Inspection**: Performed at the time a resident terminates quarters. The condition of the quarters shall meet the standards established by the Garrison Commander as listed in Appendix V, Commander's Inspection Standards. The inspection sheet, DA 4283 - Job Order Request, shall list items for repair by the residents. Any special or unusual circumstances preventing resident

repair of allowable items shall be noted on the inspection sheet. The Contractor shall remove the name sign in front of the house, if present, for out-going personnel. Items installed by residents must be removed by the residents prior to clearing from the quarters unless written approval is received from the DPW office. Also see 3.5.12.4.

d. The Contractor shall notify the COFR when units are ready for occupancy. The Contractor shall have quarters available for occupancy within 10 (ten) working days from the time the quarters are vacated by the previous resident.

e. **General Inspection**: The Contractor shall be responsible for the following tasks:

(1) Inspect, by-weekly, tenant storage areas for fire safety, adherence to standards of neatness and cleanliness, authorized use and correct (Name/Unit) marking.

(2) Inspect the grounds around tenant units for proper mowing, trimming, neatness and shoveling of snow.

(3) Inspection of sanitary conditions in response to reports received on unsanitary conditions in housing.

(4) Copies of all inspection reports shall be provided to the COFR and the resident. The Contractor shall perform follow-up inspections.

3.10.2 The Contractor shall prepare work requests requirements on DA Form 4283.

3.11 RESERVED

3.12 COMMUNITY HOMEFINDING, RELOCATION, AND REFERRAL SERVICES(CHRRS):
(The contractor shall serve as manager of the CHRRS Garrison Office. The contractor shall maintain current information on schools, churches, shopping centers, transportation, and other community services. The contractor shall also perform the following tasks:

3.12.1 Develop and keep updated a Housing Referral Handbook consisting of information pertaining to civil rights, equal opportunity policy, insurance, security deposits, military clauses, etc.

3.12.2 The contractor will distribute the Housing Referral handbook to all applicants.

3.12.3 Establish, and maintain, a description and current rental costs of COFR approved properties for publication and distribution to applicants in Wayne, Oakland & Macomb counties.

3.12.4 Interview applicants to determine housing requirements.

3.12.5 Assist applicants in filling out necessary forms involved with the rental process.

3.12.6 Assist applicants in finding housing, using the Internet and other services.

3.12.9.7 Mediate tenant/landlord disputes.

3.12.9.8 Ensure Housing Referral Office hours of operation are posted and available to the public at all times.

3.12.9.9 Compile statistical data for data calls from DPW and AMC.

3.12.9.10 Access, input data, and use the Housing Operations Management System (HOMES) in the performance of CHRRS operations, make updates.

3.13 PREPARATION AND PROCESSING OF PAINT AND FLOOR COMMITMENT DOCUMENTS

3.13.1 This scope of work is to provide instruction on the processing of delivery orders (STA Form 1155), and any required delivery order (D.O.) modifications (STA Form 30) for paint and floor, tub liner and other requirements (to be performed by other contractor (s)) at Garrison-Selfridge. The Contractor will be provided copies of these contracts.

3.13.2 Family Housing quarters shall be painted at a minimum interval of three (3) years. Vinyl tile and sheet goods flooring shall be replaced at a minimum interval of ten years. Exceptions to this policy shall be submitted in writing to the COFR. The request for an exception shall include a photograph that visually justifies the need for painting or flooring replacement. The photograph shall be annotated with the date, location and quarters address and shall be filed with the exception request in the unit file.

3.13.2.1 The Contractor shall request funds through the USAGS Housing Staff to the USAGS Budget Office via e-mail containing a total monetary estimate (quarterly and annually, to be updated as required) to cover projected delivery order requirements. A Request for Vendor Services (STA Form 4464) is prepared for processing by the Government (DPW or USAG-S Budget Office). Certified documents will be provided to the contractor. The contractor shall request delivery orders (DD Form 1155) via e-mail to the Government Order/Contracting Officer, through the Chief of Housing Programs. The request shall:

3.13.2.1.1 1Identify house addresses.

3.13.2.1.2 Cite Sub-line Item No(s) from the paint & flooring contract schedule describing scope of work.

3.13.2.1.3 Cite square footage to be painted and/or floored.

3.12.2.1.4 Cite unit price and extended total price per address.

3.13.2.1.5 Cite total price per delivery order.

3.13.2.1.6 Cite estimated schedule for start and completion of work.

3.13.3 Information is forwarded to Contracting Officer for preparation of delivery orders. Government Ordering/Contracting Officer signs and distributes delivery order before work is started. Distribution shall be made to:

3.13.4 The contractor shall schedule and notify paint and floor contractor of daily paint and floor requirements.

3.13.5 Modifications to delivery orders shall be prepared by Ordering Officer on STA Form 30. Once signed, modification is forwarded to the contractor and will cite the reason for the modification and the resulting increase or decrease in the monetary amount. Only the Ordering/Contracting Officer may authorize changes and the authority may not be redelegated.

3.13.6 Under no circumstances may the amount obligated by the D.O. or a modification exceed the certified fund commitment. In the event fund commitment is exhausted before the projected period, a new STA Form 4464 shall be prepared by the USAGS Budget Office. The contractor shall notify COFR when work against the fund commitment is nearing the amount.

3.14 RESIDENT QUARTERS CLEANING - PRIVATE CUSTODIAL CONTRACTORS

3.14.1 The contractor shall implement a pre-pay housing-approved private custodial contractor system for quarters cleaning.

3.14.2 In addition, the contractor shall:

3.14.2.1 Ensure the check or money order is made payable to (the custodial contractor) and the Finance and Accounting Officer TACOM. The Contractor shall hold the check or money order until the private custodial contractor has successfully completed its obligation under the contract.

3.14.2.2 Advise private custodial contractor of what is required to pass inspection. (Reference Commanders Inspection Standards, Appendix V). Conduct semi-annually classes or as requested by the COFR to certify private custodial contractors. Once a private custodial contractor has been certified to solicit and contract with sponsor/resident of Garrison-Selfridge housing, the contractor must re-certify annually.

3.14.2.3 Provide coordination of Between Occupancy Maintenance (BOM) and repair and private contractor custodial effort.

3.15 REPORTS OF SURVEY/STATEMENT OF CHARGES

3.15.1 The Contractor shall prepare Reports of Survey (DA Form 4697) to include:

a. Recommendations as to liability
b. Detailed description of damages on service orders or inspection records, as applicable, to support Statement of Charges.

3.15.2 The Contractor shall submit Reports of Survey to the COFR.

3.15.3 When resident is liable, the Contractor shall determine what is owed. The Contractor shall collect for lost, damaged or destroyed property. Only checks or money orders made payable to DFAS - St. Louis shall be accepted. The checks/money orders or the contractor prepared Cash Collection Voucher (DD Form 1131) shall be mailed to DFAS - St. Louis. In some cases a statement of collection may be warranted. When this occurs, a Letter Format or/DD 139(Pay Adjustment Authorization)for installments may be used.

3.15.4 The Contractor shall maintain a Statement of Charges log to record the status of each action from initiation to closeout.

APPENDICES

I PUBLICATIONS AND REGULATIONS
II DEFINITIONS/ABBREVIATIONS
III HISTORICAL WORKLOAD
IV DESCRIPTION OF UNITS

V COMMANDER'S INSPECTION STANDARDS
VI SAMPLE CONTRACT FOR QUARTER'S CLEANING
VII PERMIT TO SOLICIT

APPENDIXES FOR PWS-3
TABLE OF CONTENTS

APPENDIX #	APPENDIX TITLE	No. of Pages
I	PUBLICATIONS AND REGULATIONS	1
II	**DEFINITIONS/ABBREVIATIONS**	1
III	**HISTORICAL WORKLOAD**	14
IV	**DESCRIPTION OF UNITS**	3
V	COMMANDER'S INSPECTION STANDARDS	3
VI	SAMPLE CONTRACT FOR QUARTER'S CLEANING	3
VII	PERMIT TO SOLICIT	2
	TOTAL NUMBER OF PAGES	**27**

APPENDIX I
PUBLICATIONS and REGULATIONS
FAMILY HOUSING PWS

ARMY REGULATIONS

210-50 Family Housing Management

TACOM REGULATIONS

210-52	Installation Officer Housing Assignment Policy
210-53	Installation Enlisted Assignment Policy
210-54	Self-Help and Expanded Self-Help

COMMON TABLES OF ALLOWANCE

50-909 Furnishings for Personnel Quarters

APPENDIX II
DEFINITIONS/ABBREVIATIONS
FAMILY HOUSING PWS-3

AR	Army Regulations
BAQ	Basic Allowance For Quarters
BOM	Between Occupancy Maintenance
SEBILLE MANOR	Family Housing Complex Located Approximately 5 Miles Northwest Of Garrison-Selfridge
COR	Contracting Officer Representative
COFR	Contracting Officer's Functional Representative
DARCOM	US Army Material Development and Readiness Command (Now AMC)
DO	Delivery Order
DRMO	Defense Reutilization and Marketing Office
DU	Dwelling Unit
FAD	Funding Authorization Document
GSA	General Services Administration
HOUSING	The Term "Housing" Used Herein, Refers To: Family Housing Consisting Of Units in the 200, 400, 700, 900 Areas and Sebille Manor, Total Of 746 Available Spaces Unaccompanied Personnel Housing (UPH), Formerly Bachelor Consisting Of 141 bedrooms (Bldg.'s 924, 929, 930, 931, and 935)
ISSA	Inter Service Support Agreement
LIIP	Line Item Improvement Projects
MCA	Military Construction, Army
PM	Preventative Maintenance
SANGB	Selfridge Air National Guard Base
SAS	TACOM - Support Activity Selfridge
SAW	TACOM - Support Activity Warren
STANFINS	Standard Finance System
UPH	Unaccompanied Personnel Housing
PARR	Program Analysis and Resource Review
COB	Command Operations Budget
AFH	Army Family Housing
AWP	Annual Work Plan
LRP	Long Range Plan
M & R	Maintenance and Repair
AFHC	Army Family Housing New Construction Account (MCA)
AFHO	Army Family Housing Operations Account (M & R)
EA	Economic Analysis
FRA	Funded Reimbursement Authority
STAIRS	Stable Annual Investment For Renewal/Replacement Of Systems
MDEP	Management Decision Package
AHJP	Army Housing Justification Process
SHMA	Segmented Housing Market Analysis
SOMARDS	Standard OMA and R & D Systems

APPENDIX III
HISTORICAL DATA
FAMILY HOUSING PWS 3

BACHELOR HOUSING INFORMATION

Fiscal Year: 1999				**1-Oct-98 thru**	**30-Sep-99**	
		AVAILABLE UNITS	OCCUPIED UNITS	INACTIVE UNITS	ASSGMNTS	TERMINATIONS
October	1998	160	104	10	6	17
November	1998	160	113	10	17	8
December	1998	160	113	10	6	6
January	1999	160	108	10	21	26
February	1999	160	109	10	8	9
March	1999	160	107	10	6	6
April	1999	160	111	10	11	7
May	1999	160	108	10	10	13
June	1999	160	109	10	8	7
July	1999	160	108	10	7	8
August	1999	184	108	10	6	8
September	1999	184	110	10	6	5
Fiscal Year Totals:					**112**	**120**

Fiscal Year: 2000				**1-Oct-99 thru**	**30-Sep-00**	
		AVAILABLE UNITS	OCCUPIED UNITS	INACTIVE UNITS	ASSGMNTS	TERMINATIONS
October	1999	184	119	9	20	11
November	1999	184	118	9	7	4
December	1999	184	122	9	5	6
January	2000	184	122	9	6	9
February	2000	184	115	9	10	5
March	2000	184	116	9	2	3

BACHELOR HOUSING INFORMATION (Continued)

April	2000	184	114	9	7	7
May	2000	184	114	9	3	5
June	2000	184	114	10	10	10
July	2000	184	114	10	9	9
August	2000	184	117	10	6	11
September	2000	184	112	10	8	7
Fiscal Year Totals:					**93**	**87**

Fiscal Year: 2001				**1-Oct-00 thru**	**30-Sep-01**	
		AVAILABLE UNITS	OCCUPIED UNITS	INACTIVE UNITS	ASSGMNTS	TERMINATIONS
October	2000	184	108	5	20	12
November	2000	184	113	5	8	4
December	2000	184	113	5	5	6
January	2001	184	112	5	8	11
February	2001	184	112	5	8	4
March	2001	184	113	5	6	8
April	2001	184	110	5	7	7
May	2001	184	108	5	3	5
June	2001	184	105	5	10	16
July	2001	184	104	5	14	8
August	2001	184	103	5	7	12
September	2001	184	101	5	7	8
Fiscal Year Totals:					**103**	**101**

Fiscal Year: 2002				**1-Oct-01 thru**	**30-Sep-02**	
		AVAILABLE UNITS	OCCUPIED UNITS	INACTIVE UNITS	ASSGMNTS	TERMINATIONS
October	2001	184	93	2	4	11
November	2001	184	108	2	16	6
December	2001	184	111	2	6	6

BACHELOR HOUSING INFORMATION (Continued)

January	2002	160	108	2	23	27
February	2002	160	104	2	8	9
March	2002	160	104	2	6	6
April	2002	160	102	2	11	7
May	2002	160	102	2	10	13
June	2002	160	99	4	8	8
July	2002	160	100	4	7	7
August	2002	160	101	10	7	5
September	2002	160	98	25	6	5
Fiscal Year Totals:					**112**	**110**

BACHELOR HOUSING MONTHLY INSPECTION SUMMARY

Fiscal Year: 1999 **1-Oct-98 thru 30-Sep-99**

MONTH		CI INSP	PRE-OUT INSP	FINAL-OUT INSP	IN INSP	RFO INSP	GENERAL/ AREA INSP	WARNINGS ISSUED
October	1998	0	18	14	6	6	66	2
November	1998	4	16	17	11	17	52	0
December	1998	1	8	7	12	6	52	0
January	1999	7	12	13	14	21	57	0
February	1999	2	16	15	7	8	56	0
March	1999	5	10	20	11	6	58	0
April	1999	0	18	10	6	11	58	4
May	1999	2	13	10	9	10	59	2
June	1999	8	12	12	4	8	62	1
July	1999	4	13	18	10	7	60	0
August	1999	1	7	10	7	6	72	0
September	1999	1	6	6	12	6	75	0
	TOTALS:	35	149	152	109	112	727	9

BACHELOR HOUSING MONTHLY INSPECTION SUMMARY (CONTINUED)

Fiscal Year: 2000 **1-Oct-99 thru 30-Sep-00**

MONTH		CI INSP	PRE-OUT INSP	FINAL-OUT INSP	IN INSP	RFO INSP	GENERAL/ AREA INSP	WARNINGS ISSUED
October	1999	3	5	7	12	5	70	0
November	1999	2	10	15	6	3	72	0
December	1999	1	9	8	12	6	76	0
January	2000	1	12	14	5	3	74	0
February	2000	3	13	10	4	1	82	0
March	2000	0	8	7	8	4	68	0
April	2000	1	7	11	5	3	63	5
May	2000	0	6	6	3	2	59	0
June	2000	0	3	5	5	4	56	8
July	2000	0	6	9	5	2	52	0
August	2000	3	9	9	9	2	55	0
September	2000	1	20	23	5	3	49	1
	TOTALS:	15	108	124	79	38	776	14

Fiscal Year: 2001 **1-Oct-00 thru 30-Sep-01**

MONTH		CI INSP	PRE-OUT INSP	FINAL-OUT INSP	IN INSP	RFO INSP	GENERAL/ AREA INSP	WARNINGS ISSUED
October	2000	1	10	12	13	4	55	1
November	2000	0	3	4	12	4	56	0
December	2000	1	7	10	12	1	64	0
January	2001	1	8	13	9	3	66	0
February	2001	0	3	3	10	6	60	0
March	2001	0	7	10	4	7	56	0
April	2001	1	9	9	7	3	58	2
May	2001	1	8	7	6	3	55	3
June	2001	3	6	11	7	5	59	1
July	2001	1	11	11	10	3	47	0
August	2001	1	18	15	7	2	38	0
September	2001	2	8	11	6	3	42	0
	TOTALS:	12	98	116	103	44	656	7

BACHELOR HOUSING MONTHLY INSPECTION SUMMARY (CONTINUED)

Fiscal Year: 2002 **1-Oct-01 thru 30-Sep-02**

MONTH		CI INSP	PRE-OUT INSP	FINAL-OUT INSP	IN INSP	RFO INSP	GENERAL/ AREA INSP	WARNINGS ISSUED
October	2001	1	6	14	3	5	57	0
November	2001	1	3	3	14	3	65	2
December	2001	0	7	5	9	6	81	0
January	2002	0	30	23	14	4	72	0
February	2002	2	5	18	10	3	72	0
March	2002	1	5	6	5	2	68	0
April	2002	1	10	7	11	3	67	0
May	2002	1	12	10	8	6	52	3
June	2002	2	7	6	9	8	50	0
July	2002	0	6	10	6	7	53	0
August	2002	1	6	6	8	2	48	0
September	2002	0	12	4	7	5	50	0
	TOTALS:	10	109	112	104	54	735	5

Bayshore Hardware Store Workload Data

Self-help Counter Transactions

	FY 1999	FY 2000	FY 2001	FY 2002
1st Quarter	1,318	1,512	1,812	1,444
2nd Quarter	1,746	1,150	994	924
3rd Quarter	4,289	4,039	4,493	3,791
4th Quarter	3,054	3,547	3,140	2,900
Total	10,407	10,248	10,439	9,059

Expanded Self-help Requests:

	FY	FY	FY	FY
	1999	2000	2001	2002
Number of Requests	171	120	173	162

Bayshore Budget:

FY	FY	FY	FY
1999	2000	2001	2002
$156,000	$150,000	$195,000	$195,000

Screens Repaired through Self –Help:

FY 1999	FY 2000	FY 2001	FY 2002
0	0	82	93

MONTHLY HOUSING SUMMARY

Fiscal Year: 1999 **01 October 1998 thru 30 September 1999**

MONTH		AVAILABLE UNITS	OCCUPIED UNITS	DIVERTED/ INACTIVE	ASSGMNTS	TERMINATIONS
October	1998	664	550	14	19	23
November	1998	664	550	14	11	11
December	1998	664	547	14	11	13
January	1999	664	554	14	20	13
February	1999	664	556	14	10	10
March	1999	664	554	17	15	16
April	1999	664	557	15	12	8
May	1999	664	563	14	13	11
June	1999	664	550	14	27	45
July	1999	664	537	14	26	35
August	1999	664	535	14	28	31
September	1999	664	520	71	10	21
MONTHLY AVG:		664	548	19	17	20
FY TOTALS:					202	237

MONTHLY HOUSING SUMMARY (CONTINUED)

Fiscal Year: 2000 — **01 October 1999 thru 30 September 2000**

MONTH		AVAILABLE UNITS	OCCUPIED UNITS	DIVERTED/ INACTIVE	ASSGMNTS	TERMINATIONS
October	1999	664	525	76	18	11
November	1999	664	515	78	10	19
December	1999	667	515	82	14	13
January	2000	667	513	82	11	15
February	2000	634	525	50	15	4
March	2000	633	519	77	11	20
April	2000	633	514	77	6	9
May	2000	633	517	78	17	16
June	2000	633	503	77	33	43
July	2000	632	504	78	26	27
August	2000	632	500	79	23	24
September	2000	632	499	79	10	15
MONTHLY AVG:		644	512	76	16	18
FY TOTALS:					194	216

Fiscal Year: 2001 — **01 October 2000 thru 30 September 2001**

MONTH		AVAILABLE UNITS	OCCUPIED UNITS	DIVERTED/ INACTIVE	ASSGMNTS	TERMINATIONS
October	2000	632	504	79	18	10
November	2000	632	507	79	13	9
December	2000	627	504	73	10	13
January	2001	596	507	40	10	11
February	2001	596	501	32	8	11
March	2001	596	500	34	12	13
April	2001	596	506	34	14	8
May	2001	596	497	34	13	23
June	2001	596	482	34	20	33
July	2001	596	485	33	32	27
August	2001	596	502	33	32	20
September	2001	596	497	33	10	12
MONTHLY AVG:		605	499	45	16	16
FY TOTALS:					192	190

MONTHLY HOUSING SUMMARY (CONTINUED)

Fiscal Year: 2002 — **01 October 2001 thru 30 September 2002**

MONTH		AVAILABLE UNITS	OCCUPIED UNITS	DIVERTED/ INACTIVE	ASSGMNTS	TERMINATIONS
October	2001	596	497	33	8	11
November	2001	596	493	33	6	7
December	2001	596	487	33	14	23
January	2002	596	482	35	7	6
February	2002	596	475	35	6	14
March	2002	596	477	34	6	5
April	2002	596	480	34	13	9
May	2002	596	472	34	13	23
June	2002	596	458	35	18	28
July	2002	596	454	36	27	33
August	2002	596	464	36	19	10
September	2002	596	464	35	11	14
MONTHLY AVG:		596	475	34	12	15
FY TOTALS:					148	183

FAMILY HOUSING MONTHLY INSPECTION SUMMARY

Fiscal Year: 1999 — **01 October 1998 thru 30 September 1999**

MONTH		QTR TO QTR INSP	CI INSP	PRE-OUT INSP	FINAL-OUT INSP	IN INSP	RFO INSP	GENERAL/ AREA INSP	WARNINGS ISSUED
October	1998	6	16	34	39	22	27	144	12
November	1998	4	11	27	25	33	9	60	5
December	1998	6	8	25	26	29	25	636	53
January	1999	4	10	23	24	32	15	156	13
February	1999	1	4	24	21	22	12	300	25
March	1999	3	12	31	34	27	16	96	8
April	1999	5	7	48	19	25	21	84	7
May	1999	3	11	40	21	23	12	564	47
June	1999	2	43	45	58	21	23	420	35
July	1999	1	25	38	49	37	26	156	13
August	1999	6	22	31	44	42	34	72	6
September	1999	5	16	21	23	20	3	1176	98
TOTALS:		46	185	387	383	333	223	3864	322

General/Area Inspections include yard and storage area inspections, resident complaints, paint & floor inspections, etc.

FAMILY HOUSING MONTHLY INSPECTION SUMMARY (CONTINUED)

Fiscal Year: 2000	**01 October 1999 thru 30 September 2000**

MONTH		QTR TO QTR INSP	CI INSP	PRE-OUT INSP	FINAL-OUT INSP	IN INSP	RFO INSP	GENERAL/ AREA INSP	WARNINGS ISSUED
October	1999	4	9	16	21	21	12	48	4
November	1999	4	12	26	24	16	12	264	22
December	1999	2	6	10	18	18	18	360	30
January	2000	1	14	10	16	17	16	684	57
February	2000	4	2	20	5	18	15	216	18
March	2000	3	19	19	26	17	9	48	4
April	2000	1	7	35	15	13	14	624	52
May	2000	2	11	41	20	18	16	840	70
June	2000	1	21	30	53	27	27	504	42
July	2000	1	5	20	34	30	32	348	29
August	2000	4	14	25	41	33	28	504	42
September	2000	4	7	12	18	19	16	168	14
	TOTALS:	31	127	264	291	247	215	4608	384

Fiscal Year: 2001	**01 October 2000 thru 30 September 2001**

MONTH		QTR TO QTR INSP	CI INSP	PRE-OUT INSP	FINAL-OUT INSP	IN INSP	RFO INSP	GENERAL/ AREA INSP	WARNINGS ISSUED
October	2000	4	10	18	12	14	12	156	13
November	2000	3	6	28	18	23	8	552	46
December	2000	2	9	12	18	19	10	348	29
January	2001	3	8	14	15	15	8	60	5
February	2001	1	5	14	18	11	6	108	9
March	2001	2	7	15	23	17	7	612	51
April	2001	0	5	40	13	13	10	300	25
May	2001	1	14	40	28	14	9	648	54
June	2001	0	25	27	47	16	14	276	23
July	2001	1	9	22	35	37	17	36	3
August	2001	3	13	15	28	45	22	408	34
September	2001	1	10	21	19	16	3	72	6
	TOTALS:	21	121	266	274	240	126	3576	298

FAMILY HOUSING MONTHLY INSPECTION SUMMARY (CONTINUED)

Fiscal Year: 2002 — **01 October 2001 thru 30 September 2002**

MONTH		QTR TO QTR INSP	CI INSP	PRE-OUT INSP	FINAL-OUT INSP	IN INSP	RFO INSP	GENERAL/ AREA INSP	WARNINGS ISSUED
October	2001	3	6	17	27	12	18	792	66
November	2001	3	8	20	10	11	7	276	23
December	2001	1	17	7	32	10	13	84	7
January	2002	1	7	16	10	15	13	144	12
February	2002	0	7	7	17	9	12	96	8
March	2002	0	5	21	7	8	12	336	28
April	2002	0	8	31	9	15	10	192	16
May	2002	1	24	36	26	18	13	684	57
June	2002	0	28	19	36	16	12	300	25
July	2002	0	16	15	37	26	16	276	23
August	2002	0	9	17	11	18	11	204	17
September	2002	1	14	12	13	19	10	228	19
	TOTALS:	10	149	218	235	177	147	3612	301

WAITING LIST

Fiscal Years: (1999, 2000, 2001, 2002) — **01 October thru 30 September**

Number of Families Waiting

MONTH	FY 1999	FY 2000	FY 2001	FY 2002
October	42	23	7	1
November	28	14	10	3
December	26	10	8	7
January	27	10	6	6
February	17	11	3	4

WAITING LIST (CONTINUED)

MONTH	Number of Families Waiting FY 1999	FY 2000	FY 2001	FY 2002
March	22	14	12	6
April	12	11	11	12
May	28	6	7	13
June	40	27	34	10
July	40	29	52	27
August	29	19	22	18
September	10	7	2	14
ANNUAL SUM:	321	181	174	121
MONTHLY AVERAGE:	26	15	14	9

FURNISHINGS REPLACEMENT/PURCHASES

NOTE: No furnishings were purchased in fiscal year 99 or 00.

Fiscal Year 2001

1 October 2000 thru 30 September 2001

Description	Quantity
Sofa	4
Easy chair w/ ottoman	4
End table	8
Coffee table	4
Book case	4
Desk	4
Desk chair	4
Floor lamp	4
Dining room table	4
Dining room chair	16
Head board	8
Bed frame	8
Mattress	8
Box spring	8
Chest of drawers	8
Night stand	8
Table lamp	8

FURNISHINGS REPLACEMENT/PURCHASES (CONTINUED)

Fiscal Year 2002

1 October 2001 thru 30 September 2002

Description	Quantity
Sofa	12
Loveseat	12
End table	24
Coffee table	12
Book case	12
Desk	12
Desk chair	12
Desk lamp	12
Floor lamp	12
Table lamp	36
Dining room table	12
Dining room chairs	48
Head board/foot board	24
Bed frame	24
Mattress	24
Box spring	24
Dresser	24
Mirror	24

HOUSING REFERRAL OFFICE ACTIVITIES

NOTE: No Housing Referral in our contract for fiscal year 1999 -
Added back into our contract April 2000

Fiscal Year: 2000	**01 April 2000 thru 30 September 2000**
NO. of Applicants Interviewed:	128
NO. of Applicants Housed without HRO:	0
NO. of Applicants Housed by HRO:	27
NO. of Telephone Assistance Calls:	929
NO. of Sign-ins at HRO:	138
NO. of Contacts w/ Realtors, Landlords, Agents:	121
NO. of Responses from Bulletins:	8

HOUSING REFERRAL OFFICE ACTIVITIES (CONTINUED)

Fiscal Year: 2001	**01 October 2000 thru 30 September 2001**
NO. of Applicants Interviewed:	300
NO. of Applicants Housed without HRO:	0
NO. of Applicants Housed by HRO:	48
NO. of Telephone Assistance Calls:	1050
NO. of Sign-ins at HRO:	178
NO. of Contacts w/ Realtors, Landlords, Agents:	348
NO. of Responses from Bulletins:	58

Fiscal Year: 2002	**01 October 2001 thru 30 September 2002**
NO. of Applicants Interviewed:	503
NO. of Applicants Housed without HRO:	0
NO. of Applicants Housed by HRO:	40
NO. of Telephone Assistance Calls:	1255
NO. of Sign-ins at HRO:	162
NO. of Contacts w/ Realtors, Landlords, Agents:	1249
NO. of Responses from Bulletins:	72

MONTHLY MISCELLANEOUS REPORTS

Fiscal Year: 1999	**01 October 1998 thru 30 September 1999**

NOTE: During FY99, DD1131's were completed by Budget

NO. of Civilian 1131's	0
NO. of Unaccompanied Bachelor 1131's	0
NO. of Loss/Damages 1131's	0
Coast Guard Report	24
TOTAL	24

Fiscal Year: 2000	**01 October 1999 thru 30 September 2000**
NO. of Civilian 1131's	21
NO. of Unaccompanied Bachelor 1131's	24
NO. of Loss/Damages 1131's	8
Coast Guard Report	24
TOTAL	77

MONTHLY MISCELLANEOUS REPORTS (CONTINUED)

Fiscal Year: 2001	**01 October 2000 thru 30 September 2001**
NO. of Civilian 1131's	22
NO. of Unaccompanied Bachelor 1131's	12
NO. of Loss/Damages 1131's	9
Coast Guard Report	24
TOTAL	67

Fiscal Year: 2002	**01 October 2001 thru 30 September 2002**
NO. of Civilian 1131's	24
NO. of Unaccompanied Bachelor 1131's	12
NO. of Loss/Damages 1131's	11
Coast Guard Report	24
TOTAL	71

APPENDIX IV
DESCRIPTION OF UNITS
HOUSING PWS 3

FAMILY HOUSING

DESCRIPTION OF UNITS:

200 and 400 areas: Constructed in the late 1920s of brick, have basements and wooden floors throughout. The kitchen area is of vinyl floor covering. These homes have solid masonry walls, storm sashes, and tile and asphalt shingle gable type roofs. Most of the windows have blinds or roller type shades. Heating systems consist of a gas fired boilers and gas or electric water heaters. The units have a dishwasher and garbage disposal. Each unit is furnished with an electric range and refrigerator.

700 Area: Two story town house designs, 8 units per building, constructed in 1950 of brick on a crawl space with wood floors, vinyl covering in kitchen, asphalt shingle gable, aluminum storm windows. Most windows have roller type shades or binds. Each unit is furnished with an electric range and refrigerator. The units have a dishwasher and garbage disposal. The units are heated by a central gas fired circulating hot water heating system and a central gas water heater located in a mechanical room as the end of the building.

Sebille Manor: Constructed in the early 1960s of brick veneer and frame, concrete slab floors, drywall interior, pitched-built roofs and 1 car garages with storage areas of wood construction. Most windows have roller type shades or blinds. Floor coverings consist of vinyl tile and sheet goods. Each unit is furnished with electric range and refrigerator. The units have a dishwasher and garbage disposal. Heating is from electric baseboard heaters and an electric water heater. Total units = 373

900/Wherry Housing Area: Constructed in 1949 of brick and wood frame on a crawl space, gable type roofs with asphalt shingles. Flooring is vinyl tile and sheet goods. Most windows have roller type shades or blinds. Each unit is furnished with a gas range, refrigerator, dishwasher, and a garbage disposal. Heating if from a gas furnace in each unit. A gas central water heater located in the buildings mechanical room supplies hot water. There are outside storage buildings in the Wherry North subdivision. The amount, type, and size of units are listed below, by building:

Building 905 – 2-2A, 4-4A, 2-4B, 4-5A, 1-5B, 1-5C = 14 units (Note: 1-4A unit & 1-4B unit are temporarily combined to create an 8 bedroom unit)
Building 907 – 4-2A, 1-2B, 2-3A, 2-3B, 1-3C, 1-4B = 11 units
Building 908 – 6-2A, 1-2B, 4-3A, 4-3B, 2-3C, 2-4B = 19 units
Building 909 – 6-2A, 1-2B, 4-3A, 4-3B, 2-3C, 2-4B = 19 units
Building 911 – 6-2A, 1-2B, 4-3A, 4-3B, 2-3C, 2-4B = 19 units (This building is currently inactive)
Total units = 82

Description of Codes

2A: 2 Bedroom – 1 bath – 915 sf
2B: 2 Bedroom – 1 Bath 890 sf
2C: 2 Bedroom – 1 Bath – 829 sf
3A: 3 Bedroom – 2 Bath – 1112 sf
3B: 3 Bedroom – 2 Bath – 1110 sf
3C: 3 Bedroom – 2 bath – 1207 sf
4A: 4 Bedroom – 2 Bath – 1271 sf
4B: 4 Bedroom – 2 Bath – 1454 sf
5A: 5 Bedroom – 2 Bath – 1417 sf
5B: 5 Bedroom – 2 Bath – 1339 sf
5C: 5 Bedroom – 2 Bath – 1513 sf
5D: 5 Bedroom – 2 Bath – 1411 sf

BACHELOR HOUSING

DESCRIPTION OF UNITS:

(900/Wherry Housing Area): Constructed in 1949 of brick and wood frame on a crawl space, gable type roofs with asphalt shingles. Flooring is vinyl tile and sheet goods. Most windows have roller type shades or blinds. Each unit is furnished with a gas range, refrigerator, and portable dishwasher. Heating if from a gas furnace in each unit. A gas central water heater located in the buildings mechanical room supplies hot water. The amount, type, and size of units are listed below, by building:

Building 929 – 2-A1, 10-A3, 8-A5 = 20 units
Building 912 – 11-2A, 1-2C = 12 units
Total units = 79 units (160 apartments)

Description of Codes

A1: 1 Bedroom – 1 Bath - 553 sf
A2: 2 Bedroom – 1 Bath – 766 sf
A3: 2 Bedroom – 1 Bath – 636 sf
A4: 3 Bedroom – 1 Bath – 922 sf
A5: 3 Bedroom – 1 Bath – 733 sf
A7: 4 Bedroom – 2 Bath – 1302 sf
B1: 2 Bedroom – 1 Bath – 748 sf
2A: 2 Bedroom – 1 bath – 915 sf
2C: 2 Bedroom – 1 Bath – 829 sf

Building 325: 3 story - constructed of brick and block in the 1950s with central boiler, 70 living suites, dormitory style.

APPENDIX V
COMMANDERS INSPECTION STANDARDS
FAMILY HOUSING PWS-3

1.**General Information**

a. All light sockets must have working bulbs in them. All light fixtures must be clean.
b. Remove all marks, decals, and stains from windows and patio glass doors; any built-up residue from door and window tracks. Clean metal trim and frames.
c. Clean all registers, air-cooler and heater vents, and floor vents.
d. Strip and clean wax from floors.
e. Replace old shades.
f. Remove covers from exhaust fans; clean fans and barrels. Clean grease traps and filters, then reinstall.
g. Clean all dirt, and any marks from walls, woodwork, baseboards, electrical cover plates, and doors.

2. **Kitchens**

a. Clean ceiling and walls with strong grease - cutting solution.
b. Clean cabinets inside and out. Remove and replace shelves with mild cleaning to make sure grease and other residue is removed. Remove all shelf paper and contact paper.
c. Scrub kitchen sink to remove all stains from porcelain and residue from fixtures. pumice stone on porcelain, if necessary.
d. Defrost and drain refrigerator. Do not use sharp objects to remove frost and ice. Clean refrigerator inside and out with mild cleaning solution. Clean rubber seal and internal components. Leave refrigerator plugged in on low setting.
e. Clean behind and under all appliances.
f. Kitchen ranges require continuous attention during occupancy. All accessible area inside and out, must be clean and free of grease and stains. Unplug electric stove before cleaning, but do not disconnect any wires within the stove. Remove drip pans, oven racks, spiders, burner wells, boiler racks, pans and control knobs for cleaning; then replace.
   (1) Ranges with flexible brass tubing connections may be moved out from the wall for cleaning. Do not kink or stretch the tubing.
   (2) Clean aluminum parts with fine steel wool, not oven cleaner. Do not use cold water on hot surfaces.

(3) Never allow water to flow freely over any part of the stove because it will soak the fibrous glass insulation.

(4) Remove all spots from oven, broiler compartment, broiler pans, and top components; coarse dry steel wool is recommended. Do not paint stove or components.

(5) Range pilot lights must be lit, and stove completely assembled at time of termination inspection.

3. **Bathrooms**

a. Wash walls, floor, and tile with strong cleaning solution. Remove all film from shower walls and deck. Clean crevices, cracks, and joints. Also, clean grout between tiles.
b. Clean medicine cabinet, inside and out. Clean light shade and wall surface behind light.
c. Remove all decals and residue from tub, walls, and shower stalls.
d. Remove all deodorizing and self-cleaning material from inside toilet tank. Remove and clean tank lid and wall behind tank.

4. **Bedrooms, Living Rooms, Dining Rooms, Hallways, and Closets**

a. If walls are painted with flat alkyd paint, they do not require washing with water and soap or detergent solution, unless there are crayon or other marks. Normally, wall and ceiling surfaces can be cleaned with a dry, soft, clean cloth. Remove cobwebs and lint from textured ceilings with care, so as not to remove excessive acoustic material. Flat-painted walls shall be scrubbed, when necessary, to remove markings which cannot be removed by the dry method. Try rubber erasers first on pencil marks before washing.
b. Leave closets clean and free of dirt and dust. Wash closet doors with a detergent solution.

5. **Government Furniture**

a. Scrub interior of drawers, shelves, and doors. Clean exterior surfaces with furniture polish.
b. Vacuum sofas

6. **Exterior of House, Storage Room, Equipment Room, and Yard**

a. Remove all cobwebs and dirt from exterior walls, coves, and wood trim. All markings must be removed and surfaces restored to original condition.
b. Clean screens, and secure in proper position on window and door frames or tracks.
c. Mow and trim all lawn area. Fill in any holes, level ground, and re-seed. Remove all grass from around fence pickets.
d. Sweep concrete walkways and driveway. Remove markings and stains.
e. Clean carport; remove all drippings and grease. Sweep or scrub interior walls to remove all markings and restore surfaces to original condition. Avoid excess water usage near electrical control panel.
f. Leave storage room clean. Sweep and scrub walls and floor.
g. Clean garage and enclosed storerooms. Thoroughly clean all interior walls; however, do not use water hose to rinse down interior gypsum board walls. Remove oil and grease from deck.
h. Sweep utility/furnace room, and remove all lint, dust, and cobwebs.
i. Sweep and hose patios. Leave concrete clean and free of markings.
j. Clean all fence-enclosed patio areas.
k. Set thermostat at 55/68 degrees F. (summer/winter settings).
l. Remove all occupant-installed equipment/ furnishings/fences/carpet, etc.

APPENDIX VI
SAMPLE CONTRACT FOR QUARTERS CLEANING FAMILY HOUSING PWS-3

Sample of a Private Custodial Contract For Quarter's Cleaning

1.This private custodial contract between (Sponsor/Resident's name and address), hereinafter referred to as "resident" and Cleaner's name and address, hereinafter referred to as "Custodial Contractor" provides for the cleaning of Resident's quarters subject to the following terms:

2. The Resident shall pay the Custodial Contractor($) for cleaning and clearing of his/her quarters. Payment will be in the form of a certified check or money order, as the parties may agree, made payable to: The Custodial Contractor name or DFAS-OPLPC-SL. The check must reflect both items with the word or. Deliver the certified check or money order to the Base Operations (BASOPS) Contractor at the time the private Custodial Contract is approved. The BASOPS Contractor shall hold the certified check or money order until the private Custodial Contractor has successfully completed its obligations under this contract; the certified check or money order may then be picked up by the contractor. All or part of the payment may be applied by the US Government to damages it may incur as described in paragraphs 5 - 9, herein.

CI INSPECTION_____Date/Time_____

3. The private Custodial Contractor shall prepare the residents quarters for inspection by the BASOPS Contractor in accordance with the standards specified in AR 210-50 and TACOM Supplement 1 thereto, copies of which have been made available for review by the Contractor. Subject to the private Custodial Contractor's compliance with the contract, the private Custodial Contractor's shall have the authority to determine independently how to complete this cleaning contract.

4. The private Custodial Contractor shall clean the quarters and pass final inspection by the BASOPS Contractor on:

FINAL-OUT INSPECTION_____DATE/TIME_____

The Private Custodial Contractor shall pass the inspection on the above date.

5. The private Custodial Contractor shall be liable for all

direct damages to quarters caused by the Contractor's fault or negligence as well as the consequential damages of the loss of use of said quarters occasioned by said damages.

6. The private custodial contractor shall be liable for the loss of said quarters resultant from the Contractor's failure to complete the necessary cleaning and successful inspection by the BASOPS Contractor by time and date specified in this contract. If quarters have not been satisfactorily cleaned within two calendar days beyond the agreed date in the contract, the Garrison Family Housing Manager may take necessary action to have quarters cleaned by other means. The Contractor who fails to clean quarters satisfactorily will be liable for, in addition to, other damages as stated herein, the amount which the government may incur for the cleaning.

7. The parties agree that the fair value of the loss of use of the said quarters, as that term is used elsewhere herein, is a sum equal to the former resident's daily basic allowance for quarters allowance multiplied by the number of days the quarters remain unusable due to the private Custodial Contractor's fault or negligence.

8. The US Government, Department of Defense, Department Of The Army, or any subdivision thereof, is not a party to this contract. However, the quarters mentioned in this contract are owned and controlled by the Department of the Army. As a third party beneficiary under this contract, the Army may pursue damages against the contractor and any remedies stated herein or others available by the law or in equity.

9. Nothing herein should be construed to allow both the Government and the Resident to collect identical damages from the private custodial contractor.

10. We have read this entire agreement and understand it. It is our entire agreement. We enter into it voluntarily and aware of our respective rights and responsibilities.

10. The Resident's forwarding address is:

Phone_____

Signed/contractor_____ Date

Signed/Resident_____ Date

Approved/BASEOPS Contractor_____Date

APPENDIX VII
PERMIT TO SOLICIT
FAMILY HOUSING PWS-3

SAMPLE PERMIT TO SOLICIT

TERMS & CONDITIONS OF CLEANING TEAM CERTIFICATION – Permit to Solicit

1. Attend class presented by Raytheon Support Services Company to receive certification as an approved cleaning team.
2. Permitted to solicit, enter into and sign an approved contract with the housing resident. The contract will be between you and the housing resident and you will be paid by the resident. The resident will schedule the CI and Final Out inspections.
3. MUST attend the CI inspection with the resident. Upon completion of the CI, the cleaning contractor will sign for keys to the quarters.
4. Clean quarters in accordance with approved Government Cleaning Standards, AR 210-7.
5. Successfully pass the Final Out inspection not later than the date specified in the contract (usually within 3-4 business days). Return to the Housing Office with a signed DA Form 3161 to receive payment. Failure to pass final out inspection will result in a re-inspection within 3 business days. The date & time will be determined by the Housing Office.
6. Forfeit money in the amount of the previous resident's daily BAH for each day the quarters fail to pass inspection after the final out date specified in the contract. Payment will be made prior to receiving certified check or money order from the Family Housing Office.
7. Forfeit money for any damages or loss of any Government furniture as a result of cleaning team negligence. Payment will be made prior to receiving certified check or money order from the Family Housing Office.
8. In the event of default, reimburse the Government for the cost incurred to clean the quarters. Reimbursement may exceed the face value of the contract.
9. May be removed from the approved cleaning team file for a period of one year for accumulation of four or more points under the points systems shown below:

VIOLATION	POINTS
Failure to show at CI inspection	1
Failure to show/fail final out inspection	1
Exceed final out date reflected in contract	1
Damage/inventory loss due to cleaning team negligence	1

NOTE: Each violation will be documented and signed by the cleaning team and the Housing Manager.

I, _____agree to abide by the terms and conditions stated above and authorize a background check to be done by DOA Security Personnel. I understand that I MUST have a valid drivers license.

_____

ADDRESS, CITY, STATE, ZIP

_____ _____

TELEPHONE # SSN

_____ _____

SIGNATURE (CLEANING TEAM REPRESENTATIVE) DATE

You are hereby certified for a period of one year to clean and clear military housing units at Selfridge Air National Guard Base, Michigan. NOTE: Certification is good for one year. Certification classes will be held every six months.

_____ _____

Housing Engineer DATE

TRANSPORTATION SERVICES
PWS 4

4.0 TRANSPORTATION SERVICES

4.1 TRANSPORTATION MANAGEMENT

4.2 RESERVED

4.3 RESERVED

4.4 HOURS OF OPERATION

4.5 COMPUTER SYSTEM

4.6 SPECIFIC TASKS

4.7 ADMINISTRATION AND SUPERVISION

4.8 MOVEMENT MANAGEMENT

4.9 QUALITY CONTROL MANAGEMENT

4.10 MISCELLANEOUS TRANSPORTATION SERVICES

APPENDICES

I. DEFINITIONS
II. FORMS, PUBLICATIONS AND REGULATIONS
III. WORKLOAD DATA

4.0 TRANSPORTATION SERVICES

4.0.1 The Contractor shall be responsible for performing the overall management and operation of the transportation services and personal property (household goods, unaccompanied baggage, privately-owned vehicles and mobile homes) shipments for authorized shippers for all Government agencies located within the entire area of the lower peninsula of Michigan and Western Ontario (West of Toronto & South of 45 degree Latitude), Canada. Services shall include arrangement and documentation for the movement and receipt of personal property, including routing and preparation of all associated transportation documents. The actual shipping, receiving, etc. of personal property will be conducted under separate contracts with various transportation companies that have contracts with the government.

4.0.2 In the performance of these duties, the Contractor shall use the applicable DOD, Air Force, Navy and Army Regulations and forms (See Appendix II - Forms, Publications and Regulations appendix).

4.0.3 The Contractor shall prepare and maintain all required and requested reports, records, and correspondence in a timely manner in order to assure their arrival at higher Headquarters on or before the suspense dates. In addition, one-time reports or requests for information from shall be handled expeditiously. A central record administrative file shall be maintained for all reports, records, and correspondence.

4.0.4 **Customer Service**: Customer service is a key element to the overall transportation management mission.

a. **Inquiries**: The Contractor shall provide interim responses to customer's requests for information (e.g. location of shipment, arrival date, etc) within twenty-four (24) hours. If a complete answer is not available within that time frame, the requester must be given a time and date when a complete answer may be expected but no later than three (3) work days. Responses requiring tracing action shall be provided within one (1) work day.

b. **Movement Requests:** The Contractor shall ensure that requests for emergency household movements are processed and started within three (3) work days. Routine requests for household movements shall be processed and started within seven (7) workdays.

4.0.5 The Contractor shall be responsible for all unused accountable/controlled form, SF1203 Personal Property Government Bill of Lading. The Contractor shall maintain a register of all used accountable/controlled forms.

4.0.6 The Contractor shall furnish data requirements for various functional areas of this performance work statement (PWS) for delivery.

4.0.7 The contractor shall prepare and distribute instructions, orientation brochures, memorandums, claims forms and other official information to customers.

4.1 Transportation Management:
The Contractor shall provide a smooth flow of all work under this PWS and prepare all the schedules mentioned in the TOPPS computer system (DD1840, DD1843, DD1844, MT2256R, DD139, DD1812, DD1814, DD1780R. The Contractor shall designate a single individual with full contractor authority to interface with the Contracting Officer's Functional Representative (COFR). The Contractor shall meet, as necessary, with Government personnel to discuss problem areas. See paragraph 4.5 for more information on TOPPS.

4.2 Reserved

4.3 Reserved

4.4 HOURS OF OPERATION:
The Contractor will perform work during the following hours: Monday through Friday (excluding Federal holidays and announced base closings), 7:30 AM to 4:00 PM.

4.5 COMPUTER SYSTEM:
Contractor shall maintain and utilize Transportation Operational Personal Property Standard System (TOPPS). TOPPS is a Department of Defense system that automates the processes and procedures for the worldwide movement of personal property for U.S. Government employees, military members and their dependents. Contractor shall provide a system administrator. This will include administering any upgrades that occur with the system.

4.6 SPECIFIC TASKS:
The Contractor shall perform the following specific Transportation Management Services, but is not limited to:

a. Administration and Supervision
b. Movement Management

c. Quality Control Management
d. Miscellaneous Transportation Services

4.7 ADMINISTRATION AND SUPERVISION:
The Contractor shall supervise and manage movement services. The Contractor must coordinate submission of group movement data and group movement plans with the requesting agency and HQ Military Traffic Management Command (MTMC). The Contractor shall provide feeder data, as required, in support of programming, budgeting, fiscal management, and analysis for transportation activities. The Contractor shall be responsible for the development and execution of all operating plans. The Contractor shall perform the following tasks:

a. Consolidate reports submitted under the Transportation Management Function.

b. Review, verify, and ensure timely submission, on or before suspense date, of special and recurring reports.

c. Maintain statistics pertaining to workload, manpower, cost, performance, and other required subjects. Provide monthly report on the number and type of shipments to the COFR. Participate and provide information, data and metrics to support presentations, the Garrison's Army Communities of Excellence and other such programs.

4.8 MOVEMENT MANAGEMENT:
The Contractor must plan, supervise and coordinate movement services via rail, truck and air, and determine the quickest and least costly mode of shipment. The Contractor's determination may be to use independent carriers or a combination of an independent carrier and other carriers arranged by the HQ Military Traffic Management Command (MTMC). Utilizing TOPPS the Contractor shall perform the following tasks:

a. Counsel military personnel and/or dependents on the movement of personal property, (e.g. household goods, unaccompanied baggage, privately-owned vehicles, mobile homes, do-it-yourself moves, etc). Provide assistance and information to ensure that the customer is aware of the proper claim procedures.

b. Assist the military by scheduling and advising of the various segments of a move.

c. Prepare delivery orders (DO)to contracted agents for packing, crating, pick-up, and storage of personal property and provide the delivery orders to the COFR for signature. Copies of the Government awarded contracts will be provided to the COFR.

d. Copy and distribute the signed delivery orders within one work day to the appropriate contractor.

e. Preparing Personal Property Government Bills of Lading for movement of personal property and preparing Transportation Movement Control Documents for contracted Direct Procurement Method shipments.

4.8.5 The Contractor shall prepare and submit all transportation related documents that will obligate US Government funds to the COFR for signature. The Contractor shall copy and distribute the documents as required. These documents include, but are not limited to: DD Form 619 - Statement of Accessorial Services Performed, DD Form 1155 - Order for Supplies or Services, DD Form 1164 - Service Order for Household Goods, SF 1203 - Personal Property Government Bill of Lading, and STA Form 4820 - Conformation Order for Contractual Service. In the performance of duties, the Contractor is responsible for the correct preparation of all transportation-related documentation, including preparation of support

files that contain justification (e.g. customer TDY, PCS orders, etc) in accordance with applicable US Government Regulations. To ensure compliance, the Government's Ordering Officer or COFR will review all the Contractor's files on a quarterly basis using a random sample approach.

4.9 QUALITY CONTROL MANAGEMENT:
The Contractor shall inspect and evaluate packing, transportation, storage and crating contractors and commercial household goods carriers' facilities, equipment and service rendered during packing, transportation, storage and unpacking of personal property to assure Contractor/Carrier is providing services in accordance with the contracts/Tender of Service/Basic Ordering Agreements contained in DOD Reg. 4500.34R, within the designated geographical area of responsibility.

4.9.1 The Contractor shall order the weighing and re-weighing of shipments in accordance with DOD 4500.34-R. Re-weighing shall be ordered as follows:

a. Ten percent (10%) of all inbound CONUS (including Alaska) Household Good and Unaccompanied Baggage shipments.

b. Ten percent (10%) of all inbound international Unaccompanied Baggage shipments.

c.Ten percent (10%) of all inbound international Household Goods shipments weighing between 500 and 2000 pounds.

d. One hundred percent (100%) of all inbound international Household Good shipments weighing over 2001 pounds or more.

e. No re-weigh on shipments weighing less than 500 pounds, unless the member is near or has exceeded the authorized weight allowance.

f. The Contractor shall assure that all weighing is performed on state certified scales owned by an independent party and obtain the state certification from the owner.

4.9.2. The Contractor shall inspect twentyfive percent (25%) of all personal property shipments (total inbound and outbound) including lots to or from storage (both Storage in Transit (SIT) and Non Temporary Storage).The Contractor shall inspect claim shipments when requested by the pertinent Judge Advocates General. Inspections shall be made to ensure that all carriers providing service at the installation are performing in accordance with the terms and conditions of the Tender of Service and applicable tariffs or rate tenders. Inspections shall be performed in all locations in the geographical area of responsibility to assure adequate evaluation.

4.9.3 The Contractor shall prepare and maintain an up-to-date carrier/agent directory reflecting the address and telephone numbers of approved carriers/agents within their geographical area of responsibility.

4.9.4 The Contractor shall maintain a "Carrier Evaluation and Reporting System" (CERS) and "ITGBL Carrier Evaluation Worksheet Report" (ICERS) in accordance with Military Traffic Management Command (MTMC) Directives. The Contractor shall compile information and prepare Total Quality Assurance Program (TQAP), reports of carrier's performance rating, and furnish to the outbound booking section for tonnage distribution. (Reporting requirements are in the TOPPS Computer System)

4.9.5 Maintain and utilize equitable tonnage distribution by destination, taking into consideration cost favorable carrier's rate filings and TQAP performance standards when allocating shipments. Each transaction will be recorded for reference and reviewed by the Contractor to assure proper tonnage distribution is maintained.

4.9.6 Prepare and distribute survey data to customers and organizations (e.g. customer satisfaction survey of Contractor services provided) collect the data and prepare monthly summary reports of the data and provide to COFR. Route returning surveys to the DPW for review. Take action to resolve issues with the customers. (e.g. take action to correct recurring problems).

4.10 MISCELLANEOUS TRANSPORTATION SERVICES:
The Contractor will procure subscriptions to commercial publications (i.e., atlases) and guides necessary for references to conduct transportation services.

4.11 Training:
The Contractor shall attend training classes and conferences associated with this PWS (5 per year). Tuition for these classes are funded by head quarters, however, the contractor shall pay for lodging, transportation, meal and other costs associated with attending the classes. This does not include training to maintain qualifications and current knowledge which is the Contractor’s responsibility.

APPENDIXES FOR PWS-4
TABLE OF CONTENTS

APPENDIX #	APPENDIX TITLE	No. of Pages
I	**TRANSPORTATION DEFINITIONS/ABBREVIATIONS**	1
II	REGULATIONS, PUBLICATIONS, FORMS AND REPORTS	2
III	**TRANSPORTATION WORKLOAD**	4
	TOTAL NUMBER OF PAGES	**7**

APPENDIX I
TRANSPORTATION DEFINITIONS/ABBREVIATIONS

The following terms shall have the meaning set forth below:

AUTHORIZED ORDERS Issued by an Ordering Agency (i.e., Army, Navy, etc) to service members describing duty assignment
USAG-S U.S. Army Garrison-Selfridge.
MTMC Military Traffic Management Command
COR Contracting Officer's Representative
COFR Contracting Officer's Functional Representative
TQAP Total Quality Assurance Program
AMC U.S. Force-Air Mobility Command
TOPPS Transportation Operational Personal Property Standards Computer System
TRANSPORTATION MANAGEMENT FUNCTION Traffic Management, Personal Property, Quality Control.
SIT Storage in Transit
QC Quality Control
GBL Government Bill of Lading
AR Army Regulation
DF Disposition Form
DA FORM Department of Army Form
DD FORM Department of Defense Form
SF FORM Standard Form and Stock Form
STA FORM Command Form
ACCOUNTABLE FORMS SF1203 Personal Property Government Bill of Lading.
DITY Do-It-Yourself
ITGBL International Government Bill of Lading
HHG Household Goods

APPENDIX II

REGULATIONS, PUBLICATIONS, FORMS AND REPORTS

REGULATIONS AND PUBLICATIONS

4500.32-R Military Standard Transportation
Vol. I and Movements Procedures
(MILSTAMP)

4500.32-R MILSTAMP - Transportation Vol. II
Account Codes (TAC)

4500.34-R Defense Traffic Management
Regulation (DTMR)
Vol I – Personal Property, Consignment
Instruction Guide Worldwide(CONUS)
Vol II – Personal Property, Consignment
Instruction Guide Worldwide (OVERSEAS)

AR 55-71 Transportation of Personal Property
and Related Services

AFR75-1 Personal Property Shipping Information

AFR75-25 Air Force Moving and Storing Personal Property

AFR75-33 DITY - “Do It Yourself” Moving Program
and the Monetary Incentive Payment
Plan

NAVSUP PUB 490 Transportation of Personal Property

Joint Federal Travel Regulations
Vol. I - Members of the Uniformed Services
Vol. II - DOD Civilian Personnel

MRT Military Rate Tenders and Tariffs

AMC 76-1 Air Force-Air Mobility Command

AMC-R 55-2Personal Property and Passenger
Traffic Reports

FORMS

SF 1203 U.S. Personal Property Government Bill of Lading (PPGBL)
DD 1100 Household Goods Storage Record
DD 1164 Service Order for Household Goods

DD 1166	Report of Household Goods Storage Activities
DA 3953	Purchase Request and Commitment
DD 1131	Cash Collection Voucher
DD 139	Pay Adjustment Authorization
DD 1299	Application for Shipment and/or Storage of Personal Property
DD 1155	Order for Supplies and Services
STA FL 60	Termination of Non-temp Storage
STA FL 311	Re-weigh of Shipments Handled out of NTS

DD 1701	Inventory of Household Goods
DD 619	Statement of Accessorial Services Performed
DD 619-1	Statement of Accessorial Services Performed (SIT Delivery and Re-weigh)
DD 1671	Re-weigh of Personal Property
DD 1780R	Shipment Evaluation and Inspection Record
DD 1800	Mobile Home Shipment Inspection at Destination
DD 1811	Pre-Award Survey of Contractor Facilities
DD 1812	Inspection of Household Goods Contractor/Carrier Facility
DD 1840/1840-R	Notice of Loss or Damage
DD 1841	Government Inspection Report
DD 1842	Claim for Personal Property Against the U.S. (Claim Packet)
DD 1843	Demand on Carrier/Contractor (Claim Packet)
DD 1845	Schedule of Property (Claim Packet)
DD 2497	Carrier Evaluation Worksheet/Report
DD 1814	Letter of Warning or Suspension
STA 1203	U.S. Government Bill of Lading

APPENDIX III
TRANSPORTATION WORKLOAD

FY 99 TRANSPORTATION WORKLOAD

OCTOBER 1, 1998 – SEPTEMBER 30, 1999

	OUTBOUND	INBOUND
COUNSELING ACTIONS	1,049	N/A
APPLICATION FOR SHIPMENT/STORAGE	2,246	0
DITY	251	43
LOCAL MOVE	30	N/A
PPGBL'S (TGBL/ITGBL)	2222	2889
DIRECT PROCUREMENT METHOD:		
DOMESTIC	505	622
INTERNATIONAL (HHG/AIR)	192	230
COMMERCIAL AIR	15	5
BAGGAGE (ALL MODES)	217	462
SHIPMENTS AFFECTED BY STORAGE IN TRANSIT	22	1142
WAREHOUSE AND EQUIPMENT INSPECTIONS (SEMIANNUAL)	53	53
QUALITY CONTROL SHIPMENTS INSPECTED	1943	1474
LETTERS:		
OF WARNING	3	N/A
OF SUSPENSION	N/A	N/A
OF INTENT	15	N/A
CLAIMS ASSISTANCE	N/A	243
CUSTOMER ACTION ASSISTANCE	3011	1796
NON-TEMP STORAGE:		
HANDLING IN	N/A	121
HANDLING OUT	149	N/A

TOPPS SUPPORT DATA:

System Upgrades	4
System Maintenance	110
System Backups	52
TOPPS Rates & Solicitations Updates	2
Local Emergency Data Input Corrections	444

FY 00 TRANSPORTATION WORKLOAD

OCTOBER 1, 1999 – SEPTEMBER 30, 2000

	OUTBOUND	INBOUND
CONSELING ACTIONS	1036	N/A
APPLICATIONS FOR SHIPMENT/STORAGE	2309	0
DITY	288	67
LOCAL MOVES	30	N/A
PPGBL'S (TGBL/ITGBL)	2570	2839
DIRECT PROCUREMENT METHOD:		
DOMESTIC	576	539
INTERNATIONAL (HHG/AIR)	65	203
COMMERCIAL AIR	17	5
BAGGAGE (ALL MODES)	242	412
SHIPMENTS AFFECTED BY STORAGE IN TRANSIT	38	1243
WAREHOUSE AND EQUIPMENT INSPECTIONS (SEMIANNUAL)	53	53
QUALITY CONTROL SHIPMENTS INSPECTED	2133	1957
LETTERS:		
OF WARNING	N/A	N/A
OF SUSPENSION	N/A	N/A
OF INTENT	13	N/A
CLAIMS ASSISTANCE	N/A	228
CUSTOMER ACTION ASSISTANCE	2219	2163
NON-TEMP STORAGE:		
HANDLING IN	N/A	135
HANDLING OUT	140	N/A

TOPPS SUPPORT DATA:

Systems Upgrade	7
Systems Maintenance	112
Systems Backup	52
TOPPS Rates & Solicitations Updates	2
Local Emergency Data Input Corrections	367

FY01 TRANSPORTATION WORKLOAD

	OUTBOUND	INBOUND
COUNSELING ACTIONS	910	N/A
APPLICATIONS FOR SHIPMENT/STORAGE	2366	7
DITY	258	115
LOCAL MOVES	15	N/A
PPGBL'S (TGBL/ITGBL)	2797	2459
DIRECT PROCUREMENT METHOD:		
DOMESTIC	508	562
INTERNATIONAL (HHG/AIR)	60	96
COMMERCIAL AIR	7	13
BAGGAGE (ALL MODES)	115	381
SHIPMENTS AFFECTED BY STORAGE IN TRANSIT	18	1314
WAREHOUSE AND EQUIPMENT INSPECTIONS (SEMIANNUAL)	53	53
QUALITY CONTROL SHIPMENTS INSPECTED	1608	1213
LETTERS:		
OF WARNING	12	N/A
OF SUSPENSION	N/A	N/A
OF INTENT	11	N/A
CLAIMS ASSISTANCE	N/A	249
CUSTOMER ACTION ASSISTANCE	2188	1305
NON-TEMP STORAGE:		
HANDLING IN	N/A	102
HANDLING OUT	112	N/A
TOPPS SUPPORT DATA:		
Systems Upgrade	5	
System Maintenance	110	
System Backup	52	
TOPPS Rates & Solicitations Updates	2	
Local Emergency Data Input Corrections	402	

FY02 TRANSPORTATION WORKLOAD

OCTOBER 1, 2001- SEPTEMBER 30, 2002

	OUTBOUND	INBOUND
COUNSELING ACTIONS	1150	N/A
APPLICATIONS FOR SHIPMENT/STORAGE	2659	6
DITY MOVES	409	231
LOCAL MOVES	30	N/A
PPGBL'S (TGBL/ITGBL)	2751	2397
DIRECT PROCUREMENT METHOD:		
DOMESTIC	578	489
INTERNATIONAL (HHG/AIR)	146	120
COMMERCIAL AIR	16	7
BAGGAGE (ALL MODES)	331	319
SHIPMENTS AFECTED BY STORAGE IN TRANSIT	22	962
WAREHOUSE AND EQUIPMENT INSPECTIONS (SEMIANNUAL)	53	53
QUALITY CONTROL SHIPMENTS INSPECTED	1991	855
LETTERS:		
OF WARNING	15	N/A
OF SUSPENSION	1	N/A
OF INTENT	7	N/A
CLAIMS ASSISTANCE	N/A	130
CUSTOMER ACTION ASSISTANCE	2342	1106
NON-TEMP STORAGE		
HANDLING IN	N/A	136
HANDLING OUT	133	N/A

TOPPS SUPPORT DATA:

Systems Upgrades	8
System Maintenance	110
System Backup	52
TOPPS Rates & Solicitations Updates	2
Local Emergency Data Input Corrections	386