

# Duluth IAP (ANG) Water Distribution System

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# **J3 Duluth IAP (ANG) Water Distribution System**

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## **J3.1 Duluth IAP (ANG) Overview**

The 148<sup>th</sup> Fighter Wing is located at Duluth International Airport in St. Louis County, Minnesota, seven miles northwest of downtown Duluth. The main base occupies 153.3 acres on the northeast corner of the airport. Additionally, the munitions storage area (physically separated from the main base) occupies 16.71 acres north of Runway 09/27. The base has a total of 37 buildings; 18 industrial and 19 administrative. Normal base population is 320 personnel but surges to 1100 occur once each month during drill sessions. The 148<sup>th</sup> currently flies the F-16 ADF Fighting Falcon. Its mission is to “Provide the best Air Defense, Service, and Support to the State and the Nation in times of peace and war.

## **J3.2 Water Distribution System Description**

### **J3.2.1 Water Distribution System Fixed Equipment Inventory**

The Duluth IAP (ANG) water distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, pipelines, valves, fire hydrants, storage facilities, exterior backflow devices, pumps, and meters. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the water distribution system privatization are: None.

#### **J3.2.1.1 Description**

The Duluth IAP (ANG) water distribution is a dead-end system design. Water service enters the base at one location using a 6-inch service line at 45 psi and feeds a 60,000-gallon underground water tank. The distribution system contains approximately 6,560 linear feet of water piping which is mostly ductile iron pipe (76%) and some copper pipe (24%). Pipe sizes range from 1 inch to 8 inch in diameter and are buried approximately 7 feet underground and considered to be in average condition. The age of the system components range from 1950 to present. The underground water tank was constructed in 1952 and has automatic water level controls. There is one pump station in building 230 that was constructed in 1972 and is approximately 216 sq ft in size. Pump station contains 4 centrifugal pumps that are each rated at 25 gpm and each is 15 hp. Station has automatic controls, with local audible alarms. Pump house was upgraded in 1992 to install pressure switches. Distribution system also contains 18 fire hydrants, 1 post indicator valve, 29 gate valves, and has a

.80 MGD capacity operating on 85 psi. The system does have recognized deficiencies that were identified by the City of Duluth who supplies their water. In 1999 the base water system failed an overall hydrostatic test. One leak was repaired in the system, however a follow up hydrostatic test has not been performed. There are no backflow devices, wells, or meters associated with this system that will be privatized.

Point of Demarcation will start at the down stream side of the City of Duluth Comfort Systems master water meter located 100 feet south of building 230 central heating plant. Ending Points of Demarcation will be to within 5 feet of each building and will include the service shut-off valve.

### J3.2.1.2 Inventory

**Table 1** provides a general listing of the major water distribution system fixed assets for the Duluth IAP (ANG) water distribution system included in the sale.

**TABLE 1**  
Fixed Inventory  
*Water Distribution System Duluth IAP (ANG)*

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
<b>Ductile Iron Pipe</b>	3.00	20	LF	1950
	3.00	10	LF	1981
	3.00	10	LF	1988
	3.00	10	LF	1999
	4.00	30	LF	1992
	4.00	20	LF	1950
	4.00	20	LF	1958
	6.00	2400	LF	1950
	6.00	285	LF	1958
	6.00	456	LF	1963
	6.00	620	LF	1981
	6.00	210	LF	1984
	8.00	310	LF	1978
	8.00	565	LF	1992
<b>Copper Pipe</b>	1.00	300	LF	1984
	1.50	280	LF	1950
	1.50	40	LF	1958
	1.50	115	LF	1963
	1.50	270	LF	1988
	1.50	260	LF	1992
	2.00	160	LF	1995

<b>Item</b>	<b>Size (in.)</b>	<b>Quantity</b>	<b>Unit</b>	<b>Approximate Year of Construction</b>
	2.00	20	LF	1985
	2.00	80	LF	1984
	2.00	10	LF	1978
	2.00	60	LF	1976
<b>Cast Iron Gate Valve</b>	1.50	2	EA	1992
	1.50	1	EA	1995
	1.50	1	EA	1988
	1.50	1	EA	1978
	1.50	1	EA	1963
	2.00	1	EA	1950
	2.00	2	EA	1976
	2.00	1	EA	1978
	2.00	1	EA	1984
	2.00	1	EA	1985
	3.00	1	EA	1950
	3.00	1	EA	1981
	3.00	1	EA	1988
	3.00	1	EA	1999
	4.00	1	EA	1950
	4.00	1	EA	1958
	4.00	1	EA	1992
	6.00	2	EA	1950
	6.00	2	EA	1958
	6.00	2	EA	1976
	6.00	1	EA	1981
	6.00	1	EA	1984
	8.00	2	EA	1992
<b>Fire Hydrant Assemblies</b>		14	EA	1980
		4	EA	1997
<b>Underground Storage Tanks (60,000 Gals, Concrete)</b>		1	EA	1952
<b>Post Indicator Valves</b>	6.00	1	EA	1999
<b>Water Pump Station (216 SF)</b>		1	EA	1972
<b>Pump Station Pumps (15 hp EA – centrifugal)</b>		4	EA	1972

Notes:

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Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
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EA = Each  
 GAL= Gallon  
 HP = Horsepower  
 LF = Linear Feet

### J3.2.2 Water Distribution System Non-Fixed Equipment and Specialized Tools

**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, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

**TABLE 2**  
 Spare Parts  
*Water System Duluth IAP (ANG)*

Qty	Item	Make/Model	Description	Remarks
None				

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**TABLE 3**  
 Specialized Vehicles and Tools  
*Water Distribution System \_Duluth IAP (ANG)*

Description	Quantity	Location	Maker
None			

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### J3.2.3 Water Distribution System Manuals, Drawings, and Records

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

**TABLE 4**  
 Manuals, Drawings, and Records  
*Water Distribution System Duluth IAP (ANG)*

Qty	Item	Description	Remarks
1	Maps	AutoCAD Utility Map File	One electronic file copy
1	Manuals	Operations and Maintenance manuals for water booster systems (pump station)	Will provide one copy of required manual

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### J3.3 Specific Service Requirements

The service requirements for the Duluth IAP (ANG) water distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Duluth IAP ANG water distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

The water booster system is located in within a specific area inside Building 230. Access to the building is gained through the Facility Manager.

### J3.4 Current Service Arrangement

Provider is the City of Duluth Comfort Systems. Average usage is 13,214 gallons per day and annual usage fluctuation is approximately 2000 gallon per day. There are no existing commitments or special service agreements at this time.

### J3.5 Secondary Metering

#### J3.5.1 Existing Secondary Meters

**Table 5** provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J3.6 below.

**TABLE 5**  
Existing Secondary Meters  
*Water Distribution System Duluth IAP (ANG)*

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Meter Location	Meter Description (Type)
None	

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#### J3.5.2 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 Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J3.6 below.

**TABLE 6**  
New Secondary Meters  
*Water Distribution System Duluth IAP (ANG)*

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Meter Location	Meter Description
None	

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## J3.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. 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 25<sup>th</sup> of each month for the previous month. Invoices shall be submitted to the person identified at time of contract award.
2. 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 be submitted by the 25<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to the person identified at time of contract award.

## J3.7 Water Conservation Projects

IAW Paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for conservation purposes: None.

## J3.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Duluth IAP (ANG) boundaries and one off-installation service area at the Weapons Storage area (see paragraphs J1.2 for details) .

## J3.9 Off-Installation Sites

No off-installation sites are included in the sale of the Duluth IAP (ANG) water distribution system. (Water system at Munitions Storage Area is not owned by the ANG.)

## J3.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

**TABLE 7**  
Service Connections and Disconnections  
*Water Distribution System Duluth IAP (ANG)*

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Location	Description
None	

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## J3.11 Government Recognized System Deficiencies

**Table 8** provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Duluth IAP (ANG) water distribution system. If the utility system is sold, the Government

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will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AC.

**TABLE 8**  
System Deficiencies  
*Water Distribution System Duluth IAP (ANG)*

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Project Location	Project Description
None	

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