

ATTACHMENT J10

110th FW Wastewater Collection System

Contents

110TH FW WASTEWATER COLLECTION SYSTEM.....	I
CONTENTS.....	I
J10 110TH FW WASTEWATER COLLECTION SYSTEM.....	2
J10.1 110TH FW OVERVIEW	2
J10.2 WASTEWATER COLLECTION SYSTEM DESCRIPTION.....	2
<i>J10.2.1 Wastewater Collection System Fixed Equipment Inventory.....</i>	<i>2</i>
J10.2.1.1 Description.....	2
J10.2.1.2 Inventory	3
<i>J10.2.2 Wastewater Collection System Non-Fixed Equipment and Specialized Tools.....</i>	<i>3</i>
<i>J10.2.3 Wastewater Collection System Manuals, Drawings, and Records.....</i>	<i>4</i>
J10.3 SPECIFIC SERVICE REQUIREMENTS.....	4
J10.4 CURRENT SERVICE ARRANGEMENT.....	4
J10.5 SECONDARY METERING N/A.....	5
J10.6 MONTHLY SUBMITTALS.....	5
J10.7 INFILTRATION AND INFLOW (I&I) PROJECTS.....	6
J10.8 SERVICE AREA.....	6
J10.9 OFF-INSTALLATION SITES.....	6
J10.10 SPECIFIC TRANSITION REQUIREMENTS.....	6
J10.11 GOVERNMENT RECOGNIZED SYSTEM DEFICIENCIES.....	6

List of Tables

Fixed Inventory.....	3
Spare Parts.....	3
Specialized Vehicles and Tools.....	4
Manuals, Drawings, and Records.....	4
Service Connections and Disconnections.....	6
System Deficiencies.....	6

J10 110th FW Wastewater Collection System

J10.1 110th FW Overview

The 110th Fighter Wing (FW) of the Michigan Air National Guard (ANG) was established in 1947 at the W. K. Kellogg Airport on the west side of Battle Creek, Michigan. The 110th FW, provides close air support, including the capability to carry out a forward air control role in support of ground forces in combat. The 110th FW is currently assigned 17 A/OA-10 Thunderbolt II aircraft. The current full-time weekday population of the base is 276 people, with a maximum of 935 for an 8-hour period.

The 110th FW occupies 89 acres and contains 37 buildings including headquarters (the buildings are industrial/commercial use). The base leases a total of 319 acres from the City of Battle Creek. This includes 230 acres that are intended for future development with the construction of a new munitions maintenance and storage complex. The munitions maintenance and storage complex is in the planning and design phase, and its construction has not yet been funded.

J10.2 Wastewater Collection System Description

J10.2.1 Wastewater Collection System Fixed Equipment Inventory

The 110th FW wastewater collection system consists of all appurtenances physically connected to the collection system from the point of demarcation defined by the Right of Way. The system may include, but is not limited to, pipelines, manholes, lift stations, valves, controls, 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 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 wastewater collection system privatization are:

- Oil/Water Separators
- Septic Systems

J10.2.1.1 Description

The wastewater collection system at the 110th FW consists of 14,000 linear feet of gravity and force sewer mains. Sewer main installation from 1951 through 1973 totaled 6,600 linear feet. These mains were constructed of vitrified clay pipe. An additional 7,400 feet of

polyvinyl chloride (PVC) mains were installed between 1991 and 1997. Sewers range from 4 to 8 inches in diameter for both the vitrified clay and PVC mains.

Sanitary wastes and industrial wastes from eight oil/water separators flow by gravity or are pumped to the main lift pump station located in the northwest corner of the base. The wastewater is then pumped to the City of Battle Creek’s wastewater collection system for transport to and treatment at its wastewater treatment plant. There are no meters on the wastewater collection system.

J10.2.1.2 Inventory

Table 1 provides a general listing of the major wastewater collection system fixed assets for the 110th FW wastewater collection system included in the sale.

TABLE 1
 Fixed Inventory
 Wastewater Utility System 110th FW

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
PVC Pipe				
	4	1,020	lf	1997
	6	1,360	lf	1995
	8	5,000	lf	1991
Vitrified Clay Pipe				
	4	520	lf	1973
	6	250	lf	1961
	8	5,870	lf	1951
Standard Sanitary Sewer Manhole		35	ea	1973
Wastewater Lift/Pump Station		3	ea	1993

Notes:
 PVC = Polyvinyl Chloride
 LF = Linear Feet
 EA = Each

J10.2.2 Wastewater Collection 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
 Wastewater Collection System 110th FW

Qty	Item	Make/Model	Description	Remarks
N/A			There are no spare parts to transfer with the system	

TABLE 3
 Specialized Vehicles and Tools
Wastewater Collection System 110th FW

Description	Quantity	Location	Maker
There are no vehicles or tools to transfer with the system			

J10.2.3 Wastewater Collection 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
Wastewater Collection System 110th FW

Qty	Item	Description	Remarks
1	AutoCAD R14 Drawing	Composite Base Utilities Map	
1	Prints	Copies as needed.	
1	Smoke Test	Report of Smoke Test for Siphons	

J10.3 Specific Service Requirements

The service requirements for the 110th FW wastewater collection system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the 110th FW wastewater collection 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.

- No specific service requirements are necessary

J10.4 Current Service Arrangement

The current wastewater service provider to 110th FW is the City of Battle Creek. wastewater discharge rates and totals are not measured in the 110th FW system. The base is invoiced for wastewater by the City of Battle Creek based on water consumption. There are no meters in the wastewater collection system.

Base records show a peak water demand of 0.4 million gallons per month. This peak normally occurs in the summer, which coincides with increased lawn irrigation. Typically, wastewater demand is no more than 75 percent of the water purchased. Actual wastewater demand can be as little as 60 percent of the total water purchased in the summer due to lawn irrigation. The total gallons of water purchased in FY 1997 equaled 2.26 million gallons. The total gallons of water purchased in FY 1998 dropped to 1.88 million gallons.

Construction projects planned for the 110th FW consist of the MILCON project to replace the Munitions Maintenance and Storage Complex. This project will increase the total square footage of buildings by 6,600 square feet. This addition will not significantly affect the current water and wastewater collection system demand as it relates to capacity, because the new system is not planned to be connected to the existing water distribution or collection system. At this point in the design process, the planning documents indicate that a new connection to the City of Battle Creek wastewater main will be constructed to support the proposed expansion. The Munitions Maintenance and Storage Complex is not funded for construction, so it is not included in the consideration of demand on the system or the inventory.

Other changes in the number of buildings on the developed part of the base are not expected. As a result, a future change in wastewater collection system demand is not anticipated for the purposes of this analysis.

The main lift pumping station has a design capacity of 175 gallons per minute, or 0.25 million gallons per day.

J10.5 Secondary Metering N/A

J10.6 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: SMS James Crumrine, 110 CES/CEZ
Address: 3585 Mustang Ave, Battle Creek MI 49015-5512
Phone number: (616)969-3342

2. Outage Report. The Contractor's monthly outage report (blockage and overflow information) 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: SMS James Crumrine, 110 CES/CEZ
Address: 3585 Mustang Ave, Battle Creek MI 49015-5512
Phone number: (616)969-3342

3. Infiltration and Inflow Report. If required by Paragraph C.3, the Contractor shall submit an Infiltration and Inflow 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:

Name: SMS James Crumrine, 110 CES/CEZ
Address: 3585 Mustang Ave, Battle Creek MI 49015-5512

Phone number: (616)969-3342

J10.7 Infiltration and Inflow (I&I) Projects

IAW Paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for managing and monitoring I&I.

Currently, there are not any I&I projects at the 110th FW.

J10.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the 110th FW boundaries.

J10.9 Off-Installation Sites

No off-installation sites are included in the sale of the 110th FW wastewater collection system.

J10.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 5** provides a listing of service connections and disconnections required upon transfer.

TABLE 5
 Service Connections and Disconnections
 Wastewater Collection System 110th FW

Location	Description
<i>None</i>	

J10.11 Government Recognized System Deficiencies

Table 6 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the 110th FW wastewater collection 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 AB.

Table 6
 System Deficiencies
 Wastewater Collection System 110th FW

Project Location	Project Description
None Identified	