

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0006817, Fulton County **OFFICE** Preconstruction
CSCMQ-0006-00(817)
Perimeter Center Area Fiber Optic Interconnect **DATE** April 4, 2006

FROM *Cyahn Kunk*
Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO *ra* SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keeper
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Joe Palladi (file copy)
Paul Liles
Babs Abubakari
Bryant Poole
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: P. I. No. 0006817, Fulton County **OFFICE** Preconstruction
CSCMQ-0006-00(817)
Perimeter Center Area Fiber Optic Interconnect **DATE** March 30, 2006

FROM *cyber* *Junk*
Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO David E. Studstill, Jr., P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

This project is the Perimeter Center Fiber Optic Interconnect along portions of the following road segments:

- ◆ Hammond Drive from Peachtree Dunwoody Road NE to DeKalb/Fulton County line
- ◆ Hammond Drive from West Concourse Parkway to Barfield Road NE
- ◆ Lake Hearn Drive NE from Peachtree Dunwood Road NE to DeKalb/Fulton County line
- ◆ Abernathy Road from Mount Vernon Highway NE to Glenridge Drive NE
- ◆ Peachtree Dunwoody Road from St. Joseph's Hospital to Johnson Ferry Road NE

The Perimeter Center Community Improvement Districts (PCIDs) represent the DeKalb and Fulton Perimeter CIDs which are home to the largest office park concentration in Metro Atlanta. A combination of growth and aging traffic control equipment within the DeKalb Perimeter CID has created unacceptable levels of congestion. Upgrades to traffic signal control equipment and communications hardware are needed to allow coordination of signals, reduce congestion and improve safety. There are a number of projects under construction or being implemented to address traffic signal and communication upgrades within various sections of the CID. However, these projects are interspersed throughout the CID and do not facilitate seamless traffic operations between the two CIDs.

A separate project for the Fulton Perimeter CID (GDOT P.I. No. 0006807), which will be let at the same time as this project for the DeKalb Perimeter CID, will also fill in the gaps in the system by implementing upgrades to traffic control and communications equipment within the PCIDs to achieve seamless traffic signal operations between the two CIDs.

The proposed construction will consist of the installation of a 48 single mode fiber optic cable along certain road segments to fill in gaps in the area's fiber infrastructure. It also includes the installation of an Ethernet switch in 45 cabinets within the area and the installation of an aggregate switch to consolidate all communications to a single point.

David Studstill
Page 2

P. I. No. 0006817, Fulton
March 30, 2006

Environmental concerns include requiring a Categorical Exclusion be prepared; a public hearing open house is not required; time saving procedures are appropriate.

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>FUNDING</u>	<u>PROG DATE</u>
Construction (includes E&C and inflation)	\$674,000	\$674,000	L400	2007
Right-of-Way & Utilities*	-----	-----		

*LGPA needed.

I recommend this project concept be approved and be constructed concurrently with P.I. No. 0006807, DeKalb County.

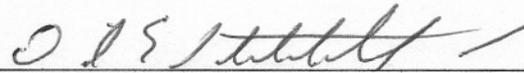
MBP:JDQ/cj

Attachment

CONCUR


Buddy Gratton, P.E., Director of Preconstruction

APPROVE


David E. Studstill, Jr., P.E., Chief Engineer

Project Concept Report
Project Number: CSCMQ-0006-00(817)
P.I. Number: 0006817
County: Fulton

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

RECEIVED
MAR 09 2006
BY: _____

PROJECT CONCEPT REPORT

Project Number: CSCMQ-0006-00(817)
County: Fulton
P. I. Number: 0006817

Federal Route Number: N/A
State Route Number: 094700, 142600

Perimeter Center Area Fiber Optic Interconnect at Several Locations

Recommendation for approval:

DATE 3/7/06

James E. Johnson
Project Manager

DATE 3-8-06

Therese Gold
State Traffic Safety & Design Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and the State Transportation Improvement Program (STIP).

DATE 3/9/06

Joseph P. Bell
State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

Project Concept Report
Project Number: CSCMQ-0006-00(817)
P.I. Number: 0006817
County: Fulton

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

PROJECT CONCEPT REPORT

Project Number: CSCMQ-0006-00(817)
County: Fulton
P. I. Number: 0006817

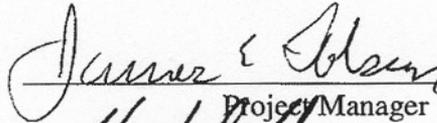
Federal Route Number: N/A
State Route Number: 094700, 142600

Perimeter Center Area Fiber Optic Interconnect at Several Locations

Recommendation for approval:

DATE 3/7/06

DATE 3-8-06



Project Manager


State Traffic Safety & Design Engineer

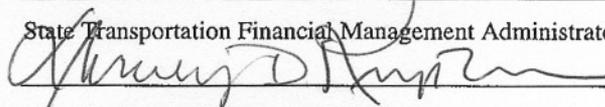
The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and the State Transportation Improvement Program (STIP).

DATE _____

State Transportation Planning Administrator

DATE _____

DATE 3.23.06

State Transportation Financial Management Administrator


State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

ATTACHMENT #2

NOTICE OF LOCATION AND DESIGN APPROVAL

**PROJECT: CSCMQ-006-00(817) FULTON COUNTY
P. I. NO. 0006817**

Notice is hereby given in compliance with Georgia Code 22-2-109 that the Georgia Department of Transportation has approved the location and Design of the above project.

Date of Location and Design Approval: APRIL 4, 2006

Project CSCMQ-006-00(817) in Fulton County consists of the installation of a 48 single mode fiber optic cable along certain road segments to fill in gaps in the area's fiber infrastructure. It also includes the installation of an Ethernet switch in 45 cabinets within the area and the installation of an aggregate switch to consolidate all communications to a single point.

Drawings of the proposed project, as approved, are on file and are available for public inspection at the Georgia Department of Transportation:

Mr. Jim Tolson, Traffic Design Manager
935 E. Confederate Avenue
Wayne Shackelford Building
Atlanta, GA 30316
(404) 635-8135
Email: jim.tolson@dot.state.ga.us

Any interested party may obtain a copy of the drawings or portions thereof by paying a nominal fee and requesting in writing to:

Keith Golden, P. E.
Office of Traffic Safety & Design
935 E. Confederate Avenue
Building 24
Atlanta, GA 30316
Email: keith.golden@dot.state.ga.us

Any written request or communication in reference to this project or notice should include the Project and P. I. Number as noted at the top of this notice.

Project Concept Report
Project Number: CSCMQ-0006-00(817)
P.I. Number: 0006817
County: Fulton

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

PROJECT CONCEPT REPORT

Project Number: CSCMQ-0006-00(817)
County: Fulton
P. I. Number: 0006817

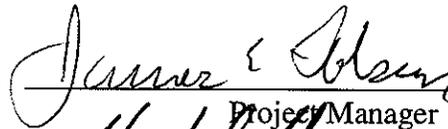
Federal Route Number: N/A
State Route Number: 094700, 142600

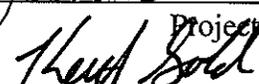
Perimeter Center Area Fiber Optic Interconnect at Several Locations

Recommendation for approval:

DATE 3/7/06

DATE 3-8-06



Project Manager


State Traffic Safety & Design Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and the State Transportation Improvement Program (STIP).

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

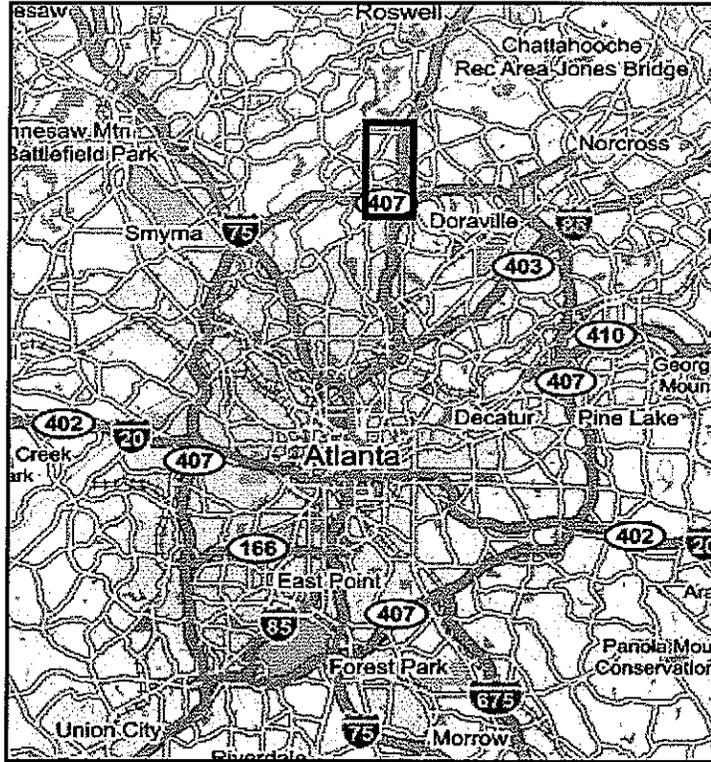
DATE _____

District Engineer

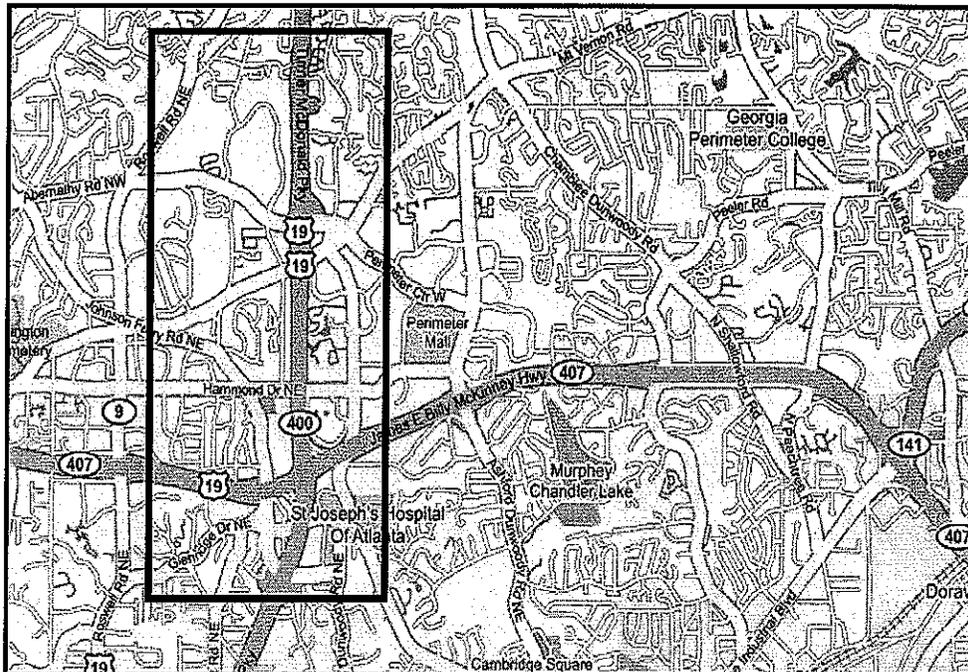
DATE _____

Project Review Engineer

PROJECT LOCATION MAP



Location of Project in Fulton County



Need and Purpose:

The Perimeter Community Improvement Districts (PCIDs) represent the DeKalb and Fulton Perimeter CIDs which are home to the largest office park concentration in Metro Atlanta. The CIDs are also home to a large number of retail operations, contain a significant number of residential properties and are accessible via Interstate 285 (I-285) and GA Route 400 (GA400). The Fulton Perimeter CID includes Northside Hospital, St. Joseph's Hospital and the Children's Hospital of Atlanta.

A combination of growth and aging traffic control equipment within the Fulton Perimeter CID has created unacceptable levels of congestion. Upgrades to traffic signal control equipment and communications hardware are needed to allow coordination of signals, reduce congestion and improve safety. There are a number of projects under construction or being implemented to address traffic signal and communication upgrades within various sections of the CID. However, these projects are interspersed throughout the CID and do not facilitate seamless traffic operations between the two CIDs.

A separate project for the DeKalb Perimeter CID (GDOT PI# 0006807), which will be let at the same time as this project for the Fulton Perimeter CID, will also fill in the gaps in the system by implementing upgrades to traffic control and communications equipment within the PCIDs to achieve seamless traffic signal operations between the two CIDs. This communication network will allow for coordination of traffic signals which will improve progression, particularly across the DeKalb-Fulton County line, and accommodate additional traffic demands placed on the roadway network.

Description of the proposed project:

This project includes the installation of:

- 48 single mode fiber optic cables along certain road segments to fill in gaps in the area's fiber infrastructure
- A field (Ethernet) switch in approximately forty-five (45) traffic signal controller cabinets within the area
- An aggregation switch to consolidate all communications to a single point which will interface with the GDOT NaviGator network

An underground single mode 48 fiber optic cable trunk line will be installed along the following road segments:

- Hammond Drive: from Peachtree Dunwoody Road NE to DeKalb/Fulton County Line
- Hammond Drive: from West Concourse Parkway to Barfield Road NE
- Lake Hearn Drive NE: Peachtree Dunwoody Road NE to DeKalb/Fulton County Line
- Abernathy Road: from Mount Vernon Highway NE to Glenridge Dr NE
- Peachtree Dunwoody: St. Joseph's Hospital to Johnson Ferry Road NE

A field (Ethernet) switch will be potentially installed in each of the traffic signal controller cabinets at the following intersections:

1. Perimeter Center West @ Perimeter Pointe Shopping Ctr	24. Glenridge Connector @ GA. 400 SB Off Ramp
2. Perimeter Center West @ MARTA	25. Glenridge Connector @ Johnson Ferry Road
3. Peachtree Dunwoody Road @ Lake Hearn Drive	26. Glenridge Drive @ I-285 EB Off Ramp
4. Peachtree Dunwoody Road @ Hollis Cobb/MARTA Med Ctr	27. Glenridge Drive @ Crawford Drive
5. Peachtree Dunwoody Road @ St. Joseph's Hospital	28. Glenridge Drive @ I-285 WB Off Ramp
6. Johnson Ferry Road @ Peachtree Dunwoody Road	29. Glenridge Drive @ Glenforest Road
7. Glenridge Connector @ Peachtree Dunwoody Road	30. Glenridge Drive @ Glenridge Office Park
8. Abernathy Road/Perimeter Center West @ Mt. Vernon Road	31. Glenridge Drive @ Hammond Drive
9. Mt. Vernon Road @ Northpark Place	32. Hammond Drive @ Barfield Road
10. Peachtree Dunwoody Road @ Northpark Place	33. Johnson Ferry Road @ N. Trimble Road/Glenridge Pt Pkwy
11. Peachtree Dunwoody Road @ COSTCO	34. Johnson Ferry Road @ Meridian Mark/Hollis Cobb
12. Mt. Vernon Highway @ Crestline Parkway	35. Meridian Mark @ Northside Professional Center
13. Mt. Vernon Highway @ Barfield Road	36. Hammond Drive @ West Concourse Parkway
14. Lake Hearn Drive at New Unnamed Driveway	37. Hammond Drive @ East Concourse Parkway
15. Peachtree Dunwoody Road @ I-285 EB On Ramp	38. Glenlake Parkway @ One Glenlake Driveway
16. Peachtree Dunwoody Road @ I-285 WB Off Ramp	39. Abernathy Road @ Peachtree Dunwoody Road
17. Peachtree Dunwoody Road @ Concourse/Palisades Drive	40. Peachtree Dunwoody Rd at Mount Vernon Hwy
18. Peachtree Dunwoody Road @ Hammond Drive	41. Abernathy Road @ Barfield Road/Glenlake Parkway
19. Peachtree Dunwoody Road @ Central Park Drive	42. Abernathy Road @ Glenridge Drive
20. Peachtree Dunwoody Road @ Crestline Parkway	43. Glenridge Connector @ Meridian Mark
21. Abernathy Road @ GA. 400 NB On Ramp	44. Johnson Ferry Road @ Glenridge Drive
22. Abernathy Road @ GA. 400 SB Off Ramp	45. Glenridge Drive @ Northland Drive
23. Glenridge Connector @ GA. 400 NB Off Ramp	

Is the project located in a Non-attainment area? Yes No.

PDP Classification: Major Minor

Federal Oversight: Full Oversight (), Exempt(X), State Funded(), or Other ()

Functional Classification: _____

Abernathy Road
 Perimeter Center West
 Peachtree Dunwoody Road
 Hammond Drive

Urban Principal Arterial
 Minor Arterial Street
 Minor Arterial Street
 Collector Street

U. S. Route Number(s): N/A

State Route Number(s): 094700, 142600

Traffic (AADT):

Current Year: (2004) Varies Design Year: (20YY) N/A

Lake Hearn Drive (Peachtree Dunwoody Road to DeKalb County Line).....	34920
Peachtree Dunwoody Road (Johnson Ferry Road to St. Joseph's Hospital).....	34300
Hammond Drive (Barfield Road to Concourse Pkwy).....	17850
Hammond Drive (Peachtree Dunwoody Road to DeKalb County Line).....	17850
Abernathy Road (Mount Vernon Hwy to Glenridge Drive).....	34920
Mount Vernon Hwy (Crestline Pkwy to NorthPark Place).....	12080

Existing design features:

- Typical Section: (*Describe number & width of lanes, turn lanes, curb & gutter, sidewalks, etc.*): **Various**
- Posted speed: **Varies 35 MPH - 45 MPH** Maximum degree of curvature: **N/A**
- Maximum grade: **N/A**
- Width of right of way: **Various**
- Major structures: **None**
- Major interchanges or intersections along the project:
Refer to Table on Page 3
- Existing length of roadway segment: **7.5 miles**

Proposed Design Features:

- Proposed typical section(s): **Existing sections will remain**
- Proposed Design Speed Mainline: **N/A**
- Proposed Maximum grade Mainline: **N/A** Maximum grade allowable **N/A**
- Proposed Maximum grade Side Street: **N/A** Maximum grade allowable **N/A**
- Proposed Maximum grade driveway: **N/A**
- Proposed Maximum degree of curve: **N/A** Maximum degree allowable: **N/A**
- Right of way: **Existing right-of-way width will remain**
 - Width _____.
 - Easements: Temporary (), Permanent (), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (), Other ().
 - Number of parcels: _____ Number of displacements:
 - Business: _____
 - Residences: _____
 - Mobile homes: _____
 - Other: _____
- Structures:
 - Bridges: **N/A**
 - Retaining walls: **N/A**
- Major intersections and interchanges. *Refer to Table on Page 3*

- Traffic control during construction:

Project construction will take place within existing right-of-way. No lane closures are anticipated. . Traffic may be interrupted while construction personnel monitor the location of the directional bore drill head when crossing under roadways . Traffic signals will remain functioning during the construction.

- Design Exceptions to controlling criteria anticipated: **None Anticipated**

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	()	(X)
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE:	()	()	(X)
SUPERELEVATION RATES:	()	()	(X)
HORIZONTAL CLEARANCE:	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPACITY:	()	()	(X)

- Design Variances: *None Anticipated*
- Environmental concerns: *None Anticipated*
- Level of environmental analysis anticipated:
 - Are Time Savings Procedures appropriate? Yes (X), No (),
 - Categorical exclusion (X),
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (), or
 - Environmental Impact Statement (EIS) ().
- Utility involvements: *New trunk fiber will be installed underground. Will coordinate with utility owners during construction.*

Project responsibilities:

- Design: *URS Corporation on behalf of PCID*
- Right of Way Acquisition: *None Required*
- Relocation of Utilities: *None Required*
- Letting to contract: *PCID*
- Supervision of construction: *PCID*
- Providing material pits: *None Anticipated*
- Providing detours: *None Anticipated*

Coordination

- Initial Concept Meeting date and brief summary. *To be determined.*
- Concept meeting date and brief summary. *To be determined.*
- P. A. R. meetings, dates and results. *None Required*
- Public involvement. *No public meetings are anticipated*
- Local government comments. *None*
- Other projects in the area:
 - Peachtree Dunwoody/Medical Center Streetscapes (LCI)

- Hammond Drive Sidewalks (GDOT PI# 753300)
- Fulton Perimeter CID – Phase I Intersections
- Fulton PCID ATMS/Signal Synchronization
- Fulton County Pedestrian Lighting
- GA400 Collector-Distribution System (GDOT PI# 721850)
- Other coordination to date. *None*
- Railroads. *None*

Scheduling – Responsible Parties’ Estimate

- Time to complete the environmental process: *3 Months.*
- Time to complete preliminary construction plans: *4 Months*
- Time to complete right of way plans: *N/A.*
- Time to complete the Section 404 Permit: *N/A*
- Time to complete final construction plans: *2 Months*
- Time to complete to purchase right of way: *N/A*

Other alternates considered:

Alternative #1: *No Build*

Alternative #2: *Considered aerial installation of the fiber optic cable but because of the existing aerial utilities and anticipated make-ready work, it was decided that underground installation by directional boring was the most practical way to install the cable.*

Comments:

This project is 100% in Fulton County, GDOT District 7 and Congressional District No. 5.

Attachments:

1. Cost Estimate
2. Notice of Location and Design Approval
3. Concept Report Rating Form

ATTACHMENT #1

PROJECT CONCEPT COST ESTIMATE

**Fulton Perimeter Center Area Fiber Interconnection
 CSCMQ-0006-00 (817)
 Fulton County
 Quantities and Cost Summary
 Concept Cost Estimate**

Item Code	Description	Unit	Quantity	Engineer Estimate	
				Unit Price (\$)	Amount (\$)
150-1000	Traffic Control - CSCMQ-0006-00 (817)	Lump Sum	Lump	\$50,000	\$50,000
XXX-XXXX	Conduit, 48- Fiber, Pull Boxes, Reel Fusion Splices	Lin Ft	12,144	\$32	\$388,608
939-2300	Field Switch, Type A	Each	45	\$4,000	\$180,000
939-XXXX	Aggregation Switch	Each	1	\$25,000	\$25,000
939-8000	Testing	Lump Sum	Lump	\$15,000	\$15,000
939-8500	Training	Lump Sum	Lump	\$15,000	\$15,000
Total Estimate					\$673,608