5.0 Summary and Conclusions

Environmental Assessment Summary

Project Location:	Shelby County, Alabama
Project Title:	National Cemetery
Assessed By:	MACTEC

Summary of Environmental Impact of the Proposed Project:

With implementation of the design, construction and operational measures identified in the EA, no significant adverse environmental impacts are anticipated, for cemetery development at the Alternative A, Alternative B, and Alternative C sites.

Recommendation:

- \underline{X} Finding of No Significant Impact. (This project will not result in a significant adverse impact on the environment and will not result in highly controversial adverse public reaction; therefore an environmental impact statement is not required.)
 - _____ An Environmental Impact Statement is required.

	Alternatives			
Attributes	No Action	Α	B	С
Aesthetics	0	-	-	-
Noise	0	-	-	-
Air Quality	0	-	-	-
Community Services	0	0	0	0
Cultural Resources	0	-	-	
Economic Activity	0	0	0	0
Floodplains, Wetlands, Coastal Zone, etc.	0	-	-	
Geology and Soils	0			
Hydrology and Water Quality	0	-	-	
Land Use	0	-	-	-
Real Property	0	-	-	-
Resident Population	0	0	0	0
Solid / Hazardous Waste	0	-	0	0
Traffic, Transportation and Parking	0			
Utilities	0	0	0	0
Vegetation and Wildlife	0	-	-	
Potential for Generating Substantial Controversy	0	+	+	+
Provide Burial Services to Veterans		+	+	+

Table 5-1. Effects Summary

Source: MACTEC, 2006. Created by: ZKH Checked by: AWC

Note:

- + = Beneficial Effect
- - = Severe Effect
- - = Moderate Effect
- = Minimal Effect
- 0 = No Significant Effect

Environmental Assessment Summary

Project Location:	Shelby County, Alabama
Project Title:	Proposed Birmingham Area National Cemetery

Definitions of Impacts

1.	Severe	Complete destruction, disruption, violation of standards, incompatibility,
		disturbance, or surpassing capability of the attribute under consideration.

- 2. Moderate Considerable destruction, disruption, violation of standards incompatibility, disturbance or surpassing of capability of the attribute. However, the effect can be minimized through further study and mitigation.
- 3. Minimal Temporary or minor destruction, disruption, violation of standards, incompatibility, disturbance or surpassing of capability of the attribute. This effect can be mitigated through standard design, construction or operational procedures.
- 4. None No effect anticipated.

Project Description:

Refer to Section 2 of the EA.

Alternatives Considered:

The "No Action" alternative and various alternatives sites were evaluated and considered for the proposed national cemetery. Three alternative sites were evaluated. The alternatives are described in Sections 2 and 3 of the EA.

Environmental Impacts:

Refer to Section 4 of the EA.

Mitigative Actions:

Refer to Section 4 of the EA.

Environmental Assessment Summary for Alternative A

Aesthetics Impacts

Attributes X Vegetation Removal

- Severe Moderate Х Minimal Beneficial None Х Long Term
- Landform Alteration Open Space Alteration Х
- Х New Building Construction
- Short Term

Comments:

Refer to Sections 3.1 and 4.1 of the EA.

Noise

Impacts Attributes Utility Source Generation Severe Moderate Х Traffic Х Minimal Х Construction (Short term) Х Operational (Long term) Beneficial None Х Long Term Х Short Term

Comments:

Refer to Sections 3.1 and 4.1 of the EA.

Air Quality

Impacts

Attributes Dust

Occurs in an Air Quality

Attainment Area

Х

Х

Severe Moderate Х Minimal Beneficial None Long Term Х Short Term

Comments:

Refer to Sections 3.2 and 4.2 of the EA.

Community Services

Impa	acts	Attributes
_	Severe	Alteration of Public Facilities
	Moderate	Alteration of Public Services
	Minimal	Alteration of Public Utilities
	Beneficial	
Х	None	
	Long Term	
	Short Term	
Com	iments:	
DC		

Refer to Sections 3.3 and 4.3 of the EA.

Building Restoration

- Service Area Development Х
- Х Grounds Improvements

Presence of Odors Particulate Emissions Х

Cultural Resources

Impacts

- Attributes Severe National Register Property Moderate Eligible Property Criteria of Effect Х Minimal Beneficial Criteria of Adverse Effect None Long Term Short Term
- Х Requires SHPO Consult. Architecturally Significant

Comments:

Refer to Sections 3.4 and 4.4 of the EA.

Economic Activity

Impa	cts	Att	ributes
	Severe		Reduction in Wages to Area
	Moderate	Х	Additional Wages in Area
	Minimal	Х	Local Purchase of Goods and Services
	Beneficial	Х	Increase in Direct Work Force
Х	None		
Х	Long Term		

Х Short Term

Comments:

Refer to Sections 3.5 and 4.5 of the EA.

Floodplains, Wetlands, Coastal Zone

Impa	acts	Att	ributes
	Severe	Х	100-Year Floodplain
	Moderate		Critical Action (E.O. 11988)
Х	Minimal		Coastal Zone Management
	Beneficial	Х	Critical Wetlands Areas
	None		
Х	Long Term		
	Short Term		
~			

Comments:

Х

Refer to Sections 3.6, 4.6, and 4.9 of the EA.

Geology and Soils

Short Term

Impacts		Att	Attributes				
	Severe	Х	Rock Excavation	Х	Soil Erosion		
Х	Moderate	Х	Cut/Fill Operations	Х	Soil Compaction		
	Minimal	Х	Grading	Х	Soil Horizon Removal & Mixing		
	Beneficial						
	None						
Х	Long Term						

Comments: Refer to Sections 3.7, 3.8, 4.7, and 4.8 of the EA.

Hydrology, Water Quality

nyu	v_{0}	uanty			
Impa	acts	At	tributes		
	Severe	Х	Potential for Erosion and/or	Х	1
	Moderate		Sedimentation		(
Х	Minimal	Х	Potential for Contamination	Х	1
	Beneficial		of Water Regime from Toxins		(
	None		-		
Х	Long Term				
Х	Short Term				
Com	ments:				

Refer to Sections 3.9, 3.10, 4.9, and 4.10 of the EA.

Land Use

Impa	cts	At	tributes
	Severe		Encroachment on Existing Land Use
	Moderate	Х	Change in Land Use Pattern
Х	Minimal	Х	Public Service (to veterans)
	Beneficial		
	None		
Х	Long Term		
	Short Term		
0			

Comments:

Refer to Sections 3.11 and 4.11 of the EA.

Real Property

Impacts		At	tributes		
	Severe	Х	Change of Land Values	Х	Change in Ownership
	Moderate				Boundaries
Х	Minimal		Change of Easement or Right		Encroachment on Critical
	Beneficial		of Way		Areas
	None				
Х	Long Term				
	Short Term				
Com	ments:				

Refer to Section 3.12 of the EA.

<u>Residential Population</u> Impacts

Resid	iential Population	
Impacts		Attributes
	Severe	Addition of Staff to Facility
	Moderate	Alteration of Demographic Characteristics
	Minimal	Change in Neighborhood Characteristics
	Beneficial	
Х	None	
	Long Term	
	Short Term	
Com	ments:	
Refer	to Section 3.13 of	f the EA.

Alteration/Quality Change of Surface Water Drainage Alteration/Quality Change of Groundwater Regime

<u>Solid</u>	/Hazardous Wa				
Impa	cts	Att	tributes		
	Severe	Х	Building Removal/Demolition	Х	Construction Site
	Moderate		Bulk Operational Waste		Stockpiling
Х	Minimal	Х	Earth and/or Rock Debris		
	Beneficial		Concrete Debris		
	None				
	Long Term				
Х	Short Term				
Com	<u>ments:</u>				

Refer to Sections 3.14 and 4.12 of the EA.

Transportation, Traffic and Parking

Impacts		At	tributes		
	Severe		Alteration of Public Transit		Alteration of Existing
Х	Moderate	Х	Alteration of Access Roads		Onsite Roads or Parking
	Minimal	Х	Construction of New Roads	Х	Additional Traffic on
	Beneficial	Х	Construction of New Parking		Existing Roads
	None		-		-
Х	Long Term				
Х	Short Term				

Comments:

Refer to Sections 3.15 and 4.13 of the EA.

<u>Utilities</u>

Х

Х

Impacts
Severe

CD			
ets	At	tributes	
Severe		Water System, Supply	
Moderate	Х	Storm Water Drainage	
Minimal		Sewage Treatment	
Beneficial			
None			
Long Term			
C1 . T			

Short Term

Comments:

Refer to Sections 3.16 and 4.14 of the EA.

Vegetation and Wildlife

Impa	acts	At	tributes		
	Severe	Х	Tree Removal	Х	Groundcover Removal
	Moderate	Х	Presence of Endangered	Х	Presence of Significant
Х	Minimal		Wildlife Species		Wildlife Habitat
	Beneficial		-		
	None				
Х	Long Term				
	Short Term				

Comments:

Refer to Sections 3.17, 3.18, 3.19, 4.15, 4.16, and 4.17 of the EA.

5-6

Potential for Generating Substantial Controversy

Impa	cts	At	tributes		
X	Severe Moderate Minimal Beneficial None	Х	Indirect or Direct Effects on Community Organizations Consistent with Profile of the Community	X	Community Response is in Question Provide Needed Benefit to Local Veterans
Х	Long Term Short Term				

Comments:

Refer to Section 4.18 of the EA.

Environmental Assessment Summary for Alternative B

<u>Aesthetics</u> Impacts

Attributes

Impa		11111	ibutes		
	Severe	Х	Vegetation Removal		Building Restoration
	Moderate		Landform Alteration	Х	Service Area Development
Х	Minimal	Х	Open Space Alteration	Х	Grounds Improvements
	Beneficial	Х	New Building Construction		
	None				
Х	Long Term				
	Short Term				
Com	ments:				
Defer	to Sections 2.1 a	nd 11c	of the EA		

Refer to Sections 3.1 and 4.1 of the EA.

<u>Noise</u> Impac

Impacts		Att	ributes
	Severe		Utility Source Generation
	Moderate	Х	Traffic
Х	Minimal	Х	Construction (Short term)
	Beneficial	Х	Operational (Long term)
	None		
Х	Long Term		
Х	Short Term		
Com	ments:		

Refer to Sections 3.1 and 4.1 of the EA.

Air Quality

Impa	acts	Att	ributes		
	Severe	Х	Dust		Presence of Odors
	Moderate	Х	Occurs in an Air Quality	Х	Particulate Emissions
Х	Minimal		Attainment Area		
	Beneficial				
	None				
	Long Term				
Х	Short Term				
Com	ments:				
-	~	1 / 0			

Refer to Sections 3.2 and 4.2 of the EA.

5-7

Community Service

Impacts

Х

- Severe Alteration of Public Facilities Moderate Alteration of Public Services Minimal Alteration of Public Utilities Beneficial None Long Term
- Short Term

Comments:

Refer to Sections 3.3 and 4.3 of the EA.

Cultural Resources

Impacts		Attributes		
	Severe	National Register Property	Х	Requires SHPO Consult.
	Moderate	Eligible Property		Architecturally Significant
Х	Minimal	Criteria of Effect		
	Beneficial	Criteria of Adverse Effect		
	None			
	Long Term			
	Short Term			
Com	<u>ments:</u>			

Refer to Sections 3.4 and 4.4 of the EA.

Economic Activity

1001	onne neer neg				
Impacts		Attributes			
	Severe		Reduction in Wages to Area		
	Moderate	Х	Additional Wages in Area		
	Minimal	Х	Local Purchase of Goods and Services		
	Beneficial	Х	Increase in Direct Work Force		
Х	None				
Х	Long Term				

Х Short Term **Comments:**

Refer to Sections 3.5 and 4.5 of the EA.

Floodplains, Wetlands, Coastal Zone

Impacts		Att	ributes
	Severe	Х	100-Year Floodplain
	Moderate		Critical Action (E.O. 11988)
Х	Minimal		Coastal Zone Management
	Beneficial	Х	Critical Wetlands Areas
	None		
Х	Long Term		
	Short Term		

Comments:

Refer to Sections 3.6, 4.6, and 4.9 of the EA.

Geology and Soils

Impacts

Attributes X Rock Excavation

Grading

Cut/Fill Operations

- SevereXXModerateXMinimalXBeneficialNoneXLong Term
- X Short Term

Comments:

Refer to Sections 3.7, 3.8, 4.7, and 4.8 of the EA.

Hydrology, Water Quality

Impacts Attributes

mpa		n.	induces and the second s		
	Severe Moderate	Х	Potential for Erosion and/or Sedimentation	Х	Alteration/Quality Change of Surface Water Drainage
Х	Minimal Beneficial None	Х	Potential for Contamination of Water Regime from Toxins	Х	Alteration/Quality Change of Groundwater Regime
Х	Long Term				
Х	Short Term				

Х

Х

Х

Soil Erosion

Soil Compaction

Soil Horizon Removal & Mixing

Comments:

Refer to Sections 3.9, 3.10, 4.9, and 4.10 of the EA.

Land Use

Lanu			
Impacts Attributes			
	Severe		Encroachment on Existing Land Use
	Moderate	Х	Change in Land Use Pattern
Х	Minimal	Х	Public Service (to veterans)
	Beneficial		
	None		
	Long Term		
	Short Term		

Comments:

Refer to Sections 3.11 and 4.11 of the EA.

Real Property

Impacts		At	Attributes				
	Severe	Х	Change of Land Values	Х	Change in Ownership		
	Moderate				Boundaries		
Х	Minimal		Change of Easement of Right		Encroachment on Critical		
	Beneficial		of Way		Areas		
	None						
Х	Long Term						
	Short Term						
Com	monto						

Comments:

Refer to Section 3.12 of the EA.

Residential Population

Impacts

Х

- tsAttributesSevereAddition of Staff to FacilityModerateAlteration of Demographic CharacteristicsMinimalChange in Neighborhood CharacteristicsBeneficialNoneLong TermImage: Characteristics
- Short Term

Comments:

Refer to Section 3.13 of the EA.

Solid/Hazardous Waste

Impacts		At	Attributes				
	Severe	Х	Building Removal/Demolition	Х	Construction Site		
	Moderate		Bulk Operational Waste		Stockpiling		
	Minimal	Х	Earth and/or Rock Debris				
	Beneficial		Concrete Debris				
Х	None						
	Long Term						
Х	Short Term						
Com	ments•						

Comments:

Refer to Sections 3.14 and 4.12 of the EA.

Transportation, Traffic and Parking

Impacts		Attributes				
	Severe		Alteration of Public Transit		Alteration of Existing	
Х	Moderate	Х	Alteration of Access Roads		Onsite Roads or Parking	
	Minimal	Х	Construction of New Roads	Х	Additional Traffic on	
	Beneficial	Х	Construction of New Parking		Existing Roads	
	None					
Х	Long Term					
Х	Short Term					

X Short 7

Refer to Sections 3.15 and 4.13 of the EA.

<u>Utilities</u>

Impa	cts	At	tributes
	Severe		Water System, Supply
	Moderate	Х	Storm Water Drainage
	Minimal		Sewage Treatment
	Beneficial		
Х	None		
Х	Long Term		
	Short Term		

Comments:

Refer to Sections 3.16 and 4.14 of the EA.

Vegetation and Wildlife

Impacts		At	- Attributes			
	Severe	Х	Tree Removal	Х	Groundcover Removal	
	Moderate	Х	Presence of Endangered	Х	Presence of Significant	
Х	Minimal		Wildlife Species		Wildlife Habitat	
	Beneficial		_			
	None					
Х	Long Term					
	Short Term					
<u>Com</u>	ments:					
DC		0 10	0.10 4.15 4.16 1.4.17			

Refer to Sections 3.17, 3.18, 3.19, 4.15, 4.16, and 4.17 of the EA.

Potential for Generating Substantial Controversy

Impacts		At	Attributes				
	Severe Moderate		Indirect or Direct Effects on Community Organizations		Community Response is in Question		
	Minimal	Х	Consistent with Profile of the	Х	Provide Needed Benefit to		
Х	Beneficial None		Community		Local Veterans		
Х	Long Term						
	Short Term						
Com	ments:						

Refer to Section 4.18 of the EA.

Environmental Assessment Summary for Alternative C

<u>Aesthetics</u> Impacts

Attributes

Impacts		Au				
	Severe	Х	Vegetation Removal		Building Restoration	
	Moderate		Landform Alteration	Х	Service Area Development	
Х	Minimal	Х	Open Space Alteration	Х	Grounds Improvements	
	Beneficial	Х	New Building Construction			
	None					
Х	Long Term					
	Short Term					
Comments:						
Refer to Sections 3.1 and 4.1 of the EA.						

<u>Noise</u> Impac

Impacts		Att	ributes
	Severe		Utility Source Generation
	Moderate	Х	Traffic
Х	Minimal	Х	Construction (Short term)
	Beneficial	Х	Operational (Long term)
	None		
Х	Long Term		
37			

X Short Term

Comments:

Refer to Sections 3.1 and 4.1 of the EA.

Air Quality

Impa	acts	Att	ributes		
	Severe	Х	Dust		Presence of Odors
	Moderate	Х	Occurs in an Air Quality	Х	Particulate Emissions
Х	Minimal		Attainment Area		
	Beneficial				
	None				
	Long Term				
Х	Short Term				
Com	monts.				

Comments:

Refer to Sections 3.2 and 4.2 of the EA.

Community Services

Impa	acts	Attributes
	Severe	Alteration of Public Facilities
	Moderate	Alteration of Public Services
	Minimal	Alteration of Public Utilities
	Beneficial	
Х	None	
	Long Term	
	Short Term	
Con	nments:	

Refer to Sections 3.3 and 4.3 of the EA.

Cultural Resources

Impa	cts	Attributes		
	Severe	National Register Property	Х	Requires SHPO Consult.
Х	Moderate	Eligible Property		Architecturally Significant
	Minimal	Criteria of Effect		
	Beneficial	Criteria of Adverse Effect		
	None			
	Long Term			
	Short Term			
Com	monto			

Comments:

Refer to Sections 3.4 and 4.4 of the EA.

Economic Activity

Econ	omic Activity			
Impacts		Attributes		
	Severe		Reduction in Wages to Area	
	Moderate	Х	Additional Wages in Area	
	Minimal	Х	Local Purchase of Goods and Services	
	Beneficial	Х	Increase in Direct Work Force	
Х	None			
Х	Long Term			
v	Chart Tarres			

X Short Term

Comments:

Refer to Sections 3.5 and 4.5 of the EA.

Floodplains, Wetlands, Coastal Zone

Impa	acts	Att	ributes
	Severe	Х	100-Year Floodplain
Х	Moderate		Critical Action (E.O. 11988)
	Minimal		Coastal Zone Management
	Beneficial	Х	Critical Wetlands Areas
	None		
Х	Long Term		
	~		

Short Term

Comments:

Refer to Sections 3.6, 4.6, and 4.9 of the EA.

<u>Geology and Soils</u> Impacts

Attributes X Rock

Х

Х

Rock Excavation

Grading

Cut/Fill Operations

- X Moderate Minimal Beneficial None X Long Term
- X Short Term

Comments:

Refer to Sections 3.7, 3.8, 4.7, and 4.8 of the EA.

Hydrology, Water Quality

Impa	cts	Att	tributes		
	Severe	Х	Potential for Erosion and/or	Х	Alteration/Quality Change
Х	Moderate		Sedimentation		of Surface Water Drainage
	Minimal	Х	Potential for Contamination	Х	Alteration/Quality Change
	Beneficial		of Water Regime from Toxins		of Groundwater Regime
	None		-		-
Х	Long Term				
Х	Short Term				

Х

Х

Х

Soil Erosion

Soil Compaction

Soil Horizon Removal & Mixing

Comments:

Refer to Sections 3.9, 3.10, 4.9, and 4.10 of the EA.

Land Use

Impa	acts	At	tributes
	Severe		Encroachment on Existing Land Use
	Moderate	Х	Change in Land Use Pattern
Х	Minimal	Х	Public Service (to veterans)
	Beneficial		
	None		
Х	Long Term		
	Short Term		

Comments:

Refer to Sections 3.11 and 4.11 of the EA.

Real Property

Impacts

Impa	ncts	At	tributes		
	Severe	Х	Change of Land Values	Х	Change in Ownership
	Moderate				Boundaries
Х	Minimal		Change of Easement of Right		Encroachment on Critical
	Beneficial		of Way		Areas
	None				
Х	Long Term				
	Short Term				
~					

Comments:

Refer to Section 3.12 of the EA.

Residential Population

Impacts		Attributes
	Severe	Addition of Staff to Facility
	Moderate	Alteration of Demographic Characteristics
	Minimal	Change in Neighborhood Characteristics
	Beneficial	
Х	None	
	Long Term	
	Short Term	
Com	ments:	
Refer	to Section 3.13 of	f the EA.

Solid/Hazardous Waste Impacts Attribute

Impa	cts	At	tributes		
	Severe	Х	Building Removal/Demolition	Х	Construction Site
	Moderate		Bulk Operational Waste		Stockpiling
	Minimal	Х	Earth and/or Rock Debris		
	Beneficial		Concrete Debris		
Х	None				
	Long Term				
Х	Short Term				
Comments:					

Refer to Sections 3.14 and 4.12 of the EA.

Transportation, Traffic and Parking

Impa	cts	Att	ributes		
	Severe		Alteration of Public Transit		Alteration of Existing
Х	Moderate	Х	Alteration of Access Roads		Onsite Roads or Parking
	Minimal	Х	Construction of New Roads	Х	Additional Traffic on
	Beneficial	Х	Construction of New Parking		Existing Roads
	None				
Х	Long Term				
Х	Short Term				

Comments:

Refer to Sections 3.15 and 4.13 of the EA.

Groundcover Removal

Presence of Significant

Wildlife Habitat

Utilities

Impacts

[mpa	ncts	At	tributes
	Severe		Water System, Supply
	Moderate	Х	Storm Water Drainage
	Minimal		Sewage Treatment
	Beneficial		-
Х	None		

Х Long Term Short Term

Comments:

Refer to Sections 3.16 and 4.14 of the EA.

Vegetation and Wildlife

Impacts	Attributes	
Severe	X Tree Removal	

	Severe
Х	Moderate
	Minimal
	Beneficial
	None
Х	Long Term

Short Term

Comments:

Refer to Sections 3.17, 3.18, 3.19, 4.15, 4.16, and 4.17 of the EA.

Presence of Endangered

Wildlife Species

Potential for Generating Substantial Controversy

Х

Impacts		Att	tributes		
	Severe		Indirect or Direct Effects on		Community Response is in
	Moderate		Community Organizations		Question
	Minimal	Х	Consistent with Profile of the	Х	Provide Needed Benefit to
Х	Beneficial		Community		Local Veterans
	None				
Х	Long Term				
	Short Term				
Com	nents•				

Х

Х

Comments:

Refer to Section 4.18 of the EA.

6.0 Agency Coordination/Contact List

The following agencies and persons were contacted and responded during the preparation of this EA:

Federal Agencies *

U.S. Department of Agriculture Natural Resources Conservation Service 4511 US Highway 31S Decatur, Al 35603

U.S. Department of Housing and Urban Development Birmingham Office Region IV Medical Forum Building, Suite 900 950 22nd Street, North Birmingham, AL 35203-5301

U. S. Fish and Wildlife Service 1208-B Main Street Daphne, AL 36526

State Agencies *

Alabama Department of Environmental Management Post Office Box 301463 Montgomery, AL 36130-1463

Alabama Historical Commission 468 South Perry Street Montgomery, AL 36130-0900

County Agencies *

Shelby County Department of Development Services Ray E. Hamilton, Manager 1123 County Services Drive Pelham, AL 35124-6128 Phone: (205) 620-6650

Shelby County Environmental Services Robert E. Kelley, Environmental Manager 504 Highway 70 Columbiana, AL 35051

Shelby County Mapping Services J.R. Henderson, Chief Mapper – Supervisor ACM P.O. Box 467 Columbiana, Al 35051 Phone: (205) 669-3728

^{*} Additional Federal, State, and local agencies were solicited, but did not respond to the inquiry

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- CFR. Title 44, Part 60, 2004. "Criteria for Land Management and Use."
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8.0 List of Preparers

Allen Conger (B.S. Natural Resources and Ecology) served as the principal project scientist, which included providing direction and supervision of field activities and senior technical review of the report. Mr. Conger is the senior Natural Resources Manager for MACTEC and has over 20 years experience in preparing natural resources assessments.

Greta Hawkins (B.S. Geology, M. Environmental Management) served as project coordinator and provided field services, technical assistance and review during report preparation. She was the primary author of report sections related to noise, transportation, economy, land use, environmental justice, and federal compliance.

Fritz Boettner (B.S. Natural Resource Management, M.S. Environmental Management) served as the primary GIS analyst for the project and provided GIS support for report preparation.

Ron Chicone (B.S. Biology) provided field services and technical assistance during report preparation.

Luther Boudra (B.S.C.E. and M.S. Geotechnical Engineering) provided technical assistance during report preparation in relation to the soil and other subsurface conditions.

Joshua Ellinger (B.S. Biology) provided field services and technical assistance during report preparation. He was the primary author of the report sections related to wetlands.

Allison Fleming (B.A. Anthropology, M.S. Geography) served as a GIS analyst for the project and provided GIS support for report preparation.

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Danielle Mora (B.S. Environmental Science) provided field services and technical assistance during report preparation. She was the primary author of report sections related to vegetation and threatened/endangered species.

Robert Perry, RPA (B.A. Economics, M.A. History) served as principal investigator for preliminary cultural resources assessment and was the primary author for the report section related to cultural and historical resources.

Ann Shortelle (Ph.D. Limnology) served as a quality assurance principal, which included providing technical review of the report.

9.0 Photolog



Photograph 1: View of south pasture on Fowler Tract, portion of Alternatives B and C. April 18, 2005.



Photograph 2: View of mixed mesophytic forest in Fowler Tract, portion of Alternatives B and C. April 18, 2005.



Photograph 3: View of field on American Village Tract, portion of Alternatives A and B. September 29, 2005.



Photograph 4: View of American Village looking northeast from the field on the American Village Tract, portion of Alternatives A and B. September 29, 2005.



Photograph 5: View of house structures on the Jackson Tract, portion of Alternative A. September 29, 2005.



Photograph 6: View of hayfield looking east on Jackson Tract, portion of Alternative A. September 29, 2005.



Photograph 7: View of Killough Mill Road with American Village along the eastern boundary of Alternatives A, B, and C. September 29, 2006.



Photograph 8: View of wetland on the eastern portion of the Fowler Tract – Alternative A. April 18, 2005.



Photograph 9: View of stream and riparian forest in Fowler Tract on Alternative C. April 18, 2005.



Photograph 10: View of Shoal Creek in Fowler Tract, located on Alternative C and the western boundary of Alternative B. April 18, 2005.



Photograph 11: View of grazed hardwood forest on Carter Tract, portion of Alternatives A and B. September 29, 2005.



Photograph 12: View of pasture/hayfield on Carter Tract, portion of Alternatives A and B. September 29, 2005.



Photograph 13: View of pasture on the Tharp Tract, portion of Alternatives A and B. April 19, 2005.



Photograph 14: View of successional forest on the Tharp Tract, portion of Alternatives A and B. April 19, 2005.