

Attachment J05

Fort McNair Potable Water System

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J05 Fort McNair Water System

J05.1 Fort McNair Overview

Fort McNair is a U.S. Army Installation located in the southwestern portion of the District of Columbia, very convenient to the National Airport and the Pentagon. Named in honor of Lt. Gen. Lesley J. McNair, Army Ground Forces Commander who was killed in Normandy in 1944. It is currently home to the National War College, the Industrial College of the Armed Forces, and the Inter-American Defense College. Approximately 1,000 military personnel work within the Installation's ninety eight acres.

J05.2 Water System Description

The water distribution system at Fort McNair consists of water mains, fire hydrants, and isolation valves within the Fort McNair installation. There are no booster pump stations, storage tanks or treatment facilities within Fort McNair, nor are any required. The District of Columbia Water and Sewer Authority (DCWASA), a semi-autonomous regional entity, supplies water to the Installation.

The water system within the Installation is operated and maintained by Installation personnel. The water distribution system in Fort McNair was upgraded in 1988.

The water system within Fort McNair provides water for both domestic and fire protection use. With few exceptions, lines are located adjacent to roadways and fire hydrants readily accessible and each fire hydrant has its own isolation valve. Isolation valves are located near most pipe intersections making it easy to isolate portions of the system. The normal distribution pressure is approximately 55 pounds per square inch (psi) and is adequate for fire protection since the majority of the buildings are under three stories.

Water is supplied to the Installation from the District of Columbia on the Installation perimeter at six locations. Four of the service connections are near Building 62 along 2nd Street with two of these serving only the fire hydrants on each side of Building 62. The other two service connections from the District's lines serve Building 62. Other locations are near 5th Avenue by Building 59, and along P Street near Building 32.

The water distribution system is laid out in a grid pattern with dead end lines only at fire hydrants.

Water Distribution System Improvements

In July 1996 a water deficiency study was conducted. The study found that the pipes are effectively interconnected and there are no constrictions to cause abnormally high pipe velocities and in all cases there is a reserve capacity to deliver water with residual pressures greater than 20 psi. The reports conclusion states *"The hydraulic analysis and field survey of the Fort McNair water distribution system shows it to be a well-designed system with ample pressure and delivery capability to satisfy peak domestic and fire flow demands under all conditions. Critical fire flows can be accommodated with either one of the Districts connections out of service."*

A new Physical Fitness Center and remodeling of Building 61 is proposed, but it appears that both of these can be accomplished with the existing pipe network.

J05.2.1 Water System Fixed Equipment Inventory

Table 1 provides a general listing of the major water system fixed assets for the Fort McNair water system included in the purchase. The system will be sold in a “as is, where is” condition without any warranty, representation, or obligation on the part of Government to make any alterations, repairs, or improvements. Ancillary equipment attached to, and necessary for, operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

TABLE 1
Fixed Inventory
Water Distribution System Inventory

Item	Quantity	Unit	Avg. Year of Const:
PVC Pipe			
4"	95	LF	1988
6"	110	LF	1988
8"	9,110	LF	1988
Ductile Iron Pipe			
2"	60	LF	1988
3"	75	LF	1988
4"	155	LF	1988
6"	635	LF	1988
8"	2,845	LF	1988
12"	600	LF	1988
Copper Pipe			
1.25"	210	LF	1988
1.5"	590	LF	1988
2"	2,250	LF	1988
Brass Pipe			
1.5"	260	LF	1988
Building Services			
Residential	27	EA	1988
Industrial	28	EA	1988
Main Valves			
2"	65	EA	1988
3"	2	EA	1988
4"	6	EA	1988
6"	5	EA	1988
8"	43	EA	1988
12"	2	EA	1988
Fire Hydrants	28	EA	1988
Hose Bibs	19	EA	1988

J05.2.1.3 Estimated Replacement Cost New (RCN)

For completing Schedule B-1, Sub-CLIN 0003AC, Normal Renewals and Replacements, the government has estimated the RCN of the Fort McNair water system to be \$.77 Million. This value shall be used by the Offeror IAW Clause B.6.3.3.

J05.2.2 Water Distribution System Non-Fixed Equipment and Specialized Tools Inventory

Table 2 lists other ancillary equipment (spare parts) and Table 3 lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE 2
Spare Parts
Water System

Qty	Item	Make/Model	Description	Remarks
Fort Myer maintains an inventory of spare parts for the water distribution system. Contents of the inventory vary as items are used and/or purchased. Availability of this inventory to the new owner will be negotiated before or during the transition period.				

TABLE 3
Specialized Equipment and Vehicles
Water System

Description	Quantity	Location	Maker
No specialized equipment or vehicles for maintenance of the Fort Myer water distribution system will be transferred to the new owner of the system.			

J05.2.3 Water System Manuals, Drawings, and Records Inventory

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Water System

Qty	Item	Description	Remarks
Fort McNair maintains a limited collection of technical manuals, drawings, and records on the installed components of the water distribution system. This information will be transferred to the new owner during the transition period. System maps will be available in the bidders' library.			

J05.3 Current Service Arrangement

The Army-owned water system at Fort McNair receives potable water from The District of Columbia Water and Sewer Authority (DCWASA).

J05.4 Secondary Metering

The Installation may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Clause C.3.

J05.4.1 Existing Secondary Meters

TABLE 5

Existing Secondary Meters
Water System

Meter	Location
Officer Club	Building #60
Boiler Plant	Building #34
IADC	Building #52

J05.4.2 Required New Secondary Meters

The Installation requires the contractor to install and calibrate new secondary meters as listed in Table 6. New secondary meters shall be installed IAW Clause C.17, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Clauses C.3, H.5, and J05.5 below.

TABLE 6

New Secondary Meters
Water Distribution System Fort McNair

Meter Location	Meter Description
Fort McNair will require the successful bidder provide and install water meters on all permanent buildings.	

J05.5 Submittals

In addition to the submittal requirements from Clause H.5, the Contractor shall provide the Government monthly submittals for:

1. Invoicing (IAW G.2) for the previous month's services. The Contractors invoice shall be prepared in a format proposed by the Contractor and accepted by the Contracting Officer.
2. Monthly Service Interruption Report for the previous month.
3. Meter Reading Report in support of internal billings, water usage management, and monitoring.

4. System Efficiency Report. If required by Clause C.3 the Contractors shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer.

J05.6 Energy Savings and Conservation Projects

An Energy Saving Performance Contract (ESPC) has been awarded at Fort Myer, 18 years remains for the current contract. IAW C.3, Utility Service Requirement, there have been no projects that affect the utility privatization of the exterior electric, potable water or wastewater utility systems.

J05.7 Service Area

IAW Clause C.4, Service Area, the service area is defined as all areas within the Fort McNair boundaries.

J05.8 Off-Installation Sites

There are no off-Installation sites associated with this scope.

J05.9 Specific Transition Requirements

IAW Clause C.17, Transition Plan, Table 7 lists service connections and disconnections required upon transfer, and Table 8 lists the improvement projects required upon transfer of the Fort McNair water system.

TABLE 7
Service Connections and Disconnections
Water System

Location	Description
None identified	

TABLE 8
System Improvement Projects
Water System

Project Location	Project Description
None identified	

J05.10 Potable Water System Points of Demarcation

The point of demarcation is defined as the point on the piping system where ownership changes from the Grantee to the building owner. The table below identifies the general locations of these points with respect to the building served. During the operation and maintenance transition period, concurrence on specific demarcation points will be documented during the joint inventory of facilities.

Point of Demarcation	Applicable Scenario	Sketch
Water meter, backflow device, or valve (closest apparatus to the exterior of the structure).	Water meter, backflow device, or valve is located on the service line entering the structure within 25 feet of the exterior of the structure.	
Point where the service line enters the structure.	No water meter, backflow device, or valve exists on the service line entering the structure.	

J05.10.1 Unique Points of Demarcation

The following table lists anomalous points of demarcation that do not fit any of the above categories.

Building No.	Point of Demarcation Description
None	

J05.10.2 Plants

Description	Facility Number	State Coordinates	Other Information
None			