

ATTACHMENT J4

Wright-Patterson AFB Wastewater Collection System

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J4 Wright-Patterson AFB Wastewater Collection System

J4.1 Wright-Patterson AFB Overview

Wright-Patterson Air Force Base (WPAFB) is located in Montgomery and Greene Counties, in the northeast portion of the Greater Dayton, Ohio area. The communities of Dayton, Riverside, Fairborn, and Huber Heights border this Base, which encompasses 7,198 acres plus 431 acres of easement or permits for a total of 8,145 acres of land. WPAFB is also an integral part in the multi-county region (Miami, Montgomery, Greene, and Clark Counties), serves as the largest single-site employer in the region, and provides employment and economic benefits to an area of nearly one million people.

J4.1.1 Installation History

The history of WPAFB begins with, and is still closely related to the legacy of Wilbur and Orville Wright. The Wright Brothers' early aviation accomplishments occurred at Huffman Prairie Flying Field, which is located off of the end of Runway 23, and is marked to commemorate their flying achievements. Today the influence of the Wright Brothers remains evident, as WPAFB is still a strong leader in both military aviation research and development.

Aviation research and development began to occur during the World War I era. In 1917, Wilbur Wright Field was established as a pilot training school, and McCook Field (near the intersection of State Route 4 and Interstate 75) was established as an air service engineer center. Following World War I, McCook Field outgrew its facilities and required a more permanent home. In 1924 the City of Dayton donated over 4,500 acres of land for the construction of an aerodrome and new research facilities. This area makes up much of what is WPAFB today.

During World War I, WPAFB began its involvement in the field of logistics. This occurred with the establishment of the Fairfield Aviation General Supply Depot, which was located adjacent to Wilbur Wright Field. The depot became known as the Fairfield Air Depot, and served as a major Army Air Corps depot through the end of World War II. Central control for the entire Air Force depot system evolved at WPAFB, forming today's modern logistics network.

In 1931, Wilbur Wright Field, Fairfield Air Depot, and Huffman Prairie were renamed Patterson Field, in honor of Lt. Frank Stuart Patterson, who died while flight testing machine gun synchronization technology. The fields were officially merged and were permanently designated as Wright-Patterson AFB on 13 January 1948. At that time the 2750th Air Base Wing assumed the host organization duties for the Base.

The 2750th remained the host organization until 1992, when the Aeronautical System Center assumed the host duties. The 2750th was redesignated as the 645th Air Base Wing then redesignated again in 1994 as the 88th Air Base Wing (88 ABW).

Today, WPAFB serves as the site for the conception, testing, modification, and re-testing of weapon systems. Using this technology, the Base has assured the Air Force “that it will continue to be the most responsive deterrent force in the history of aviation.”

J4.1.2 Physical Assets

Facilities at the Base encompass a runway, associated taxiways and parking aprons, administrative areas, industrial facilities, testing/developmental laboratories, dormitories, hospital, housing areas, recreational facilities, and open space. The overall land/facility profile of WPAFB AFB is shown in the following table.

Installation Assets	
Land Area (fee-owned)	7,198 Acres
Easements/ROWs	431 Acres
Buildings	850; 16,090,677 SF
Military Family Housing	2,249 Units; 3,839,212 SF

WPAFB is comprised of several geographic areas, generally referred to as Areas A, B, and C. The smallest of the three main areas is Area A. This area runs along the north side of Highway 444 between Gates 16A and 9A. It includes the hospital, headquarters complex, and three housing areas (Brick Quarters, Pine Estates, and Green Acres). Area B is the area on the south side of Highway 444, formerly known as Wright Field. It includes the Air Force Museum and the Prairies and Woods housing areas. Area C is by far the largest area and was formerly known as Patterson Field. It includes the active airfield and most of the Base facilities and flying activities. Area C also includes two sub-areas: Kitty Hawk Center and the West Ramp. Kitty Hawk Center is a small triangular plot east of Highway 444 and just south of the City of Fairborn that contains the community support complex and a high temperature hot water (HTHW) plant. The West Ramp area is on the northwest side of Area C and includes all facilities on the northwest side of the main runway.

WPAFB is all fee-owned, including two GSUs. There have been approximately 85 fee acquisition transactions (20 for Areas A and C and 65 for Area B) over the last 80 years ranging in size from a fraction of an acre to over 4500 acres.

For the utility systems, the AF has been granted many easements and rights-of-way (ROW), some by Government agencies, some by private entities.

J4.1.3 Mission, Organization, and Associate Units

The U.S. Air Force (USAF) mission is continually evolving at WPAFB as research continues towards “faster, higher, farther, and safer” flight. Missions at the Base include acquisition, logistics management, research and development, education, flight operations and many other activities that prove to play a crucial role in the nation’s defense.

- The Aeronautical System Center (ASC) is the host organization at WPAFB. The organization is comprised of the Acquisition Force, the 74th Medical Group, and the 88th Air Base Wing. Together these units create the “Aerospace Research and Acquisition Center of Choice, the Birthplace, Home, and Future of Aerospace.” The primary mission

of ASC is systems acquisition, which is accomplished through the development and acquisition of state-of-the-art combat-ready aeronautical weapons and related support systems for USAF operation commands. Every fighter, bomber, cargo, and trainer aircraft in the USAF inventory were developed at ASC, as well as all but one reconnaissance aircraft. The ASC also maintains the vision, “to lead the world in the development of flight; to advance the air and space dream; and to support the vision, mission, goals, and objectives of the USAF.”

- There are several missions managed by ASC’s Acquisition Force, Air Base Wing, and Medical Group. The primary missions and responsibilities of these groups include streamlining the acquisition process while strengthening strategic and conventional forces, expanding airlift capabilities, and modernizing and expanding the combat forces. The Acquisition Force manages the development and acquisition of aeronautical systems, and oversees complex strategic and tactical programs. The Air Base Wing is responsible for operations, and supports activities serving all ASC organizations and associate units. The Wing manages over 8,000 acres of land and approximately 1,600 facilities. The Medical Group offers comprehensive health and dental care in more than 52 specialties for active duty and retired military personnel, and their families. The WPAFB Medical Group is also recognized for operating the second largest medical facility in the USAF.

Over 60 associate units are currently housed at WPAFB. These organizations represent a variety of critical Department of Defense (DOD) activities. The following is a summary of major associate organizations that reside at WPAFB and their primary responsibilities.

- The Air Force Material Command (AFMC) is headquartered at WPAFB and has been associated with WPAFB since 1917. The command serves as the organization responsible for the management of weapon systems. Their mission involves building and sustaining military systems throughout their service life. This is accomplished through the management of research, development, testing, acquisition, and support of all Air Force weapon systems.
- The United States Air Force Museum (AFM) located at WPAFB is the world’s largest and oldest military aviation museum, and is host to nearly one million visitors from the world on an annual basis. The AFM operates with the primary mission and goal of preserving the history of military aviation, and has been in operation since 1923.
- HQ National Air Intelligence Center (NAIC) constitutes the primary DOD agency for production of foreign aerospace intelligence. The center is responsible for assessing current and projected foreign aerospace capabilities, developing mission-planning intelligence materials, and evaluating technologies of potential adversaries. The NAIC mission involves utilizing these responsibilities to provide national decision makers accurate and timely technical information on the capabilities and potential threats of foreign powers to ensure U.S. air superiority.
- The Air Force Research Laboratory (AFRL) is responsible for leading the discovery, development, and transition of aeronautical technologies. The AFRL is comprised of seven major Directorates with functional responsibilities in advanced technology development. Five of the seven research directorates are located at Wright Field.

- The Air Force Institute of Technology (AFIT) offers accredited graduate and professional continuing education programs to AF personnel. The AFIT operates under the mission of keeping the Air Force on the leading edge of aerospace technology and management, through specialized education, basic research, and consultation.
- The 445th Airlift Wing of the USAF Reserve Command are stationed at WPAFB and fly C-141B Starlifter aircraft. The 445th has the mission of attaining and maintaining operational readiness; providing strategic transport of personnel and equipment; providing aeromedical evacuation; and recruiting and training towards these goals. The wing is comprised of four attached groups, and if ever required to mobilize, is part of the Air Mobility Command from Scott Air Force Base, Illinois. This group has resided at WPAFB since October 1994.
- DISAM is the DOD Defense Institute of Security Assistance Management. They are responsible for education and training for personnel involved in security assistance management.
- AFSAC is the Air Force Security Assistance Center. This center is responsible for the management of foreign military sales cases and contracts.
- The 55th Wing is a component of Air Combat Command and supports the National Airborne Operations Center. This involves providing modern, highly survivable, command, control, and communications capabilities for directing U.S. Forces.
- The Defense Information Systems Agency (DISA) missions at WPAFB are to provide the Air Force new business proposals, marketing requirements for their agency, and standard executive software for large computer mainframe requirements. The Defense Enterprise Computing Center Detachment Dayton provides computer operations.
- The Materiel Systems Group’s (MSG) mission is to provide combat support information to the warfighter. MSG focuses on providing value to the customer and supports the Air Force implementation of the Aerospace Expeditionary Forces. MSG is headquartered at WPAFB with operating locations at Tinker AFB, Oklahoma and Hill AFB, Utah.

J4.1.4 Population

WPAFB employs over 20,000 persons and is considered the largest single-location employer in the State of Ohio and one of the largest employers among AF Bases worldwide. The following table breaks down the WPAFB population:

Category	Population
Active Duty U.S. Military	5,531
Appropriated Fund Civilians	11,705
Non-Appropriated Fund Civilians	1,003
Non-extended Active Duty ANG/Reserve	2,060
Total – Base Employees	20,299
Active Duty Dependents	11,856

Contract Employees (estimated)	12,000
Total	44,155

J4.1.5 Housing

There are 2,249 permanent housing units totaling 3,839,212 square feet of living space, located in distinct housing developments around the Base. These units can be divided into the following categories:

- **Brick Quarters** – These were the first housing units constructed at WPAFB and are part of a Historic District. They consist of 91 military family housing units built between 1933 – 1935 and an additional 10 units constructed in 1970. The Foulois house (88 Wright Avenue) lies with this area. Utility mains excluded from the housing privatization (HP) initiative will be included in the utilities privatization (UP) package.
- **Prairies Family Housing** – Consists of 1,382 Wherry housing units constructed in the 1950s. This area is being renovated and expanded as a housing privatization initiative. The HP package includes service laterals, while the Government has retained the utility mains and will include those mains in the UP package.
- **Woods Housing** – Constructed in the 1970s, there are 350 units located in Woodland Hills. This housing complex has been privatized except for the utility mains that will be included in this UP package.
- **Green Acres/Pine Estates** – Consist of 416 units built in 1973. A HP initiative is underway. As with the other housing areas, utility mains will be excluded from HP and included in the UP package.

J4.1.6 Geographically Separated Units

Geographically separated units (GSUs) are summarized below:

- **Huffman Radar Site:** located approximately ¼ mile off the south side of Area C on Huffman Road.
- **Kauffman Avenue 69KV Switching Station:** situated sort of between Areas A and B located just across Highway 444/Kauffman Avenue from Area A and approximately ¼ mile from the southeast end of Area A.

J4.2 Wastewater Collection System Description

J4.2.1 Wastewater Collection System Fixed Equipment Inventory

The Wright-Patterson AFB (WPAFB) 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, and controls. The actual inventory of items to be 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:

- City of Fairborn wastewater mains that run east west through the north side of the Base. Two 15-inch City mains enter the Base on the east side near Building 123, close to the intersection of Skeel Avenue and Xenia Drive (located outside the Base). Both lines proceed west through the runway area and merges into a 24-inch main on the south side of Runway 05L/23R. The 24-inch line finally exits the Base near the intersection of Riverview Road and Mitchell Drive.
- A 27-inch City of Fairborn wastewater main along the northern side of the Base that enters the Base near the West Ramp area and joins the 24-inch pipe described above.
- A City of Fairborn wastewater main that enters the Base near the intersection of State Highway Route 444 and Davis-Monthan Road. This is a 27-inch pipe that proceeds in a northerly direction. Shortly after passing under Hebble Creek Road, the pipe diameter increases to 30 inches. After passing under Pylon Road, the diameter changes from 30 to 36-inches. The line then passes near the end of Runway 05L and exits the Base.
- The Montgomery County sewer main along Colonel Glenn Highway north of the Prairie Military Family Housing (MFH).
- The Montgomery County sewer main located at the southwest part of the Prairie MFH.
- Septic tanks and drain fields.
- Grease traps (food preparation facilities).
- Industrial wastewater systems.
- Wastewater laterals in all Military Family Housing areas.

J4.2.1.1 Wastewater Collection System Description

The wastewater collection system at Wright-Patterson AFB consists of collection piping and lift stations. There is no wastewater treatment facility at the Base. All wastewater generated at WPAFB is treated by either the City of Dayton or the City of Fairborn. The City of Dayton treats most of the wastewater from WPAFB.

The wastewater generated in the West Ramp area and all Facilities north and west of the intersection of Skeel Avenue and Xenia Drive, except for Facilities 30138, 30140, and 30143, flows into the City of Fairborn mains that run through the north side of the Base. Wastewater from Building 878 and any overflow from Lift Station 31440 flows into the City of Fairborn line that enters WPAFB near the intersection of State Highway Route 444 and Davis-Monthan Road. The wastewater flows are not metered regularly, and the City of Fairborn charges WPAFB a contracted fee based on estimated flow.

All wastewater from the other areas of WPAFB is conveyed to the City of Dayton. Wastewater from Areas A and C is pumped by Lift Station 30117 into a 24-inch 12,300-foot force main that proceeds southwest. Other force mains from Area C, Woods MFH (formerly Woodland Hills MFH), and Area B feed into this 24-inch main. Wastewater from Area C buildings between Communications Boulevard and Davis-Monthan Road is served by Lift Station 31440. Lift Station 31440 pumps the wastewater through an eight-inch force main into the 24-inch force main. Woods MFH area wastewater flows to Lift Station 27000, which pumps across State Route 444 through an eight-inch force main into the 24-inch force main of Lift Station 30117. The 24-inch force main, after exiting Area C, discharges to Manhole 29L and from thereon becomes a gravity line. The 24-inch gravity main runs along Springfield Pike and changes to a 27-inch main east of Bong Street. This gravity main is approximately 12,000 feet in total length and terminates in a City of Dayton manhole approximately 200 feet south of Springfield Pike on Smithville Road. A portion of the 24-inch force main and most of the gravity line is outside WPAFB property. The force and gravity lines are operated and maintained by Base personnel and WPAFB has been granted an easement for the line. Wastewater from Area B is conveyed to the City of Dayton through either the above-mentioned 27-inch gravity main, or a 15 -inch main that exits the Base approximately 500 linear feet west of Bong Street. The wastewater flow is metered for a short test period once every four years by the City of Dayton. The City then bills WPAFB at a negotiated rate based on the metered flow for the next four years.

A Montgomery County sewer main (county main) runs along Colonel Glenn Highway north of Prairies MFH area (formerly called the Page Manor MFH area). The wastewater generated in Prairies MFH is discharged to the county main at multiple points on the north boundary. There is another Montgomery County sewer line that runs through the southeast corner of Prairies MFH. Prairies MFH discharges at two other points on this line. The entire flow goes to the City of Dayton for treatment.

LIFT STATIONS

There are a number of wastewater system lift stations at Wright-Patterson AFB. Three are relatively large lift stations; six are smaller lift stations (less than two horsepower), and 14 lift stations are inside buildings and are not included in this package.

SANITARY WASTEWATER LIFT STATIONS

Facility No.	Description	Pumps	Size (hp)	Construction
30117	Wet well/dry well type, 400 kW generator	3	175	1988
27000	Submersible pumps, 40 kW generator	2	7.5	2000
31440	Submersible pumps	2	7.5	2002
10854	Submersible pumps	2	3	1992
30056	Submersible pumps	2	2	1989
30138	Submersible pumps	2	2	1987
30140	Submersible pumps	2	1	1991
30143	Submersible pumps	2	2	1985
30152	Submersible pumps	2	1	1985
10893	Submersible pumps	2	2	1978

Facility No.	Description	Pumps	Size (hp)	Construction
Gate 9A	Submersible pumps	2	N/A	1985
Super Playground	Submersible pumps	2	N/A	1993
Hunter's Lodge	Submersible pumps	2	N/A	1985
30021	Submersible pumps	1	N/A	1985
20041	Submersible pumps	1	N/A	1985
20038	Submersible pumps	1	N/A	1985
20022	Submersible pumps	1	N/A	1985

Notes: hp = Horse power; N/A = not available

Lift Station 30117 is located in Area C and was constructed in 1988. The station is a wet well/dry well station. There are three pumps in this station each with a 175 horsepower (hp) motor drive. This lift station pumps the wastewater through a Base-owned 24-inch, 12,300-foot force main to Manhole 29L. The lift station is equipped with a 400 kW emergency generator to power the station during electrical outages. The pumps are automatically controlled by wet well water level, and have an emergency alarm that annunciates in the Energy Management Control System (EMCS) area. The EMCS is manned 24 hours a day.

Lift Station 27000, located in the Woods MFH area, was constructed in 2000. It is a wet well station with two 7.5 hp submersible grinder pumps. The pumps are automatically controlled by the wet well water level. The lift station is equipped with an emergency generator and the emergency alarm signal is sent to the EMCS. The station discharges to an eight-inch force main which is approximately 1,100 feet long. The force main passes under State Route 444 and discharges into the 24-inch force main from Lift Station 30117.

Lift Station 31440 is located in Area C of the Base and was upgraded in 2002. There are two 7.5 hp submersible pumps that operate by rising and falling water surfaces. There are no emergency alarms at the station and no emergency generator at this lift station. The lift station normally pumps through a 750-foot eight-inch force main to the 24-inch diameter force main from Lift Station 30117. If the flows to the station exceed pumping capacity, excess flow is diverted to the Fairborn gravity wastewater main via a 450-foot, 12-inch gravity line.

Lift Station 10854 has two submersible pumps and is located in Area A. This lift station has automatic controls with emergency alarm signal sent to EMCS area and is not equipped with an emergency generator. Lift Stations 30056, 30138, 30140, 30143, and 30152 are located in Area C. Lift station 300056 serves several buildings along the flight line while the other lift stations serve individual single facilities. Each lift station has two submersible pumps and do not have alarms nor emergency generators.

WASTEWATER LINES

The wastewater mains and service laterals, up to the points of demarcation near the buildings, are included in this privatization package for all non-housing buildings on WPAFB. (For the housing areas, only the wastewater mains are included in this utility

privatization package.) A service lateral is the wastewater pipe that is dedicated to one building and conveys wastewater out from the building and connects to a sewer main (a wastewater pipe serving multiple facilities). The average depth of wastewater pipe at WPAFB is eight feet. Based on the area served, WPAFB wastewater system is sub-divided into eight areas. Each of the areas is discussed below.

Area A of the Main Base wastewater system was installed in 1945. The lines are vitrified clay pipes and are in average condition. In the last 15 years, approximately 30 percent of the pipe has been upgraded by slip-lining, complete replacement, or point repairs. A few of the lines have less than the minimum required slope and a few have sags in the lines between manholes. There has been no scheduled regular flushing or cleaning program for the lines in this area. Mains are flushed and cleaned only when a backup or stoppage occurs. Within Area A is the Bricks MFH area; in this MFH area, only the wastewater mains are included in the privatization action as mentioned before.

Most of the wastewater piping in Area C of the Main Base is vitrified clay, installed in 1945, and is in average condition. Similar to Area A, a portion of the pipe is installed at less than minimum slope and some reaches of the pipe have sags in the line. Within the last 15 years approximately 30 percent of the pipe has been replaced. The wastewater mains are only flushed and cleaned when a backup or stoppage occurs.

In the Kitty Hawk area, the lines are vitrified clay pipes that were installed in 1955. Sections of the pipe have less than minimum slope and, in some cases, the sections have sags. In the last 15 years approximately 20 percent of the pipe has been replaced. The lines are considered to be in average condition.

The wastewater lines in the West Ramp area are also vitrified clay pipes that were installed in 1955. Within the last 15 years, approximately 20 percent of the pipe has been replaced. Sections of the piping have less than the minimum required slope and a portion of them have sags. The pipes in this area are in average condition. They are only flushed when a stoppage occurs or to correct a backup.

Area B was the first area constructed on the Base in the 1920s. Some lines were upgraded in mid 1990s. The piping material is vitrified clay and it is in poor condition. There are problem areas where the pipe has less than a minimum slope. Within the last 15 years, approximately 5 percent of the pipe has been relined. The mains are flushed and cleaned annually.

The wastewater lines in the Prairies MFH area were installed in 1952. The buildings in this area are currently under construction in different phases. Some of the wastewater mains are being replaced, some new lines are constructed, some old lines will be abandoned and most of the old mains will be reused. The older mains are vitrified clay pipes that are considered to be in average condition. Some sections of the pipe have less than minimum slope but the sections do not have any sag. The lines are flushed and cleaned on an annual basis. The wastewater generated in this area is discharged into the Montgomery County sewer line at multiple points along the north side of the MFH area and at two points on the southwest part of this area. Within the Prairies MFH area is a trailer park area. This area is also being upgraded and some new housing units are being constructed. The wastewater mains in this section are PVC pipe installed in 1979. All sections of the pipe have slopes greater than the

minimum requirement and have no sags. The pipes are considered to be in good condition and are flushed annually.

The Woods MFH area wastewater system was installed in 1972 with a combination of clay and PVC piping (approximately 90 percent of the pipe is PVC). The pipe sections are installed with adequate slopes and have no sags. There have been no replacements in the last 15 years. The pipes are flushed annually and are in good condition.

Generally, tracer wire or marker tape has not been effectively installed with non-metallic pipe during initial installation or replacement projects.

Wright-Patterson AFB has no Supervisory Control and Data Acquisition (SCADA) system or Energy Monitoring Control System (EMCS) to be included in the wastewater collection system privatization package.

MANHOLES

Manholes are adequately located and are of either concrete or masonry construction. The manholes in all of the WPAFB non-housing areas and in the Bricks MFH area are in poor condition and the manhole covers are not watertight. The manholes in the Prairies MFH are in average condition; the manholes in the trailer park area within the Prairies MFH and the manholes in Woods MFH area are in good condition. The manholes in these areas have watertight covers and are inspected regularly.

J4.2.1.2 Inventory

Table 1 provides a general listing of the major wastewater collection system fixed assets for the Wright-Patterson AFB wastewater collection system included in the sale. The drawings used to develop the inventory are listed in Paragraph J4.2.3.

TABLE 1
 Fixed Inventory
 Wastewater Utility System – Wright-Patterson AFB

Component	Size	Unit	Quantity	Approximate Year of Construction
MAIN BASE				
Pipe				
VC	<4"	LF	360	1940
VC	<4"	LF	180	1955
VC	<4"	LF	40	1960
VC	4"	LF	1,070	1940
VC	4"	LF	1,340	1945
VC	4"	LF	1,420	1960
VC	4"	LF	400	1979
VC	5"	LF	170	1940
VC	5"	LF	440	1945
VC	5"	LF	170	1960
VC	6"	LF	28,640	1940

Component	Size	Unit	Quantity	Approximate Year of Construction
VC	6"	LF	5,970	1945
VC	6"	LF	2,150	1955
VC	6"	LF	17,360	1960
VC	6"	LF	10,090	1979
VC	6"	LF	6,027	1994
VC	8"	LF	36,590	1940
VC	8"	LF	3,000	1945
VC	8"	LF	4,850	1955
VC	8"	LF	3,960	1960
VC	8"	LF	11,830	1979
VC	8"	LF	5,600	1990
VC	8"	LF	4,900	1994
VC	8"	LF	1,800	1996
VC	10"	LF	10,050	1940
VC	10"	LF	4,900	1945
VC	10"	LF	6,080	1960
VC	12"	LF	6,710	1940
VC	12"	LF	5,420	1945
VC	12"	LF	4,850	1960
VC	12"	LF	3,650	1979
VC	15"	LF	5,390	1940
VC	15"	LF	1,800	1945
VC	15"	LF	2,780	1960
VC	18"	LF	1,530	1960
Force Main	4"	LF	1,100	1955
Force Main	4"	LF	2,010	1955
Force Main	6"	LF	1,100	1955
Force Main	24"	LF	12,300	1943
Gravity Line	24/27"	LF	12,000	1943
Manholes				
	4x6	EA	316	1940
	4x6	EA	134	1945
	4x6	EA	9	1955
	4x6	EA	351	1960
	4x6	EA	85	1979
Lift Stations				
Lift Station #10854				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1992
Building		EA	1	1992
Pumps, Piping, Controls, & Elect		EA	2	1992

Component	Size	Unit	Quantity	Approximate Year of Construction
Lift Station #30117				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1988
Building		EA	1	1988
Pumps, Piping, Controls, & Elect		EA	3	1988
Generator	400 kW	EA	1	1988
Lift Station #30056				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1989
Building		EA	1	1989
Pumps, Piping, Controls, & Elect		EA	2	1989
Lift Station #30138				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1987
Building		EA	1	1987
Pumps, Piping, Controls, & Elect		EA	2	1987
Lift Station #30143				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1985
Building		EA	1	1985
Pumps, Piping, Controls, & Elect		EA	2	1985
Lift Station #30152				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1985
Building		EA	1	1985
Pumps, Piping, Controls, & Elect		EA	2	1985
Lift Station #31440				
Wet Well incl Exc, Bkfl, & Conc		EA	1	2002
Building		EA	1	2002
Pumps, Piping, Controls, & Elect		EA	2	2002
Lift Station #27000				
Wet Well incl Exc, Bkfl, & Conc		EA	1	2000
Building		EA	1	2000
Pumps, Piping, Controls, & Elect		EA	2	2000
Generator	40 kW	EA	1	2000
Lift Station #30140				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1991
Building		EA	1	1991
Pumps, Piping, Controls, & Elect		EA	2	1991
Lift Station #10893				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1978
Pumps, Piping, Controls, & Elect		EA	2	1978
Lift Station #Gate 9A				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1985
Pumps, Piping, Controls, & Elect		EA	2	1985

Component	Size	Unit	Quantity	Approximate Year of Construction
Lift Station #Super Playground				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1993
Pumps, Piping, Controls, & Elect		EA	2	1993
Lift Station #Hunter's Lodge				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1985
Pumps, Piping, Controls, & Elect		EA	2	1985
Lift Station #30021				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1985
Pumps, Piping, Controls, & Elect		EA	1	1985
Lift Station #20041				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1985
Pumps, Piping, Controls, & Elect		EA	1	1985
Lift Station #20038				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1985
Pumps, Piping, Controls, & Elect		EA	1	1985
Lift Station #20022				
Wet Well incl Exc, Bkfl, & Conc		EA	1	1985
Pumps, Piping, Controls, & Elect		EA	1	1985
MILITARY FAMILY HOUSING				
THE WOODS				
PVC Pipe	6"	LF	1,043	1972
PVC Pipe	8"	LF	12,555	1972
PVC Pipe	10"	LF	197	1972
Manholes	4x6	EA	25	1972
BRICK QUARTERS				
VC Pipe	8"	LF	12,090	1945
Manholes	4x6	EA	45	1945
PINE ESTATES				
VC Pipe	8"	LF	5,590	1972
Manholes	4x6	EA	23	1972
GREEN ACRES				
VC Pipe	8"	LF	7,080	1972
Manholes	4x6	EA	33	1972
THE PRAIRIES				
PVC Pipe	6"	LF	1,356	1979
PVC Pipe	8"	LF	3,756	1979
PVC Pipe	8"	LF	16,482	2003
PVC Pipe	10"	LF	736	2003
VC Pipe	6"	LF	489	1952
VC Pipe	8"	LF	8,080	1952
VC Pipe	10"	LF	1,685	1952

Component	Size	Unit	Quantity	Approximate Year of Construction
Manholes	4x6	EA	53	1952
Manholes	4x6	EA	16	1979
Manholes	4x6	EA	83	2003

Notes:

VC = vitrified clay	CI = cast iron	Exc = excavation
PVC = polyvinyl chloride	LS = lift station	Bkfl = backfill
LF = linear feet	EA = each	Conc = concrete
Elect = electrical	incl = including	gal = gallon

J4.2.2 Wastewater Collection System Non-Fixed Equipment and Specialized Tools

Tables 2 and 3 list other ancillary equipment (spare parts) and specialized vehicles and tools included in the purchase.

TABLE 2
 Spare Parts
 Wastewater Utility System – Wright-Patterson AFB

Item	Quantity	Location	Description
Miscellaneous Fittings	Variable	Utility Shop	
Repair Clamps	Variable	Utility shop	
Lift Station Pump Parts	Variable	Utility shop	

TABLE 3
 Specialized Vehicles and Tools
 Wastewater Utility System – Wright-Patterson AFB

Description	Size	Location	Quantity	Maker
None				

J4.2.3 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 Utility System – Wright-Patterson AFB

Quantity	Item	Description	Remarks
1	Utility Maps-G-2	Sanitary Sewage System 1"=400'	Sheets 1 - 5
1	Utility Maps	Electronic File – Vision System	Sheets 1-19

Quantity	Item	Description	Remarks
1	Prairies MFH Privatization Construction Drawings	Overall Sanitary Plan	Sheets 1-6
1	Manuals	Lift Station Manuals	Multiple Volumes
1	Planning Document	Comprehensive Plan	Multiple Volumes
1	Planning Document	General Plan	One Volume

J4.3 Specific Service Requirements

The service requirements for the Wright-Patterson AFB wastewater collection system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Wright-Patterson AFB wastewater collection and treatment 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.

- IAW Condition C of Attachment 1 to the ROW, the Contractor shall follow the Base digging permit process. The Contractor will be required to mark his own utilities and will be responsible for initiating, officiating, and tracking digging permits for his own utilities and shall obtain all necessary authorizations, permits and line locates prior to performing any excavations on Base. The Contractor will provide not less than 2 and not more than 5 working days notice (emergencies being excepted) of any needed excavations to the 88th ABW/CE and to said Utilities Privatization Administrative Contracting Officer so the location of underground utilities may be located and marked by the applicable utility owner. The applicable utility owner must mark their utilities as requested within 48 hours of receipt of request for non-emergency work.
- The Contractor shall support the Base digging permit process by routinely accepting and promptly processing digging permit requests which may impact on the integrity of the Contractor's utility system and/or the safety of the requestors. The Contractor shall be a participant of the Base digging permit process and shall attend any meetings called in support of the process. Contractor shall be responsible to locate and mark their utilities in the affected areas. The digging permit process involves weekly attendance at the scheduled meeting and subsequent appointments for location and marking of utilities throughout the week.
- The Contractor will respond to emergency wastewater problem within 10 minutes of notification during duty hours and within one hour during non-duty hours.
- The Contractor's representative that responds to emergency service requests shall be knowledgeable of the utility system and the Contractor's Service Interruption/Contingency Plan. The representative shall be able to assess damages and estimate the time it will take to make temporary or full-service repairs. In accordance with Paragraph H.6, Rights of the Government to Perform Function with Its Own Personnel, the Government reserves the right to substitute or supplement the

Contractor's efforts during emergency situations where the Contractor's failure or inability to perform is beyond the Contractor's control and without the Contractor's fault or negligence. In this situation, the Contractor would not be held responsible for costs incurred by the Government. However, the Contractor could be held financially responsible if the Government substitutes or supplements the Contractor's efforts during emergency situations and the Contractor's failure or inability to perform was the result of the fault or negligence of the Contractor.

- IAW Paragraph C.5.1.3, and in compliance with Base architectural standards, new and renewal distribution piping shall normally be installed using the most economical method unless otherwise prohibited by the Government. Excavation of paved surfaces is prohibited without consultation and approval from the Base Civil Engineer.
- In accordance with Paragraph C.9, Coordination of Work, the Contractor shall coordinate planned outages using the Civil Engineer Outage Form AF103.
- In addition to Section 8 of the ROW, the utility contractor (grantee) shall repair at no cost to the Government any utilities damaged by other contractors or Government organizations because Contractor utilities were improperly marked by the Contractor. Property damaged by the contractor in the conduct of his business shall be corrected in accordance with ROW Section 8.
- In accordance with Section 12 of the ROW, the Contractor is responsible for all supporting utilities that may be required to own, operate and maintain the utility system being privatized. For example, electricity is needed to power substation lighting. Supporting utilities are defined as the supply of electricity, natural gas, water, or wastewater collection, and any infrastructure or materials necessary to connect to the supply of electricity, natural gas, water, or wastewater collection. The Contractor shall coordinate with the WPAFB Civil Engineer and the Contracting Officer for any supporting utilities to be provided by the Government.
- The Contractor shall enter into a Memorandum of Understanding (MOU) with the Base Fire Department for fire protection of all facilities included in the purchase of the utility. The MOU shall be completed during the transition period and a copy provided to the Contracting Officer.
- The Contractor shall abide by Base fire protection requirements. The utility system purchased by the Contractor includes facilities. These facilities may or may not include fire alarm systems. Where required by federal, state or local regulation, the Contractor shall maintain the fire alarm system for all facilities owned and operated by the Contractor. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.
- In accordance with Paragraph C.9.8, Exercises and Crisis Situations Requiring Utility Support, the Contractor shall provide support as directed by Base Civil Engineer for exercises and crisis situations.
- The Contractor shall ensure that employees understand, implement and enforce Force Protection Condition (FPCON) requirements specified in AFI 10-245. The Contractor is advised that FORCE PROTECTION conditions vary and that these changes may cause delays in access to WPAFB. These conditions are outlined in the WPAFB FPCON

Checklist. This checklist will be available in the technical library. The Contractor will plan accordingly to provide uninterrupted support. Compliance with and staffing in support of FORCE PROTECTION condition changes shall not result in service charge adjustments to the contract.

- In accordance with Section 8 of the ROW, the Contractor shall maintain existing security mechanisms (i.e., locks, fences) to protect the utility systems. The security mechanisms should prevent tampering and sabotage. Should the Contractor become aware of any suspicious incident, security breach or act of sabotage at or against the utility system, or any of its associated facilities, they will immediately contact the Security Police Squadron and Civil Engineer Squadron.
- Due to heightened security concerns on military installations, all Contractor and subcontractor personnel who must enter WPAFB to perform this contract must undergo a background check. Background checks will be conducted using the following information: name, driver's license number, social security number, and date of birth. These procedures are considered permanent. Any Contractor or subcontractor employee that does not consent to this background investigation will not be allowed access to WPAFB. Any derogatory information resulting from the investigation, or which otherwise becomes known to the contracting officer, may also result in such individuals being prevented from entering the installation. However, nothing in this requirement shall excuse the Contractor from proceeding with any resulting contract as required.
- The Contractor shall ensure their employees, and those of their subcontractors, have the proper credentials allowing them to work in the United States. Employees must have valid Social Security Cards. Non-US Citizens must have current and valid permission from the Bureau of Immigration and Naturalization. Persons found to be undocumented or illegal aliens will be remanded to the proper authorities. The Contractor shall not be entitled to any compensation for delays or expenses associated with complying with the provisions of this requirement. Contractor personnel and their subcontractors must identify themselves as Contractors or subcontractors during meetings, telephone conversations, in electronic messages, or correspondence related to this contract. Contractor occupied facilities on WPAFB such as offices, separate rooms, or cubicles must be clearly identified with Contractor-supplied signs, name plates or other identification, showing that these are work areas for Contractor or subcontractor personnel.
- The Contractor shall notify the Safety Office and the Contracting Officer, or a designated Government Representative (GR) within one (1) hour of all mishaps or incidents at or exceeding \$2,000 (material + labor) in damage to DOD and contractor-owned property. This notification requirement shall also include physiological mishaps/incidents. A written or e-mail copy of this mishap/incident notification shall be sent within three calendar days to the GR, who will forward it to the Safety Office. For information not available at the time of initial notification, the Contractor shall provide the remaining information not later than 20 calendar days after the mishap, unless extended by the Contracting Officer. Mishap notifications shall contain, as a minimum, the following information:

(a) Contract, Contract Number, Name and Title of Person(s) Reporting

- (b) Date, Time and exact location of mishap/incident
 - (c) Brief Narrative of mishap/incident (Events leading to accident/incident)
 - (d) Cause of mishap/incident, if known
 - (e) Estimated cost of mishap/incident (material and labor to repair/replace)
 - (f) Nomenclature of equipment and personnel involved in mishap/incident
 - (g) Corrective actions (taken or proposed)
 - (h) Other pertinent information.
- If requested by Government Personnel or designated Government representative, the Contractor shall immediately secure the mishap scene/damaged property and impound pertinent maintenance and training records, until released by the Safety Office. Also, the Contractor and their subcontractors shall cooperate fully and assist Government personnel until the investigation is finalized and closed out. Safety requirements listed in this package that do not relate to the Contractor's operations or services shall be considered self-deleting as mutually agreed by the Contractor and the Contracting Officer.
 - The Contracting Officer is the only individual authorized to incur Government obligations and to make changes to contracts. The Administrative Contracting Officer (ACO) may make certain obligations and changes as provided by the Federal Acquisition Regulation part 42.302 (and supplements) or as may be specifically designated in writing by the Procuring CO. The Contracting Officer's Technical Representative (COTR), if designated, is strictly limited to the authority described in the designation letter executed by the CO. The Installation Commander's duly authorized representative is strictly limited to the tasks described and under no circumstance is authorized to incur additional obligations on behalf of the Government. The Defense Energy Support Center (DESC) is the procuring agent, and after appropriate post-award contract management transition, the WPAFB Contracting Directorate shall assume the procuring and administration contracting authority.
 - In accordance with Condition F of Attachment 1 to the ROW, the Contractor shall be responsible for grounds maintenance (except grass cutting) of all areas within the boundaries of the ROW in accordance with Base standards. Maintenance problems caused by others (AF or a third party) will not be the Contractor's responsibility.
 - In accordance with ROW, the Contractor shall not deliberately injure or kill protected species of wildlife (i.e., non-domesticated animals) without permission from the Contracting Officer, or other representative(s) as designated by the Contracting Officer.
 - In accordance with Condition J of Attachment 1 to the ROW, the provisions of ROW Sections 15, 17 and 18 also cover sites identified under the Resource Conservation Recovery Act (RCRA) Corrective Action program.
 - The Contractor shall not perform alterations to any building or structure deemed to be eligible or potentially eligible for placement on the National Register of Historic Places until approved by said officer.

J4.4 Current Service Arrangement

All wastewater treatment is purchased from the Cities of Dayton and Fairborn. There are multiple connections to the lines owned by these cities as described above in Paragraph J4.2.1.1.

Total purchased wastewater treatment for fiscal years (FYs) 2002 and 2003 was 1,394,699 kGal each year. Quantities are determined as described in Paragraph J4.2.1.1 above. Average monthly flow is calculated to be 116,225 kGal.

J4.5 Secondary Metering

J4.5.1 Existing Secondary Meters

There are no existing meters for measuring wastewater flow.

J4.5.2 Required Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 5**. 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.3.3 and J3.6 below.

TABLE 5
 New Secondary Meters
Wastewater Collection System – Wright-Patterson AFB

Meter Location	Meter Description
Lift Stations with pumps over 5 HP (approximately 3).	

J4.6 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: 88 ABW/FMI
Address: 1450 Littrell Rd
 WPAFB, OH 45433-5209
Phone number: (937) 257-7497

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: 88 ABW/CEMM
Address: 1450 Littrell Rd
WPAFB, OH 45433-5209
Phone number: (937) 904-2370

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: 88 ABW/CEMM
Address: 1450 Littrell Rd
WPAFB, OH 45433-5209
Phone number: (937) 904-2370

4. **Meter Reading Report:** The monthly meter reading report shall show the current and previous month readings for all identified 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: 88 ABW/FMI
Address: 1450 Littrell Rd
WPAFB, OH 45433-5209
Phone number: (937) 257-7497

J4.7 Infiltration and Inflow (I&I) Projects

IAW Paragraph C.3, Requirement, there are currently no I&I efforts that require continuation after privatization other than the I&I report mentioned in J4.6.

J4.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the boundaries of WPAFB and easements/rights-of-way granted to the AF.

J4.9 Off-Installation Sites

There are no wastewater components for privatization associated with the WPAFB GSUs (Kauffman Ave Switching Station and Huffman Radar Site.)

J4.10 Specific Transition Requirements

Since this package includes no wastewater treatment components (includes only pipe, lift stations, manholes, etc.) the wastewater itself remains the property of the AF. As such, the Government will retain the wastewater discharge permits.

IAW Paragraph C.13, Transition Plan, **Table 6** provides a listing of service connections and disconnections required upon transfer.

TABLE 6
 Service Connections and Disconnections
Wastewater Utility System – Wright-Patterson AFB

Location	Description
Housing Areas	As stated earlier, all housing area wastewater service laterals are excluded from this package and are included in the ongoing Housing Privatization (HP) initiative. Associated points of demarcation are described in the ROW documents. However, as the HP initiative evolves with demolition, new construction, etc., these points of demarcation could change.

J4.11 Government Recognized System Deficiencies

As mentioned in Paragraph J4.2.1.1 most of the WPAFB wastewater system consists of old vitrified clay that is in average condition. In the Prairies MFH there are some old vitrified clay lines that are not in good condition and there are newer PVC lines without any major problems. The Woods MFH area pipes are mostly newer PVC lines and do not have any major problems. Some of the old vitrified clay pipes have less than minimum slope and some sections have sags in the line. The manholes in all of the WPAFB non-housing areas and in the Bricks MFH area are in poor condition and the manhole covers are not watertight. The manholes in the Prairies MFH are in average condition; the manholes in the trailer park area within the Prairies MFH and the manholes in Woods MFH area are in good condition.

The Government recognizes the above-mentioned problems but there are no current funded projects to remedy the situation, hence there are no deficiencies listed in **Table 7**. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all improvements to address the problems. 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 7
 System Deficiencies
Wastewater Utility System – Wright-Patterson AFB

Project No.	Project Description	Program Amount (\$000)
None.		

J4.12 Right of Access to the Utility System

Exhibit A – Map of Premises

Exhibit A map or maps from the Base Comprehensive Plan or other drawings show the known locations of the utility system and are available at the Base Civil Engineering Office. Portions of the utility system may not be fully shown on the map or maps. Any such failure to show the complete utility system on the map or maps shall not be interpreted as that part of the utility system being outside the Premises. The Premises are co-extensive with the entire linear extent of the utility system sold to Grantee, whether or not precisely shown on the map or maps.

Exhibit B – Description of Premises

B.1. GENERAL DESCRIPTION OF THE UTILITY SYSTEM, LATERAL EXTENT OF THE RIGHT-OF-WAY, AND POINTS OF DEMARCATION:

UTILITY SYSTEM DESCRIPTION:

The utility system may be composed of, without limitation, collection piping, manholes, final discharge meters, lift stations, treatment plants, supporting emergency generator sets (if any), and electrical controls associated with the lift stations and emergency generator sets on the Installation.

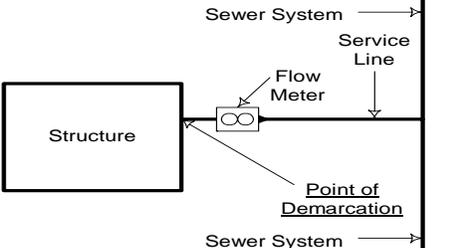
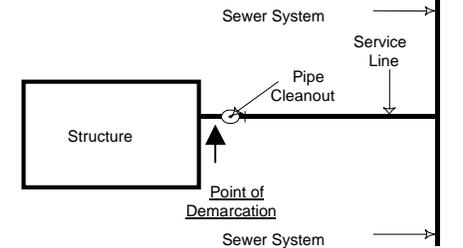
LATERAL EXTENT OF UTILITY SYSTEM RIGHT-OF-WAY:

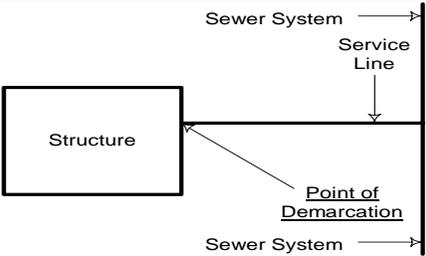
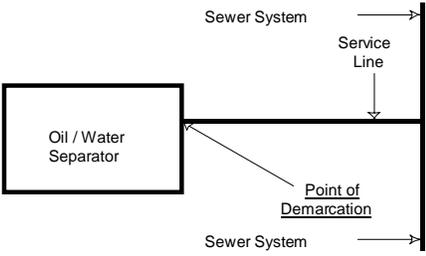
For pipe sizes of 24 inches in diameter and less, 26-feet-wide, extending 13 feet on each side of the utility system, as installed.

For pipe sizes of greater than 24 inches in diameter, 50-feet-wide, extending 25 feet on each side of the utility system, as installed.

UTILITY SYSTEM POINTS OF DEMARCATION:

The point of demarcation is defined as the point on the utility system where ownership changes from the utility system owner to the facility owner. The table below identifies the type and general location of the point of demarcation with respect to the facility for each scenario.

Point of Demarcation (POD)	Applicable Scenario	Sketch
POD is where the service line enters the structure.	Sewer system flow meter is located on the service line entering the structure.	 <p>The sketch shows a rectangular structure on the left. A horizontal line representing the service line extends from the structure to the right. A flow meter, depicted as a circle with two vertical lines, is located on this service line. An arrow labeled 'Sewer System' points to the right from the end of the service line. Another arrow labeled 'Sewer System' points to the left from the flow meter. A vertical line on the far right represents the building perimeter. The flow meter is labeled 'Flow Meter' and the location is marked as 'Point of Demarcation'.</p>
POD is the cleanout device, if within 10 feet of the building perimeter.	No flow meter exists and a sewer system cleanout is located within 10 feet of the building perimeter on the service line.	 <p>The sketch shows a rectangular structure on the left. A horizontal line representing the service line extends from the structure to the right. A pipe cleanout, depicted as a circle with a vertical line, is located on this service line near the building perimeter. An arrow labeled 'Sewer System' points to the right from the end of the service line. Another arrow labeled 'Sewer System' points to the left from the pipe cleanout. A vertical line on the far right represents the building perimeter. The pipe cleanout is labeled 'Pipe Cleanout' and the location is marked as 'Point of Demarcation'.</p>

Point of Demarcation (POD)	Applicable Scenario	Sketch
<p>POD is where the service line enters the structure.</p> <p>Note: A new cleanout device should be installed within 10 feet of the building during any stoppage or maintenance action. This will then become the new POD.</p>	<p>No flow meter or cleanout exists on the service line entering the structure.</p>	 <p>The sketch shows a rectangular box labeled 'Structure' on the left. To its right, a horizontal line represents the sewer service line. A vertical line on the far right represents the main sewer system. An arrow labeled 'Service Line' points down from the main sewer system to the horizontal line. Another arrow labeled 'Sewer System' points right from the horizontal line to the main sewer system. A diagonal arrow points from the text 'Point of Demarcation' to the junction where the service line enters the structure. The main sewer system is also labeled 'Sewer System' at the top and bottom with arrows pointing right.</p>
<p>POD is the outfall of the oil/water separator.</p>	<p>Any oil/water separator on the service line.</p>	 <p>The sketch shows a rectangular box labeled 'Oil / Water Separator' on the left. To its right, a horizontal line represents the sewer service line. A vertical line on the far right represents the main sewer system. An arrow labeled 'Service Line' points down from the main sewer system to the horizontal line. Another arrow labeled 'Sewer System' points right from the horizontal line to the main sewer system. A diagonal arrow points from the text 'Point of Demarcation' to the junction where the service line enters the separator. The main sewer system is also labeled 'Sewer System' at the top and bottom with arrows pointing right.</p>
<p>POD is the outlet side of the Grease Trap, Oil Water Separator, or Pretreatment System.</p>	<p>Grease Trap, Oil Water Separator, and Pretreatment System connected to the wastewater collection system.</p>	<p>None</p>
<p>POD is at the overhead service line's connection to the service entrance mast.</p> <p>Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter and the can. The POD for the electric meter is at the wastewater utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric utility owner's meter. The wastewater utility owner will own the service entrance mast.</p>	<p>Electric power is provided to a wastewater facility via an <u>overhead</u> service drop. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station or wastewater treatment plant.</p>	<p>None</p>

Point of Demarcation (POD)	Applicable Scenario	Sketch
<p>POD is at the transformer secondary terminal spade.</p> <p>Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter. The POD for the meter is at the wastewater utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric meters and transformers.</p>	<p>Electric power is provided to a wastewater facility via an <u>underground</u> service connection. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station or wastewater treatment plant.</p>	<p>None</p>

UNIQUE POINTS OF DEMARCATION:

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

Building No.	Point of Demarcation (POD) Description
<p>Discharge points on the City or the County wastewater systems.</p>	<p>Point of demarcation will be the point where the Base's wastewater collection system enters the City or the County-owned main pipe or manholes.</p>
<p>The wastewater system in the Military Family Housing. Only the wastewater mains are included in privatization and service laterals are excluded.</p>	<p>The point of demarcation is the junction point at which a service lateral joins the wastewater collection main. A service lateral is the wastewater pipe that is dedicated to one building and conveys wastewater out from the building and connects to a main. The main is a wastewater pipe to which multiple service laterals are connected.</p>
<p>Base-owned wastewater lines located outside the Base boundary.</p>	<p>The 24 and 27-inch mains and the 15-inch main that run along Springfield Pike. This lines traverses non-Government property via an easement granted by the City of Dayton.</p> <p>The 8-inch force main from Lift Station 27000 that passes under State Route 444. This line traverses non-Government property via an easement/right-of-way.</p> <p>Action must be taken to obtain a transfer of this easement/right-of-way for the above lines to the new system owner.</p>

B.2. DESCRIPTION OF RESTRICTED ACCESS AREAS:

Description	Facility #	Other Information
Lift Station	30117	Lift station is an enclosed locked building with the electric emergency generator located outside the building. Lateral access is provided outward around the perimeter of the lift station for a distance of 13' unless inhibited by adjacent structures.
Lift Stations	27000, 31440, 10854, 30056, 30138, 30140, 30143, 30152, 10893, Gate 9A, Super Playground, Hunter's, 30021, 20041, 20038, 20022	Lift Stations have locked hatches. Lateral access is provided outward around the perimeter of the lift station for a distance of 13' unless inhibited by adjacent structures.

Exhibit C – Environmental Baseline Survey

The Air Force has determined that it is not required to conduct an EBS in regard to the sale of this utility system.