



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY DEFENSE AMMUNITION CENTER
1 C TREE ROAD
MCALESTER OK 74501-9053

SJMAC-ESM

10 February 2009

MEMORANDUM FOR Huntsville Center, Corps of Engineers, (CEHNC-CX-MM/Mr. Becker or Mr. Zange), P.O. Box 1600, Huntsville, AL 35807-4301

SUBJECT: Interim Approval for an Amendment 3 to a Previously Approved Explosives Safety Submission (ESS) for the Choccolocco Area Removal Action at Fort McClellan, AL

1. References:

a. Your memorandum, 26 Jan 09, subject: Explosives Safety Submission (ESS), Amendment 1, Explosives Storage Area, Fort McClellan, Anniston, AL, January 2009.

b. Our memorandum, 10 Feb 09, subject: Request for Approval for Amendment 3 to an Explosives Safety Submission (ESS) for the Choccolocco Area Removal Action at Fort McClellan, AL.

c. DOD 6055.09-STD, Ammunition and Explosives Safety Standards, 29 Feb 08.

d. Our memorandum, 9 Feb 09, subject: Interim Approval for an Amendment 1 to a Previously Approved Explosives Safety Submission (ESS) for the Explosives Storage Area at Fort McClellan, AL.

2. This office has reviewed the subject amendment as requested by reference 1.a, granted Army level approval and forwarded it via reference 1.b, to the Department of Defense Explosives Safety Board (DDESB) for final approval. You may implement this amendment upon receipt of this memorandum, without waiting for final approval, in accordance with paragraph C12.5.1.2 of reference 1.c, which allows a munitions response to proceed prior to final approval if circumstances dictate. This interim approval is based on the need to move the portable magazines from property no longer owned by the Federal Government. Bear in mind that by implementing the amendment prior to the DDESB final approval, the Army is accepting responsibility for any additional requirements that the DDESB may impose.

3. This memorandum replaces reference 1.d due to the renaming of the amendment in reference 1.b. The POC is Mr. James Toburen, SJMAC-ESM, DSN 956-8784, or COMML (918) 420-8784, email james.toburen@us.army.mil.

SJMAC-ESM

SUBJECT: Interim Approval for an Amendment 3 to a Previously Approved Explosives Safety Submission (ESS) for the Choccolocco Area Removal Action at Fort McClellan, AL

FOR THE DIRECTOR:

for/CLIFFORD H. DOYLE

MEC Team Leader

Explosives Safety Knowledge, OE and
Chemical Division

US Army Technical Center for Explosives Safety



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US ARMY DEFENSE AMMUNITION CENTER
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10 February 2009

MEMORANDUM FOR Department of Defense Explosives Safety Board
(DDESB-PE/Mr. Alchowiak), 2461 Eisenhower Avenue, Alexandria, VA 22331-0600

SUBJECT: Request for Approval for Amendment 3 to an Explosives Safety Submission (ESS)
for the Choccolocco Area Removal Action at Fort McClellan, AL

1. References:

a. Phone conversation between Mr. Toburen, this office, and Mr. Dunay, DDESB, 10 Feb 09,
subject: Request for Approval for Amendment 1 to an Explosives Safety Submission (ESS) for
the Explosives Storage Area at Fort McClellan, AL

b. Our memorandum, (SJMAC-ESM/Mr. Toburen), 9 Feb 09, subject: Request for Approval
for Amendment 1 to an Explosives Safety Submission (ESS) for the Explosives Storage Area at
Fort McClellan, AL.

c. Memorandum, Department of Defense Explosives Safety Board, DDESB-KO, 31 Oct 01,
subject: Site Plan and Final Safety Submission for Storage Facility for Ordnance and Explosives
Disposal Support, Fort McClellan, AL.

d. DOD 6055.09-STD, Ammunition and Explosives Safety Standards, dated 29 Feb 08.

e. Memorandum, Department of Defense Explosives Safety Board, DDESB-KO, 28 Aug 03,
subject: Explosives Safety Submission (ESS) for the Choccolocco Area Fish and Wildlife
(FWS) Land Transfer at Fort McClellan, Alabama.

f. Memorandum, Department of Defense Explosives Safety Board, DDESB-KO, 3 Feb 04,
subject: Amendment 1 to the Conventional Explosives Safety Submission for Ordnance and
Explosives (OE) Removal Action for the Choccolocco Area at Fort McClellan, Alabama.

g. Memorandum, Department of Defense Explosives Safety Board, DDESB-KO, 26 Oct 05,
subject: Amendment 2, Explosives Safety Submission (ESS) Munitions and Explosives of
Concern Removal Action, Choccolocco Area, Fort McClellan, Alabama.

2. As discussed in reference 1.a, please replace reference 1.b with this memorandum, and close
out the site plan for the original explosives storage area approved by your office in reference 1.c.

SJMAC-ESM

SUBJECT: Request for Approval for Amendment 1 to an Explosives Safety Submission (ESS) for the Explosives Storage Area at Fort McClellan, AL

3. Per reference phone conversation, please rename the amendment originally transmitted by reference 1.b from “Amendment 1 to an Explosives Safety Submission (ESS) for the Explosives Storage Area at Fort McClellan, AL” to “Amendment 3 to an Explosives Safety Submission (ESS) for the Choccolocco Area at Fort McClellan, AL” and review IAW with reference 1.d. We have reviewed the amendment and find it acceptable as written. Please furnish your comments and/or approval to us by 31 Mar 09, so we can make any changes required and forward final approval. The basic submission was approved by your office in reference 1.e, and Amendments 1 and 2 were approved by your office in references 1.f and 1.g respectively.

4. The portable magazines covered under this amendment are currently located on property that is no longer owned and controlled by the Federal Government, so the magazines must be moved as soon as possible. They will continue to be used in the subject project, and may also be used in future projects for other areas at Fort McClellan. For any future use of the magazines, the ESS for the specific project will reference your approval memorandum. Due to the very short time frame involved, we are giving interim approval in accordance with paragraph C12.5.1.2 of reference 1.d, for the magazines to be moved prior to your final approval. The Army accepts responsibility for any additional requirements you may impose in your final approval.

5. The POC is Mr. James Toburen, SJMAC-ESM, DSN 956-8784, or COMML (918) 420-8784, email james.toburen@dac.army.mil.

FOR THE DIRECTOR:

1 Encl
as

CLIFFORD H. DOYLE
MEC Team Leader
Explosives Safety Knowledge, OE and
Chemical Division
US Army Technical Center for Explosives Safety

CF: (w/encl)
US Army Engineering and Support Center, Huntsville,
(CEHNC-OE-CX/Mr. Zange or Mr. Becker), P.O. Box 1600, Huntsville, AL 35807-4301



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MCALESTER OK 74501-9053

SJMAC-ESM

9 February 2009

MEMORANDUM FOR Department of Defense Explosives Safety Board
(DDESB-PE/Mr. Alchowiak), 2461 Eisenhower Avenue, Alexandria, VA 22331-0600

SUBJECT: Request for Approval for Amendment ² to an Explosives Safety Submission (ESS)
for the Explosives Storage Area at Fort McClellan, AL

1. References:

a. Memorandum, Huntsville Center, Corps of Engineers, (CEHNC-CX-MM/Mr. Zange or Mr. Becker), 26 Jan 09, subject: Explosives Safety Submission (ESS), Amendment 1, Explosives Storage Area, Fort McClellan, Anniston, AL, January 2009 (enclosed).

b. DOD 6055.09-STD, Ammunition and Explosives Safety Standards, dated 29 Feb 08.

c. Memorandum, Department of Defense Explosives Safety Board, DDESB-KO, 31 Oct 01, subject: Site Plan and Final Safety Submission for Storage Facility for Ordnance and Explosives Disposal Support, Fort McClellan, AL.

2. Reference 1.a is provided for your review IAW with chapter 12 of reference 1.b. We have reviewed the enclosed amendment and find it acceptable as written. Please furnish your comments and/or approval to us by 31 Mar 09, so we can make any changes required and forward final approval. The basic submission was approved by your office in reference 1.c. The portable magazines covered under this amendment are currently located on property that is no longer owned and controlled by the Federal Government, so the magazines must be moved as soon as possible. Due to the very short time frame, we are giving interim approval in accordance with paragraph C12.5.1.2 of reference 1.b, for the magazines to be moved prior to your final approval. The Army accepts responsibility for any additional requirements you may impose in your final approval.

3. The POC is Mr. James Toburen, SJMAC-ESM, DSN 956-8784, or COMML (918) 420-8784, email james.toburen@dac.army.mil.

SJMAC-ESM

SUBJECT: Request for Approval for Amendment ³/₁ to an Explosives Safety Submission (ESS)
for the Explosives Storage Area at Fort McClellan, AL

FOR THE DIRECTOR:

1 Encl
as

TOBUREN.JAMES
E.1231125198

Digitally signed by TOBUREN.JAMES
E.1231125198
DN: c=US, ou=U.S. Government,
ou=DoD, ou=PA, ou=USA,
cn=TOBUREN.JAMES.E.1231125198
Date: 2009.02.09 10:21:09 -0600

for/CLIFFORD H. DOYLE
MEC Team Leader
Explosives Safety Knowledge, OE and
Chemical Division
US Army Technical Center for Explosives Safety

CF: (w/encl)

Office of the Director of Army Safety (DACS-SF/Mr. Patton), 223 23rd Street, Crystal Plaza 5,
Suite 980, Arlington, VA 22202

Office of the Deputy Assistant Secretary of the Army for Environment, Safety, and Occupational
Health, Special Assistant for Munitions, (DASA-DESOH/Mr. King), 110 Army Pentagon,
Washington, DC 20310-0110

Headquarters, Department of the Army (DAIM-BO/Mr. Haughs), 600 Army Pentagon,
Washington, DC 20310-0600

U.S. Army Corps of Engineers (CESO/Ms Roberts), 441 G Street, NW,
Washington, DC 20314-1000

US Army Engineering and Support Center, Huntsville,
(CEHNC-OE-CX/Mr. Zange or Mr. Becker), P.O. Box 1600, Huntsville, AL 35807-4301



REPLY TO
ATTENTION OF

CEHNC-CX-MM

DEPARTMENT OF THE ARMY
HUNTSVILLE CENTER, CORPS OF ENGINEERS
P.O. BOX 1600
HUNTSVILLE, ALABAMA 35807-4301

26 January 2009

MEMORANDUM FOR US Army Technical Center for Explosives Safety, Explosives Safety Knowledge, OF and Chemical Division, (SJMCA-ESM/Mr. Cliff Doyle), Building 35, 1C Tree Road, McAlester, OK 74501-9053

SUBJECT: Explosives Safety Submission (ESS), Amendment ²1, Explosives Storage Area Fort McClellan Anniston, AL, January 2009

1. References:

- a. ER 385-1-95, Safety and Health Concerns for Munitions and Explosives of Concern (MEC) Projects, March 2007.
- b. DOD 6055.09-STD, Ammunition and Explosives Safety Standards, February 2008.
- c. Email, (CEHNC-OE-CWM-DC/Mr. Allyn Allison), 23 January 2009, subject: Requesting CEHNC EM-MM-CX process and forward ESS package to USATCES.

2. This amendment is for the relocation of the existing explosive storage facility from its current location and reduction of the total net explosive weight to 100 pounds.

3. The requested start date for MEC operations is 15 February 2009. If contractor is not able to start by 15 February 2009, additional costs will be incurred. An Interim Army approval is requested by that date if a Department of Defense Explosive Safety Board (DDESB) approval is not granted by then.

4. This memorandum constitutes Direct Reporting Unit approval for US Army Corps of Engineers participation per reference 1a.

5. If you have any questions, please contact Mr. Walt Zange at (256) 895-1586 or Mr. Dave Becker at (256) 895-1513.

Encl


SUZANNE MURDOCK, P.E.
Chief, Military Munitions Division
Environmental and Munitions
Center Of Expertise

CEHNC-CX-MM

26 January 2009

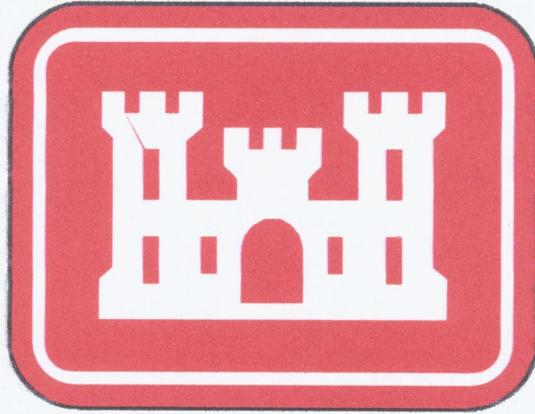
SUBJECT: Explosives Safety Submission (ESS), Amendment 1, Explosives Storage Area
Fort McClellan Anniston, AL, January 2009

CF: (electronically w/o encls)

HQUSACE, (CESO-SWD/Ms. Blanca Roberts)

USAESCH, (CEHNC-OE-DC/Mr. Samuel McManus)

USAESCH, (CEHNC-OE-CW/Mr. Allyn Allison)



Amendment *X* 3

Explosives Safety Submission

ORDNANCE AND EXPLOSIVES DISPOSAL SUPPORT

Explosives Storage Area
Fort McClellan
Anniston, Alabama

December 2008

Prepared by
US ARMY CORPS OF ENGINEERS
Engineering and Support Center, Huntsville

This Amendment is not in the current standard format. For continuity purposes it is in the same format as the original ESS.

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1.0 BACKGROUND

The previously approved “Explosives Siting Plan, Ordnance and Explosives Disposal Support, Fort McClellan, AL” dated October 11, 2001 was prepared by Foster Wheeler Environmental Corporation for the U.S. Army Corps of Engineers. This amendment is for the relocation of the existing explosives storage facility from its current location and reduction of the total net explosive weight to 100 lbs maximum. The existing storage facility is on property that is no longer owned by the U.S. Government, and will have to be relocated to an area within federally owned property. The new location is a previous borrow pit area that is now used by the Fish and Wildlife Service (FWS) as an aggregate storage yard. The area has limited access through a locked barricade. The FWS will need limited access to the area for the aggregate. The magazine will be positioned such that the FWS aggregate storage yard and the access to the yard are outside the Low Density Traffic – Public Traffic Route Distance (LDT-PTRD).

2.0 PURPOSE

The changes to the original document are as follows:

- Change all occurrences of Foster Wheeler Environmental Corporation to TetraTech Environmental Corporation, Inc.
- Delete “under Delivery Order 009 of the aforementioned contract” in the last sentence.

3.0 MAGAZINE AND SCRAP PROCESSING AREA

- Change all occurrences of Foster Wheeler Environmental Corporation to TetraTech Environmental Corporation, Inc.
- Change “Bravo” area to “Charlie” area in line 2.
- Change reference from Attachment 1 to Appendix A in line 5.

4.0 EXPLOSIVE STORAGE MAGAZINES

In all sub-paragraphs change all occurrences of Foster Wheeler Environmental Corporation to TetraTech Environmental Corporation, Inc.

4.2 Net Explosives Weight (NEW) and Hazard Division

4.2.1 Two magazines will be located at the new explosives storage facility location. The magazines will be two ATF Type II magazines sited as one magazine (see paragraph 4.1.3 of the original 2001 ESS). The combined total maximum net explosive weight (NEW) stored in the magazines will not exceed 100 pounds. These commercial explosives will have assigned DOD hazard division/storage compatibility groups (HD/SCG) and will be stored in accordance with DOD 6055.9-STD, DA Pam 385-64 and any local installation regulations.

Table 1. DELETED

4.2.1.1 DELETED

4.2.1.2 DELETED

4.3 Quantity-Distance Criteria for Siting

4.3.1 DELETED

4.3.1.1 The distance of 658 feet for inhabited buildings is established in accordance with DOD 6055.09-STD, Table C9.T2. The closest inhabited building is approximately 2400 feet.

4.3.1.2 The Public Traffic Routes Distance (PTRD) is 395 feet (for a medium traffic density road) and the Low Traffic Density - Public Traffic Routes Distance (LTD-PTRD) is 111 feet. The PTRD and LTD-PTRD are established in accordance with C9.4.1.2.1.1.5 of DOD 6055.09-STD. The closest road to the site is Bains Gap Road, and is approximately 1700 feet from the site. The aggregate storage yard and the gravel road to the storage yard are located outside of the boundaries of the LTD-PTRD. Refer to Figure 2 for the PTRD and LTD-PTRD.

4.3.1.3 Magazine Intraline distance is 84 feet.

Table 2. DELETED

5.0 Scrap Storage/Processing.

- Change all occurrences of Foster Wheeler Environmental Corporation to TetraTech Environmental Corporation, Inc.
- NOTE: Scrap Storage will no longer be located within the ABD Arc, as was previously required.

6.0 Site Map

Site Maps are attached in Appendix A. The Fort McClellan, Anniston, AL Location Map is attached as Figure 1. The New Explosives Storage Magazine Location Map is attached as Figure 2.

Attachment 1. DELETED – Replaced with Appendix A.

Attachment 2. Remains unchanged.

APPENDIX A

MAPS

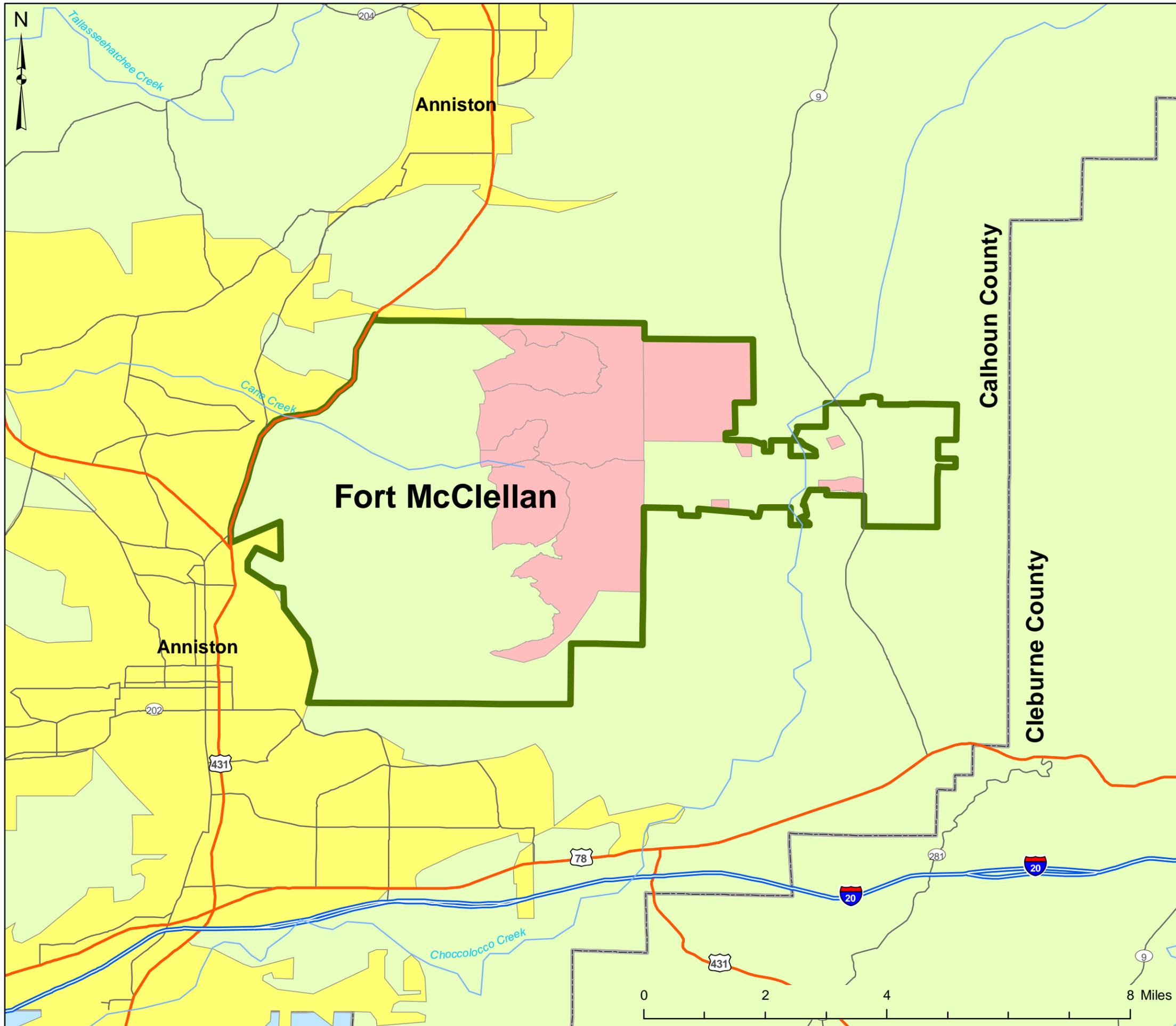


Figure 1

**Fort McClellan
Anniston, Alabama
Location Map**

-  Rivers & Streams
-  Interstate Highway
-  Major Highway
-  Road
-  Property Boundary
-  Urban Area
-  Charlie Area



<i>Environmental Protection & Utilities Branch EPUB-GIS TEAM</i>		U.S. Army Engineering And Support Center Huntsville, AL	
Drawn By: GDW	Date Drawn: 12-17-2008	Project No.:	
MXD: \\hnc-fs-gis\edgis\PROJECTS\ States\AL\McClellan\ESS_CharlieArea\ MXDs\Fig_1_location.mxd		PDF: \\hnc-fs-gis\edgis\PROJECTS\ States\AL\McClellan\ESS_CharlieArea\ PDFs\Fig_1_location.pdf	
		DISCLAIMER - The data represent the results of data collection/ processing for a specific U.S. Army Corps of Engineers activity and indicates the general existing conditions. As such, it is only valid for its intended use, content, time, and accuracy specifications. The user is responsible for the results of any application of the data for other than its intended purpose.	

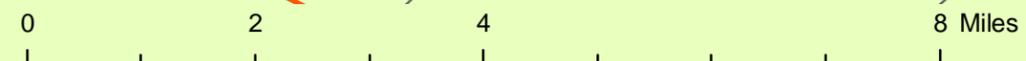
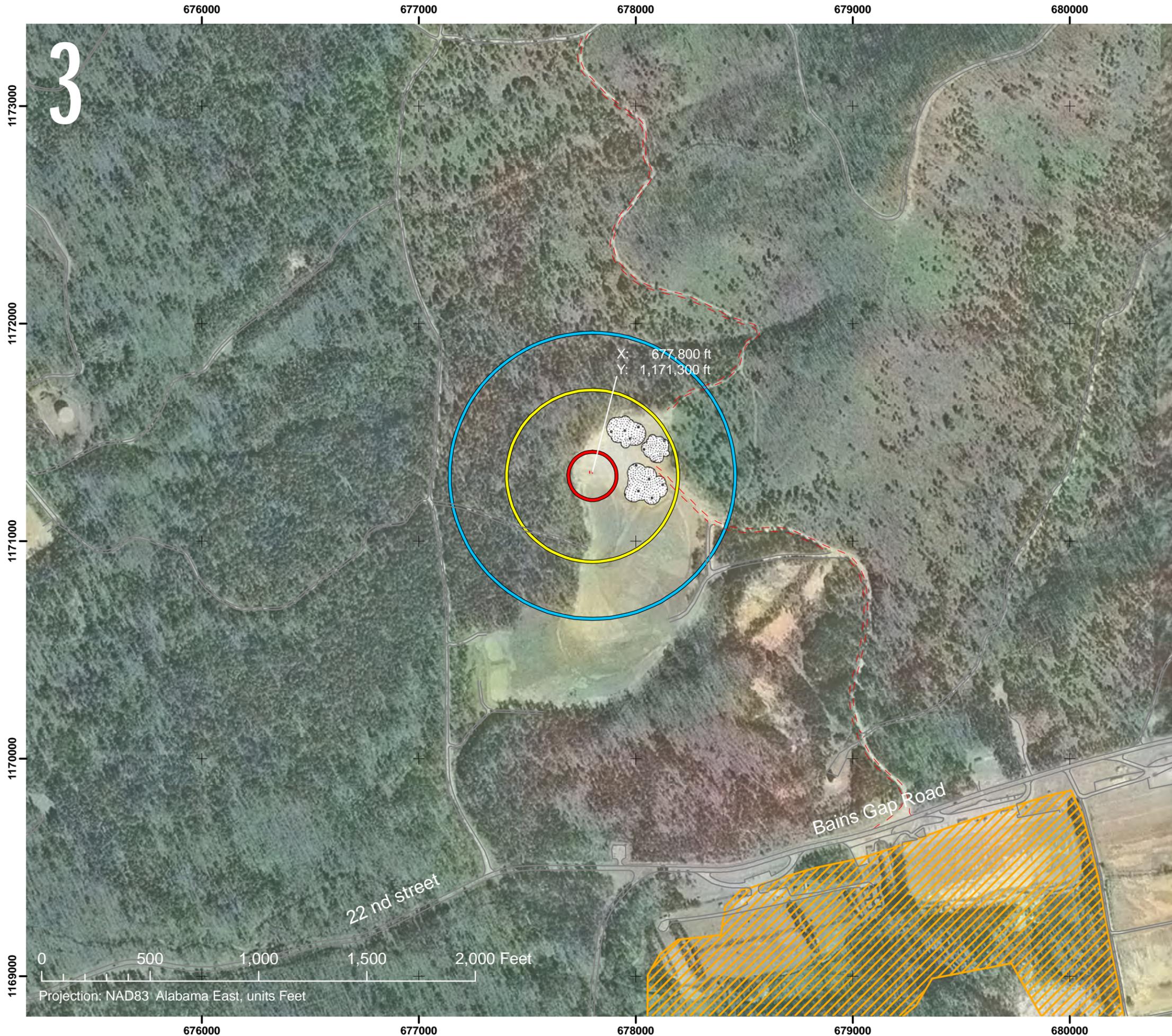


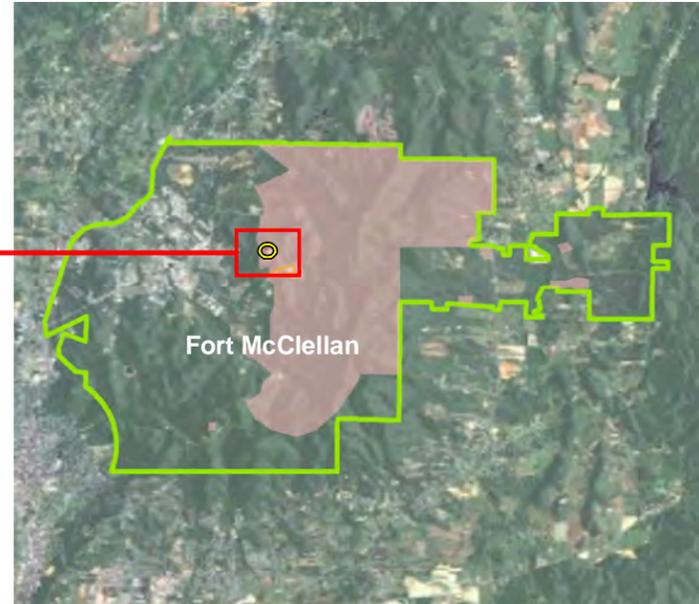
Figure 2

**Amendment to 2001 Ordnance and Explosives Disposal Support ESS
December 2008**



- New Magazine Location
- - - Gravel Roads
- 111 ft LTD - PTRD
- 395 ft PTRD
- 658 ft IBD
- ▨ Revised Bains Gap Road MEC Clearance for Lead Removal
- ☼ Aggregate Stockpile

Overview Map of Fort McClellan



<i>Environmental Protection & Utilities Branch</i> EPUB-GIS TEAM		U.S. Army Engineering And Support Center Huntsville, AL
Drawn By: GDW	Date Drawn: 12-17-2008	Project No.:
MXD: \\hnc-fs-gis\edgis\PROJECTS\ States\AL\McClellan\ESS_CharlieArea\ MXDs\Fig_2_magazine.mxd	PDF: \\hnc-fs-gis\edgis\PROJECTS\ States\AL\McClellan\ESS_CharlieArea\ PDFs\Fig_2_magazine.pdf	
	DISCLAIMER - The data represent the results of data collection/processing for a specific U.S. Army Corps of Engineers activity and indicates the general existing conditions. As such, it is only valid for its intended use, content, time, and accuracy specifications. The user is responsible for the results of any application of the data for other than its intended purpose.	



FOSTER WHEELER ENVIRONMENTAL CORPORATION

October 11, 2001

Ms. Lisa Kingsbury (ATZN-ENV)
U.S. Army Garrison
291 Jimmy Parks Blvd.
Fort McClellan, AL 36205-5000

Subject: Explosive Siting Plan, Final Draft, Delivery Order 009, Ordnance and Explosive Response at Fort McClellan, Alabama, Contract Number DACA87-99-D-0010

Dear Ms. Tadesse:

This letter transmits to the Fort McClellan Transition Force copies of the Foster Wheeler Environmental Explosive Siting Plan, Final Draft. As requested by Suzanne Murdock, USAESCH, Foster Wheeler Environmental will forward the following number of complete copies, including Attachments 1 and 2, to the appropriate commands:

USAESCH	6
U.S. Army Garrison, Fort McClellan, AL	13
Defense Ammunition Center (DAC)	2
DDESB (Submitted via DAC)	1

NOTE

DESTROY ALL PREVIOUS COPIES OF THIS EXPLOSIVE SITING PLAN

Of the thirteen copies provided, it is requested that your office forward four copies to TRADOC.

All changes to The Explosive Siting Plan have been implemented and USATCES (Jean Gallagher) has granted approval. As a portion of work required under Delivery Order 009, Foster Wheeler Environmental Corporation has prepared this Explosive Siting Plan in accordance with DoD 6055.9, Defense Ammunition and Explosives Safety Standards, July 1999 with July 2000 changes and DA Pam 385-64 Ammunition and Explosives Safety Standards, dated March 3, 2000. The format and substance of this plan are consistent with the requirements of Data Item Description 0E-005-04, dated March 3, 2000 contained in our basic contract. The Fort McClellan Task Force Headquarters has allocated the indicated location for the purpose of constructing and operating an Explosive Storage Facility.

This Explosive Siting Plan (Enclosure) is submitted as the first stage in the design and construction of an explosive storage area at Fort McClellan in Alabama. Construction and operation of this facility is essential for the continuing operations to remove ordnance and explosive materials and unexploded ordnance from Fort McClellan. Construction

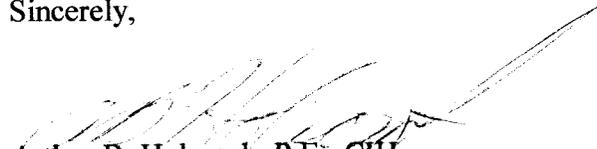


and acceptance of the facility must be complete by First Quarter, FY 2001, due to the closing of the Alabama National Guard Ammunition Supply during that quarter. Contracts have been awarded to the required subcontractors, however, work expected to last approximately five weeks, will not commence until DDESB approval of the Explosive Siting Plan.

This plan must be approved by the DoD Explosive Safety Board before the facilities may be utilized for storage of explosive materials.

If you have any questions, or require any additional information, please contact Mr. Steve Paulus or me at (256) 820-7904.

Sincerely,



Arthur B. Holcomb, P.E., CIH
Project Manager

Enclosure, as stated

CF: Mr. Charles Twing, US Army Engineering and Support Center, Huntsville
Mr. Dan Copeland, US Army Engineering and Support Center, Huntsville
Mr. Tom McMeans, US Army Engineering and Support Center, Huntsville
Ms. Suzanne Murdock, US Army Engineering and Support Center, Huntsville



EXPLOSIVE SITING PLAN

**Ordnance and Explosives Disposal Support
Fort McClellan, Alabama**

**Delivery Order 0009
Contract Number DACA87-99-D-0010**



**Contracting Agency
U.S. Army Corps of Engineers, Engineering and Support
Center
Huntsville, Alabama**

**Geographical Corps District
U.S. Army Corps of Engineers, Mobile District**

**Prepared by
Foster Wheeler Environmental Corporation
Fort McClellan, Alabama
October 11, 2001**

Explosive Siting Plan

Foster Wheeler Environmental Corporation

Fort McClellan, Alabama

1. **Background.** Foster Wheeler Environmental Corp. was selected by the U.S. Army Engineering and Support Center, Huntsville, to perform Ordnance and Explosive Response Activities at Fort McClellan Alabama, under contract number DACA 87-99-0010. Fort McClellan has been closed under the Base Realignment and Closure program, and is being cleared of hazardous materials and unexploded ordnance in anticipation of transfer of a substantial part of the property out of DoD control. Fort McClellan has been used for military training and operational activities for over 80 years. These activities included the firing of small arms, mortars, field artillery, rockets and infantry weapons, that have resulted in ordnance and explosive contamination in many training areas. In performance of work under this contract, Foster Wheeler Environmental Corporation is required to locate, access and dispose of ordnance and explosive materials, including unexploded ordnance. Disposing of unexploded ordnance requires the use of demolition explosives. Currently explosives used for the disposal of unexploded ordnance are stored in an ammunition storage facility under the control of the Alabama Army National Guard. This facility is expected to relocate during first quarter, FY 2002 to Pelham Range, and will no longer be available for storage of Foster Wheeler's explosive materials.

2. **Purpose.** The purpose of this Explosive Siting Plan is to gain approval for installation and operation of explosive storage and scrap processing facilities on Fort McClellan for the remaining duration of the unexploded ordnance removal activities currently scheduled to be completed in 2005. The U.S. Army Ammunition Supply Point, Magazine Storage Facility, Fort McClellan, Alabama currently in use by Foster Wheeler Environmental Corporation will close effective October 1, 2001. As a part of work under Delivery Order 009 of the aforementioned contract, Foster Wheeler Environmental Corporation has been tasked to establish and manage a new explosive storage facility to support their operations on Fort McClellan.

3. **Magazine and Scrap Processing Area.** The magazine and scrap processing areas will be located in a Foster Wheeler Environmental work site identified as the Bravo Engineering Evaluation and Cost Analysis (EE/CA) area. Foster Wheeler has been tasked to characterize the potential ordnance density in this area. This area has been broken down into high, medium and low ordnance probability "Sectors." These sectors are illustrated in Attachment 1. The sectors were established using Archive Search Reports, Conceptual Site Models and Physical Reconnaissance of the Bravo EE/CA area. Before the magazines are installed, work will be completed in this area. Should it become necessary to conduct Unexploded Ordnance (UXO) work within the magazine arcs, engineering controls will be used to protect the magazines.

4. **Explosive Storage Magazines.**

4.1 Type of Magazines

4.1.1 **Standards.** Foster Wheeler Environmental Corporation will locate, install, and maintain the magazines to comply with the magazine criteria, quantity-distance requirements and explosive compatibility requirements for bulk and initiating explosives established in DoD 6055.9-STD, Department of Defense, Ammunition and Explosives Safety Standards, July 1999

**Explosive Siting Plan
Foster Wheeler Environmental Corporation
Fort McClellan, Alabama**

with July 2000 changes and DA PAM 385-64, Ammunition and Explosives Safety Standards, dated 15 December 1999.

4.1.2. Magazine Type. Foster Wheeler Environmental Corporation will use two (2), portable, Bureau of Alcohol, Tobacco and Firearms (BATF) approved, Type 2, outdoor, above ground, box magazines. The magazines are ventilated and bullet, fire, weather and theft resistant. The dimension of each magazine is five (5) feet long by five (5) feet wide by seven (7) feet high. The weight of each magazine is 5,500 pounds.

4.1.3 Magazine Siting. The magazines will be sited as a single potential explosion site (PES). The magazines will be positioned so that both doors are facing away from the scrap-processing site. This position will pose the least risk to inhabited areas. Magazine to fence line distance will exceed six (6) feet.

4.1.4 Security. Security will be limited to non-sensored fencing, installed in accordance with U.S. Army Corps of Engineers Standard Details for Chain-Link Security Fences, drawings STD 87-90-04 and STD 872-90-09. Height of fencing will be six (6) feet with three- (3) strand barbed wire apron on extension arms. Bottom rails will be used to prevent "under the fence line" intrusion.

4.1.5 Lightning Protection. For lightning protection, each magazine will be grounded in accordance with EM1110-1-4009, Chapter 11, Figure 11-1, page 11-9. Refer to Attachment 2.

4.1.5.1 Inspections. A qualified electrical contractor will conduct all required visual and electrical tests and inspections in accordance with DA-PAM 385-64.

4.1.5.1.1 Visual inspections will be conducted every six- (6) months in accordance with paragraph B-2 and Table 6-1 of DA-PAM 385-64.

4.1.5.1.2 Electrical. Electrical Test will be conducted every twenty-four (24) months in accordance with paragraph B-4 and Table 6-1 of DA-PAM 385-64.

4.1.6 Restrictions.

4.1.6.1 Communications. Use of communications devices will be prohibited within thirty (30) meters of each magazine. Refer to Attachment 1.

4.1.6.2 Smoking. Smoking and open flames will be prohibited within fifty (50) feet of each magazine. Refer to Attachment 1.

4.1.6.3 Personnel. The magazines are located in an area secured by gates and signs. Refer to Attachment 1. Foster Wheeler Environmental UXO personnel and escorted subcontractors supporting the Fort McClellan contract will have access to this area. It is expected that 1-2 teams, each comprised of 3-7 UXO personnel, may be in the explosive storage/scrap processing area at any given time.

4.1.6.4 Roads. Access to the magazine storage and scrap-processing facilities is controlled by the Fort McClellan Transition Force Operations (FMTFO) security department. Attachment 1

**Explosive Siting Plan
Foster Wheeler Environmental Corporation
Fort McClellan, Alabama**

shows a series of gates, barricades and permanent blockades restricting access to the area. Gate keys are controlled by FMTFO and inventoried weekly.

4.2 Net Explosives Weight (NEW) and Hazard Division.

4.2.1 The NEW and Hazard Division for the proposed magazines are presented in Table 1 in accordance with EP1110-1-18.

Table 1. NEW and Hazard Division

MAGAZINE 1

DOT EX #	NAME	DOD Hazard Classification	Date Class	Quantity (pounds)
9608028	Shaped Charge Commercial	1.4D	19 Sep 97	28.4
9708095	Booster, Cast 3/4 pound	1.1D	10 July 01	190
9806054	Cord, Detonating	1.1D	2 Dec 98	11.46
9105268	Nonel (Shock Tube)	1.4S	10 July 01	50

MAGAZINE 2

DOT EX #	NAME	DOD Hazard Classification	Date Class	Quantity (pounds)
9303319	Cap, Electric	1.4B	10 July 01	5
9401031	Detonator Assembly EZTL 30	1.4B	10 July 01	9
9901072	Detonator Assembly EXEL 12	1.1B	10 July 01	6

4.2.1.1 Magazine 1 will be used to store Demolition Explosives (HE) up to 280 pounds N.E.W.

4.2.1.2 Magazine 2 will be used to store Blasting Caps up to 20 pounds N.E.W.

4.3 Quantity-Distance Criteria for Siting.

4.3.1 The quantity-distance criteria for magazine siting are presented in Table 2.

4.3.1.1 The distance of 1085 feet for inhabited buildings is established in accordance with DOD 6055.9 STD, Table C2.T1. The closest inhabited building is approximately 3200 feet from the proposed site.

4.3.1.2 The distance of 651 feet for Public Traffic Routes is established in accordance with

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DOD 6055.9 STD, Table C2.T1. The closest road to the proposed site is Bains Gap Road. This road is restricted by locked gates and is not open to the public. Refer to Attachment 1.

4.3.1.3 Magazine Intraline distance is 120 feet.

Table 2. Safe Separation Distances

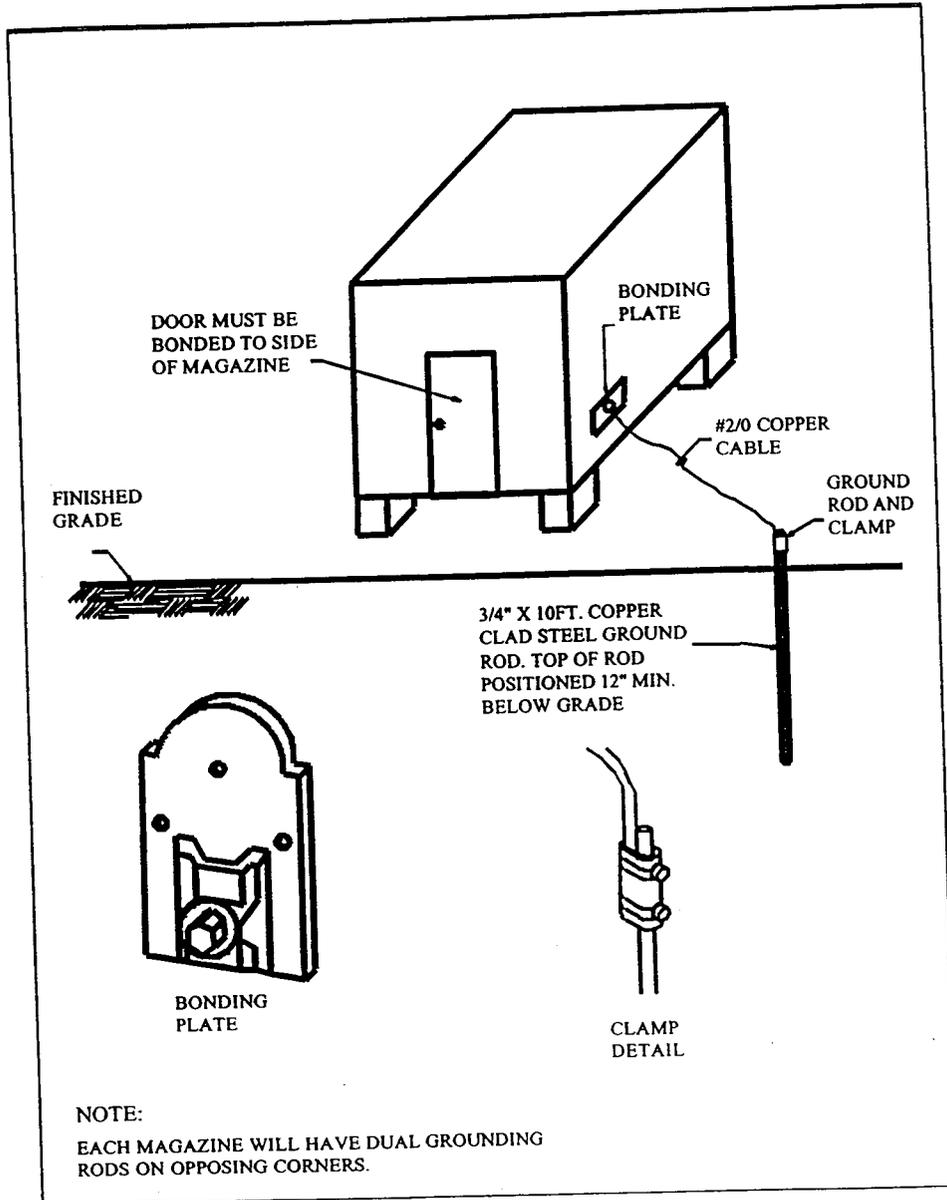
Magazine	Net Explosive Weight (NEW) lbs.	Distance in Feet to Inhabited Building:	Distance in Feet to Public Traffic Route From:
PES	300	1085	651

5. Scrap Storage/Processing. The Scrap Processing Site will not be manned full time. The scrap will be inspected in the field by the UXO Team Leader that finds the scrap. The scrap will be staged at a designated area until the scrap recovery team inspects the scrap prior to transporting to the Scrap Processing Area. As the items are loaded onto vehicles, in the field, they will be inspected to ensure that no explosive components are present. At the Scrap Processing Site, hard target scrap will be stockpiled in a processing area for future cutting or shredding. The miscellaneous scrap will be transported to a designated holding area and stored according to type (i.e., tires, lead painted wood, metal, etc.). All field collection, inspection, sorting and processing will be conducted by Foster Wheeler personnel. The process will be verified by the Quality Control Representative.

6. Site Map. The Ordnance and Explosives Storage and Scrap Processing Site and Access Control Detail Map is enclosed as Attachment 1.

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EM 1110-1-4009
23 Jun 00



MAGAZINE GROUNDING DETAIL