

ATTACHMENT J4

Tyndall AFB Wastewater Collection System

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J4 Tyndall AFB Wastewater collection system

J4.1 Tyndall AFB Overview

The Tyndall AFB is located in Bay County near Panama City in northwestern Florida. The main base and ancillary sites cover about 29,109 acres of land. The property is situated on a peninsula and is connected to the Panama City community area via the Dupont Bridge.

Named after Lt. Frank B. Tyndall AFB, a World War I ace who was killed on active duty in 1930, construction began on the Army Air Corp's Tyndall AFB Field in May 1941. The base was officially opened on December 6, 1941. As a member of the Air Education and Training (AETC) command, the primary mission of Tyndall AFB is the training of Air Force pilots. Over the years many of the original facilities have been renovated to accommodate the changes in mission requirements and increased population. Facilities range from original 1941 construction to modern energy efficient office and industrial complexes.

Tyndall AFB hosts many tenant organizations with diversified functions and missions: HQ Air Force Civil Engineer Service Agency; HQ 1st Air Force; HQ Southeast Area Defense Sector; Air Force Research Laboratories (Armstrong and Wright Labs); 53rd Weapons Evaluation Group; 84th Radar Evaluation Squadron; and Detachments of the Minnesota Air National Guard, and Air Force Operations Test and Evaluation Group.

Tyndall AFB and its ancillary sites cover over 29,000 acres. The Tyndall AFB land and ownership are summarized in the following table.

Location	Type	Acres
Main Base	Public Domain	2,101
Main Base	Fee Condemned	26,661
Main Base	Fee Purchased	5
Main Base	Easement	57
Cove Gardens (N.I.C.)	Fee Condemned	33
Apalachicola (N.I.C.)	Lease	7
Carrabelle (N.I.C.)	Fee Purchased	33
Lynn Haven (N.I.C.)	Fee Purchased	203
Samatra (N.I.C.)	Permit	1
St. George Island (N.I.C.)	Fee Purchased	1
Total =		29,102

N.I.C. - Not In Contract

Tyndall AFB is similar in scale to a small community. There are approximately 655 facilities consisting of administration, commercial, schools and training, hospital and clinics, recreational, airfield support, fire protection, and transient living that total more than 3,680,000 square feet. In addition, there are six distinctive housing areas containing single and multi-family units. There are more than 560 buildings containing approximately 1085 individual housing units totaling more than 1,400,000 square feet.

The airfield consists of two paralleled runways and associated taxiway system. The outside (13L-31R) runway is 200 feet wide and 10,000 feet long. It has high intensity edge lights, high intensity threshold lights at both ends, lighted distance marker on both sides of the runway, and aircraft arresting barrier on both ends of the runway., with one end raised at a time. The outside runway has high intensity approach lighting system with sequenced flashers (ALSF-1) on both ends and pre-threshold light bars and terminating light bars on both ends. The inside runway (13R-31L) is 150 feet wide and 8075 feet long. It has high intensity edge lights, runway end lights on the 31L end and lighted distance markers on both sides of the runway. All airfield lighting is connected to a computer control system located at the Airfield Light Vault (Building 206). A new modern computer control system will be installed at AF vault this year. The outside and the inside runways are served by precision approach path indicators (PAPI) on both ends of the runways. The airfield also has one identification beacon mounted on existing elevated water tank, Facility No. 733 and four non-illuminated wind cones.

Tyndall AFB military personnel total 3951 and are primarily permanent party with some Air National Guard and transient students. Civilian support staff consists of 1210 government employees and 1510 contractors. In addition to actual employees, military and civilian, there are 5339 dependants (wives, husbands, and children).

Tyndall AFB is the largest employer in Bay County and the surrounding area. The economic impact on the surrounding communities and counties is estimated to be over \$422 million.

Many of the facilities on Tyndall AFB, which were built in the 1940's, are still occupied and many are being renovated to meet the ever-changing occupancy requirements. Several facilities are being torn down and replaced with newer, larger, more efficient facilities. In addition, new facilities are being built to meet the changing mission requirements with total facility square footage staying fairly constant due to newer facilities being approximately the same square footage as the facilities being torn down. Over the next three years, Tyndall AFB will be constructing four new facilities and an existing facility renovation to support a new mission requirement. These new facilities will increase Tyndall AFB net square footage by approximately 140,000 square feet. These new facilities will have minimal impact on the base wastewater collection.

J4.2 Wastewater Collection System Description

J4.2.1 Wastewater Collection System Fixed Equipment Inventory

The Tyndall AFB wastewater 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, treatment plants, 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. Housing Privatization is projected for Tyndall AFB in FY 05.

Specifically excluded from the wastewater system privatization are:

- Oil Water Separator systems
- Grease Traps
- Septic Tank systems
- Storm Water Collection Systems
- Building 1722 Main Lift Station and supporting emergency generator
- Primary Wet Well associated with 1722
- 16" Force Mains from primary wet well to Bay County Sewage Treatment Plant
- 8" Force Main from the City of Mexico Beach to the Primary Wet Well
- Wastewater collection system located in Military Family Housing areas
- Any water distribution systems located in the remote sites of Cove Gardens, Apalachicola, Carabelle, Lynn Haven, Samatra and St George Island

J4.2.1.1 Description

Tyndall AFB sanitary sewer is connected to the Bay County Advanced Wastewater Treatment Facility (AWTF). Sewer system shall be maintained IAW the requirements of the government contract with Bay County for the treatment of Tyndall sewage. The Bay County treatment facility is located on Tyndall AFB at the end of Boy Scout Road.

All sewage on base (except housing) is collected and pumped to the primary wet well next to pump house, Bldg 1722, in the old sewage treatment plant. The old government sewage plant has been abandoned and only the pipe header and two force mains feeding the wet well are operational. Bldg 1722, wet well and primary force mains are leased to Bay County. The county operates and maintains these systems under the terms of their contract with the government. Bldg 1723 is a valve control facility and is still operational to allow back flow through the old system. The existing two clarifiers will be used as holding tanks in case of emergency overflow. There is no tracer wire, marker tape or cathodic protection installed on the system. The average depth of burial is 42".

The force main from the city of Mexico Beach also flows through the old plant area to the wet well. This piping network belongs to Bay County and is not included in this privatization effort.

Housing sewage is collected through lift station facility 2873 and pumped to the Bay County Treatment Plant. The force main ties into the primary force main along Boy Scout road.

J4.2.1.2 Inventory

Table 1 provides a general listing of the major wastewater collection system fixed assets for the Tyndall AFB wastewater collection system included in the sale.

Table 1
Fixed Inventory
Wastewater Utility System Tyndall AFB

Component Description	Size	Quantity	Unit of Measure	Material Type1	Approximate Year Installed
Drainage and sewage piping	2"	887	LF	PVC	1985
Drainage and sewage piping	4"	16,123	LF	VC	1943
Drainage and sewage piping	4"	15,740	LF	VC	1951
Drainage and sewage piping	4"	6,096	LF	VC	1956
Drainage and sewage piping	4"	35,526	LF	VC	1958
Drainage and sewage piping	4"	1,329	LF	VC	1962
Drainage and sewage piping	4"	985	LF	VC	1965
Drainage and sewage piping	4"	2,572	LF	VC	1969
Drainage and sewage piping	4"	260	LF	DI	1970
Drainage and sewage piping	4"	493	LF	VC	1972
Drainage and sewage piping	4"	403	LF	VC	1973
Drainage and sewage piping	4"	428	LF	PVC	1976
Drainage and sewage piping	4"	179	LF	PVC	1979
Drainage and sewage piping	4"	1,081	LF	PVC	1983
Drainage and sewage piping	4"	1,874	LF	PVC	1985
Drainage and sewage piping	4"	358	LF	PVC	1996
Drainage and sewage piping	4"	1,096	LF	PVC	1992
Drainage and sewage piping	4"	2,411	LF	PVC	1993
Drainage and sewage piping	4"	8,351	LF	PVC	1997
Drainage and sewage piping	4"	1,096	LF	PVC	1992
Drainage and sewage piping	6"	4,304	LF	VC	1943
Drainage and sewage piping	6"	1,129	LF	VC	1955
Drainage and sewage piping	6"	303	LF	VC	1962
Drainage and sewage piping	6"	443	LF	VC	1967
Drainage and sewage piping	6"	373	LF	VC	1966
Drainage and sewage piping	6"	1,285	LF	PVC	1987
Drainage and sewage piping	8"	51,987	LF	VC	1943
Drainage and sewage piping	8"	71,866	LF	VC	1951
Drainage and sewage piping	8"	10,320	LF	DI	1951
Drainage and sewage piping	8"	14,301	LF	VC	1955
Drainage and sewage piping	8"	8,987	LF	VC	1958
Drainage and sewage piping	8"	33,435	LF	VC	1959
Drainage and sewage piping	8"	5,543	LF	VC	1960
Drainage and sewage piping	8"	4,484	LF	VC	1962
Drainage and sewage piping	8"	3,618	LF	VC	1965
Drainage and sewage piping	8"	3,578	LF	VC	1967
Drainage and sewage piping	8"	12,223	LF	VC	1969
Drainage and sewage piping	8"	4,464	LF	VC	1971

Component Description	Size	Quantity	Unit of Measure	Material Type1	Approximate Year Installed
Drainage and sewage piping	8"	700	LF	DI	1973
Drainage and sewage piping	8"	6,370	LF	DI	1975
Drainage and sewage piping	8"	1,713	LF	PVC	1976
Drainage and sewage piping	8"	4,383	LF	PVC	1978
Drainage and sewage piping	8"	2,077	LF	PVC	1979
Drainage and sewage piping	8"	996	LF	PVC	1979
Drainage and sewage piping	8"	9,199	LF	PVC	1979
Drainage and sewage piping	8"	4,582	LF	PVC	1979
Drainage and sewage piping	8"	1,285	LF	PVC	1988
Drainage and sewage piping	8"	3,098	LF	PVC	1993
Drainage and sewage piping	8"	14,355	LF	PVC	1997
Drainage and sewage piping	8"	428	LF	PVC	1998
Drage and sewage pipg (Relined)	8"	707	LF	PVC	1995
Drage and sewage pipg (Relined)	8"	7,013	LF	PVC	1996
Drage and sewage pipg (Relined)	8"	7,511	LF	PVC	1997
Drage and sewage pipg	10"	1,845	LF	VC	1943
Drainage and sewage piping	10"	32,050	LF	VC	1958
Drainage and sewage piping	10"	5,849	LF	PVC	1997
Drainage and sewage piping	12"	300	LF	C	1940
Drainage and sewage piping	12"	440	LF	C	1951
Drainage and sewage piping	12"	290	LF	C	1958
Drainage and sewage piping	15"	390	LF	C	1958
Drainage and sewage piping	16"	17,140	LF	C	1973
Drainage and sewage piping	18"	1,540	LF	C	1943
Cleanout Tees	4"	14	EA	CI	1959
Wastewater Pump	15 hp	4	EA		1951
Wastewater Pump	15 hp	2	EA		1999
Wastewater Pump	30 hp	2	EA		1999
Wastewater Pump	5 hp	2	EA		1965
Wastewater Pump	10 hp	2	EA		1970
Wastewater Pump	10 hp	2	EA		1973
Wastewater Pump	10 hp	2	EA		1974
Wastewater Pump	10 hp	2	EA		1975
Wastewater Pump	5 hp	4	EA		1981
Wastewater Pump	5 hp	2	EA		1983
Wastewater Pump	3 hp	4	EA		1985
Wastewater Pump	3 hp	4	EA		1986
Wastewater Pump	3 hp	2	EA		1987
Wastewater Pump	5 hp	2	EA		1987
Wastewater Pump	5 hp	2	EA		1990
Wastewater Pump	3 hp	2	EA		1990
Wastewater Pump	5 hp	2	EA		1991
Wastewater Pump	10 hp	2	EA		1991

Component Description	Size	Quantity	Unit of Measure	Material Type1	Approximate Year Installed
Wastewater Pump	5 hp	2	EA		1992
Wastewater Pump	50 hp	2	EA		1994
Wastewater Pump	30 hp	4	EA		1994
Wastewater Pump	5 hp	2	EA		1994
Wastewater Pump	5 hp	4	EA		1970
Wastewater Pump	5 hp	2	EA		1973
Wastewater Pump	5 hp	2	EA		1975
Wastewater Pump	5 hp	2	EA		1980
Wastewater Pump	5 hp	2	EA		1995
Controls		39	EA		1994
Concrete Dry/Wet Well		39	EA		1994
Manholes	4' ID, avg 8' d	134	EA	Brick	1943
Manholes	4' ID, avg 8' d	13	EA	Brick	1945
Manholes	4' ID, avg 8' d	138	EA	Brick	1948
Manholes	4' ID, avg 8' d	142	EA	Brick	1951
Manholes	4' ID, avg 8' d	79	EA	Brick	1958
Manholes	4' ID, avg 8' d	45	EA	Brick	1960
Manholes	4' ID, avg 8' d	13	EA	Brick	1963
Manholes	4' ID, avg 8' d	19	EA	Brick	1965
Manholes	4' ID, avg 8' d	19	EA	Brick	1967
Manholes	4' ID, avg 8' d	60	EA	Precast	1970
Manholes	4' ID, avg 8' d	9	EA	Precast	1972
Manholes	4' ID, avg 8' d	7	EA	Precast	1973
Manholes	4' ID, avg 8' d	11	EA	Precast	1974
Manholes	4' ID, avg 8' d	4	EA	Precast	1978
Manholes	4' ID, avg 8' d	26	EA	Precast	1979
Manholes	4' ID, avg 8' d	4	EA	Precast	1983
Manholes	4' ID, avg 8' d	4	EA	Precast	1985
Manholes	4' ID, avg 8' d	17	EA	Precast	1986
Manholes	4' ID, avg 8' d	26	EA	Precast	1987
Manholes	4' ID, avg 8' d	9	EA	Precast	1992
Manholes	4' ID, avg 8' d	2	EA	Precast	1995
Manholes	4' ID, avg 8' d	36	EA	Precast	1996
Manholes	4' ID, avg 8' d	36	EA	Precast	1997
Manholes	4' ID, avg 8' d	11	EA	Precast	1998

Legend:

CI - Cast Iron DI - Ductile Iron C - Concrete
EA - Each PVC - Polyvinyl Chloride
LF- Linear Feet VC - Vitrified Clay
avg – average hp - horsepower

Notes:

1. Drawings furnished by Tyndall AFB do not indicate material types or sizes. Material types and sizes have been assumed and may not necessarily reflect the actual material in place.

J4.2.2 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 Tyndall AFB

Qty	Item	Make/Model	Description	Remarks
NONE				

TABLE 3
Specialized Vehicles and Tools
Wastewater collection system Tyndall AFB

Description	Quantity	Location	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 collection system Tyndall AFB

Qty	Item	Description	Remarks
1	Sewer drawings	Utility System drawings A1U.dwg through G7U.dwg	A complete set of drawings will be furnished in electronic format, ACAD 2000
2	Records and studies	Copies of sewer studies, and flow records are in the technical library. Copies will be turned over after award	

J4.3 Specific Service Requirements

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

1. Requirements set by Bay County for sewage to flow to the Advanced Waste Water Treatment Facility. Copy of the requirements can be found in the technical library.
2. Contractor is required to get prior approval of all radio frequencies before using any communications devices on Tyndall. No narrow band communications may be used or amplified RF equipment. Certain areas of the base have cell phone dead zones.
3. The contractor must coordinate all capital improvement planning and design efforts with the installation.
4. Should the contract provider not be able to perform utility service due to business problems the government reserves the right to perform work with its own resources to maintain the system for continuation of service. Contractor business problems may consist of but is not limited to: bankruptcy, receivership, employee strike, etc. Contractor is required to notify the government with-in 24 hours of such occurrence. Further details can be found in paragraph H.6 of this contract.
5. All hazardous materials used by the utility contractor will be handled as required by law and /or base safety. Contractor will be held liable for any miss use or handling of hazardous materials.
6. Lightning arrestors, grounding and cathodic protection shall be used on specific utilities as required by industry standards.
7. The government will be notified of all scheduled utility outages 48 hours in advance. The government reserves the right to have the scheduled outage postponed should the outage interfere with mission critical operations.
8. The contractor will be required to support and assist in disaster recovery or emergency situations that require system shut-off or temporary connection or disconnects. Emergency operation and disaster recovery requirements are described in Tyndall Air Force Base Contingency Response Plan 702. The contractor's interruption and contingency plans shall reflect the requirements of the base 702 plan.

J4.4 Current Service Arrangement

- Provider Name: Bay County Advanced Wastewater Treatment Facility
- Average Usage: 250,000 Kgal per Year
 - High Month: May 39,900 Kgal
 - Low Month: February 15,400 Kgal
- Annual Usage Fluctuations: +/- 15%

The city of Mexico Beach sewage flows through the main wet well operated by Bay County. It is separately metered and maintained by Bay County.

J4.5 Secondary Metering

No secondary metering system is connected to Tyndall AFB sewage system. Bay County owns, maintains and operates all sewage metering

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 15th of each month for the previous month. Invoices shall be submitted to:

Name: 325 CES/CERF
Address: 119 Alabama Ave. Stop 42
TYNDALL AFB 32403-5005
Phone number: (850)-283-2177

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: 325 CES/CEOE
Address: 119 Alabama Ave. Stop 42
TYNDALL AFB 32403-5005
Phone number: (850)-283-4611

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: 325 CES/CEOE
Address: 119 Alabama Ave. Stop 42
TYNDALL AFB 32403-5005
Phone number: (850)-283-4611

J4.7 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.

Sewer main and lateral replacement in all of base housing. Tyndall AFB has instituted a four-phase program to replace all the sewer mains and laterals to Wood Manor housing units due to tree root intrusion. The first two phases are complete.

Storm water intrusion occurs all along the flight line area and some chemical intrusion at all oil water separators.

J4.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Tyndall AFB boundaries.

J4.9 Off-Installation Sites

No off-installation sites are included in the sale of the Tyndall AFB wastewater collection system.

J4.10 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 Tyndall AFB

Location	Description
NONE	

J4.11 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 Tyndall AFB 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 Tyndall AFB

Project Location	Project Description
East Highway 98	Project #981023 Tie remote sites to Bay County sewer line along Hwy 98 serving city of Mexico Beach. Sites to be connected: Silver Flag, AFRL, Large Scale and Subscale Drone Launch, Ammo Storage, and Alert area.
Florida Ave	Project #'s 962056 A, B, C, & D Repair sewer mains along Florida Ave and Flight Line

