

ORIGINAL TO GENERAL FILES

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE** MLP-0000-00(542) Laurens County **OFFICE** Preconstruction  
P. I. No. 0000542 **DATE** November 14, 2000  
*CWH*  
**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)  
Mike Thomas

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA****INTERDEPARTMENT CORRESPONDENCE**

**FILE** MLP-000-00(542) Laurens County **OFFICE** Preconstruction  
P.I. No. 0000542 **DATE** October 24, 2000

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

**TO** J. Tom Coleman, Jr., Commissioner

**SUBJECT** PROJECT CONCEPT REPORT

This project is the widening and reconstruction of SR 257 from the I-16 interchange to Bellevue Road/CR 602 in southwest Dublin, Georgia. The project length is 2.86 miles. State Route 257 is currently a two lane roadway consisting of two, 12' lanes with variable width rural shoulders. State Route 257 serves as a regional roadway connecting the City of Dublin to I-16. The Best Buy Corporation is under construction with a large industrial distribution center on SR 257 at a newly constructed road located on SR 257 between Fire Tower Road and Bellevue Road/CR 602. The existing and future travel demands on the current design causes safety concerns and failing levels of service. The primary deficiencies are that traffic volumes generated by the Best Buy Industrial Distribution Center will exceed the capacity of the existing two lane roadway and the large volume of trucks that must be facilitated on SR 257. Accident data(1995-1997) within the project limits shows 47 accidents with 26 injuries. The base year traffic (2003) along this section of SR 257 is 14,400 VPD. The 20 year (2023) or design year projected volume is 23,000 VPD. The posted speed and the design speed are 55 MPH.

The construction proposes to widen SR 257 to consist of four, 12' lanes with turn lanes as required, separated by a 4' flush median, and 6' paved shoulders with open ditches. A 14' center two-way left turn lane will be provided at all major intersections and commercial traffic generators. The project's southern terminus ties to project IM-OOMS(328) Laurens County, an I-16 interchange improvement project. Traffic will be maintained on the existing roadway during construction.

**As proposed, this project is not consistent with the median design guidelines dated July 20, 2000. I recommend an exception be granted.**

Environmental concerns include requiring a COE 404 Permit; an Environmental Assessment will be prepared; a public hearing will be held; 3 residences displaced; time saving procedures are not appropriate.

J. Tom Coleman, Jr.

Page 2

MLP-000-00(542) Laurens

October 24, 2000

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)	\$7,471,000	\$4,250,000	2001	01-04
Right-of-Way	\$1,590,000	\$ 500,000		
Utilities*	LGPA	LGPA		

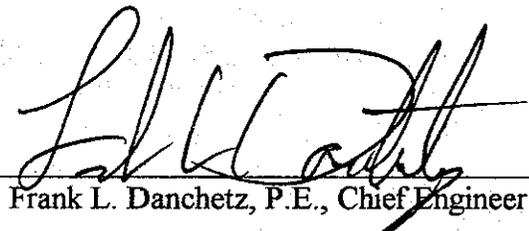
\*Laurens County signed LGPA on 6-20-00 for PE; City of Dublin signed LGPA on 3-13-00 for utilities.

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

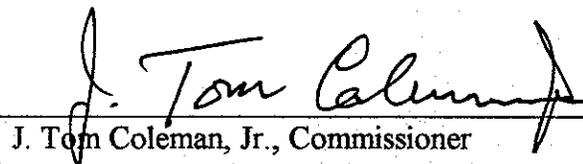
TLT:JDQ/cj

Attachment

CONCUR

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

APPROVE

  
\_\_\_\_\_  
J. Tom Coleman, Jr., Commissioner

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENTAL CORRESPONDENCE**

**FILE:** MLP-000-00(542) Laurens  
P.I. Number 0000542

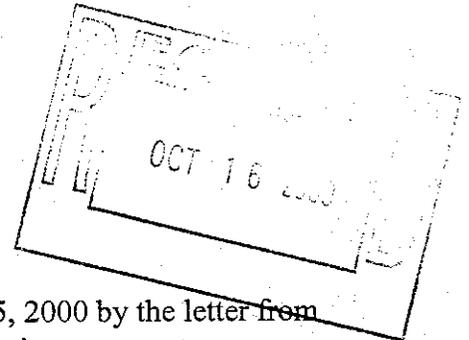
**OFFICE:** Atlanta, Georgia

**DATE:** October 13, 2000

**FROM:** David Mulling, Project Review Engineer *DM*

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

**SUBJECT: CONCEPT REPORT**



We have reviewed the concept report submitted October 5, 2000 by the letter from George Brewer dated October 4, 2000, and have the following comment:

1. The proposed 4 foot flush median is not consistent with the Raised/Depressed/Flush Median Design Guidelines dated July 20, 2000.

The costs for the project are:

Construction	\$5,906,000
Inflation	\$ 886,000
E&C	\$ 679,000
Reimbursable Utilities	\$ 400,000
Right of Way	\$1,590,000

DTM

c: George Brewer -- District 2 Design

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**



FILE MLP-0000-00(542) Laurens County  
P.I. No. 0000542

OFFICE Tennille

DATE October 4, 2000

FROM *GMB* George M. Brewer, District Design Engineer

TO Wayne Hutto, Assistant Director of Preconstruction

SUBJECT **CONCEPT REPORT**

We are sending to you attached with this letter, the project concept report for approval on the above-mentioned project.

If any further assistance is needed, please contact me at (912)552-4642.

GMB

cc: Marta Rosen  
Herman Griffin  
David Studstill  
James A. Kennerly  
David Mulling  
Marion Waters

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

# PROJECT CONCEPT REPORT

## S.R. 257 Improvement Project

Project Number: MLP-0000-00-(542)

P.I. No. 0000542

Laurens County, Georgia

FEDERAL ROUTE NO: None

STATE ROUTE NO: 257

Date of Report: October 3, 2000

### RECOMMENDATION FOR APPROVAL

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Road and Airport Design Engineer

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

\_\_\_\_\_  
DATE

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

\_\_\_\_\_  
DATE

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

\_\_\_\_\_  
DATE

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

\_\_\_\_\_  
DATE

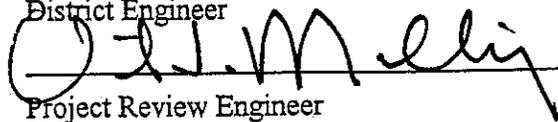
\_\_\_\_\_  
State Traffic Operations Engineer

\_\_\_\_\_  
DATE

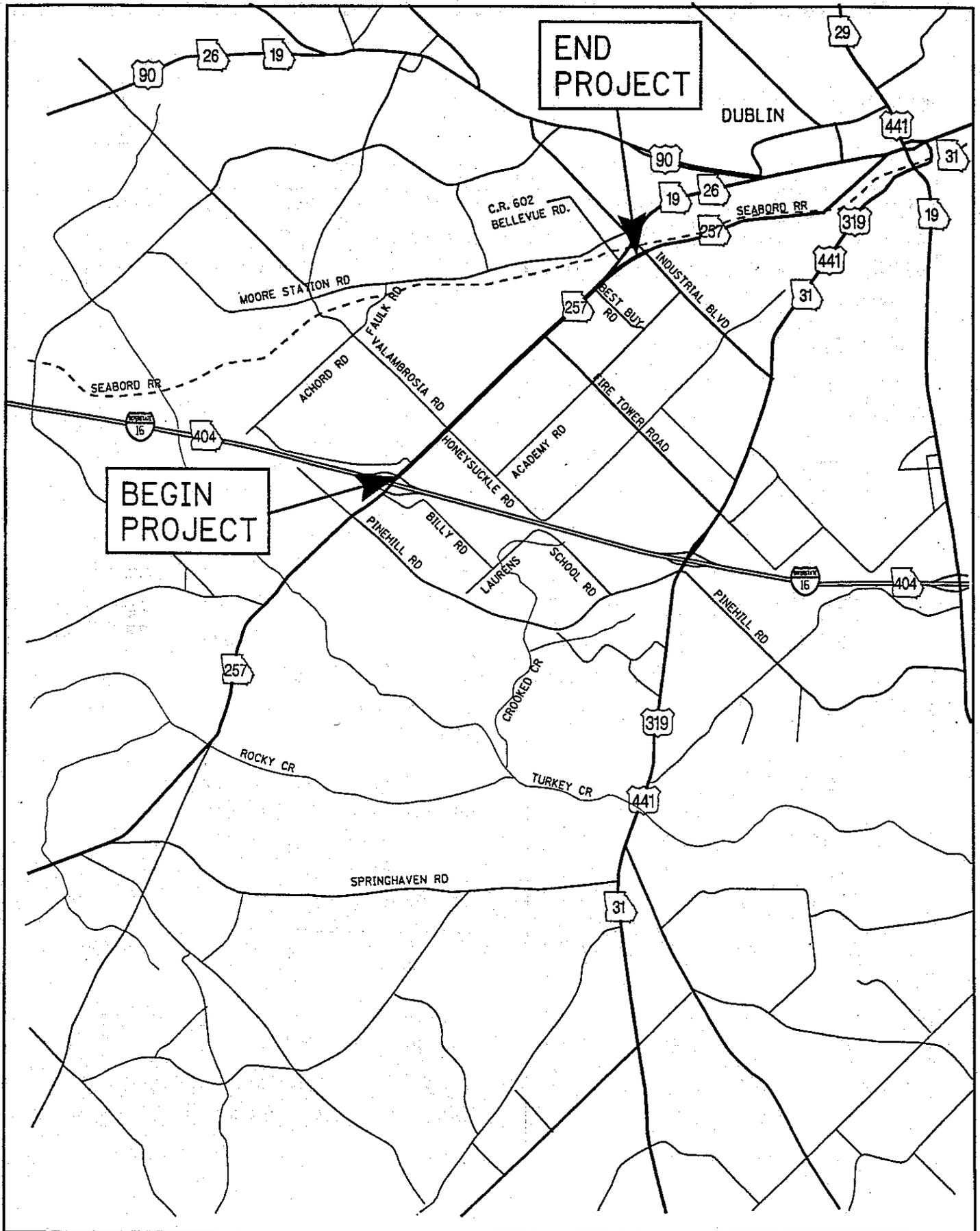
10/13/00

\_\_\_\_\_  
DATE

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

  
Project Review Engineer

PROJECT MAP - Project No.: MLP-0000-00(542), LAURENS COUNTY



**PROJECT NUMBER: MLP-0000-00 (542) Laurens County****PROJECT LOCATION & DESCRIPTION**

This project consists of the widening and reconstruction of S.R. 257 from the I-16 interchange to Bellevue (C.R. 602). The project is located southwest of the City of Dublin in Laurens County. It will widen S.R. 257 from a 2-lane rural roadway to a 4-lane rural roadway with turn lanes at the major intersections.

PROJECT LENGTH: 2.86 miles

MILE POINT REFERENCE:	BEGIN	END
S.R. 257	11.82	14.68

**TRAFFIC**

	BASE	PROJECTED
<u>Location</u>	<u>Year 2003</u>	<u>Year 2023</u>
S.R. 257	14,400 vpd	23,000 vpd

**ACCIDENT HISTORY**

<u>YEAR</u>	<u>Accident</u>		<u>Injury</u>		<u>Fatality</u>	
	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>
1995	18	241 (193)	9	120 (122)	0	0 (3.40)
1996	8	102 (201)	11	140 (122)	0	0 (3.67)
1997	21	263 (194)	6	75 (112)	0	0 (3.62)

Note: All rates are per 100 million vehicle miles of travel. Numbers in parentheses are statewide average rates for rural major collectors

**PDP CLASSIFICATION**

FOS ( ) EX (X) NA ( )

**FUNCTIONAL CLASSIFICATION**

RURAL MAJOR COLLECTOR - Mile log 11.82-14.16  
URBAN MINOR ARTERIAL - Mile log 14.16-14.68

EXISTING CONDITIONS		
TYPICAL SECTION: Two 12' lanes, variable width grass shoulders.		
R/W WIDTH: 100'-200'		
POSTED SPEED	MAX. EXISTING DEGREE OF CURVE	MAX GRADE
S.R. 257: 55 mph	2°	4 %
MAJOR STRUCTURES: There are no major structures but there are some small pipe culverts under the road.		

PROJECT NEED & PURPOSE
<p>This concept serves two primary purposes. The first purpose of this project is to provide additional traffic capacity and improved access to S.R. 257 to accommodate existing and future traffic volumes in the project corridor through the 2023 design year. The second purpose of this project is to improve traffic safety: 1) by providing left turn and right turn lanes at major intersections and commercial traffic generators; 2) reconstructing and relocating the intersection of Bellevue Road (C.R. 602) at S.R. 257 to form a 90 degree intersection; 3) installing traffic signals at the improved intersections with Best Buy Road and Bellevue Road; and, installing railroad bells and gates at the improved railroad crossing on Bellevue Road. Currently, S.R. 257 is classified as a two-lane rural major collector from the I-16 Interchange to Fire Tower Road (C.R. 337) and is a two-lane urban minor arterial from Fire Tower Road to Bellevue Road (C.R. 602).</p> <p>S.R. 257 serves as a regional roadway connecting the City of Dublin to Interstate 16. The Best Buy Corporation is under construction with a large industrial distribution center on S.R. 257 at a newly constructed road located on S.R. 257 between Fire Tower Road and Bellevue Road (C.R. 602). With the construction of the industrial center, S.R. 257 is currently being improved with turn lanes to facilitate ingress and egress of trucks. The roadway is also being improved at its intersection with Industrial Boulevard (C.R. 493) under project number PR8530-76 (175).</p> <p>The existing and future travel demands on the current design causes safety concerns and failing levels of service. The primary deficiencies are that traffic volumes generated by the Best Buy Industrial Distribution Center will exceed the capacity of the existing two lane roadway and the large volume of trucks that must be facilitated on S.R. 257 will pose traffic safety concerns.</p> <p>The traffic benefits of this project include: 1) reducing delay and traffic congestion on S.R. 257; and 2) increasing traffic safety on S.R. 257.</p>

**PROJECT NEED & PURPOSE - continued**

The logical southern termini of the S.R. 257 project is at the interchange of I-16 which is planned to be improved under project number IM-00MS (328) and the northern project termini is at the intersection of Bellevue Road (C.R. 602) where this project will tie into the improvement project PR8530-76 (175). Bellevue Road (C.R. 603) is a logical termini for the four lane widening project because it is at this intersection that traffic splits approximately 50/50. Fifty percent of the traffic continue on S.R. 257 to the intersection of Industrial Boulevard and travel straight to the southern portion of the City of Dublin. The other fifty percent of the traffic turn left from S.R. 257 onto Bellevue Road (C.R. 602), crossing the railroad tracks and then proceeding to downtown Dublin or turn left to travel north on Industrial Boulevard (C.R. 493).

**PROPOSED DESIGN**

**TYPICAL SECTION:** Four 12' lanes with a 4' striped median and 6' paved shoulders with open ditch sections. A 14' center two-way left turn lane will be provided at all the major intersections and commercial traffic generators. (See attached Typical Section Diagrams)

ROADWAY	DESIGN SPEED	MAX. DEGREE OF CURVE		MAX GRADE	
		Allowable	Proposed	Allowable	Proposed
S.R. 257	55 mph	8°	2°	7%	4%

**TYPE OF ACCESS CONTROL:** State and County Permit

**TRAFFIC CONTROL DURING CONSTRUCTION:** Traffic to be maintained on existing roadways during construction

**MAJOR STRUCTURES:** No major structures are anticipated.

<b>DESIGN EXCEPTIONS REQUESTED</b>			
<b>CONTROLLING CRITERIA</b>	<b>UNDETERMINED</b>	<b>YES</b>	<b>NO</b>
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)

<b>PROPOSED RIGHT OF WAY</b>			
R/W WIDTH: 150'-200'	DISPLACEMENTS		
	RES: 3	BUS: 0	M.H. 0
NUMBER OF PARCELS IMPACTED: 22			

<b>COORDINATION</b>
CONCEPT TEAM MEETING DATE: September 6, 2000
CONFORMS TO TIP/STIP: Yes
MEETS LOGICAL TERMINI REQUIREMENTS? Yes
TIME SAVING PROCEDURES APPROPRIATE: No
P.A.R. MEETING: Not Required
LOCATION INSPECTION DATE: To be scheduled.
LEVEL OF ENVIRONMENTAL ANALYSIS: Environmental Assessment
PERMITS REQUIRED (COE,404,etc.): 404 permit

<b>LEVEL OF PUBLIC INVOLVEMENT:</b> Public Hearing Scheduled Later
<b>LOCAL GOVERNMENT COMMITMENTS:</b> Laurens County will be responsible for all preconstruction activities.
<b>OTHER PROJECTS IN THE AREA:</b> <u>IM-00MS (328)</u> - The improvement of the S.R. 257 Interchange with I-16. <u>PR8530-76(175)</u> -Industrial Boulevard(C.R. 493) Improvement Project - This project improves the intersections of Industrial Boulevard at S.R. 257, Bellevue Road (C.R. 602) and Moore Station Road (C.R. 360). <u>EDS 441 (5) P.I. No. 262040</u> - Dublin Bypass from U.S. 441 at ½ mile north of Fire Tower Road N.W. to U.S. 441
<b>UNDERGROUND STORAGE TANKS:</b> None known.
<b>HAZARDOUS WASTE SITES:</b> None known.

<b>ALTERNATIVES CONSIDERED</b>
1. <b>NO BUILD</b> – This alternative does not meet the capacity and operational needs of the project.
2. <b>PROPOSED PROJECT</b> - This project consists of the widening and improvement of S.R. 257 from a 2-lane rural roadway to a 4-lane rural roadway with turn lanes at the major intersections.

<b>ESTIMATED COST</b>			
<b>CONSTRUCTION:</b>	\$5,906,484	<b>RIGHT-OF-WAY:</b>	\$1,590,400
<b>INFLATION (3 yr. @ 5%/yr.)</b>	\$931,010	<b>ACQUIRED BY :</b>	Laurens County*
<b>E &amp; C (10%) :</b>	\$590,648	<b>UTILITIES (reimbursable):</b>	400,000
<b>TOTAL CONSTRUCTION COST:</b>	\$7,428,142	<b>ADJUSTED BY :</b>	GDOT

\* To be reimbursed by GDOT

**COMMENTS:** Comments from the Concept Team Meeting are contained in the attached minutes.

**ATTACHMENTS:**

- Traffic Volumes & Summary of Traffic Analysis
- Detailed Cost Estimate
- Typical Section
- Concept Team Meeting Minutes

## TRAFFIC ANALYSIS & TRAFFIC FLOW DIAGRAMS

Intersection capacity analyses were performed on each of the key intersections within the study area for the A.M. and P.M. peak hours. These analyses were performed for the year 2023 build and no build conditions.

The methods used are those described in the 1994 Highway Capacity Manual. Intersection capacity is expressed in terms of level of service (LOS), which is a measure of the amount of delay and congestion experienced by motorists as they pass through an intersection. LOS is designated by the letters "A" through "F". LOS A represents free-flowing conditions with very little delay and LOS F indicates forced flow, extreme congestion and long delays. A summary of the results are shown in the table below.

SUMMARY OF INTERSECTION CAPACITY ANALYSIS				
INTERSECTION	YEAR 2023 NO BUILD		YEAR 2023 BUILD	
S.R. 257 @ Fire Tower Road	C	F	C	B
S.R. 257 @ Best Buy Road	D	C	B	B
S.R. 257 @ Bellevue Road	C	F	B	C

The results indicate that two of the intersections will operate at an unacceptable level of service if the project is not built. The level of service worksheets are attached.





HCS: Signals Release 3.1b

Inter: S.R. 257 @ Fire Tower Road  
 Analyst: MAAI  
 Date: 6/19/00  
 E/W St: S.R. 257

City/St: Laurens County, Georgia  
 Proj #: MLP-0000-00 (542)  
 Period: AM Peak Hour  
 N/S St: Fire Tower Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	1	0	0	0	0	0	0	0
LGConfig		TR			LT			LR				
Volume		565	25	45	345		25		280			
Lane Width		12.0			12.0			12.0				
RTOR Vol			0						0			

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru			
Right		P			Right	P		
Peds					Peds			
WB Left		P	P		SB Left			
Thru		P	P		Thru			
Right					Right			
Peds					Peds			
NB Right		A			EB Right	A		
SB Right					WB Right			
Green		15.0	50.0			30.0		
Yellow		5.0	5.0			5.0		
All Red		0.0	0.0			0.0		
Cycle Length:	110.0		secs					

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS

Eastbound

TR 772 1699 0.80 0.455 34.5 C 34.5 C

Westbound

LT 1126 1769 0.36 0.636 10.4 B 10.4 B

Northbound

LR 400 1468 0.80 0.273 48.5 D 48.5 D

Southbound

Intersection Delay = 30.5 (sec/veh) Intersection LOS = C

HCS: Signals Release 3.1b

Inter: S.R. 257 @ Fire Tower Road  
 Analyst: MAAI  
 Date: 6/19/00  
 E/W St: S.R. 257

City/St: Laurens County, Georgia  
 Proj #: MLP-0000-00 (542)  
 Period: PM Peak Hour  
 N/S St: Fire Tower Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0		1	0	0	0	0	0	0	0
LGConfig		TR			LT			LR				
Volume		565	10	230	1290		10		15			
Lane Width		12.0			12.0			12.0				
RTOR Vol			0						0			

Duration 0.25 Area Type: All other areas  
 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru			
Right					Right	P		
Peds					Peds			
WB Left		P			SB Left			
Thru		P			Thru			
Right					Right			
Peds					Peds			
NB Right		A			EB Right	A		
SB Right					WB Right			
Green		25.0	50.0			30.0		
Yellow		5.0	5.0			5.0		
All Red		0.0	0.0			0.0		
Cycle Length:	120.0	secs						

Intersection Performance Summary

Appr/Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
TR	710	1705	0.85	0.417	44.1	D	44.1	D
Westbound								
LT	1157	1735	1.38	0.667	197.7	F	197.7	F
Northbound								
LR	382	1527	0.07	0.250	34.4	C	34.4	C
Southbound								

Intersection Delay = 154.1 (sec/veh) Intersection LOS = F

HCS: Signals Release 3.1b

Inter: S.R. 257 @ Fire Tower Road City/St: Laurens County, Georgia  
 Analyst: MAAI Proj #: MLP-0000-00 (542)  
 Date: 6/19/00 Period: AM Peak Hour  
 E/W St: S.R. 257 N/S St: Fire Tower Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	1	1	0	1	0	1	0	0	0
LGConfig		T	R	L	T		L		R			
Volume		565	25	45	345		25		280			
Lane Width		12.0	12.0	12.0	12.0		12.0		12.0			
RTOR Vol			0						0			

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru			
Right		P			Right	P		
Peds					Peds			
WB Left		P			SB Left			
Thru		P			Thru			
Right					Right			
Peds					Peds			
NB Right		A			EB Right	A		
SB Right					WB Right			
Green		15.0	50.0			30.0		
Yellow		5.0	5.0			5.0		
All Red		0.0	0.0			0.0		
Cycle Length:	110.0							
								secs

Intersection Performance Summary

Appr/Lane	Lane Group	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
Grp	Capacity		v/c	g/C	Delay LOS	Delay LOS	
Eastbound							
T	864	1900	0.69	0.455	28.3 C	27.2	C
R	1117	1445	0.02	0.773	2.9 A		
Westbound							
L	370		0.13	0.636	12.5 B		
T	1209	1900	0.30	0.636	9.6 A	10.0-	A
Northbound							
L	415	1520	0.06	0.273	29.9 C	21.8	C
R	657	1445	0.45	0.455	21.1 C		
Southbound							

Intersection Delay = 20.7 (sec/veh) Intersection LOS = C

HCS: Signals Release 3.1b

Inter: S.R. 257 @ Fire Tower Road City/St: Laurens County, Georgia  
 Analyst: MAAI Proj #: MLP-0000-00 (542)  
 Date: 6/19/00 Period: PM Peak Hour  
 E/W St: S.R. 257 N/S St: Fire Tower Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	1	1	2	0	1	0	1	0	0	0
LGConfig		T	R	L	T		L		R			
Volume		565	10	230	1290		10		15			
Lane Width		12.0	12.0	12.0	12.0		12.0		12.0			
RTOR Vol			0						0			

Duration 0.25 Area Type: All other areas  
 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru					Thru			
Right					Right	P		
Peds					Peds			
WB Left		P			SB Left			
Thru		P			Thru			
Right					Right			
Peds					Peds			
NB Right		A			EB Right	A		
SB Right					WB Right			
Green		25.0	50.0			30.0		
Yellow		5.0	5.0			5.0		
All Red		0.0	0.0			0.0		
Cycle Length:	120.0 secs							

Intersection Performance Summary

Appr/Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
T	1504	3610	0.40	0.417	25.2	C	24.9	C
R	1024	1445	0.01	0.708	5.1	A		
Westbound								
L	546		0.44	0.667	11.9	B		
T	2407	3610	0.56	0.667	11.6	B	11.7	B
Northbound								
L	380	1520	0.03	0.250	34.1	C	22.9	C
R	723	1445	0.02	0.500	15.2	B		
Southbound								

Intersection Delay = 15.4 (sec/veh) Intersection LOS = B



HCS: Signals Release 3.1b

Inter: S.R. 257 @ Best Buy Road  
 Analyst: MAAI  
 Date: 6/19/00  
 E/W St: S.R. 257

City/St: Laurens County, Georgia  
 Proj #: MLP-0000-00 (542)  
 Period: PM Peak Hour  
 N/S St: Best Buy Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	1	1	0	1	0	1	0	0	0
LGConfig		T	R	L	T		L		R			
Volume		445	135	190	1295		225		350			
Lane Width		12.0	12.0	12.0	12.0		12.0		12.0			
RTOR Vol			0						0			

Duration 0.25 Area Type: All other areas  
 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru			P		Thru			
Right			P		Right	P		
Peds					Peds			
WB Left		P			SB Left			
Thru		P			Thru			
Right					Right			
Peds					Peds			
NB Right		P			EB Right	P		
SB Right					WB Right			
Green		35.0	40.0			20.0		
Yellow		5.0	5.0			5.0		
All Red		0.0	0.0			0.0		
Cycle Length:	110.0							
			secs					

Intersection Performance Summary

Appr/Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
T	691	1900	0.68	0.364	34.8	C	29.2	C
R	854	1445	0.17	0.591	10.6	B		
Westbound								
L	631		0.32	0.727	9.7	A		
T	1382	1900	0.99	0.727	35.6	D	32.3	C
Northbound								
L	276	1520	0.86	0.182	71.3	E	38.4	D
R	788	1445	0.47	0.545	17.2	B		
Southbound								

Intersection Delay = 32.9 (sec/veh) Intersection LOS = C

HCS: Signals Release 3.1b

Inter: S.R. 257 @ Best Buy Road  
 Analyst: MAAI  
 Date: 6/19/00  
 E/W St: S.R. 257

City/St: Laurens County, Georgia  
 Proj #: MLP-0000-00 (542)  
 Period: AM Peak Hour  
 N/S St: Best Buy Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	1	1	2	0	1	0	1	0	0	0
LGConfig		T	R	L	T		L		R			
Volume		830	220	335	275		115		155			
Lane Width		12.0	12.0	12.0	12.0		12.0		12.0			
RTOR Vol			0						0			

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru		P			Thru			
Right		P			Right	P		
Peds					Peds			
WB Left		P	P		SB Left			
Thru		P	P		Thru			
Right					Right			
Peds					Peds			
NB Right		P			EB Right	P		
SB Right					WB Right			
Green		25.0	50.0			20.0		
Yellow		5.0	5.0			5.0		
All Red		0.0	0.0			0.0		
Cycle Length:	110.0 secs							

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/c	Delay	LOS	Delay	LOS
Eastbound								
T	1641	3610	0.53	0.455	22.8	C	19.6	B
R	985	1445	0.24	0.682	7.2	A		
Westbound								
L	508		0.69	0.727	20.4	C		
T	2625	3610	0.11	0.727	4.5	A	13.2	B
Northbound								
L	276	1520	0.44	0.182	45.0	D		
R	657	1445	0.25	0.455	19.3	B	30.3	C
Southbound								

Intersection Delay = 19.1 (sec/veh) Intersection LOS = B

HCS: Signals Release 3.1b

Inter: S.R. 257 @ Best Buy Road City/St: Laurens County, Georgia  
 Analyst: MAAI Proj #: MLP-0000-00 (542)  
 Date: 6/19/00 Period: PM Peak Hour  
 E/W St: S.R. 257 N/S St: Best Buy Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	1	1	2	0	1	0	1	0	0	0
LGConfig		T	R	L	T		L		R			
Volume		445	135	190	1295		225		350			
Lane Width		12.0	12.0	12.0	12.0		12.0		12.0			
RTOR Vol			0						0			

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	P		
Thru		P			Thru			
Right		P			Right	P		
Peds					Peds			
WB Left		P	P		SB Left			
Thru		P	P		Thru			
Right					Right			
Peds					Peds			
NB Right		P			EB Right	P		
SB Right					WB Right			
Green		35.0	40.0			30.0		
Yellow		5.0	5.0			5.0		
All Red		0.0	0.0			0.0		
Cycle Length:	120.0 secs							

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group	Approach	
			v/c	g/C	Delay LOS	Delay LOS	
<b>Eastbound</b>							
T	1203	3610	0.39	0.333	31.6 C	26.5	C
R	903	1445	0.16	0.625	9.7 A		
<b>Westbound</b>							
L	652		0.31	0.667	9.8 A		
T	2407	3610	0.57	0.667	11.7 B	11.4	B
<b>Northbound</b>							
L	380	1520	0.62	0.250	47.5 D	28.1	C
R	843	1445	0.44	0.583	15.6 B		
<b>Southbound</b>							

Intersection Delay = 18.4 (sec/veh) Intersection LOS = B

HCS: Signals Release 3.1b

Inter: S.R. 257 @ Bellevue Road  
 Analyst: MAAI  
 Date: 8/19/00  
 E/W St: S.R. 257

City/St: Laurens County, Georgia  
 Proj #: MLP-0000-00 (542)  
 Period: AM Peak Hour  
 N/S St: Bellevue Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	0	0	1	1	0	0	0	0	0	1
LGConfig	L	T			T	R						R
Volume	505	480			240	1						370
Lane Width	12.0	12.0			12.0	12.0						12.0
RTOR Vol						0						0

Duration 0.25 Area Type: All other areas  
 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru			
Right					Right			
Peds					Peds			
WB Left					SB Left	A		
Thru				P	Thru			
Right				P	Right	P		
Peds					Peds			
NB Right					EB Right			
SB Right		P			WB Right			
Green		25.0	40.0			40.0		
Yellow		4.0	4.0			4.0		
All Red		1.0	1.0			1.0		
Cycle Length:	120.0 secs							

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	686		0.78	0.583	24.5	C		
T	1108	1900	0.46	0.583	15.5	B	20.1	C
Westbound								
T	633	1900	0.40	0.333	32.6	C	32.6	C
R	538	1615	0.00	0.333	26.7	C		
Northbound								
Southbound								
R	848	1453	0.46	0.583	16.0	B	16.0	B
Intersection Delay = 22.6 (sec/veh) Intersection LOS = C								

HCS: Signals Release 3.1b

Inter: S.R. 257 @ Bellevue Road  
 Analyst: MAAI  
 Date: 8/19/00  
 E/W St: S.R. 257

City/St: Laurens County, Georgia  
 Proj #: MLP-0000-00 (542)  
 Period: PM Peak Hour  
 N/S St: Bellevue Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	0	0	1	1	0	0	0	0	0	1
LGConfig	L	T			T	R						R
Volume	300	495			605	1						890
Lane Width	12.0	12.0			12.0	12.0						12.0
RTOR Vol						0						0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru			
Right					Right			
Peds					Peds			
WB Left					SB Left	A		
Thru				P	Thru			
Right				P	Right	P		
Peds					Peds			
NB Right					EB Right			
SB Right	P				WB Right			
Green	25.0	30.0			50.0			
Yellow	4.0	4.0			4.0			
All Red	1.0	1.0			1.0			
Cycle Length:	120.0 secs							

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	454		0.70	0.500	53.2	D		
T	950	1900	0.55	0.500	22.9	C	34.4	C
Westbound								
T	475	1900	1.34	0.250	212.2	F	211.9	F
R	404	1615	0.00	0.250	33.8	C		
Northbound								
Southbound								
R	969	1453	0.97	0.667	40.7	D	40.7	D
Intersection Delay = 111.1 (sec/veh)					Intersection LOS = F			

HCS: Signals Release 3.1b

Inter: S.R. 257 @ Bellevue Road  
 Analyst: MAAI  
 Date: 8/19/00  
 E/W St: S.R. 257

City/St: Laurens County, Georgia  
 Proj #: MLP-0000-00 (542)  
 Period: AM Peak Hour  
 N/S St: Bellevue Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	1	0	0	1	1	0	0	0	1	0	0
LGConfig	L	T			T	R				L		
Volume	505	480			240	1				1		
Lane Width	12.0	12.0			12.0	12.0				12.0		
RTOR Vol						0						

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	P				NB Left			
Thru	P	P			Thru			
Right					Right			
Peds					Peds			
WB Left					SB Left	P		
Thru		P			Thru			
Right		P			Right			
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	35.0	40.0			10.0			
Yellow	4.0	4.0			4.0			
All Red	1.0	1.0			1.0			
Cycle Length:	100.0 secs							

Intersection Performance Summary

Appr/Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	1226	3502	0.43	0.350	26.0	C		
T	1520	1900	0.33	0.800	3.3	A	15.0	B
Westbound								
T	760	1900	0.33	0.400	21.9	C	21.9	C
R	646	1615	0.00	0.400	18.0	B		
Northbound								
Southbound								
L	181	1805	0.01	0.100	40.6	D	40.6	D

Intersection Delay = 16.4 (sec/veh) Intersection LOS = B

HCS: Signals Release 3.1b

Inter: S.R. 257 @ Bellevue Road  
 Analyst: MAAI  
 Date: 8/19/00  
 E/W St: S.R. 257

City/St: Laurens County, Georgia  
 Proj #: MLP-0000-00 (542)  
 Period: PM Peak Hour  
 N/S St: Bellevue Road

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	1	0	0	1	1	0	0	0	1	0	0
LGConfig	L	T			T	R				L		
Volume	300	495			605	1				1		
Lane Width	12.0	12.0			12.0	12.0				12.0		
RTOR Vol						0						

Duration 0.25 Area Type: All other areas  
 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left		P			NB Left			
Thru		P			Thru			
Right			P		Right			
Peds					Peds			
WB Left					SB Left	P		
Thru				P	Thru			
Right				P	Right			
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green		35.0	40.0			10.0		
Yellow		4.0	4.0			4.0		
All Red		1.0	1.0			1.0		
Cycle Length:	100.0 secs							

Intersection Performance Summary

Appr/Lane	Lane Group	Adj Sat Flow Rate	Ratios		Lane Group		Approach	
Gpr	Capacity	(s)	v/c	g/c	Delay	LOS	Delay	LOS
Eastbound								
L	1226	3502	0.26	0.350	23.7	C		
T	1520	1900	0.34	0.800	3.4	A	11.1	B
Westbound								
T	760	1900	0.84	0.400	37.8	D	37.7	D
R	646	1615	0.00	0.400	18.0	B		
Northbound								
Southbound								
L	181	1805	0.01	0.100	40.6	D	40.6	D

Intersection Delay = 22.6 (sec/veh) Intersection LOS = C

Detailed Cost Estimate  
S.R. 257 - Project No.: MLP-0000-00-(542)

<b>A. Right of Way</b>			<b>\$1,590,400</b>
<b>B. Reimbursable Utilities</b>			<b>\$400,000</b>
<b>C. Grading and Earthwork</b>			
1. Unclassified Excavation & Borrow	125,000 CY @	\$7.00	\$875,000
		<b>Subtotal</b>	<b>\$875,000</b>
<b>D. Drainage</b>		Lump Sum	\$200,000
		<b>Subtotal</b>	<b>\$200,000</b>
<b>E. Base &amp; Paving</b>			
1. Graded Aggregate Base 6"	7,088 TN @	\$16.00	\$113,408
2. Graded Aggregate Base 12"	50,348 TN @	\$16.00	\$805,568
3. Asphalt Concrete 12.5 mm SMA 165#/SY (1-1/2")	11,892 TN @	\$40.00	\$475,680
4. Asphalt Concrete 19.0 mm Superpave 220#/SY (2")	8,581 TN @	\$38.00	\$326,078
5. Asphalt Concrete 25 mm Superpave 550#/SY (5")	21,445 TN @	\$38.00	\$814,910
6. Leveling Asphalt Concrete	3,318 TN @	\$80.00	\$265,440
7. Bitum Tack Coat	14,160 GL @	\$1.25	\$17,700
		<b>Subtotal</b>	<b>\$2,818,784</b>
<b>F. Concrete Work</b>			
1. Median Paving	450 SY @	\$35.00	\$15,750
2. Driveway	420 LF @	\$30.00	\$12,600
		<b>Subtotal</b>	<b>\$28,350</b>
<b>G. Signing, Striping, and Signals</b>			
1. Signs		Lump Sum	\$30,000
2. Striping		Lump Sum	\$48,000
3. Signals	2 ea @	\$80,000.00	\$160,000
4. Railroad Bells and Gates		Lump Sum	\$200,000
		<b>Subtotal</b>	<b>\$438,000</b>
<b>H. Traffic Control &amp; Mobilization</b>			
1. Traffic Control		Lump Sum	\$115,000
2. Mobilization		Lump Sum	\$40,000
		<b>Subtotal</b>	<b>\$155,000</b>

**I. Landscaping**

1. Clearing & Grubbing	48 ac @	\$10,000.00	\$480,000
2. Grassing	38.3 ac @	\$2,500.00	\$95,750
3. Erosion Control		Lump Sum	\$100,000
		<b>Subtotal</b>	<b>\$675,750</b>

**J. Miscellaneous Items**

1. Field Office TP 3	1 ea @	\$30,000.00	\$30,000
2. Remove Existing Pavement	6,400 SY @	\$4.00	\$25,600
3. Misc. Construction Items		Lump Sum	\$660,000
		<b>Subtotal</b>	<b>\$715,600</b>

**SUMMARY OF PROJECT COSTS**

**S.R. 257**

**Project No.: MLP-0000-00(542)**

**Non-Construction Costs**

A.	Right of Way	\$1,590,400
B.	Reimbursable Utilities	\$400,000
	<b>Total Non-Construction Cost</b>	<b>\$1,990,400</b>

**Construction Costs**

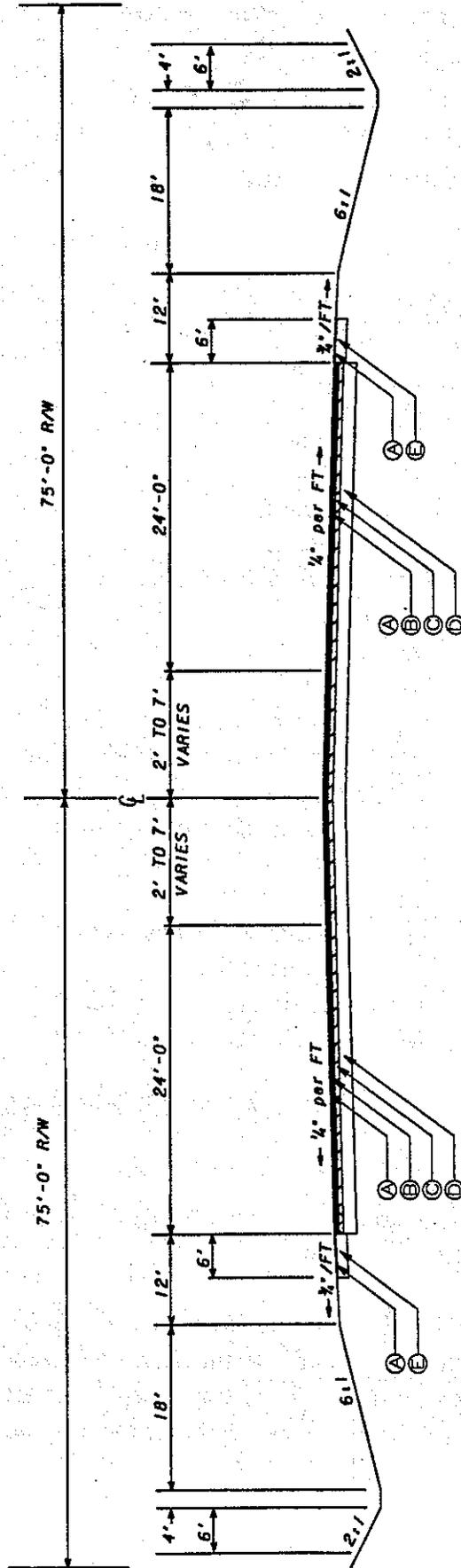
C.	Grading and Earthwork	\$875,000
D.	Drainage	\$200,000
E.	Base and Paving	\$2,818,784
F.	Concrete Work	\$28,350
G.	Signing, Striping & Signals	\$438,000
H.	Traffic Control	\$155,000
I.	Landscaping	\$675,750
J.	Miscellaneous Construction Items	\$715,600
	<b>Construction Cost Subtotal</b>	<b>\$5,906,484</b>

Three years of inflation @ 5%	\$931,010
Engineering & Construction; 10%	\$590,648

**Total Construction Cost \$7,428,142**

**Total Project Cost \$9,418,542**

DATE	PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS



# TYPICAL SECTION

NOT TO SCALE

## REQUIRED PAVEMENT

- A ASPHALTIC CONC. 12.5 mm SUPERPAVE (165 lbs/SY)
- B ASPHALTIC CONC. 19 mm SUPERPAVE (220 lbs/SY)
- C ASPHALTIC CONC. 25 mm SUPERPAVE (550 lbs/SY)
- D GRADED AGGREGATE BASE (12')
- E GRADED AGGREGATE BASE (6')

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

**MA** Kerkland Altabell Associates, Inc.

S.R. 257  
TYPICAL SECTION

FIGURE

DATE	BY	CHECKED	DATE

**District Design comments:**

- Typical section description needs to be changed to 4 - 12' lanes with a 4' striped median.
- Maximum roadway grade seems too low because the grades on S.R. 257 in front of the Church are greater than 2%.
- Add to "OTHER PROJECTS IN THE AREA" the Dublin Bypass from U.S. 441 @ 0.5 mile north of Fire Tower Road NW to U.S. 441 - Project No. EDS 441(5) P.I. 262040

**Utilities comments:**

- The cost of utilities will be absorbed by the GDOT.
- MAAI estimated costs for utility relocation is O.K.

# NOTICE OF LOCATION AND DESIGN APPROVAL

## MLP-0000-00(542) LAURENS COUNTY P. I. NUMBER 0000542

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 was \_\_\_\_\_  
Date of Approval

This project proposes to widen and reconstruct SR 257 from the I-16 interchange to Bellevue Road (CR 602). The project is located southwest of the City of Dublin in Laurens County. It will widen SR 257 from a 2-lane rural roadway to a 4-lane roadway with turn lanes at the major intersections.

Drawings of the proposed project are on file and are available for inspection at the Georgia Department of Transportation, 801 Fourth Street, Tennille, GA, telephone (912)552-4629.

Any written request in reference to this Notice should include the Project and PI numbers as noted at the top of this Notice and may be referred to:

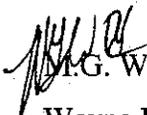
DAVID O. GRIFFITH  
PRECONSTRUCTION ENGINEER  
P.O. BOX 8  
TENNILLE, GA 31089  
(912)552-4629

Department of Transportation  
State of Georgia

INTERDEPARTMENTAL CORRESPONDENCE

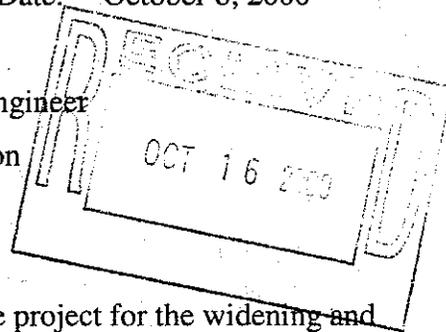
File: MLP-0000-00(542)/Laurens County  
P.I. No. 0000542

Office: Traffic Operations  
Atlanta, Georgia  
Date: October 6, 2000

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 concept report on the above project for the widening and reconstruction of SR 257 from the I-16 interchange north to Bellevue Road (CR 602), a distance of 2.86 miles. This project located southwest of the city of Dublin.

SR 257, is currently a two lane rural roadway consisting of two 12 foot lanes with variable width grassed shoulders. The posted speed limit is 55mph.

This project proposes to widen SR 257 to consist of four 12 foot travel lanes with turn lanes where required, separated by a 4 foot striped median, and 6 foot paved shoulders with open ditches. The projected, design year 2023, traffic volume is 23,000vpd. Traffic is to be maintained on the existing roadway during construction.

We recommend consideration of the raised median be in accordance with the "Raised /Depressed/Flush Median Design Guidelines" dated July 20, 2000.

We believe this concept will improve safety and traffic operations along this section of roadway.

With the recommended statement, we find this report satisfactory for approval.

MGW:TWS

Attachment (signature page)

c: Harvey Keeper

Michael Thomas, District Engineer, Tennille

Attention: George Brewer

David Mulling, w/ attachment

Marta Rosen

Chuck Hasty, TMC

General Files

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

# PROJECT CONCEPT REPORT

## S.R. 257 Improvement Project

Project Number: MLP-0000-00-(542)

P.I. No. 0000542

Laurens County, Georgia

FEDERAL ROUTE NO: None

STATE ROUTE NO: 257

Date of Report: October 3, 2000

### RECOMMENDATION FOR APPROVAL

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Road and Airport Design Engineer

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

\_\_\_\_\_  
DATE

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

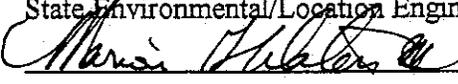
\_\_\_\_\_  
DATE

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

\_\_\_\_\_  
DATE

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

10/11/2000  
DATE

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

\_\_\_\_\_  
DATE

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

\_\_\_\_\_  
DATE

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

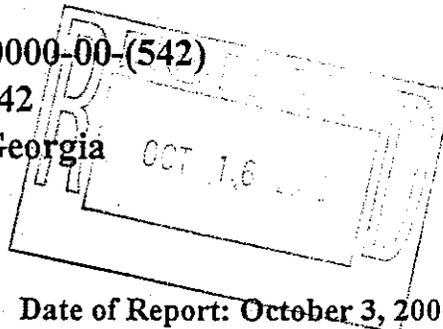
# PROJECT CONCEPT REPORT

## S.R. 257 Improvement Project

Project Number: MLP-0000-00-(542)

P.I. No. 0000542

Laurens County, Georgia



FEDERAL ROUTE NO: None

STATE ROUTE NO: 257

Date of Report: October 3, 2000

### RECOMMENDATION FOR APPROVAL

DATE

State Road and Airport Design Engineer

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

DATE

10/5/00

State Transportation Planning Administrator

DATE

State Transportation Programming Engineer

DATE

State Environmental/Location Engineer

DATE

State Traffic Operations Engineer

DATE

District Engineer

DATE

Project Review Engineer

PROJECT NUMBER/COUNTY: MLP-0000-00(542)/LAURENS

P.I. NUMBER: 0000542

This project is State Funded and not shown in the STIP.

*Marta Riser*  
\_\_\_\_\_  
STATE TRANSPORTATION PLANNING ADMINISTRATOR

DATE: 10/17/00\_\_\_\_\_