

D.O.T. 66

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

**FILE** P. I. No. 0007006, Fayette County **OFFICE** Preconstruction  
CSSTP-0007-00(006)  
SR 85 at CR 126/Bernhard Road  
Intersection Improvements **DATE** January 25, 2006

**FROM** *C. John Kunkle* Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

**TO** *MBP* 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  
Thomas Howell  
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** P.I. No. 0007006, Fayette County **OFFICE** Preconstruction  
 CSSTP-0007-00(006)  
 SR 85 at CR 126/Bernhard Road  
 Intersection Improvement **DATE** January 20, 2006

**FROM** *John Kunk*  
 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 intersection improvement to SR 85 at CR 126/Bernhard Road in Fayette County. From 2000-2002, this intersection has experienced 37 accidents, including 14 that have resulted in injuries. State Route 85 within the project limits, is a two lane rural minor arterial with 12' lanes in each direction without curb and gutter. The posted speed limit is 55 MPH. The 2003 traffic (AADT) for SR 85 in the project area was 12,800. By 2028 traffic is anticipated to increase to 21,694 AADT. This stretch of roadway has an extremely high accident rate. Both sides of the intersection have a higher accident rate than the state average for this classification of roadway. The purpose of this project is to mitigate the high accident rate and to improve the overall safety of the intersection.

The proposed construction includes the addition of a northbound and southbound left turn lane, a southbound right turn lane, and a traffic signal. In addition to the intersection improvement project, additional right-of-way acquisition will take place within the project's boundaries in anticipation of two(2) future long range widening projects along the SR 85 corridor.

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)	\$1,610,000	\$335,000	L530	Lump
Right-of-Way	\$ 921,000	\$920,000	L530	Lump
Utilities*	\$ 45,000	-----		

David Studstill

Page 2

P. I. No. 0007006, Fayette

January 20, 2006

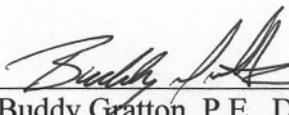
\*Notification letter sent 4-11-05.

I recommend this project concept be approved.

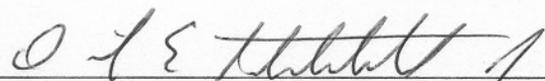
MBP:JDQ/cj

Attachment

CONCUR

  
Buddy Gratton, P.E., Director of Preconstruction

APPROVE

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

Project Concept Report page 26  
Project Number: CSSTP-0007-00(006)  
P. I. Number: 0007006  
County: Fayette

## NOTICE OF LOCATION AND DESIGN APPROVAL

**BRSTP-0007-00(006), Fayette County  
P. I. No. 0007006**

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.

The date of location approval is JANUARY 25, 2006

The project includes installing a traffic signal at the intersection of SR 85 and CR 126 / Bernhard Road, which includes constructing left and right turn lanes on the northbound and southbound lanes of SR 85. In addition, left turn lanes on eastbound and westbound lanes are being added to CR 126 / Bernhard Road. The project's length is 2400 feet, beginning at mile post 3.96 and ending at mile post 4.41 on SR 85. The intersection of SR 85 and CR 126 / Bernhard Road is 2.5 miles east of the city limits of Peachtree City and 5 miles south of the city limits of Fayetteville. This project is located in the 4<sup>th</sup> District of Fayette County, Tax Map 39 and Land Lot No. 222, and will serve current and future traffic.

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

David Coleman, Area Engineer  
david.coleman@dot.state.ga.us  
1001 Highway 19 South  
Griffin, Georgia 30223  
(770) 228-7205

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

William J. Rountree, P.E., District Design Engineer  
bill.rountree@dot.state.ga.us  
715 Andrews Drive  
Thomaston, Georgia 30286-4524  
(706) 646-6604

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

Project Concept Report page 2  
Project Number: CSSTP-0007-00(006)  
P. I. Number: 0007006  
County: Fayette

**Recommendation for approval:**

DATE 12/19/05

William J. Cantree  
Project Manager

DATE 12/20/05

J. B. Jacee  
District Engineer

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 12/20/05

Joseph P. Pineda  
State Transportation Planning Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Financial Management Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Environmental / Location Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
Project Review Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

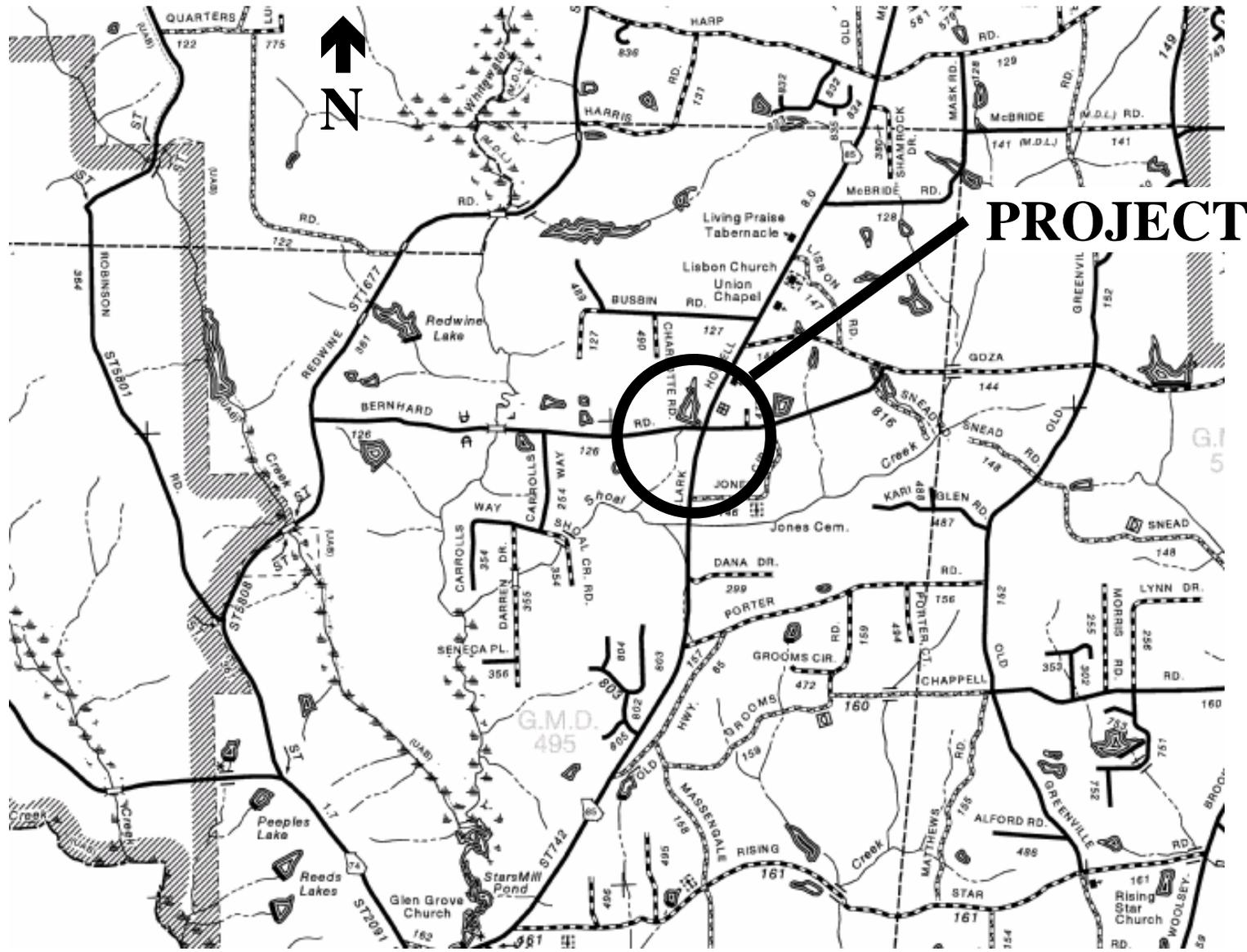
DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF DISTRICT THREE DESIGN

# PROJECT CONCEPT REPORT

CSSTP-0007-00(006)  
FAYETTE COUNTY  
P.I. NO. 0007006

FEDERAL ROUTE NO: NONE  
STATE ROUTE NO: SR 85

INTERSECTION IMPROVEMENT OF  
SR 85 @ CR 126 / Bernhard Road



Project Concept Report page 2  
Project Number: CSSTP-0007-00(006)  
P. I. Number: 0007006  
County: Fayette

**Recommendation for approval:**

DATE 12/19/05

William J. Bantree  
Project Manager

DATE 12/20/05

J. B. Hance  
District Engineer

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DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Planning Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Financial Management Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Environmental / Location Engineer

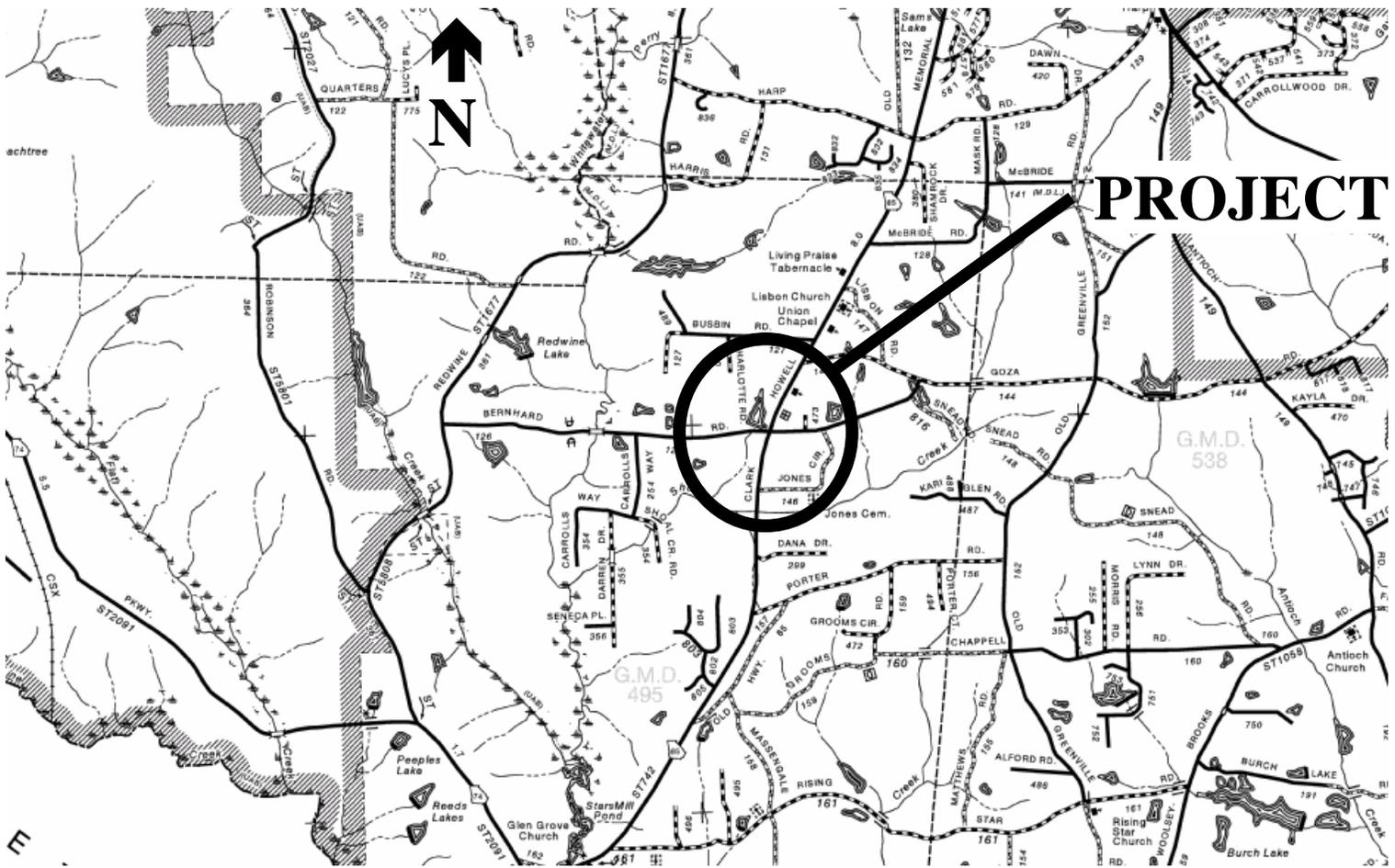
DATE \_\_\_\_\_

\_\_\_\_\_  
Project Review Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

**CSSTP-0007-00(006) Fayette**  
**P. I. NO. 0007006**  
**SR 85 @ CR 126 / Bernhard Road**



## **Need and Purpose:**

### **Background**

This project was submitted for programming in August 2004 by the Office of Traffic Safety and Design as a safety improvement project. It is located at the intersection of SR 85 and CR 126/ Bernhard Road in Fayette County and is not a part of the National Highway System (NHS) network. From 2000-2002, this intersection has experienced 37 accidents including 14 that have resulted in injuries. This project is funded by Q21 funds administered by the Georgia Department of Transportation (GDOT) as a lump sum to make safety and other miscellaneous improvements. Because this project is a safety project, it is exempt from the Atlanta Regional Commission's (ARC) air quality modeling process.

### **Existing Roadway Conditions/ Proposed Improvements**

SR 85 within the project limits is a two lane rural minor arterial with 12 ft lanes in each direction without curbs and gutter. The shoulders are 2 feet of pavement and 6 feet of grass. There is no median along SR 85 within the project area. The posted speed limit is 55 mph.

The proposed project includes the addition of a northbound and southbound left turn lane, a southbound right turn lane, and a traffic signal. In addition to the intersection improvement project, additional right of way acquisition will take place within this project's boundaries in anticipation of two (2) future long range widening projects that will take place on this section of the SR 85 corridor.

### **Projects in the Area**

- PI # 321960, STP-074-2(24), SR 85 S/Fayetteville from S/Bernhard RD to old SR 92/ Fayetteville: Widening Project.
- PI # 321964, STP-074-2(25), SR 85 from SR 74 N to CR 126 / Bernhard RD: Widening Project.
- Both projects are future long range projects.

### **Existing and Projected Traffic Conditions**

The 2003 traffic (AADT) for SR 85 in the project area was 12,800. By 2028 traffic is anticipated to increase to 21,694 AADT using a 2% growth rate. This is an increase of 69% for this section SR 85. This roadway is classified as a rural arterial and 7% of its traffic is trucks. Two (2) future widening projects will address the capacity needs.

This stretch of roadway has an extremely high accident rate. Most of the accidents that occurred near this intersection were rear ends or angle accidents. The north side of the intersection has a higher accident rate than the south side. Both sides of the intersection have a higher accident rate than the state average for this classification of roadway.

**SR 85 @ CR 126/ Bernhard Road Accidents (North Side of Intersection)**

	<b>2000</b>	<b>2001</b>	<b>2002</b>
Total Accidents	30	26	29
Accidents Per 100 MVMT	413	326	363
Statewide Accidents Per 100 MVMT	143	137	141
Accident % Higher/Lower Than Statewide Average	+189%	+138%	+157%

**SR 85 @ CR 126/ Bernhard Road Accidents (South Side of Intersection)**

	<b>2000</b>	<b>2001</b>	<b>2002</b>
Total Accidents	25	30	34
Accidents Per 100 MVMT	210	240	260
Statewide Accidents Per 100 MVMT	143	137	141
Accident % Higher/Lower Than Statewide Average	+47%	+75%	+84%

**Logical Termini**

The termini for this project are logical because the project can stand on its own; it has no significant adverse effects on the operational conditions of the SR 85 corridor beyond the boundaries of this project. This project addresses the immediate safety needs at the intersection.

**Pedestrian and Bicycle Facilities/Routes**

There are no pedestrian or bicycle facilities/routes in existence or planned at or near the intersection of SR 85 and CR 126/ Bernhard Road in Fayette County according to ARC, GDOT, or Fayette County.

**Community Issues**

In 1990 Fayette County had a population of 62,413 and in 2000 the total population grew to 91,263. The growth rate of Fayette County between 1990 and 2000 was 46% compared to the state average of 26%. According to the 2000 Census, 83.87% of the total population was white and 16.13% were minorities. The per capita income for Fayette County in 1999 was \$29,464, which is 28% higher than the state average of \$21,154. The median household income in 1999 for Fayette County was \$71,227, or 40% higher than the state median household income of \$42,433.

**Need & Purpose**

The accident history demonstrates a clear need to upgrade this intersection for improved safety. The accident rate at this intersection is much higher than the state average for this classification of roadway. The need of this project is to construct additional turn lanes and to install a traffic signal at this intersection. The purpose of these safety improvements is to mitigate the high accident rate and to improve the over all safety of the intersection.

**Description of the proposed project:**

The project includes installing a traffic signal at the intersection of SR 85 and CR 126 / Bernhard Road. The proposed project includes the addition of a northbound and southbound left turn lane, a southbound right turn lane, and a traffic signal on SR 85. In addition to the intersection improvement project, additional right of way acquisition will take place within this project’s boundaries in anticipation of two (2) future long range widening projects on this section of the SR 85 corridor.

The project’s length is 2400 feet, beginning at mile post 3.96 and ending at mile post 4.41 on SR 85. The intersection of SR 85 and CR 126 / Bernhard Road is 2.5 miles east of the city limits of Peachtree City and 5 miles south of the city limits of Fayetteville. This project will improve the immediate and future safety needs at the intersection.

**Is the project located in a Non-attainment area?** Yes  No . This is a safety project which is exempt from conforming to the air quality model.

**PDP Classification:** Major  Minor   
**Federal Oversight:** Full Oversight , Exempt , State Funded , or Other

**Functional Classification:** RURAL MINOR ARTERIAL (SR 85)  
MINOR COLLECTOR (CR 126 / Bernhard Road)

**U. S. Route Number(s):** NONE **State Route Number(s):** SR 85

Traffic (AADT) Two way traffic	SR 85	CR 126 / Bernhard Road
Current Year:(2010)	14,950	3,600
Design Year: (2030)	27,000	6,000
K=	10%	8.8%
D=	67%	51%
T=	4%	4%
24 HR T=	7%	7%

**Existing design features:**

- Typical Section: Two lane with 12 ft lanes in each direction without curb and gutter. The shoulders are 2 feet of pavement and 6 feet of grass (SR 85).
- Posted speed: 55 mph (SR 85): 30 mph (Bernhard Rd east of SR 85) : 45 mph (Bernhard Rd west of SR 85)
- Minimum Radius: 5729.58 feet
- Maximum grade: 3 % (SR 85)
- Total width of right of way: 130 ft (SR 85): 50 ft (Bernhard Road )
- Major structures: NONE
- Major interchanges or intersections along the project: CR 126 / BERNHARD ROAD
- Existing length of roadway segment and the beginning mile post at 3.93 and ending mile post 4.40 on SR 85 in Fayette County.

**Proposed Design Features:**

- Proposed typical section(s): two lanes 12' wide with right and left turns with 10' shoulders with which 2' of the shoulder is paved plus 8' of the shoulder is grass and rural ditches on SR 85; two 12' lanes with left turn lanes with 10' shoulders with which 2' of the shoulder is paved plus 8' of the shoulder is grass and rural ditches on CR 126 / Bernhard Road
- Proposed Design Speed Mainline 55 mph (SR 85)
- Proposed Design Speed: 30 mph (Bernhard Rd east of SR 85) : 45 mph (Bernhard Rd west of SR 85)
- Proposed Maximum grade Mainline 3% Maximum grade allowable 7 %.
- Proposed Maximum grade Side Street 3% Maximum grade allowable 7 %.
- Proposed Maximum grade driveway 10 %
- Radius of curve: 5729.58 ft Minimum Allowable Radius of curve: 965 ft
- Right of way
  - Total width 200 ft (SR85): 120 ft (Bernhard Road)
  - Easements: Temporary , Permanent , Utility , Other .
  - Type of access control: Full , Partial , By Permit , Other .
  - Number of parcels: 4
  - Number of displacements:
    - Business/Residences: 1
    - Mobile homes: None
    - Other: NA
- Structures:
  - None
- Major intersections and interchanges. Intersection of SR 85 and CR 126/ Bernhard Road
- Traffic control during construction: Traffic to be maintained on existing road

- Design Exceptions to controlling criteria anticipated:

	<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: The only potential concern is with ecology at the lake in the northwest quadrant of the intersection. Archeology and history is clear.
- 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:
  - Coweta-Fayette EMC
  - Atlanta Gas Light Company
  - Bell South, Comcast
  - Fayette County Water

**Project responsibilities:**

- Design, -GDOT
- Right of Way Acquisition, -GDOT
- Relocation of Utilities, -GDOT
- Letting to contract, -GDOT
- Supervision of construction, -GDOT
- Providing material pits, -CONTRACTOR
- Providing detours -NONE

**Coordination**

- Concept meeting date and brief summary. Attach minutes.
- Other projects in the area.
  - PI # 321960, STP-074-2(24), SR 85 S/Fayetteville from S/Bernhard RD to old SR 92/ Fayetteville: Widening Project.
  - PI # 321964, STP-074-2(25), SR 85 from SR 74 N to CR 126/ Bernhard RD: Widening Project.
  - Both projects are future long range projects.
- Other coordination to date: None

**Scheduling – Responsible Parties’ Estimate**

- Time to complete the environmental process: 12 Months.
- Time to complete preliminary construction plans: 6 Months.
- Time to complete right of way plans: 12 Months.
- Time to complete the Section 404 Permit: 0 Months.
- Time to complete final construction plans: 4 Months.
- Time to complete to purchase right of way: 8 Months.
- Time to complete the utilities relocation: 6 Months.

**Other alternates considered:** Build or No Build

**Attachments:**

1. Cost Estimates:
  - a. Construction including E&C,
  - b. Right of Way, and
  - c. Utilities.
2. Sketch location map,
3. Typical sections,
4. Accident summaries,
5. Capacity analysis,
6. Minutes of Initial Concept and Concept meetings,
7. Minutes of any meetings that show support or objection to the concept,
8. LGPA, (Letter waiving Right of Way and Utility requirements),
9. Location and Design Notice,
10. Conforming plan’s network schematics showing thru lanes

**PRELIMINARY COST ESTIMATE**

PROJECT NUMBER: 0007006

COUNTY: FAYETTE

DATE: 12/06

ESTIMATED LETTING DATE: 12/06

PREPARED BY: Jim Hoskins

PROJECT LENGTH: 2400 FEET

PROGRAMMING PROCESS  CONCEPT DEVELOPMENT  DURING PROJECT DEV.

<b>PROJECT COST</b>	
<b>A. RIGHT-TO-WAY:</b>	
1. PROPERTY (LAND & EASEMENT)	\$245,000.00
2. DISPLACEMENTS; RES: , BUS; , M.H.:	\$20,000.00
3. OTHER COST (ADM./COST, INFLATION)	\$655,100.00
SUBTOTAL:A	\$920,100.00
<b>B. REIMBURSABLE UTILITIES:</b>	
1. RAILROAD	\$0.00
2. TRANSMISSION LINES	\$35,000.00
3. SERVICES	\$10,000.00
SUBTOTAL:B	\$45,000.00
<b>C. CONSTRUCTION:</b>	
<b>1. MAJOR STRUCTURES</b>	
a. OVERPASSES	\$0.00
b. OTHER	\$0.00
SUBTOTAL:C-1	\$0.00
<b>2. GRADING AND DRAINAGE:</b>	
a. EARTHWORK ( 5000.00 cy @ \$15.00/cy)	\$75,000.00
<b>b. DRAINAGE:</b>	
1)Cross Drain Pipes (30", 24" PIPE, BOX CULVERT AND FLARED ENDS)	\$34,000.00
2)Side Drain Pipes ( 770' OF 18" PIPE AND FLARED ENDS @ \$32.47/ft)	\$25,000.00
3) Longitudinal System(include catch basins) Pipe( If @ \$35.00/lf)	\$0.00
SUBTOTAL:C-2	\$134,000.00

3. BASE AND PAVING:		
a. AGGREGATE BASE ( 12,000 Ton @ \$15/Ton)		\$180,000.00
b. ASPHALT PAVING: Surface ( 2900 Ton @ \$60/ Ton)	\$174,000	
Binder ( 3100 Ton @ \$60/ Ton)	\$186,000	
Base ( 6200 Ton \$60/Ton)	\$372,000	
SUBTOTAL:C-3.b		\$732,000.00
c. ASPHALT CONCRETE LEVELING ( 2100 Ton @ \$60/ Ton)		\$126,000.00
d. OTHER (Bituminous Tack 1400 Gal @ \$ 2.00/Gal)		\$2800.00
SUBTOTAL:C-3		\$1,040,800.00
4. LUMP ITEMS:		
a. GRASSING ( 2.5 ac @ \$1600.00/ac)		\$4000.00
b. CLEARING AND GRUBBING ( 2.5 ac @ \$4000/ac)		\$10,000.00
c. LANDSCAPING		\$0.00
d. EROSION CONTROL		\$60,000.00
e. TRAFFIC CONTROL		\$20,000.00
SUBTOTAL:C-4		\$94,000.00
5. MISCELLANEOUS:		
a. SIGNAL ( )		\$100,000.00
b. SIGNING (240 ft <sup>2</sup> signing material @ \$21/ft <sup>2</sup> )		\$5040.00
c. - MARKING – ( 20,000 ft @ \$0.20/ft)		\$4000.00
d. STRAIN POLE TP IV (4 EA @\$4,000)		\$16,000.00
SUBTOTAL:C-5		\$125,040.00
6. SPECIAL FEATURES ( NONE )		
SUBTOTAL:C-6		\$0.00

<b>ESTIMATE SUMMARY</b>		
A. RIGHT-OF-WAY ( )	\$920,100.00	
B. REIMBURSABLE UTILITIES	\$45,000.00	
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$0.00	
2. GRADING AND DRAINAGE	\$134,000.00	
3. BASE AND PAVING	\$1,040,800.00	
4. LUMP ITEMS	\$94,000.00	
5. MISCELLANEOUS	\$125,040.00	
6. SPECIAL FEATURES	\$0.00	
SUBTOTAL CONSTRUCTION COST	\$1,393,840.00	
E. & C. (10%)	\$139,384.00	
INFLATION (5% PER YEAR)	\$76,661.20	
NUMBER OF YEARS	1	
TOTAL CONSTRUCTION COST	\$1,609,885.20	
<b>GRAND TOTAL PROJECT COST</b>	<b>\$2,574,985.20</b>	

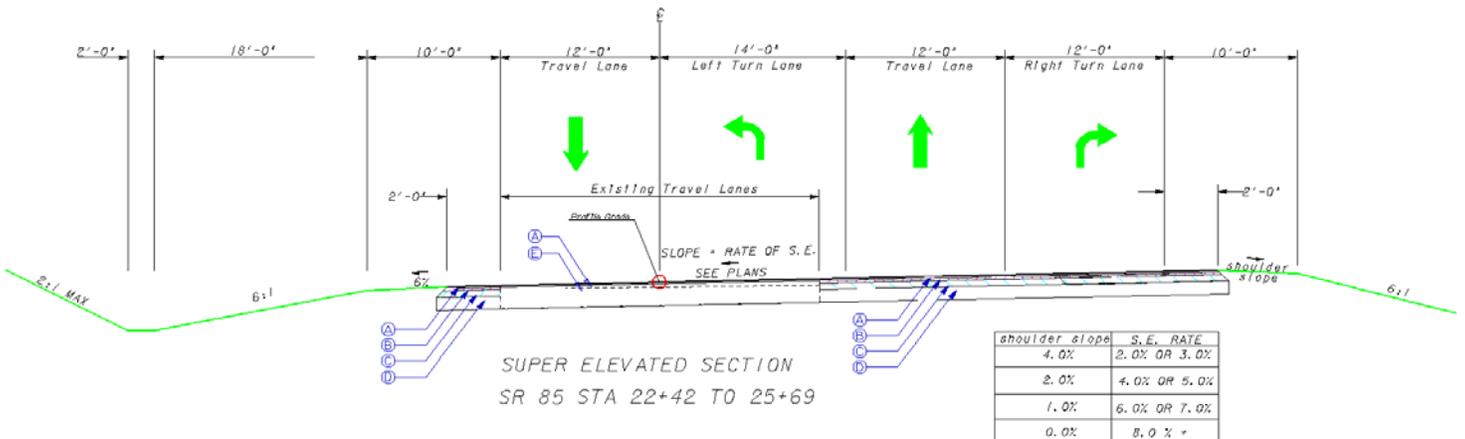
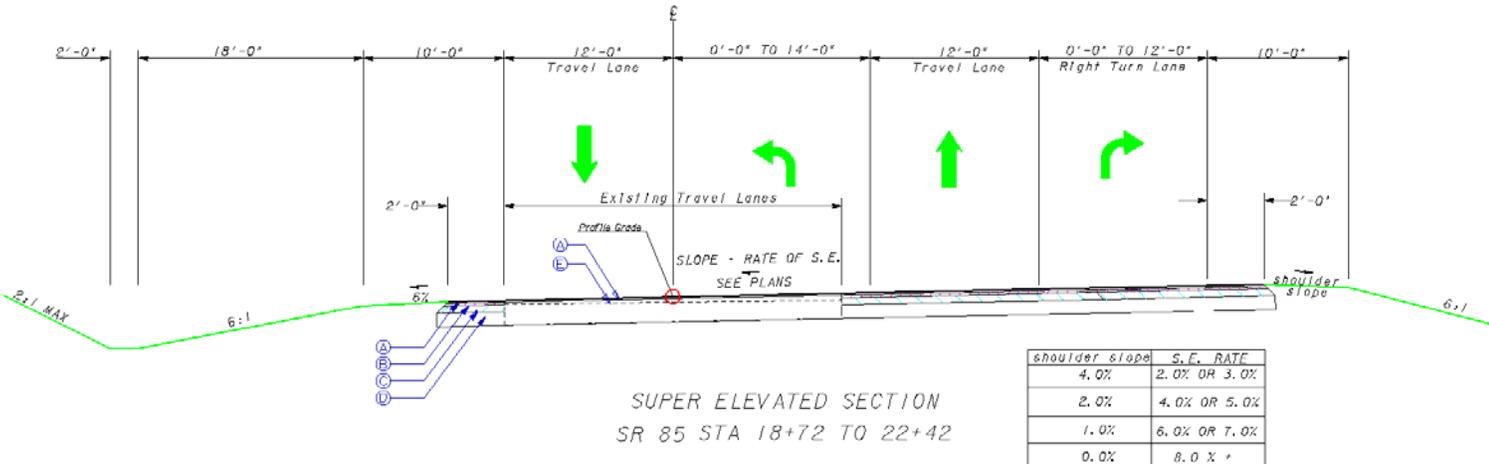
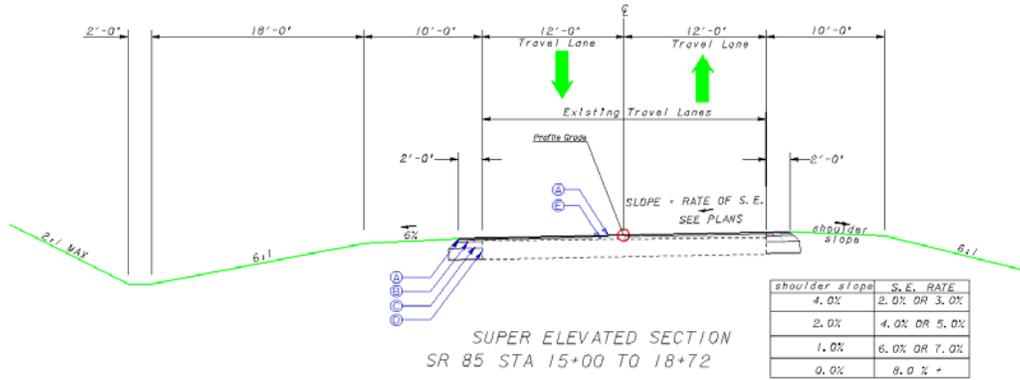
This project is 100 percent in congressional district 8.



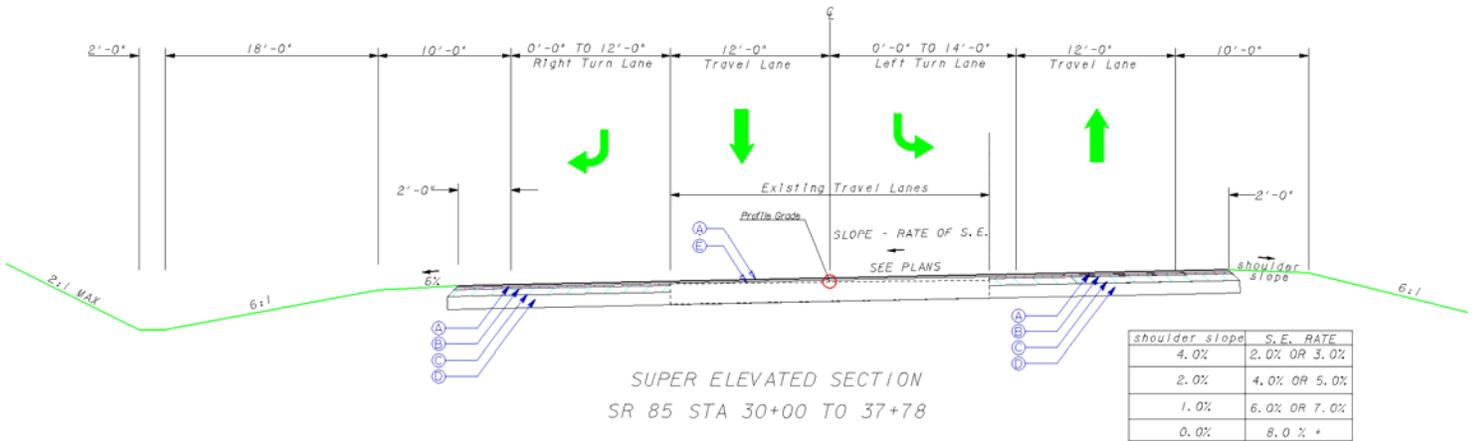
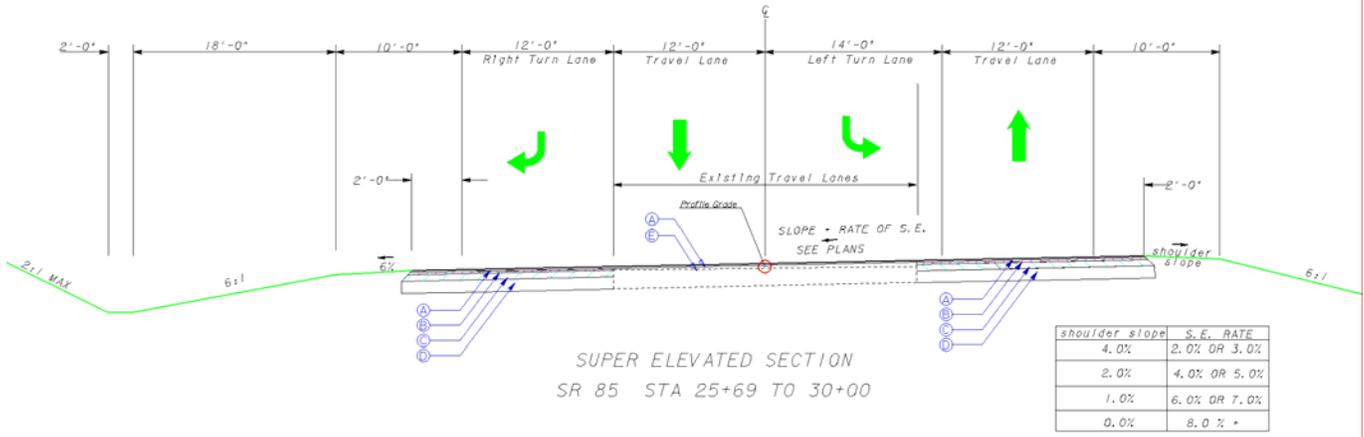
## TYPICAL SECTIONS

**REQUIRED PAVEMENT**

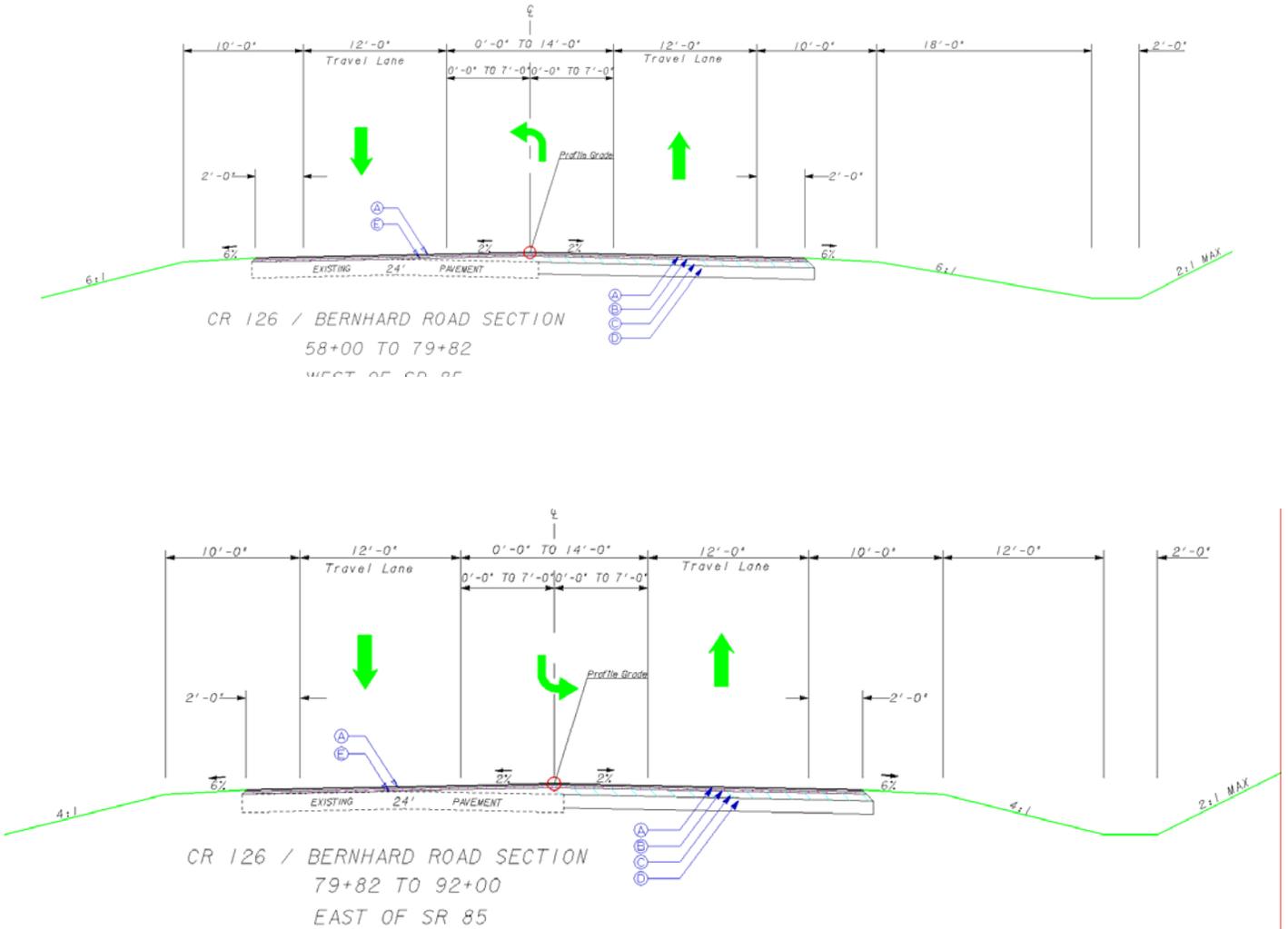
- Ⓐ ASPHALTIC CONCRETE 12.5mm SUPERPAVE, 165 LBS/SQ YD.
- Ⓑ ASPHALTIC CONCRETE 19mm SUPERPAVE, 330 LBS/SQ YD.
- Ⓒ ASPHALTIC CONCRETE 25mm SUPERPAVE, 660 LBS/SQ YD.
- Ⓓ GRADED AGGREGATE BASE, 12"
- Ⓔ ASPHALTIC CONCRETE LEVELING, AS REQ'D



## TYPICAL SECTIONS



### TYPICAL SECTIONS



## ***ACCIDENT SUMMARIES***

### **SR 85 @ CR 126/ Bernhard Road Accidents (North Side of Intersection)**

	<b>2000</b>	<b>2001</b>	<b>2002</b>
Total Accidents	30	26	29
Accidents Per 100 MVMT	413	326	363
Statewide Accidents Per 100 MVMT	143	137	141
Accident % Higher/Lower Than Statewide Average	+189%	+138%	+157%

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# CAPACITY ANALYSIS

Two-Way Stop Control

TWO-WAY STOP CONTROL SUMMARY								
<b>General Information</b>				<b>Site Information</b>				
Analyst	KBL			Intersection				
Agency/Co.	Day Wilburn Associates, Inc.			Jurisdiction	Fayette County			
Date Performed	5/15/03			Analysis Year	2003			
Analysis Time Period	AM Peak Hour							
Project Description 01045-57								
East/West Street: Bernhard Road				North/South Street: SR 85				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
<b>Vehicle Volumes and Adjustments</b>								
<b>Major Street</b>	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	26	720	4	4	275	92		
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86		
Hourly Flow Rate, HFR	28	782	4	4	319	106		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
T Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
<b>Minor Street</b>	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	4	21	18	78	23	15		
Peak-Hour Factor, PHF	0.63	0.63	0.63	0.81	0.81	0.81		
Hourly Flow Rate, HFR	6	33	28	96	28	18		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Graded Approach		N			N			
Storage		0			0			
T Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
<b>Delay, Queue Length, and Level of Service</b>								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Time Configuration	LTR	LTR	LTR			LTR		
Volume (vph)	28	4	67			142		
Flow (m) (vph)	1145	842	206			138		
Delay	0.02	0.00	0.33			1.03		
% queue length	0.08	0.01	1.42			15.63		
Control Delay	8.2	9.3	30.8			278.5		
LOS	A	A	D			F		
Approach Delay	--	--	30.8			278.5		
Approach LOS	--	--	D			F		

# CAPACITY ANALYSIS

Two-Way Stop Control

TWO-WAY STOP CONTROL SUMMARY							
<b>General Information</b>				<b>Site Information</b>			
Analyst	KBL			Intersection	Fayette County		
Company/Co.	Day Wilburn Associates, Inc.			Jurisdiction	Fayette County		
Analysis Performed	5/15/03			Analysis Year	2003		
Analysis Time Period	Noon Peak Hour						
Project Description 01045-57							
East/West Street: Bernhard Road				North/South Street: SR 85			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
<b>Vehicle Volumes and Adjustments</b>							
<b>Major Street</b>	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	12	244	0	2	267	67	
Peak-Hour Factor, PHF	0.89	0.89	0.89	0.79	0.79	0.79	
Hourly Flow Rate, HFR	13	274	0	2	337	84	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
T Channelized			0				0
Planes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
<b>Minor Street</b>	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	0	6	6	68	10	7	
Peak-Hour Factor, PHF	0.75	0.75	0.75	0.69	0.69	0.69	
Hourly Flow Rate, HFR	0	8	8	98	14	10	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Prepared Approach		N			N		
Storage		0			0		
T Channelized			0			0	
Planes	0	1	0	0	1	0	
Configuration		LTR			LTR		
<b>Delay, Queue Length, and Level of Service</b>							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11 12
Plane Configuration	LTR	LTR		LTR			LTR
Volume (vph)	13	2		16			122
Flow (m) (vph)	1149	1301		480			365
Control	0.01	0.00		0.03			0.33
Percent queue length	0.03	0.00		0.10			1.49
Control Delay	8.2	7.8		12.8			19.8
LOS	A	A		B			C
Approach Delay	--	--		12.8			19.8
Approach LOS	--	--		B			C

## CAPACITY ANALYSIS

Two-Way Stop Control

TWO-WAY STOP CONTROL SUMMARY								
<b>General Information</b>				<b>Site Information</b>				
Analyst	KBL			Intersection				
Agency/Co.	Day Wilburn Associates, Inc.			Jurisdiction	Fayette County			
Date Performed	5/15/03			Analysis Year	2003			
Analysis Time Period	PM Peak Hour							
Project Description 01045-57								
East/West Street: <i>Bemhard Road</i>				North/South Street: <i>SR 85</i>				
Intersection Orientation: <i>North-South</i>				Study Period (hrs): <i>1.00</i>				
<b>Vehicle Volumes and Adjustments</b>								
<b>Major Street</b>	<b>Northbound</b>			<b>Southbound</b>				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	14	292	4	10	701	104		
Peak-Hour Factor, PHF	0.85	0.85	0.85	0.92	0.92	0.92		
Hourly Flow Rate, HFR	16	343	4	10	761	113		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
<b>Minor Street</b>	<b>Westbound</b>			<b>Eastbound</b>				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	5	9	7	102	28	29		
Peak-Hour Factor, PHF	0.66	0.66	0.66	0.81	0.81	0.81		
Hourly Flow Rate, HFR	7	13	10	125	34	35		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
<b>Delay, Queue Length, and Level of Service</b>								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (vph)	16	10	30			194		
C (m) (vph)	781	1223	192			165		
v/c	0.02	0.01	0.16			1.18		
95% queue length	0.06	0.02	0.55			25.79		
Control Delay	9.7	8.0	27.2			451.8		
LOS	A	A	D			F		
Approach Delay	--	--	27.2			451.8		
Approach LOS	--	--	D			F		

## **CONCEPT TEAM MEETING MINUTES**

CSSTP-0007-00(006) Fayette County  
PI NO 0007006

### **INTERSECTION IMPROVEMENT OF SR 85 @ CR 123/Bernhard Road**

The concept team meeting for Georgia D.O.T., project CSSTP-0007-00(006) Fayette County, P.I. 0007006 was held at 9:00 a.m. on October 20, 2005 with Jim Hoskins, District 3 Design Engineer 2, officiating. Team members present were:

Debra Benton – GDOT District 3 Environmentalist  
Jim Hoskins – GDOT District 3 Design Engineer 2  
Carol Perry – GDOT District 3 Right of Way  
Glenn A. Williams – GDOT District 3 Utilities  
Mike England – GDOT District 3 Traffic Engineer  
Tammy Barrow – GDOT District 3 Design  
Bill Rountree – GDOT District 3 Design Engineer  
Tom Queen - GDOT Office of Planning/Programming  
Ray Crutchfield – Right of Way Consultant  
Wilson Perdue – Area 5 Consultant  
Harry Busbee – Fayette County Water Department  
Zachary Taylor – Fayette County Road Department  
Jerry Whitaker – Fayette County Board of Education  
Gene McKissick – GDOT Construction  
Tommy Cleveland – GDOT Location Engineer

The following constitutes the minutes for the concept team meeting held on October 20, 2005. These minutes are a summary in nature and do not attempt to document every item discussed nor statement made. Should your recollection differ from what is contained herein or you wish to add something, please contact Bill Rountree at (706) 646-6604, or via email at bill.rountree@dot.state.ga.us.

- I. The meeting began at approximately 9:00 AM. Jim Hoskins provided everyone with a Preconstruction Status Sheet of the project and a Draft Copy of the Project Concept Report. Jim then requested that everyone introduce themselves.
- II. After introductions, Jim Hoskins gave a detailed overview of the project from beginning to ending.
- III. In addition, the Draft Project Concept Report was discussed as a group, and minor changes were noted.

IV. Comments were received from the individual offices, as follows:

- a) **GDOT Design** – Jim Hoskins described the project as an intersection improvement south of Fayetteville, 2 miles east of Peachtree City, starting the project at STA 15 with intersection at STA 25+68 and ending at STA 37. Traffic Engineering Study was provided by Day Wilburn & Associates, Inc. which warrants installation of a signal light. A proposed four lane highway with a 44' median is in the long range plan. The General Office is requiring 200' of right of way on SR 85 and the existing right of way is 130'. CR 123 / Bernhard Road has an existing right of way of 50' and will require 110' of right of way, the plans are showing 80', required to the south side to stay away from the pond. The project may take part of the dam. The intersection is being built before the proposed four lane highway.
- b) **GDOT Planning** – Tom Queen questioned the truck traffic of 15% and stated to update the 2028 traffic to 2030 and to confirm the accident report. He also stated to look into if Q28 Safety Money is available and to research the possibility of a Park & Ride in the south or southwest quadrant.
- c) **GDOT Office of Financial Management** – No representative was present from this office.
- d) **GDOT Environmental** – Debra Benton stated two other projects are involved and preliminary has been done and will be provided. Archeological and History is clear. The only concern is the lake.
- e) **GDOT Utilities** – Glenn A. Williams presented the question of utility conflicts to the Water Department authorities. He will get more information to make a decision of what to do with water mains. He also questioned if the project limits are shown in the concept stage. He stated above ground fixtures will be more accurate for the 1<sup>st</sup> submission. Stated that preliminary plans show a four lane in the long range; accommodate so utilities will not have to be moved twice. He requested a copy of typicals to get the 2<sup>nd</sup> submission.
- f) **GDOT Right Of Way** – Carol Perry requested the entire lake be surveyed. Right of Way can't be bought in two months and requested at least a year to purchase. There needs to be an easement around the lake with silt fencing and also the lake needs to be monitored for water quality before, during, and after the construction.
- g) **GDOT Traffic Operations** – Mike England stated to research the cost of acquiring the gas station versus the cost of the lake. He requested the history of accidents from the Fayette County Road Department to see if there's a spike. He pointed out on page 15 of the Concept Report to label the turn lanes as left turn lanes and stated the break in the middle of the lane is okay. He questioned who is doing the signal design and he wants to review them for correctness. He questioned the power lines and strain poles and what side of the road they would be placed.
- h) **GDOT Construction** – Gene McKissick was curious about the 4' paved shoulder; stated it needs to be 6'6". Grading and Drainage on Earthwork should be changed from \$5.00 CY to \$10.00 CY and may be as high as \$15.00. The tack per gallon should be \$1.50-\$2.00 and the asphalt leveling should be as high as \$70.00/ton. He pointed out the shoulder slope box should change to 8% to match the S.E. Rate and also needs clarification showing it as the High Side.
- i) **GDOT Maintenance** – No representative was present from this office.
- j) **GDOT Location**- Tommy Cleveland was asked how quickly survey could be done and he stated possibly six months. He questioned if there was a SUE contractor; Glenn Williams stated he didn't think one was required.

- k) **Fayette County:** Harry Busbee, Fayette County Water Department, stated there is a 20' water main on the west side of 85 going under Bernhard Road and stops. There is a pipeline 5' inside the R/W; normal power and cable, but unsure of gas service. If the proposed plan takes the SW corner of the lake he suggested leaving the valves where they are and have an extension on the water main. The Fayette County Water Department is in favor of building the project.
  - l) **Fayette County Road Department** – Zachary Taylor stated the east side is residential only and probably does not need paved shoulders. The Fayette County Road Department is in favor of building the project.
  - m) **GDOT Design** – Bill Rountree stated this project was a high priority to county officials because of safety issues due to the high number of accidents. Proper speeds need to be shown on mainline and side roads. Traffic needs to be maintained on the existing road. Check on shoulder widths in typical section. Design is being done internally.
  - n) **Consultant Area 5** – Wilson Perdue questioned if the existing pavement is overlaid. The response was yes. He stated if the lake was not touched the Erosion Control cost would go up.
  - o) **Right of Way Consultant** – Ray Crutchfield questioned if there is only one business to be displaced and is this property business/residential. The answer was unknown. If the plans were changed by 10' the project would miss the lake altogether.
  - p) **Fayette County Board of Education** – Jerry Whitaker stated their concern for the High School being in close proximity to this project. There will be 700 Juniors and Seniors driving this route in 2006. The Board of Education is in favor of building this project.
- V. The overall consensus of the attendees was in favor of building this project.
- VI. The meeting adjourned at approximately 10:15.

Project Concept Report page 24  
Project Number: CSSTP-0007-00(006)  
P. I. Number: 0007006  
County: Fayette

**LGPA**



*Department of Transportation*

HAROLD E. LINNENKOHL  
COMMISSIONER  
(404) 656-5206

DAVID E. STUDSTILL, JR., P.E.  
CHIEF ENGINEER  
(404) 656-5277

*State of Georgia*  
*#2 Capitol Square, S.W.*  
*Atlanta, Georgia 30334-1002*

LARRY E. DENT  
DEPUTY COMMISSIONER  
(404) 656-5212

EARL L. MAHFUZ  
TREASURER  
(404) 656-5224

April 11, 2005

Honorable Gregory M. Dunn  
Commission Chairman, Fayette County  
140 Stonewall Avenue West  
Fayetteville, GA 30214

Dear Chairman Dunn:

Subject: Local Government Responsibilities

Project No. CSSTP-0007-00(006) Fayette Co. PI# 0007006  
SR 85 @ CR 126/BERNHARD ROAD

The Office of Financial Management has added the subject project to the Department's Construction Work Program.

In an effort to improve project delivery, the Department has decided to adopt a new policy in regards to Local Government responsibility and commitment requirements. For projects generated by a State Highway System need, the Department will no longer request upfront Local Government commitments nor require Local Governments to bear costs for third parties. These projects will be classified as "Department Projects" hereon. The Department will assume the eligible costs for all utilities and railroads holding a property interest.

However, utility adjustment / relocation costs associated with any utility that was originally installed within a public right of way shall remain the responsibility of each respective utility owner (Office Code of Georgia Annotated 32-6-171). Please ensure that adequate funding is budgeted for the adjustment / relocation of such utility facilities owned by your Local Government (including any associated Authority's facilities). The Department's District Utilities Office will contact you to determine the potential impacts to your facilities.

Also, in an effort to improve project coordination, the Department strongly urges all Local Governments and associated Authorities that own water and sewer facilities to include such relocation work in the project by notifying the Department's District Utilities Office as early as possible in the project's development.

# LGPA

Project No. CSSTP-0007-00(006) Fayette Co. PI# 0007006

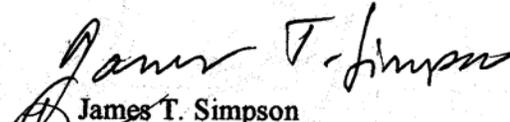
April 11, 2005

Page 2

We hope this new policy will eliminate some of the uncertainties for Local Governments when making early commitments for often unknown costs; and the scheduled delivery of each project will be more reliable.

If you have any questions, feel free to call me at (404) 463-0966 or Thomas Howell, District Engineer in Thomaston at your convenience.

Sincerely yours,



James T. Simpson  
Office of Financial Management Administrator

JTS:RR:kp

- cc: Thomas Howell - District 3 Engineer
- cc: Kerry Gore - District 3 Utilities Engineer
- cc: Jeff Baker - State Utilities Engineer
- cc: Bill Rountree - Project Manager, District 3



### NETWORK SCHEMATICS SHOWING THRU LANES

