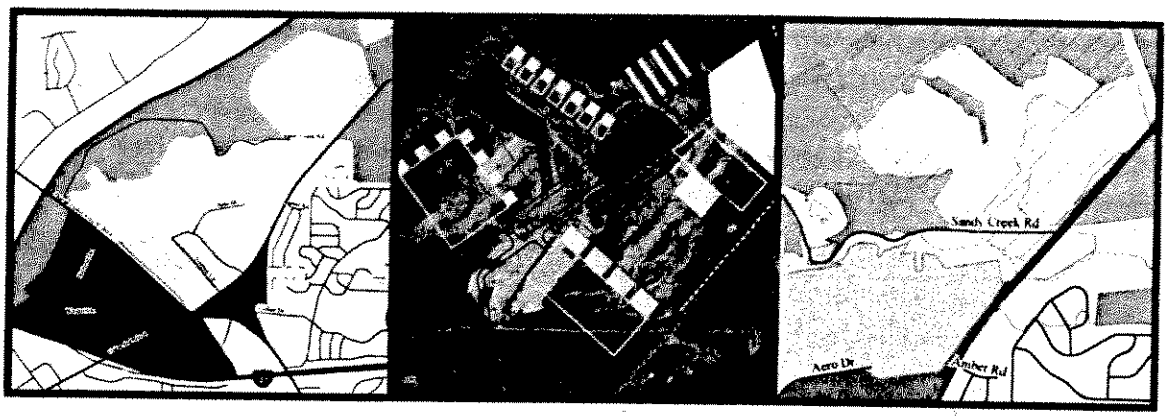


Environmental Assessment for North Terminal Area

Fulton County Airport - Brown Field
Atlanta, Georgia

Prepared for:
Fulton County Board of Commissioners
Department of General Services

Prepared by:
Kimley-Horn
and Associates, Inc.
Project Team

September 2003

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Finding of No Significant Impact

Proposed North Terminal Area Development
Fulton County Airport/Brown Field
Fulton County, Georgia

September 2003

Prepared by:

Parks Preston
Environmental Program Specialist
Atlanta Airports District Office

9/13/03
Date

Approved by:

Scott L. Seritt
Manager
Atlanta Airports District Office

9/15/03
Date

FINDING OF NO SIGNIFICANT IMPACT

Prepared by the
Federal Aviation Administration
Atlanta Airports District Office

I. TYPE OF FEDERAL ACTION

Fulton County Airport/Brown Field (hereinafter Sponsor) has requested Federal Aviation Administration (FAA) approval and processing of an application for Federal funding for the North Terminal Area (NTA) at Fulton County Airport, which qualifies under the Airport and Airway Improvement Act and subject to the National Environmental Policy Act (NEPA) of 1969, as amended.

II. ALTERNATIVES CONSIDERED

Present and forecasted aviation demand at Fulton County Airport/Brown Field (FTY) indicates the need for additional terminal area development. Activity at FTY is predicted to increase from 121,979 operations a year in 2001 to 166,500 operations a year in 2020. However, this growth assumes that the airport would have room to accommodate additional hangars, as the based aircraft would increase from 174 in 2005 to 222 in 2020.

No-Action Alternative

The No-Action Alternative would avoid any development or environmental impacts to the NTA. The No-Action Alternative would mean that the airport would not be able to meet the future demand for aircraft basing facilities. Also, should the NTA planned or similar aviation facilities not be constructed, Fulton County would be required to repay the FAA approximately $13 million or fair market value.

Other On-Site Alternatives

Since the existing terminal area is essentially built out, there is no reasonable alternative for providing the facilities in the Proposed Project elsewhere on FTY. The airport is bound by Fulton Industrial Boulevard on the east, MLK Boulevard on the south, and the Chattahoochee River on the west. These physical barriers make other on-site alternatives unfeasible.

Off-Site Alternatives

Any off-site alternative to provide additional aircraft basing capacity would be located at one of Atlanta's other general aviation reliever airports with similar facilities to FTY. Potential alternatives are DeKalb-Peachtree Airport, Gwinnett County Airport, and McCollum Field in Marietta. None of these airports has the present capacity to accommodate the projected demand for aircraft basing facilities. This alternative would not meet the need for the project.

Proposed Project

The Proposed Project consists of a pair of taxiways to serve the NTA from the existing runway system. The development also includes the grading of areas for future apron and hangar facilities, an aviation museum or similar facility, aviation school or training buildings, and an interior circulation road with access from Fulton Industrial Boulevard.

III. ACTIONS REQUIRED BY OTHER AGENCIES

The Sponsor must coordinate with Fulton County for a Land Disturbance Permit and the Georgia Department of Environmental Protection (EPD) to obtain an NPDES General Permit.

IV. BASIS FOR FINDINGS

Based upon a study of the impacts resulting from the proposed project as documented in the attached EA, and upon comment from Federal, State and local agencies, no significant impacts on natural, man-made, or cultural resources have been identified. Short-term impacts to noise, air quality, and water quality are a direct result of the construction activities.

V. MITIGATION MEASURES

The following mitigation measure categories have been identified and should be adopted by the project Sponsor to minimize harm to the environment. The categories identified for mitigation are water quality, floodplains, and construction impacts. The specifics for mitigation requirements are discussed fully in the EA.

The Sponsor's contractor implementing the proposed project shall observe and comply with all applicable Federal, state and local laws, ordinances, regulations, orders, and decrees mandating the protection of the environment during the design and construction phases.

VI. FINDINGS

Pursuant to the provisions of the National Environmental Policy Act of 1969 (PL 91-190), as amended, regulations issued by the Council on Environmental Quality (CEQ)(40 CFR Part 1500-1508), FAA Order 1050.1D and FAA Order 5050.4A, we advise you of our findings, based on the attached EA. It is our finding, after careful and thorough consideration of the identified impacts, the Sponsor's preferred alternative is acceptable and the proposed project in and of itself is not considered a major federal action.

The FAA has determined the proposed project would not have a significant impact on the human or natural environment. This Finding of No Significant Impact is based on the attached Environmental Assessment that has been independently reviewed and evaluated by the FAA and determined to adequately disclose the environmental issues and impacts of the proposed project. The EA provides sufficient evidence for determining that an Environmental Impact Statement (EIS) is not required.

Environmental Assessment

for North Terminal Area Development

Fulton County Airport – Brown Field

Project Sponsor

Fulton County Board of Commissioners
Department of General Services – Fulton County Airport

Project Consultant

Kimley-Horn and Associates, Inc.
3169 Holcomb Bridge Road, Suite 600
Norcross, Georgia 30071
(770) 825-0744

In association with
Camp Dresser & McKee, Inc.
Pegasus Associates International, Inc.
Edwards-Pitman Environmental, Inc.
New Age Environmental

September 2003

An environmental study was conducted to determine potential impacts of the proposed project on the human and natural environments. This document has been prepared in compliance with the National Environmental Policy Act (NEPA) and the Federal Aviation Administration (FAA) Order 5050.4A, FAA Order 1050.D, and other applicable laws.

This environmental assessment becomes a Federal document when evaluated and signed by the responsible FAA official.

Responsible FAA Official

9/12/03
Date

Table of Contents

Appendices

List of Tables

List of Figures

Figures have been grouped after Chapter 6 to facilitate cross-referencing between text sections.

List of Abbreviations and Acronyms Used

AAD:	Average Annual Day
AAQS:	Ambient Air Quality Standards
ac:	acre
af:	acre-feet
ALP:	Airport Layout Plan
ANCA:	Airport Noise and Capacity Act
APE:	Area of Potential Effect
ARC:	Atlanta Regional Commission
AST:	Aboveground Storage Tank
ASTM:	American Society of Testing Materials
AWQCF:	Apron Water Quality Control Facilities
BMP:	Best Management Practices
CAA:	Clean Air Act
CAAA:	Clean Air Act Amendment
CAP:	Corrective Action Plan
CEQ:	Council on Environmental Quality
CERCLA:	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS:	Comprehensive Environmental Response, Compensation and Liability Information System
CERCLIS NFRAP:	CERLIS—No Further Remedial Action Planned
CFR:	Code of Federal Regulations
cfs:	Cubic Feet per Second
CLOMR:	Conditional Letter of Map Revision
CO:	Carbon Monoxide
CTA	Central Terminal Area
CWA:	Clean Water Act
cy:	Cubic Yards
CZMA:	Coastal Zone Management Act
dB:	Decibels
dBA:	Decibels A-weighted
DE & CD:	Department of Environment and Community Development
DNL or Ldn:	Day-Night Average Sound Level
DNR:	Department of Natural Resources
DOT:	Department of Transportation
EA:	Environmental Assessment
EJ:	Environmental Justice
EO:	Executive Order
EPA:	Environmental Protection Agency
EPD:	Environmental Protection Division
ESA:	Endangered Species Act
FAA:	Federal Aviation Administration
FAR:	Federal Aviation Regulation
FBOs:	Fixed Based Operators
FEMA:	Federal Emergency Management Agency
FFIA:	Federal Flood Insurance Administration
FHWA:	Federal Highway Administration
FIA:	Federal Insurance Administration
FIRM:	Flood Insurance Rate Maps

FONSI:	Finding Of No Significant Impact
FPPA:	The Farmland Protection Policy Act
ft:	feet
FTY:	Fulton County Airport – Brown Field
GA DNR:	Georgia Department of Natural Resources
GAAQS:	Georgia's Ambient Air Quality Standards
GDOT:	Georgia Department of Transportation
GEPA:	Georgia Environmental Policy Act
GIS:	Geographical Information System
GSE:	Ground Support Equipment
GVWR:	gross vehicle weight rate
HC:	Hydrocarbons
HEC:	Hydrologic Engineering Center
HSI:	Hazardous Site Inventory
ISR:	indirect source review
L_{max}:	Maximum Sound Level
LA_{max}:	Maximum Noise Level
lbs:	pounds
Ldn or DNL:	Day-Night Equivalent Sound Level
LDPs:	Land-Disturbance Permits
Leq:	Equivalent Sound Level
$Leq_{(24)}$:	Peak Hour Equivalent Noise Level
LOS:	Level of Service
LQG:	Large Quantity Generator
LTO:	Landing/Takeoff Operation
LUST:	Leaking Underground Storage Tanks
mgd:	Million Gallons per Day
mi^2:	Square Miles
MITL:	Medium intensity taxiway lights
MLK:	Martin Luther King Boulevard
MNGWPD	The Metropolitan North Georgia Water Planning District
MPCC:	Master Plan Coordinating Committee
MRPA:	Metropolitan River Protection Act
NAAQS:	National Ambient Air Quality Standards
NEPA:	National Environmental Policy Act
NEVES:	Nonroad Engine and Vehicle Emission Study
NFIP:	National Flood Insurance Program
NFPPA:	National Farmland Protection Policy Act
NHPA:	National Historic Preservation Act
NOI:	Notice of Intent
NOMS:	Noise and Operations Monitoring System
NO_X:	Nitrogen Oxides
NPDES:	National Pollution Discharge Elimination System
NRCS:	Natural Resource Conservation Service
NRHP:	National Register of Historic Places
NTA:	North Terminal Area
NWI:	National Wetland Inventory
O_3:	Ozone
ORDER 1050.1D:	Policies and Procedures for Considering Environmental Impacts
ORDER 5050.4A:	Airport Environmental Handbook
PAH:	Polynuclear Aromatic Hydrocarbons

Part 150 FAR:	Part 150 Noise Compatibility Planning Process
Pb:	Lead
PCB:	Polychlorinated Biphenyls
pCi/L:	PicoCuries per Liter
PE:	Professional Engineer
PM:	Particulate Matter
ppm:	Parts Per Million
PPP:	Pollution Prevention Plan
R/W:	Runway
RCRA:	Resource Conservation and Recovery Act
RCRIS:	Resource Conservation and Recovery Information System
ROD:	Record of Decision
ROFA:	Runway Object-Free Area
RPZ:	Runway Protection Zone (once called a clear zone)
RSA:	Runway Safety Area
SCS:	Soil Conservation Service
sf:	Square Feet
SFHAs:	Special Flood Hazard Areas
SHPO:	State Historic Preservation Officer
SIP:	State Implementation Plan
SO_2:	Sulfur Oxides
SPCC:	Spill Prevention Control and Countermeasure
SPMS:	Special Purpose Monitoring Stations
SQG:	Small Quantity Generator
STIP:	State Transportation Improvement Plan
SWPPP:	Storm Water Pollution Prevention Plan
TDS:	total dissolved solids
TIM:	Taxi time-in-mode
TIP:	Transportation Improvement Program
TMDLs:	Total Maximum Daily Loads
tpy:	Tons per Year
TSS:	total suspended solids
USACE:	United States Army Corps or Engineers
USDA:	United States Department of Agriculture
USFWS:	United States Fish and Wildlife Service
USGS:	United States Geologic Survey
UST:	Underground Storage Tank
VMT:	vehicle mile traveled
VOCs:	Volatile Organic Compounds
WMP:	The Watershed Management Plan

Chapter 1

Chapter 1

Purpose and Need

This Environmental Assessment (EA) has been prepared to consider the potential impacts of proposed development at Fulton County Airport - Brown Field, identified as the North Terminal Area. This chapter describes the project setting, purpose and need, actions required by federal and state agencies, and applicable regulations.

1.1 Policy and Regulatory Guidance

An EA is a written statement that summarizes the analyses and findings for a proposed federal action, in compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA). The primary purpose of this documentation is to ensure the policies and goals of NEPA are considered in ongoing programs and actions of the federal government. An EA determines whether any significant environmental impacts would occur and informs decision-makers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. The Federal Aviation Administration (FAA) is the agency responsible for reviewing and approving all proposed federal actions that pertain to airports and their operations. Therefore, FAA will serve as the lead approval agency for this EA.

The EA has been conducted and written in accordance with NEPA, guidelines set forth in the FAA Order 5050.4A, *Airport Environmental Handbook*; FAA Order 1050.1D, *Policies and Procedures for Assessing Environmental Impact;* Council for Environmental Quality (CEQ) regulations; and other applicable laws.

1.2 Project Setting

Fulton County Airport - Brown Field (FTY) is one of several general aviation reliever airports in the Atlanta metropolitan area. The airport serves corporate and business operators, personal aircraft operators, police and security services, and medical flights. The airport is located in the western portion of Fulton County north of I-20 and immediately north of Martin Luther King (MLK) Boulevard, west of Fulton Industrial Boulevard, and adjacent to the Chattahoochee River. It is located approximately 9.5 miles northwest of Hartsfield Atlanta International Airport.

1.3 Project Definition

The proposed North Terminal Area (NTA) is approximately 345 acres of land currently owned by FTY. The project area is located northeast of the existing runway system as shown on Figure 1. Only 200-250 acres of the 345 acres are proposed for development under this EA. This area was previously owned by General Shale Products/Chattahoochee Brick, but is currently vacant and undeveloped. Portions of the NTA are within the jurisdictions of the City of Atlanta. The Proposed Project features a pair of taxiways to serve the NTA from the existing runway system. The development also would include grading of areas for future hangar facilities, an aviation museum or similar facility, aviation school or training buildings, and an interior circulation road with access from Fulton Industrial Boulevard.

1.4 Purpose and Need

Beginning in the late 1980s, the Fulton County Board of Commissioners considered several airport master plan development programs for FTY. One of those master plans resulted in a grant of $13 million from the FAA for the purchase of approximately 345 acres of property to the north and northeast of the central terminal area. The *Fulton County Airport- Brown Field Master Plan* (R.W. Armstrong & Associates, March 2000) updated the needs and facility potential development uses for the NTA. The master plan update evaluated the types of facilities, community interest, and potential environmental impacts associated with the development of this land, formerly the Chattahoochee Brick property. The proposed alternatives for the project were developed in accordance with the Fulton County Board of Commissioners 1998 resolution that there would be no expansion or new development of runways at the airport. The NTA alternatives also were developed with the understanding that:

- FTY is an important economic generator in the Atlanta metropolitan area and serves the high-end business and corporate aviation fleets of some of the nation's largest corporations.
- Capacity at the airport is important to the successful operation of the Hartsfield Atlanta International Airport.
- The current terminal area is essentially built out at FTY.

A present and forecasted need exists for additional terminal area development space as recognized by the FAA with the award of grants to acquire the property. Forecasts were

originally developed during master planning and subsequently updated during the EA, particularly in light of the changes in the aviation market following September 11, 2001. The operations are listed in Table 1 for 2000, 2001 (used as existing year), and forecast years.

Table 1
FTY Existing and Forecast Operations

Year	Based Aircraft*	Operations Per Based Aircraft	Total	Itinerant	Local
2000	174	750	117,806	73,150	44,656
2001(Existing)	174	750	121,979	75,786	46,193
2005	174	750	130,500	84,200	46,300
2010	193	750	144,700	93,400	51,300
2020	222	750	166,500	107,400	59,100
2020 No-Action	174	750	142,100	95,800	46,300

* From the *Fulton County Airport – Brown Field Master Plan*, R. W. Armstrong & Associates, March 2000.
Source: Kimley-Horn and Associates, Inc.; Pegasus Associates International, Inc., 2002.

Based on the updated forecasts (detailed forecasts are included in Appendix A), FTY would experience growing levels of operations, from 121,979 in 2001 to 166,500 by 2020. However, this growth assumes that the airport would have room to accommodate additional hangars, as the based aircraft would increase from 174 in 2005 to 222 in 2020. Without the development of the NTA to add hangar capacity, forecasts indicate that FTY would lose opportunities to serve these additional aircraft. In fact, the forecasted operations would not change from 2005 to 2020 due to the lack of aircraft basing space. The number of based aircraft could not increase above the 2005 total of 174. In this scenario, the 2020 operations would be approximately 142,100, a reduction of more than 24,000 compared to the forecast with the NTA development.

The loss of the based aircraft at FTY in the future would constrain Fulton County's economic growth potential and its ability to fully serve general aviation traffic, particularly corporate travel. The NTA development has been recognized by FAA as an important project to meet aviation demand in the metropolitan Atlanta area.

1.5 Required Actions

1.5.1 Federal Actions

The NEPA process is being completed on the Proposed Project as a component of an Airport Layout Plan already approved by the FAA. In order for the Sponsor's Proposed Project to be implemented, the following federal actions would be required:

- FAA consideration and processing of an application for Federal funding for those development items qualifying under the Airport and Airway Improvement Act as amended, and recodified at 49 USC § 47107 *et seq.*

1.5.2 Other Required Actions

The following actions are required by state agencies for implementation of the Proposed Project:

- Stream Buffer Variance from the EPD (most likely would require coordination with Fulton County to verify that the project is excluded from the buffer requirement as a perpendicular transportation crossing).
- Approval of the development (upon completion of design plans) by the Atlanta Regional Commission through its responsibilities to enforce the Metropolitan Rivers Protection Act (MRPA).

1.6 Applicable Laws and Regulations

The environmental analyses and documentation have been prepared to address both state and federal regulations. This EA was prepared pursuant to the following public law, Executive Orders, and regulations:

- Section 102(2) (c) of the National Environmental Policy Act of 1969 (P.L. 91-190) (42 USC 4321, *et seq.*).
- Georgia Environmental Policy Act of 1991, with Guidelines for Implementation, Georgia Department of Natural Resources, Environmental Protection Division, June 26, 1991.
- 49 USC Subtitle VII, Section 40114, as amended by P.L. 103-305 (August 23, 1994).
- 49 USC Subtitle VII, Sections 47101 *et seq.*
- 49 USC Subtitle I, Section 303 (January 12, 1983) of the Department of Transportation Act [formerly Section 4(f)].
- Executive Order 11990, Protection of Wetlands.
- Executive Order 11998, Floodplain Management.
- 49 USC Section 40101; *et seq.* (formerly Federal Aviation Act).
- The Airport and Airway Improvement Act of 1982, as amended (P.L. 97-248).

- The National Historic Preservation Act of 1966 (16 USC 470(f) as amended).
- PL 89-655, EO 11593 ("Protection and Enhancement of the Cultural Environment").
- "Protection of Historic and Cultural Properties," Advisory Council on Historic Preservation, Title 36 of the Code of Federal Regulations Part 800 (36 CFR 800).
- Archaeological and Historic Preservation Act [16 USC 469 (a)].
- Archaeological Resource Protection Act [16 USC 470 (aa)].
- 7 CFR 658, Farmland Protection Policy Act.
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.
- Clean Air Act (as amended by P.L. 91-604; 42 USC 7401, *et seq.*).
- Federal Water Pollution Control Act Amendments of 1972, Section 404, (P.L. 92-500; 33 USC 1344), as amended by the Clean Water Act of 1977 (P.L. 95-217; 33 USC 1251).
- Section 7(c) of the Endangered Species Act of 1973, as amended (P.L. 85-624; 16 USC. 661, 664, 1008 note).
- Other laws and regulations, as applicable.

Chapter 2

Chapter 2

Alternatives

The regulations implementing NEPA state that alternatives provide a foundation for the NEPA process. The CEQ regulations (40 CFR 1502.14) state that agencies should "rigorously explore" and "objectively evaluate" all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

A preliminary alternative analysis was conducted as part of the master planning process for the proposed North Terminal Area (NTA) for FTY. The discussion in this chapter summarizes the evaluation of alternatives including the Proposed Project and the No-Action Alternative.

2.1 Preliminary Alternatives

2.1.1 No-Action Alternative

The Proposed Project and the viable alternatives would involve the development of the proposed NTA. No improvements are proposed to the Central Terminal Area (CTA) or to the runway/taxiway system. Therefore, the No-Action Alternative would avoid development of the NTA and any major improvements to the CTA. Only maintenance and safety measures as part of the ongoing operations would occur. The No-Action Alternative also would have the following attributes:

- Not constructing basing facilities and taxiway connections to the NTA would mean that the airport would not be able to meet future demand for aircraft basing facilities, especially those of corporate and business aviation.
- Not constructing the NTA would mean that the educational and training facilities requiring hangars and aprons could not be constructed on the airport.
- Due to reversionary provisions in the FAA grants, should the NTA planned or similar aviation facilities not be constructed, Fulton County would be required to repay approximately $13 million or fair market value, whichever is greater, to the FAA for grant monies expended. Therefore, the No-Action Alternative potentially has a cost rivaling that of the build alternatives. Should the land be sold by Fulton County to repay the grant amounts, the land would undoubtedly be developed for other purposes.

2.1.2 Master Plan Alternatives

The alternatives analysis was conducted as part of the *Fulton County Airport - Brown Field Master Plan* (R.W. Armstrong & Associates, March 2000.). The alternatives for the NTA were developed based on identified airport needs, community input, and any known environmental constraints. During the planning process, five alternatives were evaluated, named Options A-D (see Figure 2). All of them shared common features such as an access/circulation road and recommended uses. Based on instructions from the FAA as to the potential use of the area, Option D was found to not meet the requirements of providing aviation facilities since it did not include taxiway connections to the NTA and, therefore, could not serve aircraft. Options A, B, and C included taxiways to serve the NTA and offered alternative placement of various facilities within the NTA. As a result of community input and concerns expressed about Options A-D, a fifth option was developed as Option E. The modifications features in Option E included moving corporate hangars as far away from residences as practical, locating any community facilities near public road access, and directing ground noise from aircraft away from residential areas.

2.1.3 Other On-Site Alternatives to the Proposed Project

Since the CTA is essentially built out, there is no reasonable alternative for providing the facilities in the Proposed Project elsewhere on FTY. The airport is bound by Fulton Industrial Boulevard on the east, MLK Boulevard on the south, and the Chattahoochee River on the west. These physical barriers present significant obstacles to expansion at FTY as an alternative to the Proposed Project.

2.1.4 Off-Site Alternatives to the Proposed Project

Any off-site alternative to provide additional aircraft basing capacity would have to be located at one of the Atlanta metropolitan area's other general aviation reliever airports with similar facilities to FTY. FTY has a 5,800- by 100-foot runway and is served by a precision Instrument Landing System (ILS). Potential alternatives are DeKalb-Peachtree Airport with a 6,001- by 100-foot runway and Gwinnett County Airport with a 6,000- by 100-foot runway, both also served by a precision ILS approach. McCollum Field in Marietta has a 5,355- by 75-foot runway and also is served by an ILS approach.

None of the airports mentioned above has the present capacity to accommodate the aircraft basing facilities contained in the Fulton County proposed NTA. Moreover, none would serve the community with the educational and training facilities or the museum/cultural facilities designed

to serve the residents of the FTY area. Therefore, additional basing facilities at other airports would not meet the purpose and need and were not considered further in the EA.

2.2 Details of the Proposed Project

The recommendation of Option E for development followed an extensive community involvement process that resulted in the Master Plan Coordinating Committee's (MPCC) recommendation of Option E to the Board of Commissioner's for approval. Based on aviation, environmental, and community considerations, the Fulton County Board of Commissioners approved Option E as the selected alternative at their December 1, 1999 meeting. The more general facility layout developed during the MPCC meetings was further developed into a more detailed facility layout as part of the Airport Layout Plan (ALP) set of plans. The resulting ALP was submitted to the FAA by Fulton County. The ALP was approved by the FAA.

The Proposed Project as defined in this EA is essentially Option E as shown on Figure 3 and defined in the *Master Plan.* Its specific components include:

- Grading of slopes just south of the major power line that crosses the area to meet the FAA requirements for taxiway and apron gradients and lines of sight.
- Construction of a major taxiway core running southwest to northeast to provide access from all portions of the NTA to the runway system.
- Apron and hangar development areas for the basing of corporate/business aircraft.
- T-hangar development areas for the basing of smaller business and personal aircraft.
- Area designated for future aviation training facilities such as airframe and engine, avionics, and similar schools for mechanics as well as flight training facilities.
- Additional area for potential aviation educational and aviation museum/cultural facilities as may be determined feasible by Fulton County.

Should the area noted for the aviation educational/museum/cultural facility be located elsewhere by the county, the area previously set aside for that facility would be used for additional aircraft basing and/or maintenance facilities. The uses would be consistent with those of general aviation airport terminal areas and similar to facilities currently located in FTY's CTA. The total area identified in the Proposed Project encompasses approximately 250 of the 345 acres; the remainder is not being considered for development in this EA.

The analyses conducted for this EA have included minor revisions to the layout contained in the plans previously approved by the FAA. The minor revisions were the result of more detailed analyses of the Metropolitan River Protection Act (MRPA) of the State of Georgia and an examination of the floodplain. The layout was revised slightly to reduce the degree of floodplain intrusion and to meet the requirements of the MRPA. These changes are further described in Section 4.11 (Water Quality).

Chapter 3

Chapter 3

Affected Environment

This chapter provides a general description of the current social and economic characteristics and natural environment of the project area. The descriptions establish baseline conditions for the social and environmental settings and provide a basis of comparison for the determination of the environmental consequences of the Proposed Project.

3.1 Project Area

The Fulton County Airport (FTY) is located in Atlanta, Georgia in Fulton County and is approximately 900 acres in size. Hartsfield Atlanta International Airport is located approximately 9.5 miles southeast of FTY. Two interstates, I-285 and I-20, provide north-south and east-west access from the Atlanta region. These major routes meet at an interchange southeast of the airport and serve as major land use boundaries around the airport vicinity, along with the Chattahoochee River.

3.2 Existing Facilities

The original property for the airport was acquired in the late 1940s by the former County Commissioner Charlie Brown. FTY is one of the largest general aviation airports in the region. The airport is operated by the office of Airport Manager under the Department of General Services. Most of the revenue generated comes from government agencies or corporate flight operations.

Runways and Taxiways

FTY is owned and operated by Fulton County through the office of the Airport Manager under the Department of General Services. Existing facilities are shown on Figure 4. There are three runways at FTY. The primary runway is Runway 8/26 and is 5,796 feet long and 100 feet wide. This runway has a grooved asphalt surface and has a dual-wheel weight bearing capacity of 121,000 pounds. Runway 8/26 has a full parallel taxiway on the south side and high-intensity runway edge lighting.

Runway 14/32 is the crosswind runway at the airport. It is 4,158 feet long and 100 feet wide and has a displaced threshold of 199 feet on the southeast end. This runway has a grooved asphalt surface and a 30,000-pound, single-wheel weight bearing capacity. Runway 14/32 has full parallel taxiways on both sides of the runway and is lighted with medium-intensity runway edge lighting. Obstruction lights are at the end of Runway 14/32 along Fulton Industrial Boulevard.

Runway 9/27 is the third runway and is 2,801 feet long and 60 feet wide. Runway 9/27 is parallel to and on the north side of Runway 8/26 and is separated from Runway 8/26 by 400 feet as measured from the respective runway centerlines. This runway also has a grooved asphalt surface and a 35,000-pound, single-wheel weight bearing capacity. Runway 9/27 does not have a parallel taxiway; however, there are access taxiways from the aircraft parking areas and aprons. Aircraft taxiing to or from Runway 9/27 must cross Runway 8/26. With the development of the NTA, Runway 9/27 also would be used as a taxiway for aircraft access to the NTA.

Terminal Facilities

The airport's terminal area has 24 hangars and associated facilities operated by fixed base operators (FBOs), government agencies, and private corporations. The FBOs presently at the airport are Hill Aircraft and Raytheon Aircraft Services. Bell South, Coca-Cola, Cox Enterprises, Georgia Pacific, Home Depot, Bank of America, Sears, Black and Decker, Nike, and IBM use the airport on a regular basis. New hangar and service facilities have recently been constructed in in-fill areas and, in some cases, new hangars have replaced old hangars.

Fulton County Fire Services Department is located in the CTA and serves both the airport and the community. A Georgia State Patrol precinct office, Georgia Department of Transportation (DOT) Office of Environment/Location, Georgia Environmental Services permitting office, and various Fulton County facilities also are located in the CTA portion of the airport. Due to the topography of the area, the CTA is essentially built out at the present time.

There are several additional facilities on the airport property – the airport terminal building, which houses the airport administration offices, a flight school, and the Flight Deck Café. To the east of the airport terminal building is the air traffic control tower, which is a contract tower that is open 24 hours a day.

3.3 Local Government and Community Facilities

Fulton County has seven elected County Commissioners with Atlanta being the county seat. The FTY property lies partially within the City of Atlanta limits and partially within Fulton County. Most public services are located within the county. There are two school systems that serve Fulton County. They are the Atlanta Public School System and the Fulton County School System. The Grady Health System offers healthcare and the Fulton County Emergency Response provides emergency response to persons within Fulton County.

3.4 Surrounding Land Use

Surrounding development is located off US 78 (D.L. Hollowell Parkway) and Fulton Industrial Boulevard (see Figure 5). Along US 78 (D.L. Hollowell Parkway) to the northwest of the project area is a mix of commercial, industrial, and residential tracts. Fulton Industrial Boulevard is located southeast of the proposed north terminal development area. This area is primarily residential and includes some commercial and industrial sites. The Chattahoochee River is the northern boundary of FTY. The river and forested areas are to the northeast and east of the project area.

Surrounding land does not include any agriculture land that is of either local or state significance. Also, the surrounding land does not include any land that has been classified by the NRCS as being prime or unique farmland.

In the vicinity of the NTA are one small forested wetland and three streams. There is one main steam, Sandy Creek, with the two other streams being tributaries of Sandy Creek. The forested wetland is located along the south bank of Sandy Creek and northeast of Runway 26. Floodplains also are a concern for the Proposed Project due to the proximity of the Chattahoochee River.

Nearby residential areas include the Bankhead Courts Public Housing Complex (Bankhead Courts) along US 78 (D.L. Hollowell Parkway). (US 78 was formerly named Bankhead Highway until a recent name change.) Nearby neighborhoods include Fairburn Heights, Carroll Heights, and Collier Heights, which are located east of the airport off Fulton Industrial Boulevard.

For purposes of analyses in this EA, boundaries were defined for the *project area* based on the potential direct impacts of construction in the NTA. The project area appears in Figure 6. In addition, data have been reviewed related to the surrounding land uses, U.S. Census boundaries, and major land features to determine appropriate *study area* boundaries. The study area is defined to evaluate indirect impacts that could extend beyond the project area itself. Specifically, consistent boundaries are helpful in assessing social impacts, land use changes, and cumulative impacts. The appropriate study area boundaries were determined as shown in Figure 6, along with U.S. Census boundaries within the study area that have been included in analyses.

3.5 Population and Economic Characteristics

The Atlanta area and surrounding counties have seen significant growth in population in recent years. Basic demographic characteristics are listed in Table 2. Based on the 2000 Census, the total population in Atlanta within Fulton County is 386,699. Of the 386,999 residents of this area, 128,000 are white and 237,000 are African American. The remaining population is made up of varying ethnic backgrounds.

Fulton County encompasses approximately 529 square miles. The population, according to 2000 Census data, is 816,006. There has been an increase in population of almost 25% from 1990 to 2000. Of the total population, 48% are white, 46% are African American, and 4% represent other ethnic origins.

Table 2
Study Area Population

	Atlanta	Fulton County	Study Area
Total Population	416,474	816,006	7,334
Percentage of Minorities	+50.0%	51.9%	94.9%
Median Household Income	$34,770	$47,321	$8,672-$33,375
Per Capita Income	$10,786	$30,003	$25,772

Source: Kimley-Horn & Associates, Inc., 2003 (Based on 2000 U.S. Census Data).

The defined study area consists of a total population of 7,334 persons. About 34.7% of the total population is over the age of 64. Over 75% of the population is identified as a race other than Caucasian.

3.6 Other Airport Development

Other development projects have been planned at FTY in addition to the Proposed Project. These include a rehabilitation of Runway 8-26, rehabilitation of airport aprons, and minor maintenance activities. Specific uses within the NTA would be dependent upon future county budgeting priorities, private development proposals, and demand for aviation support services.

Chapter 4

Chapter 4

Environmental Consequences

The impacts of the Proposed Project on the human and natural environments have been studied in accordance with the technical guidelines set forth in Federal Aviation Administration (FAA) Order 5050.4A – *Airport Environmental Handbook;* FAA Order 1050.1D – *Policies and Procedures for Considering Environmental Impacts;* CEQ regulations; and other applicable laws. This chapter addresses the potential effects of the Proposed Project on the human, physical, and natural environments. Included in the discussion of impacts are any adverse environmental effects that cannot be avoided should the Proposed Project be implemented. In addition, this chapter identifies mitigation measures where appropriate, applicable permit or license requirements, and special consultation with various resource agencies that would be required.

4.1 Noise

Various descriptors have been developed to reflect how time-varying noise levels resulting from aircraft operations affect people. Under the guidance of FAA Orders 1050.1D and 5050.4A, thresholds for requiring detailed noise analysis were used. The Proposed Project does not include a new runway, modifications to, or extension of any runway that would change existing patterns for take-offs and landings. Therefore, the project would avoid any significant noise impacts resulting from aircraft operations. However, due to the Proposed Project's increase in forecasted operations over the No-Action Alternative, potential noise impacts were assessed for aircraft operations and ground sources.

Due to concerns expressed within the community during the master planning process, noise barriers were included on the Option E plan for future evaluation (as shown on Figure 2). The intent was to consider the potential for increases in ground activities, from both aircraft in the NTA and vehicular traffic on the loop road for the NTA. While FAA criteria would not apply due to the low level of annual operations, other federal guidelines (particularly from the USDOT) were helpful in considering potential noise increases and the feasibility of the proposed barriers.

4.1.1 Noise Definitions

Noise is typically defined as unwanted sound. It is emitted from many sources, including airplanes, factories, railroads, power generating plants, and highway vehicles. The actual magnitude of sound is caused by short-duration fluctuations in atmospheric pressure. These fluctuations are called "sound pressures". Since the range of sound pressures varies greatly, a logarithmic relationship is used to reference sound pressures to a common pressure. This relationship is defined as the sound pressure level and is measured in decibels (dB). The decibel is often modified by frequency-weighting curves (A, B, C, or D). Noise levels are commonly modified by the A-weighting curve which correlates very well with human response to noise. Sound levels utilizing the A-weighting curve are expressed in dBA.

Sound pressure levels in this report are expressed as the hourly Leq, or equivalent sound level, which is the level in dBA of constant sound that would contain the same acoustic energy in an hour as the actual sound, which varies considerably over time. In other words, the fluctuating sound levels of traffic noise are represented in terms of a steady noise level with the same energy content. Another way of expressing potential noise impacts is through the Day-Night Average Sound Level (DNL), used to estimate a contour area within a noise level over a 24-hour period.

4.1.2 Ambient Noise Levels

Of the various land uses bordering the airport, Bankhead Courts and one daycare facility were identified as the only noise sensitive receptors. Noise readings were taken at several critical points around the airport and near the receptors. These measurements represent noise levels that could be expected for taxi operations, start-up operations, and ground aviation operations near the hangars and surrounding highway traffic activity. Measurements at the apartment complex were taken in an outdoor area to determine ambient levels for the residential use.

The results are summarized in Table 3. The noise sensitive receptor locations are italicized.

Table 3
Noise Level Measurements – FTY Ground Sources

Location of Noise Measurement	Type of Operation	Noise Reading
Approximately 175' from taxiway along Runway 8/26	Taxi	60 dBA Leq
Approximately 550' from start-up area	Start-Up	52 dBA Leq
Approximately 175' from taxiway along Runway 14/32	No Operations	46 dBA Leq
On Fulton Industrial Boulevard	Highway Traffic	64 dBA Leq
Along back property line of Bankhead Courts	*Ambient residential*	*54 dBA Leq*
Along power line easement	*Ambient*	*54 dBA Leq*

Source: New Age Environmental, 2002.

Each reading represents an isolated operation type. The highest noise level was generated by highway traffic on Fulton Industrial Boulevard. With the high percentage of trucks that travel this route, traffic would remain a dominant producer of noise near the two identified receptors.

4.1.3 Projected Noise Levels from Ground Transportation

Concerns over potential noise increases in the NTA would relate to traffic on the new loop road and start-up or taxi operations of aircraft along the new taxiways and apron area. To assess the noise potential, federal highway traffic-generated noise guidelines were used.

Traffic-generated noise levels for the future conditions along the proposed access road were calculated using STAMINA 2.0, the *FHWA Highway Traffic Noise Prediction Model*. The proposed roadway alignment, projected volumes, and vehicle speeds were added to the model. The peak hour traffic volume used was 172 vehicles and the assumed speed was 15 mph. The taxiing aircraft were considered in the model as a point source since these operations do not occur at a continuous rate to be considered a line source. As a future No-Action comparison, the measured levels of 54 dBA were assumed, although growth in nearby traffic and other development would likely increase the No-Action levels at least slightly.

Based on the stated assumptions, the projected noise level from the loop road to the closest apartment unit is approximately 34 dBA Leq. Although this measurement is well below what is

normally produced by vehicle operations on a major roadway, this can be attributed to low traffic volumes, low travel speed, the absence of medium and heavy truck operations, and distance between the source and receiver. The centerline of the access road is approximately 400 feet from the rear of the apartment complex. It should be noted that the modeled results do not reflect the noise-reducing effect of any topographic shielding. Actual noise levels could be somewhat lower.

In determining future noise levels for activities associated with the NTA operations, the projected ground operations were assumed to be similar to the existing ground activities. Therefore, measurements for aircraft taxi operations (60 dBA Leq) and start-ups (52 dBA Leq) were used to represent the projected operations along the new taxiway.

Using the decibel levels at known distances for taxi operations and start-ups, for every doubling in distance for point sources, noise decreases by 6 dBA. The "inverse square law" states that the sound pressure squared or intensity varies inversely as the square of the distance (i.e., at twice the distance, the intensity decreases by a factor of 6 dB; at three times the distance, the intensity decreases by a factor of 9.5 dB; at four times the distance, intensity decreases by a factor of 12 dB). The following formula represents the drop-off rate of 6 dB per double distances for a vehicular point source: dBA Reduction = 20 log (Distance/15). Table 4 presents estimated noise levels at various distances.

Table 4
Noise Distance Relationships

Taxi Operations		Start-up Operations	
@ 175'	60 dBA Leq	@ 500'	52 dBA Leq
@ 350'	54 dBA Leq	@ 1,000'	46 dBA Leq
@ 700'	48 dBA Leq	@ 2,000'	40 dBA Leq
@ 1,400'	42 dBA Leq		

Source: New Age Environmental, 2002.

The approximate distance from the closest T-hangar to the proposed barrier is 750 feet, and to the rear of the building at Bankhead Courts, the distance is approximately 1,100 feet. Using the "inverse square law" for point sources, noise levels at Bankhead Courts would be approximately 46 dBA Leq for start-up and taxi operations. By comparison, the federal criteria for noise

abatement at the residential uses would be approaching or exceeding 57 dBA Leq (based on Title 23 on the Code of Federal Regulations, Part 772 (23 CFR 772), US DOT). The monitored locations at Bankhead Courts also would experience less than a substantial increase in noise levels, typically defined as 10 dBA or more over the No-Action levels. In fact, due to the distance from the proposed development to the receptors, the existing levels at the receptors are already higher (at 54 dBA) than the projected levels of the airport activity resulting from the Proposed Project (34 dBA for vehicular traffic and up to 46 dBA for aircraft taxiing and start-up operations).

4.1.4 Projected Noise from Aircraft Operations

The current version (6.0c) of the FAA's Area Equivalent Method (AEM) was used to screen the potential aircraft noise effects of the proposed project, due to the forecast increase in total operations. The analysis compared the No-Action with the 2020 scenario for the NTA development. The fleet mix, forecasts, and related assumptions were consistent with other elements of the EA. This model was developed to project the approximate area of the 65 DNL contour and changes in the total size of the contour that would occur with increased operations. The AEM results indicate that the total change in the projected 65 DNL contour area by 2020 would be 10.8 percent, assuming the build-out development by private parties on the property occurs by this timeframe. The increase in contour area is well below the 17 percent threshold established to determine whether further analysis is warranted, and the contour would be located over compatible uses.

4.1.5 Noise Barrier Analysis

Although the noise levels with the Proposed Project would not require abatement (in the context of ground transportation), the effectiveness of proposed barriers was evaluated because of the community's interest expressed during the previous master planning process.

The noise barriers proposed originally, as shown on Figure 7, included one barrier across the street from the airport. It was deleted from the analysis, as its potential noise abatement would be related to noise sources apart from the NTA operations. The proposed barrier along Fulton Industrial Boulevard was evaluated. At this location, the barrier would not benefit any noise sensitive receptors. Properties across the street from the barrier were determined to be a power line easement and undeveloped land. The buildings between the taxiway and Fulton Industrial

Boulevard would provide some shielding for any receptors on the opposite side of Fulton Industrial Boulevard.

The next barrier evaluated was along the proposed access road. This would appear to be a logical location for a proposed barrier. However, as previously described, the modeled noise level that would be generated by vehicles traveling along this facility (34 dBA) is considerably less than the noise abatement criteria of 67 dBA Leq. It was determined that the barrier would not be effective in reducing noise levels from ground aviation sources because the line of sight between the source and the receiver would not be broken. The line of sight break will yield approximately a 5 dBA insertion loss or reduction in noise.

The third barrier proposed would extend 1,500 feet along the edge of the Bankhead Courts. Due to the changes in elevation, the line of sight from some of the residential units would require an excessively tall barrier. In some locations, the height would need to be 42 feet to break the line of sight. This height would dominate the view from the ground inside Bankhead Court Apartments, creating an undesirable effect of "walling in" the residents in that portion of the complex. Moreover, the barrier would reflect noise from inside the complex, amplifying the common noises and perhaps worsening their effects on residents. Another consideration is feasibility in terms of cost. At an average height of at least 20 feet, the barrier would cost more than $600,000. The cost per "benefited receptor" would far outweigh the benefits of potential noise reduction.

4.1.6 Conclusions

The noise analysis has determined that no substantial increases in noise levels would occur due to increased aircraft operations, traffic on the loop road, or nearby aircraft taxi and start-up operations. No barrier locations would provide the desired positive effects for local residents and, in fact, could amplify existing noise levels without noticeably reducing noise levels from the NTA operations. Therefore, no barriers are included in the Proposed Project.

4.2 Compatible Land Use

FAA guidelines regarding land use compatibility have been adopted over the years and are the subject of continuing analysis and recommendations. Most of the potential land use concerns occur where an airport (particularly with commercial air carrier service) begins plans to expand into surrounding areas that already have compatible land uses. However, in the case of FTY, the

Proposed Project consists of developing aviation-related uses on existing airport property. No changes would occur to patterns for take-offs and landings.

The development of the NTA would introduce uses that are compatible with airport activities – new area for future hangars, possible community center or similar use with an aviation theme, and aviation training facilities. The land itself is already owned by the airport, and it is mostly cleared with patches of recent vegetation since the removal of the Chattahoochee Brick facilities. Construction-related debris and similar materials have been stored on the site over a period of several years. Much of the surrounding land use, as shown in Figure 5, is commercial or industrial. Most of the residences in the study area are separated from FTY by Fulton Industrial Boulevard or US 78 (D.L. Hollowell Parkway). In the case of the Bankhead Courts, existing vegetation near the complex would remain, and no incompatible noise levels from NTA operations would occur. No proposed development in the study area has been identified that would create noise concerns or other issues of compatibility with the Proposed Project.

Apart from considerations of noise-sensitive uses, compatibility also is important in the context of regional planning. The NTA development is included in the Atlanta Regional Commission's (ARC) plan for improvements to airports located within its 13-county boundaries. Also important to the ARC is the Chattahoochee River that serves as the northern boundary of FTY. The river and its buffer are critical resources in the region, and the proposed development of the NTA would require approval from ARC for compatibility with the Metropolitan Rivers Protection Act (MRPA). Extensive coordination and planning have occurred during the EA to address MRPA requirements, as described in Section 4.11.

4.3 Social Impacts

4.3.1 Relocations and Community Impacts

The Proposed Project would occur entirely within property already acquired by Fulton County for the NTA development. The property is currently fenced and secured as part of the FTY boundaries. No relocations of any kind would be required.

The Proposed Project also would not have any other adverse community impacts. A new loop road would include direct access from Fulton Industrial Boulevard, with signalization. No

changes would be necessary to existing patterns for local or neighborhood traffic in the study area. No neighborhoods would be divided or cut off by the construction or future operations at the NTA. Furthermore, the Proposed Project would not create an unmanageable demand on emergency response services, local utilities, or other community facilities.

The No-Action Alternative also would avoid any adverse impacts related to relocations, access, or community facilities.

4.3.2 Environmental Justice

4.3.2.1 Background

On February 11, 1994, President Clinton issued Executive Order 12898 and an accompanying presidential memorandum to focus federal attention on the environmental and human health conditions in minority and low-income communities.

Executive Order (EO) 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," provides that to the greatest extent practicable and permitted by law and consistent with the principles set forth in the report on the National Performance Review, each federal agency must make achieving environmental justice part of its mission. This would be done by appropriately identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and/or low-income populations in the United States.

Consistent with policies of the USDOT, Environmental Protection Agency (EPA), and the U.S. Census Bureau, the populations for the environmental justice (EJ) analysis were defined as follows:

- Minority population refers to any readily identifiable group of *minority persons* (Black, Hispanic, Asian or Pacific Islander, American Indian or Alaskan Native, and other non-White populations). The EJ analysis used the definitions from the 2000 Census collectively as a comparison between white and non-white population.

- Low-income population can be based on several indicators. For the EJ analysis in this EA, the low-income threshold was based on *percent below the poverty level* from the 2000 Census. The 2000 Census questionnaires identified income levels from 1999. The income level has a scale to correlate with household size, using a weighted average threshold ranging from $8,501 for an individual to $34,417 for a family of nine or more persons.

During the analyses and documentation for the EA, EJ concerns were coordinated at federal, state, and local levels. The Fulton County Department of Environment and Community Development was consulted to identify any community concerns or EJ populations and to review the findings of the EJ analysis. Agencies also were invited to provide comments during the early coordination/scoping process at the beginning of the EA.

4.3.2.2 Identification of Environmental Justice Areas

In addition to the EJ considerations at a county and community level, population characteristics within the demographic project area were reviewed. See Figure 6 for the study area used in the EJ analysis. Areas of minority and low-income populations were identified consistent with guidance from several sources, including *the U.S. Department of Transportation Order on Environmental Justice* and *Interim Policy to Identify and Address Potential Environmental Justice Areas* from EPA's Region IV. Census data from 2000 were used at the tract and block level and compared with the averages for the county. The Census tracts that had minority or low-income populations exceeding the county totals by 20 percent were identified as being EJ areas. Those areas are shown in Figure 8 and listed in Table 5.

Within the five Census Tracts that are totally or partially included in the study area boundaries, virtually all of the blocks with any population have a minority percentage greater than the EJ threshold. For the 2000 Census, 1999 income records were applied only at the Block Group level and higher. Of those Block Groups in the study area, seven out of eight meet the definition for low-income EJ areas. By compiling the data within the study area, a total population was estimated at 7,334, with 94.9 percent being minorities and 42.6 being low income.

Identifying the demographic make-up of the study area provided a framework for reviewing potential EJ issues. In addition, the study area was reviewed for specific low-income housing. Bankhead Courts is the only low-income, multifamily housing complex identified in the study area. Particular care has been applied throughout the EA process to determine any potential impacts and/or mitigation measures that could affect the residents of Bankhead Courts.

Table 5
High Proportion of Minority or Low-Income Populations

Census Group	Percent Minority Population	Percent Below Poverty Level
Fulton County	51.9	15.7
Tract 78.05[1]		
Within Block Group 1	79.6	23.9
Tract 78.07[2]		
Within Block Group 1	96.8	37.0
Tract 82.02[3]		
Block Group 1	99.2	29.3
Block Group 2	99.2	15.6
Block Group 3	96.6	34.4
Block Group 4	99.6	75.5
Tract 86.02[4]		
Block Group 1	98.5	70.6
Composite Percentage for Study Area	94.9	42.6

[1]Tract 78.05 in study area includes 12 Blocks in 1 Block Group.
[2]Tract 78.07 in study area includes 9 Blocks in 1 Block Group.
[3]Tract 82.02 in study area includes 37 Blocks within 4 Block Groups.
[4]Tract 86.02 in study area includes 8 Blocks within 1Block Group.
Note: Tract 87.02 in study area includes 3 Blocks; none have population.
Source: Kimley-Horn and Associates, Inc., 2002-2003.

4.3.2.3 Findings of Impacts

While virtually all of the study area would be considered to have EJ populations based on the demographic make-up, the intent of an EJ analysis is to make sure any federally funded project is consistent with EO 12898. The purpose is to determine whether the likely impacts of the project would be *disproportionately adverse* to minority or low-income populations. Based on a review of the analyses conducted for the Proposed Project as summarized throughout the EA, no disproportionate impacts would occur. This finding is based on the following conclusions:

- No displacements of residences or businesses would be required.
- No adverse increases in noise levels would occur.
- No agencies in the scoping process have reported concerns over any potential health affects of the Proposed Project.
- Potential floodplain impacts have been minimized through the current planning process; bridging of the Sandy Creek with no intrusion into the stream channel would greatly reduce any encroachment into existing floodplains. With committed mitigation, there would be no net loss of floodplains on the airport site (see Section 4.12, Floodplains).
- Water quality measures would be carried out during subsequent design, construction, and operational phases. Best Management Practices (BMPs) and proper detention facilities will be used to prevent water quality impacts.
- No intrusion into the Chattahoochee River buffer would occur.
- While long-term development and its induced affect on job opportunities cannot be determined, there is a potential for job creation in a range of skills, some of which could be filled by local residents.
- Construction of the Proposed Project would include clean-up and removal of existing construction debris stockpiled in the vicinity of the NTA, leading to more attractive views from Fulton Industrial Boulevard.
- While the feasibility of a museum or other community use within the NTA would have to be determined in the future, Fulton County desires to bring a facility to or near the airport that would benefit the local community.
- While the No-Action Alternative would avoid the impacts of the Proposed Project, it also would mean that no opportunity for jobs or new community uses would occur.

4.3.2.4 Community Participation

While no disproportionate impacts would occur as a result of the Proposed Project, continued opportunities for community participation are encouraged. Local minority business leaders and citizens have been involved in discussions about the NTA development, as part of the Brown Field Steering Committee. A series of eight meetings was conducted during 1999 and 2000, seeking input from local community leaders and citizens about the goals for the NTA and any concerns to address. During the NEPA process, the Steering Committee has been kept informed of the study. A Notice of Availability, copy of the EA, and comment forms were provided in four local libraries and the Harriett G. Darnell Senior Multipurpose Facility, which is frequented by local residents for activities and community meetings. In addition, two public meetings were held at the Multipurpose Facility to announce the availability of the EA, discuss its findings, and listen to concerns of residents. County personnel contacted local citizens via email and letter to invite their participation. In both meetings, consultants explained the EJ analysis and the NEPA process.

4.4 Induced Socioeconomic Impacts

Airport development projects, in general, have the potential to induce related growth in aviation-related uses nearby. The proposed NTA development would occur in phases. The primary components (and subjects of direct impact analyses in this EA) are the infrastructure serving the NTA – the taxiways, loop road, associated utilities, and grading of areas for aviation-related uses. Those future uses could occur across a wide span of time. Fulton County would consider the feasibility of sponsoring uses within the NTA such as a museum or community center. Much of the potential development would occur by private entities in the form of new hangars.

These potential development activities would likely have a beneficial socioeconomic impact on Fulton County. As described in Section 1.4, additional hangar space is needed to better serve an increasing demand by corporate aircraft users. Most of the uses would require a minimal number of employees, but the overall development of the NTA could be expected to add jobs in a range of skill levels. Construction jobs may be the largest socioeconomic benefit, providing opportunities for local suppliers and laborers.

In terms of potential secondary impacts occurring from new uses either within or near the NTA, the overall build-out scenario is considered during the EA in the relevant impact categories: air quality, traffic, water quality, and floodplains. Therefore, the identified impacts would likely occur over a period of time beyond the initial construction. Subsequent to environmental approval and subject to funding availability, the design and construction would likely proceed in phases. Part of the process would include detailed hydrologic studies and designs that would better define potential water quality measures needed in conjunction with individual uses on the property.

4.5 Air Quality

4.5.1 Introduction

The FAA Order 5050.4A requires states that do not have indirect source review (ISR) requirements to examine the projected airport activity levels to determine whether an air quality analysis is required. An air quality analysis is not required for a general aviation airport if levels of activity forecasted are below 180,000 operations. Georgia does not have ISR, and FTY's

forecasted operations levels in 2020 are 166,500, with the Proposed Project. Based on the guidance outlined in the FAA Order and *Air Quality Procedures for Civilian Airports and Air Force Bases* (FAA, 1997), a National Ambient Air Quality Standards (NAAQS) analysis is not required and air quality impacts, if any, would be insignificant.

However, the 13 counties in and around Atlanta are designated as a serious non-attainment area for ground-level ozone (40 CFR 81.311). Non-attainment indicates the Atlanta region does not meet the NAAQS for ground-level ozone. Ground-level ozone is a colorless gas created by a chemical reaction of nitrous oxides (NO_x), volatile organic compounds (VOCs), and sunlight. Due to the Atlanta area's designation as a non-attainment area for ground-level ozone, more detailed analyses were conducted to consider air quality impacts and conformity with the State Implementation Plan (SIP).

There are three aspects of the Proposed Project that have potential air quality impacts. One is the possible increase in aircraft taxi time-in-mode (TIM), where an increase in taxi TIM on the airfield would result in some increase in taxi-related emissions. The taxi TIM is the period in which the aircraft rolls or "taxis" from the hangar or basing area to the runway end for takeoff and then again after landing, when it returns to the hangar or basing area from the runway. The TIMs for other aircraft modes (i.e., approach, takeoff, climbout) would not change as a result of the Proposed Project.

A second possible air quality impact is related to changes in the level of service (LOS) on the roadway network surrounding the project area. The LOS is a qualitative measure that describes operational conditions and capacity on road segments or intersections.

The third possible impact is the short-term emissions from construction equipment during the construction phase of the project.

4.5.2 Taxi Time-in-Mode (TIM)

TIM calculations were made to determine if the combination of the TIM change, a decrease in LOS, and construction emissions were significant enough to trigger an air quality conformity determination and/or require emissions modeling. The approach used in this study assumes that increases or decreases in TIM would have corresponding increases or decreases in air emissions. Representative taxi times were calculated based on the following factors:

$$\text{Taxi Time}_{(RW)}\text{ (min)} = (\text{Number of Operations} * \%\ RW_{use}) * \frac{\text{average distance (ft)}}{\text{taxi speed (ft/min)}}$$

For these calculations, "RW" specifies the runway for which the calculations were made. Separate calculations were made for Runways 26 and 8 based on the differences in taxi distances and the frequency each runway is used. The number of annual operations occurring at the airport for each analysis year is included in the calculations. The forecasted operations are summarized in Table 6.

Table 6
Operations Forecast

Alternative	Base Year 2001	2005	2020
No-Action Alternative	121,979	130,500	142,100
Proposed Project	121,979	130,500	166,500

Source: Pegasus Associates International, Inc., 2003.

Total annual airport operations were distributed to each runway using an estimated percent runway use. Based on observations from the airport manager, 40 percent of annual airport operations were estimated to occur on Runway 8 and 60 percent on Runway 26.

Average taxi distance was determined by averaging taxi distances for takeoff and landing operations between the two runways and various points on the airfield. To calculate the average taxi distance for operations in the existing terminal area, four aircraft hangar areas were chosen. The hangar areas included in the calculations are the central basing area adjacent to the Hill Aircraft and Raytheon Fixed Base Operators (FBOs), the State of Georgia Hangar at the end of Runway 32 (Building 107), the Raytheon Hangar at the end of Runway 32 (Building 109), and the corporate hangar at the end of Runway 26 (Building 126). Average taxi distance for the NTA was based on the midpoint of the NTA to and from the runway ends. Taxi distances used for calculation are shown in Figure 9. The average distance was divided by a taxi speed of 880 ft/min or 10 mph to determine the average taxi time for each operation. The taxi speed estimate was made by interviewing pilots operating on the airport. Pilot training teaches that taxi speed should be no faster than a brisk walk. This low speed was used to give a conservative estimate of the TIM.

4.5.2.1 No-Action Alternative Calculations

If the projected growth as forecasted materializes, there would be inadequate space in the CTA to accommodate the number of aircraft. The No-Action Alternative TIM calculations are based on the fact that the existing or CTA can accommodate based aircraft growth only up to the 2005 forecast. After 2005, the existing terminal area would not have the capacity to accommodate the forecast of based aircraft. These based aircraft would have to be accommodated at other area airports. Operations by transient aircraft would continue to grow through 2020 and would be unaffected by the basing area constraints in the existing terminal area.

In the No-Action Alternative, all forecasted taxiing activity would occur on the existing taxiway system. By using the formula above, an average taxi time for Runway 8 was calculated to be 4.17 minutes and an average taxi time for Runway 26 was calculated to be 4.25 minutes. Each of these factors was multiplied by the number of operations on the respective runways for the forecast year. The annual taxi times associated with each runway were summed to produce an annual total taxi time.

4.5.2.2 Proposed Project Calculations

The Proposed Project assumes that future based aircraft beginning in 2005 are accommodated in the new basing area. The Proposed Project is expected to have very little transient activity because the plan does not include a third FBO. The taxiing operations between the Proposed Project and the runway ends would be generated predominately by based aircraft.

To calculate the TIM for the proposed action, the taxi time for the existing terminal area and the Proposed Project were calculated separately and then summed. The taxi time associated with the existing terminal area was calculated using the average taxi times noted above multiplied by the number of operations to/from the existing area.

Using the same methodology as above, average taxi times to/from the Proposed Project to each runway end were calculated. The average taxi time for Runway 8 was calculated to be 6.34 minutes and the average taxi time for Runway 26 was calculated to be 4.57 minutes. These factors were multiplied by the number of operations from the Proposed Project using Runways 8 and 26, respectively. The annual taxi times associated with each runway were summed to produce the annual total taxi time associated with taxi operations to/from the Proposed Project.

An emissions inventory estimate was performed using the engine types for the Falcon 10, Lear 35/36, Lear 31, CL600, IAI 1124, and Falcon 50 to represent jet operations. The KingAir 200 was used to represent turboprop operations, and the Cessna 150 was used to represent single-engine operations. Table 7 shows the fleet mix used to prepare emissions calculations.

Table 7
FTY Fleet Mix

Aircraft Type	Fleet
Falcon 10, Lear 35/36, Lear 31	15%
Falcon 50, IAI 1124	10%
CL600	10%
Cessna 150	46%
KingAir 200	19%
Total	**100%**

Source: Pegasus Associates International Inc.; Camp Dresser & McKee, Inc., 2003.

Emissions were first calculated for a single operation for each airplane type as follows:

Emissions per Operation (lbs) = TIM * Fuel Flow * Emissions Index * No. of Engines

Fuel Flow represents the amount of fuel used for each engine type during various modes of aircraft operation (takeoff, climbout, approach, taxi/idle) and Emissions Index represents the corresponding emissions for fuel consumption. These values are provided in Table 5-4 of EPA's *Procedures Emission Inventory Preparation*. Emissions for annual aircraft operations for each type of aircraft were calculated as follows:

Annual Emissions for Aircraft Type = Emissions per Operation (lbs) * Percent of Fleet * Number of Operations per Year * Emissions per Year

Emissions for the Proposed Project and No-Action Alternative are then calculated as the sum of emissions from all aircraft types. Table 8 summarizes the annual emissions calculations for the

2005 No-Action Alternative, 2020 No-Action Alternative, and 2020 Proposed Project. Emissions for 2005 Proposed Project were not calculated as construction is not anticipated to be complete. Emissions for 2020 are shown as the most conservative estimate of emissions from the operation of the project. Emissions were calculated for carbon monoxide (CO) and sulfur dioxide (SO_2) in addition to VOCs and NO_x.

Table 8
Annual Taxi Time-in-Mode Emissions Summary

Aircraft Type	Tons of Emissions per Year			
	VOC	CO	NO_x	SO_2
2005 No-Action Alternative				
Falcon 10, Lear 35/36, Lear 31	5.50	16.09	0.77	0.15
Falcon 50, IAI 1124	1.80	9.48	0.74	0.11
CL600	2.42	16.63	1.23	0.20
Cessna 150	27.32	4.95	0.01	0.00
KingAir 200	0.54	75.05	1.28	0.35
2005 No-Action Alternative Total	**37.58**	**122.20**	**4.04**	**0.80**
2020 No-Action Alternative				
Falcon 10, Lear 35/36, Lear 31	5.71	16.69	0.80	0.15
Falcon 50, IAI 1124	1.86	9.83	0.77	0.11
CL600	2.51	17.24	1.28	0.20
Cessna 150	28.33	5.13	0.01	0.00
KingAir 200	0.56	77.83	1.33	0.36
2020 No-Action Alternative Total	**38.97**	**126.72**	**4.19**	**0.83**
2020 Proposed Project				
Falcon 10, Lear 35/36, Lear 31	7.02	20.53	0.99	0.19
Falcon 50, IAI 1124	2.29	12.09	0.94	0.14
CL600	3.09	21.22	1.57	0.25
Cessna 150	34.86	6.32	0.02	0.00
KingAir 200	0.69	95.76	1.64	0.45
2020 Proposed Project Total	**47.95**	**155.91**	**5.15**	**1.03**
2020 Proposed Project, Less 2020 No-Action Alternative	**8.98**	**29.19**	**0.97**	**0.19**
Increase of 2020 Proposed Project over 2020 No-Action Alternative	**23%**	**23%**	**23%**	**23%**

Note: Particulate matter emission rates not available.
Source: EPA, Procedures Emission Inventory Preparation, Vol IV, Chap 5. Camp Dresser & McKee, Inc., 2003.

4.5.2.3 Summary and Conclusion

Calculations based on this method show an overall increase in taxi TIM from the No-Action Alternative to the Proposed Project of 2 percent for 2005 and 23 percent for 2020. Table 9 summarizes the results.

Table 9
Taxi Time-in-Mode Estimates

	2005	2020
No-Action Alternative		
Central Terminal Area Operations	130,500	142,100
North Terminal Area Operations	0	0
Taxi Time in Mode (annual hrs)	9,167	9,981
Proposed Project		
Central Terminal Area Operations	121,862	133,472
North Terminal Area Operations	8,638	33,028
Taxi Time in Mode (annual hrs)	9,320	12,281
Annual Difference (hours)	153	2,300
Percent Difference	2%	23%

Source: Camp Dresser & McKee, Inc., 2003.

While a 23 percent increase in annual taxi TIM may appear to be a substantial percentage increase, the net impact to NO_x emissions is relatively small. NO_x emissions are directly related to the heat produced by the engine and generally increase at higher engine power settings, where the engine temperature also is higher. Taxiing is usually performed at low power settings (~30% of full power) where the engine temperature is relatively lower. VOC emissions are the product of incomplete combustion and are highest at the lower, less efficient engine power settings. Therefore, emissions of VOCs during taxi are relatively higher than during other modes. In addition, taxi mode is only one of four modes, with takeoff, climbout, and approach, comprising a

landing/takeoff operation (LTO). Since TIM changes in other modes are not expected, no net changes in emissions from the other modes were evaluated.

4.5.3 *Trip Generation and Level of Service*

A traffic impact evaluation was conducted for the NTA development. Estimated trips were used to determine whether the Proposed Project would worsen the level of traffic congestion during the morning (7:30 – 8:30 AM) and afternoon (4:30 – 5:30 PM) peak hours along Fulton Industrial Boulevard.

4.5.3.1 Trip Generation

The number of vehicle trips to and from the NTA at FTY is expected to increase with the Proposed Project. Vehicles would be using the aviation training facility and museum/similar facility. In addition, there would be a small increase in the number of vehicle trips due to the growth of the airport and additional aviation activities. Table 10 identifies the anticipated number of trips at the NTA for the AM and PM peaks.

Table 10
Trip Generation for the North Terminal Area (Vehicles)[1]

Development	AM Peak		PM Peak	
	In	Out	In	Out
Training Facility[2]	153	35	153	35
Aviation Museum (or Similar Community Facility[3])	7	0	16	23
Additional Aviation Activities[4]	12	3	3	12
Total	**172**	**38**	**172**	**70**

Notes:
[1]This trip generation is for NTA access only; other FTY operations would be assumed to continue using the main entrance at Aviation Circle.
[2]Based on vehicle data obtained from an A&P Training Facility located at Gwinnett County Airport. Assumes 2 shifts of students and faculty, arriving during morning and afternoon peak hours but leaving during off-peak hours.
[3] Based on vehicle data obtained from the Warner Robins Museum of Aviation.
[4] An added factor to account for longer range growth at the North Terminal Area.

Source: Kimley-Horn and Associates, Inc. 2003.

4.5.3.2 Level-of-Service (LOS) Analysis

The LOS is a qualitative measure that describes operational conditions and capacity on a road segment or intersection. LOS A represents free-flow conditions; LOS C is consistent with typical

traffic patterns where occasional delay may occur due to slight congestion; and LOS E and F represent severe levels of congestion consistent with gridlock conditions.

The following intersections are located near the Proposed Project and were evaluated for LOS:

- US 78 (D.L. Hollowell Parkway)/ Fulton Industrial Boulevard
- Sandy Creek/Fulton Industrial Boulevard (currently private entry onto airport property)

The LOS analysis evaluated roadway conditions in 2020, trips generated as a result of the Proposed Project, and proposed roadway improvements. The analysis incorporated data from the Georgia Department of Transportation (GDOT) related to the programmed widening of Fulton Industrial Boulevard and modification of its intersection with US 78 (D.L. Hollowell Parkway). GDOT traffic volumes for 2024 were used as a worst-case projection for 2020 volumes.

The newly generated trips would not degrade the intersection of US 78 (D.L. Hollowell Parkway) and Fulton Industrial Boulevard. As shown in Table 11, if the Proposed Project were built, LOS for the 2020 AM and PM peaks would not change.

Table 11
Level of Service

US 78(D.L. Hollowell Parkway)/Fulton Industrial Boulevard (signalized)	**LOS**	
	AM Peak 7:30 – 8:30	**PM Peak 4:30 –5:30**
2020 No-Action Alternative	C	E
2020 Proposed Project	C	E
Fulton Industrial Blvd./ Sandy Creek[1] (with proposed signalization)		
2020 Proposed Project (new signalized intersection)	A	A

[1]The No-Action Alternative at the Sandy Creek intersection would not include any public access.
Source: Kimley-Horn and Associates, Inc., 2003.

However, the Sandy Creek median opening on Fulton Industrial Boulevard would require signalization to operate under LOS 'A' conditions (for cars wishing to make a left off Sandy Creek Road in both the 2020 AM and PM peak conditions). With the proposed traffic control, there would be no significant increase in vehicle emissions due to trip generation or LOS. Moreover, based on verbal coordination with the Atlanta Regional Commission, the proposed trip

generation and size of development are well below Development of Regional Impact (DRI) thresholds and would have no vehicular air quality concerns.

4.5.4 Construction Emissions

A construction emissions inventory was prepared for construction activity directly associated with the development of the Proposed Project. Emission estimates were determined for criteria air pollutants (CO, SO_2, particulate matter (PM), volatile VOCs and NO_x) emitted during construction. Sources of emissions included in the air emissions inventory include non-road sources such as construction equipment (i.e., excavators, bull dozers, compaction equipment, and clearing equipment), construction vehicles (i.e., pickup trucks and dump trucks), and dust emissions from clearing, grading, and placement of fill material.

The emissions inventory is based on construction of the Proposed Project beginning as soon as the summer of 2004. The emission estimates were developed for the most intense year of construction activity, which is associated with the first 12 months of construction (summer 2004 – spring 2005) and would include clearing, grading, and the beginning of the taxiway construction. No source reduction activities were considered for emissions estimating purposes. It also was assumed no equipment used for clearing or grading would be retired (or scrapped) within the first year. Thus, emission estimates for the 12-month period beginning with the summer 2004 construction season represents worst-case annual emissions estimates for the entire construction process.

Emission factors for construction equipment were obtained from Table 2-7 of the *Environmental Protection Agency (EPA) Non-road Engine and Vehicle Emission Study (NEVES) Report* dated November 1991. All construction equipment was assumed to be diesel powered equipment. Emission factors for each equipment type were applied to the anticipated work output (horsepower-hours of expected equipment use). A list of typical construction equipment and operating hours for the site was developed by the project team. The rated capacity in horsepower for each equipment type was determined from Table 2-4 of the *1991 NEVES Report.*

Table 12 presents a list of construction equipment (not including pickup and dual tandem trucks) to be used onsite and the criteria pollutant emissions from this equipment.

Table 12
Exhaust Emissions from Construction Equipment

Equipment Type	Emission Estimates (lb/year)				
	VOC	CO	NO_x	PM	SO_2
Wheel Loader (CAT IT18B)	327	1,818	3,902	489	326
Track Loader (CAT 963)	155	735	1,092	114	92
Excavator (CAT 325BL)	56	406	837	112	73
Excavator (CAT 320BL)	56	406	837	112	73
Bull Dozers (Crawler Tractor [CAT D6E])	61	203	485	52	40
Compaction Equipment (Ingersoll Rand SD70D Roller)	44	168	503	42	54
Compaction Equipment (Dynapac CA25 Padfoot Roller)	44	168	503	42	54
Clearing Equipment (Log Skidder [Timberjack 225])	22	206	447	57	37
Clearing Equipment (Track Feller/Buncher [TIMBCO T445-B])	69	417	906	115	75
Clearing Equipment (Brush Chipper [Morbark 13])	28	113	181	23	21
Deck Screed	147	935	1,117	146	94
Cranes	565	1,885	4,622	646	417
Pile Driving Hammer or Auger	147	935	1,117	146	94
Total Emissions (lb/year)	**1,721**	**8,395**	**16,549**	**2,096**	**1,450**
Total Emissions (ton/year)	**0.86**	**4.20**	**8.28**	**1.05**	**0.725**

Source: EPA NEVES Report, 1991, Table 2-4. Camp Dresser & McKee, Inc., 2003.

Emission factors for pickup and dual tandem trucks were obtained from *EPA AP-42 Volume II Table 2.1A* and *Table 7.1*, respectively. Pickup trucks were assumed to be light duty trucks with gross vehicle weight rate (GVWR) less than 6,000 pounds (small pickup trucks) and trucks with a GVWR less than 8,500 pounds (larger trucks). Dual tandem trucks were assumed to be diesel powered vehicles. Since emission factors are based on grams per vehicle mile traveled (VMT), it was estimated that pickup trucks would travel to, from, and around the site for approximately 50 miles per day for inspection purposes and transportation of supplies or personnel; dual tandem trucks were estimated to travel 30 miles per day throughout the site; and dump trucks were

estimated to travel 30 miles per day throughout the site and 50 miles per day to and from the site. Table 13 presents emission calculations for pickup and dual tandem trucks.

Table 13
Exhaust Emissions from Construction Vehicles

Construction Vehicles	Equipment Total	Emission Estimates (lb/year)			
		VOC	CO	NO_x	PM
Trucks					
Pickup Truck (Chevy C2500)	6	70	956	100	6,942
Specialty/Dual Tandem Trucks					
Mechanic (Ford F450)	1	36	165	140	694
Fuel (Mack CS300)	1	36	165	140	694
Flatbed (Ford F800)	1	36	165	140	694
Welding (mounted on heavy-duty P/U)	1	36	165	140	694
Grease Truck	1	36	165	140	694
Water (Mack RD600)	1	36	165	140	694
Vacuum (Ford LN8000)	1	36	165	140	694
Articulated (Off-Road) Truck (CATD25C)	1	36	165	140	694
Dump Truck (onsite emissions)					
Mack RD688S	10	361	1,650	1,397	6,942
Dump Truck (offsite emissions)					
Mack RD688S	10	601	2,761	2,328	NA
Total Emissions (lb/year)		**1,320**	**6,687**	**4,945**	**19,436**
Total Emissions (ton/year)		**0.66**	**3.34**	**2.47**	**9.72**

Source: EPA AP-42 Volume II, Table 2.1A and Table 7.1. Camp Dresser & McKee, Inc., 2003.

Dust emissions from material handling associated with clearing, grading, storing, and handling fill material for the construction of the bridge area to the Proposed Project are shown in Table 14. No estimates of the quantity of fill material required, other than for the bridge, have been made.

Table 14
Particulate Matter Emissions from Material Handling Activities

Construction Vehicles	Material Handled (tons/year)	Emissions Estimate (lbs./year)
		PM
Bridge Construction	2,700	1,361
Total Emissions (lb/year)		1,361
Total Emissions (ton/year)		0.68

Source: EPA AP-42 Compilation of Air Pollutant Emission Factors Volume I Section 13.2.4
Camp Dresser & McKee, Inc., 2003.

Table 15 summarizes the combined total of annual criteria pollutant emissions from construction equipment, construction vehicles, and construction activities.

Table 15
2004-2005 Construction Emissions Summary

Potential Criteria Pollutant Emissions (lbs./year)	VOC	CO	NOx	PM	SO_2
Emissions from Construction Equipment Exhaust	1,721	8,395	16,549	2,096	1,450
Emissions from Construction Vehicle Exhaust	1,320	6,687	4,945	19,436	NA
Emissions from Construction Activities	NA	NA	NA	1,361	NA
Total Emissions (lbs./year)	**3,041**	**15,082**	**21,494**	**22,893**	**1,450**
Total Emissions (ton/year)	**1.52**	**7.54**	**10.73**	**11.45**	**0.73**

Source: Camp Dresser & McKee, Inc., 2003.

The highest emitting pollutants during construction activities would be PM and NO_x, which are attributed primarily to site clearing and clearing equipment, cranes, and dump trucks needed to distribute fill around the site. NO_x emissions are minimized by constructing a bridge across Sandy Creek, rather than culverts, as considerably less fill material is required for this alternative which translates to fewer dump truck VMTs.

4.5.5 General Conformity Determination

General conformity is the federal process used to ensure that the air quality effects of federal actions, not related to motor vehicle transportation plans, and located within non-attainment and maintenance areas are considered. FTY is located in the metro Atlanta ozone serious non-attainment area. NO_x and VOC are precursors for the formation of ozone. Because the airport is within a non-attainment area, the emissions caused by the federal action (the "net" emissions when Proposed Project emissions are compared to No-Action emissions) must be compared to what are known as *de minimis* levels. A conformity determination must be performed when the project emission's equal or exceed the *de minimis* levels. If emissions are below the *de minimis* levels, the action is presumed to conform to the 1990 Clean Air Act Amendments (CAAA). If emissions are above the *de minimis* levels, a conformity determination must be prepared.

In addition to a comparison of total project emissions to the *de minimis* levels, conformity determinations are also required when a project's emissions represent 10 percent or more of a non-attainment area's total regional emissions of the applicable pollutant or precursors, in this case NO_x and VOC. If the emissions represent 10 percent or more of the regional emissions, the action is determined to be regionally significant and a conformity determination must be performed.

4.5.5.1 *De minimis* Comparison

Based on the current ozone serious non-attainment designation for the Atlanta area, the *de minimis* levels are 50 tons per year of VOC and 50 tons per year of NO_x. As shown in Tables 8 and 15, emissions of neither ozone precursor is expected to meet or exceed the *de minimis* levels. The greatest project-related VOC emissions are 9 tons per year (2020) and the greatest construction equipment NO_x emissions are 11 tons per year (2004-2005). As these levels are below the *de minimis* criteria, the project is presumed to conform to the CAAA.

4.5.5.2 Regional Significance

To evaluate the regional significance of project-related construction emissions, the estimates were compared to regional emissions based on the July 17, 2001 Georgia SIP submitted to EPA. The projected 2003 emissions inventory for the 13-county non-attainment area includes emissions from all sources: stationary, mobile, and area. The emissions were approximated from an average of daily emission rates used in EPD's attainment modeling demonstration.

The 2003 estimated total regional VOC and NOx emissions for the Atlanta ozone non-attainment area are shown in Table 16. The maximum project-related emissions are provided in the table for comparison. As shown, project-related emissions represent less than 0.01 percent of the regional emissions of the O_3 precursors. Therefore, emissions resulting from the Proposed Project are not considered regionally significant and the Proposed Project construction and operation are presumed to conform to the CAAA.

Table 16
Atlanta Regional Emissions Inventory

Source	Tons/Year	
	VOC	NO_x
2003 Regional Emission Estimate	498,225	192,720
Maximum Project-Related VOC & Construction Equipment NO_x Emissions	9	11
Percent of Regional Total	Less than 0.01	Less than 0.01

Source: State Implementation Plan, July 17, 2001. Camp Dresser & McKee, Inc., 2003.

4.6 Cultural Resources

Historic and archaeological resources listed in or eligible for listing in the National Register of Historic Places (NRHP), and those that may be affected by an undertaking by a federal agency, are protected by federal law. Eligibility and protection of such resources are determined in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, Section 101(b) 4 of the National Environmental Policy Act of 1969, Section 303 (c) of

Title 49, U.S.C. (previously Section 4(f) of the Department of Transportation Act), and amended procedures of the protection of historic and cultural properties as set forth in 36 CFR 800 (June 1999). These laws and regulations are invoked by the involvement of federal funding, licensing, or permitting. Under the authority of Section 106 of the NHPA, a federal agency must consider the effects of the Proposed Project on properties listed in or eligible for listing in the NRHP. The DNR's Historic Preservation Division (HPD) has been consulted as the State Historic Preservation Officer (SHPO).

Federal regulations define the area of potential effect (APE) as "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist" [36 CFR 800.16(d)]. Such changes may include physical destruction, damage, or alteration of a property; change in the character of the property's use or of physical features within its setting that contribute to its historic significance; and introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features [36 CFR 800.5(a)(2)]. The APE was defined as all properties physically affected by project implementation, all properties visible from the project area, and/or locations where the Proposed Project may alter or disturb surface and subsurface soils that contain, or have the potential to contain, archaeological sites.

4.6.1 Historic Structures

In May 2002, a survey was performed to identify historic properties located in the APE for the Proposed Project. Existing information was checked to determine if any historic properties are located within the APE. This review included NRHP listed properties, pending NRHP nominations, National Historic Landmarks, and the updated Georgia Historic Bridge Survey (GHBS). No properties listed in or nominated for listing in the National Register, National Historic Landmarks or bridges determined eligible for inclusion in the National Register were identified within the Proposed Project's APE. There are no historic structures within the APE that are eligible or potentially eligible for the NRHP. Currently, the project area is vacant. Previously, it was owned and occupied by the Chattahoochee Brick Company. However, there are no associated buildings and structures that exist within the project area. Therefore, the Proposed Project would result in a finding of No Historic Properties Affected. The SHPO has reviewed the report and concurred with its findings (see Appendix B).

4.6.2 Archaeological Sites

According to the Georgia Department of Natural Resources-Historic Preservation Division (HPD), there are numerous large prehistoric and historic archaeological sites within close proximity to the boundary of the Proposed Project. Due to the potential for such resources, HPD staff recommended an archaeological survey be completed to meet Section 106 standards. As a result of this request, background research and a field survey were conducted. The results are contained in the report, *Archaeological Resurvey of the Proposed North Terminal Development-Fulton County Airport-Brown Field* (Site Inc., May 2002), which is available from Kimley-Horn and Associates, Inc. The SHPO has reviewed the report and concurred with its findings (see Appendix B).

Background research included review of State Archaeological Site Files database (maintained by the University of Georgia) for any previously identified resources within the project area. In addition, documents from the Fulton County Airport, such as the *Fulton County Airport-Brown Field Master Plan* (R.W. Armstrong, 2000), *Environmental Assessment for the Purchase of the Chattahoochee Brick Property* (Airport Planning and Design, 2000) and *Northern Expansion of Brown Airport, Fulton County, Georgia* (OSM Archaeological Consultants, 1985) were reviewed. For the background research and field survey, the entire airport area was evaluated, rather than just the APE.

Background research indicated two prehistoric archaeological sites, an historic farmstead site, a Civil War fortification, and one historic cemetery within the project area. None of the sites, with exception of the Civil War fortification, were determined eligible for nomination to the NRHP. The entire project area and identified sites were examined by pedestrian reconnaissance to determine their current state of preservation. Of the sites, the Civil War fortifications and the cemetery appeared to be in good condition and unchanged except for growth in vegetation; the farmstead site was overgrown to invisibility, and the archaeological sites were no longer existent. The Civil War fortification is outside the APE, and would not be impacted by project construction.

The Nelson cemetery was identified during the master planning process for preservation on site. The Proposed Project has been developed to avoid any impacts to the site, as it is protected by state law and county policy. Prior to project construction, a survey of the cemetery will be

prepared, identifying full boundaries with a metes and bounds description. The cemetery will be protected with fencing, and access to the site will be available. The SHPO has agreed with the recommendations for preserving the cemetery.

4.6.3 Section 303 (c) of Title 49 U.S.C.

Section 303 (c) of Title 49 U.S.C. (previously known as Section 4(f) of the Department of Transportation Act) prohibits any project that requires use of any public park; recreation area; wildlife or waterfowl refuge of national, state, or local significance; or historic site of national, state, or local significance unless no practicable and feasible alternative exists. The Chattahoochee River National Recreational Area, which is located approximately 12 miles north of the project area, would not be impacted by the project. No Section 303 (c) resources are located within the area of impact, and therefore, no Section 303 (c) involvement would occur.

4.7 Biotic Communities

Many of the terrestrial communities and wildlife habitats within the project area have been disturbed. Historic brick mining activities and suburban development have compromised water sources, food supply, and appropriate vegetation cover within the project area. Therefore, the terrestrial vegetation communities have encountered degradation. A number of species have been able to exist without a significant decline in population. These species would be impacted by the utilization of clear-cutting techniques, grading, and fill activities associated with the construction phase of the Proposed Project. However, because the project area is primarily dominated by disturbed land uses, it is anticipated that minimal impacts would occur.

4.7.1 Methodology

The project area was evaluated for the occurrence of distinct and definable natural communities and land uses that would be potentially impacted by the Proposed Project. Identification was based on the existing vegetation, hydrology, soils, and topographic position within the project area. Concurrent with field surveys to identify "Waters of the U.S." (February 2002), biologists assessed the character and nature of all natural and modified communities within the project area. This assessment included the evaluation of potentially affected terrestrial communities, as well as wildlife and wildlife habitats. Biotic communities were determined through field surveys and the acres of impact were calculated by using ArcView GIS. General communities within the project

area are shown on Figure 10. Approximately 57% of the project area is bare land, 26% forested, and 26% is cleared land.

4.7.2 Terrestrial Communities

Natural communities occurring within the project area include disturbed scrub-shrub, bottomland hardwood forest, mixed pine/hardwood forest, bottomland hardwood forest, and remnant pine planted forests. All of the above communities are in various stages of succession.

4.7.2.1 Scrub-Shrub

A majority of the project area was previously mined for use in brick making productions and has since been abandoned and left barren of most vegetation. A scrub-shrub community has been created by primary and secondary-successional species that have emerged and taken root in areas that were previously mined. In general, nearly pure stands of young loblolly pine trees (*Pinus taeda*) have naturally regenerated in the old brick production areas. However, there are small areas devoid of vegetation and small areas with a dense covering of hardwood sapling, shrubs, woody vines, and herbaceous species commonly found in disturbed areas or in earlier stages of plant succession. Common species observed included red maple (*Acer rubrum*) saplings, sweetgum (*Liquidambar styraciflua*) saplings, loblolly pine (*Pinus taeda)* saplings, Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), blackberry (*Rubus* spp.), greenbrier (*Smilax* sp.), fescue (*Festuca* sp.), goldenrod (*Solidago* spp.), and broomsedge (*Andropogon virginicus*).

Most of the project impacts to the biotic communities would occur within the disturbed scrub-shrub community. It is anticipated that this community would be permanently impacted by clearing and grading and would result in the loss of some foraging and nesting habitats due to the development of the NTA. Some displacement of fauna during the construction phase of the project would be expected to occur.

4.7.2.2 Bottomland Hardwood Forest

A bottomland hardwood forest is located along the floodplain of Sandy Creek. The age of the bottomland hardwood forest is estimated to be less than 50 years old. Common overstory species observed during the field investigation include sweetgum (*Liquidambar styraciflua*), water oak (*Quercus nigra*), tulip poplar (*Liriodendron tulipifera*), green ash (*Fraxinus pennsylvanica*), and

eastern sycamore (*Platanus occidentalis*). The dense understory is dominated by invasive species such as Chinese privet (*Ligustrum sinense*), mimosa (*Albizia julibrissin*), and Japanese honeysuckle (*Lonicera japonica*). Other dominant understory species include flowering dogwood (*Cornus florida*), hawthorne (*Cretagous* sp.), blueberries (*Vaccinium* sp.), and seedlings of the previously mentioned overstory species. Some portions of this community include jurisdictional wetlands.

The primary impact to the bottomland hardwood forest would be the clearing of mature timbers. Even with the clearing of some mature timber, most of the wildlife species that presently use the area would continue to have habitat for foraging, breeding, and cover for resting and protection. There would likely be some displacement of fauna due to the construction of the project. The proposed footprint has been revised to minimize impacts to forested areas within the floodplains and to preserve forest in the northern corner of the airport property.

4.7.2.3 Mixed Pine / Hardwood Forest

Mixed pine/hardwood forests are located on the upland slopes adjacent to the bottomland hardwood forest and on undisturbed areas within the mined brick site. Like the bottomland hardwood forest, this forest community appears to be less than 50 years old. The overstory of the mixed pine/hardwood forest is dominated by pines and upland hardwoods including loblolly pine (*Pinus taeda*), white oak (*Quercus alba*), southern red oak (*Quercus falcata*), post oak (*Quercus stellata*), mockernut hickory (*Carya tomentosa*), and shagbark hickory (*Carya ovata*). The sparse understory is dominated by species that include flowering dogwood (*Carnaceae cornus),* Chinese privet (*Ligustrum sinense),* winged elm (*Ulmus alata*), sourwood (*Oxydendrum arboreum*), and blackcherry (*Prunus serotina*). Herbaceous species in the mixed pine/hardwood forest included greenbrier, Japanese honeysuckle, poison ivy (*Toxicodendron radicans*), and Christmas fern (*Polystichum acrostichoides*).

The mixed pine/hardwood forest would be impacted by the clearing of mature timber for the Proposed Project. The footprint of the development area has been revised to minimize impacts, and as a result, much of the forested area within the Sandy Creek floodplain would be preserved. In addition, more than 20 acres of forest area would be preserved northeast of the NTA.

4.7.3 Fauna

Previous brick mining and urbanization activities within and surrounding the project area have altered the species composition that permanently or temporarily occupies the NTA. In general, the shift has been to generalist species that have adapted to human activities and do not require large tracts of undisturbed forest. These species are capable of sustaining and even flourishing in disturbed communities without significant declines in population.

The Proposed Project would primarily impact the scrub-shrub community and would have little impact to the bottomland hardwood forest. The permanent impacts would primarily occur within historically fragmented and heavily degraded scrub-shrub community. Additional impacts would be to the bottomland hardwood and mixed pine/hardwood forest. The species observed in the project area were gray squirrels (*Sciurus carolinensis*) and birds such as American crows (*Corvus brachyrhynchos*), northern mockingbirds (*Mimus polyglottos*), northern cardinals (*Cardinalis cardinalis*), blue jays (*Cyanocitta cristata*), and sparrows (*Aimophila aestivalis).* Indicators of white-tail deer (*Odocoileus virginianus*) and eastern cottontail (*Sylvilagus floridanus*) also were observed. Given the project's location and surrounding land use, the value of the site for wildlife is limited to those species normally associated with a mixed suburban landscape.

No impacts would occur within the interior portions of a large contiguous mature forest, which is necessary to support some neotropical birds, migratory birds, and other fauna. Furthermore, impacts to forest edges, which are primary foraging locations for some birds and mammals, would be temporary. It is anticipated that natural succession dynamics would result in the development of a similar quantity and quality of foraging locations. Therefore, no significant adverse impacts would occur to wildlife and wildlife habitats.

4.7.4 Aquatic Resources

The Proposed Project includes two permanent crossings of Sandy Creek via bridges for the taxiways (see Section 4.10.3.2). During the construction of these bridges and the other facilities, minor temporary impacts to Sandy Creek may occur. Despite recent efforts to improve regional water quality standards within the metro Atlanta area, riverine systems encountered within the project area exhibit the detrimental effects of historic and current urban land uses. Such effects have resulted in the elimination and degradation of any potentially suitable channel substrate, water flow rate, or water quality capable of sustaining any of the consistent federally-listed

aquatic species within the project area. Appropriate sedimentation and erosion control practices would be employed during construction to minimize turbidity. The Proposed Project would adhere to local and state storm water management requirements. It is anticipated that no long-term degradation of aquatic resources would occur.

4.7.5 Summary of Impacts

The Proposed Project would primarily impact areas that are severely disturbed, fragmented, or isolated. Therefore, there would be minimal adverse impacts to the non-urban biotic communities within the project area.

4.8 Endangered and Threatened Species

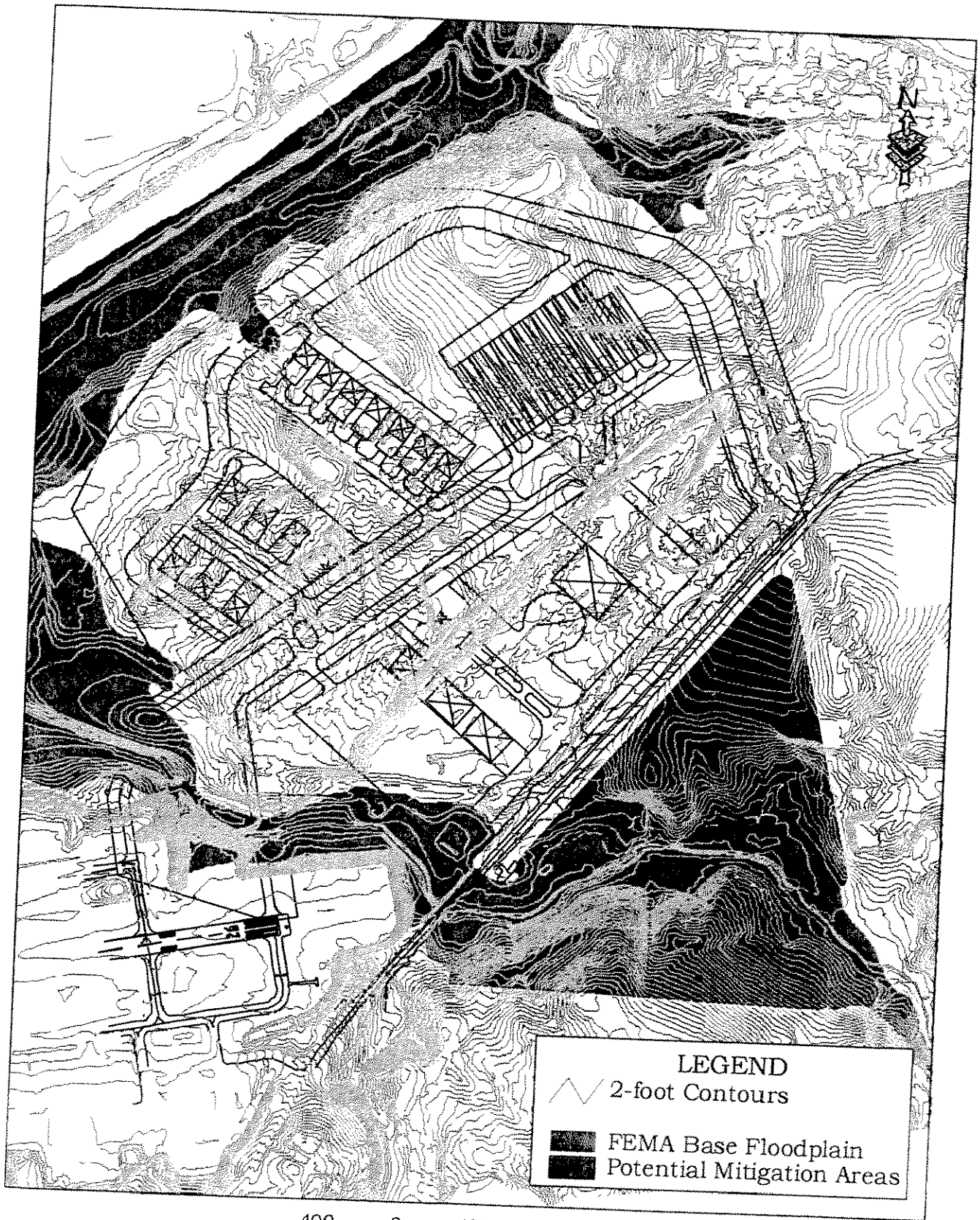
Surveys for federal and state protected species as well as federal candidate species were conducted by biologists in February 2002. No federally-listed terrestrial species or potentially suitable habitats, capable of supporting such species, were identified during the field surveys.

4.8.1 Methodology

An evaluation of protected species was performed using a comprehensive literature search, field reconnaissance, and consultation with the United States Fish and Wildlife Service (USFWS) and the Georgia Department of Natural Resources (DNR) Natural Heritage Program. Prior to field surveys, a list of protected floral and faunal species with ranges that include the project area was generated for field and office use. The list was based on information derived from the USFWS and "The Protected Plants of Georgia" published by the DNR Natural Heritage Program (see Appendix B). Field surveys were conducted to determine whether these species occurred within the project area.

4.8.2 Federal Species

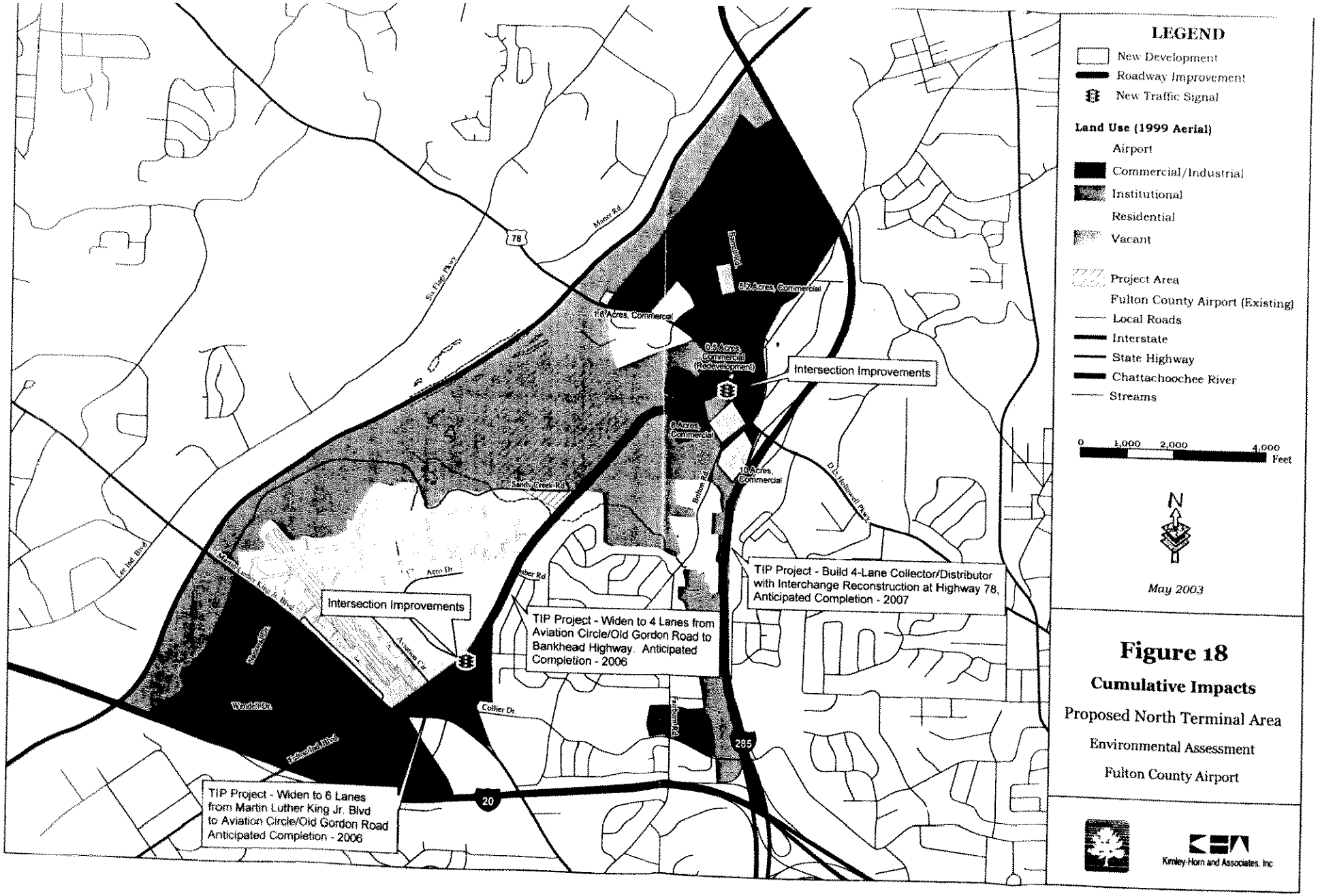
The potential impacts to the four federally-protected terrestrial and aquatic species are described in this section. These species include the bald eagle (*Haliaeetus leucocephalus)*, shiny-rayed pocketbook mussel (*Lampsilis subangulata)*, Gulf moccasinshell mussel (*Medionidus pencillatus)*, and the Cheorkee darter (*Etheostoma scotti)*. In addition, the Georgia aster (*Aster georgianus)* is a federal candidate species. Candidate species are currently under review to determine and evaluate population trends and threats. Such evaluations could result in the elevation of a species status to federally endangered or threatened and thus granted legal



CDM

Figure 16
Potential Floodplain
Mitigation Areas
Proposed North Terminal Area
Fulton County Airport

LEGEND
Landfill Locations
Major Roads
County Boundary
Fulton County Airport
2000 0 2000 4000 Feet
N
May 2003
Figure 17
Landfill Locations
Proposed North Terminal Area
Environmental Assessment
Fulton County Airport
CDM
COBB
FULTON
Field Road #1
Skinner - Watts Rd.
BFI - Watts Road
Interstate 285
Joe Jones
MacDougald Construction Co.
Mid - South Supply - Bankhead Highway
US 78
Fulton Industrial Blvd NW
Interstate 20
Martin Luther King Jr Dr SW



To: 4048936341 From: Stream Customer (4048936540) 05/07/07 04:13 PM Page 3 of 64

Appendix

Appendix A

Forecasts

Appendix A

Fulton County Airport – Brown Field

Aircraft Operations Forecast Update

Operations Forecast Background

Fulton County Airport – Brown Field's current improvement program began with an update of the Airport Master Plan in 1999. Aviation demand forecasts used in the master plan update were produced during that process and were based on the data available early in 1999. Therefore, the calendar year 1998 aircraft operational statistics were the latest data available from the Fulton County Air Traffic Control Tower at the time the forecasts were prepared. The 1998 data was used with previous years as the basis for the forecast of operations.

Need for the Update

Data from calendar year 1999, which had not been available during the forecasting process, but which was included in the final report produced in April of 2000, indicated that the aircraft activity at the airport was beginning to accelerate at a faster pace than earlier data had suggested. More recent data through CY2001 indicates that the growth of traffic is still following the faster pace even recognizing the traffic slump following the September 11th tragedy.

Based on the growth rate since 1998, as reported by the Air Traffic Control Tower, the forecast of aircraft operations as reported for the year 2005 in the master plan document would appear to be understated since the operations reported by the Tower for the year CY2000 are essentially equal to those forecast for the year 2005 and the 2001 operations were significantly ahead of the forecast for 2005. A reevaluation of the data suggests that the master plan forecast of operations may best reflect a low forecast range. The growth of the aircraft operations at the airport reflects a return to a higher level of operational utilization of the aircraft and that the upper end of general aviation is maintaining strong growth.

Portions of the environmental assessment analyses use the operations forecasts for the prediction of various environmental impacts. Therefore, it is essential that the forecast of operations is current in order to properly assess the environmental impacts which may arise from the aircraft operational activity.

Operations Forecast

Proposed Project

The master plan forecast of aircraft operations was based on an operations per based aircraft factor of 675; meaning that for every aircraft based at the airport, an average of 675 operations (landings or takeoffs) would be conducted annually. The operations per based aircraft (OPBA) factor are commonly used in the aviation industry to forecast aircraft operations.

A review of the most recent operational history suggests that the 675 number is currently too low. A comparison of the known based aircraft count and the operations for CY1999 suggests a minimum OPBA factor of 735. A time series regression analysis utilizing the known operations for the period from 1998 through 2001 suggests a factor of 820 OPBA; however, while a four

year period certainly provides an indication of stronger growth, it is considered insufficient in length to provide a reliable forecasting base.

The OPBAs of 675 and 820 effectively provide an upper and lower range of potential values for the operations at Fulton County Airport. An average of the upper and lower values yields an OPBA factor of 750 which will be used to update the forecast of operations. The based aircraft forecast from the master plan and the total operations are contained in the following table. The split between itinerant and local operations remains as forecast in the master plan. Itinerant operations are those where the aircraft departs from Fulton County Airport and travels to another location or airport or departs another location and arrives at Fulton County Airport. Local operations are defined as those remaining in the "local" area.

To date there is no indication that any adjustments to the forecast of based aircraft is warranted. Therefore, the forecast of based aircraft is as contained in the master plan document. The updated forecast of operations is contained in Table A-1.

Table A-1
Revised Operations Forecast
Proposed Project

Year	Based* Aircraft	Previous* Operations Forecast	Revised OPBA	Total	Itinerant	Local
2005	174	117,450	750	130,500	84,200	46,300
2010	193	130,275	750	144,700	93,400	51,300
2020	222	149,850	750	166,500	107,400	59,100

Source: Kimley-Horn and Associates Project Team, Pegasus Associates International, Inc.
* From the Fulton County Airport – Brown Field Master Plan, prepared by R. W. Armstrong & Associates

No-Action

One of the primary evaluation criteria utilized in environmental assessments is that of comparing the "build" alternative, the development of the North Terminal Area in this case, with not building the project. In order to effect that comparison in several areas of environmental concern, a "no-action" forecast is required.

The analysis of the master plan alternatives and the airport as it presently exists indicates that the airport could accommodate the year 2005 based aircraft growth on the existing central portion of the airport terminal area. The runway system has sufficient capacity to accommodate the entire 20 year forecast and is, therefore, not a factor in the environmental investigation.

The development schedule does indicate that a portion of the development may be accommodated in the new North Terminal Area by 2005. Beyond the year 2005, however, the growth of based aircraft will be accommodated in the North Terminal Area.

Since the aircraft operations are based on a factor of operations per based aircraft, if the based aircraft as forecast are not accommodated on the airport, some number of operations will not occur. Therefore, the environmental assessment future year time frame of 2020 suggests that if the total based aircraft forecast cannot be accommodated on the existing airport without expansion, then it is possible that the total operations as forecast will not occur.

The utilization of the operations per based aircraft factor includes the premise that a portion of the aircraft operations are conducted by based aircraft and a portion are conducted by transient aircraft. When all aircraft operations are considered together, the OPBA factor represents an average number of operations conducted per each of the based aircraft. The differentiation of the different types of traffic sets the scenario for the no - build forecast as follows:

- The existing airside and landside system can accommodate the 2005 forecast of based aircraft and operations.
- Aircraft based at the airport conduct most of the local operations and many of the itinerant operations.
- The vast majority of transient aircraft operations conducted at the airport are itinerant operations although there are a few local operations which are conducted by transient aircraft in training activities. (Those aircraft based at other airports and which are visiting Fulton County Airport conduct local operations while there.)
- For the future year (2020) no-action forecast (without the North Terminal Area project), based aircraft and therefore operations generated by based aircraft will be limited by a lack of aircraft basing space.
- The future year (2020) itinerant operations by transient aircraft will not be limited by a lack of aircraft basing space.

Methodology

This no-action forecast assumes that there will be no growth in based aircraft beyond the year 2005 level without the project due to a lack of basing space. Therefore, the contribution by based aircraft to the total number of future aircraft operations is maintained at the year 2005 forecast level of 174 based aircraft. The 2005 operations generated by based aircraft were assumed to be all of the local operations (46,300) and one half of the itinerant operations (42,100). This number (88,400) is carried into the future as the total operations generated by based aircraft and would be expected to remain essentially the same from 2005 through 2020 without the North Terminal Area project.

The remainder of the forecast operations is those generated by transient aircraft. The no-action forecast further assumes that transient operations will not be affected by a lack of basing space. Future transient operations are dependent on the transportation needs of the economy and not on local based aircraft. The number of transient operations in 2020 is assumed to be one half of the build forecast's itinerant operations (53,700). The forecast of total itinerant operations for the

year 2020 is unchanged from the master plan forecast which presumed facilities would be available.

Based on the premises noted above, the forecast for the year 2020 no-action operations is as contained in Table A–2.

Table A-2
No-Action Forecast

Type Of Operation	Derived From	Operations
2020 FTY Based Local Operations	Equal to 2005 Local Operations	46,300
2020 FTY Based Itinerant Operations	Equal to ½ 2005 Itinerant Operations	42,100
2020 Transient Operations	Equal to ½ 2020 Itinerant Operations	53,700
2020 Total No-Action Operations		142,100
2020 No-Action Based Aircraft		174

Source: Pegasus Associates International, Inc.

Appendix B

Agency and Public Coordination

Agency Comments

Barker, Todd

Subject: FW: North Terminal Area Development at Fulton County Airport

-----Original Message-----
From: Scott Southwick [mailto:Scott_Southwick@dnr.state.ga.us]
Sent: Wednesday, August 20, 2003 1:46 PM
To: Barker, Todd
Subject: RE: North Terminal Area Development at Fulton County Airport

Thanks. Thanks for the additional analysis. I concur with your conclusion that the increased emissions are below the deminimis levels.

>>> <Todd.Barker@kimley-horn.com> 8/15/03 11:00:04 AM >>>

Scott-

I am replying to your comment letter on the proposed North Terminal Area development at Fulton County Airport. While the type of project and size of projected operations fall well below the federal threshold for detailed analysis, we have used the methodology from the EA to estimate total air emissions. Enclosed is a table that shows projected total emissions for all modes (taxi, takeoff, climbout, and landing). It accounts for the increase in taxi TIM as well as total operations from the no-action to the proposed project. The bottom line is the difference in emissions as a result of the project do not exceed the *deminimis* levels.

These totals in 2020 represent a buildout scenario where 1) the public project is fully constructed, consisting of the infrastructure, pads, taxiways, and grading and 2) private developers and other entities build the hangar facilities that could be accommodated within the NTA. Essentially, the emissions would become a possible secondary impact of induced development if all of the project is funded and the business demand is high enough to build the hangars.

I would appreciate any comments back within the week to bring closure in this review process. We have coordinated with EPA, which has no comments other than a request for us to respond to your letter.

<<EPDResponseTable.doc>>
Thanks,

Todd A. Barker, AICP

Kimley-Horn and Associates, Inc.
3169 Holcomb Bridge Road, Suite 600
Norcross, Georgia 30071
678 533 3918 *Direct Office*
678 469 1600 *Cell Phone*
770 825 0074 *Facsimile*

Fulton County Airport – North Terminal Area Development
Annual Emission Estimates from Aircraft Operations

	Tons of Emissions per Year			
Aircraft Type	**VOC**	**CO**	**NO_x**	**SO_2**
2005 No Build Total	**42.51**	**188.71**	**17.64**	**1.35**
2020 No Build				
Falcon 10, Lear 35/36, Lear 31	6.38	20.48	5.05	0.36
Falcon 50, IAI 1124	2.03	11.75	4.53	0.26
CL600	2.55	18.05	6.27	0.46
Cessna 150	3.31	125.78	0.39	0.01
KingAir 200	35.25	43.78	4.31	0.47
2020 No Build Total	**49.52**	**219.84**	**20.55**	**1.58**
2020 Build				
Falcon 10, Lear 35/36, Lear 31	7.81	24.97	5.97	0.44
Falcon 50, IAI 1124	2.48	14.34	5.36	0.31
CL600	3.14	22.16	7.42	0.55
Cessna 150	3.91	148.11	0.46	0.02
KingAir 200	42.96	53.19	5.08	0.56
2020 Build Total	**60.31**	**262.77**	**24.28**	**1.88**
2020 Build, Less 2020 No Build	**10.79**	**42.93**	**3.73**	**0.31**
Percent Increase of 2020 Build over 2020 No Build	**22%**	**20%**	**18%**	**19%**

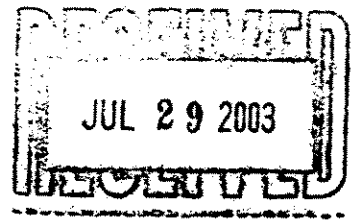
Georgia Department of Natural Resources

Lonice C. Barrett, Commissioner

Historic Preservation Division

W. Ray Luce, Division Director and Deputy State Historic Preservation Officer
156 Trinity Avenue, S.W., Suite 101, Atlanta, Georgia 30303-3600
Telephone (404) 656-2840 Fax (404) 657-1040 http://www.gashpo.org

July 28, 2003



Kimley-Horn and Associates, Inc.
Attn: Todd Barker
Suite 600
3169 Holcomb Bridge Road
Norcross, Georgia 30071

RE: **Fulton County Airport Development, North Terminal Area**
Fulton County, Georgia
HP-011226-008

Dear Mr. Barker:

The Historic Preservation Division (HPD) has reviewed the *Archaeological Resurvey of the Proposed North Terminal Development, Fulton County Airport, Brown Field* and the Environmental Assessment concerning the above-mentioned project. Our comments are offered to assist federal agencies and project applicants in complying with the provisions of Section 106 of the National Historic Preservation Act.

HPD concurs with the findings that sites 9FU(OSM)1 and 9FU(OSM)2 are likely no longer extant, and that site 9FU(OSM)5, the Civil War fortification, will not be affected by the proposed undertaking. We also concur with the recommendations that the Nelson Cemetery be surveyed and delineated by an archaeologist, and that the measures described to protect the cemetery be implemented.

Therefore, based on the information submitted, HPD believes that no historic properties or archaeological resources that are listed in or eligible for listing in the National Register of Historic Places will be affected by this undertaking. Please note that historic and/or archaeological resources may be located within the project's area of potential effect (APE), however, at this time it has been determined that they will not be impacted by the above-referenced project. Furthermore, any changes to this project as proposed will require further review by our office for compliance with the Section 106 process.

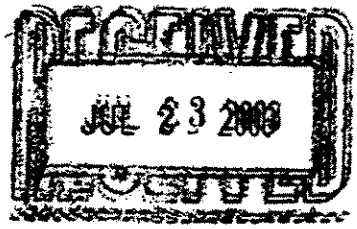
If we may be of any further assistance, please do not hesitate to contact me at (404) 651-6777 or Serena Bellew, Environmental Review Coordinator, at (404) 651- 6624. **For questions specific to archaeology, please call Joey Charles, Review Archaeologist, at (404) 651-6433.**

Sincerely,

Denise P. Messick
Environmental Review Historian

cc: Maurice Ungaro, Atlanta Regional Commission

Georgia Department of Natural Resources
Environmental Protection Division • Air Protection Branch
4244 International Parkway • Suite 120 • Atlanta • Georgia 30354
404/363-7000 • Fax: 404/363-7100
Lonice C. Barrett, Commissioner
Harold F. Reheis, Director



July 22, 2003

Todd Barker, AICP
Senior Planner
Kimley-Horn and Associates
3169 Holcomb Bridge Road
Suite 600
Norcross, GA 30071

Re: North Terminal Area Development at Fulton County Airport

Dear Mr. Barker:

Thank you for the opportunity to review the Fulton County Airport project. Please consider the following comment. I would like to see the analysis done for the taxi-in-mode (TIM) also done for aircraft approach, takeoff, and climbout. This analysis would provide a complete representation of emissions that result from an increase in hangar capacity.

Thanks again for the opportunity to review this project. If you have any questions or need any additional assistance, please feel free to contact me at (404) 362-4569.

Sincerely,

Scott Southwick
Environmental Engineer

Barker, Todd

From: Steve_Parris@fws.gov
Sent: Wednesday, July 30, 2003 9:45 AM
To: Barker, Todd
Subject: RE: Environmental Assessment for North Terminal Area Development, Fulton County Ariport-Brown Field

I think that would be useful. A smaller footprint is better as far as wildlife resources. My comments were to clarify that if habitat is lost, in the long term populations will adjust downward to the level that the remaining habitat can support. That does not necessarily mean the loss is significant in the context of NEPA.

Steve Parris
Supervisory Fish and Wildlife Biologist
Georgia Ecological Services
West Georgia Sub-Office
P. O. Box 52560
Fort Benning, GA 31995-2560
Phone (706) 544-6428
FAX (706) 544-6419

<Todd.Barker@kimley-horn.com> To: <Steve_Parris@fws.gov>

07/25/03 10:47 AM cc:
Subject: RE: Environmental Assessment for North Terminal Area Development, Fulton County Ariport-Brown Field

Steve-

We will consider your comments in the Final EA. Do you suggest adding clarification in a response to you or within the actual text?

We do expect that the design is allowing preservation of some forest area on site as well as the adjacent 500-foot buffer along the river that is forested in this location. A smaller footprint is being used than the original Master Plan envisisioned, with considerable percentage being forest buffering between the proposed development and the housing complex and truck terminal to the north. Perhaps we need to identify the acreage and type of communities being preserved on the property that otherwise would have been developed.

Thanks

Todd Barker

-----Original Message-----
From: Steve_Parris@fws.gov [mailto:Steve_Parris@fws.gov]
Sent: Fri 7/25/2003 10:00 AM
To: Barker, Todd
Cc:
Subject: Environmental Assessment for North Terminal Area Development, Fulton County Ariport-Brown Field

Mr. Todd Barker:

I have the following comments on the subject environmental assessment:

4.7.2 Terrestrial Communities, Scrub-Shrub. "It is anticipated that this community would be permanently impacted by clearing and grading.... Although displacement of fauna during the construction phase of the project would undoubtedly occur, the adjacent biotic communities should be able to accommodate the influx fauna." It is unlikely that adjacent communities would be able to accommodate displaced individuals unless those communities are below carrying capacity. A much more likely scenario is that competition for limited habitat resources will cause additional mortality of displaced and resident individuals and the population(s) will not remain stable. Long-tern impacts, a decrease in fauna, is the more likely result.

Bottomland Hardwood Forests. Again, adjacent biotic communities would be unlikely to accommodate displaced individuals long term especially if they do not provide mature timber. Long term impacts should be anticipated.

Mixed Pine/Hardwood. Long-term impacts to fauna should be anticipated if there is a net loss of habitat.

Steve Parris
Supervisory Fish and Wildlife Biologist
Georgia Ecological Services
West Georgia Sub-Office
P. O. Box 52560
Fort Benning, GA 31995-2560
Phone (706) 544-6428
FAX (706) 544-6419

Public Involvement

Notice of Availability
Environmental Assessment for North Terminal Area
Fulton County Airport – Brown Field

Fulton County Airport has conducted an Environmental Assessment (EA) to consider potential impacts of developing its North Terminal Area. The EA has been prepared in accordance with state and federal regulations, including the National Environmental Policy Act of 1969.

The North Terminal Area project would consist of taxiways connecting the existing runway ends to a new area for hangars and aviation related development. The new area would address the airport's need to increase hangar space and related aviation services to remain economically viable in future years. The construction would occur in phases over several years. Based on the findings of the EA, the project would:

- Be located entirely on existing airport property.
- Avoid any relocations or physical impacts to residential areas, including Bankhead Courts.
- Not include any modifications to runways or flight paths.
- Avoid impacts to Sandy Creek by bridging over the stream instead of using culverts.
- Minimize any floodplain impacts by using bridges, and compensate any impacts by creating floodplain on-site.
- Provide potential job opportunities in a range of skill levels, depending on future
- Not worsen the level of traffic service on the surrounding roadways.

Comments are invited from interested persons until July 26, 2003. Comments can either be written or submitted on forms provided. Mail comments to:

Fulton County Airport EA
c/o Kimley Horn and Associates, Inc.
3169 Holcomb Bridge Road
Suite 600
Norcross, Georgia 30071

Opportunities for Public Review of the Fulton County Airport Environmental Assessment

- Fulton County Central Public Library
- Bankhead Courts Public Library
- Adamsville-Collier Heights Public Library
- Harriett G. Darnell Senior Multipurpose Facility

To: 4048936341 From: Stream Customer (4048936540) 05/07/07 04:17 PM Page 20 of 64

Comment Form

Fulton County Airport Environmental Assessment (EA) – North Terminal Area

Please state your comments regarding the North Terminal Area Development and the EA.

1. Which beneficial or adverse impacts have been assessed and described in the EA do you consider the most important?

2. Do you have any concerns about this project that are not identified in the EA?

3. Other Comments

Please mail comments by July 26, 2003 to the following address:

Fulton County Airport EA
Kimley-Horn and Associates, Inc.
3169 Holcomb Bridge
Suite 600
Norcross, GA 30071

Name_____
Address_____
City_____, GA Zip Code_____

FULTON COUNTY

UTOY/CLAYTON TASK FORCE ON THE ENVIRONMENT MONTHLY MEETING

Sponsored by
District 5 Fulton County Commissioner
Emma I. Darnell

Thursday, June 26, 2003
Harriett G. Darnell Senior Multipurpose Facility
6:30 P.M. – 8:30 P.M.

CALL TO ORDER

PROJECT UPDATES

I. Presentation of Cascade Upgrade Median Landscaping Plan — Ernest Slaughter, Deputy Director, Department of Public Works

II. Status Report: Brown Field, Fulton County Airport — Douglas Barrett, Manager, Fulton County Airport

DISCUSSION

ADJOURNMENT

FULTON COUNTY

BROWN FIELD STEERING COMMITTEE SPECIAL MEETING

Sponsored by
District 5 Fulton County Commissioner
Emma I. Darnell

Monday, July 14, 2003
Harriett G. Darnell Senior Multipurpose Facility
6:30 P.M. – 8:00 P.M.

CALL TO ORDER	
FULTON COUNTY AIRPORT MASTER PLAN OVERVIEW	Carl Crass, Deputy Director Department of General Services
PRESENTATION OF ENVIRONMENTAL ASSESMENT FINDINGS	Todd Barker, Consultant Kimley-Horn Associates, Inc
QUESTIONS AND ANSWERS	
REMARKS	Commissioner Emma I. Darnell
ADJOURNMENT	

BOARD OF COMMISSIONERS OF FULTON COUNTY

FULTON COUNTY GOVERNMENT CENTER
141 PRYOR STREET, S.W.
ATLANTA, GEORGIA 30303

EMMA I. DARNELL
COMMISSIONER
DISTRICT 5

FULTON COUNTY

TELEPHONE (404) 730-8222
FACSIMILE (404) 224-3775
EMAIL: emma.darnell@co.fulton.ga.us

TO: *The Brownfield Steering Committee and Residents of District 5*

FROM: *Emma I. Darnell, Commissioner Fulton County Board of Commissioners*

SUBJECT: *The Brownfield Steering Committee and Residents of District 5 Special Community Meeting: Monday, July 14, 2003 at 6:30 p.m.- 8:30 p.m.*

DATE: *July 8, 2003*

Please join me, the Brownfield Steering Committee and Residents of District 5 at a Special Community Meeting on Monday, July 14, 2003 at 6:30 p.m. – 8:30 p.m. at the Harriett G. Darnell Senior Multipurpose Facility, 677 Fairburn Road, N.W. The topic of discussion will be the Environmental Assessment of the Fulton County Airport Master Plan.

Thank you.

EID/jw

Adams, Corey

From: Adams, Corey
Sent: Thursday, July 10, 2003 8:32 PM
To:

Cc: McMillan, Beth; Fason, James; Dupree, Christina; Todd, Terry; Hunter, Elayne; Woods, Anita; Crass, Carl; Barrett, Douglas; Adams, Corey; Blalock, Rick; Wardlaw, Jean; Robinson, Mae
Subject: Meeting Reminder: Commissioner Darnell -July 14, 2003 Meeting

Good Evening!

I trust that most of you have received your notices for Monday's Public Hearing that Commissioner Darnell will host regarding Fulton County Airport – Brown Field Master Plan. Monday's meeting will focus upon the findings of the consultant regarding the Environmental Assessment Phase of the Airport Master Plan. We urge you to attend to hear what environmental issues may be of concern to you. This will be the only meeting for you to express any environmental concerns regarding the Airport. The meeting will be held this Monday, July 14, 2003 from 6:30 p.m. until 8:00 p.m. at the Harriett G. Darnell Senior Multipurpose Facility. We look forward to seeing you and presenting the next steps in the Master Plan Process. If you have any questions, please feel free to call me at 404-730-8222. Thank you!

Corey Adams, Chief of Staff
Office of Fulton County Commissioner Emma I. Darnell
141 Pryor Street, Suite 10023
Atlanta, GA 30303
404-730-8222 (office)
404-224-3775 (fax)

Summary of Environmental Findings
North Terminal Development
Fulton County Airport – Brown Field Steering Committee
July 14, 2003

Environmental Impact Categories[1]	Relevant Section of EA	Level of Impact[2]			
		None	*Minor*	*Moderate*	*Comment*
1. Noise	4.1		X		
2. Compatible Land Use	4..2	X			
3. Social Impacts – Relocations/Traffic	4.3	X			
4. Induced Socioeconomic Impacts	4.4	X			
5. Air Quality	4.5	X			
6. Water Quality	4.11	X			
7. Section 303	4.6	X			
8. Historic, Architectural, Archeological, and Cultural Resources	4.6		X		**Archaeological Survey complete, no impacts reported**
9. Biotic Communities	4.7		X		**Minimal Impacts that are not already present**
10. Endangered and Threatened Species	4.8	X			**None, identified during field survey**
11. Wetlands	4.10	X			
12. Floodplains	4.12			X	**Restored on property**
13./14. Coastal Zones / Coastal Barriers	4.13	X			
15. Wild and Scenic Rivers	4.14	X			
16. Farmland	4.15	X			
17. Energy Supplies / Natural Resources	4.16	X			
18. Light Emissions	4.17	X			
19. Solid Waste	4.18.3		X		**Increase in solid waste produced by airport**
20. Construction Impacts	4.20		X		**All materials, used and unused, will be disposed of properly**
21. Hazardous Materials	4.19		X		**Risk is already present at existing airport**
22. Environmental Justice Issues	4.3.2		X		
23. Cumulative Impacts	4.21		X		

[1]Categories in FAA Environmental Handbook (FAA Order 5050.4A) and additional topics required for FAA approval.

[2]Analyses have found no significant impactsbased on thresholds in FAA Order 5050.4A and related guidance in FAA Order 1050.1D

Water Quality/Floodplains

- Bridges over Sandy Creek reduce floodplain impacts, no net loss after mitigation

Air Quality

- No significant increase in aircraft emissions
- Slight increase in vehicle traffic
- During construction, short-tem increases in emissions
- Project conforms to Clean Air Act

Solid Waste/ Hazardous Materials

- No significant increase in aircraft emissions
- Slight increase in vehicle traffic
- During construction, short-tem increases in emissions
- No impacts related to Solid Waste or Hazardous Waste

Construction

- Noise, Water Quality, Air Quality, and Cemetery will all be temporary impacts during construction.
- Impacts will minimized during construction, through design and construction techniques.

Natural Resources

- Stream and wetland impacts avoided
- No suitable habitat fit Endangered or Threatened Species
- Most of land already disturbed, within project area

Noise and Compatible Land Use

- No modification to runway or flight paths
- Distance, elevation of ground activities would prevent adverse impacts
- No adverse noise impacts

Social Impacts

- No relocations
- No changes in neighborhood cohesion or travel patterns
- No elevated health risk

Environmental Justice

- No Disproportionate Impacts

Scoping Coordination

FILE COPY

ATLANTA REGIONAL COMMISSION 40 COURTLAND STREET, NE ATLANTA, GEORGIA 30303

February 10, 2003

Brian Keel, Project Engineer
Camp Dresser & McKee, Inc.
2030 Powers Ferry Road, Suite 325
Atlanta, GA 30339

Dear Brian:

I have reviewed the revised reanalysis materials you sent me for the proposed Fulton County Airport North Terminal Expansion Area on the Chattahoochee River in Fulton County. With the revisions that you made on the slope coverage, the reanalysis appears correct and accurate. As we discussed, this is not an official approval of the reanalysis. If the reanalysis is submitted as part of a Metro River review application, it will be approved as part of that review.

As I discussed with you, if you need to include adjacent land that is not in the current project boundaries, such areas will need to be included in the reanalysis. Again, that does not apply to land in the 100-year floodplain, which cannot be reanalyzed.

Please call me at (404) 463-3258 if you have any questions or need anything else.

Sincerely,

James M. Santo
Principal Planner

C: Mike Charlson, Fulton County Planning and Community Development

CDM
2030 Powers Ferry Road, Suite 325
Atlanta, Georgia 30339
tel: 770 952-8643
fax: 770 952-9893

FILE COPY

February 3, 2003

Mr. Jim Santo
Atlanta Regional Commission
40 Courtland Street, NE
Atlanta, Georgia 30303

Subject: MRPA Vulnerability Category Reanalysis
Fulton County Airport North Terminal Expansion Area

Dear Mr. Santo:

In response to our phone conversation on January 30, 2003, we have made changes to our slope coverage and redefined our proposed MRPA categories for the Fulton County Airport North Terminal Expansion (NTE) Area. Attached are two figures showing the revised slope coverage with 2-foot contours and the revised MRPA vulnerability categories. Please note that in an effort to save time the slope coverage was only revised within the boundaries of the proposed project area.

In response to your comment concerning the soil coverage, we checked our digital version against the official Fulton County Soil Survey book. You were correct in that the Class 1 soil does extend farther away from the Chattahoochee than it appears to in our digital coverage. However, moving the digital coverage to match its location in the Soil Survey book still does not place the Class 1 soil inside our project boundary, and therefore doing so would not affect our MRPA category reanalysis.

Thank you again for your time in reviewing these figures. Please contact me for any additional information.

Sincerely,

Brian Keel
Project Engineer
Camp Dresser & McKee Inc.

cc: Todd Barker, KHA (w/o Attachments)
Gordon Jackson, Pegasus Associates (w/o Attachments)
Virginia Jackson, CDM (w/o Attachments)

L953019

CDM
2030 Powers Ferry Road, Suite 325
Atlanta, Georgia 30339
tel: 770 952-8643
fax: 770 952-9893

FILE COPY

January 24, 2003

Mr. Jim Santo
Atlanta Regional Commission
40 Courtland Street, NE
Atlanta, Georgia 30303

Subject: MRPA Vulnerability Category Reanalysis
Fulton County Airport North Terminal Expansion Area

Dear Mr. Santo:

In response to our meeting on December 10, 2002, we have made changes to our vegetation, hydrologic basin, and floodplain coverages and redefined our proposed MRPA categories for the Fulton County Airport North Terminal Expansion (NTE) Area. Attached are seven figures showing the individual coverages as updated following our meeting and the new MRPA categories as derived from these coverages. These figures show the following:

1. The May 10, 1999 aerial photograph of the project site and surrounding area with no coverages overlaid
2. The aerial photograph with 2-foot topographic contours and elevation references
3. The aerial photograph with the new vegetation coverage overlaid
4. The soil classification coverage
5. The slope and hydrology coverages with the new Sandy Creek basin order labeled
6. The newly delineated 100-year floodplain (along the 767-foot contour) and the newly delineated 500-year floodplain (from the 786-foot contour at Bankhead Highway to the 785.5-foot contour at Sandy Creek)
7. The new MRPA categories as derived from these coverages

CDM

Please review these figures and contact me if you have any questions or need further information. We are currently working toward a draft submittal of the conceptual site plan, which we will submit to you for a "staff approval" upon its completion. Thank you for time and attention in these matters.

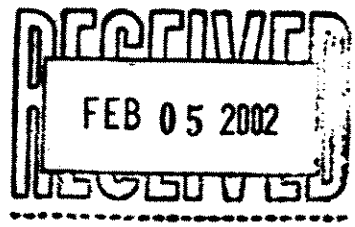
Sincerely,

Brian Keel
Project Engineer
Camp Dresser & McKee Inc.

cc: Todd Barker, KHA (w/o Attachments)
Gordon Jackson, Pegasus Associates (w/o Attachments)
Virginia Jackson, CDM (w/o Attachments)

ARC
ATLANTA REGIONAL COMMISSION 40 COURTLAND STREET, NE ATLANTA, GEORGIA 30303

February 4, 2002



Mr. Todd Barker
Kimley-Horn and Associates, Inc.
Suite 600
3169 Holcomb Bridge Road
Norcross, GA 30071

Dear Mr. Barker:

As you requested in your letter to Pat Stevens of the ARC Environmental Planning Division, ARC staff has researched which issues and conditions are of special concern in developing the proposed Fulton County Airport North Terminal Area between Fulton Industrial Boulevard and the Chattahoochee River. We have identified three areas of concern that will need to be addressed: Metropolitan River Protection Act issues, transportation issues and Development of Regional Impact issues.

First, a portion of the property is within the Chattahoochee River Corridor and is subject to review under the Chattahoochee Corridor Plan, as required by the Metropolitan River Protection Act, or MRPA (Georgia Code 12-5-440 et seq.). The Act was adopted in 1973 for the portion of the Chattahoochee River between Buford Dam and Peachtree Creek and was amended in 1998 to extend its jurisdiction to the southern limits of Fulton and Douglas Counties, which includes this area. The Act created a corridor extending 2000-feet from either bank of the Chattahoochee River and its impoundments. Areas of river floodplain that extend beyond the 2000-foot line are also in the Corridor. The Act required ARC to develop a Plan to protect the land and water resources of the Corridor and required that all development in the Corridor, including public projects, be reviewed for consistency with Plan standards. The Chattahoochee Corridor Plan includes three sets of standards: Vulnerability Standards; Buffer Zone Standards and Floodplain Standards. All three sets of standards will apply to the Corridor portion of this project.

The Vulnerability Standards set limits on the amounts of land disturbance and impervious surface on a piece of land based on its vulnerability, or sensitivity to development. The land throughout the Corridor is in one of six vulnerability categories designated by the letters "A" through "F". Each category has different maximum amounts of land disturbance and impervious surface, with "A" being the least restrictive and "F" the most restrictive. In order to be consistent with the Plan, any development activity must be within the maximums for each category on the development property. All land in the river's 100-year floodplain is classified as "E" category land.

The Buffer Zone Standards require a 50-foot undisturbed natural vegetative buffer, a 150-foot

impervious surface setback along the river, and a 35-foot undisturbed natural vegetative buffer along specific tributary streams. Sandy Creek, the stream that separates the expansion property from the existing airport, is one of these tributaries.

Flood Plain Standards apply only to the Chattahoochee River Floodplain. ARC uses the elevations established by the US Army Corps of Engineers in the document entitled Flood Plain Information Chattahoochee River, Buford Dam to Whitesburg, Georgia, November 1973, and a supplement to this document dated March 1982. We do not use FEMA maps. The approximate 100-year flood elevation in this area is 767 feet MSL. The 500-year (or standard project) flood elevation is 786 feet MSL. In the 100-year floodplain, the standards require that all fill volume up to the floodplain elevation be offset by an equal volume of cut. Further, flood flows cannot be blocked and no net loss of flood storage volume is allowed. In the 500-year floodplain, no structure, other than bridges, may be more than 35 feet above the existing grade.

Our Corridor maps for the area show land in the "B", "C", "D" and "E" categories in the proposed project area. The "E" category areas include large areas of river floodplain on and near the project site, including an area along Sandy Creek extending beyond the 2000-foot line almost to Fulton Industrial Boulevard.

It is not possible to provide detailed comments on the conceptual plans accompanying your letter. However, we can say that placing much of the development either outside the Corridor or in already disturbed areas, as shown in the conceptual plans, will help in meeting Plan standards. More detailed plans and the property boundaries are needed to discuss the specifics of the proposed project, such as the actual amounts of land disturbance and impervious surface proposed and the amount of undisturbed area remaining. ARC staff will be happy to meet with you to discuss the project and its Metro River review in more detail.

The two main transportation concerns for the North Terminal Development are the proposed project access points and the proposed access road paralleling Fulton Industrial Boulevard. Fulton Industrial Boulevard is a state highway (SR 70), and a principal north-south arterial in western Fulton County. A road-widening project for Fulton Industrial Boulevard between Interchange Boulevard and US 78/278 is programmed in the Atlanta Region Transportation Improvement Program (TIP) for FY 2002-2004. The widening runs along the entire road frontage of the existing airport and the proposed expansion site.

Depending on the actual siting of the proposed access road paralleling Fulton Industrial, it may conflict with the road-widening project, or with its additional right-of-way.

Because Fulton Industrial Boulevard is also a state road, the Georgia Department of Transportation needs to be contacted concerning any portions of the proposed development that may impact the road, as well as for approval of the access point locations and design specifications.

The proposed project may also be affected by the requirements of the 1989 Georgia Planning Act. Under the Act, certain identified development projects that are likely to have an impact beyond the immediate local jurisdiction are subject to review as Developments of Regional Impact (DRIs). The review is intended to increase communication among local governments on large-scale and certain other types of development and provides a means of assessing possible impacts before conflicts arise. The Georgia Department of Community Affairs has established thresholds for a variety of development types for determining whether a development qualifies as a DRI.

For airports, the thresholds for development that require DRI review are: new airports, new runways, and new runway extensions. The business park shown on the conceptual plans would also be a DRI if it exceeds 500,000 square feet.

We realize that we will need to discuss these issues in greater detail. As I mentioned earlier concerning the Metropolitan River Protection Act, ARC staff would be happy to discuss these issues and what will needed to address them. As the project will most likely require a Metro River review, I suggest that you first contact James Santo of the Environmental Planning Division. He is the person who handles River Corridor and Metro River issues and can coordinate with other staff to address transportation and DRI questions. His phone number is (404) 463-3258. We look forward to working with you on this project.

Sincerely,

Thomas Weyandt, Director
Comprehensive Planning

c: Caroline Marshall
Beverly Rhea
James Santo

Federal Emergency Management Agency
Region IV
3003 Chamblee-Tucker Road
Atlanta, Georgia 30341-4130

JAN 1 0 2002

January 7, 2002

Mr. Todd Barker, AICP
Senior Planner
Kimley-Horn and Associates, Inc.
3199 Holcomb Bridge Road, Suite 600
Norcross, Georgia 30071

Re: North Terminal Area Development

Dear Mr. Barker:

This letter responds to your request for comments on the proposed development of the Chattahoochee Brick property north of Fulton County Airport. It comments on portions of the project that would encroach on the floodplain and floodway of Sandy Creek.

We note that current plans call for two taxiways to connect the project to the airport. We have two concerns here. One involves risks to the taxiways themselves. The other involves risks to upstream property-owners. The stream crossings should be constructed to withstand potential flood flows, at a minimum, flows with a 1% chance of recurrence in any given year. In addition, any constriction or obstruction of the floodplain this close to its confluence with the Chattahoochee River could increase the risk of upstream flooding. These risks should be minimized to the extent they can.

Also, we note that two of the proposed structures would encroach on the floodplain of Sandy Creek. From the drawing enclosed with your letter, it appears that only the southern tip of these buildings would be in the area mapped as floodplain. Once again, we are concerned that proposed structures be able to withstand potential flooding and not exacerbate potential flooding elsewhere. These risks should also be minimized to the extent that they can.

Finally, we note that a number of floodplain regulations may apply to the project. Both the City of Atlanta and Fulton County participate in the National Flood Insurance Program, and hence, regulate construction and development within floodplains and floodways consistent with 44 CFR 60.3. As the project straddles the boundary between these jurisdictions, the ordinances of both may apply. Also, if a federal permit or federal funding will be involved, Presidential Executive Order 11988 and related regulations will apply. Lastly, we note that activities, such as the stream crossings, authorized under the Corps of Engineers Nationwide permit for linear transportation projects (#14) "must not ... increase flooding" (condition *f*). We recommend these issues for your consideration.

If you have any questions or comments on our review, or if we can be of service in some other way, please feel free to contact Mr. Charles Beck of my staff at 770-220-5334.

Sincerely,

Charles Beck

for William R. Straw, Ph. D.
Regional Environmental Officer

United States Department of Agriculture

NRCS
Natural Resources Conservation Service
355 East Hancock Avenue
Athens, Georgia 30601
Telephone: 706-546-2272 Fax: 706-546-2120

RECEIVED
MAY 22 2002

May 15, 2002

Ms. Freya Thamman
Kimley-Horn and Associates, Inc.
Suite 600
3169 Holcomb Bridge Road
Norcross, Georgia 30071

RE: Environmental Assessment for Fulton County, Georgia Airport

Dear Ms. Thamman:

This is in response to your letter requesting information on impacts the above referenced project may have on prime and important farmlands. The proposed project is an expansion of facilities at the Fulton County Airport. The Natural Resources Conservation Service (NRCS) appreciates the opportunity to assist you with your environmental assessment.

We have determined that the proposed project will not impact farmland protected by the Farmland Protection Policy Act (FPPA). NRCS is concerned with the potential for soil erosion and its offsite impacts. We recommend that a continuous sediment control plan be implemented through out project construction.

If you have questions please contact Edward Ealy of my staff at 706 546-2278.

Sincerely,

Leonard Jordan

LEONARD JORDAN
State Conservationist

cc: Edward Ealy, State Soil Scientist, Athens, GA

Georgia Department of Natural Resources

Lonice C. Barrett, Commissioner

Historic Preservation Division

W. Ray Luce, Division Director and Deputy State Historic Preservation Officer
156 Trinity Avenue, S.W., Suite 101, Atlanta, Georgia 30303-3600
Telephone (404) 656-2840 Fax (404) 657-1040 http://www.gashpo.org

January 29, 2002

RECEIVED
FEB 05 2002

Todd Barker, AICP
Senior Planner
Kimley-Horn and Associates, Inc.
Suite 600
3169 Holcomb Bridge Road
Norcross, Georgia 30071

RE: Fulton County Airport Development, North Terminal Area
Fulton County, Georgia
HP011226-008

Dear Mr.Barker:

The Historic Preservation Division (HPD) has reviewed the information submitted concerning the above referenced undertaking. Our comments are offered to assist the Federal Aviation Administration and their applicants in complying with the provisions of Section 106 of the National Historic Preservation Act. However, insufficient information was provided on which to complete this review.

Based on the information provided, HPD recommends that an archaeological reconnaissance be completed for the project area. Although we understand that brick mining has heavily disturbed a great deal of the project area, there are numerous large prehistoric and historic archaeological sites just outside the project boundary. We further suggest that this survey be completed to meet Section 106 standards; the resulting report can be used for any aspect of federal involvement, including applications for federal assistance and wetland permits. This survey should be completed early in the project planning, well in advance of actual construction.

Furthermore, in order to complete our review and make a determination of effect, we will need the following information:

1. Provide original 35mm or high quality digital color photographs keyed to a map showing any buildings, structures, or ruins on the project tract that may have been associated with the Chattahoochee Brick Company, or advise that no such buildings, structures, or ruins exist.

Please refer to project number HP011226-008 in your response regarding this project. If we may be of further assistance, please do not hesitate to contact me at (404) 651-6624.

Sincerely,

Serena G. Bellew
Environmental Review Coordinator

SGB:kac
cc: Maurice Ungaro, Atlanta Regional Commission

Georgia Department of Natural Resources

Reply To:
NonPoint Source Program
404/675-6240
FAX: 404/675-6245

Environmental Protection Division, Water Protection Branch
4220 International Parkway, Suite 101, Atlanta, Georgia 30354
Alan W. Hallum, Branch Chief
404/675-6232
FAX: 404/675-6247

February 7, 2002

RECEIVED
FEB 11 2002

Mr. Todd Barker, AICP
Senior Planner
Kimley-Horn and Associates, Inc.
3169 Holcomb Bridge Road, Suite 600
Norcross, Georgia 30071

Re: Fulton County Airport
North Terminal Area Development

Dear Mr. Barker:

This will acknowledge receipt of your letter of December 20, 2001 regarding airport development at the Fulton County Airport. It is our understanding that the airport is located in unincorporated Fulton County.

Fulton County has been designated as an "Issuing Authority" for Land Disturbing Permits pursuant to Georgia's Erosion and Sedimentation Act of 1975, as amended. Fulton County would need to obtain a stream buffer variance from EPD if the proposed land disturbing activities for the project are within 25 feet of State waters. Buffer encroachment determinations are made by Fulton County in accordance with their Soil Erosion and Sedimentation Control Ordinance.

In accordance with the Georgia Water Quality Control Act and the Federal Clean Water Act, EPD issued on June 12, 2000 a NPDES General Permit No. GAR100000 for storm water discharges from construction activities. If the project will disturb more than five acres, both Fulton County and the general contractor for the project would need to comply with the terms and conditions of the NPDES permit. Both parties must submit a Notice of Intent (NOI) for coverage under this NPDES permit within one week prior to commencement of construction activity. The NOI forms are available on EPD's website at http://www.dnr.state.ga.us/dnr/environ/, under "EPD Forms/ Storm Water Permitting." The NPDES permit is posted on the website under "Technical Guidance."

If this project will impact wetlands, a Section 404 permit may be required. Pursuant to the Federal Clean Water Act, Fulton County should contact the U. S. Army Corps of Engineers in Savannah at (800) 448-2402 to determine if an individual Section 404 permit will be issued. If so, a Section 401 Water Quality Certification from EPD will be required.

If you should have any questions, please contact Mr. Drew Zurow of my Program's Storm Water Unit at (404) 675-6240.

Sincerely,

Lawrence W. Hedges

Lawrence W. Hedges
Program Manager
NonPoint Source Program

LWH:acz

Georgia Department of Natural Resources
205 Jesse Hill Jr., Drive, S.E., Suite 1152 East Tower, Atlanta, Georgia 30334-4100
Lonice C. Barrett, Commissioner
Harold F. Reheis, Director
Environmental Protection Division
404/656-4713

January 17, 2002

Mr. Todd Barker, AICP
Senior Planner
Kimley-Horn and Associates, Inc.
Suite 600
3169 Holcomb Bridge Road
Norcross, Georgia 30071

SUBJECT: North Terminal Area Development at Fulton County Airport

Dear Mr. Barker:

This is in response to your letter, dated December 20, 2001, to Ron Methier, requesting information related to site-specific conditions or environmental concerns associated with the subject project. The overall development is expected to consist of site preparation for the proposed construction of an aviation museum, aviation educational facilities, additional hangar and apron space, as well as, new taxiways at the Fulton County Airport in Atlanta, Georgia. Your letter included a project site map with limited details covering the project location and general layout of the proposed construction and buildings.

Potential environmental impacts from this construction project include, but are not limited to, storm water discharges, air emissions, generation of demolition and construction debris, and generation of hazardous materials. The FAA will be able to prevent environmental impacts and protect environmental quality in the project area by achieving and maintaining full compliance with all terms and conditions of all environmental permits and all environmental regulations throughout the construction and operation of the proposed project.

Thank you for the opportunity to provide consultation on this proposed project. If you have any questions, please contact me at 404-657-5419.

Sincerely,

Marlin R. Gottschalk, Ph.D.
Senior Policy Advisor

MRG:wem

cc: Ron Methier

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
247 South Milledge Avenue
Athens, Georgia 30605

West Georgia Sub Office
P.O. Box 52560
Ft. Benning, Georgia 31995-2560

Coastal Sub Office
4270 Norwich Street
Brunswick, Georgia 31520

RECEIVED
JAN 28 2002

JAN 23 2002

Mr. Todd Barker
Kimberly-Horn & Associates, Inc.
3169 Holcomb Bridge Rd., Suite 600
Norcross, Georgia 30071

Re: FWS Log No. 02-0544

Dear Mr. Barker:

Thank you for your letter dated December 20, 2001, requesting information pertaining to listed species that may occur on a proposed project site within Fulton County, Georgia. According to the information provided, Fulton County proposes to construct an aviation museum, aviation educational facilities, additional hanger and apron space, and new taxiways located in the North Terminal Area of the Fulton County Airport. We submit the following comments on this project under provisions of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

Several federally-listed and/or state-listed species have the potential to occur within Fulton County. Enclosed, please find a species list which provides habitat descriptions for federally and state listed species that could occur in Fulton County. If suitable habitat for listed species is present within the proposed project area, an on-site inspection or survey should be conducted to determine if listed species are present or occur seasonally. Surveys should be done by qualified personnel and be conducted during the appropriated time of day and or year (i.e., flowering time for plants) to ensure confidence in survey results. Results of any surveys conducted should be forwarded to the Service's West Georgia Field Office for review.

We appreciate the opportunity to provide you information on federally-listed species that occur in our area. If you have further questions or require additional information, please contact Phil DeGarmo at the West Georgia Field Office address listed above or at (706) 544-6422 ext. 4.

Sincerely,

Stephen D. Parris
for Sandra S. Tucker
Field Supervisor

enclosures

cc: file, W.GA ES

LISTED SPECIES IN FULTON COUNTY

FEDERAL ENDANGERED AND THREATENED SPECIES[1]

Animals

Bald eagle (T,SE)	Haliaeetus leucocephalus	Inland waterways and estuarine areas in Georgia
[redacted]	Picoides borealis	Nest in mature pine with low understory vegetation (<1.5m); forage in pine and pine hardwood stands ≥30 years of age, preferably ≥10" dbh
Shiny-rayed pocketbook mussel (E,SE)	Lampsilis subangulata	Medium creeks to the mainstems of rivers with slow to moderate currents over sandy substrates and associated with rock or clay
Gulf moccasinshell mussel (E,SE)	Medionidus penicillatus	Medium streams to large rivers with slight to moderate current over sand and gravel substrates; may be associated with muddy sand substrates around tree roots

SPECIES OF MANAGEMENT CONCERN[1]: The Fish and Wildlife Service is evaluating population trends and threats to the following Species of Management Concern. Please contact us at 247 S. Milledge Ave., Athens, GA, 706-613-9493, if you locate these species during site surveys or have other information on the species' distributions in Georgia.

Animals

Bachman's sparrow (SR)	Aimophila aestivalis	Abandoned fields with scattered shrubs, pines, or oaks
Appalachian Bewick's wren (SR)	Thyromanes bewickii altus	Dense undergrowth, overgrown fields, thickets, and brush in open or semi-open habitat; feed primarily on insects
Bluestripe shiner (ST)	Cyprinella callitaenia	Brownwater streams

STATE ENDANGERED AND THREATENED SPECIES[1]: The following species, as well as the Federally protected species indicted above (SE, ST, SR), are protected by the State of Georgia. For information on State listed species, contact the GA Department of Natural Resources, GA Natural Heritage Program, 2117 US HWY 278 SE, Social Circle, GA 30279 (706-557-3032).

Animals

Peregrine falcon (SE)	Falco peregrinus	F. p. anatum nests on cliffs, high hills, or tall buildings; F. p. tundrius primarily seen in Georgia migrating along the coast

Plants

Bay star-vine (ST)	Schisandra glabra	Twining on subcanopy and understory trees/shrubs in rich alluvial woods
Piedmont barren strawberry (ST)	Waldsteinia lobata	Rocky acedic woods along streams with mountain laurel; rarely in drier upland oak-hickory-pine woods

[1] Key to notations: E = endangered, T = threatened, and R = rare. The SE, ST, and SR indicate species also listed by the State of Georgia as endangered, threatened, and rare, respectively.

Updated Jan. 2001

Fish Survey Data Form

Field Number: **Date:**

Drainage:

State: **County:**

Locality & GPS Coordinates: **Datum:** NAD 27 NAD 83 WGS 84

Collector/Surveyor:

Project:

Site Description:

Estimated Stream Width: **Depth at Bankfull:**

Bank Condition: (bank height, degree of erosion, stream entrenchment, species of stabilizing vegetation on banks above bankfull)

Substrate: 1) <25% 2) 25-50% 3) 50+%

(Please indicate estimated percentages of each substrate type per habitat)

_____soft silt-mud	_____bedrock/claypan	RH- Riffle Habitat
_____silt-sand mix	_____bedrock ledges/fissures	
_____sand (0.125-1.9mm)	_____vegetation	PH- Pool Habitat
_____gravel (2-63mm)	_____shred detritus, organics	
_____rubble (64-256mm)	_____leaves, small branches	OH- Other Habitat Surveyed
_____boulder (>256mm)	_____logs	

Water Condition:

Level	no flow	low flow	normal flow	full bank	flood	
Appearance	clear	turbid	green/algae	tannic	muddy	
Visibility	<0.1m	0.1-0.3m	0.3-1m	1-3m	3-10m	>10m

Riparian Description: (Avg. width, dominant canopy, and understory species)

Methods & Description of Survey:

Species Encountered: Scientific Name	No. of Individuals Collected/Observed	Nuptial Status	Other Remarks

*** Please forward survey results to the following FWS Ecological Services Office indicated below.**

X West Georgia Sub Office	__ North Georgia Office	__ Coastal Georgia Sub Office
P.O. Box 52560	247 South Milledge Avenue	4270 Norwich Street
Fort Benning, GA 31995	Athens, GA 30605	Brunswick, GA 31520
706-544-6419 (fax)	706-613-6059 (fax)	912-265-9339 (fax)

**** If photos of species encountered were taken, please forward with reults.**

Field Number: **Date:**

Drainage:

State: **County:**

Locality & GPS Coordinates: **Datum:** NAD 27 NAD 83 WGS 84

Collector/Surveyor:

Project:

Site Description:

Substrate: 1) <25% 2) 25-50% 3) 50+%

_____soft silt-mud
_____silt-sand mix
_____sand (0.125-1.9mm)
_____gravel (2-63mm)
_____rubble (64-256mm)
_____boulder (>256mm)

_____bedrock/claypan
_____bedrock ledges/fissures
_____vegetation
_____shred detritus, organics
_____leaves, small branches
_____logs

Water Condition:

Level	no flow	low flow	normal flow	full bank	flood	
Appearance	clear	turbid	green/algae	tannic	muddy	
Visibility	< 0.1m	0.1-0.3m	0.3-1m	1-3m	3-10m	>10m

Riparian Description:

Methods & Description of Survey:

Species Encountered:

Genus & species:	# live	# dead	location in stream

*** Please forward survey results to the following FWS Ecological Services Office indicated below.**

X West Georgia Sub Office
P.O. Box 52560
Fort Benning, GA 31995
706-544-6419 (fax)

__ North Georgia Office
247 South Milledge Avenue
Athens, GA 30605
706-613-6059 (fax)

__ Coastal Georgia Sub Office
4270 Norwich Street
Brunswick, GA 31520
912-265-9339 (fax)

**** If photos of species encountered were taken, please forward with results.**

Flora Survey Data Form

Field Number: **Date:**

State: **County:**

Locality & GPS Coordinates: **Datum:** NAD 27 NAD 83 WGS 84

Collector/Surveyor:

Project:

Site Description: (general habitat description; dominant canopy, midstory, and understory species/percent coverage)

Methods & Description of Survey:

Fed./State Listed Species Encountered:

Scientific Name	Population Size	No. Plants Flowering	No. Plants w/Fruit	Habitat Type in Which Plants Were Observed/Collected

Other Remarks:

*** Please forward survey results to the following FWS Ecological Services Office indicated below.**

X West Georgia Sub Office
P.O. Box 52560
Fort Benning, GA 31995
706-544-6419 (fax)

__ North Georgia Office
247 South Milledge Avenue
Athens, GA 30605
706-613-6059 (fax)

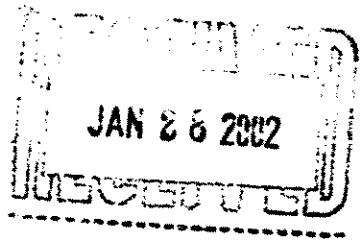
__ Coastal Georgia Sub Office
4270 Norwich Street
Brunswick, GA 31520
912-265-9339 (fax)

**** If photos of species encountered were taken, please forward with results.**

Georgia Department of Natural Resources
Wildlife Resources Division

ONICE C. BARRETT, COMMISSIONER
JAVID WALLER, DIVISION DIRECTOR

Georgia Natural Heritage Program
2117 U.S. Hwy. 278 S.E., Social Circle, Georgia 30025-4714
(770) 918-6411, (706) 557-3032



January 22, 2002

Todd Barker, AICP
Senior Planner
Kimley-Horn and Associates, Inc.
3169 Holcomb Bridge Road, Suite 600
Norcross, GA 30071

Subject: **Known or Potential Occurrences of Special Concern Plant and Animal Species on or near Proposed North Terminal Area Development at Fulton County Airport, Fulton County, Georgia**

Dear Mr. Barker:

This is in response to your request of December 20, 2001. According to our records, within a three mile radius of the project site, there are occurrences of the following:

Ichthyomyzon gagei (Southern Brook Lamprey) approx. 3.0 mi. N of site, in Nickajack Creek
Medionidus penicillatus (Gulf Moccasinshell) approx. 1.5 mi. SW of site, in the Chattahoochee River
Schisandra glabra (Bay Starvine) approx. 1.5 mi. NW of site

Although no rare aquatic species are known from the stream that will be affected by this project, we are still concerned about water quality in the stream and the nearby Chattahoochee River. Therefore, we urge you to use erosion and sedimentation techniques to the greatest extent possible during runway construction. We strongly recommend that disturbed areas be re-vegetated immediately after construction is completed, particularly in areas adjacent to waterways.

Enclosed are lists that should aid in assessing the potential for rare species occurrences within the area of concern.

Please keep in mind the limitations of our database. The data collected by the Georgia Natural Heritage Program comes from a variety of sources, including museum and herbarium records, literature, and reports from individuals and organizations, as well as field surveys by our staff biologists. In most cases the information is not the result of a recent on-site survey by our staff. Many areas of Georgia have never been surveyed thoroughly. Therefore, the Georgia Natural Heritage Program can only occasionally provide definitive information on the presence or absence of rare species on a given site. Our files are updated constantly as new information is received. **Thus, information provided by our program represents the existing data in our files at the time of the request and should not be considered a final statement on the species or area under consideration.**

If you know the location of populations of special concern species that are not in our database, please fill out the appropriate data collection form and send it to our office. Forms can be obtained through our web site (http://www.dnr.state.ga.us/dnr/wild/natural.html) or by contacting our office. If I can be of further assistance, please let me know.

Sincerely,

Sarah Buckner
for

Greg Krakow
Data Manager

enclosures

UR 8331

Edition date: November 26, 2000

GEORGIA NATURAL HERITAGE PROGRAM

EXPLANATION OF CODES

FOR RARITY RANK AND LEGAL STATUS

The "State Rank" and "Global Rank" codes indicate relative rarity of species statewide and range-wide, respectively. An explanation of these codes follows. For further information please see www.natureserve.org/ranking.

STATE [GLOBAL] RANK

S1[G1]	Critically imperiled in state [globally] because of extreme rarity (5 or fewer occurrences).
S2[G2]	Imperiled in state [globally] because of rarity (6 to 20 occurrences).
S3[G3]	Rare or uncommon in state [rare and local throughout range or in a special habitat or narrowly endemic] (on the order of 21 to 100 occurrences).
S4[G4]	Apparently secure in state [globally] (of no immediate conservation concern).
S5[G5]	Demonstrably secure in state [globally].
SA	Accidental in state, including migratory or wide-ranging species recorded only once or twice or at very great intervals.
SN	Regularly occurring, usually migratory and typically nonbreeding species.
SR	Reported from the state, but without persuasive documentation (no precise site records and no verification of taxonomy).
SU[GU]	Possibly in peril in state [range-wide] but status uncertain; need more information on threats or distribution.
SX[GX]	Apparently extirpated from state [extinct throughout range]. GXC is known only in cultivation/captivity.
SE	An exotic established in state. May be native elsewhere in North America. Sometimes difficult to determine if native (**SE?**).
SH[GH]	Of historical occurrence in the state [throughout its range], perhaps not verified in the past 20 years, but suspected to be still extant.
[T]	Taxonomic subdivision (trinomial, either a subspecies or variety), used in a global rank, for example "G2T2."
Q	Denotes a taxonomic question - either the taxon is not generally recognized as valid, or there is reasonable concern about its validity or identity globally or at the state level.
?	Denotes questionable rank; best guess given whenever possible (e.g. **S3?**).

FEDERAL STATUS (US Fish and Wildlife Service, USFWS)

The following abbreviations are used to indicate the legal status of federally-protected plants and animals or those proposed for listing. For further information please see www.natureserve.org/status.

LE	Listed as endangered. The most critically imperiled species. A species that may become extinct or disappear from a significant part of its range if not immediately protected.
LT	Listed as threatened. The next most critical level of threatened species. A species that may become endangered if not protected.
PE or PT	Candidate species currently proposed for listing as endangered or threatened.
C	Candidate species presently under status review for federal listing for which adequate information exists on biological vulnerability and threats to list the taxa as endangered or threatened.
PDL	Proposed for delisting.
E(S/A) or T(S/A)	Listed as endangered or threatened because of similarity of appearance.
(PS)	Indicates "partial status" - status in only a portion of the species' range. Typically indicated in a "full" species record where an infraspecific taxon or population has U.S. ESA status, but the entire species does not.

STATE STATUS (Georgia Department of Natural Resources, GA-DNR)

The following abbreviations are used to indicate the status of state-protected plants and animals or those proposed for state-protection in Georgia.

E	Listed as endangered. A species which is in danger of extinction throughout all or part of its range
T	Listed as threatened. A species which is likely to become an endangered species in the foreseeable future throughout all or parts of its range.
R	Listed as rare. A species which may not be endangered or threatened but which should be protected because of its scarcity.
U	Listed as unusual (and thus deserving of special consideration). Uncommon plants subject to commercial exploitation would have this status.

NOTE:
This is a working list and is constantly revised. For the latest changes, acknowledgment of numerous sources, interpretation of data, or other information connected with this list, please contact:

Greg Krakow, Data Manager
Georgia Department of Natural Resources
Wildlife Resources Division
Georgia Natural Heritage Program
2117 U.S. Highway 278 S.E.
Social Circle, Georgia 30025-4714
Phone: 770-918-6411
Fax: 706-557-3033
E-mail: greg_krakow@mail.dnr.state.ga.us

The proper citation for this list is:

Georgia Natural Heritage Program. [Edition date from top right corner]. [Title from top center]. Georgia Department of Natural Resources, Social Circle.

Special Concern Plants Potentially Occurring in Fulton County

Report Generated 15 June 1998
36 Taxa in List

Georgia Natural Heritage Program, 2117 US Hwy 278 SE, Social Circle, GA 30025, (770) 918-6411

Species Common Name	Global Rank	State Rank	Federal Status	State Status	Habitat
Aesculus glabra OHIO BUCKEYE	G5	S2			Mesic forests in circumneutral soil
Amorpha schwerinii SCHWERIN INDIGO-BUSH	G3	S2			Rocky upland woods
Amsonia ludoviciana LOUISIANA BLUE STAR	G3	S2			Open woods near granite outcrops (limited to Lithonia Gneiss types)
Anemone berlandieri GLADE WINDFLOWER	G4?	S1S2			Granite outcrop ecotones; openings over basic rock
Arabis missouriensis MISSOURI ROCKCRESS	G4?Q	S2			Granite outcrops
Aster avitus ALEXANDER ROCK ASTER	G3	S3			Granite outcrops
Aster georgianus GEORGIA ASTER	G2G3	S2			Upland oak-hickory-pine forests; especially with Echinaceae laevigata
Castanea dentata AMERICAN CHESTNUT (NUT-BEARING ONLY)	G4	S3			Upland mixed oak or oak-hickory forests
Clematis ochroleuca CURLY-HEADS	G4	S2			Dry woods in circumneutral soil
Cypripedium acaule PINK LADYSLIPPER	G5	S4		U	Upland oak-hickory-pine forests; piney woods
Cypripedium calceolus var. parviflorum SMALL-FLOWERED YELLOW LADYSLIPPER	G5	S2		U	Upland oak-hickory-pine forests; mixed hardwood forests
Cypripedium calceolus var. pubescens LARGE-FLOWERED YELLOW LADYSLIPPER	G5	S3		U	Upland oak-hickory-pine forests; mixed hardwood forests
Delphinium carolinianum CAROLINA LARKSPUR	G5	S3			Granite outcrops; rocky, calcareous oak forests; Altamaha Grit outcrops
Dodecatheon meadia SHOOTING-STAR	G5	S3			Mesic hardwood forests over basic soils
Dryopteris celsa LOG FERN	G4	S2			Floodplain forests; lower slopes of rocky woods
Dryopteris cristata CRESTED WOOD FERN	G5	S1SE?			Swamps
Eleocharis wolfii SPIKERUSH	G4?	S1			Shallow pools on granite outcrops
Eriocaulon koernickianum PIPEWORT	G2	S1			Granite outcrops
Fothergilla major MOUNTAIN WITCH-ALDER	G3	S1			Rocky (sandstone, granite) woods; bouldery stream margins
Hexastylis shuttleworthii var. harperi HARPER HEARTLEAF	G4T3	S2?		U	Low terraces in floodplain forests; edges of bogs
Hydrastis canadensis GOLDENSEAL	G4	S2		E	Rich woods in circumneutral soil
Ipomopsis rubra STANDING CYPRESS	G4G5	S3			Granite outcrops; sandridges

Special Concern Plants Potentially Occurring in Fulton County

Report Generated 22 June 1998
36 Taxa in List

Georgia Natural Heritage Program, 2117 US Hwy 278 SE, Social Circle, GA 30025, (770) 918-6411

Species Common Name	Global Rank	State Rank	Federal Status	State Status	Habitat
Isoetes melanospora BLACK-SPORED QUILLWORT	G1	S1	LE	E	Vernal pools on granite outcrops
Listera australis SOUTHERN TWAYBLADE	G4	S2			Poorly drained circumneutral soils
Lonicera flava YELLOW HONEYSUCKLE	G5?	S3?			Rocky, upland forests and thickets
Melanthium latifolium BROADLEAF BUNCHFLOWER	G5	S2?			Mesic deciduous hardwood forests
Nestronia umbellula INDIAN OLIVE	G4	S2		T	Mixed with dwarf shrubby heaths in oak-hickory-pine woods; often in transition areas between flatwoo
Panax quinquefolius AMERICAN GINSENG	G4	S3			Mesic hardwood forests; cove hardwood forests
Platanthera integrilabia MONKEYFACE ORCHID	G2G3	S1S2		T	Red maple-gum swamps; seepy streambanks in sphagnum mats
Portulaca umbraticola ssp. coronata WINGPOD PURSLANE	G5T?	S2			Granite outcrops; Altamaha Grit outcrops
Rhus michauxii DWARF SUMAC	G2	S1	LE	E	Open forests over ultramafic rock
Schisandra glabra BAY STARVINE	G3	S2		T	Stream terraces
Sedum pusillum DWARF GRANITE STONECROP	G3	S3		T	Granite outcrops
Veratrum woodii OZARK BUNCHFLOWER	G5	S2		R	Mesic hardwood forests over basic soils
Waldsteinia lobata PIEDMONT BARREN STRAWBERRY	G2?	S2		T	Stream terraces and adjacent gneiss outcrops
Zanthoxylum americanum NORTHERN PRICKLY ASH	G5	S1			Rocky, openly wooded slopes; river banks

Special Concern Animals Potentially Occurring in Fulton County, Georgia

Report Generated 7 July 2000

Georgia Natural Heritage Program, 2117 US Hwy 278 SE, Social Circle, GA 30025, (770) 918-6411

Species Common Name	Global Rank	State Rank	Federal Status	State Status	Habitat
Aimophila aestivalis BACHMAN'S SPARROW	G3	S3		R	Open pine or oak woods; old fields; brushy areas
Ammodramus henslowii HENSLOW'S SPARROW	G4	S3			Wet shrubby fields and weedy meadows
Cyprinella callitaenia BLUESTRIPE SHINER	G2	S2		T	Flowing areas in large creeks and medium-sized rivers over rocky substrates
Etheostoma rupestre ROCK DARTER	G4	S2S3			Swift rocky riffles often associated with attached vegetation such as Podostemum
Hemidactylium scutatum FOUR-TOED SALAMANDER	G5	S2			Swamps; boggy streams & ponds; wet woods
Hybopsis lineapunctata LINED CHUB	G3	S3			Upland creeks over sandy substrate with gentle current
Ichthyomyzon gagei SOUTHERN BROOK LAMPREY	G5	S3			Creeks to small rivers with sand or sand and gravel substrate
Lythrurus atrapiculus BLACKTIP SHINER	G4	S2			Pools and backwater areas in small to medium-sized creeks over sandy substrate
Macrhybopsis aestivalis SPECKLED CHUB	G5	S1S2			Swift currents over gravel substrates
Medionidus penicillatus GULF MOCCASINSHELL	G2	S2	LE	E	Sandy/rocky medium-sized rivers & creeks
Necturus alabamensis ALABAMA WATERDOG	G2	S2			Streams with submerged logs & rocks
Notropis hypsilepis HIGHSCALE SHINER	G3	S2S3		T	Flowing areas of small to large streams over sand or bedrock substrates
Notropis stilbius SILVERSTRIPE SHINER	G4	S3			Medium-sized streams and rivers in flowing pools over sandy to rocky substrates
Ophisaurus attenuatus SLENDER GLASS LIZARD	G5	S3			Open woods; savannas; old fields; edges of streams & ponds; sandhills
Phenacobius catostomus RIFFLE MINNOW	G4	S3			Swift riffles in large streams or rivers over rocky substrates
Plethodon websteri WEBSTER'S SALAMANDER	G3	S1			Moist forests near rocky streams
Pseudotriton montanus MUD SALAMANDER	G5	S4			Swamps; muddy seeps; springs
Scartomyzon lachneri GREATER JUMPROCK	G3	S3			Small to large streams in swift current over rocky substrate
Thryomanes bewickii BEWICK'S WREN	G5	SU		R	Thickets; brushy areas; open woods

Fulton EA - MRPA Agency Coord.

ATLANTA REGIONAL COMMISSION 40 COURTLAND STREET, NE ATLANTA, GEORGIA 30303

February 10, 2003

Brian Keel, Project Engineer
Camp Dresser & McKee, Inc.
2030 Powers Ferry Road, Suite 325
Atlanta, GA 30339

Dear Brian:

I have reviewed the revised reanalysis materials you sent me for the proposed Fulton County Airport North Terminal Expansion Area on the Chattahoochee River in Fulton County. With the revisions that you made on the slope coverage, the reanalysis appears correct and accurate. As we discussed, this is not an official approval of the reanalysis. If the reanalysis is submitted as part of a Metro River review application, it will be approved as part of that review.

As I discussed with you, if you need to include adjacent land that is not in the current project boundaries, such areas will need to be included in the reanalysis. Again, that does not apply to land in the 100-year floodplain, which cannot be reanalyzed.

Please call me at (404) 463-3258 if you have any questions or need anything else.

Sincerely,

James M. Santo
Principal Planner

C: Mike Charlson, Fulton County Planning and Community Development

404-463-3100 FAX 404-463-3105 WWW.ATLANTAREGIONAL.COM

Fulton Agency Lead ARC re MRPA

CDM

Memorandum

To: *Fulton County Airport Environmental Assessment*

From: *Brian Keel*

Date: *02/27/03*

Subject: *Telephone Correspondence between Victoria Samuels and Jim Santo, ARC*

This memo documents correspondence that occurred between Victoria Samuels of CDM and Jim Santo of ARC in December 2002 concerning the MRPA 35-foot building height restriction within the 500-year floodplain as it pertains to the Fulton County Airport North Terminal Expansion Area. The main points of the discussion are as follows:

1. Mr. Santo confirmed that placing fill on top of the existing natural grade counts towards the 35' elevation allowance. Mr. Santo suggested a cut in order to achieve a flat surface rather than to place fill.

2. For the sake of calculating the height of a single structure, gable roofs should be measured from the average height of the eave and the peak, rather than just from the peak. The ground elevation is the average of the elevations in the footprint of the structure.

3. There is no variance for the 35' height restriction in the 500-year floodplain. However, the County could submit the application stating that the 35' height restriction causes a "hardship".

4. One effective method of arguing the restriction would be to show that the land was purchased for intended airport use or planning/design money was spent for the project before 1998 (when the Chattahoochee Corridor Plan was expanded to include the area in which our project lies). In essence, demonstrate that this project was begun before the Plan was enacted and that the 35' restriction will cause the land to not be used for its legally intended purpose; that the restriction is impractical in this instance (plane height requirements, etc.).

5. We can also argue the restriction by demonstrating that we cannot meet its requirement due to other conflicting environmental or safety requirements (i.e., we are limited in the

range of elevations at which we can build because FAA limits the allowable slopes of taxiways).

6. Mr. Santo mentioned finding a standard or equivalent project with an objective standard, but did not explain this fully because it "opens up a can of worms".

7. Mr. Santo also mentioned that we should describe any federal requirements or regulations that may be influencing the design and the project's inability to comply with the 35' height restriction.

8. ARC has three findings on a MRPA application:

   - Consistent
   - Inconsistent with Recommendations
   - Inconsistent with No Recommendations

   Inconsistent with Recommendations includes ARC's recommendations to make the proposed project consistent with the MRPA. Inconsistent with No Recommendations is as close to "no comment" as ARC staff can go.

After performing these tasks, we could submit for review. If the staff reviews our documentation of all of the above efforts and approves our development even though there are hangars above the 35' height restriction they can issue a finding of "Inconsistent with No Recommendations". However, this adds time to the review process of 3-4 weeks. For this finding to be approved, higher up staff must approve it, then the project goes before the environmental committee. From the environmental committee, it goes to the ARC board which meets on the 4th Wednesday of every month. If the Board approves this finding, it goes to the local government for approval.

C: Todd Barker, Kimley-Horn
Gordon Jackson, PAII
Tina S. Houston, CDM
Virginia Jackson, CDM

Atlanta Gas Light Company

May 14, 2003

CDM
Attn: Ms. Virginia Jackson

Re: Gas Availability
Commercial Development
Land Lot (s): 17, 18, 267 & 268
14th & 17th District(s)
Fulton County, GA

Dear Ms. Jackson:

This letter is to advise that natural gas is available at the intersection of Bankhead Highway and Fulton Industrial Boulevard, Atlanta, Fulton County, Georgia.

Atlanta Gas Light Company will make natural gas available to the site according to the Rules and Regulation governing our operations on file with the Georgia Public Service Commission at the time service is requested.

If you should require further assistance, please contact me at (404) 584-4101.

Sincerely,

Brian Rountree
Architect & Engineer Consultant

MAX CLELAND
GEORGIA
Telephone: (202) 224-3521
TDD/TTY: (202) 224-3203
www.senate.gov/~cleland

COMMITTEES:
ARMED SERVICES
COMMERCE
GOVERNMENTAL AFFAIRS
SMALL BUSINESS

United States Senate

WASHINGTON, DC 20510–1005

January 7, 2002

Mr. Todd Barker
Kimley-Horn & Associates, Inc.
3169 Holcomb Bridge Road, Suite 600
Norcross, GA 30071

Dear Todd:

Thank you for contacting me concerning site assessment of the North Terminal property at Charlie Brown Field. I appreciate the effort you are making to identify all the environmental issues which deserve consideration as planning for expansion moves forward.

At this time, I do not have any specific information relative to the project area.

Please continue to keep me informed as appropriate as this project moves forward.

Most respectfully,

Max Cleland

Max Cleland
United States Senator

MC:jhs

Suite 1700
75 Spring Street, S.W.
A ...nta, GA 30303-3309
(404) 331-4811

Suite 101
235 Roosevelt Avenue
Albany, GA 31701-2372
(229) 430-7796

611 Telfair Street
Augusta, GA 30901-2324
(706) 722-4040

Suite 101
120 12th Street
Columbus, GA 31902-2461
(706) 649-7705

203 Martin Luther King Jr. Blvd.
Dalton, GA 30721-3004
(706) 275-8905

Suite 203
401 Cherry Street
Macon, GA 31201-3384
(478) 755-1779

Suite A
440 Mall Boulevard
Savannah, GA 31406-4823
(912) 352-8283

Thamman, Freya

From: Jackson, Virginia [JacksonVF@cdm.com]
Sent: Friday, July 12, 2002 11:03 AM
To: Barker, Todd; Thamman, Freya
Subject: FW: Fulton County Airport

For inclusion in the agency coordination appendix.

-----Original Message-----
From: Dees, Bruce R. [mailto:BRDEES@southernco.com]
Sent: Monday, March 04, 2002 1:15 PM
To: Jackson, Virginia
Cc: D'Andrea, Chris L.
Subject: Fulton County Airport

Virginia,
As we discussed on the phone today, Georgia Power Company can accomodate the expansion plans at the airport. However, depending on the size and location of the new facilities, there may be an up-front cost from Georgia Power Company to accomodate the expansion. Please call if you have any further questions.
Thanks,
Randy

Appendix C

Potential Future Water Quality/ Floodplain Regulations
FEMA / USACE Floodplain Figures

Fulton County Airport – Brown Field

Possible Future Water Quality And Floodplain Regulations

Water Quality

Possible Future County Regulations

Fulton County is in the process of refining some of their regulations which could affect the subsequent design of the proposed project. One proposed change is to mandate an additional 75-foot buffer along water supply streams for seven miles upstream of the intake. According to a map published by ARC in January 1998, the closest water supply intake downstream of the project area is the City of East Point intake on Sweetwater Creek, which flows into the Chattahoochee River approximately nine miles downstream of the project area. Therefore, the 75-foot buffer would not affect the project.

Another proposed County regulation would set an undisturbed vegetative buffer equal to the FEMA-delineated 100-year floodplain for all streams. The proposed project layout has been planned to minimize encroachment on the 100-year floodplain. Fulton County may soon also require detention facilities to limit outflow velocities to pre-development velocities for the 2-year storm and smaller events. This regulation would be an erosion prevention measure.

Other Possible Future Regulations

The Metropolitan North Georgia Water Planning District (MNGWPD) has adopted a model ordinance as of October 3, 2002 that pertains to water quality. The Watershed Management Plan (WMP) developed by MNGWPD encourages local governments to adopt this ordinance or a similar ordinance to ensure consistent watershed management practices across the region. The requirements set forth by this model ordinance might, therefore, be integrated into Fulton County's regulations.

MNGWPD has proposed a storm water concept plan and consultation meeting early in the project development process. The storm water concept plan would include plans of existing conditions, the proposed site, an inventory of natural resources at the site and surrounding area, and a storm water management system concept plan, which would include preliminary proposed storm water controls.

MNGWPD has also proposed a storm water management plan, which details how storm water runoff would be controlled after development. This plan would necessarily bear the stamp and signature of a Professional Engineer (PE) licensed in the state of Georgia and include the following: common address and legal site description, vicinity map, existing conditions hydrologic analysis, post-development hydrologic analysis, drawings and calculations for the proposed storm water management system, post-development downstream analysis, construction-phase erosion and sedimentation control plan, landscaping and open space plan, operations and maintenance plan, maintenance access easements, inspection and maintenance agreements, and evidence of acquisition of applicable local and non-local permits.

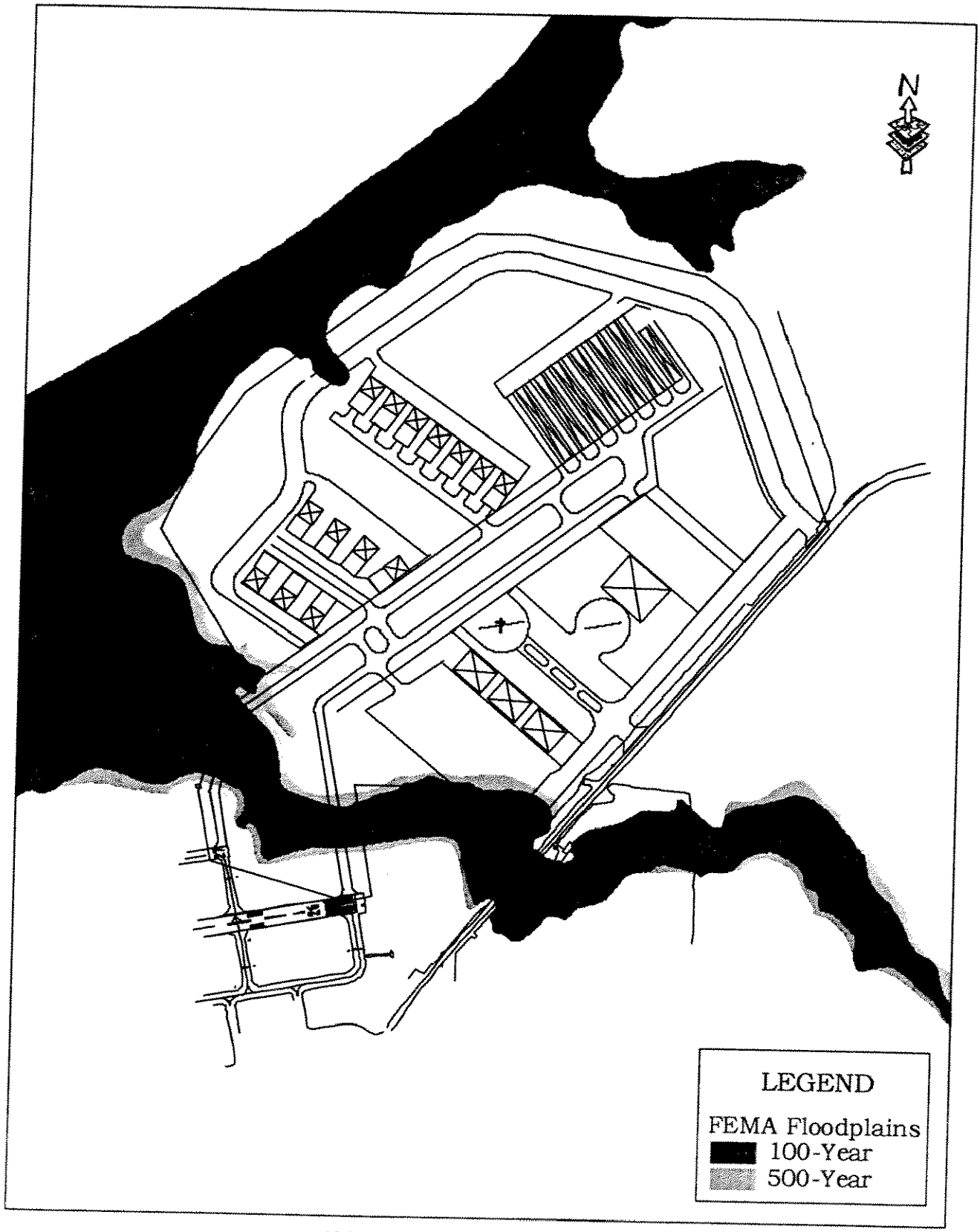
Additional storm water regulations proposed by the MGNWPD model ordinance state that structural storm water controls and non-structural practices should follow criteria set forth in the Georgia Storm water Management Manual. Specific practices outlined in the ordinance include some of those already discussed in this document under other regulatory agencies. Other practices specified by the ordinance include providing extended detention storage for the 1-year, 24-hour storm event and allowing for post-construction inspections of storm water control facilities by staff of the local permitting authority.

Floodplain

Possible Future Regulations

MNGWPD has adopted a model floodplain management/flood damage prevention ordinance. One requirement under this ordinance is the submittal of a floodplain management/flood damage prevention plan that has been signed and sealed by a professional engineer licensed in the state of Georgia. The plan should include the following items: a site plan, foundation design detail, description of the extent to which any watercourse would be altered or relocated, and all certifications required under this ordinance.

The ordinance also requires submittal of as-built drawings showing the regulatory floor elevation or flood-proofing level immediately after the lowest floor. Standards for land development are also outlined in this ordinance, and include many of the same requirements mandated by FEMA. The ordinances developed by MNGWPD are not yet law, but might be incorporated into Fulton County's ordinances.



CDM

Figure C-1
Proposed Project
With FEMA Floodplains
Proposed North Terminal Area
Fulton County Airport

LEGEND
FEMA Floodplains
100-Year
500-Year
USACE Floodplains
100-Year
500-Year
300 0 300 600 Feet
N
May 2003
Figure C-2
Proposed Project with FEMA Floodplains and USACE Floodplains
Proposed North Terminal Area
Environmental Assessment
Fulton County Airport
CDM
12