

ATTACHMENT J3

Niagara Falls ARS Water Distribution System

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J3 Niagara Falls ARS Water Distribution System

J3.1 Niagara Falls ARS Overview

The Niagara Falls Air Reserve Station (ARS) is home to the 914th Airlift Wing (AW) of the Air Force Reserve and the 107th Air Refueling Wing (ARW) of the New York Air National Guard. The 914th AW is the host unit at the Niagara Falls ARS and the 107th ARW is the largest tenant. The installation is located approximately 6 miles east of Niagara Falls, New York and 20 miles north of Buffalo, New York. The installation occupies 985 acres on the northern part of the Niagara Falls International Airport in Niagara County, New York. The installation leases 38.71 acres from the People of the State of New York and 37.1 acres from the Niagara Frontier Transportation Authority.

The 914th AW has an economic impact of over \$76 million on the surrounding area. The working population consists of 1,117 Reservists and 397 full time personnel, of which 209 are civilians. The 914th AW's mission is to provide airland and aerial delivery of troops, supplies, and equipment using C-130 H-3 Hercules cargo aircraft carriers. The base occupies 82 buildings on the Niagara Falls ARS including 62 buildings dedicated to industrial activities and 20 to administrative activities.

The 107th ARW has an economic impact of over \$61 million on the surrounding area. The working population consists of 552 assigned personnel, 260 active Reservists and military technicians, and 18 other employees. The 107th ARW's mission is to provide in-flight refueling services for cargo and passenger movements using KC-135 Stratotankers. The base occupies 22 buildings on the Niagara Falls ARS including 16 buildings dedicated to industrial activities and 6 to administrative activities.

The Niagara Falls International Airport opened in 1928 and was joined by the military in 1946. The base has expanded several times over the years. The base has some Visiting Officer Quarters but no permanent on-base military family housing. No significant growth or reduction in building square footage or personnel is planned.

J3.2 Water Distribution System Description

J3.2.1 Water Distribution System Fixed Equipment Inventory

The Niagara Falls ARS 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:

- Fire Protection Mains – water mains exiting building 828
- Fire Protection Water Reservoir – located in building 828
- Fire Pump Building 828

- Post Indicator Valves

J3.2.1.1 Description

The Niagara Falls ARS receives water from the City of Niagara Falls, the Town of Wheatfield, and the Town of Niagara. The main water supply, provided by the City of Niagara Falls, enters the installation at the southeast corner through a 10-inch diameter asbestos cement pipe. It passes through a City of Niagara Falls owned master meter and installation owned backflow preventers in Building 729 before entering the installation's distribution system. Ownership of the distribution system starts at the demand side of the master meter. Building 729 will be retained by the Installation after privatization but access will be granted to the new owner.

The secondary water supply, provided by the Town of Wheatfield, enters the installation through an automatic pressure sensitive valve near the main gate on Lockport Road. The valve automatically opens when the pressure in the installation's distribution system drops below 50 psig. The water line passes through an installation owned meter and backflow preventers in Building 891 before entering the distribution system. Ownership of the Town of Wheatfield line begins at the connection to the water main in Lockport Road. Building 891 will remain property of the Air Force, but access will be provided to the new owner.

The third water supply, provided by the Town of Niagara, enters the Fire Training Area through a 6-inch pipe on Lockport Road. Ownership of the Town of Niagara line begins at the property line. The line passes through a Town of Niagara owned master meter and installation owned backflow preventers in the metering pit. The Fire Training Area is independent of the Niagara Falls ARS' distribution system and fire protection system.

The Niagara Falls ARS' water distribution pipes consists mostly of cast iron, steel, and asbestos cement on the 914th AW's side and PVC on the 107th ARW's side. Expansions and repairs to the 914th AW's system have replaced part of the original pipes with PVC and ductile iron. Tracer wire was installed with the PVC pipe at the 107th ARW. The estimated range of pipe depth at the installation is 4 to 8 feet below the ground surface but actual depth may vary. The secondary water meters will be included in the privatization contract, including those located inside buildings. The buildings will remain Air Force property but access will be granted to the meter locations.

The original pipe appears to be in good condition from the perspective that it is not clogging or corroding. However, the pipe beneath the 914th AW is approaching the end of its useful life. Plans for replacing the water distribution mains on the 914th AW are being discussed, but pipe replacement is not currently funded.

J3.2.1.2 Inventory

Table 1 provides a general listing of the major water distribution system fixed assets for the Niagara Falls ARS water distribution system included in the sale.

TABLE 1
Fixed Inventory
Water Distribution System Niagara Falls ARS

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
<u>Piping</u>				
PVC Pipe	6	410	LF	1997
PVC Pipe	8	5,145	LF	1997
PVC Pipe	10	3,102	LF	1997
Cast Iron Pipe	4	118	LF	1950
Cast Iron Pipe	6	2,719	LF	1950
Cast Iron Pipe	8	3,111	LF	1950
Copper Pipe	0.75	325	LF	1960
Copper Pipe	1.25	39	LF	1960
Copper Pipe	1.5	18	LF	1960
Copper Pipe	2	192	LF	1960
Steel Pipe	1.5	698	LF	1950
Steel Pipe	2	1,490	LF	1950
Steel Pipe	3	1,945	LF	1950
Asbestos Cement Pipe	4	1,142	LF	1950
Asbestos Cement Pipe	6	6,846	LF	1950
Asbestos Cement Pipe	8	14,298	LF	1950
Asbestos Cement Pipe	10	7,323	LF	1950
Ductile Iron Pipe	4	192	EA	1998
Ductile Iron Pipe	6	295	EA	1998
Ductile Iron Pipe	6	100	LF	2002
<u>Valves</u>				

TABLE 1

Fixed Inventory
Water Distribution System Niagara Falls ARS

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Cast Iron Gate Valve	0.75	2	EA	1960
Cast Iron Gate Valve	1.25	1	EA	1960
Cast Iron Gate Valve	1.5	1	EA	1960
Cast Iron Gate Valve	2	2	EA	1960
Cast Iron Gate Valve	4	5	EA	1950
Cast Iron Gate Valve	6	82	EA	1950
Cast Iron Gate Valve	6	16	EA	1997
Cast Iron Gate Valve	6	1	EA	1998
Cast Iron Gate Valve	6	4	EA	2002
Cast Iron Gate Valve	8	3	EA	1950
Cast Iron Gate Valve	8	5	EA	1997
Cast Iron Gate Valve	8	23	EA	2002
Cast Iron Gate Valve	10	7	EA	1950
Cast Iron Gate Valve	10	10	EA	1997
Cast Iron Gate Valve	10	8	EA	2002
Gate Valve	1.5	4	EA	1950
Gate Valve	2	6	EA	1950
Gate Valve	3	7	EA	1950
Plug Valve	4	2	EA	1998
Plug Valve	8	4	EA	1950
<u>Fire Hydrants</u>				
Fire Hydrants	4.5	53	EA	1974
Fire Hydrants	4.5	33	EA	1998
Fire Hydrants	4.5	3	EA	2003
<u>Backflow Preventer</u>				
Backflow Preventer (Bldg. 729)	4	3	EA	1992
Backflow Preventer (Bldg. 729)	4	1	EA	2003
Backflow Preventer (Bldg. 891)	8	4	EA	1993
Backflow Preventer (Fire Training Area)	6	1	EA	2003

TABLE 1
Fixed Inventory
Water Distribution System Niagara Falls ARS

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Service Connection	10	2	EA	1950
<u>Meters</u>				
Meter		1	EA	1950
Meter		13	EA	1997
Meter Pit (Fire Training Area)		1	EA	1997
Notes: PVC = Polyvinyl chloride EA = Each SF = Square Feet 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 Niagara Falls ARS

Qty	Item	Make/Model	Description	Remarks
There are no spare parts to transfer with the bill of sale.				

TABLE 3
Specialized Vehicles and Tools
Water Distribution System Niagara Falls ARS

Description	Quantity	Location	Maker
No special vehicles or tools will be transferred with the bill of sale.			

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 Niagara Falls ARS

Qty	Item	Description	Remarks
1	Layout drawings for water distribution system	Drawings for 914th side of the installation	Drawings available in AutoCAD
1	Design drawings for water distribution system	Drawings for 107th side of the installation	Drawings available in AutoCAD
1	Operating Procedure	Written procedure for flushing line containing high bacteria	

J3.3 Specific Service Requirements

The service requirements for the Niagara Falls ARS water distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Niagara Falls ARS 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 Contractor shall abide by current and future Niagara Falls ARS fire protection requirements. (Current fire protection requirements are presented in the Niagara Falls ARS Technical Library). The utility system purchased by the Contractor may include facilities that may or may not include fire alarm systems. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.
- The Contractor shall coordinate changes to the water distribution system (including fire hydrants) that may affect water supply and fire protection with the Base Fire Department and Contracting Officer's designated representative. Contractor shall submit a written request with engineering plans describing proposed changes, and shall not start work until the Contracting Officer's designated representative has approved changes in writing.
- The Contractor shall ensure that the water system provides an ample amount of pressure and flow for general water supply, fire protection, and other emergencies.
- The Contractor shall conform to the base spill plan (copy located in the Technical Library) and provide a copy to their EPCRA report(s) to the base on request.
- The Contractor shall perform EIAP or NEPA reviews and reporting as required for additions or modifications to the water system.
- Some of the utility systems described in this document are located in restricted areas. Access to the restricted areas will be available only with an approved escort by base security.
- Painting of fire hydrants shall meet base standards.

- Upon receiving notice of intent to award, the Contractor shall begin negotiating with the Niagara Frontier Transportation Authority to acquire easements for water lines to cross Niagara Frontier Transportation Authority land. The easements must be approved and in place before the bill of sale can be finalized. The appropriate address and contact point at Niagara Frontier Transportation Authority will be provided at the time of award.
- Provide marks on the ground to show locations of underground water distribution lines on an as needed basis as other entities request. Mark utilities in the field to show location and depth.
- The contractor shall (at a minimum) perform pressure and flow tests of all fire hydrants annually.

J3.4 Current Service Arrangement

Niagara Falls ARS acquires potable water from the City of Niagara Falls. The Town of Wheatfield provides emergency water service to the water system if the pressure in the base system drops to an unacceptable level.

The FY 2002 annual water consumption was 20,305 kgal. The average monthly usage was 1,700 kgal. The peak monthly demand recorded in this period was 2,700 kgal per month (over a 3-month period). The minimum monthly demand was 1,160 kgal per month (over a 3-month period).

The city of Niagara Falls provides more than 95 percent of the water used on base. The quantity of water supplied by the Town of Wheatfield varies from one year to the next depending upon the number of times the pressure drops within the main system.

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 Niagara Falls ARS

Meter Location	Meter Description (Type)
891 – Water Supply	Meter for Town of Wheatfield water supply
202 – BE Maintenance Shop	Meter No. 5967135
204 – Communication Facility	Meter No. F068118
918 – POL	Meter No. 4800016
920 – Motor Pool	Meter No. 36999304

Meter Location	Meter Description (Type)
960 – CATM	Meter No. 797820
901 – Res Forces Training	Meter No. 47553661
902 – Shp Acft Gen Purp	Meter No. 6090733
904 – Base Supply	Meter No. 94067210
906 – A/SE	Meter No. 1191446
907 – HG Maintenance	Meter No. 48811073
912 – Squad Ops	Meter No. 1362558
915 – Maintenance Docks	Meter No. 87610760
936 – Medical Training	Meter No. 1131750

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 Niagara Falls ARS

Meter Location	Meter Description
None.	

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 25th of each month for the previous month. Invoices shall be submitted to:

Name: 914th AW/CEC
Address: 2405 Franklin Drive, Niagara Falls, New York 14304-5063
Phone number: (716) 236-3117

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 25th of each month for the previous month. Outage reports shall be submitted to:

Name: 914th AW/CEC

Address: 2405 Franklin Drive, Niagara Falls, New York 14304-5063
Phone number: (716) 236-3117

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all identified 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:

Name: 914th AW/CEC
Address: 2405 Franklin Drive, Niagara Falls, New York 14304-5063
Phone number: (716) 236-3117

J3.7 Water Conservation Projects

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

No water conservation projects were identified.

J3.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Niagara Falls ARS boundaries.

J3.9 Off-Installation Sites

The City of Niagara Falls water line, meter building and water supply line from the meter in building 729 to the Niagara Falls ARS is considered an off-installation site. The water supply line from Building 729 to the base crosses property owned by the Niagara Frontier Transportation Authority (NFTA). The NFTA grants an easement to the Air Force to allow access to the pipe. These pipes are included in the service area and the quantities are included in the inventory noted in this RFP.

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 Niagara Falls ARS

Location	Description
None	The government does not anticipate requiring connections or disconnections during the transition period.

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 Niagara Falls ARS water distribution system. If the utility system is sold, the Government 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 Niagara Falls ARS

Project Location	Project Description
Water supply line from Town of Wheatfield's transmission main in Lockport Road to Building 891 (near the entrance on the north side of the installation).	Design and install a new water line between Building 891 and the Town of Wheatfield's transmission main. Design the new pipe to allow circulation of water in the supply line to prevent buildup of bacteria in the water system. Currently, stagnant water in the supply line between Lockport Road and building 891 loses chlorine residual, and is flushed on a regular basis to prevent water with unacceptable levels of chlorine from entering the base distribution system. A 600 to 800 linear foot line is expected to be required.