

SECTION J
DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS
TABLE OF CONTENTS

ATTACHMENT NUMBER	ATTACHMENT TITLE
J-1604000-01	DEFINITION AND ACRONYMS
J-1604000-02	REFERENCES AND TECHNICAL DOCUMENTS
J-1604000-03	WASTEWATER AND STORM DRAIN COLLECTION SYSTEMS INVENTORY
J-1604000-04	SEWER LINES AND STORM DRAINS SYSTEMS INVENTORY
J-1604000-05	SEPTIC TANKS INVENTORY
J-1604000-06	HISTORICAL SEPTIC TANKS SEWAGE WASTE TONNAGE DATA
J-1604000-07	HOLDING TANK INVENTORY

ATTACHMENT J-1604000-01
DEFINITIONS AND ACRONYMS

DEFINITION	DESCRIPTION
Applicable Regulatory Drivers	The Italian national, regional, and local laws and regulations, including but not limited to the Italian Legislative Decree no.152 of 3 April 2006 (D.Lgs.152/06), as well as, when found not in conflict with them and more protective of the human health and environment, the applicable provisions of the Environmental Final Governing Standards for Italy (I-FGS), and of the additional documents listed in the References and Technical Documents in J-1604000-02, including any amendments to the foregoing.
Applicable Technical Standards	The European/Italian technical standards (i.e.: UNI/CEI standards, etc.) as well as any additional technical standards discussed in the Performance Work Statement (PWS).
Equipment, Collateral	Encompasses built-in and large substantially affixed equipment/property that is normally acquired and installed as part of a facility project.
Equipment, Installed	Encompasses building-type equipment, built-in equipment, and large, substantially affixed equipment/property, and is normally acquired and installed as part of a facility project. Installed equipment is normally required to make a facility useful and operable. Removing such equipment would impair the usefulness, safety, or environment of the facility or the facility restoration work required after its removal, is substantial.
Equipment, Personal Property	Personal property equipment includes all equipment other than collateral equipment. Such equipment, when acquired and used in a facility or a test apparatus, can be severed and removed after erection or installation without substantial loss of value or damage thereto or to the premises where installed.
Facilities Life Cycle	A facilities life cycle is divided into four stages, requirements (planning and design), acquisition (construction and acceptance), stewardship (operations, maintenance and repair), and disposal.
Facilities Maintenance Management	The planning, prioritizing, organizing, controlling, reporting, evaluating, and adjusting of facilities maintenance operations to support the CNO/NAVFAC facilities policy and objectives and satisfy customers' facility needs. Defined by the International Facility Management Association as "the practice of coordinating the physical workplace with the people and work of the organization."
Integrated Maintenance Plan	IMP is a recurring state-of-the-art, reliability-centered inspection, testing, maintenance and repair program that determines best practices for managing the functions and consequences of failures of facilities equipment and system components. IMP encompasses accepted commercial practices, including reactive, preventive, predictive and proactive maintenance, into one optimal program. The IMP approach gives the Contractor full responsibility to maintain systems and equipment and perform repairs whenever necessary to ensure equipment and systems are operational and remain in a constant state of readiness.
Life-Cycle Costs	A form of economic analysis that considers the total cost of owning, operating, and maintaining a building or system over its useful life.
Repair	Repair is the restoration of facilities or equipment to such a condition that it may be effectively utilized for its designated purposes by overhaul, reconstruction, or replacement of constituent parts or materials which have deteriorated by action of the elements or usage, and which have not been corrected through maintenance. This term also applies to replacement of the entire unit or system if beyond economical repair. The intent of repair is to have the equipment at normal working condition.

ATTACHMENT J-1604000-01
DEFINITIONS AND ACRONYMS

DEFINITION	DESCRIPTION
Replacement	Replacement, as a distinct work element, is confined to a program of planned replacement of a facility or its components. It may be further limited to major components such as air conditioning compressors, furnaces or hot water heaters. Replacement is performed when the equipment has reached the end of its useful life; when it no longer can perform due to degradation of its internal components and repair is no longer cost effective. Included under the replacement would be the major rebuilding of any component, since rebuilding also restores performance.
Restoration	Restoration of real property to such a condition that it can be used for its intended purpose. Includes repair or replacement work to restore facilities damaged by inadequate sustainment, excessive age, natural disaster, fire, accident or other causes.
Sustainment	Maintenance and repair activities necessary to keep a typical inventory of facilities in "normal working condition". Sustainment includes regularly scheduled maintenance as well as cyclical major repairs or replacement of components that occur periodically over the expected service life of the facilities.
SCADA	A version of telemetry commonly used in wide-area industrial applications, such as electrical power generation and distribution and water distribution, which includes supervisory control of remote stations as well as data acquisition from those stations over a bidirectional communications link.
ACRONYM	DESCRIPTION
ANSI	American National Standards Institute
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
MACP	Manhole Assessment and Certification Program
NASSCO	National Association of Sewer Service Companies
NPDES	National Pollutant Discharge Elimination System
PACP	Pipeline Assessment and Certification Program
SCADA	Supervisory Control and Data Acquisition
SRM	Sustainment, Restoration and Modernization
UFC	Unified Facilities Criteria
WEF	Water Environmental Federation

ATTACHMENT 1604000-02
REFERENCES AND TECHNICAL DOCUMENTS

The Contractor shall adhere to the applicable portions of the following publications and directives in performing the services required under this contract. This list shall not be considered all-inclusive and does not release the Contractor from all obligations that must be fulfilled in the observance and execution of this contract.

When performing under this Contract, the Contractor shall comply with the requirements of all the applicable Italian national, regional, and local laws and regulations and, when non-conflicting and more protective of the environment as well as human health and safety, shall also comply with the applicable requirements of the U.S. Department of Defense Environmental Final Governing Standards for Italy (DoD I-FGS) and the additional regulatory drivers listed below.

REFERENCE	TITLE
EI 11C201	Wastewater Collection and Pumping
MO-209	Engineering Criteria
MIL-HDBK-1005/9	Industrial and Oily Wastewater Control
UFC 3-240-02N	Wastewater Treatment Systems
UFC 3-240-04A	Wastewater Collection
UFC 3-240-07FA	Sanitary and Industrial Wastewater Collection: Gravity Sewers and Appurtenances
UFC 3-240-09FA	Domestic Wastewater Treatment
UFC 4-832-01N	Design: Industrial and Oily Wastewater Control
Non-Government Publications	
National Association of Sewer Service Companies, (NASSCO)	
11521 Cronridge Drive, Suite J, Owings, MD 21117	
American National Standards Institute, Inc. (ANSI)	
11 West 42nd Street, New York, NY 10036	

ATTACHMENT J-1604000-03
WASTEWATER AND STORM DRAIN COLLECTION SYSTEMS INVENTORY

Funding Activity: REGION

GAETA – Wastewater Collection System				
Bldg No.	Location	Equipment Description	Technical Specifications	Qty
752	Fitness/Rec. Center	Buried gravity pipeline	8" diameter	60 lm
	Fitness/Rec. Center	Sewer tank (wet well)	1 cu mt capacity	2
	Fitness/Rec. Center	Inspection pit	0.05 cu mt capacity	1
752A		Underground concrete sewer tank (wet well)	Manhole with cast iron covering	1
		Buried pressurized pipeline	3.15" diam., 4 ea. floor clean-outs	100 lm
	Laundry Drain Pit	Submersible pump	Mfgr: Idromec, Mod. PV/M 3/A, 1.5 HP, installed in the tank	2
	Laundry Drain Pit	Minimum level sensor		1
	Laundry Drain Pit	Maximum level sensor		1
		Control panel	Feeding/controlling pump and sensors	1
	Laundry	Buried gravity pipeline	8" diameter	20 lm
	Laundry	Sewer tank (wet well)	1 cu mt capacity	1
	Laundry	Inspection pit	0.05 cu mt capacity	2
757	Trailers/Laundry	Underground concrete sewer tank (wet well)	Manhole with cast iron covering	2
	Trailers/Laundry	Buried pressurized pipeline	3.15" diam.	200 lm
	Trailers/Laundry	Submersible pump	1.5 HP, installed in the tank	2
	Trailers/Laundry	Minimum level sensor		1
	Trailers/Laundry	Maximum level sensor		1
	Trailers/Laundry	Control panel	Feeding/controlling pump and sensors	1

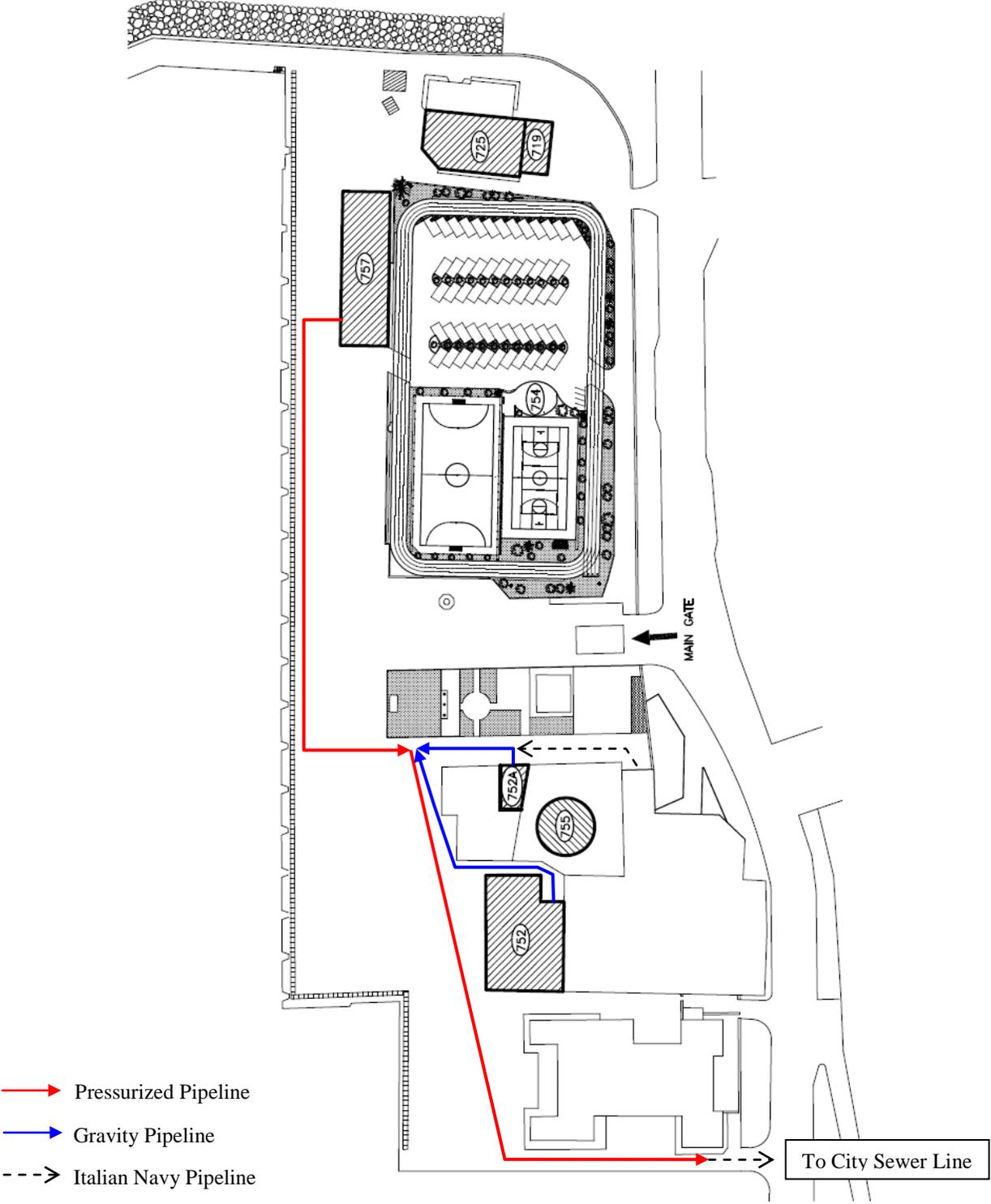
ATTACHMENT J-1604000-03
WASTEWATER AND STORM DRAIN COLLECTION SYSTEMS INVENTORY (cont'd)

Funding Activity: REGION

GAETA – Ship-to-Shore Wastewater Lift Station					
Note: The plant described below is currently non-operational; however, a PM Program as per Technical Specification 1604000, Spec Item 3.1 is still required.					
Location	Equipment Description	Manufacturer	Model/Type	Technical Specification	Qty
Wastewater Tank	Air blower	MAPRO	TURBOTRON	250 m ³ /h	1
Lift Station	Butterfly valve on blower	VALSAR	WAFER G/1	DN 125	1
Lift Station	Check valve on blower	VALSAR	AISI 304	DN 65	2
Lift Station	Submersible pumps	FAGGIOLATI PUMPS	B210T3A30	50 m ³ /h	3
Lift Station	Ball valve on pump	RBR VALVOLE	Serie 10WAFER TYPE	3"	3
Lift Station	Check valve on pump	FIL-PEMTO	D6666AISI 316	3"	3
Lift Station	Control panel for pumps	MANIERO ELETTRONICA	QTDE30/Kw-T	5,5 Kw	1
Lift Station	Ultrasonic level meter	AUTOMATION PROGETTI	AP5117 - NT680E	6 Digital Outputs	1
Lift Station	Ultrasonic level probe	AUTOMATION PROGETTI	AP5126	0.25m-5m	1
Lift Station	T-Connection				1
Wastewater Tank	Electromagnetic flowmeter	DANFOSS	MAG1100 - MAG 5000	DN 8036-90 m3/h	1
Wastewater Tank	Printer	MJKII AUTOMATION	MJK 791	2 Timers with hr/24 - hr/yr valves	1
Wastewater Tank	Autom. Feeder for Tank Cathodic Protection	ELME	CP2 49V.8A. D.C.	Feeding 220 V, 50 Hz. Output current 8A	1
Wastewater Tank	Zinc reference electrode	SEAGUARD	S/D 30 X 400/2	PE/POLIOLEFINA-0,6/1 kV, F1x16mm2	2
Wastewater Tank	Tubular anodes	SEAGUARD	CPR-8C/CPR-10FW	1", length 44"	4
Wastewater Tank	Exhaust fan on tank	DYNAIR	BOX-T 9/9	Air flow: 2000 m3/h	1
Wastewater Tank	Activated charcoal filters on tank	FCR	P-CARB, PCA-1/12	Size: 610x610x470 mm	12
Wastewater Tank	General Control Panel PWW	VEMER	PWW	Gen. Disconnect Switch. LED and Relays	1
Wastewater Tank	Air blower control panel PWS	VEMER	PWS	Disconnect switches. Thermal protection	1
Pier	Alarm Panel Q.AL 1 for lift station	VEMER	Q.AL 1	230-400V/24V AC/DC. Relays R1,R2,RT2	1
Lift Station	Alarm Panel Q.AL 2 for lift station	VEMER	Q.AL 2	230-400V/24V AC/DC. Relays R1,R2,RT2	1
Next to Bldg 752A	Alarm Panel Q.AL 3 for lift station	VEMER	Q.AL 3	230-400V/24V AC/DC. Relays R1,R2,RT2	1

ATTACHMENT J-1604000-03
WASTEWATER AND STORM DRAIN COLLECTION SYSTEMS INVENTORY (cont'd)

GAETA - WASTEWATER SYSTEM LAYOUT



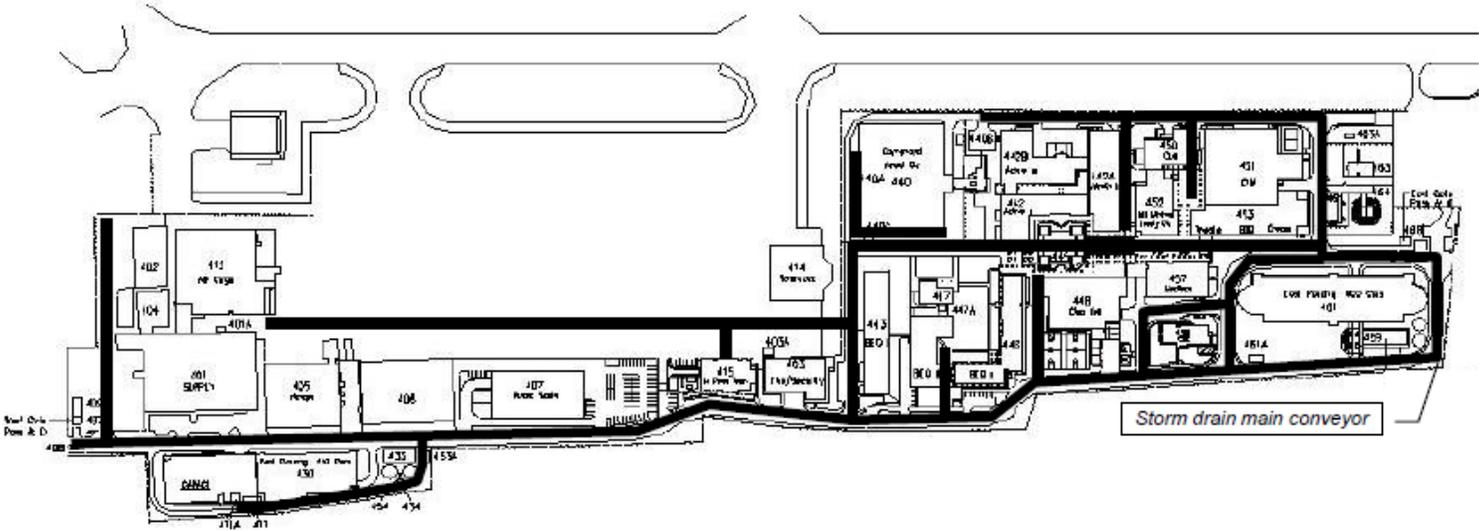
ATTACHMENT J-1604000-04
SEWER LINES AND STORM DRAINS SYSTEMS INVENTORY

Funding Activating: REGION

CAPODICHINO – Sewer Lines and Storm Drains Systems	
Equipment Description	Technical Specification (Approx. Quantities and Sizes) and Frequencies of Services
Sewer Trunk Line	- 2,000 mt total length - 300 mm diameter Inspection/Cleaning/Unclogging: Semi-Annually
Inspection Pits	- 50 each - 1 cu mt each Cleaning: Quarterly
Main Conveyor	- 1 each Inspection/Cleaning/Unclogging: Quarterly
Drain Trunk Line	- 3,500 mt total length - 300 mm diameter Inspection/Cleaning/Unclogging: Semi-Annually
Inspection Pits and Grates	- 100 each - 1 cu mt each Inspection/Cleaning/Unclogging: Semi-Annually

ATTACHMENT J-1604000-04
SEWER LINES AND STORM DRAINS SYSTEMS (Cont'd)

CAPODICHINO - STORM DRAIN SYSTEM LAYOUT



Note: this layout is approximate and may not be showing the entire Capodichino storm drain system to be maintained under this contract.

ATTACHMENT J-1604000-05
SEPTIC TANKS INVENTORY

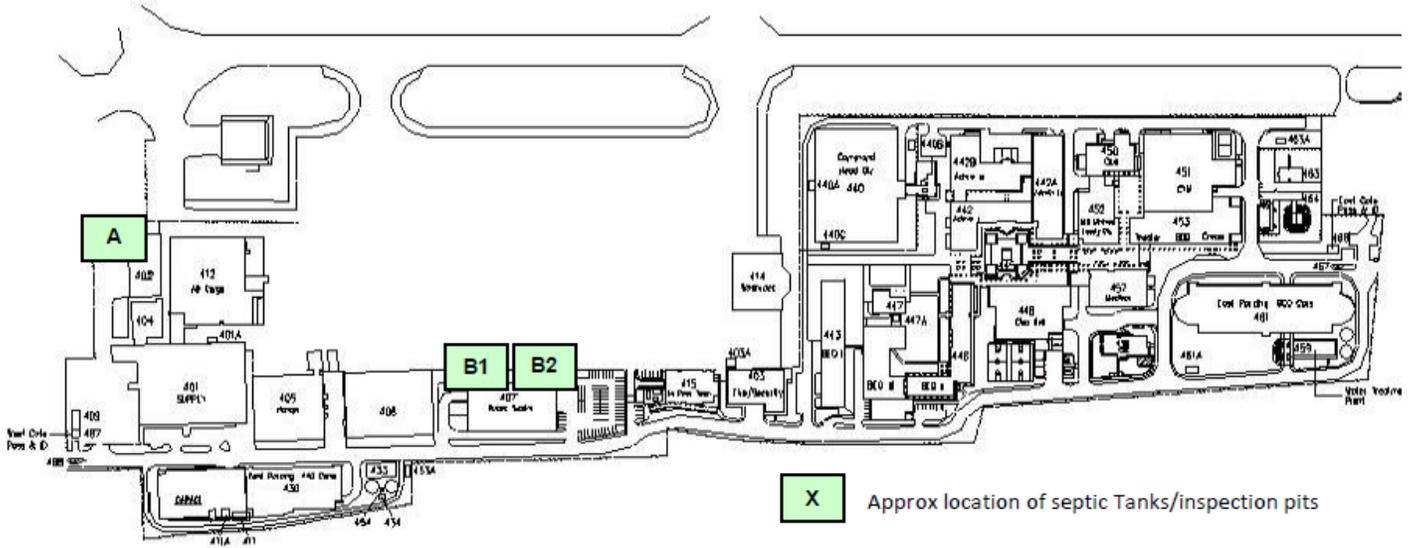
Funding Activity: REGION

CAPODICHINO – Septic Tanks Inventory and Servicing Frequencies					
Bldg No.	Layout Code ¹	Equipment Description	Size	Frequency	
				Routing Emptying	Complete Emptying
402	A	Septic Tank	6 m ³	As Required (refer to Technical Specification 1604000, Spec Item 3.3.3)	Quarterly
472	B1	Inspection Pit	1 m ³		
	B2	Septic Tank	5 m ³		
CARNEY PARK – Septic Tanks Inventory and Servicing Frequencies					
Bldg No.	Layout Code ¹	Equipment Description	Size	Routing Emptying	Complete Emptying
526/540	A1	Septic Tank	10 m ³	As Required (refer to Technical Specification 1604000, Spec Item 3.3.3)	Quarterly
	A2	Septic Tank	10 m ³		
	A3	Septic Tank	10 m ³		
525	B	Septic Tank	9 m ³		
524	C	Septic Tank	9 m ³		
522	D	Septic Tank	9 m ³		
528	E	Septic Tank	12 m ³		
500	F	Septic Tank	9 m ³		
514	G	Septic Tank	12 m ³		
551	H	Septic Tank	12 m ³		
522/554	J	Septic Tank	10 m ³		

Note 1: Refer to the below attached Capodichino and Carney Park maps for approximate locations

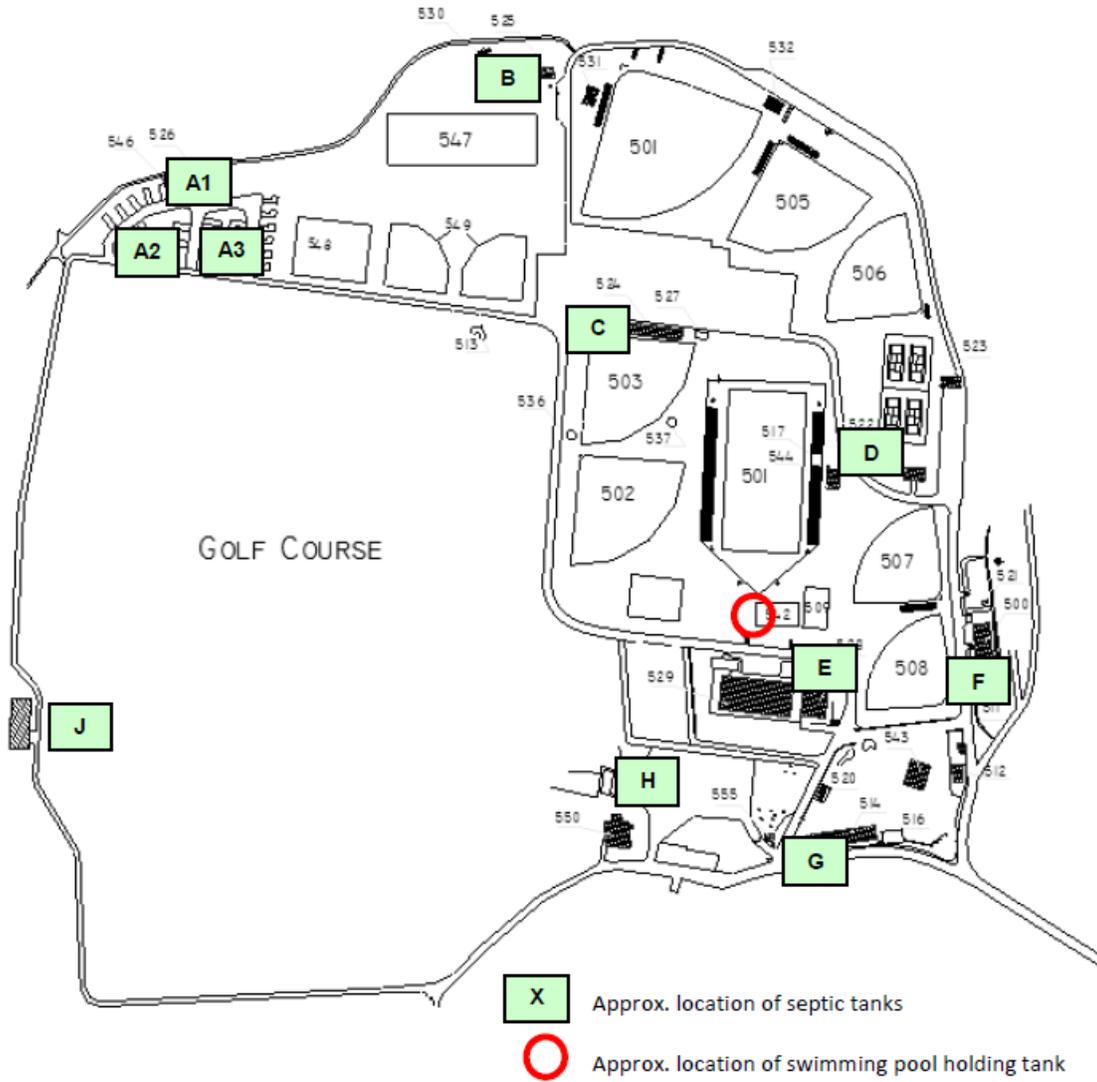
ATTACHMENT J-1604000-05
SEPTIC TANKS INVENTORY (cont'd)

CAPODICHINO - SEPTIC TANKS AND INSPECTION PIT APPROX. LOCATIONS



ATTACHMENT J-1604000-05
SEPTIC TANKS INVENTORY (cont'd)

CARNEY PARK - SEPTIC TANKS AND HOLDING TANK APPROX. LOCATIONS



ATTACHMENT J-1604000-06
HISTORICAL SEPTIC TANKS SEWAGE WASTE TONNAGE DATA

<u>CER Code</u>	<u>Type of Waste</u>	<u>Annual Quantity (Kg)</u>	
		January – December 2014	January – December 2015
161002	Aqueous liquid wastes / <i>Soluzioni acquose di scarto</i>	0	169.930
200304	Septic tank sludge / <i>Fanghi delle fosse settiche</i>	889.178	2.494.190
200306	Waste from sewage cleaning / <i>Rifiuti della pulizia delle fognature</i>	0	27.490

ATTACHMENT J-1604000-07
HOLDING TANK INVENTORY

Funding Activity: REGION

CARNEY PARK - Holding Tank¹			
Bldg No.	Equipment Description	Size	Frequencies of Services
528	Swimming Pool Holding Tank	16 m ³	From mid April to Pool Opening Day (Memorial Day): 2 times a week From Opening Day to 2nd week in September: every 2 weeks

Note 1: Refer to attached Carney Park map (J-1604000-05) for holding tank location.