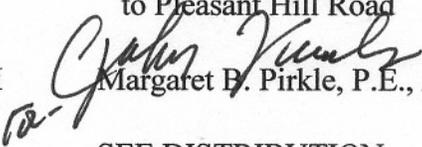


D.O.T. 66

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0006397, Fulton County **OFFICE** Preconstruction
CSNHS-0006-00(397)
I-85 Ramp Meters from Buford Highway
to Pleasant Hill Road **DATE** September 9, 2005

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

TO SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

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

David Studstill

Page 2

P. I. No. 0006397, Fulton

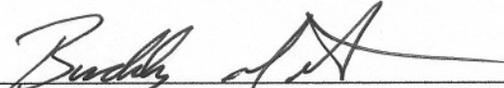
August 4, 2005

I recommend this project concept be approved.

MBP:JDQ/cj

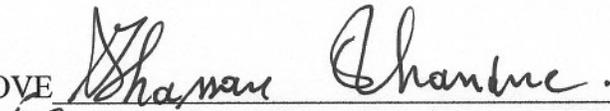
Attachment

CONCUR



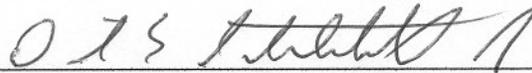
Buddy Gratton, P.E., Director of Preconstruction

APPROVE



for Robert M. Callan, Administrator, FHWA

APPROVE

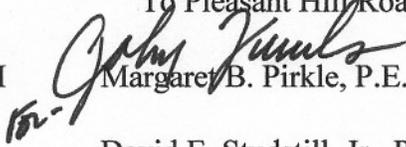


David E. Studstill, Jr., P.E., Chief Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 0006397, Fulton County **OFFICE** Preconstruction
 CSNHS-0006-00(397)
 I-85 Ramp Meters from Buford Highway
 To Pleasant Hill Road **DATE** August 4, 2005

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

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

SUBJECT PROJECT CONCEPT REPORT

This project will install ramp meters and enhanced vehicle detection system (VDS) and closed circuit television (CCTV) coverage at all on-ramp locations between Buford Highway and Pleasant Hill Road. The ramp meters will control the release of vehicles onto the corridor during peak hours, thereby reducing congestion and stabilizing the flow of traffic that typically occurs at heavy volume merge locations. The operation of ramp meters will create a smoother flow of traffic and reduce the potential for traffic crashes during peak hours.

Ramp meters will be installed on northbound and southbound entrance ramps at Buford Highway, Cheshire Bridge Road/Lenox Road, North Druid Hills Road, Chamblee-Tucker Road, Jimmy Carter Boulevard, Indian Trail, Beaver Ruin Road, Steve Reynolds Boulevard, and Pleasant Hill Road (where applicable). Each ramp meter will require at least one VDS camera to monitor the operation of the ramp meter, as well as CCTV for visual coverage along the length of the ramp. All supporting hardware, VDS, CTV, poles and/or mast arms, lane markings, signal assemblies, as well as controller cabinets and signage utilized for the installation of ramp meters are in this project. This project will use the existing fiber optic trunk line along I-85 to tie in with hubs E, C, and D.

Environmental concerns include requiring a Categorical Exclusion be prepared; a public meeting 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)	\$1,485,000	\$3,000,000	GRVS	2006
Right-of-Way & Utilities	-0-	-0-		

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

CSNHS-0006-00(397)
FULTON/DEKALB/GWINNETT COUNTIES
P.I. NO. 0006397

FEDERAL ROUTE NO: NH-85-1, I-85
STATE ROUTE NO: 403

*ATMS/I-85 Communication/Surveillance from Buford
Highway to Pleasant Hill Road*

Recommendation for approval:

DATE 7-8-05



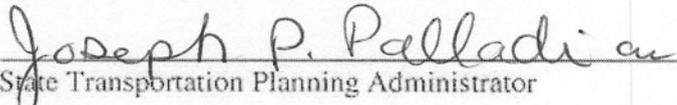
State Traffic Safety & Design Administrator

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

DATE _____

State Traffic Operations Engineer

DATE 7-12-05



State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

State Environmental / Location Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

CSNHS-0006-00(397)
FULTON/DEKALB/GWINNETT COUNTIES
P.I. NO. 0006397

FEDERAL ROUTE NO: NH-85-1, I-85
STATE ROUTE NO: 403

*ATMS/I-85 Communication/Surveillance from Buford
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DATE _____

State Traffic Operations Engineer

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

State Environmental / Location Engineer

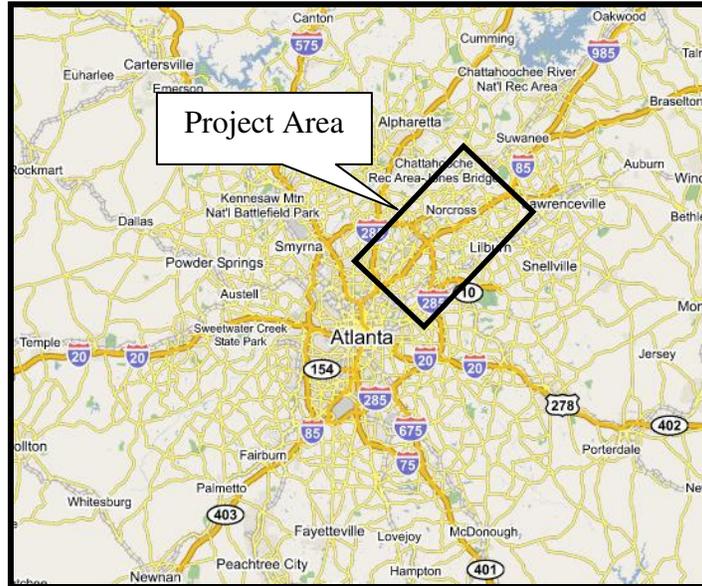
DATE _____

District Engineer

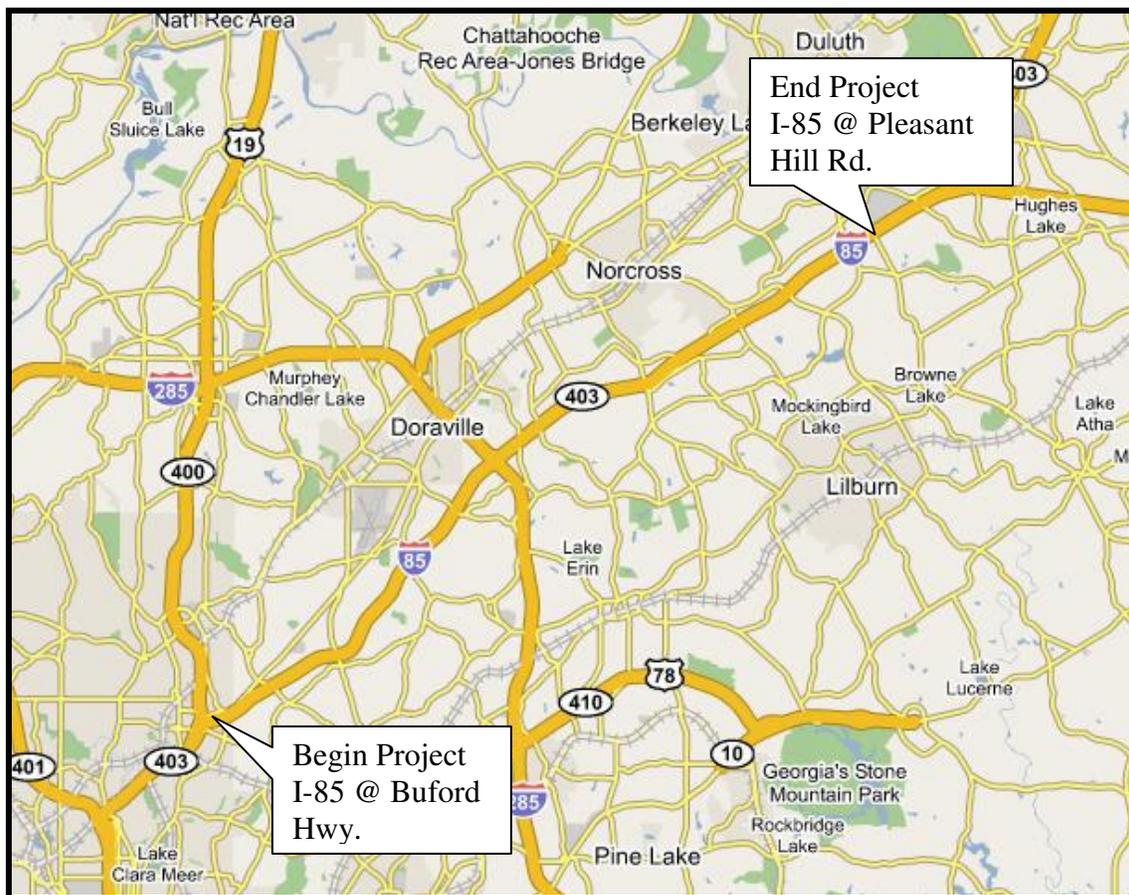
DATE _____

Project Review Engineer

PROJECT LOCATION MAPS



Location of Project in Fulton/DeKalb/Gwinnett Counties



Detail Map of Project

Need and Purpose:

The purpose of this project is to increase the efficiency and safety of the corridor by installing ramp meters along I-85 from the intersection of I-85 with Buford Highway in Fulton County, through DeKalb County, to the I-85 interchange with Pleasant Hill Road in Gwinnett County. The ramp meters will control the release of vehicles onto I-85 during peak hours, therefore reducing congestion and stabilizing the flow of traffic that typically occurs at heavy volume merge locations. The operation of the ramp meters will create a smoother flow of traffic and reduce the potential for traffic crashes during peak hours.

The Georgia DOT's NaviGator – Intelligent Transportation System has been in operation since April 1996. Initially providing coverage on Interstates 75 and 85, primarily within the I-285 Perimeter Highway, it is currently being extended along SR 166 in Fulton County and SR 141 in DeKalb and Gwinnett counties, with further projects on I-20, I-75, I-85, I-285, I-575, I-675, I-985, SR 316, SR 400, and US 78 planned as part of the Fast Forward Program. The system consists of surveillance cameras (CCTV), vehicle detection system cameras, Changeable Message Signs (CMS), and ramp meters. By use of a fiber optic communications backbone, all the devices are tied to the Transportation Management Center (TMC) and various Traffic Control Centers (TCC) in the Metro Atlanta area. Operators located at the TMC are able to detect incidents and dispatch, with minimal delay, appropriate response teams. The NaviGator program benefits the trucking industry and motorists by reducing incident response/clearance times, and providing better information with consequential safety improvements.

On April 14, 2004 Governor Sonny Perdue introduced the Fast Forward Congestion Relief Program which includes accelerated growth of the NaviGator system throughout the Metro Atlanta region. The Fast Forward Program provides \$211 million to expand the Navigator and Highway Emergency Response Operator (HERO) coverage with a goal of reducing peak hour delays by 30%. This project covers I-85 from Buford Highway to Pleasant Hill Road. This project includes new field device connections to Hub E in Fulton County, Hub C in DeKalb County and Hub D in Gwinnett County.

Description of the proposed project:

Coverage

This project will include ramp meters and enhanced VDS and CCTV coverage at all on ramp locations along I-85 between Buford Highway and Pleasant Hill Road. The CCTV cameras will allow for improved monitoring of the interchanges and operation of the ramp meters at the TMC. This project will use the existing fiber optic trunk line along Interstate 85 to tie in with Hubs E, C and D.

Communications Plan

This project will use the new digital communications architecture. The video data and control communications from the new devices will be sent via Gig Ethernet network, as opposed to the older analog method involving switches and multiplexers. All network electronics required to operate and communicate with the devices in this project are included as well.

Ramp Meters

Ramp Meters will be installed on northbound and southbound entrance ramps at Buford Highway, Cheshire Bridge Road/Lenox Road, North Druid Hills Road, Chamblee-Tucker Road, Jimmy Carter Boulevard, Indian Trail, Beaver Ruin Road, Steve Reynolds Boulevard, and Pleasant Hill Road (where applicable). Each ramp meter will require at least one VDS camera to monitor the operation of the ramp meter, as well as CCTV for visual coverage along the length of the ramp. All supporting hardware, VDS, CCTV, poles and/or mast arms, lane markings, signal assemblies, as well as controller cabinets and signage utilized for the installation of ramp meters are in this project.

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

PDP Classification: Major Minor

Federal Oversight: Full Oversight , Exempt , State Funded , or Other

Functional Classification: Interstate Principal Arterial

U. S. Route Number(s): I-85

State Route Number(s): SR 403

Traffic (2004 AADT)

source: http://www.dot.state.ga.us/dot/plan-prog/transportation_data/traffic_counts/index.shtml

I-85 (Cheshire Bridge to SR 42)	219,150
I-85 (SR 42 to Druid Hills Road).....	219,050
I-85 (Druid Hills Road to Clairmont Road).....	187,040
I-85 (Clairmont Road to Shallowford Road)	195,520
I-85 (Shallowford Road to Chamblee-Tucker Road).....	195,010
I-85 (Chamblee-Tucker Road to I-285)	192,490
I-85 (I-285 to Northcrest Road)	198,710
I-85 (Northcrest Road to Pleasantdale Road)	211,760
I-85 (Pleasantdale Road to Indian Trail Lilburn Road)	268,870
I-85 (Indian Trail Lilburn Road to Beaver Ruin Road)	255,720
I-85 (Beaver Ruin Road to Steve Reynolds Boulevard).....	247,550
I-85 (Steve Reynolds Boulevard to Pleasant Hill Road)	211,760

Existing design features:

- Typical Sections:
 - I-85: 5 - 6 lanes in each direction
- Posted speed:
 - I-85: 65 mph
- Minimum Radius: N/A
- Maximum grade: N/A
- Major structures:
 - Bridge @ Cheshire Bridge Road underpass
 - Bridge @ North Druid Hills Road overpass
 - Bridge @ Clairmont Road (SR 155) underpass
 - Bridge @ Shallowford overpass
 - Bridge @ Mercer University Drive overpass
 - Bridges @ I-285 underpass and overpass
 - Bridge @ Northcrest Road and overpass
 - Bridge @ Pleasantdale Road overpass
 - Bridge @ Dawson Blvd. overpass
 - Bridge @ Jimmy Carter Blvd. overpass
 - Bridge @ Lilburn Road overpass
 - Bridge @ Beaver Ruin Road overpass
 - Bridge @ Steve Reynolds Boulevard overpass
 - Bridge @ Pleasant Hill Road underpass

- Major interchanges or intersections along the project:
 - *I-85 & Cheshire Bridge Road*
 - *I-85 & North Druid Hills*
 - *I-85 & Clairmont Road (SR 155)*
 - *I-85 & Shallowford Rd.*
 - *I-85 & Mercer University Dr.*
 - *I-85 & I-285*
 - *I-85 & Pleasantdale Rd.*
 - *I-85 & Dawson Blvd.*
 - *I-85 & Jimmy Carter Blvd.*
 - *I-85 & Lilburn Rd.*
 - *I-85 & Beaver Ruin Rd.*
 - *I-85 & Steve Reynolds Blvd.*
 - *I-85 & Pleasant Hill Rd.*
- Existing length: *8.55 miles*

Proposed Design Features:

- Typical Sections:
 - *I-85: Existing section to remain*
- Posted speed:
 - *I-85: 65 mph*
- Minimum Radius: *N/A*
- Maximum grade: *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 Minimum Radius Mainline: *N/A* Minimum Radius allowable: *N/A*
- Proposed Minimum Radius Side Street: *N/A* Minimum Radius allowable: *N/A*
- Type of Access: *Limited Access*
- Right of way: *Project will be constructed within the existing Limited Access Right of Way. No additional right of way and/or easements will be required.*
 - Number of parcels: *0* Number of displacements: *0*
 - Business: *0*
 - Residences: *0*
 - Mobile homes: *0*
 - Other: *0*
- Structures:
 - Strain Poles for Ramp Meter Signals, CCTV and VDS
- Major intersections and interchanges:
 - *I-85 & Cheshire Bridge Road*
 - *I-85 & North Druid Hills*
 - *I-85 & Clairmont Road (SR 155)*
 - *I-85 & Shallowford Rd.*
 - *I-85 & Mercer University Dr.*
 - *I-85 & I-285*
 - *I-85 & Pleasantdale Rd.*
 - *I-85 & Dawson Blvd.*

- I-85 & Jimmy Carter Blvd.
- I-85 & Lilburn Rd.
- I-85 & Beaver Run Rd.
- I-85 & Steve Reynolds Blvd.
- I-85 & Pleasant Hill Rd.

- Traffic control during construction: *Shoulder closures and/ or lane closures will be necessary during installation of conduit, fiber optic cables, changeable message signs, and strain poles. Traffic pacing will be required during installation of changeable message signs.*
- Design Exceptions to controlling criteria anticipated: *None*

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ROADWAY WIDTH:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SHOULDER WIDTH:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VERTICAL GRADES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CROSS SLOPES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
STOPPING SIGHT DISTANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SUPERELEVATION RATES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HORIZONTAL CLEARANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPEED DESIGN:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VERTICAL CLEARANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BRIDGE WIDTH:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BRIDGE STRUCTURAL CAPACITY:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- Design Variances: *None*
- Environmental Concerns: *None*
- Probable Locations of UST's: *N/A*
- Probable Locations of Hazardous Waste: *None*
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes , No ,
 - Categorical Exclusion ,
 - Environmental Assessment/Finding of No Significant Impact (FONSI) , or
 - Environmental Impact Statement (EIS) .
- Utility involvements: *Power service will be required for all CMS and CCTV cameras.*
- Meets Logical Termini Requirements: *Yes*
- Conforms to TIP/STIP: *Yes*

Project responsibilities:

- Design: *Gresham Smith and Partners on Behalf of the Georgia DOT.*
- Right of Way Acquisition: *N/A*
- Relocation of Utilities: *GDOT*
- Letting to contract: *GDOT*
- Supervision of construction: *GDOT*
- Providing material pits: *None Required*
- Providing detours: *None Anticipated*

Coordination

- Pre-Concept Meeting: *x-x-05*

- 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: *N/A*
- Other projects in the area: *See attached list*
- Other coordination to date: *GS&P to contact Fulton/DeKalb/Gwinnett County to determine any needs they may have with regards to this project.*

Scheduling – Responsible Parties’ Estimate

- Time to complete the environmental process: *4 Months*
- Time to complete preliminary construction plans: *6 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: *7 Months*
- Time to complete to purchase right of way: *N/A*

Other alternates considered:

Alternative #1: No Build

Comments: *Extension of NaviGator system, Current fiscal year FY 05*

Attachments:

1. Cost Estimate including E & C
2. List of other projects in the area (ARC Project Fact Sheets)
 - a. Description: Add HOV lanes along I-85 from SR 316 to Hamilton Mill Road
GDOT Project Number: 0003164
 - b. Description: SR 378 (Beaver Ruin Road) ATMS from US 23 to US 29
GDOT Project Number: 0005688
3. Concept Report Rating Form

**ATMS / I-85 Ramp Meters from Buford Highway/Fulton to Pleasant Hill Road/Gwinnett
 CSNHS-0006-00(397), PI 0006397
 Fulton/DeKalb/Gwinnett Counties
 Quantities and Cost Summary
 Concept Cost Estimate**

Engineer Estimate

Item Code	Description	Unit	Quantity	Unit Price (\$)	Amount (\$)
150-1000	Traffic Control CSNHS-0006-00(397)	Lump	Lump	\$ 150,000.00	\$ 150,000.00
XXX-XXXX	Ramp Meter Equipment	Each	16	\$ 75,000.00	\$ 1,200,000.00
Total Estimate					\$ 1,350,000.00
Total Estimate:					\$ 1,350,000.00
Inflation:					
10% E & C					\$ 135,000.00
Total Project Cost					\$ 1,485,000.00

SCORING RESULTS AS PER TOPPS 2440-2

Project Number: CHNHS-0006-00(397)		County: Fulton/DeKalb/Gwinnett		PI No.: 0006397		
Report Date:		Concept By: DOT Office: Traffic Safety and Design				
<input checked="" type="checkbox"/> CONCEPT		Consultant: Gresham Smith and Partners				
Project Type: Choose One From Each Column		<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural	<input checked="" type="checkbox"/> ATMS <input type="checkbox"/> Bridge <input type="checkbox"/> Building <input type="checkbox"/> Interchange <input type="checkbox"/> Intersection <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous		
FOCUS AREAS	SCORE	RESULTS				
Presentation						
Judgment						
Environmental						
Right of Way						
Utility						
Constructability						
Schedule						

NOTICE OF LOCATION AND DESIGN APPROVAL

**PROJECT: CSNHS-0006-00(397) FULTON/DEKALB/GWINNETT COUNTY
P. I. NO. 0006397**

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 projects.

Date of Location and Design Approval: SEPTEMBER 9, 2005

Project CSNHS-0006-00(397) in Fulton, DeKalb and Gwinnett Counties consists of installing ramp meters along I-85 from the intersection of I-85 with Buford Highway in Fulton County, through DeKalb County, to the I-85 interchange with Pleasant Hill Road in Gwinnett County. The ramp meters will control the release of vehicles onto I-85 during peak hours, therefore reducing congestion and stabilizing the flow of traffic that typically occurs at heavy volume merge locations. The operation of the ramp meters will create a smoother flow of traffic and reduce the potential for traffic crashes during peak hours. In addition to ramp meters, this project will also include enhanced VDS and CCTV coverage at all on ramp locations along I-85 between Buford Highway and Pleasant Hill Road. The CCTV cameras will allow for improved monitoring of the interchanges and operation of the ramp meters at the TMC. This project will use the existing fiber optic trunk line along Interstate 85 to tie in with Hubs E, C and D.

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) 635-8139
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.