

ORIGINAL TO GENERAL FILES

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** HPP-0000-00(249) Fulton County **OFFICE** Preconstruction  
P.I. No. 0000249  
**DATE** May 30, 2001  
**FROM**  C. Wayne Hutto, Assistant Director of Preconstruction  
**TO**  SEE DISTRIBUTION

**SUBJECT** PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

**DISTRIBUTION:**

Tom Turner  
David Mulling  
Harvey Keepler  
Jerry Hobbs  
Herman Griffin  
Michael Henry  
Marion Waters  
Marta Rosen  
Paul Liles  
Jimmy Chambers (ATTN: Ted Cashin)  
Joe Palladi  
Steve Henry

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** HPP-0000-00(249) Fulton County **OFFICE** Preconstruction  
P.I. No. 0000249 **DATE** May 17, 2001

*CW Hutto*

**FROM** C. Wayne Hutto, P.E., Assistant Director of Preconstruction

**TO** Frank L. Danchetz, P.E., Chief Engineer

**SUBJECT** PROJECT CONCEPT REPORT

This project is the intersection improvements on SR 9/Roswell Road at Northridge Road in Fulton County. Roswell Road is currently a 5-lane roadway with 10' lanes and a flush median. Northridge Road is currently a 3-lane roadway with 12' lanes. Roswell Road parallels Georgia 400 and provides needed congestion relief during the AM and PM peak hours. The existing (2000) traffic volumes on this section of Roswell Road is 40,754 VPD and future volume is expected to be 49,728 in the year 2020. The current Level of Service (LOS) at this intersection is LOS "E." With no improvements, the LOS for this intersection will be LOS "F" in the year 2020. With the proposed improvements, the intersection can expect to operate at a LOS "D" in the year 2020.

The construction proposes to add an additional southbound left turn lane on Roswell Road to provide dual lefts onto Northridge Road (eastbound), 4' wide bicycle lanes and 5' wide sidewalks on both sides of Roswell road, as well as the separation of left turn and through movements to eastbound and westbound Northridge Road. All lanes on Roswell Road will be widened to 12' through the intersection. Modifications to the existing signal are included in this project. Traffic will be maintained during construction.

Environmental concerns include requiring a Categorical Exclusion be prepared; a public information meeting will be held; time saving procedures are appropriate.

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG DATE</u>	<u>LET DATE</u>
Construction (includes E&C and inflation)	\$1,254,000	\$837,000	2001	02-03
Right-of-Way & Utilities*	Local	Local		

\*Fulton County signed LGPA on 6-20-00 for PE, right-of-way, utilities, and construction costs over \$400,000.

Frank L. Danchetz

Page 2

HPP-0000-00(249) Fulton

May 17, 2001

This project is in the STIP. I recommend this project concept be approved.

CWH:JDQ/cj

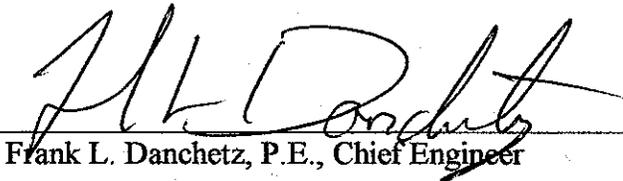
Attachment

CONCUR



Thomas L. Turner, P.E., Director of Preconstruction

APPROVE



Frank L. Danchetz, P.E., Chief Engineer

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

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INTERDEPARTMENTAL CORRESPONDENCE

**FILE:** HPP-0000-00(249) Fulton  
P.I. Number 0000249-

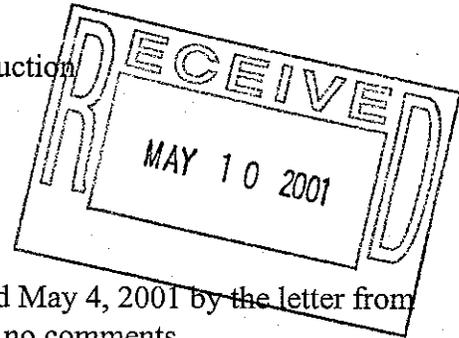
**OFFICE:** Engineering Services

**DATE:** May 9, 2001

**FROM:** <sup>DM</sup> David Mulling, Project Review Engineer

**TO:** Wayne Hutto, Assistant Director of Pre-construction

**SUBJECT:** CONCEPT REPORT



We have reviewed the concept report submitted May 4, 2001 by the letter from Joseph P. Palladi dated May 3, 2001, and have no comments.

The costs for the project are:

Construction	\$1,036,000
Inflation	\$ 104,000
E&C	\$ 114,000
Reimbursable Utilities	\$ 75,000
Right of Way	\$ 105,000

DTM

c: Joe Palladi

## SCORING RESULTS AS PER MOG 2440-2

<b>Project Number:</b> HPP-0000-00(249)		<b>County:</b> FULTON		<b>PI No.:</b> 0000249	
<b>Report Date:</b> 5/3/01		<b>Concept By:</b> DOT Office: URBAN DESIGN			
<input checked="" type="checkbox"/> CONCEPT		DOT Project Manager: Darrell Richardson			
Consultant: Clark Patterson Associates					
<b>Project Type:</b> Choose One From Each Column		<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural	<input type="checkbox"/> ATMS <input type="checkbox"/> Bridge <input type="checkbox"/> Building <input type="checkbox"/> Interchange Reconstruction <input checked="" type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous	
<b>FOCUS AREAS</b>	<b>SCORE</b>	<b>RESULTS</b>			
Presentation	100%				
Judgement	100%				
Environmental	100%				
Right of Way	100%				
Utility	100%				
Constructability	100%				
Schedule	100%				

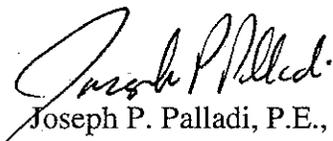
# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENTAL CORRESPONDENCE

**FILE:** HPP-0000-00(249), Fulton County  
SR 9/Roswell Road at Northridge Road  
P.I. No. 0000249

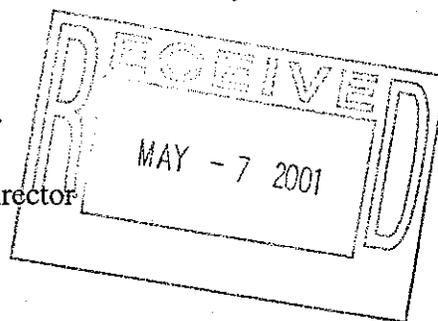
**OFFICE:** Urban Design

**DATE:** May 3, 2001

**FROM:**   
Joseph P. Palladi, P.E., State Urban Design Engineer

**TO:** Thomas L. Turner, P.E., Preconstruction Division Director  
Attn.: Wayne Hutto, P.E.

**SUBJECT:** Proposed Project Concept Report



Attached for your further handling is the Project Concept Report and Location and Design Approval for the intersection improvement of Roswell Road at Northridge Road. The project adds a median on Roswell Road and turn lanes to both roads.

Please process this report through the Departments project development process. Fulton County has requested an expedited review and approval process so that this project can remain on schedule.

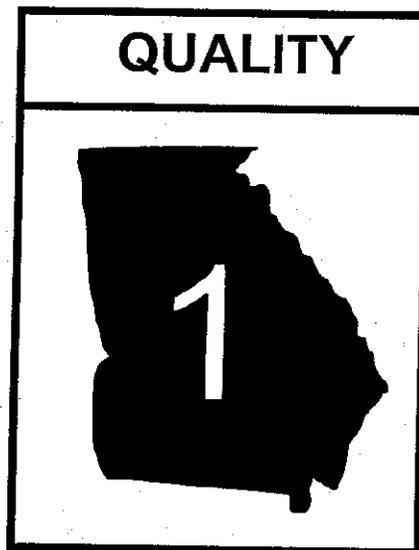
JPP:DMR   
Attachment

cc: David Mulling, w/attachment  
Harvey Keeper, w/attachment  
Marion Waters, w/attachment  
Marta Rosen, w/attachment  
Herman Griffin, w/attachment  
Steve Henry, District 7 Engineer w/attachment



## **PROJECT CONCEPT REPORT**

**HPP-0000-00 (249), FULTON  
GDOT P.I. NO. 0000249  
FULTON CO # T104  
ROSWELL RD (SR 9) @ NORTHRIDGE ROAD  
INTERSECTION IMPROVEMENT PROJECT**



**PREPARED FOR:**

**FULTON COUNTY  
DEPARTMENT OF PUBLIC WORKS  
141 PRYOR STREET  
ATLANTA, GEORGIA 30303**

**May 1, 2001**

**DESIGN PROFESSIONALS**

3585 LAWRENCEVILLE-SUWANEE ROAD, SUITE 301 ■ SUWANEE, GEORGIA 30024

www.clarkpatterson.com ■ TEL: 770/831-9000 ■ FAX: 770/831-9243

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN

PROJECT CONCEPT REPORT

Project Number: HPP-0000-00 (249), FULTON CO #T104  
County: FULTON  
P. I. Number: 0000249

Federal Route Number: N/A  
State Route Number: SR9

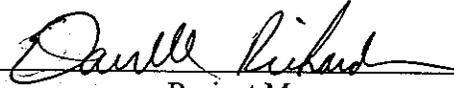
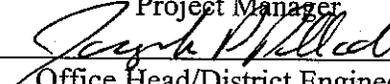
ROSWELL RD (SR9) @ NORTHRIDGE RD

**Project Description:** Additional southbound left turn lane on Roswell Road to provide dual lefts onto Northridge Road (eastbound), four foot wide bicycle lanes on both sides of Roswell Road, as well as the separation of left turn and through movements to eastbound and westbound Northridge Road.

**Recommendation for approval:**

DATE 5-2-01

DATE 5/4/01

  
Project Manager  
  
Office Head/District Engineer

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

DATE _____	_____
DATE _____	State Transportation Planning Administrator
DATE _____	_____
DATE _____	State Transportation Programming Engineer
DATE _____	_____
DATE _____	State Environmental/Location Engineer
DATE _____	_____
DATE _____	State Traffic Operations Engineer
DATE _____	_____
DATE _____	District Engineer
DATE _____	_____
DATE _____	Project Review Engineer
DATE _____	_____
DATE _____	State Urban Design Engineer
DATE _____	_____
	Georgia Dept. of Transportation Project Manager



**Need and Purpose:**

The purpose of project HPP-0000-00(249) consists of reconstructing the intersection of Roswell Road and Northridge Road in Fulton County to help to improve the current congested intersection. The reconstruction consists of adding an additional left turn on Roswell Road southbound lane and on Northridge Road westbound lane. This project will begin 500-ft south of the intersection of Roswell Road and Northridge Road and end just north of the intersection of Roswell Road and Northridge Parkway. Also, bike lanes will be provided on both sides of Roswell Road. The total project length is 0.49 miles.

Roswell Road parallels Ga. 400 and provides needed congestion relief during the am and pm peak hours. The existing 2000 traffic volumes on this section of Roswell Road is 40,100 vehicles per day (VPD) and future volume is expected to be 49,728 VPD in 2020. The current level of service at the intersection of Roswell Road and Northridge Road is LOS E, which is unacceptable. With no improvements, the LOS for this intersection will be LOS F in year the 2020. With improvements the intersection can expect to operate at a LOS D in year 2020, which is acceptable. Continued growth in the area will only add to the existing congestion and without the intersection improvement will add to existing ecological, air and noise pollution.

**Description of the proposed project:**

The project consists of the addition of an additional southbound left turn lane on Roswell Road to provide dual lefts onto Northridge Road (eastbound), four foot wide bicycle lanes and five foot wide sidewalks on both sides of Roswell Road, as well as the separation of left turn and through movements to eastbound and westbound Northridge Road. Roswell Road (southbound) would have a dual left, two straight, and a right turn lane. Roswell Road (northbound) would have a single left, two straight, and a right turn lane. In addition, all lanes (northbound and southbound) on Roswell Road will be widened to 12 feet of pavement, and separated between stations 18+25 and 26+58 by an eight foot wide concrete raised median, and the existing signal will be modified. The project begins approximately 800' south of the existing intersection of Roswell Road and Northridge Road and extends northward along Roswell Road to a point approximately 1800' north of the Roswell Road at Northridge Road intersection. The project extends eastward along Northridge Road approximately 200'. Total project length is approximately .49 miles.

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

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

Functional Classification: <sup>MINOR</sup> ~~Major Urban Arterial~~

**PROJECT DESIGNATION:** Roswell Rd – Urban Arterial, Northridge Rd Urban Collector

U. S. Route Number(s): N/A State Route Number(s): SR9

**Traffic (AADT):**

Current Year: (2000) 40,754 Design Year: (2020) 49,728



**Proposed Design Features cont'd.:**

- Right of way
  - Width Roswell Rd. – varies from 150ft to 205 ft; Northridge Rd. - 100ft
  - Easements: Temporary (X), Permanent ( ), Utility ( ), Other ( ).
  - Type of access control: Full ( ), Partial ( ), By Permit (X), Other ( ).
  - Number of parcels: 7 Number of displacements:
    - Business: 0
    - Residences: 0
    - Mobile homes: 0
    - Other: N/A

- Structures:
  - Bridges N/A
  - Retaining walls N/A
- Major intersections and interchanges. N/A
- Traffic control during construction: Maintain Existing traffic
- Design Exceptions to controlling criteria 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 N/A
- Environmental concerns: N/A
- Level of environmental analysis:
  - Are Time Savings Procedures appropriate? Yes (X), No ( ),
  - Categorical exclusion (X),
  - Environmental Assessment/Finding of No Significant Impact (FONSI) ( ), or N/A
  - Environmental Impact Statement (EIS) ( ).
- Utility involvements: The following utility companies are located within the general project vicinity, a more defined list will be provided as the project progresses: Atlanta Gas Light Co., E Spire Communications, Inc., MCI, R & U Investigations, Sawnee EMC, Fulton County Public Works, United Water Services Atlanta, City of Atlanta Public Works, Georgia Power Company, Distribution; Transmission; Underground, AT&T Broadband, Access Transmission Services, City of Alpharetta, Metrex Corporation, Metromedia Fiber Network Services, Teleport Communications Group, and Georgia Transmission Corporation.

**Project responsibilities:**

- Design: Fulton County
- Right of Way Acquisition: Fulton County
- Relocation of Utilities: Fulton County
- Letting to contract: Georgia Department of Transportation
- Supervision of construction: Georgia Department of Transportation
- Providing material pits: by Contractor if required
- Providing detours: as per state construction plans

**Coordination**

- Initial Concept Meeting date: N/A
- Concept meeting date and brief summary. October 11, 2000. Minutes attached.
- P. A. R. meetings, dates and results. N/A
- Public involvement. Public information meeting will be held.
- (Local government comments. None
- Other projects in the area. HPP-0000-00(248) Roswell Rd @ Dunwoody
- Other coordination to date.

**Scheduling – Responsible Parties' Estimate**

- Time to complete the environmental process: 2 Months.
- Time to complete preliminary construction plans: 6 Months.
- Time to complete right of way plans: 3 Months.
- Time to complete the Section 404 Permit: N/A Months.
- Time to complete final construction plans: 3 Months.
- Time to complete to purchase right of way: 8 Months.
- List other major items that will affect the project schedule: N/A Months.

**Other alternates considered:**

1. No Build
2. Maintain the existing 10' & 11' lanes on NB & SB Roswell Rd and add an additional SB turning lane with no bicycle lanes. This alternative was not chosen due to the high volume of traffic at this intersection.
3. Widen existing lanes to 12' on Roswell Rd but with no bicycle lanes. This alternative was not chosen because Roswell Rd is a designated bike facility by Fulton County.

**Comments:** See Minutes attached.

**Attachments:**

1. Cost Estimates: pages 8-10
  - a. Construction including E&C,
  - b. Right of Way, and
  - c. Utilities.
2. Sketch location map, page 2
3. Typical sections, pages 11 & 12
4. Accident summaries, page 13
5. Capacity analysis, pages 14-27 (unnumbered)
6. Minutes of Concept meetings, page 28
7. LGPA's or PMA's,
8. Location and Design Notice,
9. Conforming plan's network schematics showing thru lanes

**Approvals:**

Concur: \_\_\_\_\_  
Director of Preconstruction

Approve: \_\_\_\_\_  
Chief Engineer

PRELIMINARY COST ESTIMATE

	<u>Qty</u>	<u>Unit</u>	<u>Cost</u>	<u>Total</u>
<b>A. Right of Way (this cost is subsequently reaffirmed from FCo's Land Dept)</b>				
Right-of-Way	10,000	SF@	\$7.00	\$70,000
Easements	50,000	SF@	\$0.70	\$35,000
			<b>Subtotal A</b>	<b>\$105,000</b>
<b>B. Reimbursable Utilities</b>				
			Lump Sum	\$75,000
			<b>Subtotal B</b>	<b>\$75,000</b>
<b>C. Grading and Earthwork</b>				
Unclassified Excavation & Borrow	6000.00	CY@	\$10.00	\$60,000
Clearing and Grubbing			Lump Sum	\$8,000
			<b>Subtotal C</b>	<b>\$68,000</b>
<b>D. Drainage</b>				
Storm Drain Pipe, 18"	60	LF @	\$28.85	\$1,731
Storm Drain Pipe, 36"	70	LF @	\$49.59	\$3,471
Storm Drain Pipe, 15"	40	LF @	\$27.76	\$1,110
Storm Drain Pipe, 24"	100	LF @	\$34.49	\$3,449
Catch Basin	10	EA	\$1900	\$19,000
Storm Sewer Manhole	4	EA	\$1600	\$6,400
			<b>Subtotal D</b>	<b>\$35,161</b>
<b>E. Base &amp; Paving</b>				
Asphalt Concrete 9.5mm, SMA 165#/SY (1-1/2")	1750	TN@	\$34.64	\$60,620
Asphalt Concrete 19.0mm, SMA 220SY (2")	500	TN@	\$40.96	\$20,480
Asphalt Concrete 25mm, SMA 440#/SY (4")	1000	TN@	\$39.34	\$39,340
Graded Aggregate Base, incl. Material	2700	TN@	\$15.51	\$41,877
Asphaltic Conc. Leveling	1200	TN@	\$39.22	\$47,064
Bitum. Tack Coat	1255	GL@	\$0.91	\$ 1,142
			<b>Subtotal E</b>	<b>\$210,523</b>
<b>F. Concrete Work</b>				
Conc. Sidewalk, 4in	1980	SY@	\$32.59	\$64,528
Conc. Curb & Gutter, GA. STD. 9032B type 2, 8" x 30"	5704	LF@	\$12.15	\$69,303
6" Concrete Doweled Median	400	SY@	\$55.00	\$22,000
Bar Reinforcing Steel	42	LF@	\$ 0.57	\$ 24
Conc. Curb & Gutter, GA STD 9032B type 7 8" x 30"	1640	LF@	\$11.00	\$18,040
			<b>Subtotal F</b>	<b>\$173,895</b>

PRELIMINARY COST ESTIMATE cont'd.**G. Sign, Stripe, and Signal**

Signs			Lump Sum	\$50,000
Signals	1	1 ea@	\$80,000.00	\$80,000
Strain Pole	4	1 ea@	\$3,800.00	\$15,200
Arrow	20	1 ea@	\$78.00	\$2,678
Striping- 5in SOLID WHITE	4960	LF@	\$0.54	\$2,678
5in SOLID YELLOW	4140	LF@	0.55	\$2,277
24in SOLID WHITE	3661	LF@	\$4.91	\$17,976
5in SKIP WHITE	6050	LF@	\$0.40	\$2,420
5in SKIP YELLOW	3110	LF@	\$0.13	\$404
THERMOPLASTIC YELLOW	283	SY@	\$2.59	\$733
			<b>Subtotal G</b>	<b>\$178,048</b>

**H. Miscellaneous Items**

Field Engineer Office TP3	1	EA	\$65,000.00	\$65,000.00
			<b>Subtotal H</b>	<b>\$65,000.00</b>

**I. Traffic Control & Mobilization**

Traffic Control	1		Lump Sum	\$110,000.00
Mobilization	1		Lump Sum	\$40,000.00
			<b>Subtotal I</b>	<b>\$150,000.00</b>

**J. Grassing/Landscaping**

Grassing (Seed, Fertilizer, Nitrogen)			Lump Sum	\$50,000.00
Landscaping			Lump Sum	\$30,000.00
			<b>Subtotal J</b>	<b>\$80,000.00</b>

**K. Erosion Control**

Temp. Grassing	150	LB@	\$1.00	\$150.00
Temp. Mulch	3	TN@	\$150.00	\$450.00
Temp. Silt Fence, Type A	3000	LF@	\$4.00	\$12,000.00
Maintenance Temp. Silt Fence, Type A	1500	LF@	\$1.50	\$2,250.00
Temp. Silt Fence, Type C	4000	LF@	\$5.00	\$20,000.00
Maintenance Temp. Silt Fence, Type C	2000	LF@	\$1.50	\$3,000.00
Slit Control Gates, Type III	4	EA@	\$650.00	\$2,600.00
Maintenance of Silt Control Gate, Tp. III	4	EA@	\$250.00	\$1,000.00
Construction Entrance	8	EA@	\$1,500.00	\$12,000.00
Maintenance of Erosion Control				
Checkdams/Ditch Check	25	EA@	\$250.00	\$7,500.00
Monitoring and Sampling	7	MTH@	\$2,000.00	\$14,000.00
			<b>Subtotal K</b>	<b>\$74,950.00</b>

ESTIMATE SUMMARY

A. RIGHT OF WAY	\$ <u>105,000</u>
B. REIMBURSABLE UTILITIES	\$ <u>75,000</u>

CONSTRUCTION COST SUMMARY

C. GRADING AND EARTHWORK	\$ <u>68,000</u>
D. DRAINAGE	\$ <u>35,162</u>
E. BASE & PAVING	\$ <u>210,524</u>
F. CONCRETE WORK	\$ <u>173,872</u>
G. SIGN, STRIPE, & SIGNAL	\$ <u>178,049</u>
H. MISCELLANEOUS ITEMS	\$ <u>65,000</u>
I. TRAFFIC CONTROL	\$ <u>150,000</u>
J. GRASSING/LANDSCAPING	\$ <u>80,000</u>
L. EROSION CONTROL	\$ <u>75,000</u>

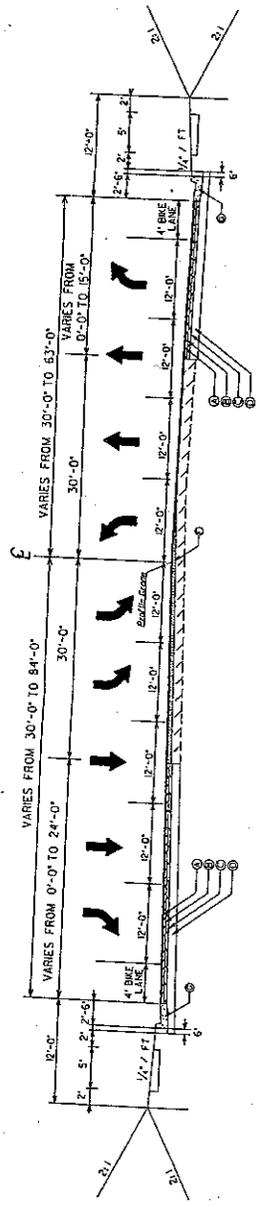
SUBTOTAL CONSTRUCTION COST	\$ <u>1,035,607</u>
E & C (10%)	\$ <u>103,561</u>
INFLATION (5% PER YEAR) 2 YRS.	\$ <u>113,917</u>
TOTAL CONSTRUCTION COST	\$ <u>1,253,085</u>

**GRAND TOTAL PROJECT COST** \$ 1,433,085

ESTIMATED COST

<b>CONSTRUCTION:</b>	\$ 1,035,607	<b>RIGHT-OF-WAY:</b>	\$ 105,000
<b>E &amp; C (10 %)</b>	\$ 103,561	<b>ACQUIRED BY:</b>	Fulton Co.
<b>INFLATION:</b>	\$ 113,917	<b>UTILITIES:</b>	\$ 75,000
<b>( 2 years at 5% per year)</b>		<b>ADJUSTED BY:</b>	
<b>TOTAL CNST COST:</b>	\$ 1,253,085	<b>GRAND TOTAL</b>	\$1,433,085

PROJECT NO.	11
PROJECT NAME	HPP-0001-0002(9)
DATE	11

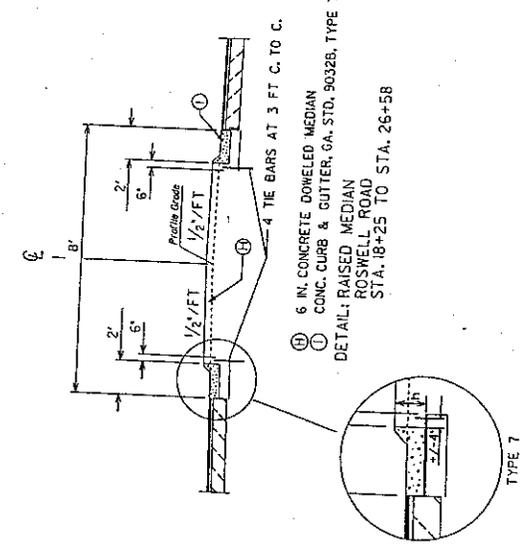


TS-1  
TANGENT SECTION  
ROSWELL ROAD

NOTE: Standard Cross-slopes of 1/2% per foot may be varied as directed by the Engineer. The existing roadway as per Sec. 108.01 of the Supplemental Specifications, See "Allowable Ranges Table".

NOTE: All vegetation (i.e. trees, shrubs, grass, etc.) that is not directly affected by the actual construction limits is not to be disturbed.

- (A) ASPHALTIC CONC 9.5 mm, SUPERPAVE, 165 LBS./S.Y.
- (B) ASPHALTIC CONC 19 mm, SUPERPAVE, 220 LBS./S.Y.
- (C) ASPHALTIC CONC 25 mm, SUPERPAVE, 440 LBS./S.Y.
- (D) GRADED AGGREGATE BASE, 10"
- (E) ASPHALTIC CONC. LEVELING, AS REQ'D
- (F) CONC. CURB & GUTTER, CA. STD. 5032B, TYPE 2, 8"x30"



ATTACHMENT 'A'

ROSWELL ROAD @ NORTHRIDGE ROAD INTERSECTION IMPROVEMENT PROJECTS TYPICAL SECTION

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION

DATE: \_\_\_\_\_

DESIGNED BY: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_

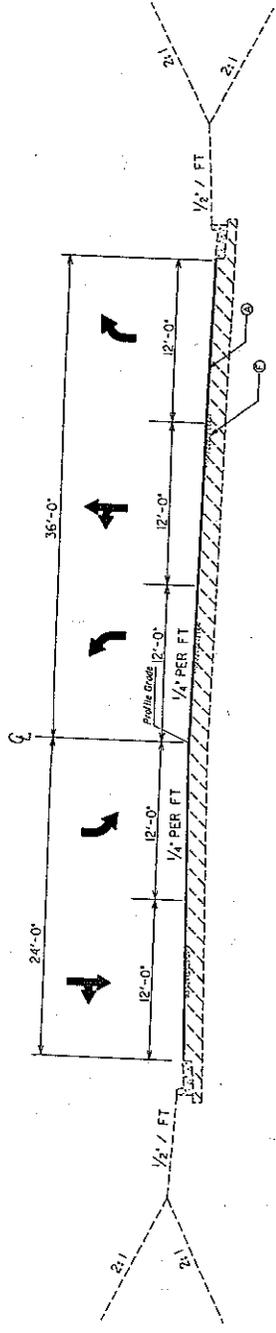
APPROVED BY: \_\_\_\_\_

SCALE: \_\_\_\_\_

PROJECT NO.: HPP-0001-0002(9)

SHEET NO.: 11

STATE	PROJECT NUMBER	SHEET TOTAL
GSA	HPP-0000-002499	12



TS-1  
TANGENT SECTION  
NORTHBRIDGE ROAD

NOTE: Standard Cross-slopes of 1/2 inch per foot may be varied as directed by the engineer to provide proper drainage for the existing roadway as per Section 108 of the Supplemental Specifications. See "Miscellaneous Tables".

NOTE: All vegetation (i.e. trees, shrubs, grass, etc.) that is not directly affected by the actual construction limits is not to be disturbed.

- Ⓐ ASPHALTIC CONC. 9.5 mm. SUPERPAVE. 165 LBS./S.Y.
- Ⓑ ASPHALTIC CONC. LEVELING, AS REQ'D

ATTACHMENT "B"		PROJECT NUMBER		SHEET TOTAL	
ROSWELL ROAD @ NORTHBRIDGE ROAD INTERSECTION IMPROVEMENT PROJECTS		HPP-0000-002499		12	
TANGENT SECTION		DATE		SCALE	
2-02					

STATE	PROJECT NUMBER	SHEET TOTAL
GSA	HPP-0000-002499	12

DATE	BY	REVISIONS

DESIGNER	CHECKED	DATE

CONTRACT NUMBER	CONTRACT DESCRIPTION

DESIGNER	DATE

STATE	PROJECT NUMBER	SHEET TOTAL
GSA	HPP-0000-002499	12

**ACCIDENT SUMMARY TABLE**

**ACCIDENTS PER MILLION ENTERING VEHICLES**

Intersection	Incidents by year		
	97	98	99
Roswell Road / Northridge Road	2.4	2.7	3.2

The numerical values above were compared with the GDOT statewide average accident rate for same/similar roadways of 3.8 per MEV. Accidents at Roswell Road at Northridge Road do not exceed the statewide average accident rate for the represented years for same/similar roadways.

ACCIDENT SUMMARY TABLE

# STUDY METHODOLOGY

Traffic conditions are evaluated in terms of average vehicle delay and based on Level of Service (LOS) measurements from the 1997 Highway Capacity Manual (HCM). LOS is a measure of a roadway facility's ability to accommodate a moving stream of vehicles. LOS measurements range from "A" to "F", with LOS A being the best operating conditions and LOS F the worst. Generally, LOS D or better is acceptable. LOS E and F are unacceptable in most cases and warrant improvements to the intersection geometry or signal timing adjustments. Table 1 and Table 2 list the LOS criteria for signalized and unsignalized intersections, respectively.

Table 1 - LOS for Signalized Intersections

LEVEL OF SERVICE	STOPPED DELAY PER VEHICLE (SEC)
A	≤ 10.0
B	10.0 – 20.0
C	20.0 – 35.0
D	35.0 – 55.0
E	55.0 – 80.0
F	> 80.0

Reference: Highway Capacity Manual, 1997 Update

Table 2 - LOS for Unsignalized Intersections

LEVEL OF SERVICE	AVERAGE TOTAL DELAY (SEC/VEH)
A	< 10.0
B	> 10 and < 15
C	> 15 and < 25
D	> 25 and < 35
E	> 35 and < 50
F	> 50

Reference: Highway Capacity Manual, 1997 Update

## EXISTING TRAFFIC OPERATIONS

Using procedures outlined in the Synchro Release 4.0 traffic modeling software, an analysis of the existing intersection capacity during the peak periods identified earlier was performed. The software uses the following data to evaluate traffic conditions at studied intersections.

- Turning Movement Counts
- Traffic Signal Controller Database Settings and Timings, if applicable
- Intersection Geometry (See Exhibits 6 - 9)
- Pedestrian Phasing, if applicable

Synchro Release 4.0 was used to model signalized intersections and the Highway Capacity Software (HCS), Version 3.1b was used to analyze the unsignalized intersection. HCS provides the LOS for the approach(s) to the intersection that is controlled by the stop sign. The overall LOS of the intersections is determined by procedures outlined in the HCM (1997).

A capacity analysis was performed for each studied intersection using the existing lane configurations. Table 3 shows the existing LOS for each intersection during the studied peak period.

Table 3 – Existing Intersection Level of Service (LOS)

INTERSECTION	AM PEAK PERIOD	PM PEAK PERIOD
Roswell Road at Dunwoody Place	E	F
Roswell Road at Northridge Drive	D	E
Arnold Mill Road at Green Road	A	F
Glenridge Drive at Abernathy Road	C	C

# EXISTING LANE CONFIGURATION ROSWELL ROAD AT NORTHRIDGE DRIVE

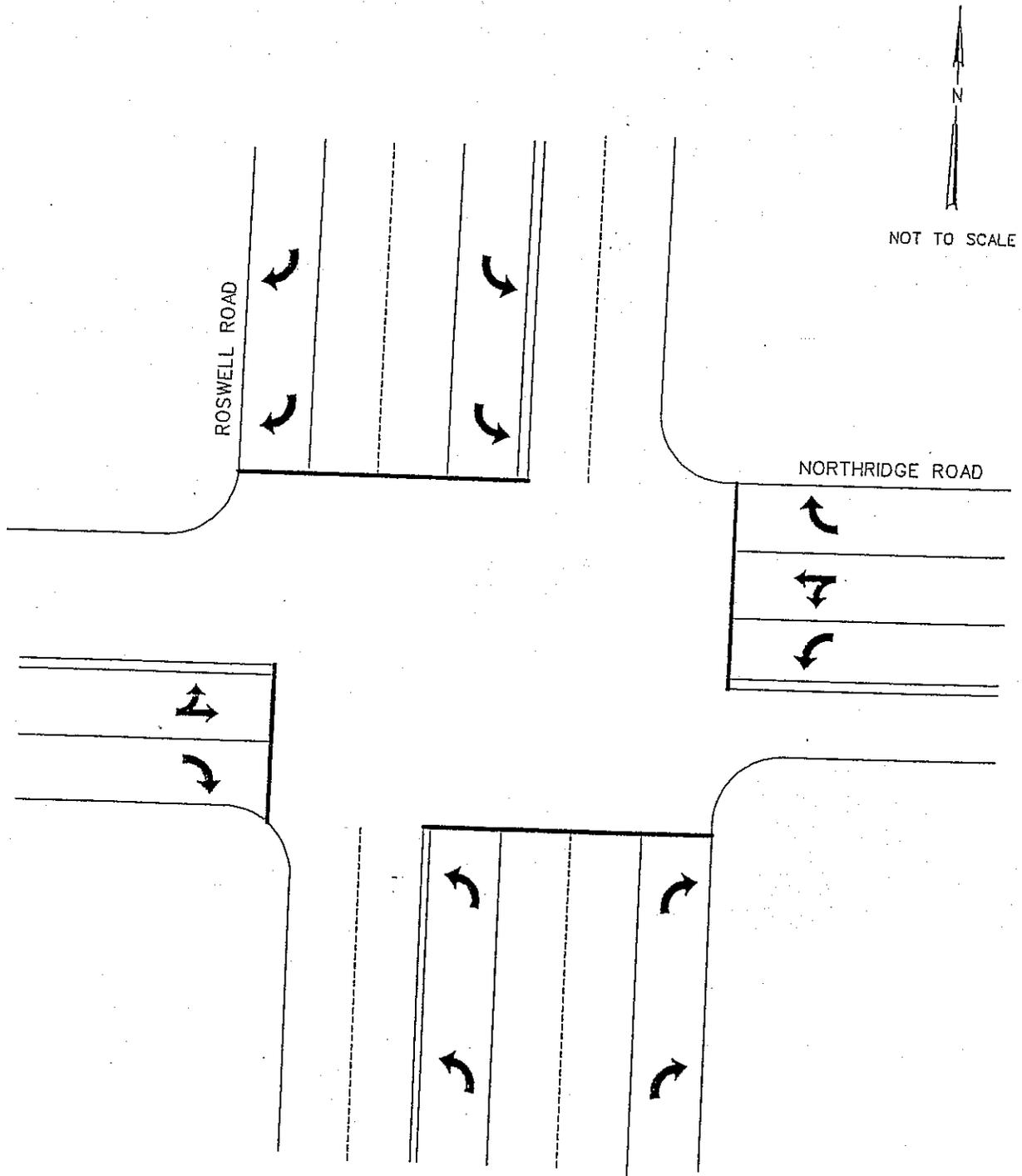


EXHIBIT 7

GA 400 CORRIDOR/NORTH FULTON  
INTERSECTIONS - 1

**GRICE**  
& ASSOCIATES

JUNE 2000

## FUTURE TRAFFIC OPERATIONS

The GA 400 Intersection Improvement Project consists of intersection improvements located in the vicinity of the GA 400 corridor. The proposed limits extend just beyond the intersections in the immediate project area. Each intersection was analyzed for traffic operations, safety, and geometric lane configuration. This analysis utilized existing (2000), build year (2002), and projected (2020) traffic volumes. Projected build year (2002) traffic volumes are shown on Exhibits 10 - 13 while projected (2020) traffic volumes are shown on Exhibits 14 - 17. These volumes were computed based upon historical ADT volumes collected by GDOT. The volume growth rate was determined to be 2.89 percent per year. Thus, for our purposes, the growth factor used for this analysis was three (3) percent.

### Traffic Signal Warrant Analysis

The determination of the need for a traffic signal at Arnold Mill Road at Green Road was evaluated using the Manual of Uniform Traffic Control Devices (MUTCD) Traffic Signal Warrant Analysis procedure. This analysis processes several iterations of algorithms to analyze the volume of traffic during particular time periods of the day. It evaluates eleven warrants as part of this procedure. The output displays the warrants that are and are not met as a result of the analysis of the studied intersection. The MUTCD provides the following eleven traffic signal warrants:

- Warrant 1 – Minimum Vehicular Volume
- Warrant 2 – Interruption of Continuous Traffic
- Warrant 3 – Minimum Pedestrian Volume
- Warrant 4 – School Crossing
- Warrant 5 – Progressive Movement
- Warrant 6 – Accident Experience
- Warrant 7 – Systems
- Warrant 8 – Combination of Warrants
- Warrant 9 – Four Hour Volumes
- Warrant 10 – Peak Hour Delay
- Warrant 11 – Peak Hour Volume

Below is the warrant that was met for the studied intersection.

- Warrant 11 – Peak Hour Volume

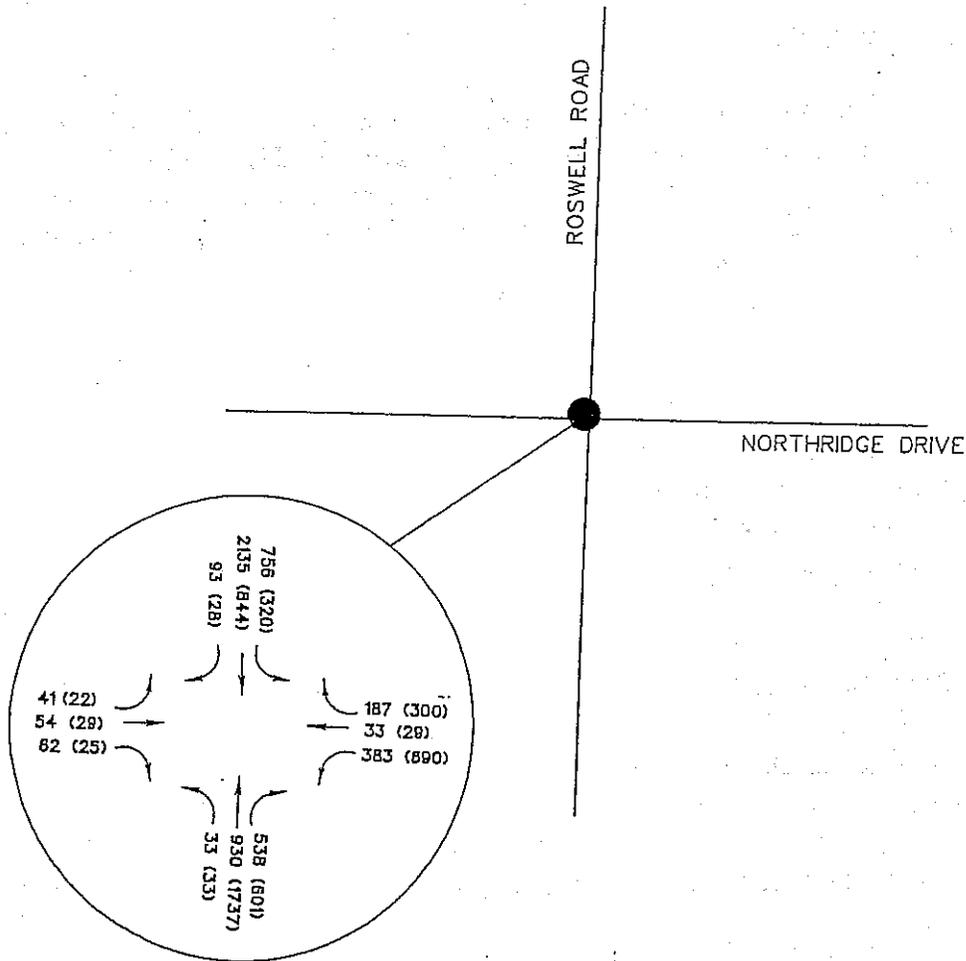
### Geometric Modifications

Based upon traffic engineering principles and specific study area needs and expectations, several geometric modifications were analyzed to improve traffic operations and safety. The recommended geometric modifications can be found in Exhibits 18 - 21 - Proposed Lane Configuration.

# 2002 PROJECTED TURNING MOVEMENT COUNTS ROSWELL ROAD AT NORTHRIDGE DRIVE



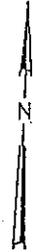
NOT TO SCALE



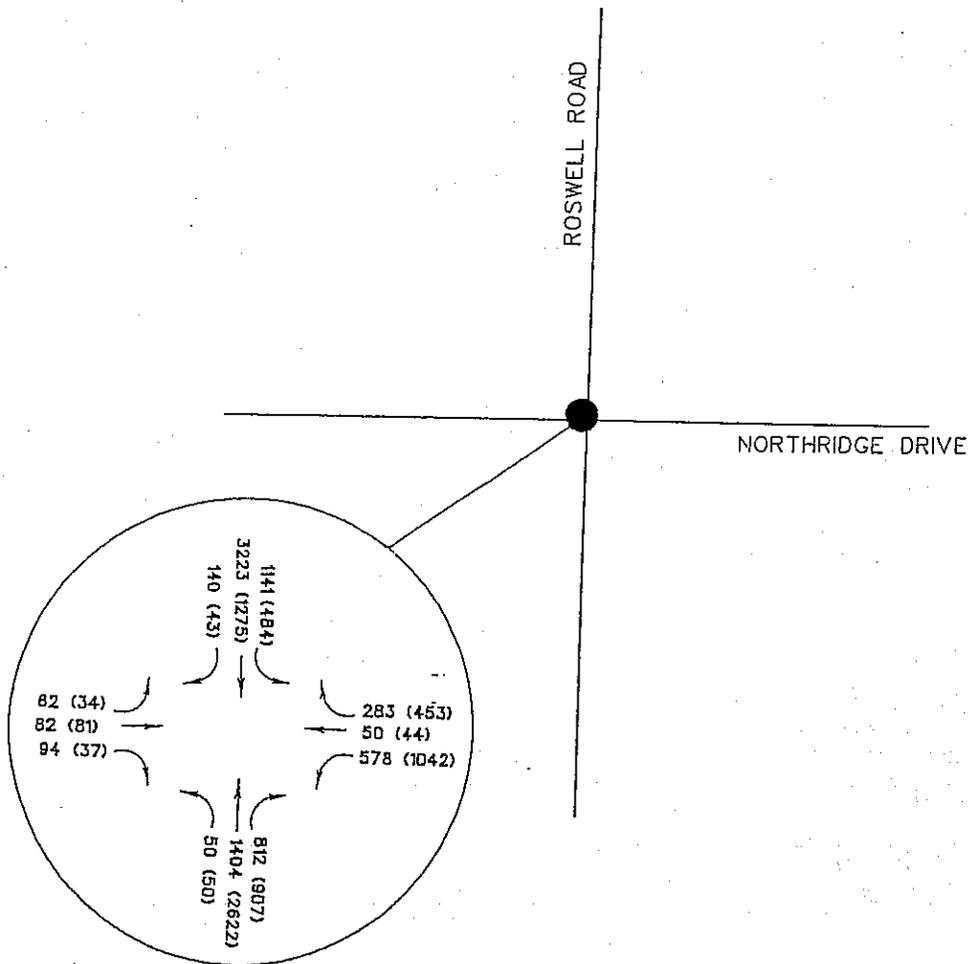
● - Signalized Intersection  
100 (100) - Turning Movements AM(PM)

EXHIBIT 11

# 2020 PROJECTED TURNING MOVEMENT COUNTS ROSWELL ROAD AT NORTHRIDGE DRIVE



NOT TO SCALE



● - Signalized Intersection  
100 (100) - Turning Movements AM(PM)

EXHIBIT 15

## Future Level of Service (LOS) Analysis

A capacity analysis was performed for each intersection using the projected traffic volumes and the geometric modifications. Several iterations were developed and analyzed to attempt to produce an acceptable level of service. The capacity analysis results are shown in the following tables – Future Intersection Level of Service (LOS).

### 2002 Future Intersection Level of Service (LOS) with Fulton's Concept

INTERSECTION	AM PEAK PERIOD	PM PEAK PERIOD
Roswell Road at Dunwoody Place	D	F
Roswell Road at Northridge Drive	D	D
Arnold Mill Road at Green Road	A	C
Glenridge Drive at Abernathy Road	C	C

### 2020 Future Intersection Level of Service (LOS) with Fulton's Concept

INTERSECTION	AM PEAK PERIOD	PM PEAK PERIOD
Roswell Road at Dunwoody Place	F	F
Roswell Road at Northridge Drive	F	F
Arnold Mill Road at Green Road	F	F
Glenridge Drive at Abernathy Road	F	F

2020 Future Intersection Level of Service (LOS) with Major Improvements

INTERSECTION	AM PEAK PERIOD	PM PEAK PERIOD
Roswell Road at Dunwoody Place	C	D
Roswell Road at Northridge Drive	D	D
Arnold Mill Road at Green Road	B	C
Glenridge Drive at Abernathy Road	C	C

# PROPOSED LANE CONFIGURATION ROSWELL ROAD AT NORTHRIDGE ROAD

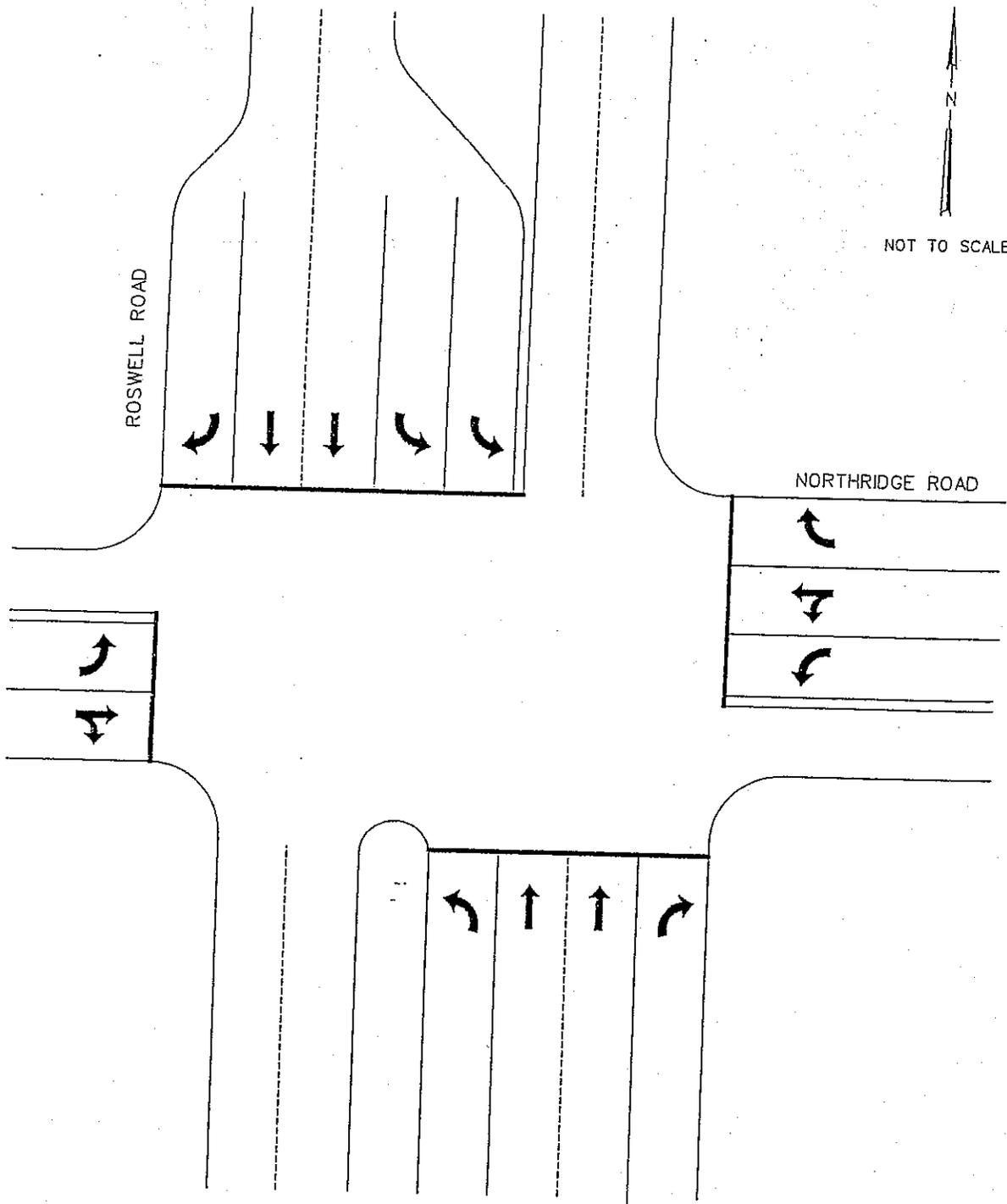


EXHIBIT 19

The projected year analysis for 2020 forecasted unacceptable levels of service for all intersections studied. Current physical constraints limit the potential for further geometric improvements beyond the design year. Therefore, these intersections should be further analyzed in conjunction with major roadway improvement (widening) projects to produce an acceptable level of service for all intersections in the year 2020.

To obtain acceptable Levels of Service (LOS) in the year 2020, the following major geometric improvements are recommended:

#### Roswell Road at Dunwoody Place

- Southbound
  - One right turn storage lane – 150 feet
  - Four through lanes
  - Two Left turn storage lanes – 525 feet each
- Northbound
  - One right turn lane – 150 feet
  - Four through lanes
  - One Left turn storage lane – 125 feet
- Eastbound
  - One right turn lane – 150 feet
  - One through lane
  - One left and through shared lane
  - One Left turn storage lane – 150 feet
- Westbound
  - Two right turn storage lanes – 100 feet each
  - Two through lanes
  - Two Left turn storage lanes – 200 feet each

#### Roswell Road at Northridge Drive

- Northbound
  - One right turn lane – 150 feet
  - Four through lanes
  - One Left turn storage lane – 100 feet
- Southbound
  - One right turn lane – 150 feet
  - Three through lanes
  - Three Left turn storage lanes – 500 feet each

- Eastbound  
One right turn lane – 150 feet  
Two through lanes  
One Left turn storage lane – 100 feet
- Westbound  
One right turn lane – 150 feet  
Three through lanes  
Three Left turn lanes – 450 feet each

#### Arnold Mill Road at Green Road

- Northbound  
One right turn lane – 150 feet  
Two through lanes
- Southbound  
Two through lanes  
One Left turn storage lane – 700 feet
- Westbound  
One right turn lane  
One Left turn storage lane – 150 feet

#### Glenridge Drive at Abernathy Road

- Northbound  
One through and right shared lane  
One through lane  
Two Left turn storage lanes – 225 feet each
- Southbound  
One right turn lane – 150 feet  
Two through lanes  
One Left turn storage lane – 200 feet
- Eastbound  
One through and right shared lane  
Two through lanes  
One Left turn storage lane – 200 feet

- Westbound

---

One through and right shared lane

Two through lanes

One Left turn storage lane – 200 feet

Based on the location of the studied intersections, it is recommended to analyze other signals in the immediate area to determine the need for signal system tie-in or signal coordination.

Concept Team Meeting Minutes  
October 11, 2000

Attendees:

Angela Alexander	GaDOT – Urban Design
Darrell Richardson	GaDOT – Urban Design
Darryl VanMeter	GaDOT – Urban Design
Brook Martin	GaDOT – Traffic Operations
Katie Mullins	GaDOT – Programming
Donald Mills	GaDOT – Planning
David Mulling	GaDOT – Engineering Services
Robert Crawford	GaDOT – District 7 Preconstruction
John McClelland	Fulton Co. – Public Works
Sammye Setzer	Fulton Co. – Public Works
Brian Leavell	Atlanta Gas Light Co.
Frank Stone	Bell South
Kevin Laseter	Sawnee EMC
Jeannine Risfin	Georgia Transmission
Mitchell Fowler	RMJ
Valerie Lee	Grice & Associates
Terri Verdone	Edwards & Pitman
Jim Fuerst	Clark Patterson Associates
Chip Randall	Clark Patterson Associates
Tom Harjung	Clark Patterson Associates
Nikki Graham	Clark Patterson Associates

\* ALL COMMENTS HAVE BEEN CONSIDERED AND INCORPORATED INTO REPORT SUBMITTAL

HPP-0000-00(249)

PI # 0000249

**Roswell Road & Northridge Intersection Improvements**

**Response ()**

Darryl VanMeter

- Need to mill at gutter, asphalt goes to face of curb. (OK)
- Suggested replacing Curb & Gutter on Northridge (OK)

Angela Alexander

- Suggested replacing Curb & Gutter on Roswell (OK)
- If curb height is fine, no need to touch shoulder (OK)
- Might want to include raised median to prevent Northbound traffic from turning left across double lanes into apt. complex and leaving apt. (DONE, SEE CONCEPT LAYOUT)

Sammye Setzer

- Suggested Right-in/right-out driveway for apts. (OK)

David Mulling

- Need to recalculate cost of asphalt (OK, SEE COST ESTIMATE PAGE 8)

Concept Team Meeting Minutes cont'd.

\* ALL COMMENTS HAVE BEEN CONSIDERED AND INCORPORATED INTO REPORT SUBMITTAL

**HPP-0000-00(249)**

**PI # 0000249**

**Roswell Road & Northridge Intersection Improvements**

Terri Verdone

- Need to include public in R/W expansion (OK)

General Comments

- Expanding R/W for wider lanes will cut into already steep Driveways on east side(OK)
- Possible widening on west side of street (DONE SEE CONCEPT LAYOUT)
- Need accurate and current Typical Cross sections (DONE SEE TYPES PAGES 11-13)

NOTICE OF LOCATION AND DESIGN APPROVAL

HPP-0000-00 (249)  
GDOT P.I. NO. 0000249

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 project consists of the addition of an additional southbound left turn lane to Roswell Road to provide dual lefts onto Northridge Road (eastbound), four foot wide bicycle lanes on both sides of Roswell Road, as well as the separation of left turn and through movements to eastbound and westbound Northridge Road. Roswell Road (southbound) would have a dual left, two straight, and a right turn lane. Roswell Road (northbound) would have a single left, two straight, and a right turn lane. In addition, all lanes (northbound and southbound) on Roswell Road will be widened to 12 feet of pavement and the existing signal will be modified. The project lies entirely within Fulton County, and within District 17, Land Lot 25.

Date of Location and Design Approval: MAY 29, 2001

The project consists of adding an additional left turn lane on southbound Roswell Road, four foot wide bicycle lanes on both sides of Roswell Road and separating the left turn and through movements on eastbound Northridge Road. All lanes on Roswell Road will be widened to 12 feet. Modifications to the existing signal are also included.

Drawings or maps or plats of the proposed project as approved are on file and are available for inspection at the Georgia Department of Transportation, Office of Urban Design, No. 2 Capitol Square, S.W., Room 356, Atlanta, GA 30334. Or, any interested party may obtain a copy of the drawings or maps or plats by writing to the Georgia Department of Transportation, Office of Urban Design, No. 2 Capitol Square, S.W., Room 356, Atlanta, GA 30334 and paying a nominal cost therefore.

Any written request in reference to this Notice should include the Project and P.I. Numbers as noted at the top of this Notice and may be referred to:

Joseph P. Palladi, P.E.  
State Urban Design Engineer  
Georgia Department of Transportation  
No. 2 Capitol Square, S.W., Room 356  
Atlanta, GA 30334  
(404)656-5440





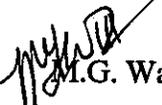
Department of Transportation  
State of Georgia

INTERDEPARTMENTAL CORRESPONDENCE

File: HPP-0000-00(249)/Fulton County  
P.I. No. 000249

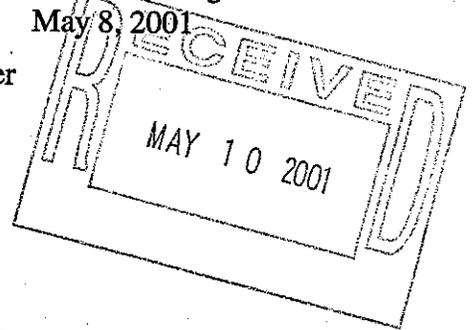
Office: Traffic Operations  
Atlanta, Georgia

Date: May 8, 2001

From:  M.G. Waters, III, P.E., State Traffic Operations Engineer

To: Wayne Hutto, Assistant Director of Preconstruction

Subject: Project Concept Report Review



We have reviewed the above referenced concept report for the intersection improvements on SR 9/Roswell Road at Northridge Road in Fulton County.

Roswell Road is currently a 5-lane roadway with 10-foot lanes and a flush median. Northridge Road is currently a 3-lane roadway with 12-foot lanes. This project proposes to add an additional left turn lane southbound and install a raised median north of Northridge Road on Roswell Road. All lanes on Roswell Road will be increased to 12 feet. The proposed typical section for Northridge Road will add 1 westbound left turn lane.

We believe this concept will improve safety and traffic operations within this area, therefore find this report satisfactory for approval.

MGW/BM

Attachment (signature page)

Cc: Harvey Keeper, Office of Environmental Location  
Joseph P. Palladi, State Urban Design Engineer  
David Mulling, Eng. Services, w/ attachment  
Marta Rosen, Office of Planning  
Chuck Hasty, TMC  
General Files

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN

PROJECT CONCEPT REPORT

Project Number: HPP-0000-00 (249), FULTON CO #T104  
County: FULTON  
P. I. Number: 0000249

Federal Route Number: N/A  
State Route Number: SR9

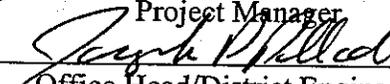
ROSWELL RD (SR9) @ NORTHRIDGE RD

**Project Description:** Additional southbound left turn lane on Roswell Road to provide dual lefts onto Northridge Road (eastbound), four foot wide bicycle lanes on both sides of Roswell Road, as well as the separation of left turn and through movements to eastbound and westbound Northridge Road.

**Recommendation for approval:**

DATE 5-2-01

DATE 5/4/01

  
Project Manager  
  
Office Head/District Engineer

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

DATE \_\_\_\_\_

DATE \_\_\_\_\_

DATE \_\_\_\_\_

DATE 05/09/01

DATE \_\_\_\_\_

DATE \_\_\_\_\_

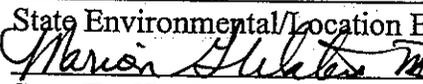
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DATE \_\_\_\_\_

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

\_\_\_\_\_  
State Transportation Programming Engineer

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

  
State Traffic Operations Engineer

\_\_\_\_\_  
District Engineer

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

\_\_\_\_\_  
State Urban Design Engineer

\_\_\_\_\_  
Georgia Dept. of Transportation Project Manager

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN

PROJECT CONCEPT REPORT

Project Number: HPP-0000-00 (249), FULTON CO #T104

County: FULTON

P. I. Number: 0000249

Federal Route Number: N/A

State Route Number: SR9

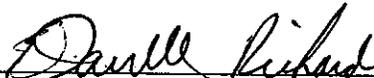
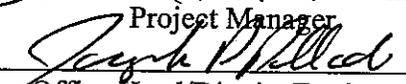
ROSWELL RD (SR9) @ NORTHRIDGE RD

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\_\_\_\_\_  
Office Head/District Engineer

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DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Programming Engineer

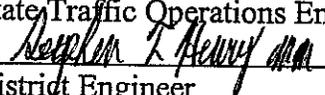
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\_\_\_\_\_  
State Environmental/Location Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Operations Engineer

DATE 5-16-01

  
\_\_\_\_\_  
District Engineer

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Urban Design Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
Georgia Dept. of Transportation Project Manager

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN

PROJECT CONCEPT REPORT

Project Number: HPP-0000-00 (249), FULTON CO #T104  
County: FULTON  
P. I. Number: 0000249

Federal Route Number: N/A  
State Route Number: SR9

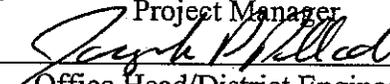
ROSWELL RD (SR9) @ NORTHRIDGE RD

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**Recommendation for approval:**

DATE 5-2-01

DATE 5/4/01

  
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Office Head/District Engineer

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State Transportation Planning Administrator

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State Transportation Programming Engineer

DATE \_\_\_\_\_

State Environmental/Location Engineer

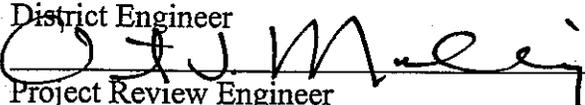
DATE \_\_\_\_\_

State Traffic Operations Engineer

DATE \_\_\_\_\_

District Engineer

DATE 5/9/01

  
Project Review Engineer

DATE \_\_\_\_\_

State Urban Design Engineer

DATE \_\_\_\_\_

Georgia Dept. of Transportation Project Manager

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF URBAN DESIGN

PROJECT CONCEPT REPORT

Project Number: HPP-0000-00 (249), FULTON CO #T104  
County: FULTON  
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Federal Route Number: N/A  
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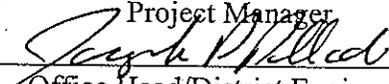
ROSWELL RD (SR9) @ NORTHRIDGE RD

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DATE 5/4/01

DATE \_\_\_\_\_

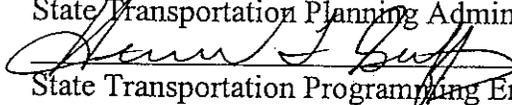
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