

**FINAL
DECISION DOCUMENT FOR THE
GOLF COURSE, PARCELS 178(7), 83(7), AND 141(7)
FORT McCLELLAN, CALHOUN COUNTY, ALABAMA**

ISSUED BY: THE U. S. ARMY

JUNE 2001

**U.S. ARMY ANNOUNCES
DECISION DOCUMENT**

This Decision Document presents the determination that no further remedial action will be necessary to protect human health and the environment at the Golf Course, Parcels 178(7), 83(7), and 141(7), at Fort McClellan (FTMC) in Calhoun County, Alabama. The locations of the parcels at FTMC are shown on Figures 1 through 3. In addition, this Decision Document provides the site background information used as the basis for the no further action decision.

This Decision Document is issued by the U.S. Army Garrison at FTMC with involvement by the Base Realignment and Closure (BRAC) Cleanup Team (BCT). The BCT consists of representatives from the U.S. Army, the U.S. Environmental Protection Agency (EPA) Region IV, and the Alabama Department of Environmental Management.

The BCT is responsible for planning and implementing environmental investigations at FTMC.

Based on the results of the site investigation (SI) completed at the

Golf Course, Parcels 178(7), 83(7), and 141(7), the U.S. Army will implement no further action at the site. This decision was made by the U.S. Army with concurrence by the BCT.

This Decision Document summarizes site information presented in detail in background documents that are part of the administrative record for the Golf Course, Parcels 178(7), 83(7), and 141(7). A list of background documents for Parcels 178(7), 83(7), and 141(7) is presented on Page 2. A copy of the administrative record for Parcels 178(7), 83(7), and 141(7) is available at the public repositories listed on Page 3.

**REGULATIONS GOVERNING
SITE**

FTMC is undergoing closure by the BRAC Commission under Public Laws 100-526 and 101-510. The 1990 Base Closure Act, Public Law 101-510, established the process by which U.S. Department of Defense (DOD) installations would be closed or realigned. The BRAC environmental restoration program requires investigation and cleanup of federal properties prior to transfer to the public domain. In addition, the Community Environmental Response

Facilitation Act (CERFA) (Public Law 102-426) requires federal agencies to identify real property on military installations scheduled for closure that can be transferred to the public for redevelopment or reuse. Consequently, the U.S. Army is conducting environmental studies of the impact of suspected contaminants at parcels at FTMC. The BRAC environmental restoration program at FTMC follows the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process.

SITE BACKGROUND

FTMC is located in the foothills of the Appalachian Mountains of northeastern Alabama near the cities of Anniston and Weaver in Calhoun County. FTMC comprises two main areas of government-owned properties: the Main Post and Pelham Range. Until May 1998, the FTMC installation also included the Choccolocco Corridor, a 4,488-acre tract of land that was leased from the State of Alabama. The Main Post, which occupies 18,929 acres, is bounded on the east by the Choccolocco Corridor, which previously connected the Main Post with the Talladega National Forest. Pelham Range, which occupies

PRIMARY BACKGROUND DOCUMENTS FOR PARCELS 178(7), 83(7), and 141(7)

U.S. Environmental Protection Agency (EPA), 2000a, *Drinking Water Standards and Health Advisories*, EPA 822-B-00-01, Office of Water, Summer.

U.S. Environmental Protection Agency (EPA), 2000b, *Region 9 Preliminary Remediation Goals*, November.

Environmental Science and Engineering, Inc. (ESE), 1998, *Final Environmental Baseline Survey, Fort McClellan, Alabama*, prepared for U.S. Army Environmental Center, Aberdeen Proving Ground, Maryland, January.

IT Corporation (IT), 2001, *Final Site Investigation Report, Golf Course, Parcels 178(7), 83(7), and 141(7) Fort McClellan, Calhoun County, Alabama*, June.

IT Corporation (IT), 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July.

IT Corporation (IT), 1998, *Final Site-Specific Field Sampling Plan Attachment Site Investigation at the Golf Course, Parcels 178(7), 83(7), and 141(7) Fort McClellan, Calhoun County, Alabama*, December.

QST Environmental Inc. (QST), 1998, *Final Site Investigation Work Plan, Fort McClellan, Alabama*, March.

Science Applications International Corporation (SAIC), 1998, *Final Background Metals Survey Report, Fort McClellan, Alabama*, July.

22,245 acres, is located approximately 5 miles due west of the Main Post and adjoins the Anniston Army Depot on the southwest.

The Golf Course, Parcel 178(7), is located in the northwest area of the FTMC Main Post and covers approximately 146 acres. Evidence of inappropriate application of chemicals, spills, or other releases at the golf course was not identified during the environmental baseline survey. In addition, there have not been any recorded spills or incidences at the Golf Course (ESE, 1998).

The mixing and storage of pesticides and herbicides used for the golf course was performed at

the former Pesticide Mixing and Storage Facility (former Building T-2249) located near the intersection of Galloway Road and Baltzell Gate Road, from an unknown beginning date until approximately 1985, when this process was moved to Building 2252. Building T-2249 was demolished in 1994.

The mixing and storage of pesticides and herbicides for the golf course is now performed at Building 2252, located on 14th Army Band Road. Building 2252 was built in 1984, and operations commenced there in 1985. The Golf Course Pesticide Mixing and Storage Facility, Building 2252, was categorized as Parcel 83(7) and was included in the SI. The

Former Golf Course Pesticide Mixing and Storage Facility, Building T-2249, Parcel 141(7), was also a part of the SI.

A variety of pesticides and herbicides have been applied at FTMC over the years. Personnel who applied pesticides were employed at the golf course, the Roads and Grounds Department, and at Pest Management (ESE, 1998). Personnel who applied pesticides at FTMC, whether employees of the government or private contractors, were licensed and certified (ESE, 1998). The requirement for certification of all pesticide applicators goes back at least as far as the 1970s. Although recertification was required every two years, personnel at the golf

**PUBLIC INFORMATION REPOSITORIES
FOR FORT McCLELLAN**

Anniston Calhoun County Public Library

Reference Section

Anniston, Alabama 36201

Point of Contact: Ms. Sunny Addison

Telephone: (256) 237-8501

Fax: (256) 238-0474

Hours of Operation: Monday – Friday 9:00 a.m. - 6:30 p.m.

Saturday 9:00 a.m. - 4:00 p.m.

Sunday 1:00 p.m. – 5:00 p.m.

Houston Cole Library

9th Floor

Jacksonville State University

700 Pelham Road

Jacksonville, Alabama 36265

Point of Contact: Ms. Rita Smith (256) 782-5249

Hours of Operation: Monday – Thursday 7:30 a.m. – 11:00 p.m.

Friday 7:30 a.m. – 4:30 p.m.

Saturday 9:00 a.m. – 5:00 p.m.

Sunday 3:00 p.m. – 11:00 p.m.

course and the Forestry Department did not receive recertification on at least one occasion (ESE, 1998). Pesticide applicators received DOD certification upon completion of training at Fort Sam Houston, or obtained certification from outside agencies. Pest management staff obtained additional certification by the State of Alabama beginning in 1983 (ESE, 1998).

The site elevation at the Golf Course ranges from approximately 800 feet at the northern end of the course to approximately 700 feet at the western end of the site along Cane Creek. Cane Creek, a perennial stream, flows from the southeast to the northwest as it crosses the Golf Course. Remount

Creek flows to the north-northwest, where it joins Cane Creek near the central portion of the site.

**SCOPE AND ROLE OF
PARCEL**

Information developed from the environmental baseline survey (ESE, 1998) was used to group areas at FTMC into standardized parcel categories using DOD guidance. All parcels received a parcel designation for one of seven CERFA categories, or a non-CERCLA qualifier designation, as appropriate. The seven CERFA categories include CERFA Uncontaminated Parcels (Categories 1 and 2), CERFA Contaminated Parcels (Categories

3 through 7), and CERFA Qualified Parcels. Parcels 178(7), 83(7), and 141(7) were categorized as a CERFA Category 7 parcels in the environmental baseline survey. CERFA Category 7 parcels are areas that are not evaluated or require further evaluation (ESE, 1998).

With the issuance of this Decision Document, Parcels 178(7), 83(7), and 141(7) are recategorized as CERFA Category 3 Parcels. Category 3 Parcels are areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

SITE INVESTIGATION

An SI was conducted at the Golf Course, Parcels 178(7), 83(7), and 141(7) to determine whether chemical constituents are present at the site at concentrations that present an unacceptable risk to human health or the environment.

Nineteen surface soil samples, six subsurface soil samples, five groundwater samples, five surface water samples, and five sediment samples were collected at the Golf Course, Parcels 178(7), 83(7), and 141(7) (Figures 1 through 3).

Surface soil samples were collected from the upper 1 foot of soil; subsurface soil samples were collected at depths greater than 1 foot below ground surface. Groundwater samples were collected from five groundwater monitoring wells installed at the site during the SI. Surface water and sediment samples were collected from surface water and drainage areas associated with the Golf Course.

Chemical analyses of the samples included target analyte list metals, target compound list (TCL) volatile organic compounds (VOC), TCL semivolatile organic compounds (SVOC), pesticides, herbicides, polychlorinated biphenyls (PCB), anions, and total organic carbon. In addition, the sediment samples were analyzed for grain size. To evaluate whether detected constituents present an unacceptable risk to human health and the environment, the analytical results were compared to human health site-specific screening levels (SSSL) and ecological screening values (ESV) for FTMC. The SSSLs and ESVs were developed

as part of human health and ecological risk evaluations associated with site investigations being performed under the BRAC environmental restoration program at FTMC. Additionally, metals concentrations exceeding SSSLs and ESVs were compared to media-specific background screening values (SAIC, 1998).

The potential threat to human health is expected to be minimal. The concentrations of metals and organic compounds in site media are low. Although the Golf Course is projected for continued use as an active recreational area, the soils and groundwater analytical data from the site were screened against residential human health SSSLs to evaluate the site for possible unrestricted land reuse. In soils, the metals concentrations that exceeded SSSLs were below their respective background concentrations or within the range of background values and, thus, do not pose a threat to human health. VOC, SVOC, and pesticide/herbicide concentrations in soils were below SSSLs.

In groundwater, with the exception of aluminum, iron, manganese, and vanadium, detected in two temporary groundwater wells (SI07-GWS02 and SI07-GWS05) installed using direct-push methods, metals concentrations were within the range of background values. In addition, four pesticides (aldrin, chlordane, dieldrin, and heptachlor epoxide) were detected at concentrations exceeding SSSLs in one groundwater sample (SI07-GWS02) collected in the area of the former pesticide mixing and storage area. However, the pesticide concentrations were

below EPA drinking water standards and health advisory values (EPA, 2000a). The VOC methyl tertiary butyl ether (MTBE) was detected in one well (SI07-GWS05), located near the current pesticide mixing and storage building (Building 2252), at a concentration of 0.005 milligrams per liter (mg/L). Currently no SSSL exists for MTBE. However, the MTBE concentration was below the EPA Region 9 Preliminary Remediation Goal of 0.020 mg/L for MTBE in tap water (EPA, 2000b). Given the low concentrations and limited distribution, these compounds are not expected to pose a threat to human health in either the current recreational or the residential land-use scenario.

The potential threat to ecological receptors is also expected to be low. Several metals were detected in site media at concentrations exceeding ESVs. However, with the exception of selenium (in four surface soil samples) and lead (one sediment sample), the metals concentrations that exceeded ESVs were below their respective background concentration or within the range of background values. The concentrations of two VOCs (tetrachloroethene and trichloroethene) exceeded ESVs in six of seven surface soil samples. However, none of the VOCs detected exceeded SSSLs. Only one SVOC (fluoranthene) exceeded its ESV in one surface soil sample. The concentrations of three chlorinated pesticides (4,4'-DDT, 4,4'-DDE, and dieldrin) exceeded ESVs in a limited number of surface soil and sediment samples but show no pattern of distribution that would

indicate a discrete source. In all likelihood, these pesticides are indicative of historical pesticide use on the golf course as part of a routine maintenance program. Although these pesticides are no longer in use, other pesticides are routinely used at the golf course to maintain the area for its intended purpose. Because the golf course is expected to remain active for the foreseeable future, these sporadic, low-levels of pesticides are not expected to adversely affect the ecological receptors in the vicinity of the golf course.

SITE REMEDIAL ACTIONS

Remedial actions were not conducted at the Golf Course, Parcels 178(7), 83(7), and 141(7).

DESCRIPTION OF NO FURTHER ACTION

Remedial alternatives were not developed for Parcels 178(7), 83(7), and 141(7). No further action is selected because remedial action is unnecessary to protect human health or the environment at this site. The metals and chemical compounds detected in site media do not pose an unacceptable risk to human health or the environment in either the current recreational or the residential land-use scenario. Therefore, the site is released for unrestricted land reuse. Furthermore, Parcels 178(7), 83(7), and 141(7) are re-categorized as CERFA Category 3 parcels. Category 3 parcels are areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response. The U.S. Army will not take any further action to investigate, remediate, or monitor

the Golf Course, Parcels 178(3), 83(3), and 141(3) (formerly Parcels 178[7], 83[7], and 141[7]).

The following costs are associated with implementing the no-action alternative:

Capital Cost:	\$0
Annual Operation & Maintenance Costs:	\$0
Present Worth Cost:	\$0
Months to Implement:	None
Remedial Duration:	None.

DECLARATION

Remedial action is unnecessary at the Golf Course, Parcels 178(3), 83(3), and 141(3) (formerly Parcels 178[7], 83[7], and 141[7]). The no further action remedy protects human health and the environment, complies with relevant federal and state regulations, and is a cost-effective application of public funds. This remedy will not leave in place hazardous substances at concentrations that require limiting the future use of the parcel, or that require land-use control restrictions. The site is released for unrestricted land reuse. Parcels 178(7), 83(7), and 141(7) are re-categorized as CERFA Category 3 parcels. Category 3 parcels are areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response. There will not be any further remedial costs associated with implementing no further action at the Golf Course, Parcels 178(3), 83(3), and 141(3) (formerly Parcels 178[7], 83[7], and 141[7]).

QUESTIONS/COMMENTS

Any questions or comments concerning this Decision Document or other documents in the administrative record can be directed to:

Mr. Ron Levy
Fort McClellan BRAC
Environmental Coordinator
Tel: (256) 848-3539

E-mail: LevyR@mcclellan-emh2.army.mil

ACRONYMS

BCT	BRAC Cleanup Team
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
DOD	U.S. Department of Defense
EPA	U.S. Environmental Protection Agency
ESE	Environmental Science and Engineering, Inc.
ESV	ecological screening value
FTMC	Fort McClellan
MTBE	Methyl tertiary butyl ether
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
SI	site investigation
SSSL	site-specific screening level
SVOC	semivolatile organic compound
TCL	target compound list
VOC	volatile organic compound

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6/15/01
Date

Reviewed by:

Ronald M. Levy

Ronald M. Levy
BRAC Environmental Coordinator
Fort McClellan, Alabama

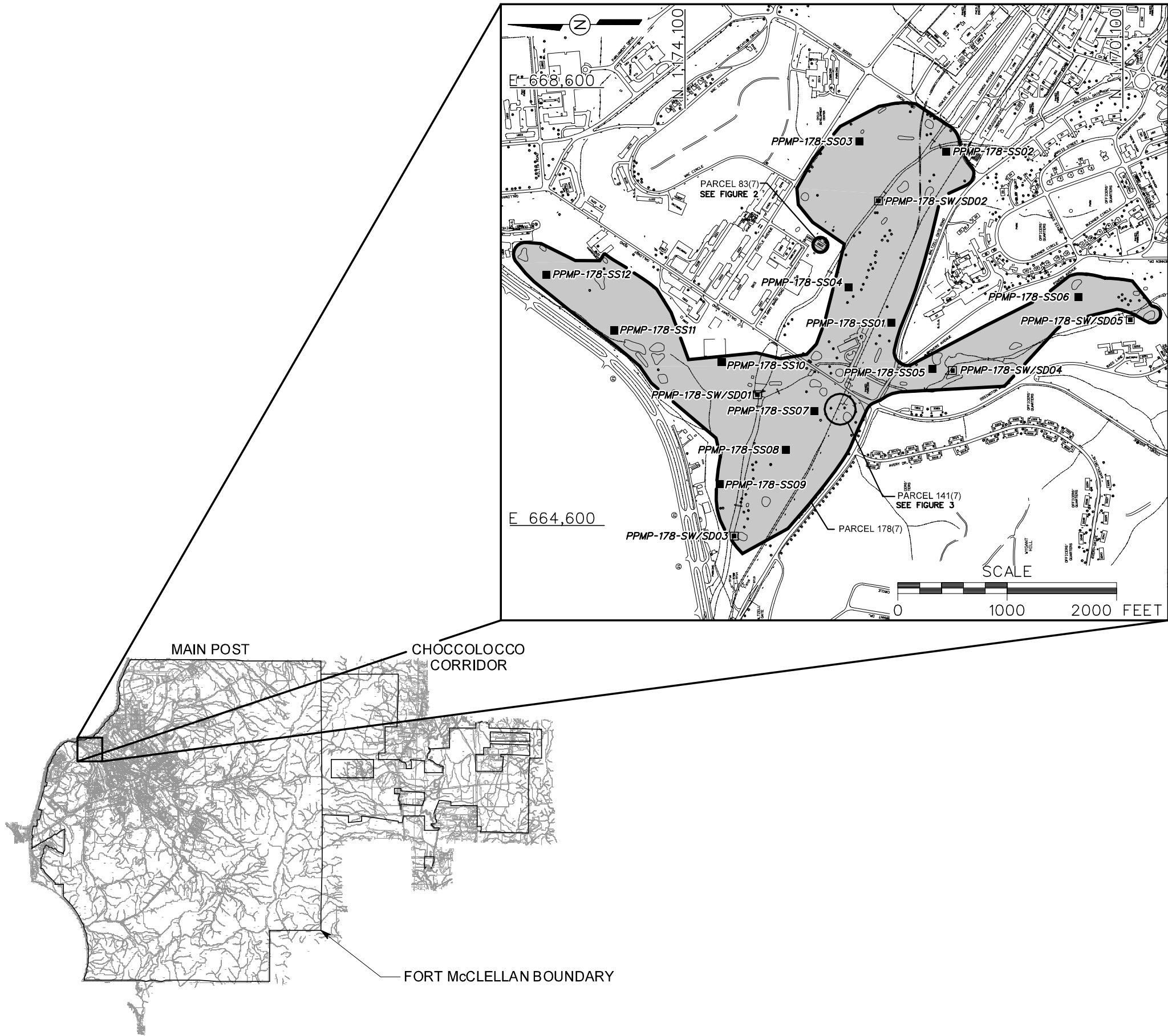
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Date

Approved by:

Glynn D. Ryan

Glynn D. Ryan
Site Manager
Fort McClellan, Alabama

09/18/01
Date



LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TREES / TREELINE
- MARSH / WETLANDS
- PARCEL BOUNDARY
- BRIDGE
- CULVERT WITH HEADWALL
- SURFACE DRAINAGE / CREEK
- MANMADE SURFACE DRAINAGE FEATURE
- FENCE
- RAILROAD
- UTILITY POLE
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- SURFACE SOIL SAMPLE LOCATION

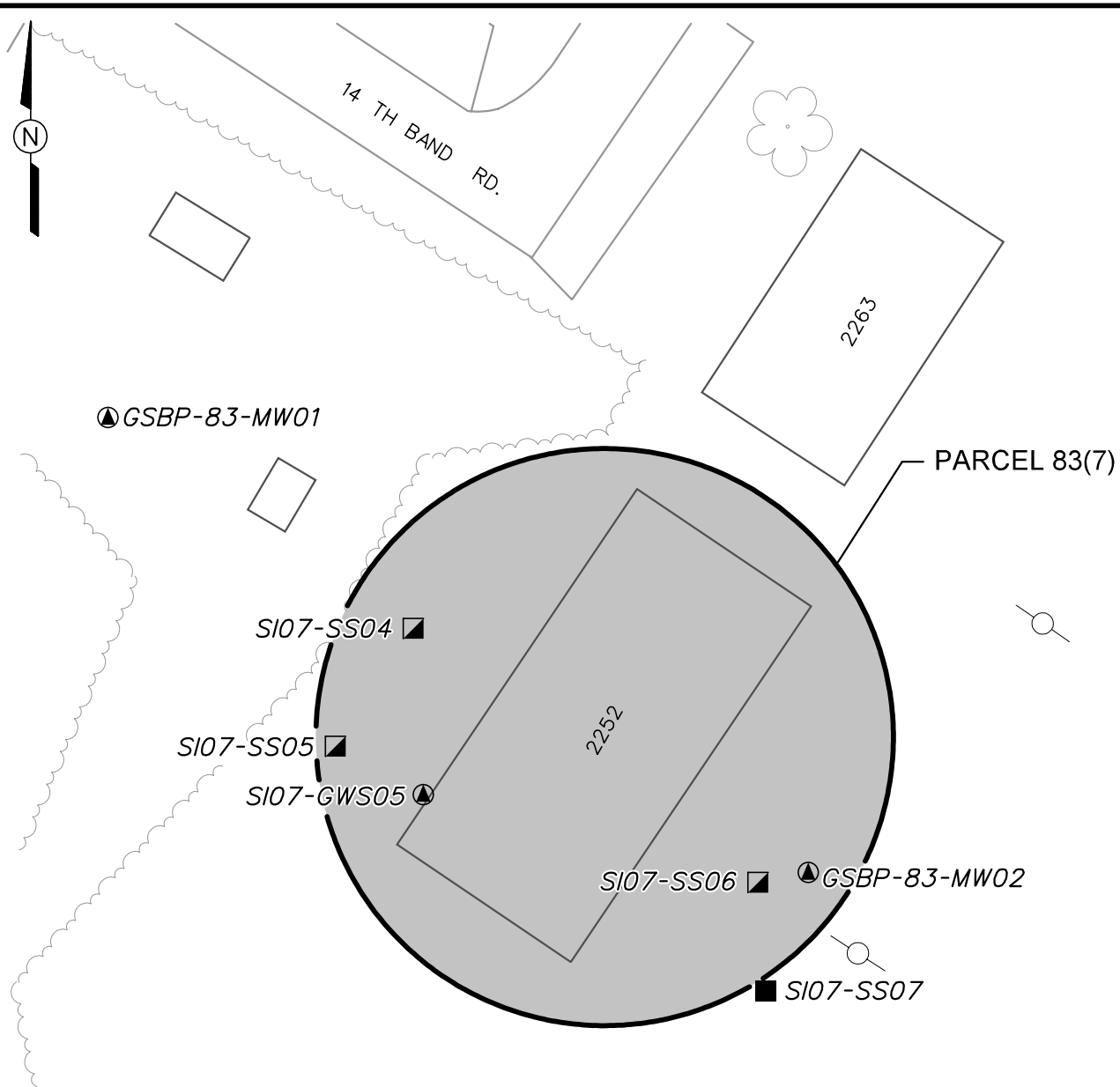
FIGURE 1
SITE MAP
GOLF COURSE
PARCELS 178(7), 83(7) AND 141(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

DWG. NO.: ...\\774645es.522	INITIATOR:D. LAMB	DATE LAST REV.:	DRAFT. CHK. BY:	PROJ. NO.: 774645
PROJ. MGR.: J. YACOUB	ENGR. CHK. BY: D. LAMB	DRAWN BY: D. BILLINGSLEY		

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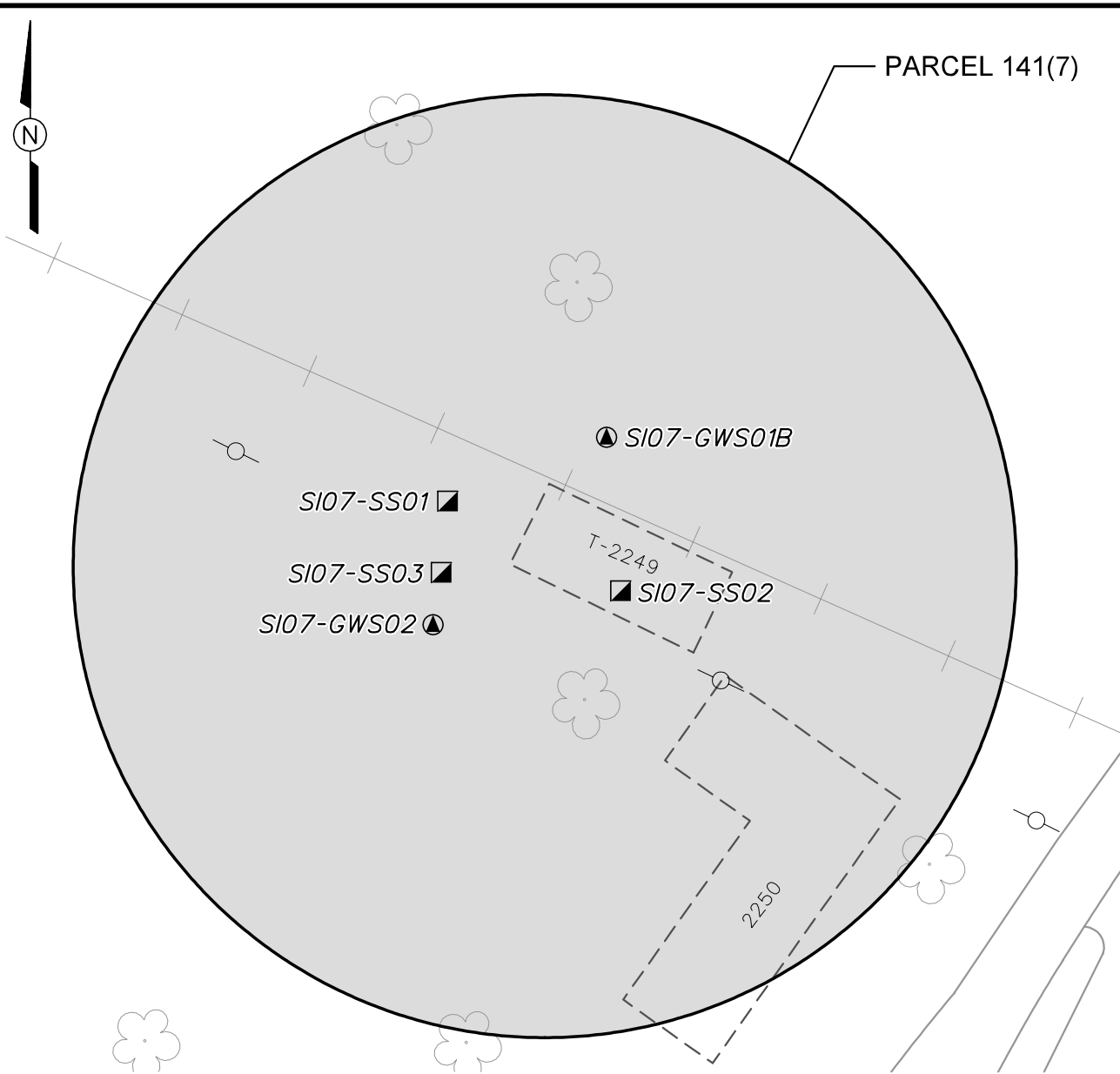
- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TREES / TREELINE
- PARCEL BOUNDARY
- UTILITY POLE
- GROUNDWATER SAMPLE LOCATION
- SURFACE SOIL SAMPLE LOCATION
- SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION

SCALE
0 40 80 FEET

FIGURE 2
SAMPLE LOCATION MAP
GOLF COURSE PESTICIDE
MIX/STORAGE FACILITY
PARCEL 83(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

DWG. NO.: ...\\774645es.523	INITIATOR:D. LAMB	DRAFT. CHCK. BY:	DATE LAST REV.:	STARTING DATE: 06/15/00	11/16/00
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LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- FORMER BUILDING LOCATIONS
- TREES / TREELINE
- PARCEL BOUNDARY
- RAILROAD
- UTILITY POLE
- GROUNDWATER SAMPLE LOCATION
- SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION



FIGURE 3
SAMPLE LOCATION MAP
FORMER GOLF COURSE PESTICIDE
MIX/STORAGE FACILITY
PARCEL 141(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018