

**ENVIRONMENTAL ASSESSMENT
FOR
SITING OF THE BLUE GRASS CHEMICAL
AGENT-DESTRUCTION PILOT PLANT
AND ASSOCIATED ACCESS ROAD,
PARKING AREAS AND UTILITIES
AT THE
BLUE GRASS ARMY DEPOT**

**FOR:
DEPARTMENT OF THE ARMY
BLUE GRASS ARMY DEPOT
RICHMOND, KENTUCKY**

PREPARED BY:

**U.S. ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
OCTOBER 2004**

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1.0 PURPOSE AND NEED

Public Law 99-145, subsequent related legislation and an international treaty, the Chemical Weapons Convention (CWC), require destruction of the U.S. stockpile of lethal unitary chemical agents and munitions. Thus, the need of the proposed destruction activities at Blue Grass Army Depot (BGAD) is to (1) complete the destruction of the BGAD inventory of chemical agents in compliance with US. Public Law and the CWC, and (2) conduct the destruction activities in a safe and environmentally sound manner. The need for the proposed action is to eliminate the risk to the public and to the environment from continued deterioration of the munitions in storage, and to destroy obsolete and containerized munitions and agents. The Program Manager for Chemical Demilitarization, now part of the U.S. Army Chemical Materials Agency (CMA), prepared a Final Environmental Impact Statement (FEIS), dated, December 2002, to assess the potential health and environmental impacts of the construction, operation, and closure of a facility to destroy the chemical agent and munitions stored at BGAD.

The Record of Decision (ROD)(December 2002) based upon the FEIS did not specifically site the facility, or the access road and parking lots. The purpose of this EA is to (1) update biological and cultural information for the selected site, (2) address new access road alignment, and (3) site the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP), and associated facilities and utilities. In addition, a wastewater treatment plant will no longer be built; rather sewer lines will be installed from the facilities to the existing plant. The EA addresses the site-specific effects of the construction of two parking areas, a road, the BGCAPP and associated facilities and utilities. Sewer lines will also be installed to support the facility and are included in this analysis to the extent that they are not covered by the FEIS.

2.0 ALTERNATIVES CONSIDERED INCLUDING THE PROPOSED ACTION

2.1 Proposed Plan. The demilitarization facility siting process evaluated two site locations (see Fig. 2.3 of the FEIS) and three separate road alignments (see Appendix A). Site A was chosen for the location of the demilitarization facility, to be called the Blue Grass Chemical Agent Pilot Plant (BGCAPP). The road locations evaluated in the original FEIS were eliminated from consideration due to concerns (or effects) over safety, security, and endangered species. Three new road alignments were developed and evaluated. They are shown in Appendix A. The proposed road alignment (Road Plan C) was selected in order to avoid endangered species and cultural resources that were located within the other two proposed road alignments. The proposed plan consists of the construction of a road (approximately 8,200 linear feet) beginning at Kentucky Highway 52 traveling south between BGAD areas E and F and ends at the BGCAPP site (see Appendix B). The road will consist of 4 lanes (12' per lane) between Highway 52 and the Access Control Building located near Highway 52, and 2 lanes thereafter to the BGCAPP. A parking lot of approximately 400 spaces will be constructed near Kentucky Highway 52 located south of the access control building and west of the access road. An additional 600 space parking area will be located east of the BGCAPP facility (Appendix

B). In addition to the construction of the BGCAPP and associated facilities discussed in the FEIS, sewer lines will also be installed to support the facility. These utilities lines will be located along existing road right-of-way and will run parallel to existing utility lines.

2.2 Alternative Road Alignments. In addition to the proposed road alignment, two other alternative road alignments, Road Plans A and B, were considered. As shown in Appendix A, those alignments would have a significant impact on running buffalo clover, a federally-endangered species, and cultural resources potentially eligible for listing in the National Register of Historic Places (NRHP). Therefore, these road alignments were eliminated from further consideration.

2.3. No Action Alternative. The “No Action” alternative is not an option. The chemical weapons and agents that are currently stored at BGAD will continue to deteriorate and pose a greater risk to the workers, the environment and the general public. The temporary and minimal impacts from construction of the facilities and the roads would not occur.

3.0 AFFECTED ENVIRONMENT

3.1 General. The environmental setting of the project area is described in detail in the FEIS in section 4. The following supplemental information focuses on key components of the environment that are impacted by the project siting. Impacts to resources adequately addressed in the FEIS (such as Air, Water, etc.) are not discussed further in this EA.

3.2 Terrestrial. The area is described by Daniel Boone as the land of cane and clover. The land was a savanna type with mixed oaks and grass lands. The Knobs area, east of the Depot, was (and remains) a mixed hardwood forest with wet depressions. The 1939 air photos show that the land was farmland for crops and grazing with only shade trees along the larger drains. In the project area, vegetation composition has been altered because of the construction of BGAD. The land required for the proposed road, parking area and the BGCAPP is maintained as fescue-dominated pasture interspersed with shrubs and trees that are periodically mowed. Beginning at Highway 52 and continuing south for approximately 3,400 ft., the area consists of grassland (pasture and haylands with remnants of Little Bluestem) then becomes a mix of woods and grasslands for approximately 3,500 ft. Continuing south toward the BGCAPP facility, the habitat for the proposed road returns to fescue-dominated pasture for the remaining approximate 1,300 ft. The proposed road crosses an unnamed creek, a tributary of Muddy Creek. The stream crossing is approximately 3,200 ft. north of the BGCAPP. In addition, the proposed sewer line crosses several unnamed tributaries of Muddy Creek.

3.3 Wetlands and Aquatic Resources. There are wetlands scattered throughout the installation. According to the USFWS National Wetland Inventory maps (See Figure 4.9 from the FEIS) there are wetlands located approximately 0.5 miles south of the BGCAPP and small (less than 1 acre) wetlands occur along intermittent drainage

ways in the proposed area of the access road and the facility. The only small wetland to be effected by the proposed access road is located adjacent to the unnamed stream, a tributary of Muddy Creek, located near the road crossing at the unnamed stream, approximately 3,200 ft. north of the facility. A small section of sewer line will also cross several unnamed streams, tributaries of Muddy Creek, as reported in the *Biological Flora Assessment, Bluegrass Army Depot (BGAD) Proposed Sanitary Sewer Line To Service The Chemical Demilitarization Facility*, dated June 2004.

The Environmental Protection Agency lists Muddy Creek as a 303(d) priority one impaired stream. Simply stated, Muddy Creek has been determined to not support at least one of its designated uses, being swimming. The impairment is listed as pathogens from agriculture and sedimentation. The priority listing states the order, within the watershed, that mitigation measures will be implemented.

The most common fish species found in Muddy Creek are creek chub, bluntnose minnow, silverjaw minnow, creek chub, central stoneroller, rosefin shiner, green sunfish, longear sunfish, greenside darter, faintail darter Johnny darter, rainbow darter and Kentucky bass. Three species of freshwater mussels documented in the creek are Giant floater, Fatmucket and Creeper. The predominant crayfish is *Orconectes juvenilis*. Muddy Creek has a variety of other aquatic invertebrates including species of mayflies, caddisflies, stoneflies, damselflies and water pennies.

3.4 Cultural Resources. Pertinent technical reports and publications were consulted from the U.S. Army Corps of Engineers-Louisville District Office and BGAD in Richmond, Kentucky to provide information on significant cultural resources, environmental data, overall cultural history, and previous investigations conducted within the project area and region. Results of this literature review identified one prehistoric site, 15MA185, within the project area. This site is described as a moderately dense prehistoric lithic scatter of an unknown cultural affiliation. No properties or districts currently listed on, or pending nomination for, the NRHP were identified within the project area.

Results of an archaeological field investigation relocated site 15MA185 and identified three additional archaeological sites within the project area: Site 15MA376, 15MA377 and BGAD Site 4 (all shown on Appendix A). Site 15MA185 is a small, unknown prehistoric habitation site, likely a field camp, and a very small historic artifact scatter. Site 15MA376 is the remnants of a historic farmstead complex dating to the mid-nineteenth century. Several surface features were identified within this site including a cistern, a root cellar, a corral or animal pen, and the footers for structures. Site 15Ma377 is an unknown prehistoric limited activity site and an isolated historic find. BGAD Site 4 is the remnant of an unknown historic dump and an isolated prehistoric find. This site was not given an official state site number by the Kentucky Office of State Archaeology. Based on the results of this investigation sites 15MA185 and 15MA376 are in need of additional work to determine their eligibility for listing to the National Register of Historic Places (NRHP), but Site 15MA377 and the BGAD Site 4 are ineligible for listing in the NRHP and thus no further work is recommended.

3.5 Endangered Species. The U.S. Fish and Wildlife Service (USFWS) has identified seven Federally-listed endangered species as occurring within 30 miles of BGAD: three mussel species, three bat species, and one plant species. Five Federally-listed threatened species and three candidate species for listing are also known to occur within this area.

Of the listed species, only the bald eagle (*Haliaeetus leucocephalus*), and the running buffalo clover (*Trifolium stoloniferum*) are known to occur at BGAD. The bald eagle probably occurs as a migrant to Lake Vega and other water bodies on post and in the region. No nesting has occurred and no resident birds exist. The running buffalo clover occurs most commonly on rich soils in habitats with filtered light such as open woodlands, savannas, floodplains, and mesic stream terraces on well-drained sites. The clover has been positively identified as shown in Appendix A. Summer roost and foraging habitat for the endangered Indiana bat (*Myotis sodalis*) may exist within the proposed project area but previous surveys have not shown the Indiana bat exists on the depot.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Terrestrial. The proposed access road will extend approximately 1-1/2 miles south into BGAD starting at Highway 52 and will be approximately 24 ft wide with 6-foot shoulders. Extending approximately 3,400 ft. from Highway 52 the area is predominately grassland (pasture and hayland), with small portions of Little Bluestem native grass. As the proposed road continues south, it connects to an existing roadbed and follows it for approximately 2,000 ft. then cutting through a mix of forest and pasture area. The last 1,300 ft on the south end of the proposed road consists of fescue-dominated pasture. The proposed parking areas located at the north end of the access road consist of fescue-dominated pastureland (interspersed with Little Bluestem native grass) while the south parking area and the location of the BGCAPP consists of a combination of fescue-dominated pastureland and woods. The proposed road, parking areas, and chemical demilitarization facility, including support buildings, would remove upland forest and grassland communities (including a small portion of Little Bluestem native grass remnants) through its entirety. However, similar habitat is relatively common throughout BGAD. Sewer lines will be located along existing road right-of-way and parallel existing utilities. Therefore, the impact to the terrestrial environment will be minimal.

4.2 Wetlands and Aquatic Resources. A site visit was conducted by a Corps of Engineers ecologist and found that the access road would cross a small wetland near an unnamed stream, located approximately 3,200 ft north of the BGCAPP. The proposed road will have an impact on the wetland. There are no other alternatives that will have a less adverse impact to the wetland. As indicated in the FEIS, there is a small wetland, identified on USFWS national wetland inventory maps, of less than 1 acre (i.e., a farm pond) in the area where BGCAPP will be built. The maps were developed in the 1980's by remote sensing and their use is for the determination of the potential existence of a

wetland. A site investigation by Corps of Engineers (Corps) professionals has determined that there are no jurisdictional wetlands, as jointly defined by the Corps, the U.S. Environmental Protection Agency, the USFWS and the Natural Resources Conservation Service, and therefore, it has been determined that no regulated wetlands will be affected by the construction of the BGCAPP. There are no other wetland areas located within the designated access road, parking areas or chemical demilitarization facility. There are several, small unnamed streams, all tributaries of the Muddy Creek watershed, that will be crossed with the installation of the sewer line. These areas have been previously disturbed by the construction of secondary roads and underground water lines. In addition, the crossings of these streams are covered under the general Nationwide Permit.

A Section 404(b) (1) Evaluation (Appendix C) has been prepared for the crossing of unnamed stream affected by the access road and the sewer line and the construction of the BGCAPP. This evaluation has found that the construction should have no detrimental effect on the aquatic ecosystem of BGAD. In accordance with Section 401 of the Clean Water Act, a Water Quality Certification will be obtained for this activity from the Kentucky Department for Environmental Protection, Division of Water. Any mitigation measures required by the water quality certification are likely to include siltation fencing or other mechanical erosion control measures that would eliminate runoff at points where surface disturbance could otherwise affect aquatic habitats. Implementation of best management practices for erosion control and spill response would cause impacts on aquatic habitats and fish species to be of little or no consequence. In addition sound engineering design and careful placement of fill material will limit impacts to aquatic resources. Use of the mitigation measures required by the certification will keep impacts to wetlands and aquatic resources to a minimal and insignificant level.

4.3 Cultural Resources Changes to the design and scope of the proposed project were made to avoid significant impacts to cultural bearing deposits represented at sites 15MA185 and 15MA376. Therefore, the proposed undertaking will have no affect on cultural resources and/or historic properties within the area of potential effect. The BGAD cultural resource manager will monitor the archaeologically sensitive areas throughout construction and remain on call in case of any inadvertent discovery of archaeological materials.

As part of the NEPA process, the EA will be made available to the appropriate Federally recognized Native American tribal groups with current or ancestral ties to the BGAD area in order to solicit comments and information on the proposed action (Appendix E). All comments received will be considered.

4.4 Endangered Species. Louisville District biologists conducted field surveys on 6 occasions during the period from March to July 2003 to evaluate potential impacts of the proposed road alignments on running buffalo clover. On each field survey, 2 biologist walked the entire length of the proposed road alignment covering the 500' wide corridor limits designated for the proposed road. The spring site visits showed no clover yet in bloom. Subsequent site visits were conducted approximately every 2

weeks until positive identification of running buffalo clover could be established. As running buffalo clover is comparable, native and otherwise, to other clovers in the area, the distinct characteristics, stolons or runners that extend from the base of the plant, had to be visible before positive identification could be made. Positive identification of a new small population of 3 or 4 plants was located within the 500' corridor designated as proposed routes A and B for the road alignment. These discoveries lead to the currently proposed alignment. Corps of Engineers personnel, along with personnel from the U.S. Fish and Wildlife Service, further conducted a survey of the final access road alignment on August 21, 2003 and found that all known running buffalo clover populations will be avoided. Field surveys were again conducted for running buffalo clover from 9 April – 10 June, 2004 for the access road and the chemical demilitarization site. A subsequent report entitled *Environmental Investigation for the Proposed Chemical Demilitarization Facility* reports the findings. In addition, field surveys were conducted on 13, 20-21 May 2004 for the proposed sanitary sewer line and lift station and the report entitled *Biological Flora Assessment, Bluegrass Army Depot (BGAD), Proposed Sanitary Sewer Line to Service the Chemical-Demilitarization Facility*, indicates no direct affect on running buffalo clover. In summary, no known running buffalo clover populations will be directly affected by the construction of the BGCAPP, associated facilities and utilities, the access road and parking lots or the sewer line. Consultation with U.S. Fish and Wildlife Service resulted in concurrence that the proposed construction is not likely to adversely affect the endangered running buffalo clover (Appendix D).

To avoid potential adverse impacts to summer-roosting Indiana bats, any tree removal activities will be restricted to the period between October 15 and March 31. If winter tree removal is not possible, the project area will be surveyed prior to or during the Indiana bat summer roosting season to determine the presence or absence of the Indiana bat and the potential impacts.

The proposed project will have no adverse effect on bald eagles due to the fact that similar habitat is available in other areas of the installation.

4.5 Cumulative Effects Cumulative impacts result when incremental impacts combine with those of other ongoing or planned activities in the same geographical area to create a collectively significant impact.

The cumulative effects (air quality, water quality, noise, socioeconomic, etc) of the construction and operation of the facility, the access road and the associated utilities have been adequately addressed in the FEIS. In addition, BGAD has completed Records of Environmental Consideration (REC) for Installation of Sewer Lines and Lift Stations, and Installation of Communication Lines for the Chemical Demilitarization Support. These RECs are maintained at BGAD and are available for review. The environmental impacts for these actions in the areas of air quality, water quality, noise, socioeconomic, etc are similar in nature to the impacts addressed in the FEIS. The finding from the FEIS and the RECs is that there was no significant impact from these projects. Therefore, discussion of cumulative effects for the purpose of this EA is limited to impacts to any cultural or environmental resources affected by the physical location of the facilities.

Extensive surveys were conducted to locate cultural resources and endangered species, primarily running buffalo clover, in order to eliminate any possible adverse impacts. As a result, the proposed road alignment was selected to avoid prehistoric and historic cultural resources and identified locations of running buffalo clover. In addition, surveys were conducted for the full extension of the sewer line, a warehouse, and the chemical demilitarization building, to locate cultural resources and endangered species. The sewer line will run parallel to existing paved roadways and other utilities, including the communication lines. The surveys identified no adverse effects to cultural resources or endangered species for the site location of the warehouse and chemical demilitarization building, including support buildings.

In summary, it has been determined that there will be no additional identifiable cumulative effects for the site locations of these facilities.

5.0 COMPLIANCE WITH OTHER ENVIRONMENTAL REQUIREMENTS

5.1 National Environmental Policy Act (NEPA). It is anticipated that a Finding of No Significant Impact (FONSI), based upon this EA, will fulfill the requirements of NEPA.

5.2 Clean Water Act Prior to construction start-up, a storm-water permit will be obtained from the Kentucky Division of Water. BGAD will insure that all conditions of this permit will be met. Additionally, any requirements of Section 404 (b)(1) of the Clean Water Act will be met. The Section 404(b)(1) Evaluation for the project is included as Attachment C.

5.3 Clean Air Act. Madison County, Kentucky and the surrounding area are considered as an attainment area as defined in the Clean Air Act. Construction of the proposed project will only have a minor and temporary effect on air quality, and no additional work is required with regard to the Clean Air Act.

5.4 Fish and Wildlife Coordination Act (FWCA). Letter dated September 2, 2003 initiated consultation with USFWS and a subsequent letter from USFWS was received, dated October 1, 2003 (Appendix D). Site development plans have incorporated the USFWS conditions. BGAD is committed to the protection of endangered species and their critical habitat.

5.5 Comprehensive Environmental Resource Compensation Liability Act (CERCLA) and Resources Conservation and Recovery Act (RCRA). These two acts pertain to hazardous, toxic and radioactive wastes (HTRW). A site inspection was performed on the area considered for the proposed access road, the chemical demilitarization facility and its associated utilities and there is no evidence found that would indicate a reasonable probability of HTRW contamination on the project site.

5.6 Farmland Protection Policy Act (FPPA). The FPPA directs Federal agencies to identify and take into account the adverse effects to their programs on the preservation of farmlands. Mr. Bobby Elkins of the Madison County Conservation District verified that no prime farmland exists within the proposed project area. Therefore, no land designated as prime farmland will be affected by the proposed work.

5.7 Floodplain Management E.O. 11988. The objectives of Executive Order (EO) 11988 have been considered. The following determination has been made pertaining to Floodplain Management: The considered action does not conflict with applicable state and local standards concerning Floodplain protection. The considered action will have no affect on the floodplain.

5.8 Intergovernmental Review of Federal Programs (E.O. 12372). The EA is being distributed to Federal, State and local government agencies having jurisdictional responsibilities, or otherwise having an interest in the project.

6.0 COORDINATION

Throughout the preparation of this EA, consultation took place between the U.S. Army Corps of Engineers, the preparer, and the following agencies/individuals:

U.S. Fish and Wildlife Service
Kentucky State Historic Preservation Office
Tom Edwards, Kentucky Department of Fish and Wildlife
Alan Colwell, Blue Grass Army Depot
Joe Elliott, Blue Grass Army Depot
Ruth Flanders, Env. Law Team Leader, Aberdeen Proving Ground, MD
Marsha S. Goldberg, Env. Project Manager, Argonne National Laboratory,
Washington, DC
Jon Ware, Env. Team Leader, Aberdeen Proving Grond, MD
Nathan White, Blue Grass Army Depot

This EA will be provided, for comments, to pertinent agencies, public officials, and interested individuals.

7.0 REFERENCES

Bader, Anne Tobbe, 2004. *A Phase I Archaeological Survey of 77.9 Acres at the Proposed Chemical Demilitarization Facility Construction Site*. AMEC Earth & Environmental Inc., Louisville, Kentucky.

Blue Grass Army Depot, 2004. *Record of Environmental Consideration, Installation of Sewer Lines and Lift Stations, Blue Grass Army Depot, Richmond, Kentucky 40475*. Environmental Office

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Chanda, Thomas M., 2004. *Environmental Investigation for the Proposed Chemical Demilitarization Facility*. U.S. Army Corps of Engineers, Louisville District.

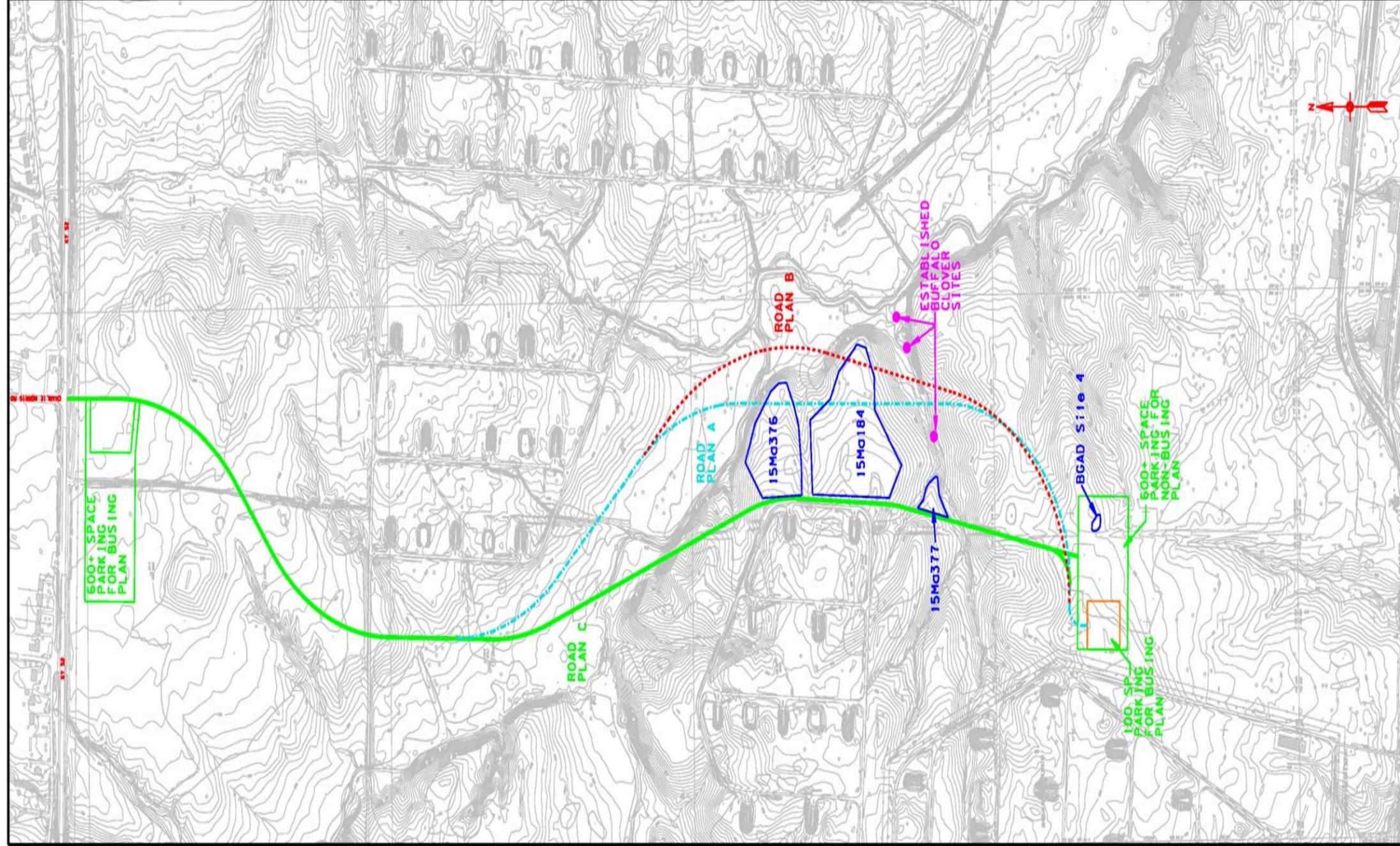
Chanda, Thomas M., 2004. *Biological Flora Assessment Bluegrass Army Depot (BGAD) Proposed Sanitary Sewer Line to Service the Chemical – Demilitarization Facility*. U.S. Army Corps of Engineers, Louisville District.

Department of the Army, 2002. *Destruction of Chemical Munitions at Blue Grass Army Depot, Kentucky, Draft Environmental Impact Statement*. Department of the Army. Program Manager for Chemical Demilitarization.

Keeney, Keith A., 2004. *A Phase I Cultural Resources Survey of the Chem-Demil Road Access Project at Blue Grass Army in Madison County, Kentuck*. U.S. Army Corps of Engineers, Louisville District.

APPENDIX A

**ROAD ALTERNATIVES
AND ENVIRONMENTAL SITES**



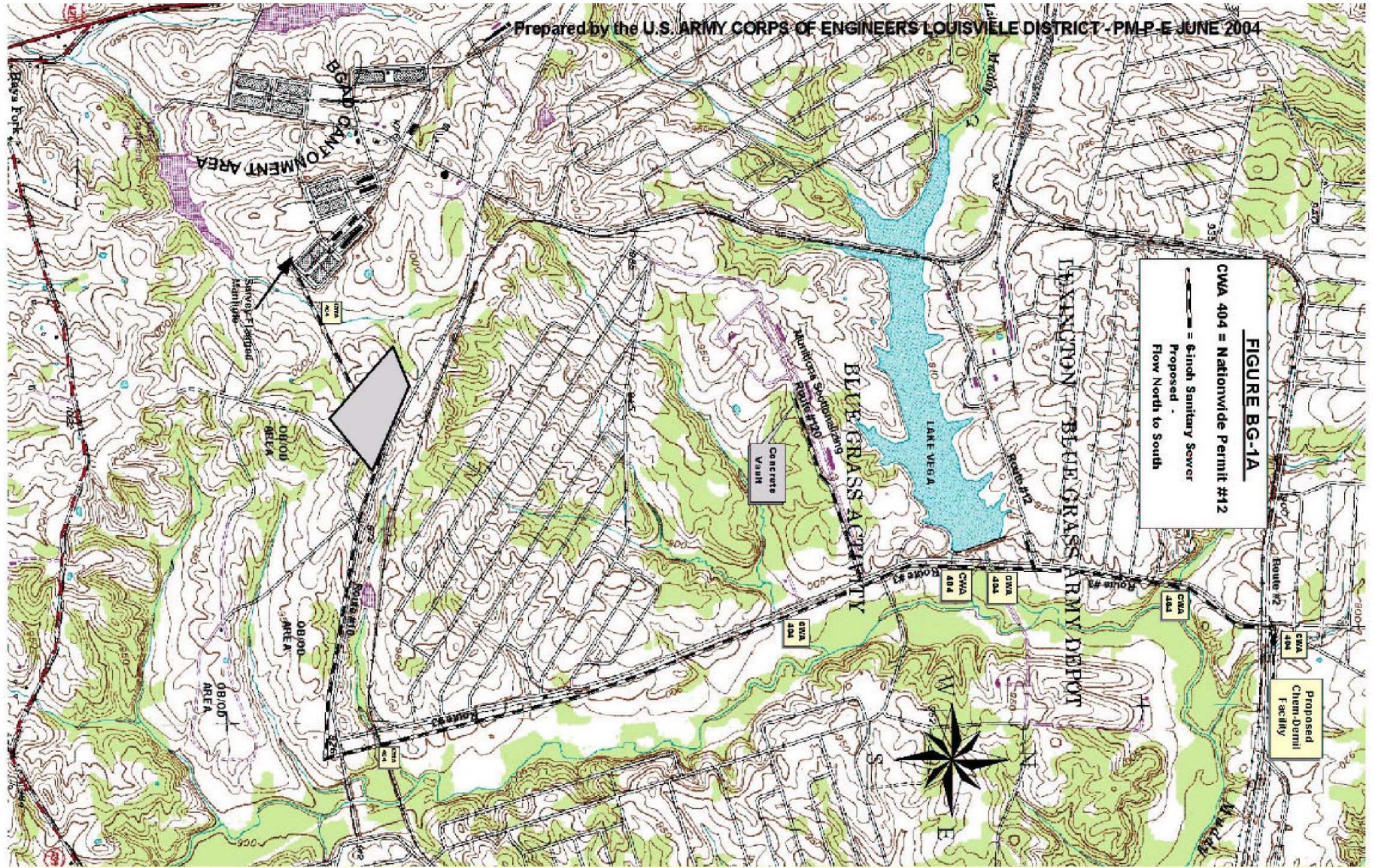
**DESIGN
DATA REVIEW
ROAD ALTERNATIVES &
ENVIRONMENTAL SITES
AUGUST 2004**

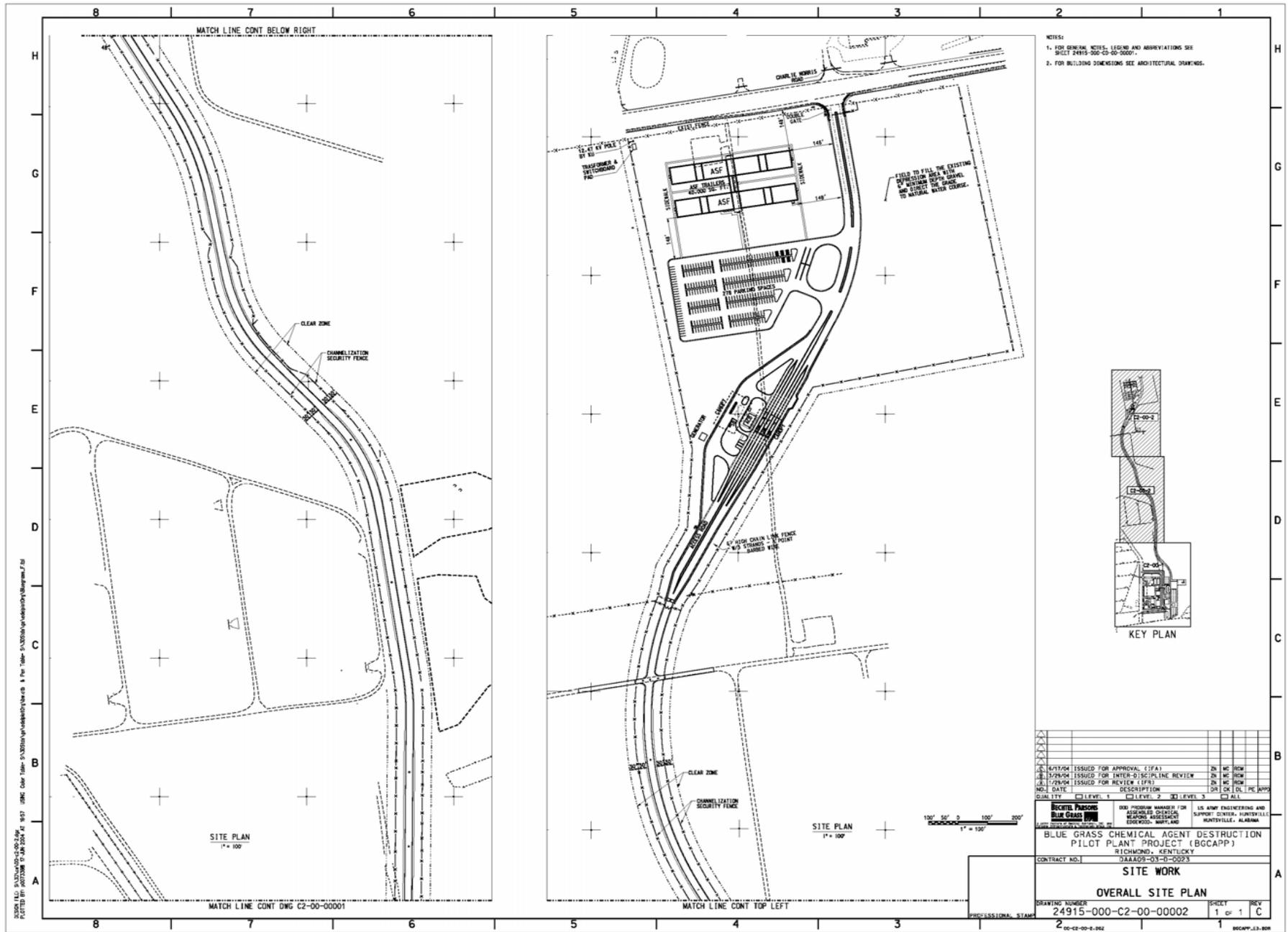
BLUEGRASS ARMY DEPOT
AMMUNITION DEMILITARIZATION
SUPPORT PHASE 3
CHEMICAL SUPPORT BUILDING
**ACCESS CONTROL BUILDING &
ACCESS ROAD**

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APPENDIX B
PROPOSED PLANS





APPENDIX C
SECTION 404 (b)(1) EVALUATION

SECTION 404(b) (1) EVALUATION
SITING OF THE BLUE GRASS CHEMICAL AGENT-DESTRUCTION PILOT
PLANT
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1. PROJECT DESCRIPTION

A. Location. The project is located on 119 acres within Madison County, at the Blue Grass Army Depot (BGAD), south of Richmond, Kentucky. The proposed road, BGCAPP facilities, parking area and utilities will be located off of Kentucky Highway 52 and run generally south for approximately 1-1/2 miles into BGAD. An approximately 400-space parking lot will be constructed near Kentucky Highway 52 located south of the access control building and west of the access road. A 600-space parking area will be located east of the BGCAPP facility, which will be at the southern end of the access road. The subject parcel is owned by the U.S. Army.

B. General Description. Public Law 99-145, subsequent related legislation, and an international treaty, the Chemical Weapons Convention (CWC), require destruction of the U.S. stockpile of lethal unitary chemical agents and munitions. Thus, the purpose of the proposed destruction activities at BGAD is to: (1) complete the destruction of the BGAD inventory of chemical agents in compliance with US. Public Law 99-145 and the CWC and (2) conduct the destruction activities in a safe and environmentally sound manner. The need for the proposed action is to eliminate the risk to the public and to the environment from continued deterioration of the munitions in storage and to destroy obsolete and containerized munitions and agents.

C. Authority and Purpose. The purpose of this project is to construct a chemical demilitarization facility, to be called the Blue Grass Chemical Agent Pilot Plant (BGCAPP), a road and parking areas to be used to transport construction equipment to the facility, to transport workers between parking areas and the facility, to remove solid waste from the facility and to construct a warehouse, sewer, and communication lines to support the facility. The U.S. Army is destroying the nation's stockpile of lethal chemical agents and munitions under Congressional directive (Public Law 99-145) and the CWC.

D. General Description of the Fill Material. The proposed action will require placement of approximately 418 cubic yards (CY) of earth fill material from an on-site borrow area for construction of one stream crossing. The borrow will be taken from the roadwork spoil from the construction of the road.

E. Description of the Proposed Discharge Site. The proposed project is located in eastern Kentucky near the town of Richmond, in Madison County, Kentucky.

Historically wetlands are common in the area due to many watercourses, soil types, and geomorphic features.

The area was most likely a savanna with oaks scattered over the area before farming and construction of BGAD. The native animal and plant populations that thrived in the area have greatly been reduced or eliminated because of farming and the construction of BGAD.

1. Aquatic. Aquatic resources within the project area have been altered by the construction of BGAD. The area has numerous small watercourses (tributaries of Muddy Creek) because of the geomorphic features of the area. Muddy Creek is listed as a 303(d) priority one impaired stream by the Environmental Protection Agency due to pathogens and sedimentation. The fishery of Muddy Creek includes creek chub, bluntnose minnow, central stoneroller, silverjaw minnow, rosefin shiner, green sunfish, longear sunfish, greenside darter, fantail darter, Johnny darter and Kentucky bass. The proposed road crosses an unnamed creek, a tributary of Muddy Creek. The stream crossing is approximately 3,200 ft. north of the proposed BGCAPP. One small wetland exists near the stream. There are several, small unnamed streams, all tributaries of the Muddy Creek watershed, that will be crossed with the installation of the sewer line. These areas have been previously disturbed by the construction of secondary roads and underground water lines. In addition, the crossings of these streams are covered under the general Nationwide Permit. There is a small wetland, identified on USFWS national wetland inventory maps, of less than 1 acre (i.e., a farm pond) in the area where the Chemical Demilitarization facility will be built. The maps were developed in the 1980's by remote sensing and their use is for the determination of the potential existence of a wetland. A site investigation by Corps of Engineers (Corps) professionals has determined that there are no jurisdictional wetlands, as jointly defined by the Corps, the U.S. Environmental Protection Agency, the USFWS and the Natural Resources Conservation Service, and therefore, it has been determined that no regulated wetlands will be affected by the construction of the BGCAPP. There is no other wetland areas located within the designated access road, parking areas or chemical demilitarization facility construction areas.

2. Terrestrial Habitat. The land involved in the proposed road and parking area for the BGCAPP is maintained as fescue-dominated pasture interspersed with Little Bluestem native grass remnants and shrubs and trees that are periodically mowed. Beginning at Highway 52 and continuing south for approximately 3,400 ft., the area consists of pasture then becomes a mix of woods and pasture for approximately 3,500 ft. Continuing south toward the BGCAPP the habitat for the proposed road returns to fescue-dominated pasture for the remaining approximate 1,300 ft.

The vegetation of the area, not altered by agricultural fields, or BGAD, consists of an oak-hickory forest type with wet-depressions. In the project area vegetation composition has been altered because of the construction of BGAD. Common tree species of the forested areas in and around the project area are composed of 75% black cherry and black walnut, with the remaining composed of hickory, sugar maple, red and white oak, ash,

black and honey locust, sycamore, willow, sassafras and redbud. Avian species common to the wetland and riverine forested areas are redwing blackbird, green heron, great blue heron, common flicker, pileated woodpecker, eastern kingbird, brown thrasher, robin, turkey, blue birds, bobwhite quail, woodcock, red-tailed

hawk, American kestrel, morning dove, and grackle. Mammals most commonly found within the area include river otter, beaver, deer, squirrel, rabbit opossum, raccoon and skunk.

F. Description of Disposal Method. Sound engineering practices and stormwater pollution controls will be followed and implemented during all phases of project construction to prevent siltation of downstream channels. The construction of the crossings will be by mechanical means so as to produce a well-constructed and stable project.

2. FACTUAL DETERMINATIONS OF POTENTIAL SHORT-TERM OR LONG-TERM IMPACTS.

A. Physical Substrate Determinations. The sites consist of relatively narrow moderately sloped valleys. The landscape is undulating and has winding ridges and U-shaped valleys and the soils are clayey.

B. Water Circulation, Fluctuation, and Salinity Determinations. Water chemistry, odor, taste, dissolved oxygen levels, and nutrients will not be adversely affected by the proposed project. The proposed project will have no significant effect on current water flow patterns, velocity and the hydrologic regime within the project area. Salinity is not a consideration.

C. Suspended Particulate and Turbidity Determinations. Turbidity levels may be slightly elevated locally during construction. Following construction activities, turbidity levels will return to pre-construction levels. The fill materials will not have an effect on the chemical and physical properties of adjacent waterways or wetlands. Primary production in the waterways and adjacent wetlands will not be affected due to the temporary state of suspended particulates and turbidity. After construction the project will have no post-construction suspended particulate or turbidity that will affect fisheries.

D. Contaminant Determination. The fill material is on site roadwork spoil. A Phase 1 Environmental Site Assessment conducted for the project area concluded there is no reason to believe that the proposed fill material is a carrier of contaminants. The proposed project meets the state of Kentucky testing exclusion criteria for material analysis for dredge and fills activities.

E. Aquatic Ecosystem and Organism Determinations. The construction of the project will impact about 119 acres of land. No existing known fish spawning or rearing areas will be impacted by the project. An appropriate level of study of the operations of

the project has indicated that no impacts on current patterns, velocity or the hydrologic regime in the area will occur.

F. Proposed Fill Site Determinations. Presently the area is managed as a munitions storage area. Therefore, construction of the road for the chemical facility should not adversely affect this area. Placement of the fill materials will not violate Kentucky water quality standards. There will be no effect on municipal water supplies, and no recreation fishery will be adversely affected.

G. Determination of Cumulative Effects on the Aquatic Ecosystem. Construction of the road, the parking areas and the facilities should have no detrimental effect to the aquatic ecosystem of BGAD or the primary adjacent waterway. No other construction activities would be underway at the time of the proposed road site and stream crossing fill activities that would cause cumulative impacts. Therefore, no cumulative effect can be attributed to the disposal of dredged and fill materials associated with the construction of the road or the sewer lines.

H. Determinations of Secondary Effects on the Aquatic Ecosystem. Construction of the proposed project will not affect existing flood control. Construction of the project will not adversely impact aquatic life in the area. It has been determined that the proposed project will have no significant effect on current water flow patterns, velocity and the hydrologic regime of the area, adjacent to wetlands or receiving streams.

3. FINDING OF COMPLIANCE OR NON-COMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE.

A. Evaluation of Availability of Practicable Alternatives to Proposed Discharge Site, Which Would Have Less Adverse Impact on the Aquatic Ecosystem. Construction and operation of the proposed project will impact the environment of the area. There is no alternative to the proposed discharge site known, which will have less adverse impact on the aquatic ecosystem.

B. Compliance with Applicable State Water Quality Standards. As required by Section 401 of the Clean Water Act, a Water Quality Certification, will be requested from the State of Kentucky, and will be attached to this evaluation report.

C. Compliance with Applicable Toxic Effluent Standard or Prohibition under Section 307 of the Clean Water Act. The fill placement operations will not violate Section 307 of the Clean Water Act.

D. Compliance with Endangered Species Act of 1973, as Amended. Potential impacts on endangered species were considered in the Environmental Assessment for this project. Based on review of available information, it is the Louisville District's opinion that the construction and operation of this project will not likely jeopardize existence of any endangered species.

E. Evaluation of Extent of Degradation of the Water of the United States. The considered placement of fill will result in no significant adverse impact on human health and welfare, including municipal and private water supplies, recreation and commercial fishing, plankton, shellfish, wildlife and endangered species. Life stages of aquatic and terrestrial species will not be adversely affected. No significant adverse effects on aquatic ecosystem diversity, productivity and stability will occur. Recreational, aesthetic and economic values will not be adversely affected.

F. Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem. Appropriate steps to minimize potential adverse impacts of the discharge on the aquatic system of adjacent waterways and wetlands include sound engineering design and careful placement of fill material. In addition, the Contractor(s) placing the fill material will be governed by detailed contract specifications to prevent pollution and damage to the aquatic system as a result of construction activities and fill placement.

4. EVALUATION RESPONSIBILITY

On the basis of the guidelines, the considered site for the fill material is specified as complying with the requirements of these guidelines.

Date _____

MARTIN A. JACOBY
Commander
Blue Grass Army Depot

APPENDIX D
FISH AND WILDLIFE COORDINATION LETTERS



United States Department of the Interior

FISH AND WILDLIFE SERVICE

3761 GEORGETOWN ROAD

FRANKFORT, KY 40601

October 1, 2003

Mr. Mike Turner
U.S. Army Corps of Engineers
P.O. Box 59
Louisville, Kentucky 40201-0059

Subject: FWS #04-0028; Proposed construction of two parking areas and a road at the Bluegrass Army Depot, Madison County, Kentucky

Dear Mr. Turner:

Thank you for your correspondence of September 2, 2003, regarding the proposed construction of two parking areas and a road at the Bluegrass Army Depot in Madison County, Kentucky, as shown on the attachments to your correspondence. The proposed project is a late construction addition to the Army Chemical Stockpile Disposal Program Final Environmental Impact Statement for which an Environmental Assessment is being prepared. Fish and Wildlife Service (Service) personnel have reviewed the information, and we offer the following comments.

Information available to the Service indicates that wetlands exist in the vicinity of the proposed project. Attached is a copy of a portion of the Moberly quadrangle with the referenced wetlands highlighted. This information is provided for your convenience. We suggest that you thoroughly investigate the proposed project corridor to determine if any jurisdictional wetlands will be impacted by the proposed road and parking areas. At our recent site visit, several areas that may be wetlands were observed within the proposed project corridor. If these areas are wetlands and will be impacted by the proposed project, the Louisville District should prepare a wetland mitigation plan that would identify how these impacts would be mitigated.

Similarly, we note that the proposed project will cross several perennial, intermittent, and ephemeral streams. We recommend that plans for the proposed project include stringent erosion and sediment control measures and that these streams be bridged where possible. We also recommend that the design of each crossing be carefully considered and each crossing designed to pass flood flows without causing degradation to the streams. Crossings should also be designed to allow aquatic organisms to freely pass upstream and downstream of the crossing (e.g., the bottoms of culverts should be constructed at the grade of the stream and should be open bottom to maintain habitat connectivity).

In addition, we would like to see over-sized crossings (i.e., > 100-year flood event) at all stream crossings. This would help to ensure that riparian areas and stream banks are not degraded from scouring and that occupied and potential habitat for the federally listed running buffalo clover

and Indiana bats is maintained. We would expect the Louisville District to pay particular attention to road crossings that occur in watersheds where running buffalo clover populations are known. As we discussed at one site, an undersized culvert near the southern terminus of the project has the potential to cause bank destabilization that could result in the loss of at least one patch of running buffalo clover.

Two federally listed species may occur in the vicinity of the proposed project area. These species are listed below:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Federal Status</u>
Indiana bat	<i>Myotis sodalis</i>	endangered
running buffalo clover	<i>Trifolium stoloniferum</i>	endangered

Summer roost habitat for the endangered Indiana bat (*Myotis sodalis*), may exist within the proposed project site. Based on this information, we believe that forested areas in the vicinity of and on the project area may provide potentially suitable summer roosting and foraging habitat for the Indiana bat. Our belief that potentially suitable habitat may be present, and possibly occupied by this species, is based on the information provided in your correspondence, the fact that the project site and surrounding areas contain forested habitats that are within the natural ranges of these species, and our knowledge of the life history characteristics of these species.

The Indiana bat utilizes a wide array of forested habitats, including riparian forests, bottomlands, and uplands for both summer foraging and roosting habitat. Indiana bats typically roost under exfoliating bark, in cavities of dead and live trees, and in snags (i.e., dead trees or dead portions of live trees). Trees in excess of 16 inches diameter at breast height (DBH) are considered optimal for maternity colony roosts, but trees in excess of 9 inches DBH appear to provide suitable maternity roosting habitat. Male Indiana bats have been observed roosting in trees as small as 3 inches DBH.

Prior to hibernation, Indiana bats utilize the forest habitat around the hibernacula, where they feed and roost until temperatures drop to a point that forces them into hibernation. This "swarming" period lasts, depending on weather conditions in a particular year, from about September 15 to about November 15. This is a critical time for Indiana bats, since they are acquiring additional fat reserves and mating prior to hibernation. Research has shown that bats exhibiting this "swarming" behavior will range up to five miles from chosen hibernacula during this time. For hibernation, the Indiana bat prefers limestone caves, sandstone rockshelters, and abandoned underground mines with stable temperatures of 39 to 46 degrees F and humidity above 74 percent but below saturation.

Because we have concerns relating to this species on this project, we recommend that you only remove trees within the project area between October 15 and March 31 in order to avoid impacting summer roosting Indiana bats. However, if any Indiana bat hibernacula are identified on the project area or are known to occur within 10 miles of the project area, we recommend that the Louisville District only remove trees between November 15 and March 31 in order to avoid impacting Indiana bat "swarming" behavior.

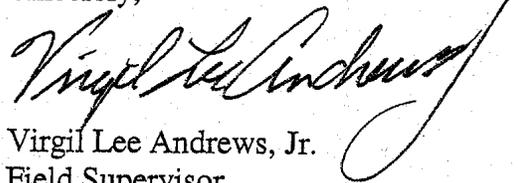
If this recommendation cannot be incorporated as a project condition, the Louisville District should survey the project area prior to or during the Indiana bat summer roosting season in which the proposed construction will occur. This will help us determine the presence or absence of the species within the project area in an effort to determine if potential impacts to these species are likely. A qualified biologist who holds the appropriate collection permits for these species must undertake such surveys, and we would appreciate the opportunity to approve the biologist's survey plan prior to the survey being undertaken and to review all survey results, both positive and negative. If any Indiana bats are identified, we request written notification of such occurrence(s) and further coordination and consultation with the Louisville District.

Several populations of running buffalo clover (*Trifolium stoloniferum*), a federally listed endangered plant, occur within the boundaries of the Bluegrass Army Depot, and within the project area. Running buffalo clover is known to occur in habitats ranging from stream banks and low mesic (moderately moist) forests to lawns and cemeteries. Although most populations of this species on the Bluegrass Army Depot are known, the Louisville District should survey the final project corridor during the flowering season for this species in order to determine the presence or absence of this species. This survey should be conducted in the year prior to or during which the proposed construction of the project will occur. A qualified biologist, and preferably one who holds the appropriate collection permits for this species, must undertake such surveys, and we would appreciate the opportunity to approve the biologist's survey plan prior to the survey being undertaken and to review all survey results, both positive and negative. If this species is identified, we request written notification of such occurrence(s) and further coordination and consultation with you.

As noted above, a patch of running buffalo clover exists just downstream of a proposed stream crossing. We request that the design of the crossing be adequate to support flooding events and prevent any bank scouring. This would avoid impacts to the species from bank destabilization and the loss of any potential habitat which may exist downstream of the crossing. Because of the potential impacts to running buffalo clover and the Indiana bat, we recommend that the Louisville District initiate informal consultation with this office under section 7 of the Endangered Species Act. The use of existing road corridors could preclude the need for additional consultation and reduce impacts to streams and wetlands.

Thank you for the opportunity to comment on this action. If you have any questions on the information we provided, please contact Mindi Brady at (502) 695-0468 (ext. 229).

Sincerely,



Virgil Lee Andrews, Jr.
Field Supervisor



United States Department of the Interior

FISH AND WILDLIFE SERVICE

3761 GEORGETOWN ROAD

FRANKFORT, KY 40601

July 26, 2004

Mr. Michael Turner
Supervisory Ecologist
Economics and Environmental
Protection Section
U.S. Army Corps of Engineers
P.O. Box 59
Louisville, Kentucky 40201-0059

Attention: Alan R. Colwell, Natural Resources, Building S-14

Subject: FWS #04-1391; Sewer Line Installation, Blue Grass Army Depot, Madison County, Kentucky

Dear Mr. Turner:

Thank you for your correspondence of June 21, 2004, regarding the proposed construction of 6.2 miles of sewer line on Blue Grass Army Depot (BGAD), Madison County, Kentucky. Based on your correspondence, 90 percent of the proposed sewer line installation will occur along previously disturbed and maintained road and power-line right-of-way areas. The remaining 10 percent (0.7 mile) of sewer lines will cross an open field/pasture. The sewer line will be used for the collection and transfer of human-generated sanitary wastewater from a proposed chemical demilitarization facility on BGAD.

We have reviewed the information that was submitted for the proposed project. The following constitute the comments of the U. S. Department of the Interior provided in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) and the Endangered Species Act.

Threatened and Endangered Species

Two federally listed species may occur within the proposed project area and are listed below:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Federal Status</u>
Indiana bat	<i>Myotis sodalis</i>	Endangered
Running buffalo clover	<i>Trifolium stoloniferum</i>	Endangered

Indiana Bat

Summer roost habitat for the endangered Indiana bat (*Myotis sodalis*) may exist within the proposed project area. Based on this information, we believe that forested areas in the project area may provide potentially suitable summer roosting and foraging habitat for the Indiana bat. Our belief that potentially suitable habitat may be present, and possibly occupied by this species,

is based on the information provided in your correspondence, the fact that the project site and surrounding areas contain forested habitats within the natural range of the species, our knowledge of the life history of the species, and our knowledge of the project area.

The Indiana bat utilizes a wide array of forested habitats, including riparian forests, bottomlands, and uplands for both summer foraging and roosting habitat. Indiana bats typically roost under exfoliating bark, in cavities of dead and live trees, and in snags (i.e., dead trees or dead portions of live trees). Trees in excess of 16 inches DBH are considered optimal for maternity colony roosts, but trees in excess of 9 inches DBH appear to provide suitable maternity roosting habitat. Male Indiana bats have been observed roosting in trees as small as 3 inches DBH.

Prior to hibernation, Indiana bats utilize the forest habitat around the hibernacula, where they feed and roost until temperatures drop to a point that forces them into hibernation. This "swarming" period lasts, depending on weather conditions in a particular year, from about September 15 to about November 15. This is a critical time for Indiana bats, since they are acquiring additional fat reserves and mating prior to hibernation. Research has shown that bats exhibiting this "swarming" behavior will range up to five miles from chosen hibernacula during this time. For hibernation, the Indiana bat prefers limestone caves, sandstone rockshelters, and abandoned underground mines with stable temperatures of 39 to 46 degrees F and humidity above 74 percent but below saturation.

If the proposed sewer line installation requires the removal of trees (Routes 3 and 120), we request that these activities be restricted to the period between October 15 and March 31 in order to avoid potential impacts to summer-roosting Indiana bats. If tree removal is restricted to this time period, then the Service believes that the proposed project is "not likely to adversely affect" the Indiana bat. In view of this, we believe that the requirements of section 7 of the ESA have been fulfilled for this action with respect to the Indiana bat. Your obligations under section 7 must be reconsidered, however, if (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

If winter tree removal cannot be incorporated as a project condition, the project area should be surveyed prior to or during the Indiana bat summer roosting season in which the proposed construction will occur. This will help us determine the presence or absence of the species within the project area in an effort to determine if potential impacts to these species are likely. A qualified biologist who holds the appropriate collection permits for these species must undertake such surveys, and we would appreciate the opportunity to approve the biologist's survey plan prior to the survey being undertaken and to review all survey results, both positive and negative. If any Indiana bats are identified, we request written notification of such occurrence(s) and further coordination with your office.

Running Buffalo Clover

Numerous populations of running buffalo clover (*Trifolium stoloniferum*), a federally endangered plant, occur within boundaries of the BGAD. Throughout its range, the species

occurs in habitats ranging from stream banks and low mesic (moderately moist) forests to lawns and cemeteries. The BGAD populations represent one of the largest known concentrations of the species and are a critical component of the species' recovery.

As documented in the biological assessment report completed by your agency, no populations of running buffalo clover were discovered during a field survey of the proposed project area, and the closest known population of the species occurs approximately 500 feet from the project boundary. The biological assessment concluded with a "no effect" finding for running buffalo clover. Based on the widespread occurrence of the species on the BGAD, the close proximity of the proposed project area to known running buffalo clover sites, and the importance of the BGAD populations to recovery efforts for the species, the Service cannot concur with the "no effect" finding reported in the biological assessment. The Service believes that a finding of "not likely to adversely affect" is more appropriate. If your agency concurs with this finding, no additional response is necessary, and we believe that the requirements of section 7 of the ESA have been fulfilled for this action with respect to running buffalo clover. Your obligations under section 7 must be reconsidered, however, if (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

Fish and Wildlife Resources

We note that seven unnamed tributaries in the Muddy Creek watershed will be crossed by the proposed sewer lines. In general, we are concerned that construction activities may frequently accelerate erosion and sedimentation in these systems, resulting in adverse effects to the aquatic environment and adjacent riparian areas that may support populations of running buffalo clover. The use of heavy equipment to move earth and existing vegetation disrupts natural drainage patterns and exposes large areas of disturbed soil to erosion. Excessive sedimentation can clog stream channels and contribute to increased flooding. It can also increase water temperatures and cause oxygen demands that can damage or destroy fish and invertebrate populations. Deposition of sediment on the channel bottom also degrades aquatic habitat by filling in substrate cavities, burying demersal eggs, and smothering bottom organisms. In addition, turbidity, as induced by accelerated erosion and sedimentation, results in further damage to aquatic systems. Increased particulate matter suspended in the water column may drive fish from the polluted area by irritating the gills, concealing forage, and/or destroying vegetation that may be essential for spawning and cover habitat for particular species. Turbidity also degrades water quality by reducing light penetration, pH and oxygen levels, and the buffering capacity of the water. Degraded water quality may continue downstream from where erosion occurs.

Prevention of excessive sedimentation can occur only through application of best management practices (BMPs) during daily project activities. Rigid application of erosion control standards can preclude most sedimentation problems. In some cases, however, additional measures will need to be taken by on-site inspectors that are trained in erosion and sediment control methods. We request that you consider having an inspector on-site during all harvest activities to ensure that work areas are stabilized on a daily or regular basis.

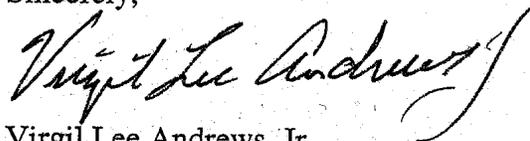
The following BMPs are specifically recommended for the avoidance and/or minimization of impacts to stream corridors:

1. Erosion and sediment control measures, including but not limited to the following, should be implemented on all vegetatively denuded areas:
 - a. Preventive planning: A well-developed erosion control plan which entails a preliminary investigation, detailed contract plans and specifications, and final erosion and sediment control contingency measures should be formulated and made a part of the contract.
 - b. Silt barriers: Appropriate use should be made of silt fences, hay bale and brush barriers, and silt basins in areas susceptible to erosion.
 - c. Temporary seeding and mulching: All disturbed areas should be seeded as soon as possible.
 - d. Limitation of in-stream activities: In-stream activities, including temporary fills and equipment crossings, should be limited to those absolutely necessary. A 100-foot no-disturbance buffer should be established along all stream corridors.
2. Existing transportation corridors should be used in lieu of temporary crossings where possible.

Efforts should be made to minimize any negative effects on wetlands and aquatic resources in the Muddy Creek watershed. The Kentucky Department of Fish and Wildlife Resources, The Nature Conservancy, and the Service are currently implementing a riparian and prairie habitat restoration initiative in the Muddy Creek watershed and much of this effort is centered around the recovery of running buffalo clover on non-federal lands. Since a portion of Muddy Creek flows through the BGAD, any positive efforts to help control on- and off-site erosion and sedimentation would be helpful and greatly appreciated. In particular, we recommend that appropriate best management practices be used during all phases of the timber harvest.

We appreciate the opportunity to provide input on the proposed project. If you have any questions, please contact Dr. Michael Floyd of my staff at (502) 695-0468.

Sincerely,



Virgil Lee Andrews, Jr.
Field Supervisor

APPENDIX E

**MAILING LIST
NATIVE AMERICAN TRIBAL GROUPS
AGENCIES, PUBLIC OFFICIALS,
INTERESTED INDIVIDUALS, AND MEDIA**

Mailing List
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Mr. Charles Enyart
Chief Eastern Shawnee Tribe of Oklahoma
P.O. Box 350
Seneca, MO 64865

Mr. Leon Jones
Principal Chief Eastern Band of Cherokee Indians
P.O. Box 455
Cherokee, NC 28719

Mr. Bill Anoatubby
Governor Chickasaw Nation
Arlington at Mississippi
P.O. Box 1548
Ada, OK 74821

Mr. John P. Froman
Chief Peoria Indian Tribe of Oklahoma
P.O. Box 1527
Miami, OK 74355

Mr. Bruce Gonzales
President Delaware Nation
P.O. Box 825
Anadarko, OK 73005

Mr. Dallas Proctor
Chief United Keetoowah Band of Cherokee Indians
P.O. Box 746
Tahlequah, OK 74464

Mr. Lee Edwards
Governor Absentee
Shawnee Tribe of Oklahoma
2025 S. Gordon Cooper Drive
Shawnee, OK 74801-9381

Mr. Chad Smith
Principal Chief Cherokee Nation
P.O. Box 948
Tahlequah, OK 74465

Mr. Floyd E. Leonard
Chief Miami Tribe of Oklahoma
P.O. Box 1326
Miami, OK 74355

Mr. Dee Ketchum
Chief, Delaware Tribe
200 NW Virginia
Bartlesville, OK 74003

Mr. Ron Sparkman
Chairman Shawnee Tribe
P.O. Box 189
Miami, OK 74355

Mr. Gregory Pyle
Chief Choctaw Nation of Oklahoma
P.O. Drawer 1210, 16th and Locust Street
Durant, OK 74702

Mailing List
Agencies, Public Officials and Interested Individuals

Director
Mr. James Lee Witt
Federal Emergency Management Agency
500 C. Streets SW, Room 714
Washington, DC 20472

Mr. John M. Fowler
Executive Director
Advisory Council on Historic Preservation
Old Post Office Bldg.
1100 Pennsylvania Ave NW
Washington, DC 2004

Mr. Sam D. Hamilton
Regional Director
U.S. Fish and Wildlife Service
Department of Interior
1875 Century Blvd., Suite 400
Atlanta, GA 30345

Mr. Gregory L. Hogue
Regional Environmental Officer
Office of Environmental Policy and Compliance
U.S. Department of Interior
75 Spring Street SW, Suite 1144
Atlanta, GA 30303

Regional Forester
Southern Region Regional Office
U.S. Department of Agriculture
1720 Peachtree Road, Suite 760S
Atlanta, GA 30309

Vice Admiral Conrad C. Lautenbacher, Jr.
Administrator
National Oceanic & Atmospheric Admn
Department of Commerce
14th & Constitution Ave NW, Room 6217
Washington, DC 20230

Mr. John B. Copenhaver
Regional Director
Region IV Federal Emergency Mgmt Agency
3003 Chamblee-Tucker Road
Atlanta, GA 30341

Mr. J. I. Palmer, Jr.
Regional Administrator
US EPA Region IV
Sam Nunn Federal Center
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Atlanta, GA 30303

Director of Field Services
Southern Resource Center
Department of Transportation
61 Forsyth Street, SW
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Atlanta, GA 30303-3104

Regional Director
National Park Service
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1924 Building
Atlanta, GA 30303

Mr. Kenneth Holt
Centers for Disease Control & Prevention
1600 Clifton Rd.
Atlanta, GA 30333

Mr. Jeff Pratt
Director, Kentucky Division of Water
14 Reilly Road
Frankfort, KY 40601

Mr. David L. Morgan
State Historic Preservation Officer
Kentucky Heritage Council
300 Washington Street
Frankfort, Kentucky 40601

Honorable Mitch McConnell
United States Senate
601 W. Broadway, Rm 630
Louisville, Kentucky 40202

Ms. Krista Mills
Acting Field Office Director
HUD-Kentucky State Office
601 West Broadway
Louisville, Kentucky 40202

Honorable Jim Bunning
United States Senate
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Honorable Kent Clark
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Honorable Ernie Fletcher
Governor of Kentucky State Capitol
700 Capitol Avenue, Suite 100
Frankfort, Kentucky 40601

Mr. Ron Cook
Governor's Office for Local Development
1024 Capital Center Drive
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Mr. David G. Sawyer
State Conservationist Natural Resources
Conservation Service
U.S. Department of Agriculture
771 Corporate Drive, Suite 100
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Mr. Loyd Cress
Commissioner
KY Dept for Environmental Protection
14 Reilly Road, Ash Building
Frankfort, Kentucky 40601

Mr. Benjy Kinman
Director, Fisheries Division
Kentucky Dept. of Fish & Wildlife Resources
#1 Game Farm Road
Frankfort, Kentucky 40601

Honorable Harry Moberly, Jr.
United States Representative
Kentucky State Legislature
P.O. Box 721
Richmond, Kentucky 40475

Mark Matuszewski
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Kentucky Division of Forestry
627 Comanche Trail
Frankfort, Kentucky 40601

Mr. Steven A. Coleman
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Frankfort Office
663 Teton Trail
Frankfort, Kentucky 40601

Mr. Tim Thomas
Assistant to the Secretary
Kentucky Environmental and Public Protection Cabinet
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Frankfort, Kentucky 40601

Honorable Connie Lawson
Mayor of Richmond
P.O. Box 250
Richmond, Kentucky 40476

Honorable Steve Connelly
Mayor of Berea
438 Chestnut Street
Berea, KY 40403

R.G. Toler
District Commissioner
KY Fish and Wildlife Resources
5228 Trapp Goff Corner
Winchester, KY 40391

Honorable Ed Worley
United States Senator
Kentucky State Legislature
P.O. Box 659
Richmond, Kentucky 40475

Chief
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12201 Sunrise Valley Drive, MS423
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