Attachment J01
Fort Meade Potable Water Distribution and Treatment System

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J01 Fort Meade Potable Water Distribution and Treatment System

J01.1 Fort Meade Overview

Fort George G. Meade (FGGM or the Installation), established in 1917 as a training site for three infantry divisions, three training battalions and one depot brigade, is located almost midway between the cities of Baltimore, Md. and Washington, D.C. The Installation consists of 5,415 acres and is comprised of approximately 1,300 facilities. Fort Meade is home to approximately 10,000 military personnel along with approximately 25,800 civilian employees.

Fort Meade's mission is to provide a wide range of support to more than 78 organizations from all four services and to several federal agencies. Major tenants include the National Security Agency (NSA), the Defense Information School (DINFOS), and the U.S. Environmental Protection Agency Center (EPA).

J01.2 Water System Description

The Fort meade potable water distribution and treatment system consists of all appurtenances physically connected to the system from the point in which the Government ownership currently, starts to the point of demarcation defined by the real estate instruments. Generally, the point of demarcation will be the building footprint. The system may include, but is not limited to, the water wells, the water treatment plant, the storage tanks and the distribution lines including service laterals. The following description and inventory is included to provide the utility service provider with a general understanding of the size and configuration of the distribution system. The Utility service provider shall base the proposal on site inspections, information in the bidders' library, other pertinent information, and to a lesser degree the following description. Under no circumstances shall the successful Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

J01.2.1 Water System Fixed Equipment Inventory

FGGM's potable water distribution and treatment system includes six functioning groundwater wells, a low-lift pumping station, two high lift pump stations, a water treatment plant, three clearwells, one booster station, four elevated storage tanks, three ground storage tanks, and a potable water distribution system containing approximately 90 miles of pipe.

For the purposes of this document, Fort Meade's potable water system has been divided into the following three components: (1) raw water supply, (2) water treatment plant, and (3) water distribution and storage. The schematic diagram of the FGGM potable water system is shown in Figure 2.1.2.

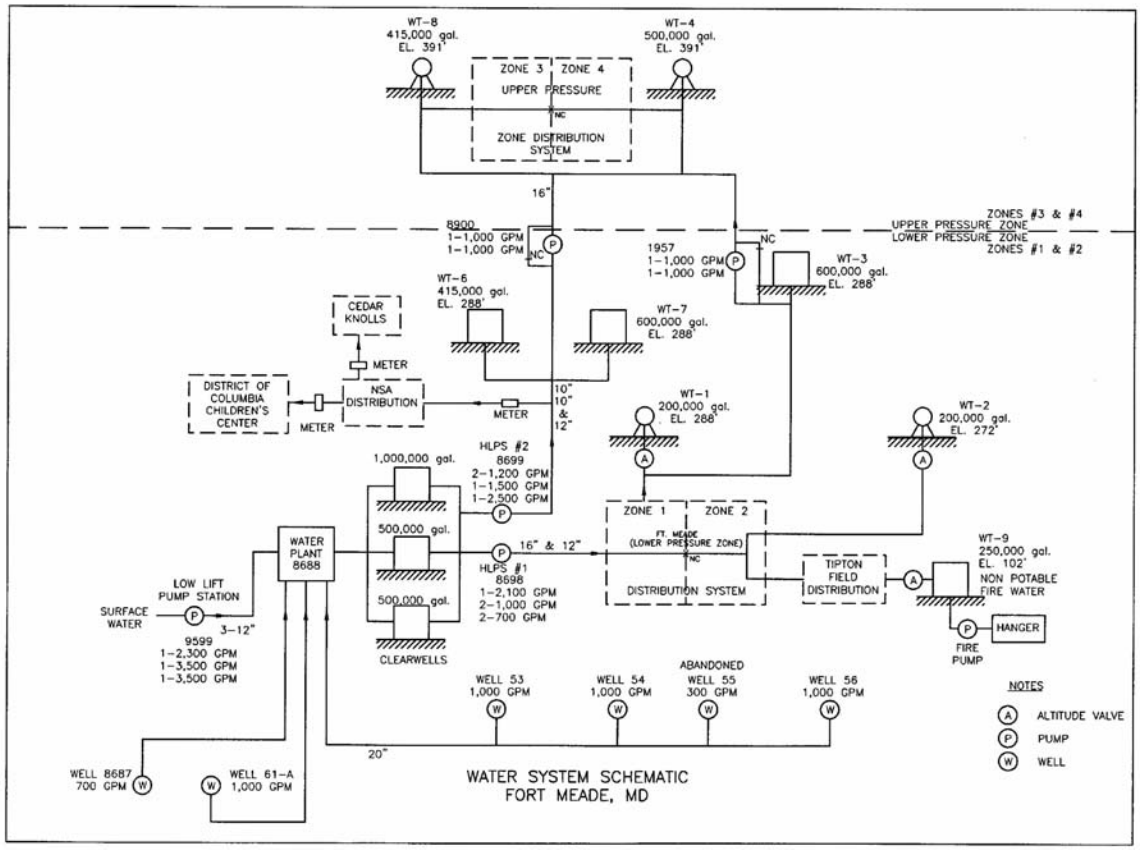


Figure 2.1.2 - Fort Meade Potable Water Distribution and Treatment System Schematic

Raw Water Supply

FGGM's raw water supply sources include both surface water and groundwater. The Installation's primary source of water is the surface water from the Little Patuxent River which provides approximately 80 percent of water used at FGGM. The other raw water source, which provided the remaining 20 percent of the Installation's raw water requirements, is groundwater pumped from the six wells.

Under a permitting system administered by the Department of Natural Resources, Fort Meade is authorized to draw raw water from two sources. A surface water permit authorizes the Post to use 5.2 MGD from the Little Patuxent River, and a groundwater permit allows a withdrawal of 2 MGD from a field of six artesian wells located on the Fort Meade installation; both thresholds are averaged over a twelve-month period. The Low Lift Pump Station (LLPS) adjacent to the river houses three electric pumps total combined capacity rated at 13.4 MGD (9,300 gpm). The well field draws from a confined aquifer at depths of 400' – 785' below ground level and has an aggregate capacity of 8.28 MGD (5750 gpm).

The surface water is taken at the low-lift pumping station located near Maryland Route 198 and upstream of the wastewater treatment plant discharge. Approximately 20 feet downstream of the intakes is a dam. The dam is a concrete structure with an overflow weir, a sluice gate on the east side, and a fish ladder on the west end. There are two water intake structures with trash racks and stop log groves. Silt build-up in front of the raw water intake at the LLPS is a problem and imposes limitations on water withdrawal from the river. The weir in front of the raw water intake will need periodic dredging in order for the Installation to withdraw surface water from the river.

The LLPS structure, located on the river's east bank, houses three raw water pumps that pump water to the water treatment facility. There are three electric pumps located at this pumping station. The combined capacity of the three electric pumps is 9,300 gallon per minute (gpm), or approximately 13.4 million gallons per day (MGD). The raw water is pumped from the LLPS through three 12-inch diameter water mains, approximately 4,000 feet long, to the water treatment plant. The quality of the river water is considered acceptable for treatment, except when high chloride concentrations are present in the river water resulting from winter de-icing operations upstream of the pumping station.

As previously noted, the secondary raw water source is groundwater pumped from wells. Well No. 1 is located near the water treatment plant facilities. Wells No. 2 through No. 6 are located in the well field, south of the main Installation. Each well utilizes one vertical turbine-type pump located within its individual well house. The rated capacity of Well No. 1 is 700 gpm, while Wells No. 2, No. 3, No. 4 , and No. 6 have rated capacities of 1,000 gpm and Well No. 5 is rated at 1,050 gpm. The combined total capacity of the five operating wells is 5750 gpm, or 8.28 MGD. The groundwater is pumped to the water treatment plant through two 16-inch and one 12-inch diameter water pipelines. All wells are operated manually from the water treatment plant.

Water Treatment Plant

Although initially constructed around 1919 as a "run of the river"-type plant, the treatment plant facilities were upgraded in 1942, 1956, 1968, 1984, and most recently in 1986. The chemical feed has been replaced to use liquid chemical feed. The treatment plant had an original design capacity of 8.3 MGD. The present day actual design capacity is 7.2 MGD. For the past 10 years, the plant has produced an average daily capacity of 3.4 MGD. Typically, the seasonal peak daily demand is 4.5 MGD and usually occurs between July and September. The all-time peak daily demand was 6.5 MGD, which occurred during Desert Storm. The 5-year and 10-year future water requirements have been estimated to be 3.8 and 4.3 MGD, respectively. The treatment plant provides treated water to the NSA complex as well as Fort Meade. The schematic diagram of the FGGM water treatment plant is shown in Figure 2.1.2.

The raw river water is pumped by the LLPS to the treatment plant via three 12-inch pipes. The water is discharged into the rapid mix basin where alum is added. From the rapid mix basin, the flow is discharged into one of three sedimentation/flocculation basins. Each basin has two mechanical flocculators followed by settling compartments. Lime is added to the water as it enters the sedimentation/flocculation basins to aid flocculation. Powdered activated carbon is added to treat odor on an as needed basis. The groundwater pumped from the wells enters the plant and flows into two induced-draft tray aerators for carbon dioxide removal and oxidation of iron and manganese. The water from the aerators is then discharged into Sedimentation Basin No. 4. After sedimentation the water is chlorinated. Final sedimentation takes place in the 0.5 million-gallon basin to settle iron precipitation.

Sludge is withdrawn from the basins by means of gravity flow. There are no mechanical scrapers or sludge collection devices in the sedimentation basins. Sludge is periodically withdrawn. Sludge is pumped from the water treatment plant to the wastewater treatment plant for disposal.

The effluent from Sedimentation Basin No. 5 is filtered in six (1.2 MG each) tri-media (anthracite-sand-garnet) rapid-flow filters. After filtration, sodium silica fluoride along with lime and zinc bimetallic phosphate, are added for corrosion control. The treated water is chlorinated (post-chlorination) and flows to three aboveground clearwell storage tanks located near the plant. The clearwell storage tanks, which have a combined storage of 2.3 million gallons, also provide the required chlorine detention time.

The treated water is pumped from the clearwell storage tanks into the distribution system through High Lift Pump Stations (HLPS) No. 1 and No. 2 located near the water treatment plant. Approximately 3.4 MGD of potable water is pumped to Fort Meade and Fort Meade tenants.

HLPS No.1 (Building No. 8698) contains six total pumps, only five of which serve the distribution system. Pump No. 1 is a backwash pump used solely to backwash the rapid-flow sand filters in the plant and is the only pump capable of providing backwash water. The remaining five pumps serve the potable water distribution system. Pumps No. 2 and No. 5 each have a capacity of 1,000 gpm (1.44 MGD), while Pumps No. 3 and No. 4 each have a capacity of 700 gpm (1.0 MGD). There is also a diesel powered pump, Pump No. 6, with a capacity of 2,100 gpm (3.0 MGD), which can be used during power outages to supply water to the distribution system. This pump, however, is currently in need of repair and is not operational at time of this report. The combined capacity of high-lift pumping station No. 1 (when Pump No. 6 is operational) is roughly 5,500 gpm (7.92 MGD).

HLPS No. 2 (Building No. 8699) consists of four pumps. Pumps No. 1 and No. 2 each have capacity of 1,200 gpm (1.73 MGD) one of these pumps can operate on either electricity or diesel fuel, while Pump No. 3 has a capacity of 1,500 gpm (2.16 MGD) and Pump No. 4 has a capacity of 2,500 gpm (3.60 MGD). The combined pump capacity of this station is 6,400 gpm (9.2 MGD). Under normal steady state conditions, HLPS No.2 pressurizes Pressure Zones No. 1and 2 and simultaneously maintains a 70 percent minimum fill level in the Chaffee Hill ground water storage tanks. A booster station draws water from the Chaffee Hill water storage tanks and pumps it to the higher Pressure Zones No. 3 and 4 for the Argonne Hills area supply. Overflow from the booster station is contained by the Pershing Hill elevated water storage tank.

The Water Treatment Plant has an emergency generator with enough capacity to sustain full plant operations; e.g., chemical mixing, flocculation, etc. Also, a diesel-generator set with automatic transfer switch supplies full backup power to the LLPS. There is no emergency power or diesel backup for operating the deep wells, and only limited emergency resources are available at HLPS No.1 and HLPS No. 2.

TABLE 11
11. Plants and Towers
Water Distribution System – Fort Meade

Description	Facility Number	State Coordinates	Other Information
Water Treatment Plant			

"User Note: This table should include any parcels of land that the Grantee will need to be granted exclusive use under the right-of-way. This land should be described according to a state coordinate system."

Water Distribution and Storage

The water distribution system transports the water from the treatment plant facilities to the various facilities located on the Installation. The system provides domestic, industrial and fire water throughout the Installation. The distribution system consists of pipes, valves, meters, fire hydrants and booster pump stations. The system has four pressure zones and is adequate to maintain a pressure of 30 pounds per square inch (psi) during peak daily flows. Figure 2.1.2 (illustrated previously in Subsection 2.1.2) indicates a high-pressure and a low-pressure zone. The high-pressure and the low-pressure zone each have a normally closed valve in place to create two separate high-pressure and two separate low-pressure zones.

Four elevated storage tanks and three ground storage tanks located throughout the system support FGGM's potable water distribution system. The type, location, manufacturer, date of fabrication and the

capacity of each tank are summarized in Table 2.1.2.3 below. The combined capacity of the storage tanks is approximately 3.035 million gallons. All of the tanks have recently undergone extensive renovation consisting of removing existing paint, repainting all exterior and interior surfaces of the tanks, and replacing the cathodic protection systems within the tanks.

Table 2.1.2.3: Fort Meade Potable Water Storage Tanks

Tank No.	Type	Location	Manufacturer*	Installed/ Upgrade	Capacity (gallons)
1	Elevated	Symonds and Zimborski	PDMSC	1928/1996	200,000
2	Elevated	Ordinance Area	PDMSC	1934/1996	305,000
3	Ground	Annapolis Hill	PDMSC	1940/1996	600,000
4	Elevated	Hunt Hill	PDMSC	1940/1996	500,000
6	Ground	Chaffee Hill	GTC	1954/1996	415,000
7	Ground	Chaffee Hill	GTC	1954/1996	600,000
8	Elevated	Pershing Hill	GTC	1958/1996	415,000
				Total	**3,035,000**

Note: *PDMS – Pittsburgh-Des Moines Steel Company
GTC – Graver Tank Company
Tank Upgrade include removal of lead paint and repainting tank

J01.2.1.1 Inventory

Table 1 provides a general listing of the major water system fixed assets for the Fort Meade water system included in the purchase. The system will be transferred 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 1A
1A. Fixed Inventory - Fort Meade
Water Distribution System Inventory

Item	Size	Quantity	Unit	Average Year of Construction
Pipe	Less than 4"	14,294	Linear Feet	1976
	4"	14,486	Linear Feet	1991
	6"	145,341	Linear Feet	1981
	8"	101,393	Linear Feet	1971
	10"	23,418	Linear Feet	1971
	12"	71,863	Linear Feet	1970
	14"	2,397	Linear Feet	1968
	16"	29,475	Linear Feet	1965
	18"	2,165	Linear Feet	1968
	20"	8,720	Linear Feet	1963
Total		413,552		
Main Valves	6" Gate Valve w/Box	105	Each	1969
	8" Gate Valve w/Box	247	Each	1960
Total		352		
Fire Hydrants	Fire Hydrant	552	Each	1973

Item	Size	Quantity	Unit	Average Year of Construction
Building Services	Building Service	1,251	Each	1981
Meters	Main Meters	3	Each	1967
Storage Tanks: (detailed in previous section)	3,035,000 gal.	7	Gal.	1996
Wells	Well #1	1	700 GPM	1972
	Well #2	1	1,000 GPM	1970
	Well #3	1	1,000 GPM	1989
	Well #4	1	1,000 GPM	1989
	Well #6	1	1,000 GPM	1989
High/Low Lift Stations	HLPS #1	1	Each	1958
	HLPS #2	1	Each	1968
	LLPS	1	Each	1967
Treatment Plant	Bldg #P-8688	1	Each	1970
Booster Pump Station	Booster Pump Station	1	Each	1958

TABLE 1B
1B. Fixed Inventory - NSA
Water Distribution System Inventory

Item	Size	Quantity	Unit	Average Year of Construction
Pipe	Less than 4”	104	Linear Feet	1961
	4”	935	Linear Feet	1961
	6”	7,97	Linear Feet	1973
	8”	17,439	Linear Feet	1970
	10”	15,773	Linear Feet	1973
	12”	17,156	Linear Feet	1967
	14”	0	Linear Feet	----
	16”	2,163	Linear Feet	1958
	18”	0	Linear Feet	----
	20”	0	Linear Feet	----
Subtotal		61,567		
Main Valves	6” Gate Valve w/Box	9	Each	1976
	8” Gate Valve w/Box	73	Each	1970
	10” Gate Valve w/Box	60		1972
	12” Gate Valve w/Box	49		1964
	14” Gate Valve w/Box	13		1958
		204		
Fire Hydrants	Fire Hydrant	82	Each	1971
Building Services	Building Service	0	Each	----
Meters	Main Meters	0	Each	----

J01.2.2 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. Utility service providers shall field verify all equipment and tools prior to submitting a bid. Utility service providers 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
2. Spare Parts
Water Distribution System – Fort Meade

Qty	Item	Make/Model	Description	Remarks
Fort Meade indicated no spare parts are available for inventory.				

TABLE 3
3. Specialized Equipment and Vehicles
Water Distribution System – Fort Meade

Description	Quantity	Location	Maker
No special equipment or vehicles are listed for transfer.			

J01.2.3 Water System Manuals, Drawings, and Records Inventory

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

TABLE 4
4. Manuals, Drawings, and Records
Water Distribution System – Fort Meade

Qty	Item	Description	Remarks
Fort Meade 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. Electronic versions of a few select photos/maps are contained in a Power Point file named "Add'l photos.ppt".			

J01.3 Current Service Arrangement

The Army owned water system at Fort Meade is permitted to withdraw 2 MGD of groundwater from six artesian wells located on the Fort Meade installation and 5.2 MGD of surface water from the Little Patuxent River.

J01.4 Secondary Metering

The Base 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.

J01.4.1 Existing Secondary Meters

TABLE 5
5. Existing Secondary Meters
Water Distribution System – Fort Meade

Meter Number	DOD-owned Building/Location	Serves	Remarks
70022849	6500	Defense Information School (DINFOS)	Operational, accuracy questionable
W1	2015	Anne Arundel County – Sarah's House	Non-operational
W2	2014	Anne Arundel County – Sarah's House	Non-operational
W3	2013	Anne Arundel County – Sarah's House	Non-operational
W5	Clark Road and MacArthur Road	Family Housing Areas	Non-operational
W6	Clark Road and 26th Street	Family Housing Areas	Non-operational
W10A	Rockenbach and Canine Roads	Cedar Knoll (off of the Post)	Main Line Meter - Non Operational
W10B	Rockenbach and Canine Roads	Cedar Knoll (off of the Post)	By-Pass Meter - Non Operational
W12	6600	Club Meade - Former Officer's Club	Non-operational
W13	4680	PX Gas Station	Non-operational
W14	Roberts and Varney Roads	Family Housing Areas	Non-operational
W15	Roberts and Wright Roads	Family Housing Areas	Non-operational
W16	Rock Avenue and Redwood Road	Family Housing Areas	Non-operational
W17	English and Llewellyn Avenues	Family Housing Areas	Non-operational
W18	Butler Road and Llewellyn Avenue	Family Housing Areas	Non-operational
W19	McKay Road and Llewellyn Avenue	Family Housing Areas	Non-operational
W20	English Avenue and Mapes Road	Family Housing Areas	Non-operational
W21	2694	Family Housing	Non-operational
W22	2692	Family Housing	Non-operational
W23	Buckner Avenue and Rose Street	Family Housing Areas	Non-operational
W24	2786	Commissary	Non-operational
W25	2790	PX Main (Retail) Store	Non-operational
W26	2791	PX Shops	Non-operational
W27	2791	PX Garden Shop	Non-operational
W29	Ernie Pyle and 21st Streets	Family Housing Areas	Non-operational
W30	1250	Dekalb USARC Building	Non-operational
W31	1252	Reserve Center	Non-operational
W32	1957	Family Housing Areas	Non-operational
W33	1957	Family Housing Areas	Non-operational
W34A	Route 175, North of Walker Avenue	Family Housing Areas	Non-operational
W34B	Route 175, North of Walker Avenue	Family Housing Areas	Non-operational
W35A	Route 175, South of Walker Avenue	Family Housing Areas	Non-operational

Meter Number	DOD-owned Building/Location	Serves	Remarks
W35B	Route 175, South of Walker Avenue	Family Housing Areas	Non-operational
W37	Range Road	Department of Interior	Non-operational
W38	8452	McGill Recreation Center	Non-operational
W40	9810	Sealandair Recreation Center	Non-operational
Meter #	Building/Location	Serves:	Remarks
W41	2011	Anne Arundel County – Sarah's House	Non-operational
W42	2016	Anne Arundel County – Sarah's House	Non-operational
W43	2017	Anne Arundel County – Sarah's House	Non-operational
1536779	1100	Meade Senior High School	Anne Arundel County owned; accuracy of meter questionable
19430751	3500	MacArthur Junior High School	Anne Arundel County owned; accuracy of meter questionable
166711893	7600	Pershing Hill Elementary School	Anne Arundel County owned; accuracy of meter questionable
1539329	7700	West Meade Elementary School	Anne Arundel County owned; accuracy of meter questionable
1539328	3001	Manor View Elementary School	Anne Arundel County owned; accuracy of meter questionable
N/A	1925	Meade Heights Elementary School	Anne Arundel County owned; accuracy of meter questionable
1540469	1103	Meade Middle School	Anne Arundel County owned; accuracy of meter questionable
	701	EPA Building	Meter for building
	701	EPA Building	Meter for cooling tower

Notes:

1. Spreadsheet generated on 13 March 2002.
2. All meters, except for building 6500, listed above are by-passed, missing, broken, uncalibrated, etc. - useless.
3. Accuracy questionable - no maintenance nor calibration has been performed since meter was put into service.

J01.4.2 Required New Secondary Meters

The Contractor shall 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 J01.5 below.

TABLE 6
6. New Secondary Meters
Water Distribution System – Fort Meade

Meter Location	Meter Description
The intention of Fort Meade is to have the successful bidder provide and install water meters on all permanent and existing temporary non-housing buildings and facilities. Future non-DOD entities, including the housing privatization contractor, will negotiate directly with successful bidder.	
Install necessary telemetry or similar equipment to meter NSA water use with monitoring capability for NSA.	NSA water consumption, excluding the Super-computer facility, is computed through deductive readings from flow meters at High Lift Pump Station #2 and Chaffee Hill Booster Station. Two sub-meter locations measure flow out of NSA to the former Cedar Knolls Hospital and the Washington D.C. Youth Services Administration's Youth Center.

J01.5 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following: Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

J01.6 Energy Savings and Conservation Projects

IAW C.3, Utility Service Requirement, the following projects have been implemented by the Government for energy conservation purposes:

Energy Savings Performance Contracting (ESPC) project awarded to Pepco Government Services in June 1999. Energy conservation measures included installing low flow faucets and showerheads and low flush toilets in numerous Fort Meade facilities.

J01.7 Service Area

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

J01.8 Off-Installation Sites

Water service is provided to the Washington D.C. Youth Services Administration's Youth Center, the Anne Arundel County (AAC) Airport, and the former Cedar Knolls Hospital from the NSA portion of the distribution system. Water service will be required to these off-Installation sites.

J01.9 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 Meade water system.

TABLE 7
7. Service Connections and Disconnections
Water Distribution System – Fort Meade

Location	Description
Future non-DOD entities will negotiate directly with successful bidder.	
Planned Future MCA Projects are listed in a separate Excel file located in Section J05.	

The utility service provider will coordinate with Fort Meade for future addition or demolition of buildings. For existing and new family housing units and facilities, the utility service provider shall coordinate directly with the housing privatization contractor. The utility service provider may or may not be responsible, as mutually agreed upon by the utility service provider and the housing privatization contractor, for installing new service lines and meters up to the mutually agreed upon demarcation point for future housing. Also, the utility service provider may or may not be responsible, as mutually agreed upon by the utility service provider and the housing privatization contractor, for disconnecting service to abandoned buildings, and for removal, reuse or disposal of the associated

meters and piping. The utility service provider may or may not be responsible, as mutually agreed upon by the utility service provider and the housing privatization contractor for ownership, operation, and maintenance of existing piping owned by the housing privatization contractor.

TABLE 8
8. System Improvement Projects
Water Distribution System – Fort Meade

Project Location	Project Description
None Identified	

J01.10 Water Distribution 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 tables below identify the general locations of these points with respect to the building served.

TABLE 9A
9A. Points of Demarcation
Water Distribution System – Fort Meade

Water Distribution System Points of Demarcation - Ft. Meade

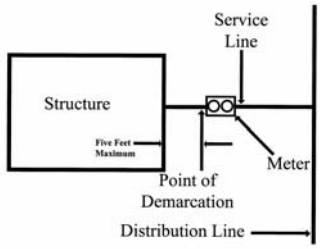
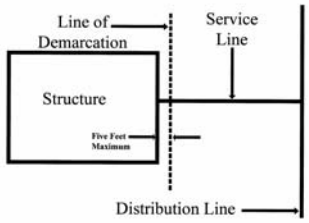
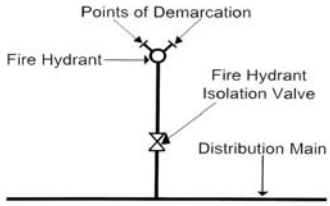
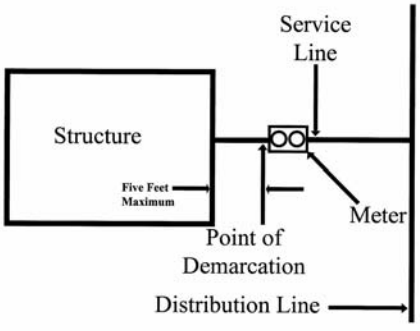
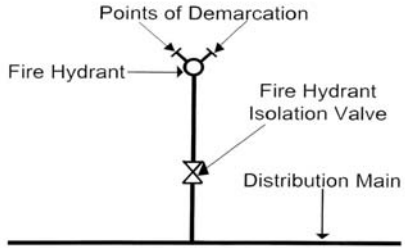
Point of Demarcation	Applicable Scenario	Sketch
The point of demarcation is the water meter, backflow device, or valve (closest apparatus to the exterior of the structure) within five feet of the face of the structure. If greater than five feet from the face of the structure, the demarcation point is five feet from the face of the structure.	Water meter, backflow device, or cutoff valve is located on the service line entering the structure within five feet of the exterior of the structure.	
The point of demarcation is five feet from the face of the structure where the service line enters the structure for either potable water or fire protection service.	No water meter, backflow device, or cutoff valve exists on the service line entering the structure.	
No point of demarcation exists; the utility service contractor will own all exterior fire suppression infrastructure, up to and including fire hydrants.	Exterior fire protection exists at the installation.	

TABLE 9B
9B. Points of Demarcation
Water Distribution System – NSA

Water Distribution System Points of Demarcation - NSA

Point of Demarcation	Applicable Scenario	Sketch
The point of demarcation is the water meter, backflow device, or valve (closest apparatus to the exterior of the structure).	Water meter, backflow device, or cutoff valve is located on the service line entering the structure.	

Water Distribution System Points of Demarcation - NSA

Point of Demarcation	Applicable Scenario	Sketch
No point of demarcation exists; the utility service contractor will own all exterior fire suppression infrastructure, up to and including fire hydrants.	Exterior fire protection exists at the installation.	

J01.10.1 Unique Points of Demarcation

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

TABLE 10
10. Unique Points of Demarcation
Water Distribution System – Fort Meade

Point of Demarcation	Applicable Scenario
Point of demarcation is at a boundary mutually agreed upon by the utility service provider and the housing privatization contractor.	Includes but not necessarily limited to: Utility service provider owned piping connects to housing privatization contractor owned piping. New housing constructed before and after utility service provider takes over the system.